



MARQUETTE MINERALS, INC.

March 29, 1990

Ms. Carole O'Brien
A. F. Budge
4301 North 75th Street
Suite 101
Scottsdale, Arizona 85251

RECEIVED MAR 31 1990

Dear Ms. O'Brien:

Subsequent to reviewing a technical paper describing the Vulture Mine, published in the November 1989 Mining Engineering magazine, I recently had the opportunity to drive to the Vulture Mine property and do a brief reconnaissance.

I found the property to be of considerable interest. As we are experiencing some difficulty in locating literature describing the property, I would appreciate your advice as to possible sources of descriptive information.

Marquette is a privately held S-type corporation which, over the last several years, has been involved in extensive exploratory and pilot mining operations, mostly here in Colorado. These efforts have resulted in a recent joint venture of the above described properties with a major North American mining company. Consequent to the joint venture, we now have the time available to pursue other worthwhile projects within the Western United States, particularly Arizona, and are in the process of setting up an affiliate office on the West Coast in order to implement that program.

I would like to visit with you and discuss the Vulture Mine property further. Perhaps I could stop at Scottsdale on one of my frequent trips to the West Coast. I will look forward to hearing from you with regard to the above.

Yours truly,

Raymond P. Heon, President
MARQUETTE MINERALS, INC.

RPH/NRO
xc: Donald C. White

VULTURE OPERATING COSTS
Based on 1,000 tpd
LABOR

Title	No.	Rate	Fringe	Hours /day	Days /week	Cost /week	Cost /ton
Manager	1	\$55,000	30%	10	5.5	\$1,375	\$0.28
Eq. Operator Maintenance & Watchman	1	\$100.00		10	5	\$5,000	\$1.00
Agg. Operator	1	\$13.00	30%	10	5	\$845	\$0.17
Rec. Operator	1	\$13.00	30%	10	5	\$845	\$0.17
Utility	2	\$10.00	30%	8	5	\$1,300	\$0.26
Mechanic	1	\$12.00	30%	8	5	\$780	\$0.16
Totals						\$10,145	\$2.03

FUEL & REAGENTS

Fuel, power		\$0.21
Fuel, melting		\$0.01
Cement	.44	\$0.54
Cyanide	.90	\$0.75
Lime	.18	\$0.15
Water Chemicals		\$0.03
Zinc Dust		\$0.06
Lead Nitrate		\$0.01
Precoat		\$0.01
Fluxes, melting		\$0.01

Totals \$1.78

EQUIPMENT RENTALS

Generators at \$680 and \$1400 per month \$0.10

ADVANCE ROYALTY: V.M.P. INC.

Based on \$5,500 per month \$0.28

REFINING CHARGES

136.5 ounces per week \$0.05

Based on minimum treatment charge of \$250

TOTAL OPERATING COSTS

\$4.24

\$ 81.50/ton

55.00
16.25

{ \$ 71.25/ton
delivered

Lime: 25.34 t. delivery
Cement: 26.17 t. delivery

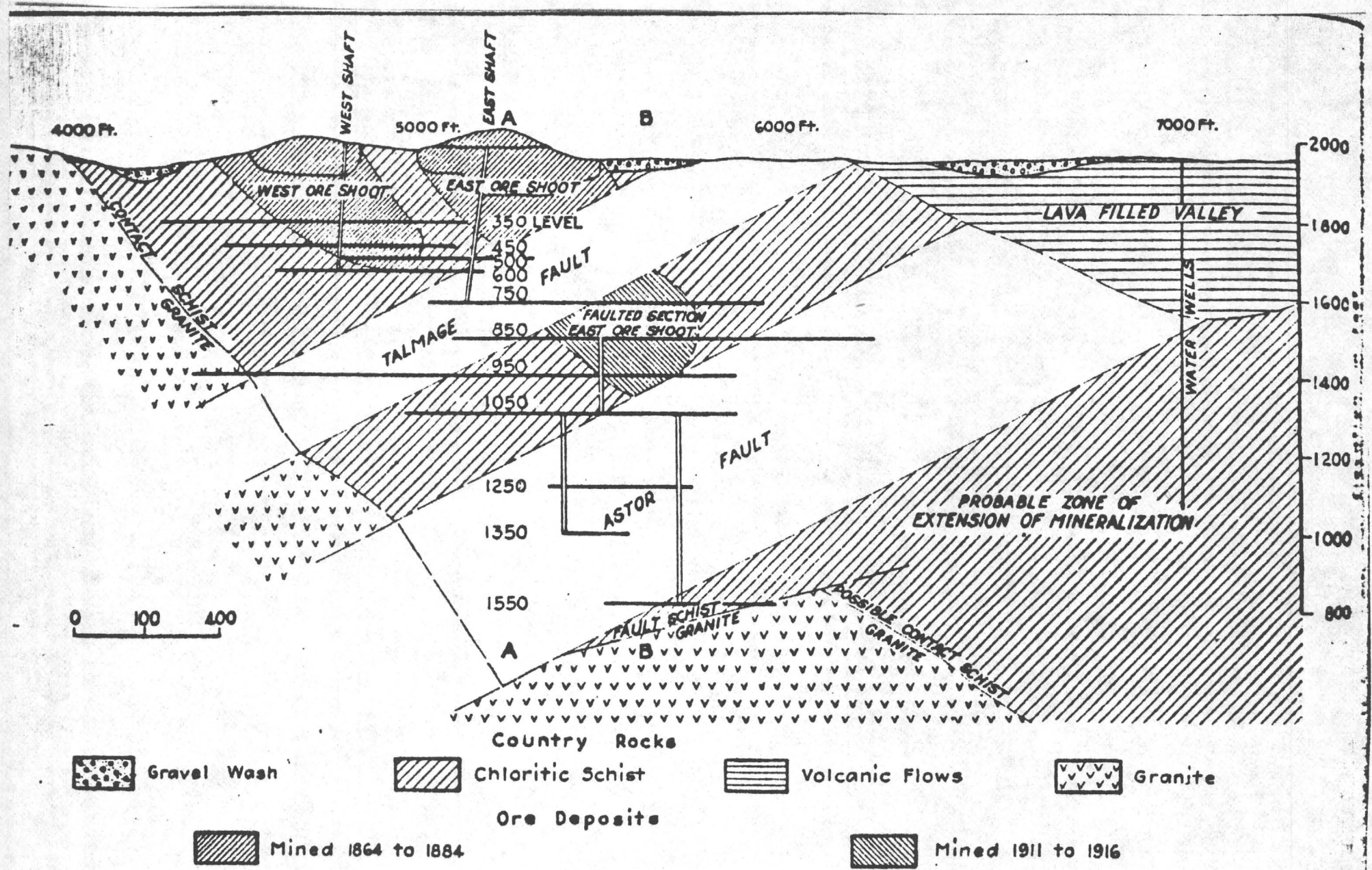


FIG. 1. LONGITUDINAL VERTICAL PROJECTION OF THE VULTURE MINE WORKINGS

A. F. BUDGE (MINING) LIMITED

VULTURE MINE

ASSAYS

DATE	SAMPLE	AU		Na CN lb/t	PH	REMARKS
		PPM	oz/t			
1/18/90	Leak #1		0.041		8.9	42 ml
	Leak #2		0.032		9.3	76 ml
	Gap		0.023		8.3	37 ml
1/22/90	Leak #1	1.32	.038	.4	8.25	
	" #2	1.15	.033	.2	8.45	
	cap	Down				
1/23/90	Leak #1	1.30	.037	.4	8.22	
	Leak #2	1.10	.032	.1	8.43	
	Gap	.35	.010	.3	8.15	
1/24/90	Leak #1	1.24	.036	.3	8.04	
	Leak #2	.97	.028	.4	8.26	
	Gap	.37	.011	.3	8.16	
1/25/90	Leak #1	1.00	.046	.3	8.05	
	" #2	11.07	.031	.3	8.24	
	gap	.45	.013	.3	8.20	
1-29-90	Leak #1	1.75	.051	.3	8.14	45 ml
	" #2	1.03	.030	.3	8.39	18 ml
	gap	.50	.015	.3	8.18	40 ml
1-30-90	Leak #1	1.53	.044	.3	9.23	45 ml
	" #2	1.03	.030	.3	9.16	20 ml
	Cap	.47	.014	.3	8.96	40 ml
1-31-90	Leak #1	1.60	.046	.3	9.25	45 ml
	" #2	1.04	.030	.3	9.10	10 ml
	Gap	.45	.013	.3	8.85	40 ml
2-1-90	Leak #1	1.55	.045	.3	8.95	45 ml
	" #2	1.09	.032	.3	9.10	10 ml closed
	Gap	.47	.014	.3	8.90	40 ml
2-2-90	Leak #1	1.94	.056	.3	9.9	43 ml
	" #2	1.37	.040	.4	10.6	9 ml
	Gap	.61	.018	.3	9.6	13 ml

PPM Au x 0.029 = oz/t

22-141 50 SHEETS
 22-142 100 SHEETS
 22-144 200 SHEETS



A.F. BUDGE (MINING) LIMITED

VULTURE MINE

ASSAYS

DATE	SAMPLE	AU		Na CN lb/t	PH	REMARKS
		PPM	oz/t			
2-5	LEAK #1	1.88	.05	3	8.85	42 ml
	" #2	1.16	.03	3	9.12	8 ml
	GAP	.56	.016	3	8.65	13 ml
2-6	LEAK #1	1.79	.052	3	8.89	42 ml
	" #2	1.14	.033	3	8.95	9 ml
	GAP	.55	.016	3	9.20	13 ml
2-7	LEAK #1	1.99	.057	.2	8.96	48 ml
	LEAK #2	1.45	.042	.3	8.37	5 ml
	GAP	.78	.023	.3	8.15	9 ml
2-8-90	LEAK #1	1.85	.054	3	8.32	47 ml
	" #2	1.40	.041	3	8.15	6 ml
	GAP	.67	.019	3	9.05	10 ml
2-12-90	LEAK #1	1.98	.057	3	9.02	20 ml
	LEAK #2	1.45	.042	3	9.21	5 ml
2-13-90	LEAK #1	2.10	.061	3	9.08	13 ml
	" #2	1.37	.040	3	9.17	2 ml
2-14-90	" #1	1.95	.057	3	9.05	10 ml
	" #2	1.35	.039	3	9.15	1 ml
2-15-90	" #1	1.93	.056	3	9.00	5 ml
	" #2	1.38	.040	3	9.21	1 ml
2-19-90	" #1	DRY				
	" #2	DRY				
2-20-90	" #1	"				
	" #2	"				
2-21-90	" #1	"				
	" #2	"				
4-9-90	#1	DOWN				
	#2	.32	.009	1.0	9.00	45 ml
4-10-90	#1	DOWN		.9	9.3	44 ml
	#2	.27	.008			

PPM AU x 0.029 = oz/t

22-141 50 SHEETS
 22-142 100 SHEETS
 22-144 200 SHEETS



UNITED STATES
 DEPARTMENT OF LABOR
 MINE SAFETY AND
 HEALTH ADMINISTRATION
 HEALTH & SAFETY ANALYSIS CEN
 P. O. BOX 25367
 DENVER, COLORADO 80225



ID: 0202441 MINE: VULTURE MINE 1 9257

BELOW IS A LISTING OF THE EMPLOYMENT, ACCIDENT, AND INJURY DATA (FOR COAL, PRODUCTION IS ALSO SHOWN) WHICH THE HEALTH AND SAFETY ANALYSIS CENTER HAS IN ITS 1990 (JAN - JUN) AUTOMATED FILES FOR MINE-ID 0202441

IF YOU HAVE ANY ADDITIONAL INJURIES THEY SHALL BE SUBMITTED ON FORM 7000-1. FOR ALL INJURED EMPLOYEES (IDENTIFIED BY ASTERISKS (*)) IN THE RETURN TO WORK COLUMN) WHO HAVE RETURNED TO WORK, COMPLETE THE RETURN TO WORK DATA ON YOUR INJURY FORM (7000-1) AND ON THE PINK COPY AND RETURN THE PINK COPY TO MSHA - HSAC. EMPLOYMENT ADDITIONS, CORRECTIONS, OR DELETIONS SHALL BE MADE ON THIS LISTING. FOR ANY QUESTIONS CALL - 303-236-2716. THE PRIMARY COMMODITY YOU ARE MINING OR MILLING IS COPPER ORE

PLEASE DO NOT RETURN THIS FORM IF INFORMATION IS CORRECT. RETURN ALL OTHER ACTIONS TO HEALTH AND SAFETY ANALYSIS CENTER BY OCT. 15, 1990. P.O. BOX 25367, DENVER, COLORADO 80225.

QTR	S-U	EMP	EMP-HRS.	S-U	EMP	EMP-HRS.	S-U	EMP	EMP-HRS.	S-U	EMP	EMP-HRS.
01	PIT	6	3484	OFC	1	300						
02	PIT	6	3303	OFC	1	300						

INJURIES							INJURIES								
NAME	SSN	UNIT	INJ DATE	WORK LOST	RST. DAYS	STD. CHAR	DATE RET'D	NAME	SSN	UNIT	INJ DATE	WORK LOST	RST. DAYS	STD. CHAR	DATE RET'D
HALL	5500	PIT	0322	0000	0000	0000	900322								

SEP 10 1990

NUMBER OF INJURIES REPORTED ON EMPLOYMENT FORM = 0
 REPORTABLE INJURIES ON HSAC FILES AS OF 09/04/90 = 1
 IN THE EMP-HRS. COLUMN (* *) INDICATES THAT HSAC HAS NO
 EMPLOYMENT FOR THE QUARTER AND SUB-UNIT LISTED.

ID. 0202441 PAGE NO. 1
 A.F. BUDGE MINING LIMITED
 VULTURE MINE
 4301 N. 75TH STREET
 SCOTTSDALE AZ 85251

W. SCOTT DONALDSON
ATTORNEY-AT-LAW
301 WEST INDIAN SCHOOL ROAD, SUITE 102
PHOENIX, ARIZONA 85013-3214
TELEPHONE: (602) 264-1351
TELECOPIER: (602) 279-9018

RECEIVED MAY 14 1990

May 9, 1990

A. F. Budge
West Carr Road
Retford, Nottinghamshire,
England DN22 7SW

DMEA Limited
7340 East Shoeman Lane
Suite 111 "B"
Scottsdale, Arizona 85251

John C. Lacy
DeConcini,, McDonald, Bremmer, Yetwin, Lacy & Zimmerman, P.C.
2525 East Broadway Blvd., Suite 200
Tucson, Arizona 85716

Arizona Exploration, Inc.
Exodyne Business Park
8433 North Black Canyon Hwy., Ste. 158
Phoenix, Arizona 85021

**Re: V.M.P., Inc. - A.F. Budge (Mining) Limited
Option and Lease Agreement: Notice of Default**

Gentlemen:

V.M.P., Inc., an Arizona corporation ("V.M.P."), pursuant to Section 8 of the above-referenced Option and Lease Agreement dated July 1, 1984, and the First Amendment thereto, hereby gives A.F. Budge (Mining) Limited ("Budge") notice of default. The defaults are specifically described below.

1. Budge, or its agent, is treating or detoxifying solid wastes from another property at the Vulture mine site. The details of this operation are provided in Exhibit A. This activity is not "Mineral Exploration" or "Mining Activities" as defined in Sections 2.b.(3) and 2.b.(4) of the Agreement. V.M.P. requests that Budge immediately cease this activity and remove the approximately one hundred twenty five (125) cubic yards of material.

2. Budge has assigned the Agreement to Arizona - Ontario Exploration, Inc. ("Arizona Exploration") without permission of V.M.P. That assignment is described in Exhibit B. Section 10 of the Agreement requires consent by V.M.P. before an assignment is effective. V.M.P. will not approve the assignment because Arizona Exploration is not complying with federal mining laws and regulations as described in paragraph 3.

3. Arizona Exploration is conducting mineral exploration activities on the property. The location of those activities is shown by the well registration documents attached hereto as Exhibit C. As of May 4, 1990, Arizona Exploration is conducting

W. SCOTT DONALDSON
ATTORNEY-AT-LAW
301 WEST INDIAN SCHOOL ROAD, SUITE 102
PHOENIX, ARIZONA 85013-3214
TELEPHONE: (602) 264-1351
TELECOPIER: (602) 279-9018

Page two
V.M.P., Inc.

those activities without having applied for or obtained the requisite federal permits or notices.

4. Budge has failed to properly maintain all of the unpatented mining claims as required by Sections 6.a. and 6.f.(1) of the Agreement. The details of this failure are outlined in Exhibit D.

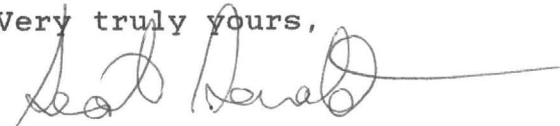
5. Budge has failed to pay the advance minimum royalties due, pursuant to Section 4.b. of the Agreement as amended, on March 5, April 5, and May 5, 1990. Although Arizona Exploration has attempted to make the April 5 payment, as indicated by Exhibit E, V.M.P. cannot accept this payment since it has not approved the Budge - Arizona Exploration assignment.

6. Budge has failed to make the \$75,000.00 Production Bonus Payment called for in Section 3.g. of the "First Amendment to Option and Lease Agreement" dated February 1, 1985. Budge has been operating a heap leaching facility on the property since approximately May 27, 1988 as is indicated by Exhibit F. This activity must be defined as mineral production since Budge is sending concentrates to G.D. Resources, Inc. and receiving payments therefrom, as indicated by the settlement statements attached hereto as Exhibit G. Budge is calculating the advance mineral royalties paid to V.M.P. against income from G.D. Resources, Inc. The "Remarks Sheet" (Exhibit H), given to Larry Beal on February 20, 1990 by Ron Short, shows this calculation and leaves V.M.P. convinced that Budge is producing minerals from the property.

7. Budge has failed to transfer the Vulture townsite to V.M.P. V.M.P.'s intent in agreeing to Section 12 of the Agreement was that any interest associated with the Vulture Mine and obtained by Budge within the described boundaries would be subject to V.M.P. ownership.

8. Budge has failed to employ John Osborn throughout the term of the Agreement pursuant to Ben Dickerson's agreement with V.M.P.

Very truly yours,



W. Scott Donaldson, Esq.

WSD/dmm
cc: V.M.P., Inc.
Enclosures

A

**BIOREMEDIATION SITE REGISTRATION
APPLICATION FOR
A.F. BUDGE (MINING) LIMITED
VULTURE MINE
WICKENBURG, ARIZONA
WT JOB NO. 7120K028**



**WESTERN
TECHNOLOGIES
INC.**
The Quality People

ARIZONA

Phoenix
P.O. Box 21387 85036
3737 East Broadway Road
Phoenix, Arizona 85040
(602) 437-3737

Mesa
952 East Baseline Road, No. 104
Mesa, Arizona 85204
(602) 926-2113

Sun City
17200 North Dysart Road, No. 13
P.O. Box 2431
Sun City, Arizona 85372
(602) 975-2154

Flagstaff
2400 East Huntington Drive
Flagstaff, Arizona 86004
(602) 774-8708

Lakeside
Route 1, Box 1030
Lakeside, Arizona 85929
(602) 368-5568

Tucson
3480 South Dodge Boulevard
Tucson, Arizona 85713
(602) 748-2262

Sierra Vista
1827 South Paseo San Luis
Sierra Vista, Arizona 85635
(602) 458-0364

Laughlin / Bullhead City
1610 Riverview Drive, No. 5
Bullhead City, Arizona 86442
(602) 758-8378

CALIFORNIA

Concord
1001 Galaxy Way, No. 107
Concord, California 94520
(415) 689-9378

Riverside
16801 Van Buren Boulevard, Suite A
Riverside, California 92504
(714) 780-7482

COLORADO

Golden
13949 West Colfax Avenue, No. 140
Golden, Colorado 80401
(303) 233-2991

NEVADA

Las Vegas
3611 West Tompkins Avenue
Las Vegas, Nevada 89103
(702) 798-8050

Environmental Services
4085 Nevso Drive, Suite C
Las Vegas, Nevada 89103
(702) 252-0580

NEW MEXICO

Albuquerque
8305 Washington Place, N.E.
Albuquerque, New Mexico 87113
(505) 823-4488

Farmington
400 South Lorena Avenue
Farmington, New Mexico 87401
(505) 327-4966



**WESTERN
TECHNOLOGIES
INC.**

175 East Broadway Road
Phoenix, Arizona 85040
(602) 437-3737

April 26, 1990

Ms. Betsey P. Westell
Environmental Health Specialist
Solid Waste Unit
Arizona Department of Environmental Quality
2005 North Central Avenue
Phoenix, Arizona 85004

**RE: TEMPORARY SOIL TREATMENT SITE REGISTRATION, VULTURE MINE, WICKENBURG,
ARIZONA. WT JOB NO. 7120K028.**

Dear Ms. Westell:

Pursuant to our recent discussions and the "Waste Management Guidelines" provided by the Arizona Department of Environmental Quality (ADEQ) Solid Waste Unit, Western Technologies Inc. (WT) would like to register a temporary soil treatment site at the above mentioned location. The site currently is owned by A.F. Budge (Mining) Limited. This application has been prepared in accordance with the "Guidelines" and follows the same sequential order.

Approximately 125-cubic yards of soil has been stockpiled at the site. The soil was transferred from an A.F. Budge (Mining) Limited facility in San Manuel, Arizona. WT estimates that the treatment program will require approximately 6 - 8 months to complete.

WT would appreciate your assistance in expediting the review process. As previously discussed, the guideline information will be sent to your office for each program of this nature that WT plans to perform. If you have any questions regarding this information, please call us at (602) 437-3737.

Respectfully submitted,

WESTERN TECHNOLOGIES INC.

Glen R. Turney, Ch.E.
Project Engineer, Remediation
Environmental Engineering Services

/bd

Attachments:

Copies to: Addressee (3)

TABLE OF CONTENTS

REGISTRATION INFORMATION Pages 1 - 4

APPENDICES

Appendix A	Maricopa County Air Quality Permit Application
Appendix B	Letter From Property Owner
Appendix C	Figures 1 & 2
Appendix D	Ambient Soil Sampling Results
Appendix E	Chain-of-Custody Form QA/QC



**BIOREMEDIATION SITE REGISTRATION APPLICATION FOR
A.F. BUDGE (MINING) LIMITED
VULTURE MINE
WICKENBURG, ARIZONA**

WASTE MANAGEMENT GUIDELINE - SOIL TREATMENT SITE INFORMATION

A. Local Government Approval

- 1) See Appendix A, Maricopa County Bureau of Air Pollution Control. The area is outside of Phoenix city limits and is not zoned.

B. General Information

- 1) See Appendix B.
- 2) Source: Surface staining from mining equipment.
Amount: Approximately 125 cubic yards.
Concentration: Waste oil, average TPHC level = 6000 - 8000 parts per million (ppm).
- 3) Vulture mine site. Book 1, Page 2, SW 1/4 of SE 1/4 of Section 36, Township 6 North, Range 6 West, Gila and Salt River Meridian, Maricopa County, Arizona.
- 4) The site currently slopes gently from the northeast to the southwest. The containment pit will have the same 1 - 1-1/2% slope. The containment area is located on mine tailings from previous operations at the site. The tails are silty clays. Ground water in this area is limited to the alluvium in the valley. The mine is located at the mountain base and is not underlain by the alluvium.
- 5) See Figure Nos. 1 & 2 in Appendix C. Note: Area is not within the 100 year flood plain.
- 6) The only surface water source in the area is a lined mine tailings pond located approximately 1/4 mile east of the containment area. The mine tailings piles are located between the containment area and the pond which precludes a discharge to the pond. There is an arroyo located 500 feet to the west of the containment area. However, the containment pit slope is parallel to the arroyo and the pit is 30 to 40 feet in elevation above the wash.
- 7) See Appendix D. The ambient petroleum hydrocarbon concentrations ranged from 10 parts per million (ppm) to 15 ppm. See Section D. - Operating Procedures for ambient sampling procedures. The two samples were taken from soils that will underlie the containment pit. The soil is very uniform and WT deemed two samples sufficient to define the ambient conditions. The samples were taken from about 6 - 12 inches below ground surface.



C. Design of the Site and System

1) Berm Design:

The polyethylene liner will extend over the soil berm. The soil berms which surround the pit will be approximately 3 feet in height. As discussed with Mr. Larson formerly of ADEQ, the berms will be approximately 6 feet wide instead of 9 feet. This yields a 2:1 angle of repose, which is more functional for a pit of this size than a 3:1. In the Wickenburg area a 10 year/24 hour flood event is approximately 2.76 inches. The berms of the pit will be one foot higher than the soil enclosed, which will provide four times the suggested containment.

2) Nature of containment system:

- A.) One layer of polyethylene sheeting will be used to line the containment pit and soil berm.
- B.) The layer will be 20 millimeters (mm) in thickness. No chemical reaction is expected between the petroleum contaminated soil (PCS) and the polyethylene liner. Previous jobs of a similar nature have indicated that the shear strength of the liner is sufficient to sustain the treatment process. No permeability information was available from the polyfilm.
- C.) The polyethylene sheeting is to be field seamed with a chemically inert adhesive. A 12 to 16-inch overlap will be used for each layer of the liner. A 6-inch buffer layer of clean fill will be placed over the liner in order to assure that the integrity is not compromised during aeration.

3) Remediation system to be employed:

- C.) Biological remediation will be employed on the PCS soil. Three times per week, the soil will be turned with a mechanical tilling device. This will introduce oxygen into the soil and enhance biological growth. Biological media and nutrients will be introduced into the soil by inoculation 1 to 2 times during the program. The bacteria will be hydrated in a 55-gallon water tank and sprayed onto the soil. The nutrients will be applied by a conventional fertilizer spreader.

D.) Operating Procedures

1) Site Preparation:

- A.) Two ambient native soil samples have been taken from the area where the containment pit will be placed. The samples were taken at the approximate location of the collection area of the containment pit. With the pit slope and possible standing water, this would be the most likely area if a discharge were to occur.
- B.) Ambient sampling.
 - 1) A WT field engineer with experience in sampling and quality assurance procedures obtained the samples. The engineer has OSHA 40-hour Hazardous Waste Training certification.



- 2-6) The soil samples were taken with decontaminated soil scoops from 6 to 12 inches below the soil surface. The soil was placed into the jar up to the brim to prevent headspace and possible volatile losses. The sample containers were 125 milliliter (ml) lab jars which had teflon-lined lids. The samples then were placed on ice in a cooler for transport. Following sampling, the soil scoops were washed in an Alconox solution, rinsed in potable water, and finally rinsed in deionized water.

The sampling gloves used were discarded at the WT laboratory.

2) Transportation and Handling:

- A-C.) The soil will be taken from the stockpile and placed on the liner with a backhoe. The soil will be deposited on one end and the unloading will continue to the other end. The soil berm will then be replaced at the point of entry by the backhoe into the pit. An engineer will oversee the procedure to see that the liner integrity is not compromised. Patching material will be available should a liner breach occur. The soil will be placed on the liner to a depth of 1.5 feet, overlying a 6-inch thick layer of granular fill. The fill will provide additional protection against incidental slashing of the polyethylene liner during tilling.

3) Operation and Maintenance Schedule:

The soil will be tilled three times each week following the initial inoculation. Moisture will also be added as needed. The liner and berms will be inspected visually during each tilling.

4) Sampling Schedule and Schedule for Submittance of Results to ADEQ:

The soil will be sampled monthly after the initial sampling. Four samples will be obtained during each sampling round. A copy of the analytical reports will be provided to ADEQ upon completion of the project unless a more frequent reporting is required.

- 1-3) A copy of a WT chain-of-custody form is included as Appendix E. Also included is a QA/QC form followed by WT personnel.

- B.) As earlier referred to, a copy of the lab analysis will be provided.

The samples will be analyzed for total petroleum hydrocarbon by EPA Method 8015. They will also be analyzed by EPA Method 8020 for benzene, toluene, ethylbenzene, and xylenes. Both methods are described in Test Methods for Evaluation Solid Wastes SW846, third edition, United States EPA, November, 1986.

Any rinse water thought to be contaminated will be placed into the pit for treatment. In the event of runoff from the pit, procedures will be followed to determine the extent of the contamination through sampling and excavation.

- E) As-Built Plan - N/A



F) Closure Plan

- 1.) The soil beneath the containment pit will be sampled following removal of the formerly contaminated soil from the pit. WT will obtain samples from the original areas sampled and also from any areas that indicate a possible leak or compromise of the pit.
- 2.) The remediated soil will remain on the site following treatment. If the treatment process is not effective in reducing the TPH levels, WT will be prepared to transfer the soil to an approved facility.
- 3.) The liner will be reused for the facilities mining operation if possible.
- 4.) The land will be used for expansion of the mine tailings in the future or for a maintenance access road for A.F. Budge.





**WESTERN
TECHNOLOGIES
INC.**

9707 East Broadway Road
Phoenix, Arizona 85040
(602) 437-3737

May 2, 1990

Mr. Jess Lotwala
Public Health Engineer
Bureau of Air Pollution Control
Maricopa County Department of Health Services
1845 East Roosevelt Street
Phoenix, Arizona 85006

**RE: APPLICATION FOR AIR QUALITY PERMIT FOR BIOREMEDIATION SITE LOCATED AT
THE VULTURE MINE, WICKENBURG, ARIZONA.**

Dear Mr. Lotwala:

Western Technologies Inc. (WT), on behalf of A.F. Budge (Mining) Limited, would like to request an air quality permit for the above mentioned facility. The site is currently owned by A.F. Budge (Mining) Limited.

A.F. Budge will be performing soil moisturizing and aeration as part of a biological treatment process at the site. WT will be directing the bioremediation and has submitted registration information to the Arizona Department of Environmental Quality, Solid Waste Unit. A copy of this information is attached.

The process is to be performed on soil contaminated with heavy oils and is expected to take 6 to 8 months. During the program it is estimated that releases to the atmosphere from the soil would be minimal due to the non-volatile nature of the contaminant.

WT would appreciate your assistance in expediting the review process. As previously discussed, a permit application will be sent to your office for each program of this nature that WT plans to perform in Maricopa County.

If you have any questions, please call me at (602) 437-3737.

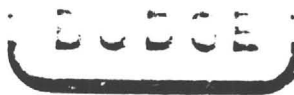
Respectfully submitted,

WESTERN TECHNOLOGIES INC.

Glen R. Turney, Ch.E.
Sr. Remediation Engineer
Environmental Engineering Services

/bd

Attachments: Registration Information



A.F. Budge (Mining) Limited

RECEIVED
MAY 1 1990
PHOENIX, ARIZONA

April 27, 1990

4301 North 75th Street
Suite 101
Scottsdale, AZ 85251-3504

(602) 945-4630
FAX (602) 949-1737

Glen Turney
Project Remediation Engineer
Environmental Engineering Services
Western Technology Inc.
3737 East Broadway Road
Phoenix, Arizona 85040

Dear Mr. Turney:

Please be advised that the owner of record of the land in the SW1/4SE1/4 of Section 36, Township 6 North, Range 6West, Maricopa County is:

A.F. Budge (Mining) Limited
4301 North 75th Street, Suite 101
Scottsdale, AZ 85251

We are aware that material containing petroleum hydrocarbons have been deposited at this site. We are also aware that a bioremediation plan has been proposed by Western Technologies Inc. to treat this material and we approve of this plan.

Very truly yours,

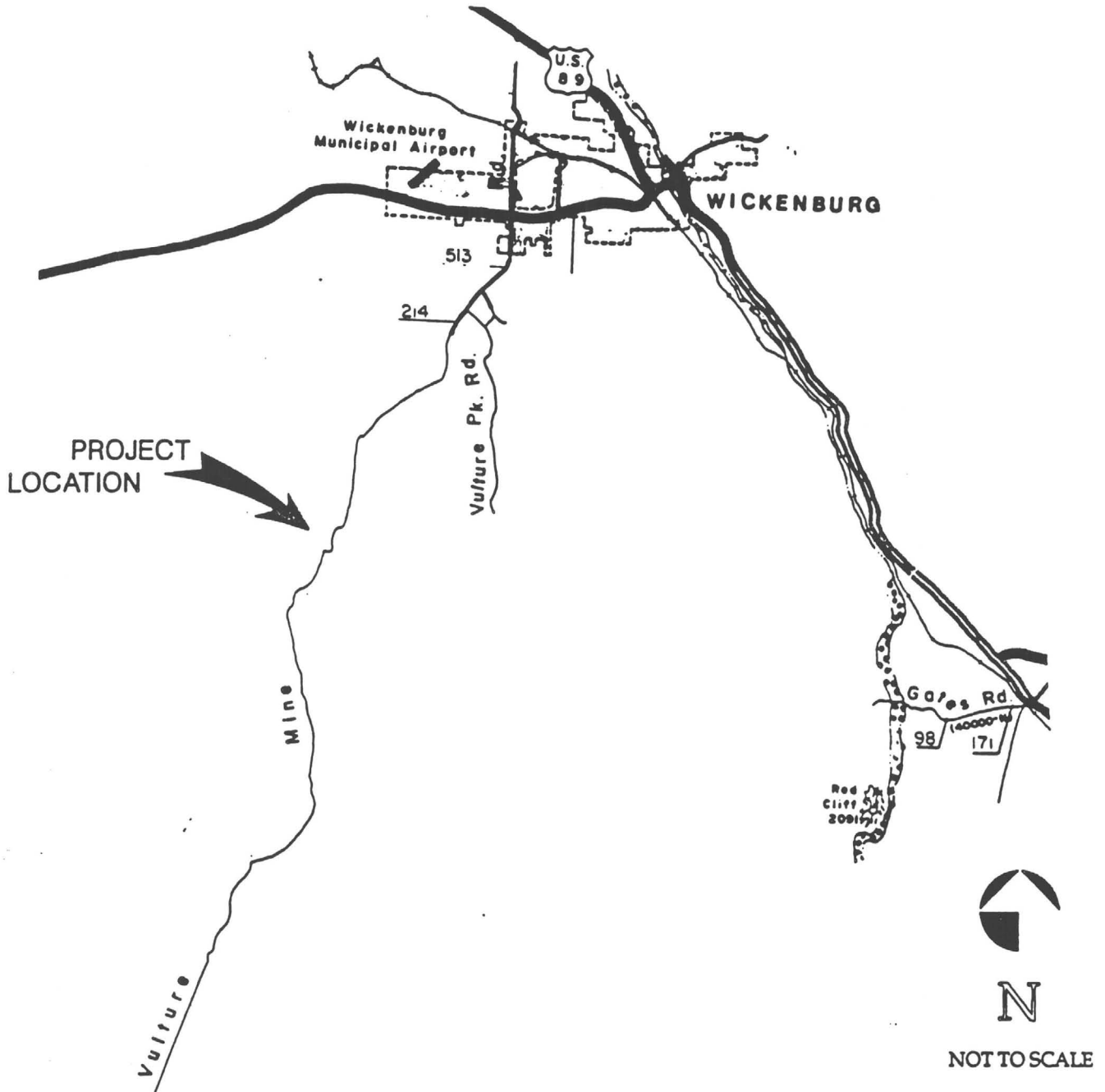
Carole A. O'Brien
Carole A. O'Brien
Mining and Financial Coordinator

Soil Remediation

A. F. Budge (Mining) Limited

Vicinity Map

Figure 1



JOB NO. 7120K028

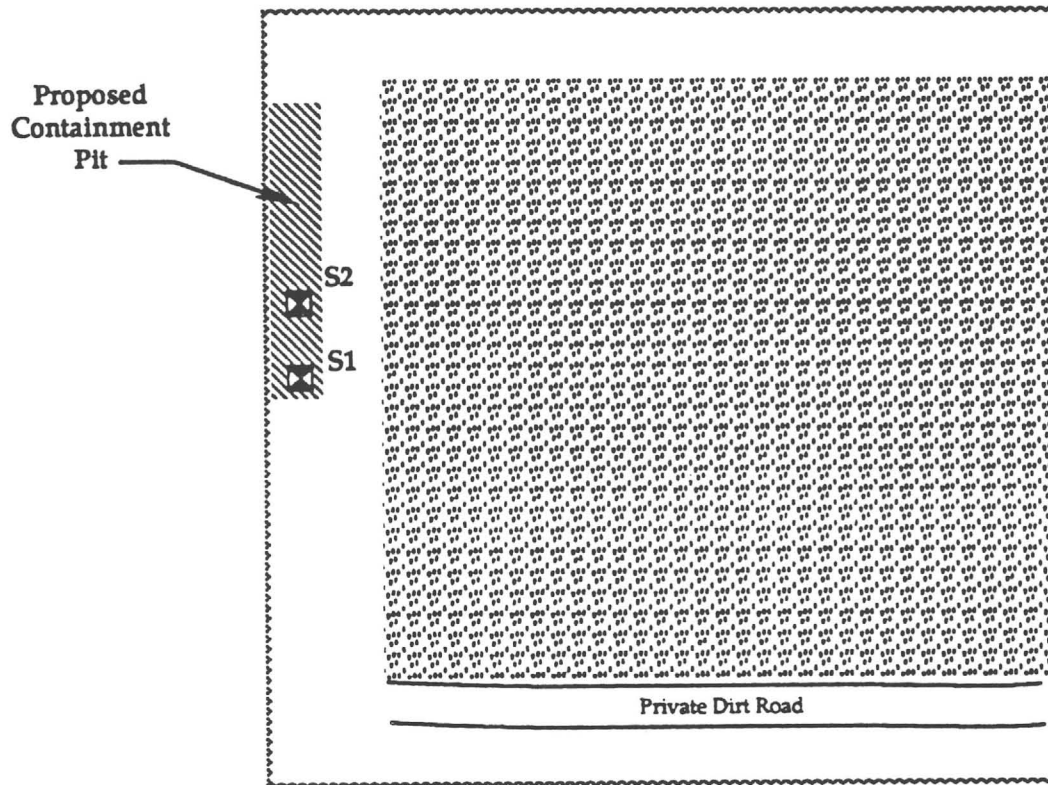
REVIEWED	R. Livermore
PREPARED	T. Chapman

WESTERN TECHNOLOGIES INC.
The Quality People



Soil Remediation

A. F. Budge (Mining) Limited Site Plan Figure 2



Legend

-  Soil Sample Location
-  Lined Tailings Area
-  Chain Linked/Barbed Wire Fence



N
Scale



JOB NO. 7120K028

REVIEWED	R. Livermore
PREPARED	T. Chapman

WESTERN TECHNOLOGIES INC.
The Quality People





ENVIRONMENTAL
TECHNOLOGI
INC.

1000 S. 50th Street
Phoenix, Arizona 85036
(602) 437-3737



CLIENT A F BUDGE (MINING) LIMITED
4301 N. 75TH STREET
SCOTTSDALE, AZ 85251

SAMPLE NO. : 9002361
INVOICE NO.: 7120W028
DATE : 04-26-90
REVIEWED BY *M.E. Dineen*
PAGE : 1 OF 1

CLIENT SAMPLE ID : AFB-001-A
SAMPLE TYPE : SOIL
SAMPLE SOURCE : --
SAMPLED BY : WTI/G. TURNEY
SUBMITTED BY : WTI/G. TURNEY

AUTHORIZED BY: AFBML/PERSONNEL
CLIENT P.O. : --
SAMPLE DATE : 04-20-90
SUBMITTED ON : 04-20-90

REMARKS -

TOTAL PETROLEUM HYDROCARBONS BY MODIFIED 418.1

* DATA TABLE *

PARAMETER	RESULT	UNIT	TEST DATE
Total Petroleum Hydrocarbons	10.	mg/Kg	04-23-90



CLIENT A F BUDGE (MINING) LIMITED
4301 N. 75TH STREET
SCOTTSDALE, AZ 85251

SAMPLE NO. : 9002362
INVOICE NO.: 7120W028
DATE : 04-26-90
REVIEWED BY: *M.E. D. Mui*
PAGE : 1 OF 1

CLIENT SAMPLE ID : AFB-002-A
SAMPLE TYPE: SOIL
SAMPLE SOURCE: --
SAMPLED BY: WTI/G. TURNEY
SUBMITTED BY: WTI/G. TURNEY

AUTHORIZED BY: AFBML/PERSONNEL
CLIENT P.O. : --
SAMPLE DATE .: 04-20-90
SUBMITTED ON : 04-20-90

REMARKS -

TOTAL PETROLEUM HYDROCARBONS BY MODIFIED 418.1

* DATA TABLE *

TEST

[----- PARAMETER -----] [-- RESULT -] [- UNIT -] [DATE]

Total Petroleum Hydrocarbons: 15. mg/Kg 04-23-90

CHAIN OF CUSTODY RECORD

JOB NO.		PROJECT NAME				NUMBER OF CONTAINERS	SAMPLE METHOD					REMARKS (PHYSICAL APPEARANCE, etc.)	LABORATORY IDENTIFICATION	
SAMPLER (SIGNATURE)		DATE	TIME	COMP.	GRAB		SAMPLE LOCATION	VACSAM	SOIL SCOOP	SOIL AUGER	SPLIT-SPOON			BAILER
7120KO		AF BUDGE												
GR Turney														
B-001-A		4/20/90	1130		✓			✓					SOIL	900236
B-002-A		4/20/90	1130		✓			✓					"	900236

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)
GR Turney	4/20/90	1500					
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LABORATORY BY (SIGNATURE)	DATE	TIME	REMARKS
			Rene Nichol	4/20/90	15:00	
				SHIPPING TEMP. (°F)		
				MIN.	MAX.	



CHAIN OF CUSTODY RECORD

№ 90217

JOB NO.		PROJECT NAME				NUMBER OF CONTAINERS	SAMPLE METHOD					REMARKS (PHYSICAL APPEARANCE, etc.)
SAMPLER (SIGNATURE)							VACSAM	SOIL SCOOP	SOIL AUGER	SPLIT-SPOON	BAILER	
SAMPLE IDENTIFICATION	DATE	TIME	COMP.	GRAB	SAMPLE LOCATION							
RELINQUISHED BY (SIGNATURE)		DATE	TIME	RECEIVED BY (SIGNATURE)			RELINQUISHED BY (SIGNATURE)		DATE	TIME	RECEIVED BY (SIGNATURE)	
RELINQUISHED BY (SIGNATURE)		DATE	TIME	RECEIVED BY (SIGNATURE)			RELINQUISHED BY (SIGNATURE)		DATE	TIME	RECEIVED BY (SIGNATURE)	
RELINQUISHED BY (SIGNATURE)		DATE	TIME	RECEIVED FOR LABORATORY BY (SIGNATURE)			DATE	TIME	REMARKS			
		SHIPPING TEMP. (°F)										
		MIN.	MAX.									

LABORATORY



QUALITY ASSURANCE PROCEDURES



QUALITY ASSURANCE OBJECTIVES

The overall QA objectives are to develop and implement procedures for collecting and evaluating data in an accurate, precise and complete manner. Data obtained under such procedures will insure that the measurement of data, sampling procedures, and field measurement provide information that is representative of actual site condition. The definitions for accuracy, precision, completeness, and representativeness are as follows (quoted from EPA's QAMS-005/80, December 29, 1980):

- o Accuracy - the degree of agreement of a measurement (or an average of measurements of the same thing), X , with an accepted reference or true value, T , usually expressed as the difference between the two values, $X-T$, or the difference as a percentage of the reference or true value, $100 (X-T)/T$. Accuracy is a measure of the bias in a system.
- o Precision - a measure of mutual agreement among individual measurements of the same property, usually under prescribed similar conditions. Precision is best expressed in terms of the standard deviation. Various measures of precision exist depending upon the "prescribed similar conditions."
- o Completeness - a measure of the amount of valid data obtained from a measurement system compared to the amount that was expected to be obtained under correct normal conditions.
- o Representativeness - expresses the degree to which data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point, a process condition, or an environmental condition.



The procedures for gathering accurate, precise, complete and representative data are described in subsequent sections.

The overall QA/QC Program will be administered and directed by a QA/QC Officer who will be directly responsible to the Program Director, who will ensure that all procedures outlined in this document and site-specific plans are followed by the field, laboratory, administrative and data interpretation personnel. If any discrepancies are observed by the QA/QC Officer, the Program Director will be notified and corrective action instituted. The QA/QC Officer will review all site-specific investigation plans to insure that each contains adequate QA/QC Plans and that all work can be inspected or audited for compliance. The QA/QC Officer will review all draft reports to insure the quality assurance plans were observed.

1.0 Document Control and Filing Systems

All documents will be under the control of the Program Director. The documents from each site investigated will be placed into a central file (either manual or computerized). The filing system will be based on a serial-number system. The files will be kept in filing cabinets which are kept locked when not in use. The QA/QC Officer and Program Director will be responsible for ensuring that the document system is available to users while providing adequate control on security and usefulness of files.

All correspondence will be logged in and placed in a designated file upon receipt. The central files will be located at Western Technologies Inc., Las Vegas, Nevada. Separate file numbers will be assigned in the central filing systems to each site investigated under this contract. This will insure against files being misfiled.



work plans, project management plans, assessments and progress reports.

2.0 Field Activities

All field activities will be conducted according to written protocols. Field personnel will be briefed on the activities to be performed before any work commences. Field personnel unfamiliar with new equipment or procedures will be trained before field activities are performed. Additionally, field personnel will be briefed concerning the Health and Safety Plan of the site before work is commenced at the site.

2.1 Development of Standard Operating Procedures (SOPs) for Sampling

Before any site is investigated in this program, sampling SOPs will be developed. The development of sampling SOPs and adherence to the SOPs during field work is required for a complete quality assurance program. The sampling SOPs will define objectives, design the plan, preparation of containers, maintenance of equipment sample packaging and chain-of-custody protocols. It is important to note that in the design of the sampling plan, it is necessary to insure that the samples being collected are representative of the population (soil, water) being sampled. Therefore, a statistical approach will be used to estimate the minimum number of samples needed to meet an acceptable confidence level. Because environmental samples are usually grossly heterogeneous, a statistical approach can aid insuring adequate samples are collected to meet the objective of the site investigation or remediation. The sampling plan will be prepared by the Project Manager and reviewed by the QA/QC Officer for adherence to the overall quality assurance program.



ing sampling will coordinate
ensure the correct sampling
are employed. Sample containers
the sampling activity commences.
ill be checked to ensure they are
e correct preservatives, if neces-
ple is collected, the date, time, name
ing location will be written on the
sample will be capped and a sample seal
between the cap and the container. The
ce sample into an a cooler for transport to
dy Record. The sampler will record each sample on a
of the samples until the samples have been
o the laboratory or a shipping agent. The
or shipping agent will be required to sign the
Custody Record before the sampler will relinquish
of samples.

ield quality control program will include the use of
al blanks and field spikes to evaluate problems which
be encountered in sampling and transport to the labora-
ry. Travel blanks are containers (e.g. 40-ml VOA
ottles) filled with deionized water at the site. The
container containing the travel blank is labelled, sample
seal applied, placed in the cooler and transported to the
laboratory along with the samples collected at the site.
The sample is analyzed to ascertain if the samples may have
been contaminated during transit. Field spikes are pre-
pared by adding a known concentration of the chemical
parameter to a sample or deionized water. The container is
labelled, sealed and transported with the samples collected
at the site. The spiking solution will contain chemical
markers which are being investigated at the site. Field
markers indicate losses associated with transport or



... differences. Field samples ... not be revealed as such to the laboratory and, therefore, can be used as an independent check on the performance of the laboratory.

The field equipment (split-spoon samplers, spatulas, etc.) will be cleaned before each sample is collected. The equipment will be cleaned with a solution of trisodium phosphate and triple rinsed with distilled water. The water will be collected and taken off site for disposal.

Field logs will be written with waterproof ink and log books. The sampler will place all observations concerning collection of samples such as time, depth, location, geologic materials encountered, soil moisture, etc. The logs will be signed by the field supervisor at the end of each working day. The field logs will become part of the document control system at the end of the field activities.

The QA/QC Officer will visit each site being investigated to insure the procedures listed in this document and the site-specific documents are implemented. The visit will be unannounced and the results of the audit reported to Program Director and Project Managers.

2.3 Sampling; Natural Waters

The groundwater sampling will conform to the following guidelines. All measuring and sampling equipment will be decontaminated prior to sample collection from each well. Prior to sampling, a submersible pump and stainless steel bailer will be used to evacuate a minimum of three casing volumes prior to sampling. Temperature, conductivity and pH will be monitored during evacuation to verify purging of static water in well. The sample will be taken after well has recovered with 80% of the water level above the bottom of the well prior to purging.



Water samples will be collected with a bailer or submersible bladder pump. Samples collected for volatile organics will be placed in 40-mL VOA bottles and filled from the bottom up and capped tightly to avoid formation of bubbles. Samples will be placed in the containers using the preservatives and holding times outlined in Table I. The sample label, seal and Chain-of-Custody Record will be completed. The sampler will enter the following information in the field notebook:

- o Sampler's name
- o Sample number
- o Location
- o Purged volume
- o Unusual conditions (i.e., color, odor, solids, etc.).
- o pH, temperature, conductivity
- o Water level

The samples and a travel blank will be placed into a cooler containing ice. The cooler will be marked "Fragile" and "this-end-up" labels on all four sides of each cooler. The cooler will deliver to shipper or laboratory and the Chain-of-Custody form signed.

All field instruments (pH, conductivity, temperature) will be calibrated at the beginning of each work day and must not vary by more than 5% of true measurement.

2.4 Lithologic Logging

A complete log of conditions encountered during drilling will be maintained using Unified Soil Classification System by an engineer or geologist. A borehole log form will be used to record observations.



Upon receipt of the sample, the laboratory will sign the Chain-of-Custody Record and forward a photocopy to the project manager for inclusion in the project files. The sample will be logged in, assigned a laboratory tracking number and stored in the proper location in the laboratory.

Samples requiring organic analyses will be refrigerated. Refrigerators used to store volatile organics will be monitored using refrigerator blanks. Refrigerator blanks are 40-ml VOA bottles containing deionized water. Periodically, the blanks are analyzed to ascertain if the deionized water has been contaminated by the storage of volatile organics. Refrigerator blanks are helpful in ascertaining possible contaminant pathways if a field blank tests positive for volatile organics.

The samples will be analyzed within the time periods listed in Table I. The time is measured from the time of collection to time of analysis or extraction. The table also lists the type of containers to be used and the required preservatives for aqueous samples.

The chemical laboratory will monitor the following operations which affect the control of quality of chemical analysis. The QA/QC Officer will be responsible for proper monitoring of all operations.

Deionized Water

The deionized water will be monitored to insure that it meets the following specifications for laboratory and field use:

pH	6.7 to 7.3 pH units
Electrical Conductivity	< 1.0 mhos/cm @ 25C°
Particulates	≤ 0.1 mg/l



Water for Special Uses

Deionized water is boiled for 24 hours and then packed in 40-mL vials for later use. Organic-free water is prepared on a weekly basis.

Carbon dioxide free water obtained by deionized water is boiled for 15 to 20 minutes, cooled to room temperature and sealed in a glass container.

Ammonia-free water is obtained by passing water through an ion exchange column.

Chemicals and Gases

All chemicals used in preparation of standards, decompositions, and extractions will be analytical grade or better. The use of method blanks will assist in monitoring the quality of chemicals used with sample decomposition and extractions. If at any point a method blank fails to perform according to the parameters of the method, the chemicals used with the method blank will be replaced. Reagents are logged under an inventory control and disposed of at the date of expiration.

Glassware

In all cases, polyethylene or borosilicate (Pyrex, Kimax) containers will be used for storage of standards and reagents, including tinted glass for photosensitive reagents. Most metal stock solutions are placed in polyethylene bottles, except for elemental solutions known to react with polyethylene (such as antimony).



standard solutions are prepared in Class "A" volumetric flasks. For all titrimetric procedures, Class "A" micro-burets are employed. All G.C. syringes are calibrated and certified by the distributor (Hamilton, Supelco).

Standards

Commercially prepared and certified calibration and stock standards are purchased for all analyses requiring such standards. Organic standards are purchased from Ultra Scientific, Supelco or Chem Service. Fisher Scientific is the supplier for inorganic and metal standards. Pesticide grade solvents are purchased from Burdick and Jackson. Quality control check samples for organic analyses are provided by EPA. Quality control check samples not obtained from a certified source are prepared in the laboratory using a chemical reagent which differs from the reagent used in preparing the external (calibration) standards. The standard stock solutions (usually 1000 ppm) are prepared on a monthly basis. The diluted stock solutions used for external or internal standards are prepared daily.

3.1 Internal Quality Control Checks

The quality assurance procedures of the environmental laboratory are based on Standard Methods for Examination of Water and Wastewater, 16th edition, Handbook for Analytical Quality Control in Water and Wastewater Laboratories, EPA, June 1972, by the Analytical Control Laboratory, Cincinnati, Ohio and "Establishment of Chemistry Laboratory Quality Assurance Policies", Arizona Department of Health Services, Memorandum; Laboratory Certification and Licensors Section 2551188, December 1, 1982.



The laboratory will perform environmental analyses in accordance with the following documents:

Methods for Organic Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057

Methods for Chemical Analyses of Water and Wastes, EPA-600/4-79-020

Standard Methods for Examination of Water and Wastewater, 15th Edition

Test Methods for Evaluating Solid Waste, SW-846, 2nd Editions

The quality control procedures mandated in each of the above documents will be observed. Additionally, many of the recommended quality control procedures associated with the above documents will be incorporated into this QA/QC plan. The quality control checks incorporated in this QA/QC Plan are listed and defined below:

- 3.1.1 Reagent/Method Blank - a sampled of deionized/organic free water that is processed through all procedures, quantities of materials and labware used in sample preparation. Methods requiring the addition of internal standards and/or surrogate spikes, the spikes will be added to Reagent/-Method blank. The data from the blank assesses whether adequate contaminant control was exercised. If the method blank gives a positive response for the parameter(s) of interest, corrective action will be taken. Actions will include review of method and possible replacement of reagents, water, glassware, etc. A method blank will be analyzed for each batch of samples or once every ten samples.
- 3.1.2 Check Standard - Certified check samples will be used when available from commercial or government sources. EPA check samples are available for many of the organic analyses. Laboratory prepared check samples will be prepared with an



analytical reagent which differs from the one used to prepare the calibration standards. The check standard is not carried through the entire analytical procedure, but is analyzed directly by the analytical instrumentation (e.g. direct injection of a G. C. column). A check standard result is used to validate an existing concentration calibration curve. If the check standard deviates by more than $\pm 10\%$ from the calibration curve, corrective action will be taken. A check standard will be analyzed for each batch of samples or once every ten samples.

3.1.3 Surrogate Spike - prepared by adding a known amount of a pure compound to the environmental sample. The compounds selected for surrogate spikes are not expected to be found in the sample, but is similar to the compounds of interest. Surrogate spikes are added to an environmental sample prior to any extraction process and are carried through the total analytical method. In analytical methods requiring surrogate spikes, the spike is added to every environmental sample. Surrogates are used to monitor the operation of the analytical method. The data is used to calculate a percent recovery of the surrogate spike (an estimate of accuracy). The percent recovery of the surrogate spikes must fall within the acceptable range of recovery or corrective action will be taken.



Surrogate Spikes

	<u>Acceptable Range of Recovery (%)</u>
Volatiles	80-120
Base/neutral	30-130
Acids	50-110
Pesticides	70-120
TCDD	20-150

Soil/Waste Samples
Surrogate Spikes

	<u>Acceptable Range of Recovery (%)</u>
Pesticides	25-140
Volatiles	60-130
Base/neutral	25-120
Acids	15-110

The laboratory maintains quality control charts to monitor the continuous (accuracy) performance of the analysis. If the control charts indicate the analysis is "out of control" by the laboratory, even though the acceptable ranges listed above have not been exceeded, the laboratory will take corrective action.

- 3.1.4 Internal Standard - prepared by adding a known amount of a compound to the environmental sample. The compound selected is not one expected to be found in the sample, but is similar in nature to the compound of interest. Internal standards are added to the environmental sample just prior to analysis. With the purge and trap techniques, the internal standard and surrogate spike are identical. The internal standard is used to monitor the operation and sensitivity of the analytical system and the effectiveness



of pers apparatus. In analytical methods requiring internal standards, the standard is added to each environmental sample.

- 3.1.5 Calibration Standards - prepared by adding a known amount of compound to deionized water. The solution is serially diluted to produce 4 to 5 solutions of different concentrations. The calibration standards are analyzed and used to produce an external calibration curve. The curve must be linear and have correlation coefficient of $\geq .995$ before samples will be analyzed.
- 3.1.6 Matrix Spike - prepared by adding a known amount of a pure compound to the environmental sample. The compound used for the spike is the same as that being analyzed for in the sample. The matrix spike is added to the environmental sample prior to any extraction or decomposition and is carried through the entire analytical process. A matrix spike will be analyzed for each batch of samples or once every ten samples. The data is used to calculate a percent recovery of the matrix spike. The percent recovery of the matrix spikes must fall within the acceptable range of recovery or corrective action will be taken.

Water Samples
Matrix Spikes

	<u>Acceptable Range of Recovery (%)</u>
Pesticides	40-130
Volatiles	60-145
Base/neutrals	30-120
Acids	10-120



	<u>Acceptable Range of Recovery (%)</u>
Pesticides	25-140
Volatiles	60-140
Base/neutral	30-140
Acids	20-120

The laboratory maintains quality control charts to monitor the continuous (accuracy) performance of the analysis. If the control charts indicate the analysis is "out of control" by the laboratory, even though the acceptable ranges listed above have not been exceeded, the laboratory will take corrective action. Matrix spikes for organic parameter is not listed above and inorganics will use acceptance criteria listed by the respective EPA method.

- 3.1.7 Matrix Duplication - Aliquots are made in the laboratory of the same environmental sample and each aliquot is treated exactly the same throughout the analytical method. If the maximum acceptable percent difference of the duplicates exceeds the criteria listed below, then corrective action will be taken.

	<u>Maximum % Difference</u>
Volatile	15%
Base/neutral	50%
Acid	40%
Pesticide	40%

- 3.1.8 GC/MS Tuning Sample - The EPA tuning compounds will be used. Set the mass spectrometer to the acceptance criteria listed with the respective EPA method. The GC/MS will be tuned every 24 hours.



The laboratory maintains control charts on both inorganic and organic analyses. The type of chart used consists of a central line and two limit lines spaced above and below the central line. These are termed the inner and outer control limits. The charts used to assess accuracy (% recovery) the central line represents the mean of the % recovery values. The inner control limits and outer control limits are located two and three standard deviations from the central line, respectively. If a % recovery is located outside of the outer control limits or two consecutive % recovery values reside outside of the inner control limits, then the analysis is considered "out of control." The analyst must take corrective action before proceeding.

Additionally, charts are developed to assess precision of the analysis (% difference of duplicates).

3.2 External Quality Control

A laboratory in order to maintain a consistent quality control program must include outside sources of standards. The sources supply control solutions similar in properties to the internal quality control solutions used by the laboratory. The recommended frequency of an external quality control check is once or twice annually.

Western Technologies Inc. participates twice annually in the EPA Performance Evaluation Water Pollution and Water Supply studies as an external check on our capabilities.

3.3 Record Keeping

All reports, charts and calculations associated with an analyses are filed according to the name of the client. Records are kept on file for at least seven years. The QC



data is maintained in separate log books. The maintenance of QC log books and control charts are under the control of the laboratory QA/QC Manager. The QA/QC Manager is responsible for checking calculations and the accuracy of QC data.

3.4 Maintenance and Calibration of Instrumentation

The laboratory has an in depth QA/QC Document which lists specifically the calibration for each instrument in the laboratory. A brief description is given below:

1. Instrument calibration is done at the time of use as dictated by the SOP for each individual instrument.
2. All balances are zeroed before each day's use and checked against Class S weights monthly and annually calibrated by a commercial calibration service.
3. Volumetric glassware which is not Class A is checked for calibration semiannually.
4. Thermometer calibrations are performed annually by a commercial calibration service.
5. Documentation is kept on all gas cylinder changes as well as change of gas line filter and molecular sieves.
6. Records of service contracts and service/maintenance visits are kept.
7. A preventive maintenance schedule is maintained in accordance with the laboratory QA/QC Manual.

3.5 Laboratory QA/QC Manual and Standard Operating Procedures (SOP)

The laboratory has prepared an in depth QA/QC Manual (130 pages). The manual incorporates all the QA/QC procedures used in the laboratory.



Standard Operating Procedure (SOP) manuals have been written for each environmental analyses performed by the laboratory. SOP's are detailed restatements of EPA methods. The SOPs mandate the exact type of standardization (internal or external), chemicals to be used, concentrations of spiking solutions and many other analytical techniques left to the discretion of the individual laboratories by EPA methods. The SOPs are updated each year and must be approved by the laboratory QA/QC Officer and Laboratory Manager.

4.0 Performance and System Audits

An audit is an independent assessment of data quality. The QA/QC Officer will conduct field office and laboratory audits. The function of the field auditor will be to:

- o Observe procedures and techniques of the field sampling crew;
- o Check and verify records of calibration;
- o Assess the effectiveness of and adherence to prescribed QC procedures;
- o Review document control procedures;
- o Identify and correct any weakness in the sampling/analytical approach and techniques and;
- o Assess the overall data quality of the various sampling/analytical systems.

The function of the laboratory auditor will be to review:

- o Calibration documentation of instruments;
- o Completeness of laboratory data forms;
- o Sampling logging procedures;
- o Documentation of quality control data (control charts).



- o Field data review and validation procedures;
- o Field data storage and filing procedures;
- o Laboratory data review and filing procedures.

Upon completion of the audit, the QA/QC Officer will discuss any specific weaknesses with the Project Manager and make recommendations for corrective action. An audit report will subsequently be prepared and distributed to Project Manager, Program Director and Arizona Department of Environmental Quality. This report will outline the audit approach and present a summary of results and recommendations.



B



A.F. Budge (Mining) Limited

March 8, 1990

4301 North 75th Street
Suite 101
Scottsdale, AZ 85251-3504

(602) 945-4630
FAX (602) 949-1737

Larry W. Beal
President
V.M.P., Inc.
1414 E. Purdue
Phoenix, AZ 85020

Dear Mr. Beal:

This letter will inform you of a pending agreement between A.F. Budge (Mining) Limited and Arizona-Ontario Explorations, Inc. per Section 10 of our original agreement.

A.F. Budge (Mining) Limited will assign the lease to Arizona-Ontario Explorations, Inc.

Arizona-Ontario Explorations, Inc. is incorporated and registered to do business in the State of Arizona. The company is a syndicate, consisting of three larger mining companies: Placer Dome U.S., Inc., Prime Resources Corp., and American Barrick Resources Corp. Enclosed for your information are annual reports of the participating companies plus letters acknowledging their participation in the syndicate.

All three companies are very successful; they have the resources and expertise to conduct the type of exploration needed on the Vulture Mine property.

Very truly yours,

Ronald R. Short
General Manager

RRS:ca

encls.

e

3/13/90



AZ EXPLORAITON, INC.
8433 BLACK CANYON HWY
SUITE 158
PHOENIX AZ 85021

ARIZONA
DEPARTMENT
OF WATER
RESOURCES

Rose Mofford, Governor
N. W. Plummer
Director

RE: Registration No. 55-527417 55-527418
File No. B(6-5)31 B(6-5)36

15 South 15th Avenue
Phoenix, Arizona 85007

Dear Well Owner:

Enclosed for your records is an annotated copy of the Notice of Intention to Drill a well which was recently filed with this Department. This is returned to you as evidence of compliance with A.R.S. §45-596. Your designated driller has been mailed, separately, a Well Drilling Card which he is required to have in his possession before commencing to drill the well.

Since this well is being drilled as a monitor well, or for cathodic protection, grounding, geotechnical or piezometer purposes, our standard driller report form is also being furnished to the driller which he is required to complete and return to the Department within 30 days after the completion of drilling. A Completion Report form is being furnished for monitor wells where pump equipment is authorized to be installed as part of this packet so that you may submit the report within 30 days after the installation of the pumping equipment on a monitor well as required by A.R.S. §45-600.

This well is authorized to be drilled for mineral exploration purposes. Because of this, no pump equipment may be installed. A Project Completion Report is being furnished you for each hole to be drilled. You are required to submit this Project Completion Report within 30 days after completion of drilling.

For monitor, geotechnical, cathodic protection, grounding and piezometer wells, you should obtain the written permission of the Department of Water Resources before proceeding with the drilling in the event that you determine it necessary to change the location of the proposed well. A properly signed amended Drilling Card must be in the possession of the driller before drilling commences at a different location than originally authorized.

For your future use, a Change of Well Information form is enclosed should it become needed. Per A.R.S. §45-593, the person to whom a well is registered shall notify this Department of a change of ownership of the well and/or information pertaining to the physical characteristics of the well, including abandonment, in order to keep the well registration file current and accurate.

Sincerely,

R. A. Gessner
Chief, Operations Division

RAG:ba
Enclosures
DWR-55-50-12/89

CHANGE OF WELL INFORMATION

Well Reg. No.

File (location) No.

I/We request the following well information be changed:

Date: _____, 19____

Signature of current Well Owner

(DO NOT CUT THIS FORM IN HALF)

STATEMENT OF CHANGE OF WELL OWNERSHIP

I, _____, state that I am (no longer) the (new)
(please print)
owner of the well described below:

Township _____ Range _____ Section _____; _____ $\frac{1}{4}$ _____ $\frac{1}{4}$ _____ $\frac{1}{4}$

Well Registration No. _____ File (location) No. _____

Previous Owner

PRINT New Owner's Name

Address

Signature of New Owner

City State Zip

Address

DATED:

City State Zip

NOTE: A.R.S. §45-593.C. requires that the Department be notified of change of well ownership and that the well owner is required to keep the Department's Well Registration records current and accurate. Well data and ownership changes must be submitted within thirty (30) days after changes take place.

SAVE THIS FORM TO REPORT FUTURE CHANGES IN OWNERSHIP, CHANGES IN ADDRESS, OR CHANGE IN WELL DATA SUCH AS PUMP CAPACITY, CORRECTION OF LEGAL DESCRIPTION, CHANGE OF WELL DRILLER, PRIOR TO DRILLING THE WELL, IN ADDITION TO AMENDING INFORMATION PREVIOUSLY FILED.

* * * * *

ARIZONA DEPARTMENT OF WATER RESOURCES

15 South 15th Avenue
Phoenix, Arizona 85007

NOTICE OF ABANDONMENT

A.R.S. §45-594; R12-15-816(E): The owner or operator of the well shall notify the Department, in writing, no later than thirty days after the abandonment has been completed.

1. Well location:

Township _____

Range _____

Section _____

_____ ^{1/4} _____ ^{1/4} _____ ^{1/4}
(10 acre subdivision)

County _____

2. Owner of the well:

Name

Address

City

State

Zip

3. Owner of the land:

Name

Address

City

State

Zip

4. Well Description:

Depth of hole _____

Diameter of hole _____

Type of Casing _____

5. _____

Well Registration Number

File Number

6. Prior to abandonment, did the well penetrate any waterbearing layers?

Yes _____ No _____

7. Prior to abandonment, did the well have 20' of steel surface casing and 20' of grout in the annular space surrounding the surface casing.

Yes _____ No _____

8. If the answer to No. 7 is no, was the top 20' of casing removed prior to setting the cement plug?

Yes _____ No _____

9. Was the well filled with cuttings or other non-toxic material prior to setting the cement plug?

Yes _____ No _____

10. If the answer to No. 9 is yes, what material was used to fill the well?

11. How deep does the cement plug extend below land surface?

12. Was the well backfilled above the cement plug?

Yes _____ No _____

13. _____
Date Abandonment Complete

I state that this Notice is filed in compliance with A.R.S. §45-594: R12-15-816(E), and is complete and correct to the best of my knowledge and belief.

DATE

SIGNATURE

EXPLORATION WELL(S)
FILING FEE \$10.00

DEPARTMENT OF WATER RESOURCES (DR)
NOTICE OF INTENTION TO DRILL
EXPLORATION WELL(S)

EXPLORATION WELL(S)

Section 45-596, Arizona Revised Statutes and Rule R12-15-817 provide: Prior to drilling one or more exploration wells, the well owner, lessee or exploration firm shall file a Notice of Intention to Drill on a form provided by the Department.

WELL/LAND LOCATION

1. Township 6N N/S
Range 15W E/W
Section 31

7. Number of wells 3
(See Condition 3 on reverse)

11. Drilling firm:

In the case of a single well,
list 10-acre subdivision

1/4, 1/4, 1/4

2. County Maricopa

8. Owner of land:

Longyear Co
Name

As Kudge (M. P. K.) LTD
Name

7777 W. Camelback
Address

4-121 N. 16th St. 101
Address

Phoenix AZ 85024
City State Zip

3. Applicant:

Scottsdale Arizona
City State Zip

ALZUPAZ Exploration Inc
Name

9. DESCRIPTION OF WELL:

83
DWR License Number

8733 K. P. K. (M. P. K.) HOY
Address

Diameter 4 inches

12. Period well will remain
in use 0 months.

Phoenix AZ 85021
City State Zip

Depth 100 feet

Type of casing perforated
(If none, so state)

13. Proposed method of
abandonment of well(s)
after project is
completed:

4. Jim Stop Holman
NAME OF CONTACT PERSON

10. Construction will start:

2 / 1 / 1992
Month Day Year

5. Owner of well:

Same as above
Name

Address

City State Zip

6. Purpose of well(s) drilled
pursuant to this Notice:

Mineral Exploration X
Geotechnical _____
Cathodic Protection _____
Grounding _____

DO NOT WRITE IN THIS SPACE
OFFICE RECORD

File No. B(6-5)31

Filed 3-6-90 By ak

Input _____ By _____

Duplicate Mailed 3-8-90 By ak

Registration 55-527417

AMA/INA PH

W/S L8 S/B 03

DO NOT COMEPT THE

14. Is the proposed wellsite within 100 feet of a septic tank system, sewage disposal area, landfill, hazardous waste facility or storage area of hazardous materials? Yes No
If yes, a request for a variance must accompany this application pursuant to R12-15-820.

GENERAL INSTRUCTIONS HYDROLOGY

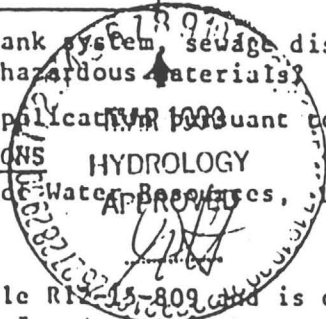
- Fill out this form in duplicate and mail to Department of Water Resources, 15 South 15th Ave. Phoenix, Arizona 85007
- Proper filing fee of \$10.00 must accompany Notice.

I state that this Notice is filed in compliance with Rule R12-15-809 and is complete and correct to the best of my knowledge and belief and that I understand the conditions set forth on the reverse side of this form.

DATE 3-6-90

DWR 55-43-10/88 (Revised)

Jim Stop Holman
Signature of Applicant



STATE OF ARIZONA
DEPARTMENT OF WATER RESOURCES
15 SOUTH 15TH AVENUE
PHOENIX, ARIZONA 85007

PROJECT COMPLETION REPORT FOR EXPLORATION DRILLING

This report must be prepared by the owner in all detail and filed with the Department within 30 days following completion of the well drilling project.

1. Owner: _____
Name
Address: _____
Street City State Zip

2. Lessee or Operator: _____
Name
Address: _____
Street City State Zip

3. Driller: _____
Name
Address: _____
Street City State Zip

4. Location: _____
Township Range Section $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$ WELL REGISTRATION NO. 55- _____
(A REQUIREMENT)

DESCRIPTION OF WELL

5. Type of Casing (if installed): _____

6. Abandonment method and material used if abandoned: _____

7. Construction details if completed for monitoring purposes, re-entry or conversion to water wells: _____

8. Date or period drilled: _____

LOG OF WELL

Unconsolidated Formation

Consolidated Formation

Depth to water in feet below land surface: _____
(if encountered or detected)

DO NOT WRITE IN THIS SPACE	
OFFICE RECORD	
Registration No. 55-527417	
Received _____	By _____
Entered _____	By _____
File No. B(6-5) 31	

I state that this report is filed in compliance with A.R.S. § 45-600 and is complete and correct to the best of my knowledge and belief.

Owner's Signature _____ Date _____

STATE OF ARIZONA
DEPARTMENT OF WATER RESOURCES
15 SOUTH 15TH AVENUE
PHOENIX, ARIZONA 85007

PROJECT COMPLETION REPORT FOR EXPLORATION DRILLING

This report must be prepared by the owner in all detail and filed with the Department within 30 days following completion of the well drilling project.

1. Owner: _____
Name
Address: _____
Street City State Zip

2. Lessee or Operator: _____
Name
Address: _____
Street City State Zip

3. Driller: _____
Name
Address: _____
Street City State Zip

4. Location: _____
Township Range Section $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$ WELL REGISTRATION NO. 55- _____
(A REQUIREMENT)

DESCRIPTION OF WELL

5. Type of Casing (if installed): _____

6. Abandonment method and material used if abandoned: _____

7. Construction details if completed for monitoring purposes, re-entry or conversion to water wells: _____

8. Date or period drilled: _____

LOG OF WELL

Unconsolidated Formation

Consolidated Formation

Depth to water in feet below land surface: _____
(if encountered or detected)

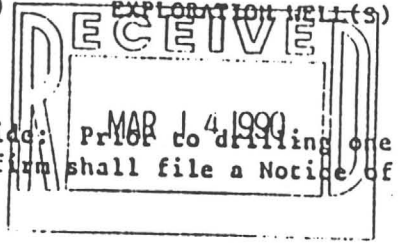
DO NOT WRITE IN THIS SPACE OFFICE RECORD	
Registration No. 55-527418	
Received _____	By _____
Entered _____	By _____
File No. _____	B(6-6)36

I state that this report is filed in compliance with A.R.S. § 45-600 and is complete and correct to the best of my knowledge and belief.

Owner's Signature _____ Date _____

EXPLORATION WELL(S)
FILING FEE \$10.00

DEPARTMENT OF WATER RESOURCES (DWR)
NOTICE OF INTENTION TO DRILL
EXPLORATION WELL(S)



Section 45-596, Arizona Revised Statutes and Rule R12-15-817 provide: Prior to drilling one or more exploration wells, the well owner, lessee or exploration firm shall file a Notice of Intention to Drill on a form provided by the Department.

WELL/LAND LOCATION

1. Township 6N N/S
Range R6W E/W
Section 36

In the case of a single well,
list 10-acre subdivision

1/4, 1/4, 1/4

2. County Maricopa

3. Applicant:
Arizona Exploration, Inc.
Name
8433 N. Black Canyon Hwy
Address
Phoenix, Arizona 85021
City State Zip

4. Dr. Stan Holmes
NAME OF CONTACT PERSON
Phone (602) 864-6202

5. Owner of well:
Arizona Exploration, Inc.
Name
8433 N. Black Canyon Hwy
Address
Phoenix, Arizona 85021
City State Zip

6. Purpose of well(s) drilled pursuant to this Notice:
Mineral Exploration X
Geotechnical _____
Cathodic Protection _____
Grounding _____

7. Number of wells 2
(See Condition 3 on reverse)

8. Owner of land:
A.F. Budge (Mining) Ltd.
Name
4301 N. 75th St. Suite 101
Address
Scottsdale, Az 85251
City State Zip

9. DESCRIPTION OF WELL:
Diameter 4" inches
Depth 700 ft. feet
Type of casing none
(If none, so state)

10. Construction will start:
March 1990
Month Day Year

11. Drilling firm:
Longyear Company
Name
7773 W. Seldon Lane
Address
Peoria, Arizona 85
City State Zip

83
DWR License Number
12. Period well will remain in use 0 months.
13. Proposed method of abandonment of well(s) after project is completed:
20' cement plug

DO NOT WRITE IN THIS SPACE
OFFICE RECORD
File No. B(66)36
Filed 3-6-90 By ak
Input _____ By _____
Duplicate _____
Mailed 3-13-90 By ak
Registration 55527418
AMA/INA PH
W/S 8 S/B 03

14. Is the proposed wellsite within 100 feet of a septic tank system, sewage disposal area, landfill, hazardous waste facility or storage area of hazardous materials? Yes ___ No X
If yes, a request for a variance must accompany this application pursuant to R12-15-820.

GENERAL INSTRUCTIONS

- 1. Fill out this form in duplicate and mail to Department of Water Resources, 15 South 15th Ave. Phoenix, Arizona 85007
- 2. Proper filing fee of \$10.00 must accompany Notice.

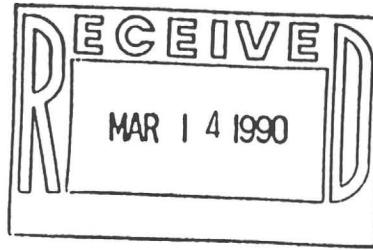
I state that this Notice is filed in compliance with Rule R12-15-809 and is complete and correct to the best of my knowledge and belief and that I understand the conditions set forth on the reverse side of this form.

DATE March 6, 1990
DWR 55-43-10/88 (Revised)

MAR 1990
APPROVED
Stan Holmes
Signature of Applicant

3/13/90

AZ EXPLORATION, INC.
8433 N BLACK CANYON HWY
PHOENIX AZ 85021



ARIZONA
DEPARTMENT
OF WATER
RESOURCES

Rose Mofford, Governor
N. W. Plummer
Director

RE: Registration No. 55-527416
File No. B(6-5)30

Dear Well Owner:

15 South 15th Avenue
Phoenix, Arizona 85007

Enclosed for your records is an annotated copy of the Notice of Intention to Drill a well which was recently filed with this Department. This is returned to you as evidence of compliance with A.R.S §45-596. Your designated driller has been mailed, separately, a Well Drilling Card which he is required to have in his possession before commencing to drill the well.

Since this well is being drilled as a monitor well, or for cathodic protection, grounding, geotechnical or piezometer purposes, our standard driller report form is also being furnished to the driller which he is required to complete and return to the Department within 30 days after the completion of drilling. A Completion Report form is being furnished for monitor wells where pump equipment is authorized to be installed as part of this packet so that you may submit the report within 30 days after the installation of the pumping equipment on a monitor well as required by A.R.S. §45-600.

This well is authorized to be drilled for mineral exploration purposes. Because of this, no pump equipment may be installed. A Project Completion Report is being furnished you for each hole to be drilled. You are required to submit this Project Completion Report within 30 days after completion of drilling.

For monitor, geotechnical, cathodic protection, grounding and piezometer wells, you should obtain the written permission of the Department of Water Resources before proceeding with the drilling in the event that you determine it necessary to change the location of the proposed well. A properly signed amended Drilling Card must be in the possession of the driller before drilling commences at a different location than originally authorized.

For your future use, a Change of Well Information form is enclosed should it become needed. Per A.R.S. §45-593, the person to whom a well is registered shall notify this Department of a change of ownership of the well and/or information pertaining to the physical characteristics of the well, including abandonment, in order to keep the well registration file current and accurate.

Sincerely

R. A. Gessner

Chief, Operations Division

RAG:ba
Enclosures
DWR-55-50-12/89

ARIZONA DEPARTMENT OF WATER RESOURCES

15 South 15th Avenue
Phoenix, Arizona 85007

NOTICE OF ABANDONMENT

A.R.S. §45-594; R12-15-816(E): The owner or operator of the well shall notify the Department, in writing, no later than thirty days after the abandonment has been completed.

- | | |
|---|---|
| <p>1. Well location:</p> <p>Township _____</p> <p>Range _____</p> <p>Section _____</p> <p align="center">_____ $\frac{1}{4}$ _____ $\frac{1}{4}$ _____ $\frac{1}{4}$</p> <p align="center">(10 acre subdivision)</p> <p>County _____</p> | <p>6. Prior to abandonment, did the well penetrate any waterbearing layers?</p> <p>Yes _____ No _____</p> |
| <p>2. Owner of the well:</p> <p>_____</p> <p>Name _____</p> <p>Address _____</p> <p>City _____ State _____ Zip _____</p> | <p>7. Prior to abandonment, did the well have 20' of steel surface casing and 20' of grout in the annular space surrounding the surface casing.</p> <p>Yes _____ No _____</p> |
| <p>3. Owner of the land:</p> <p>_____</p> <p>Name _____</p> <p>Address _____</p> <p>City _____ State _____ Zip _____</p> | <p>8. If the answer to No. 7 is no, was the top 20' of casing removed prior to setting the cement plug?</p> <p>Yes _____ No _____</p> |
| <p>4. Well Description:</p> <p>Depth of hole _____</p> <p>Diameter of hole _____</p> <p>Type of Casing _____</p> | <p>9. Was the well filled with cuttings or other non-toxic material prior to setting the cement plug?</p> <p>Yes _____ No _____</p> |
| <p>5. _____</p> <p>Well Registration Number _____</p> <p>File Number _____</p> | <p>10. If the answer to No. 9 is yes, what material was used to fill the well?</p> <p>_____</p> |
| | <p>11. How deep does the cement plug extend below land surface?</p> <p>_____</p> |
| | <p>12. Was the well backfilled above the cement plug?</p> <p>Yes _____ No _____</p> |
| | <p>13. _____</p> <p>Date Abandonment Complete</p> |

I state that this Notice is filed in compliance with A.R.S. §45-594: R12-15-816(E), and is complete and correct to the best of my knowledge and belief.

DATE

SIGNATURE

CHANGE OF WELL INFORMATION

Well Reg. No. _____

File (location) No. _____

I/We request the following well information be changed:

Date: _____, 19____

Signature of current Well Owner

(DO NOT CUT THIS FORM IN HALF)

STATEMENT OF CHANGE OF WELL OWNERSHIP

I, _____, state that I am (no longer) the (new)
(please print)
owner of the well described below:

Township _____ Range _____ Section _____; _____ $\frac{1}{4}$ _____ $\frac{1}{4}$ _____ $\frac{1}{4}$

Well Registration No. _____ File (location) No. _____

Previous Owner

PRINT New Owner's Name

Address

Signature of New Owner

City State Zip

Address

DATED: _____

City State Zip

NOTE: A.R.S. §45-593.C. requires that the Department be notified of change of well ownership and that the well owner is required to keep the Department's Well Registration records current and accurate. Well data and ownership changes must be submitted within thirty (30) days after changes take place.

SAVE THIS FORM TO REPORT FUTURE CHANGES IN OWNERSHIP, CHANGES IN ADDRESS, OR CHANGE IN WELL DATA SUCH AS PUMP CAPACITY, CORRECTION OF LEGAL DESCRIPTION, CHANGE OF WELL DRILLER, PRIOR TO DRILLING THE WELL, IN ADDITION TO AMENDING INFORMATION PREVIOUSLY FILED.

* * * * *

STATE OF ARIZONA
DEPARTMENT OF WATER RESOURCES
15 SOUTH 15TH AVENUE
PHOENIX, ARIZONA 85007

PROJECT COMPLETION REPORT FOR EXPLORATION DRILLING

This report must be prepared by the owner in all detail and filed with the Department within 30 days following completion of the well drilling project.

1. Owner: _____
Name
Address: _____
Street | City | State | Zip

2. Lessee or Operator: _____
Name
Address: _____
Street | City | State | Zip

3. Driller: _____
Name
Address: _____
Street | City | State | Zip

4. Location: _____
Township | Range | Section | $\frac{1}{4}$ | $\frac{1}{4}$ | $\frac{1}{4}$ | City | State | Zip
WELL REGISTRATION NO. 55-_____
(A REQUIREMENT)

DESCRIPTION OF WELL

1. Type of Casing (if installed): _____

2. Abandonment method and material used if abandoned: _____

3. Construction details if completed for monitoring purposes, re-entry or conversion to water wells: _____

4. Date or period drilled: _____

LOG OF WELL

Unconsolidated Formation

Consolidated Formation

Depth to water in feet below land surface: _____
(if encountered or detected)

DO NOT WRITE IN THIS SPACE OFFICE RECORD	
Registration No. <u>55-527416</u>	
Received _____	By _____
Entered _____	By _____
File No. <u>B(6-5)30</u>	

I state that this report is filed in compliance with A.R.S. 45-600 and is complete and correct to the best of my knowledge and belief.

Owner's Signature _____ Date _____

EXPLORATION WELL(S)
FILING FEE \$10.00

DEPARTMENT OF WATER RESOURCES (DWR)
NOTICE OF INTENTION TO DRILL
EXPLORATION WELL(S)

EXPLORATION WELL(S)

Section 45-596, Arizona Revised Statutes and Rule R12-15-817 provide: Prior to drilling one or more exploration wells, the well owner, lessee or exploration firm shall file a Notice of Intention to Drill on a form provided by the Department.

WELL/LAND LOCATION

1. Township 6N N/S
Range R5W E/W
Section 30, 34

In the case of a single well,
list 10-acre subdivision

2. County Maricopa

3. Applicant:
Arizona Exploration, Inc.
Name

8433 N. Black Canyon Hwy
Address
Phoenix, Ariz. 85021
City State Zip

4. Dr. Stan Holmes
NAME OF CONTACT PERSON
Phone (602) 864-6202

5. Owner of well:
Arizona Exploration,
Name
8433 N. Black Canyon Hwy
Address
Phoenix, Az 85021
City State Zip

6. Purpose of well(s) drilled pursuant to this Notice:
Mineral Exploration X
Geotechnical
Cathodic Protection
Grounding

7. Number of wells 3
(See Condition 3 on reverse)

8. Owner of land:
A.F. Budge (Mining) Ltd.
Name
4301 N. 75th St., Suite 101
Address
Scottsdale, Az 85251
City State Zip

9. DESCRIPTION OF WELL:
Diameter 4" inches
Depth 700' feet
Type of casing none
(If none, so state)

10. Construction will start:
March 1990
Month Day Year

11. Drilling firm:
Longyear Company
Name
7773 W. Seldon Lane
Address
Peoria, Az. 85345
City State Zip
83
DWR License Number

12. Period well will remain in use 0 months.

13. Proposed method of abandonment of well(s) after project is completed:

20' cement plug

DO NOT WRITE IN THIS SPACE
OFFICE RECORD
File No. B(6-5)30
Filed 3-6-90 By sk
Input _____ By _____
Duplicate Mailed 3-8-90 By sk
Registration 55-527416
AMA/INA P74
W/S 8 S/D 03

14. Is the proposed wellsite within 100 feet of a septic tank system, sanitary disposal area, landfill, hazardous waste facility or storage area of hazardous materials? Yes No X
If yes, a request for a variance must accompany this application pursuant to R12-15-820.

GENERAL INSTRUCTIONS

- 1. Fill out this form in duplicate and mail to Department of Water Resources, 1016 South 15th Avenue, Phoenix, Arizona 85007
- 2. Proper filing fee of \$10.00 must accompany Notice.

I state that this Notice is filed in compliance with Rule R12-15-809 and is complete and correct to the best of my knowledge and belief and that I understand the conditions set forth on the reverse side of this form.

DATE March 6, 1990

DWR 55-43-10/88 (Revised)

Stan Holmes
Signature of Applicant
MAR 1990
HYDROLOGY
APPROVED



D

(602) 640-5550

~~A MC 160432~~
A MC 246152
(922-LC)

April 10, 1990

Larry Deal
Vulture Mining Properties
1414 E. Purdue
Phoenix, Arizona 85020

Lode Mining Claims
Vulture No. 63 - No. 66,
A MC 160490 - 160493
Desert No. 118, No. 119, No. 122
A MC 160720, 160721, 160724
Vulture Annex No. 1, No. 2
A MC 246516, 246517

DECISION VACATED IN PART

The decisions of May 12, and May 13, 1987 by the Chief, Branch of Lands and Minerals Operations declaring the above-named lode mining claims abandoned is hereby vacated. The affidavit of annual labor received December 17, 1986 did include the correct claim names. The above-named claims have been reinstated on our records and credit has been given for the 1986 through 1989 assessment years.

Our decisions, however, must stand as they affect the remainder of the claims listed in the decisions of May 12, and May 13, 1987 unless you have a timely-filed proof of labor.

In the future, always include both the correct claim name and A MC serial number assigned to each claim or site on any correspondence.

Byard L. Kershaw
Acting Chief, Branch of
Mining Law Administration

cc: A. F. Budge (Mining), Limited
4301 N. 75th Street, Suite 101
Scottsdale, Arizona 85251-3504

LCarneal:sr:4/10/90 (4065H)

<u>Claim Name</u>	<u>Incorrect A MC Serial Number</u>	<u>Correct A MC Serial Number</u>
<u>Vulture</u> 1-20, 25-62, 63-80 84-89, 91-174 90A	246347 - 246422 246426 - 246515) 246529)	160432 - 160507 160512 - 160602
<u>Vulture Annex</u> 1 and 2	CORRECTLY LISTED ON AFFIDAVIT	246516 and 246517
<u>Desert</u> 1A, 5A, 8A, 9A 2-4, 6, 7, 10-155	246524 - 246527) 246196 - 126346)	160603 - 160756
<u>B-lan</u> 1-21 22, 23	246173 - 246193 246194, 246195	167064 - 167084 170741, 170742
<u>Zen</u> 1-21	246152 - 246172	167085 - 167105
<u>A-lan</u> 1 2-5 6, 7 8 9-12 13, 14 15 16-19 10, 21 22 23-26 27, 28 29 30-33 34, 35 36 37-40 41, 42	246518 CORRECTLY LISTED ON AFFIDAVIT CORRECTLY LISTED ON AFFIDAVIT 246519 CORRECTLY LISTED ON AFFIDAVIT CORRECTLY LISTED ON AFFIDAVIT 246520 CORRECTLY LISTED ON AFFIDAVIT CORRECTLY LISTED ON AFFIDAVIT 246521 CORRECTLY LISTED ON AFFIDAVIT CORRECTLY LISTED ON AFFIDAVIT 246522 CORRECTLY LISTED ON AFFIDAVIT CORRECTLY LISTED ON AFFIDAVIT 246523 CORRECTLY LISTED ON AFFIDAVIT CORRECTLY LISTED ON AFFIDAVIT	167034 167035 - 167038 170729, 170730 167039 167040 - 167043 170731, 170732 167044 167045 - 167048 170733, 170734 167049 167050 - 167053 170735, 170736 167054 167055 - 167058 170737, 170738 167059 167060 - 167063 170739, 170740
<u>VMP</u> 1-5, 8-13, 18-38	CORRECTLY LISTED ON AFFIDAVIT	77018 - 77022, 77025 - 7705
<u>JS</u> 1-16	CORRECTLY LISTED ON AFFIDAVIT	71781 - 71796

Additionally, the following claims are closed on our record, thus, were not given 1989 assessment credit:

<u>Vulture</u> 81-83, 81A	A MC 246423 - 246425, 246528
<u>VMP</u> 6, 7	A MC 77023, 77024

E

April 24, 1990

Mr. Larry W. Beal, President
V.M.P., Inc.
1414 E. Purdue
Phoenix, AZ 85020

RE: LEASE PAYMENTS TO V.M.P., INC.

Dear Mr. Beal;

In accordance with the original lease between V.M.P., Inc. and A.F. Budge (Mining) Limited and the subsequent assignment to Arizona-Ontario Explorations Inc. on March 1st, 1990, we are enclosing the advance minimum royalty payment due to V.M.P., Inc. effective April 5th, 1990.

The April 5th payment of \$5,000.00 in accordance with the above agreement is attached.

With kindest regards,

Sincerely yours,



ARIZONA EXPLORATIONS INC.
Stanley W. Holmes,
President

SWH/bjg

enclosure

cc: Mr. Ronald Short - A.F. Budge (Mining) Limited
Ms. Carole O'Brien - A.F. Budge (Mining) Limited
Mr. Scott Donaldson

ARIZONA - ONTARIO EXPLORATIONS INC.

602-864-6202

8433 N. BLACK CANYON HWY., STE. 158
PHOENIX, AZ 85021



APRIL 24 19 90

91-283
1221

PAY TO THE ORDER OF V.M.P., INC.

\$**5,000.00**

*****FIVE THOUSAND DOLLARS AND NO CENTS*****
DOLLARS

CITIBANK

Citibank (Arizona)
9850 Metro Parkway West
Phoenix, Arizona 85051

FOR LEASE PAYMENT - APRIL '90



F

STATE OF ARIZONA

GROUNDWATER QUALITY PROTECTION PERMIT

Part I. AUTHORIZATION FOR FACILITY OPERATION SUCH THAT GROUNDWATER QUALITY OF THE STATE OF ARIZONA IS NOT ADVERSELY IMPACTED.

In compliance with the provisions of A.R.S. 36-1851 et seq; A.A.C. Title 9, Chapter 20, Article 2; A.A.C. Title 9, Chapter 21, Article 4; and conditions set forth in this permit:

Facility Name: Vulture Mine

Owner: Vulture Mine Properties Inc.
Larry Beal, President
1414 E. Purdue
Phoenix, Arizona 85020

Operator: Carole A. O'Brien
A. F. Budge (Mining) Limited
4301 North 75th Street, Suite 101
Scottsdale, Arizona 85251-3504

is authorized to operate the Vulture Mine-Heap Leaching facility located 12 miles Southwest of Wickenburg, Arizona in Maricopa County over groundwaters of the Phoenix Active Management Area in Township 6 North; Range 6 West; Section 36, SE 1/4 - Gila and Salt River Base Line and Meridian.

This permit shall become effective on the date of signature and shall be valid for the operational life of the facility provided that the facility is operated and maintained in compliance with the specific conditions, general conditions, and information documented or referenced in Parts I, II, III and IV of this Permit and such that groundwater quality standards are not violated (Part V).

/s/ Carole A. O'Brien
Carole A. O'Brien, Operator
A. F. Budge Mining Limited

/s/ Ronald R. Miller
Ronald L. Miller, Ph.D., Assistant Director
Arizona Department of Environmental Quality

Signed this 9th day of
June 19 88

Signed this 27th day of
May 19 88

Part II. SPECIFIC CONDITIONS (R9-20-208.C.)

A. Containment/Disposal Requirements

1. Containment

The permittee is authorized to operate a hydrometallurgical precious metal recovery facility utilizing the cyanide heap leach process. Components of the operation shall include an agglomeration circuit, an impervious lined leach pad with solution collection ditches and containment berms, two impervious lined solution containment ponds (pregnant, barren), a product recovery circuit, and stormwater diversion ditches and berms. The facility shall be constructed and maintained in such a manner as to prevent discharge of pollutants to the land surface or subsurface which may have an adverse impact on groundwater.

a. Heap Leach Process

Material (ore) to be processed at the facility include 225,000 tons of existing on-site tailings. The tailings will be agglomerated with Portland cement prior to placement on the heap leach pad. The pelletized (agglomerated) material shall be placed on the lined leach pad. The heap will be constructed on the lined leach pad in three lifts, each of which will be twelve to fifteen feet in height, with a total heap height of approximately 45 feet. The cyanide solution application rate to the heap shall be approximately 0.004 gallons per minute per square foot, with a corresponding design solution flow rate of approximately 100 gpm.

b. Leach Pad Design with Leak Detection/Collection

The leach pad shall cover an area of approximately 180,000 square feet (4 acres) and shall be graded at a 1 percent slope from the toe of the pad (collection ditch) to a distance of 75 feet upslope edge of the pad. Prior to installation of the liner, the lining contractor shall inspect and verify the subgrade to be a continuous smooth surface free of protrusions of rock, nested gravels or other abrupt irregularities and that proper compaction has been achieved. The upper 6 inches of subgrade shall be compacted to a minimum of 95

percent of maximum dry density as determined by ASTM D698 method. A leak detection system consisting of a 30 mil HDPE underliner, a 16 ounce geotextile and a granular (sand and gravel) fill shall be placed underneath the primary liner at the west toe of the five segment berms which run parallel to the pad slope and divides the pad into five identical segments. The leak detection system shall have five sample access tubes (risers) booted through the primary liner at the toe of each pad segment to provide access for sampling of any leaking fluids. The leach pad primary liner shall consist of a 30-mil HDPE material and shall meet or exceed the National Sanitation Foundation minimum material properties (NSF Standard 54). Liner installation shall be supervised by a Lining Contractor which has more than five years experience or more than five million square feet of successfully installed flexible membrane lining. Destructive shear and peel test (ASTM D4545 6.1.2 and 6.1.1) shall be performed by an independent testing laboratory on field welds every 500 lineal feet of weld. The entire length of each field weld shall be tested by either vacuum methods or by electric arc testing.

c. Solution Storage Ponds with Leak Detection/Collection

The 40 mil HDPE lined solution collection channel located along the downslope toe of the leach pad shall transport pregnant solution and storm water runoff from the leach pad to the ponds. The V-shaped solution channel shall have a discharge capacity capable of handling the operating solution flow rate of 100 gpm with 1.8 foot of freeboard, and a stormwater discharge capacity in excess of 44,000 gpm without freeboard. Pregnant solution shall be directed from the channel down a spillway to the pregnant pond inlet. The pregnant pond shall have a total capacity of 1,000,000 gallons, which includes approximately 400,000 gallons reserved for stormwater flows. The pregnant pond shall have a reserved stormwater capacity capable of containing one-half the six-hour PMF (Probable Maximum Flood) (4.7 inches) which may fall on all lined areas. The barren solution storage pond will be approximately the same dimensions and capacity as the pregnant solution pond. The pregnant and barren pond liners shall be composed of three layers. First, a 20-mil HDPE underliner shall be covered by a layer of 16 ounce geotextile. The primary liner shall overlay the geotextile and shall be a 40-mil HDPE geomembrane. The bottom of both ponds shall be sloped to a lined leak

detection/collection sump where a PVC pipe shall be installed between the HDPE underliner and the HDPE primary liner extending through (booted) the primary liner at the crest elevation of each pond to provide access for the detection and sampling of any fluid leaks. Geomembrane liner installation and field seaming test as described for the heap pad liner installation shall be required for pond liner installations.

d. Product Recovery and Spill Containment

Precious metals contained in the leach solution shall be recovered in the extraction plant. Solution in the pregnant solution pond shall be pumped to the extraction plant and then into the barren solution storage pond. The extraction plant area shall be sloped to drain to the barren solution pond. The concrete floor of the extraction plant shall be designed to drain to a cement sump, piped to conduct flow to the barren solution pond. The cement structure and sump shall be capable of containing all solutions being processed within the extraction plant.

e. Tailings Disposal

The waste product (leach tailings) generated by the heap leach processing shall be rinsed and neutralized tailings contained on the impervious lined pad. The waste product shall not be removed from the lined pad and shall be stacked to prevent slumping and shall not allow discharge of any material or fluids to the land surface of subsurface.

f. Chemical Storage

Sodium cyanide used in the leaching process shall be stored in "air-tight" drums on wooden platforms underlain by a 40 mil HDPE liner which drains into the barren solution pond. A fresh water spray system shall be installed for washdown of the storage area and for triple rinsing empty cyanide containers. Empty chemical containers which have been triple rinsed shall be stored on-site until disposed of at an approved landfill site. All personnel shall be required to attend a cyanide safety and first-aid seminar offered on-site by the chemical supplier, or the State Mine Inspector. A stock of hypochlorite shall be maintained on-site for the purpose of neutralizing any cyanide in the unlikely event a spill occurs outside the areas of lined containment.

g. Sewage Disposal

Only temporary non-residential structures shall be built on-site to serve as an analytical laboratory, offices, and storage. Domestic sewage disposal shall be by means of portable toilets which shall be properly maintained with disposal of holding tank effluent at an approved location (landfill or wastewater treatment plant). All analytical samples shall be returned to the heap leach circuit so that no discard of leach solution samples to the land surface or subsurface shall be allowed.

h. Facility Protection

A surface water diversion system shall be constructed to prevent any runoff from a stormwater event from entering the processing site. Diversion of runoff from the upslope watershed shall be provided by a trapezoidal channel. The diversion channel shall be ten feet wide at the base with a height of approximately five feet with side slope having a 2 1/2:1 slope. The diversion shall have a discharge capacity of approximately 875 cfs approximately the equivalent of the 100-year, 24-hour storm event for the 4.4 square mile watershed. The channel surface shall be lined with shotcrete for erosion protection. A fence shall be constructed to enclose the leach pad, solution ponds, extraction plant, and chemical storage areas. The fence shall have lockable gates on all entrances and shall be posted as a restricted access area.

2. Unauthorized Materials

- a. Adequate supervision and operation shall be performed to ensure that all users of the facility are aware of and understand the containment/disposal requirements of Part II.A.
- b. No commercial operations utilizing hazardous materials or creating hazardous wastes shall dispose of such materials into these systems.

3. Discharge Source Limits

- a. There shall be no discharge of pollutants that violate the State of Arizona Groundwater Quality Standards (A.R.S. R9-21-401, et seq.).
- b. The exhausted ore (waste product) shall not be removed from the lined heap leach pad.

c. Analytical sampling aliquots shall be returned to the heap leach solution circuit and shall not be disposed of on the land surface or subsurface.

4. Leak Detection Limits

Any fluid collected at the leak detection/collection sampling points shall not exceed a pH of 8.5 or show the presence of free cyanide above 0.20 mg/l.

5. Modification

This permit is issued contingent upon the above conditions. The permittee shall give ninety (90) days written advance notice to the Department of any modification to the above facility.

6. Other Laws and Rules

The operator must maintain compliance with all other State of Arizona laws and rules. The issuance of this permit does not waive any federal, state, county, or local government rules, regulations, or permits for which this facility may have to comply.

B. Monitoring Requirements, Record Keeping (R9-20-215)

1. Monitoring Type and Conditions

a. Leach Solution Monitoring

The leaching solution used in the hydromethallurgical heap leach process shall be closely monitored at least once daily in the form of a water balance. Representative samples will be taken daily from: Drainage from the heap leach pad into pregnant pond, leach solution entering and leaving barren ponds where chemicals (cyanide, lime) are added. All solutions sampled shall be analyzed by standard field methods for pH and cyanide (free) (EPA method 335.1). A log of these results, as well as daily solution levels in both barren and pregnant ponds, and the amount of fresh water added to leaching system daily shall be kept at the facility available for inspection by ADEQ personnel and shall be submitted to the Department in the form of a water balance along with the monitoring report as outlined in Part II.B.2.

b. Leak Detection and Collection Monitoring.

The leak collection sampling point specified in Part II.A.1.b. and c. shall be monitored weekly for

the presence of fluid. Any fluid collected shall be analyzed by standard field methods for pH and free cyanide. Refer to contingency requirements (Part II.C.) for action to be taken if cyanide is detected.

2. Reporting Frequency

For daily and weekly field monitoring, including leak detection monitoring and water balance, obtained during the previous 3 months shall be summarized for each month and submitted quarterly in duplicate in accordance with the following schedule. The operator shall prepare a quarterly assessment report including the status of the operation, any remedial activities undertaken and analytical results for that quarter.

Monitoring results, water balance and assessment report for the previous quarter shall be postmarked no later than the 28th day of the month following the completed reporting period as follows:

<u>Reporting Period</u>	<u>are due by</u>
1st Quarter (Jan, Feb, Mar)	Apr 28
2nd Quarter (Apr, May, Jun)	Jul 28
3rd Quarter (Jul, Aug, Sep)	Oct 28
4th Quarter (Oct, Nov, Dec)	Jan 28

The results of all monitoring and reporting required by this permit shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this permit. All forms shall be sent to the following address:

Arizona Department of Environmental Quality
Office of Water Quality
Compliance Section
2005 North Central Avenue
Phoenix, Arizona 85004

C. Contingency Requirements (R9-20-206.D.2.)

1. Should any fluid be collected in any of the leak detection sampling points and exceed the limits of Section A.3., the permittee shall contact the Water Permits/U.S.T. Compliance Unit, adjacent landowners, and the Maricopa County Health Department within 72 hours to determine the appropriate action to mitigate the effects of the violation.

In the event of a spill, it shall be neutralized with a 10% hypochlorite solution stored on site to accommodate such or any other type of unforeseen situation. Any spill shall be reported in the quarterly assessment report.

D. Post-Closure Plan (R9-20-206.D.3. and R9-20-216.C.2.)

1. Before permanent abandonment of the facility site, the permittee shall adhere to the following procedures for closure when utilizing cyanide.
 - a. Operate the leach solution circuit for a minimum of 96 hours without the addition of cyanide, only adding fresh water and caustic soda to maintain water levels and a pH of 10 to 11. Test the leach solution for any residual free cyanide. If free cyanide is detected in concentrations of greater than 0.2 mg/l, continue with next steps ("b." and "c." hypochlorite neutralization). If free cyanide is not detected in concentrations of greater than 0.2 mg/l, go to step "e."
 - b. Run a 1% hypochlorite solution through the pregnant pond and barren pond for a minimum of 24 hours.
 - c. Run a 1% hypochlorite solution through the entire heap leaching system for a minimum of 48 hours.
 - d. Test the rinseate for free cyanide as described in Part II.B.1.a. If free cyanide is detected in concentrations of greater than 0.2 mg/l, repeat steps "a." "b." and "c." above and test for cyanide again.
 - e. Allow solutions to evaporate from the ponds. Any remaining residues or sludges shall be analyzed by EPA approved test methods (Test Methods for Evaluating Solid Waste, SW-846, 2nd Edition) for the following constituents, and the results reported to the Department.

<u>Constituent</u>	<u>Limits</u>
Cyanide (Total and Free)	10 mg/l
Arsenic	5 mg/l
Barium	100 mg/l
Cadmium	1 mg/l
Chromium	5 mg/l
Lead	5 mg/l
Selenium	1 mg/l
Silver	5 mg/l

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If any constituent exceeds its associated limit, the residual sludge shall be removed and disposed of at a landfill approved for handling hazardous waste.

2. The permittee shall file a report with the Department's Water Permits Unit following closure describing the results of each step of the closure plan within 60 days after closure.

E. Compliance Schedule (R9-20-219)

No special requirements.

Part III. REFERENCES: PERTINENT INFORMATION

A. References

The terms and conditions set forth in this permit have been developed based upon the information contained in the following:

1. Groundwater Field Inspection Form(s) dated _____

2. Notice of Disposal dated 5/13/87
3. Groundwater Impact Review dated _____
4. Plan Review File Number N/A
5. Permit Application dated _____
6. Groundwater Impact Review dated _____
7. Amendments to 2 and 4 dated _____
8. Public Notice dated February 29, 1988
9. Public Hearing comments, correspondence letters, and any additional supplemental information contained in the facility permit file.
10. Other _____

B. Facility Information

1. Facility Contact Person Carole A. O'Brien, Operator
2. Address 7340 E. Shoeman Lane, Suite 111 "B" (E)
Scottsdale, Arizona 85251-3335
3. Emergency Telephone Number: Bus: (602) 945-4630
Home (602) 949-5015

The Department shall be notified within 30 days of a change in the facility contact person.

4. Landowner of Facility Site Vulture Mine Properties, Inc.
Larry Beal, President

C. Definitions

1. "Abandoned" means permanent cessation of facility operation, as determined by the facility owner. Facilities which are temporarily shut down are not considered abandoned within the context of these regulations.
2. "Activity" means any human activity including institutional, commercial, manufacturing, extraction, agricultural, or residential land use which may involve disposal of wastes or pollutants which may result in pollution of groundwaters of the State.
3. "Adverse impact upon groundwater quality" means any measurable change to the physical, chemical or biological character of groundwater caused by addition of pollutants or wastes.
4. "Approved" or "approval" means approved in writing by the Director.
5. "Aquifer" means a geologic unit that contains saturated permeable material to yield usable (drinking water, agriculture, industry, etc.) quantities of water to a well or spring.
6. "Composite sample" means a combination of 4 individual portions obtained at equal time intervals for 1 hour. The volume of each individual portion shall be directly proportional to the discharge flow rate at the time of sampling. The sampling period shall coincide with the period of maximum discharge flow.
7. "Department" means the Arizona Department of Environmental Quality (ADEQ).
8. "Director" means the Director of the Arizona Department of Environmental Quality or his duly authorized representative.
9. "Discharge" means the addition, spilling, leaking, pumping, pouring, emitting or dumping of any pollutant into waters of the State from any point source.
10. "Discharge Impact Area" means the potential area extent of waste or pollutant migration, as projected on the land surface, as a result of a discharge or disposal from a facility.
11. "Discrete sample" means any individual sample collected in less than 15 minutes.

12. "Disposal" means the discharge, deposit, well injection, dumping, spilling, leaking, or placing of any wastes or pollutants into or on any land or water such that groundwater is or may be affected. For the purposes of this Article, irrigation with effluent from a wastewater treatment facility is disposal if the application rate exceeds that amount necessary to satisfy the consumptive use and leaching requirements of the crop or landscaping being irrigated.
13. "Disposal system" means a system for disposing of wastes either by surface or underground methods and includes sewerage systems, treatment works, disposal wells and other systems.
14. "Facility" means any system or activity in which or by which disposal occurs or has occurred on either a continuous or intermittent basis.
15. "Flow rate" means the volume per unit time given to the flow of fluids.
16. "Geologic unit" means a geologic formation, group of formations, or part of a formation.
17. "Groundwater" means water under the surface of the earth regardless of the geologic structure in which it is standing or moving. Groundwater does not include water flowing in underground streams with ascertainable beds and banks.
18. "Groundwater Quality Standards" means the standards in A.A.C. R9-21-403.
19. "Hazardous waste" means a waste as defined by the Federal Resource Conservation and Recovery Act (P.L. 94-580).
20. "Hydraulic conductivity" means a measure of the capability of a geologic unit to transmit a fluid.
21. "Individual disposal system" means a device or system for the treatment or disposal of sewage from a single housing unit or equivalent.
22. "Maximum Disposal Limit (MDL)" means the maximum permissible level for a contaminant in an effluent stream.
23. "Maximum Groundwater Limit (MGL)" means the maximum permissible level for a contaminant in water.

24. "Modification" means a change in the location, volume, constituent(s) or constituent concentration(s) of a disposal which is described in the permit issued pursuant to R9-20-208.
25. "Operator" means any person who makes management decisions regarding facility operations.
26. "Owner" means any person holding legal or equitable title in any real property subject to these regulations.
27. "Permit" means a rule, certificate, letter, or any other document issued by the Director authorizing and conditioning the discharge of any pollutant to groundwater from any point source or disposal of wastes from any disposal system identified in A.R.S. Sec. 36-136.G.8.
28. "Pollute" means to cause pollution.
29. "Regulations" means A.A.C. Title 9, Chapter 20, Article 2, requirements for facilities affecting groundwater quality.
30. "Schedule of compliance" or "compliance schedule" means a written document issued by the Director which identifies requirements and times for compliance with either or both the water quality standards in A.A.C. Title 9, Chapter 21 or the permit regulations in A.A.C. Title 9, Chapter 20.
31. "Sewage" means wastes from toilets, baths, sinks, lavatories, laundries and other plumbing fixtures in residences, and wastes from institutions, commercial buildings, mobile homes and other places of human habitation, employment or recreation which are similar in content to residential wastes.
32. "Site" means the area where any facility is physically located or an activity is conducted, including adjacent land used in connection with the facility.
33. "Treatment works" means any plant or other works used for the purpose of treating, stabilizing, or holding wastes.
34. "Vadose zone" means the zone between the land surface and the principle zone of saturation.

Part IV. GENERAL CONDITIONS: RESPONSIBILITIES

A. Permit Duration (R9-20-210)

1. Permits shall be valid for the expected operational life of the facility under the ownership as set forth in the permit unless otherwise limited by Federal or State statute or transferred pursuant to R9-20-221.C.
2. A permit may be modified or terminated pursuant to R9-20-221.
3. The owner or operator of the facility may request that a permit be issued for a duration that is less than the full allowable term.

B. Permit Rights (R9-20-214)

1. A permit does not convey any property or water right of any sort, or any exclusive privilege.
2. A permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of Federal, State, or local laws or regulations.

C. Monitoring Requirements; Record Keeping (R9-20-215)

1. The permittee shall implement and maintain an approved monitoring system if required as a condition of a permit.
 - a. The permittee shall install, use and maintain all monitoring equipment in acceptable condition or provide alternate methods approved by the Department.
 - b. The permittee is required to conduct monitoring of a type and frequency sufficient to yield data which are representative of the monitored activity.
2. The permittee shall retain records or have access to all monitoring information, for a period of at least three (3) years from the date of the sample, or measurement. This period may be extended by written request of the Department at any time. Copies of records shall be furnished to the Department upon written request.
 - a. Records of monitoring information shall include but are not limited to the following:
 - (1) The date, time, exact place, and name of individual(s) who performed the sampling or measuring;

- (2) the date(s) of, and name(s) of the individual(s) who performed the analyses; and
 - (3) the analytical techniques or methods used to perform the analyses.
- b. Monitoring results shall be reported at intervals specified in the permit.
 - c. Calculations which require the averaging of measurements shall utilize an arithmetic mean unless it can be demonstrated by the permittee that another method would more accurately describe or be representative of the monitored activity.
3. Information submitted as a result of any well boring shall include a complete driller's log and drawings showing details of the well's construction. If information must be submitted more than once for the same well, then subsequent submittals shall note that the driller's log and construction drawings have already been submitted and the date of the initial submittal shall be documented.
- D. Reporting Requirements (R9-20-216)
1. The permittee shall give ninety (90) days written advance notice to the Department of any modification to the facility which is not described in the approved Notice of Disposal or permit application.
 2. The permittee shall notify the Department within seventy two (72) hours of becoming aware of any permit violation. The Department may require the permittee to submit a written report within thirty (30) days documenting the following:
 - a. A description of the noncompliance and its cause;
 - b. the period of noncompliance, including exact date(s) and time(s), and the anticipated time period during which the noncompliance is expected to continue if it has not been completely corrected;
 - c. action taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance: If applicable, such action shall be in accordance with an approved contingency plan;
 - d. monitoring or other information which indicates that any waste or pollutant may cause an endangerment to an aquifer; and

- e. noncompliance with a permit condition, or malfunction of the disposal system which may cause fluid migration into or between aquifers.
3. The Department shall be notified in writing at least one hundred eighty (180) days prior to abandonment of the facility.
- a. The permittee may be required to submit a detailed post-closure plan to the Department for approval which shall describe what the physical condition of the facility will be on the date operations are terminated.
 - b. The Department may require the post-closure plan to include any or all of the following:
 - (1) A description of monitoring procedures to be implemented by the permittee including monitoring frequency, type, and location which will be implemented to ensure post-closure activities will not violate groundwater quality standards;
 - (2) a description of procedures for maintaining existing groundwater quality protection systems;
 - (3) a schedule and description of physical inspections to be conducted at the facility following abandonment;
 - (4) a description of future land or water uses or both which may be precluded as a result of facility abandonment; and
 - (5) identification of responsibilities for post-closure cleanup or remedial action in the event of pollution of waters of the State.

E. Site Examination (R9-20-217)

- 1. The Department may routinely inspect the facility or an activity used for the generation, storage, treatment, collection, or disposal of any waste or pollutant, and where records are kept, for the purpose of determining compliance with these regulations or water quality standards, or verifying information submitted in a Notice of Disposal, or permit application, or documented in a permit including any permit conditions.

2. The Department may:
 - a. Obtain samples of wastes or pollutants;
 - b. analyze or cause to be analyzed any samples either on site or at another location;
 - c. take photographs of waste and equipment processes and conditions at the site; or
 - d. inspect and copy any pertinent records, reports, information, and test results.
3. Any pertinent information required by the permit to be maintained by the permittee shall be available for on-site inspection during normal business hours. Split samples and copies of photographs will be provided to the facility owner or operator if the owner or operator requests them at the time the sample(s) is obtained or the photograph(s) is taken as the case may be.
4. Inspections shall be conducted pursuant to the appropriate provisions of the Arizona Revised Statutes and policies established by the Department.

F. Proper Operation and Maintenance (R9-20-218)

The permittee shall at all times maintain in good working order and operate properly all treatment works installed or used for water pollution control and abatement to achieve compliance with the terms and conditions of the permit and water quality standards. If required by Article 5 of A.A.C. Title 9, Chapter 20, the permittee shall retain the services of an operator certified by the Department at the level appropriate to the permitted facility.

G. Permit Conditions (R9-20-220)

1. Duty to Mitigate

The permittee shall take all steps to minimize and correct any adverse impact on groundwater quality as defined in A.A.C. Title 9, Chapters 20 and 21 resulting from noncompliance with the permit.

2. Duty to Reapply

If a permittee has not been issued a permit for the life of the facility, a renewal application in the form of an amended Notice of Disposal or permit application shall be submitted to the Department no less than one hundred eighty (180) days prior to expiration of the existing permit.

3. Duty to Comply

The permittee shall comply with all terms and conditions of the permit, and take such action as is necessary to ensure compliance.

H. Permit Actions (R9-20-221)

1. This permit may be modified, transferred, renewed, or revoked for cause. The filing of a request by the permittee for a permit action does not stay any existing permit condition.

2. Permit Modification

a. Request for modification of a permit may be made by the permittee, the Department, or any affected person and shall identify the specific item(s) to be considered for modification.

b. Public requests for modification of a permit shall be in writing to the Department and shall contain technical facts or reasons which justify the requested changes. The Department upon receipt of the request will notify the permittee, and evaluate and determine whether any request for modification shall be granted.

c. The permittee may be required to submit additional information, including an updated Notice of Disposal or permit application.

d. Only those items considered for modification may be changed, and all other conditions of the existing permit will remain in effect.

e. The following circumstances and occurrences shall require modification of a permit:

(1) Modification to the facility, which justify application of permit conditions that are different from or absent in the existing permit;

(2) other information that was not available when the existing permit was issued, and which justifies application of different permit conditions;

(3) changes in the regulations or standards upon which the permit was based which have been made after the permit was issued;

- (4) good cause exists for changes in a compliance schedule because of conditions over which the permittee has little or no control, and a change to the permit by modification is a reasonable remedy;
 - (5) reason(s) exists for revocation of the permit, and the Department determines that modification is an appropriate method for change; and
 - (6) amendment to an approved abandonment plan or contingency plan or any other portion of an approved Notice of Disposal or permit application.
- f. The suitability of the location of the facility will not be reconsidered during the process of changing the permit unless new information or change to regulations indicate that a violation of adopted groundwater quality standards exist and no other action is possible to mitigate the violation and comply with groundwater quality standards.
- g. The Department will publish a notice of intent pursuant to R9-20-223 to modify a permit before any final action is taken.
- h. With the concurrence of the permittee, the Department may make minor modifications to a permit for any of the following reasons:
- (1) To correct typographical errors;
 - (2) to require more or less frequent monitoring or reporting by the permittee;
 - (3) to change an interim compliance date in a schedule of compliance, provided the new date is not more than sixty (60) days after the date specified in the existing permit, and does not interfere with attainment of the final compliance date requirement;
 - (4) to change quantities or types of fluids discharged which are within the capacity of the facility as permitted, and in the judgment of the Department would not interfere with the operation of the facility or its ability to meet conditions prescribed in the permit, and would not change its classification, if the facility is an injection well; or

- (5) to change construction requirements approved by the Department, provided that any such alteration shall comply with the requirements of these regulations.

3. Permit Transfer

- a. This permit is transferrable to any person after thirty (30) days advance written notice to the Department. The Department may require modification of the permit to change the name of the permittee and incorporate any requirements which may be necessary to ensure compliance with State statutes and regulations.
- b. The permittee shall notify by registered letter a new owner or operator of a permitted facility of the existence of the permit thirty (30) days prior to transfer of responsibility. The notice shall include a copy of the permit. A copy of the letter shall be transmitted to the Department.
- c. The new owner or operator shall be responsible for compliance with the permit upon transfer of ownership or operation without regard to whether said owner or operator has in fact received the notice required by R9-20-221.C.2.
- d. Permit transfer does not absolve the previous permittee of any liability existing at or before the time the permit was transferred.

4. Permit Revocation

- a. Request for revocation of a permit may be made by the permittee, Department, or any affected person.
- b. Public requests for permit revocation shall be in writing to the Department and shall contain technical facts or reasons which justify the requested action. The Department upon receipt of the request will notify the permittee and evaluate the request and determine whether any request for revocation should be granted.
- c. Revocation of a permit is initiated when the Department issues a notice of intent to revoke a permit pursuant to R9-20-223 to the permittee and may be initiated for the following reasons:
 - (1) Noncompliance by the permittee with any permit condition;

- (2) deliberate failure by the permittee to fully disclose all relevant facts when applying for a permit;
 - (3) intentional or deliberate misrepresentation of any relevant fact at any time by the permittee; or
 - (4) if it is determined by ADEQ that the permitted activity is causing a violation of groundwater quality standards and such violation can only be regulated to acceptable levels by revoking the permit.
- d. If disposal to an aquifer causes a clear, present, and immediate danger to the health or welfare of persons, the Department may immediately suspend a permit. Within fourteen (14) days of the suspension, the Department shall issue a notice of intent to revoke the permit. The permit shall be considered revoked thirty (30) days after the notice of intent is issued by the Department unless and until a hearing is requested by the permittee pursuant to R9-20-222.

I. Confidentiality of Information (R9-20-224)

1. Any information submitted to or obtained by the Department pursuant to these regulations may be claimed as confidential by the facility owner or operator. Any such claim shall be asserted at the time the information is submitted or obtained. If no claim is made at that time, the Department may make the information available to the public without further notice.
2. Claims of confidentiality for the following information shall be denied:
 - a. The name and address of any permit applicant or permittee; or
 - b. information which deals with the present or future existence, absence, or level of waste(s) or pollutant(s) in water.
3. Criteria for determining confidentiality are:
 - a. A confidentiality claim has been made at the time the information was submitted or obtained;
 - b. the facility owner or operator has shown that reasonable measures have been taken to protect the confidentiality of the information, and intends to continue to take such measures;

- c. the information is not, and has not been, reasonably obtainable without the facility owner or operator's consent;
- d. no statute specifically requires disclosure of the information; and
- e. the facility owner or operator has shown that disclosure of the information is likely to cause harm to its competitive position; or, the information is voluntarily submitted and disclosure would be likely to impair the State's ability to obtain necessary information in the future.

J. Enforcement and Penalties (R9-20-225)

Any person who constructs, operates, or maintains a facility, disposal system, or introduces wastes or pollutants to waters of the State contrary to the provisions of this permit, falsifies data or information submitted to the Department as a result of the requirements of this permit, or otherwise violates the provisions of this permit, shall be subject to enforcement and penalties pursuant but not limited to A.R.S. 36-1864.01.

PART V. GROUNDWATER QUALITY STANDARDS

A. General Standards Applicable to all Groundwaters (R9-21-403)

1. Discharges of any pollutants and disposal of any wastes shall not impair the uses which have been made, are being made, or will be made of groundwater for every purpose.
2. Discharges of any pollutants and disposal of any wastes to groundwaters of the State shall not cause a public health hazard.
3. Disposal of any hazardous waste, radioactive waste or other waste shall not cause toxic substances to be present in groundwaters of the State in concentrations which are or may be hazardous to public health or which interfere with present and future uses of the groundwater.
4. Discharges of any pollutants and disposal of any wastes to groundwaters of the State shall not directly or indirectly cause violation of surface water quality standards established pursuant to Article 2 of this chapter.

G



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

December 15, 1988

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 570, DORE
STOCK RECEIVED NOTE #: 480

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt			2,681.3 gms.
Net weight of material, After Melt (not incl. 2.2 gms. to Budge)			2,673.2 gms.
Settlement Assays	Gold		9.342%
	Silver		28.163%
Settlement Date			12/13/88
Market Fix, London p.m.	Gold	12/13/88	\$ 420.50/oz.
Handy & Harman	Silver	12/13/88	\$ 6.13/oz.
<u>Metal Content and Gross Value</u>	Gold	8.029 ozs.	\$3,376.19
	Silver	24.205 ozs.	\$ 148.38
	GROSS TOTAL		\$3,524.57

Less Deductions

Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% X \$3,376.19	\$ 75.96
	Silver	3% X \$ 148.38	\$ 4.45
	TOTAL DEDUCTIONS		\$ 580.41

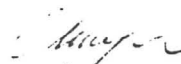
TOTAL DUE TO CLIENT


\$2,944.16

A check in the amount of \$2,944.16 will be paid to A.F. BUDGE (MINING) on or before 12/29/88.

Thank You.

Yours sincerely,


Martin H. Olwyn
Financial Director/Treasurer
MHO/dlr
cc DT


Steve Kay
Vice President, Marketing/Geology



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

December 15, 1988

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 571, ZINC PRECIPITATE
STOCK RECEIVED NOTE #: 480

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Net wet weight of material			702 lbs.
Moisture			5.05%
Net dry weight of material			666.5 lbs.
Settlement Assays	Gold		320.579 oz/t
	Silver		1,394.875 oz/t
Settlement Date			12/13/88
Market Fix, London p.m.	Gold	12/13/88	\$ 420.50/oz.
Handy & Harman	Silver	12/13/88	\$ 6.13/oz.
<u>Metal Content and Gross Value</u>	Gold	106.833 ozs.	\$44,923.28
	Silver	464.842 ozs.	\$ 2,849.48
	GROSS TOTAL		\$47,772.76

Less Deductions


Processing Charge, 702 lbs. X \$2.75/lb.			\$ 1,930.50
Retained Percentage	Gold	2.25% X \$44,923.28	\$ 1,010.77
	Silver	3% X \$ 2,849.48	\$ 85.48
	TOTAL DEDUCTIONS		\$ 3,026.75
TOTAL DUE TO CLIENT			\$44,746.01

A check in the amount of \$44,746.01 will be paid to A.F. BUDGE (MINING) on or before 12/29/88.

Thank You.

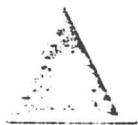
Yours sincerely,


Martin H. Olwyn
Financial Director/Treasurer


Steve Kay
Vice President, Marketing/Geology

MHO/dlr

cc DT



A member of the
Group Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89401
Telephone (702) 358-9275
FAX (702) 358-9275

December 5, 1988

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 540, DORE
STOCK RECEIVED NOTE #: 469

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt			41,321.2 gms.
Net weight of material, After Melt (not incl. 2.1 gms. to Budge)			40,622.4 gms.
Settlement Assays	Gold		10.937%
	Silver		35.925%
Settlement Date			12/02/88
Market Fix, London p.m.	Gold	12/02/88	\$ 424.25/oz.
Handy & Harman	Silver	12/02/88	\$ 6.125/oz.
<u>Metal Content and Gross Value</u>	Gold	142.842 ozs.	\$60,600.72
	Silver	469.19 ozs.	\$ 2,873.79
	GROSS TOTAL		\$63,474.51

Less Deductions


Processing Charge	Minimum Charge	\$ 500.00
Retained Percentage	Gold 2.25% X \$60,600.72	\$ 1,363.52
	Silver 3% X \$ 2,873.79	\$ 86.21
	TOTAL DEDUCTIONS	\$ 1,949.73
TOTAL DUE TO CLIENT		\$61,524.78

A check in the amount of \$61,524.78 will be paid to A.F. BUDGE (MINING) on or before 12/23/88.

Thank You.

Yours sincerely,


Martin H. Olwyn
Financial Director/Treasurer


Steve Kay
Vice President, Marketing/Geology

MHO/dlr

cc DT



A member of the
Crown Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

December 5, 1988

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 547, ZINC PRECIPITATE
STOCK RECEIVED NOTE #: 469

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Net wet weight of material			161.9 lbs.
Moisture			9.96%
Net dry weight of material			145.8 lbs.
Settlement Assays	Gold		162.063 oz/t
	Silver		797.97 oz/t
Settlement Date			12/02/88
Market Fix, London p.m.	Gold	12/02/88	\$ 424.25/oz.
Handy & Harman	Silver	12/02/88	\$ 6.125/oz.
<u>Metal Content and Gross Value</u>	Gold	11.814 ozs.	\$5,012.09
	Silver	58.17 ozs.	\$ 356.29
	GROSS TOTAL		\$5,368.38

Less Deductions

Processing Charge, 161.9 lbs. X \$2.75/lb. (\$445.23) Min. Chg.	\$	500.00
Retained Percentage	Gold	2.5% X \$5,012.09
	Silver	3.5% X \$ 356.29
		<u>\$ 125.30</u>
		<u>\$ 12.47</u>
	TOTAL DEDUCTIONS	\$ 637.77

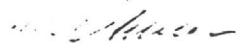
TOTAL DUE TO CLIENT

\$4,730.61

A check in the amount of \$4,730.61 will be paid to A.F. BUDGE (MINING) on or before 12/23/88.

Thank You.

Yours sincerely,


Martin H. Olwyn
Financial Director/Treasurer


Steve Kay
Vice President, Marketing/Geology

MHO/dlr

cc DT.



GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

A member of the
Orion Corporation Group

January 19, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 601, ZINC PRECIPITATE
STOCK RECEIVED NOTE #: 507

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Net wet weight of material			613.42 lbs.
Moisture			7.90%
Net dry weight of material			564.96 lbs.
Settlement Assays	Gold		601.046 oz/t
	Silver		1,963.05 oz/t
Settlement Date			01/12/89
Market Fix, London p.m.	Gold	01/13/89	\$ 405.55/oz.
Handy & Harman	Silver	01/13/89	\$ 5.93/oz.
<u>Metal Content and Gross Value</u>	Gold	169.783 ozs.	\$68,855.50
	Silver	554.52 ozs.	\$ 3,288.30
	GROSS TOTAL		\$72,143.80

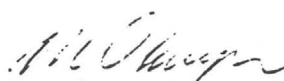
Less Deductions


Processing Charge, 613.42 lbs. X \$2.75/lb.		\$ 1,686.91
Retained Percentage	Gold 2.25% X \$68,855.50	\$ 1,549.25
	Silver 3% X \$ 3,288.30	\$ 98.65
Excess Mercury Charge, 613.42 lbs. X \$1.50/lb.		\$ 920.13
Prepayment on 01/13/89		\$37,000.00
Finance Charge for prepayment, \$37,000.00 X 1.0%		\$ 370.00
	TOTAL DEDUCTIONS	\$41,624.94
NET DUE TO CLIENT		\$30,518.86

A check in the amount of \$30,518.86 will be paid to A.F. BUDGE (MINING) on or before February 2, 1989.

Thank You.

Yours sincerely,


Martin H. Olwyn
Financial Director/Treasurer
MHO/dlr


Steve Kay
Vice President, Marketing/Geology



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

January 19, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 597, DORE
STOCK RECEIVED NOTE #: 507

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt		9,319.0 gms.
Net weight of material, After Melt (not incl. 5.8 gms. to Budge)		9,199.4 gms.
Settlement Assays	Gold	5.978%
	Silver	21.366%
Settlement Date		01/12/89
Market Fix, London p.m.	Gold	01/13/89 \$ 405.55/oz.
Handy & Harman	Silver	01/13/89 \$ 5.93/oz.
<u>Metal Content and Gross Value</u>	Gold	17.681 ozs. \$7,170.53
	Silver	63.19 ozs. \$ 374.72
	GROSS TOTAL	\$7,545.25

Less Deductions

Processing Charge	Minimum Charge	\$ 500.00
Retained Percentage	Gold 2.25% X \$7,170.53	\$ 161.34
	Silver 3% X \$ 374.72	\$ 11.24
	TOTAL DEDUCTIONS	\$ 672.58
TOTAL DUE TO CLIENT		\$6,872.67

A check in the amount of \$6,872.67 will be paid to A.F. BUDGE (MINING) on or before February 2, 1989.

Thank You.

Yours sincerely,

M. H. Olwyn
Martin H. Olwyn
Financial Director/Treasurer
MHO/dlr
cc DT

Steve Kay
Steve Kay
Vice President, Marketing/Geology



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

February 23, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 626, DORE
STOCK RECEIVED NOTE #: 546

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt			41,440.6 gms.
Net weight of material, After Melt (not incl. 6.4 gms. to Budge)			41,323.0 gms.
Settlement Assays	Gold		13.128%
	Silver		45.420%
Settlement Date			02/15/89
Market Fix, London p.m.	Gold	02/15/89	\$ 381.00/oz.
Handy & Harman	Silver	02/15/89	\$ 5.81/oz.
<u>Metal Content and Gross Value</u>	Gold	174.414 ozs.	\$66,451.73
	Silver	603.43 ozs.	\$ 3,505.93
	GROSS TOTAL		\$69,957.66

Less Deductions

Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% X \$66,451.73	\$ 1,495.16
	Silver	3% X \$ 3,505.93	\$ 105.18
Prepayment on 02/15/89			\$33,000.00
Finance Charge for prepayment, \$33,000.00 X 1.0%			\$ 330.00
	TOTAL DEDUCTIONS		\$35,430.34
TOTAL DUE TO CLIENT			\$34,527.32

A wire in the amount of \$34,527.32 will be paid to A.F. BUDGE (MINING) on or before March 8, 1989.

Thank You.

Yours sincerely,

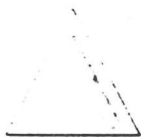
Harald V. Zipprich
President

MHO/dlr

cc DT

Martin H. Olwyn
Vice President, Finance

RECEIVED MAR 3 1989



GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

A member of the
Orion Corporation Group

February 23, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 627, DORE
STOCK RECEIVED NOTE #: 546

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt			20,436.1 gms.
Net weight of material, After Melt (not incl. 3.4 gms. to Budge)			20,352.1 gms.
Settlement Assays	Gold		13.578%
	Silver		44.307%
Settlement Date			02/17/89
Market Fix, London p.m.	Gold	02/17/89	\$ 380.40/oz.
Handy & Harman	Silver	02/17/89	\$ 5.96/oz.
<u>Metal Content and Gross Value</u>	Gold	88.846 ozs.	\$33,797.02
	Silver	289.92 ozs.	\$ 1,727.92
	GROSS TOTAL		\$35,524.94


Less Deductions


Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% X \$33,797.02	\$ 760.43
	Silver	3% X \$ 1,727.92	\$ 51.84
Prepayment on 02/17/89			\$16,000.00
Finance Charge for prepayment, \$16,000.00 X 1.0%			\$ 160.00
	TOTAL DEDUCTIONS		\$17,472.27
TOTAL DUE TO CLIENT			\$18,052.67

A wire in the amount of \$18,052.67 will be paid to A.F. BUDGE (MINING) on or before March 10, 1989.

Thank You.

Yours sincerely,


Harald V. Zipprich
President


Martin H. Olwyn
Vice President, Finance

MHO/dlr

cc DT

RECEIVED MAR 3 1989



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

March 13, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 631, DORE
STOCK RECEIVED NOTE #: 557

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt			14,611.1 gms.
Net weight of material, After Melt (not incl. 3.8 gms. to Budge)			14,510.6 gms.
Settlement Assays	Gold		11.056%
	Silver		41.161%
Settlement Date			03/07/89
Market Fix, London p.m.	Gold	03/08/89	\$ 394.60/oz.
Handy & Harman	Silver	03/08/89	\$ 5.88/oz.
<u>Metal Content and Gross Value</u>	Gold	51.579 ozs.	\$20,353.07
	Silver	192.03 ozs.	\$ 1,129.14
	GROSS TOTAL		\$21,482.21

Less Deductions

Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% X \$20,353.07	\$ 457.94
	Silver	3% X \$ 1,129.14	\$ 33.87
	TOTAL DEDUCTIONS		\$ 991.81
TOTAL DUE TO CLIENT			\$20,490.40

A wire in the amount of \$20,490.40 will be paid to A.F. BUDGE (MINING) on or before **March 28, 1989.**

Thank You.

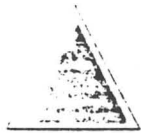
Yours sincerely,

Steve J. Kay
President

MHO/dlr

cc DT

Martin H. Olwyn
Vice President, Finance



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

March 13, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 639, DORE
STOCK RECEIVED NOTE #: 560

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt			24,527.5 gms.
Net weight of material, After Melt (not incl. 2.0 gms. to Budge)			24,603.1 gms.
Settlement Assays	Gold		11.025%
	Silver		41.794%
Settlement Date			03/09/89
Market Fix, London p.m. Handy & Harman	Gold	03/10/89	\$ 393.50/oz.
	Silver	03/10/89	\$ 5.97/oz.
<u>Metal Content and Gross Value</u>	Gold	87.208 ozs.	\$34,316.35
	Silver	330.59 ozs.	\$ 1,973.62
GROSS TOTAL			\$36,289.97

Less Deductions

Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% X \$34,316.35	\$ 772.12
	Silver	3% X \$ 1,973.62	\$ 59.21
TOTAL DEDUCTIONS			\$ 1,331.33

TOTAL DUE TO CLIENT \$34,958.64

A wire in the amount of \$34,958.64 will be paid to A.F. BUDGE (MINING) on or before March 30, 1989.

Thank You.

Yours sincerely,

Steve J. Kay
President

MHO/dlr

cc DT

Martin H. Olwyn
Vice President, Finance



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

March 13, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 645, DORE
STOCK RECEIVED NOTE #: 564

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt			14,808.6 gms.
Net weight of material, After Melt (not incl. 4.3 gms. to Budge)			14,678.4 gms.
Settlement Assays	Gold		10.044%
	Silver		38.290%
Settlement Date			03/10/89
Market Fix, London p.m.	Gold	03/13/89	\$ 392.50/oz.
Handy & Harman	Silver	03/13/89	\$ 6.035/oz.
<u>Metal Content and Gross Value</u>	Gold	47.400 ozs.	\$18,604.50
	Silver	180.70 ozs.	\$ 1,090.52
	GROSS TOTAL		\$19,695.02

Less Deductions

Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% X \$18,604.50	\$ 418.60
	Silver	3% X \$ 1,090.52	\$ 32.72
	TOTAL DEDUCTIONS		\$ 951.32
TOTAL DUE TO CLIENT			\$18,743.70

A wire in the amount of \$18,743.70 will be paid to A.F. BUDGE (MINING) on or before March 31, 1989.

Thank You.

Yours sincerely,

Steve J. Kay
President

MHO/dlr

cc DT

Martin H. Olwyn
Vice President, Finance



GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

A member of the
Orion Corporation Group

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

April 13, 1989

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 670, DORE
STOCK RECEIVED NOTE #: 582

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt			32,857.1 gms.
Net weight of material, After Melt (not incl. 3.2 gms. to Budge)			32,829.4 gms.
Settlement Assays	Gold		11.784%
	Silver		30.150%
Settlement Date			03/30/89
Market Fix, London p.m.	Gold	03/31/89	\$ 383.70/oz.
Handy & Harman	Silver	03/31/89	\$ 5.755/oz.
<u>Metal Content and Gross Value</u>	Gold	124.379 ozs.	\$47,724.22
	Adjustment for CN # 645 (Au)		
	0.441% X 471.9 ozs. X \$392.50		\$ 816.82
	Silver	318.23 ozs.	<u>\$ 1,831.41</u>
	GROSS TOTAL		\$50,372.45

Less Deductions

Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% X \$48,541.04	\$ 1,092.17
	Silver	3% X \$ 1,831.41	<u>\$ 54.94</u>
	TOTAL DEDUCTIONS		\$ 1,647.11

GROSS DUE TO CLIENT **\$48,725.34**


Deduct balance for Sodium Cyanide (CN# 663, your P.O. #V012489-1) \$ 4,811.27

NET DUE TO CLIENT **\$43,914.07**

A wire in the amount of **\$43,914.07** will be paid to A.F. BUDGE (MINING) LTD. on or before **April 20, 1989.**

Thank You,
Yours sincerely,


Steve Kay
President


Martin H. Olwyn
Vice President, Finance

MHO/dlr

cc DT



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

April 13, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 681, DORE
STOCK RECEIVED NOTE #: 589

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt			24,477.8 gms.
Net weight of material, After Melt (not incl. 3.8 gms. to Budge)			24,371.2 gms.
Settlement Assays	Gold		12.251%
	Silver		34.242%
Settlement Date			04/06/89
Market Fix, London p.m.	Gold	04/07/89	\$ 382.25/oz.
Handy & Harman	Silver	04/07/89	\$ 5.77/oz.
<u>Metal Content and Gross Value</u>	Gold	95.993 ozs.	\$36,693.32
	Silver	268.304 ozs.	<u>\$ 1,548.11</u>
	GROSS TOTAL		\$38,241.43

Less Deductions

Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% X \$36,693.32	\$ 825.60
	Silver	3% X \$ 1,548.11	<u>\$ 46.44</u>
	TOTAL DEDUCTIONS		\$ 1,372.04

TOTAL DUE TO CLIENT **\$36,869.39**

A wire in the amount of **\$36,869.39** will be paid to **A.F. BUDGE (MINING) LTD.** on or before **April 27, 1989.**

Thank You.

Yours sincerely,


Steve J. Kay
President

MHO/dlr

cc DT


Martin H. Olwyn
Vice President, Finance



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

April 17, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 686, DORE
STOCK RECEIVED NOTE #: 593

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt			13,749.8 gms.
Net weight of material, After Melt (not incl. 3.3 gms. to Budge)			13,695.7 gms.
Settlement Assays	Gold		12.936%
	Silver		37.807%
Settlement Date			04/13/89
Market Fix, London p.m.	Gold	04/14/89	\$ 386.20/oz.
Handy & Harman	Silver	04/14/89	\$ 5.775/oz.
<u>Metal Content and Gross Value</u>	Gold	56.961 ozs.	\$21,998.34
	Silver	166.474 ozs.	\$ 961.39
	GROSS TOTAL		\$22,959.73

Less Deductions


Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% X \$21,998.34	\$ 494.96
	Silver	3% X \$ 961.39	\$ 28.84
	TOTAL DEDUCTIONS		\$ 1,023.80
TOTAL DUE TO CLIENT			\$21,935.93

A wire in the amount of \$21,935.93 will be paid to A.F. BUDGE (MINING) LTD. on or before May 4, 1989.

Thank You.

Yours sincerely,


Steve Kay
President


Martin H. Olwyn
Vice President, Finance

MHO/dlr

cc DT



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

April 27, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 696, DORE
STOCK RECEIVED NOTE #: 598

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt			16,601.5 gms.
Net weight of material, After Melt (not incl. 3.6 gms. to Budge)			16,575.4 gms.
Settlement Assays	Gold		12.230%
	Silver		36.871%
Settlement Date			04/20/89
Market Fix, London p.m. Handy & Harman	Gold	04/21/89	\$ 384.00/oz.
	Silver	04/21/89	\$ 5.745/oz.
<u>Metal Content and Gross Value</u>	Gold	65.175 ozs.	\$25,027.20
	Silver	196.490 ozs.	\$ 1,128.84
	GROSS TOTAL		\$26,156.04

Less Deductions

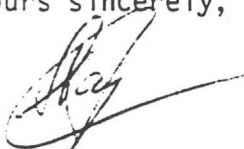
Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% X \$25,027.20	\$ 563.11
	Silver	3% X \$ 1,128.84	\$ 33.86
	TOTAL DEDUCTIONS		\$ 1,096.97

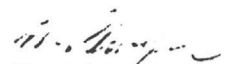
TOTAL DUE TO CLIENT **\$25,059.07**

A wire in the amount of \$25,059.07 will be paid to A.F. BUDGE (MINING) LTD. on or before May 11, 1989.

Thank You.

Yours sincerely,


Steve Kay
President


Martin H. Olwyn
Vice President, Finance

MHO/dlr

cc DT



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

May 10, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 711, DORE
STOCK RECEIVED NOTE #: 612

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt			15,949.7 gms.
Net weight of material, After Melt (not incl. 2.4 gms. to Budge)			15,947.1 gms.
Settlement Assays	Gold		10.411%
	Silver		32.169%
Settlement Date			04/28/89
Market Fix, London p.m.	Gold	05/02/89	\$ 377.45/oz.
Handy & Harman	Silver	05/01/89	\$ 5.655/oz.
<u>Metal Content and Gross Value</u>	Gold	53.378 ozs.	\$20,147.53
	Silver	164.934 ozs.	\$ 932.70
	GROSS TOTAL		\$21,080.23

Less Deductions

Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% X \$20,147.53	\$ 453.32
	Silver	3% X \$ 932.70	\$ 27.98
	TOTAL DEDUCTIONS		\$ 981.30

TOTAL DUE TO CLIENT **\$20,098.93**

A wire in the amount of \$20,098.93 will be paid to A.F. BUDGE (MINING) LTD. on or before May 19, 1989.

Thank You.

Yours sincerely,

Steve Kay
President

MHO/dlr

cc DT

Martin H. Olwyn
Vice President, Finance



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

May 10, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 715, DORE
STOCK RECEIVED NOTE #: 631

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt			10,211.4 gms.
Net weight of material, After Melt (not incl. 4.9 gms. to Budge)			10,165.1 gms.
Settlement Assays	Gold		11.346%
	Silver		39.808%
Settlement Date			05/05/89
Market Fix, London p.m.	Gold	05/08/89	\$ 378.25/oz.
Handy & Harman	Silver	05/08/89	\$ 5.62/oz.
<u>Metal Content and Gross Value</u>	Gold	37.080 ozs.	\$14,025.51
	Silver	130.099 ozs.	\$ 731.16
	GROSS TOTAL		\$14,756.67

Less Deductions

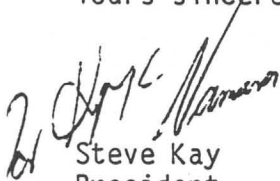
Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% X \$14,025.51	\$ 315.57
	Silver	3% X \$ 731.16	\$ 21.93
	TOTAL DEDUCTIONS		\$ 837.50

TOTAL DUE TO CLIENT **\$13,919.17**

A wire in the amount of **\$13,919.17** will be paid to **A.F. BUDGE (MINING) LTD.** on or before **May 26, 1989.**

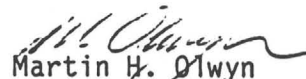
Thank You.

Yours sincerely,


Steve Kay
President

MHO/dlr

cc DT


Martin H. Olwyn
Vice President, Finance



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

May 17, 1989

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 732, DORE
STOCK RECEIVED NOTE #: 636

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt			32,335.5 gms.
Net weight of material, After Melt (not incl. 7.7 gms. to Budge)			32,239.4 gms.
Settlement Assays	Gold		12.096%
	Silver		38.128%
Settlement Date			05/16/89
Market Fix, London p.m.	Gold	05/17/89	\$ 371.90/oz.
Handy & Harman	Silver	05/17/89	\$ 5.425/oz.
<u>Metal Content and Gross Value</u>	Gold	125.378 ozs.	\$46,628.08
	Silver	395.205 ozs.	\$ 2,143.99
	GROSS TOTAL		\$48,772.07

Less Deductions

Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% X \$46,628.08	\$ 1,049.13
	Silver	3% X \$ 2,143.99	\$ 64.32
Finance Charge for prepayment, \$20,000.00 X 1.0%			\$ 200.00
	TOTAL DEDUCTIONS		\$ 1,813.45

GROSS DUE TO CLIENT \$46,958.62


Less prepayment to be wired with payment for CN # 715 on 05/26/89 \$20,000.00

NET DUE TO CLIENT \$26,958.62

A check in the amount of \$26,958.62 will be paid to A.F. BUDGE (MINING) on or before June 6, 1989.

Thank You.


Yours sincerely,

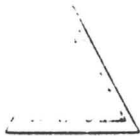
for 
Steve Kay
President

MHO/dlr

cc DT

paid ck # 2031 6/6/89


Martin E. Olwyn
Vice President, Finance



GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

A member of the
Orion Corporation Group

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

May 17, 1989

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 732, DORE
STOCK RECEIVED NOTE #: 636

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt			32,335.5 gms.
Net weight of material, After Melt (not incl. 7.7 gms. to Budge)			32,239.4 gms.
Settlement Assays	Gold		12.096%
	Silver		38.128%
Settlement Date			05/16/89
Market Fix, London p.m.	Gold	05/17/89	\$ 371.90/oz.
Handy & Harman	Silver	05/17/89	\$ 5.425/oz.
<u>Metal Content and Gross Value</u>	Gold	125.378 ozs.	\$46,628.08
	Silver	395.205 ozs.	\$ 2,143.99
	GROSS TOTAL		\$48,772.07

Less Deductions

Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% X \$46,628.08	\$ 1,049.13
	Silver	3% X \$ 2,143.99	\$ 64.32
Finance Charge for prepayment, \$20,000.00 X 1.0%			\$ 200.00
	TOTAL DEDUCTIONS		\$ 1,813.45

GROSS DUE TO CLIENT \$46,958.62

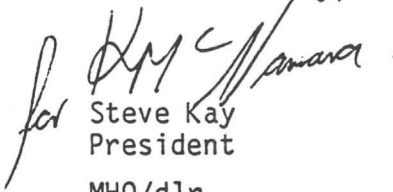
Less prepayment to be wired with payment for CN # 715 on 05/26/89 \$20,000.00


NET DUE TO CLIENT \$26,958.62

A check in the amount of \$26,958.62 will be paid to A.F. BUDGE (MINING) on or before June 6, 1989.

Thank You.

Yours sincerely,


Steve Kay
President


Martin E. Olwyn
Vice President, Finance

MHO/dlr

cc DT



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

May 29, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 742, DORE
STOCK RECEIVED NOTE #: 644

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt			28,159.6 gms.
Net weight of material, After Melt (not incl. 2.2 gms. to Budge)			28,023.2 gms.
Settlement Assays	Gold		10.358%
	Silver		30.104%
Settlement Date			05/25/89
Market Fix, London p.m.	Gold	05/26/89	\$ 365.80/oz.
Handy & Harman	Silver	05/26/89	\$ 5.23/oz.
<u>Metal Content and Gross Value</u>	Gold	93.322 ozs.	\$34,137.19
	Silver	271.227 ozs.	\$ 1,418.52
	GROSS TOTAL		\$35,555.71

Less Deductions

Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% X \$34,137.19	\$ 768.09
	Silver	3% X \$ 1,418.52	\$ 42.56
	TOTAL DEDUCTIONS		\$ 1,310.65

TOTAL DUE TO CLIENT **\$34,245.06**

A wire in the amount of \$34,245.06 will be paid to A.F. BUDGE (MINING) LTD. on or before June 15, 1989.

Thank You.

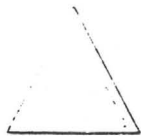
Yours sincerely,

Steve Kay
President

MHO/dlr

cc DT

Martin H. Olwyn
Vice President, Finance



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

June 22, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 758, DORE
STOCK RECEIVED NOTE #: 658

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt		24,082.9 gms.
Net weight of material, After Melt (not incl. 4.8 gms. to Budge)		23,996.9 gms.
Settlement Assays	Gold	10.382%
	Silver	35.579%
Settlement Date		06/12/89
Market Fix, London p.m.	Gold	06/13/89 \$ 358.70/oz.
Handy & Harman	Silver	06/13/89 \$ 5.20/oz.
<u>Metal Content and Gross Value</u>	Gold	80.099 ozs. \$28,731.51
	Silver	274.498 ozs. \$ 1,427.39
	GROSS TOTAL	\$30,158.90

Less Deductions

Processing Charge	Minimum Charge	\$ 500.00
Retained Percentage	Gold 2.25% X \$28,731.51	\$ 646.46
	Silver 3% X \$ 1,427.39	\$ 42.82
	TOTAL DEDUCTIONS	\$ 1,189.28
TOTAL DUE TO CLIENT		\$28,969.62

A wire in the amount of \$28,969.62 will be paid to A.F. BUDGE (MINING) LTD. on or before July 3, 1989.

Thank You.

Yours sincerely,

Steve Kay
President

MHO/dlr

cc DT

RECEIVED JUN 26 1989

Martin H. Olwyn
Vice President, Finance



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

June 22, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 762, DORE
STOCK RECEIVED NOTE #: 662

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt			18,974.4 gms.
Net weight of material, After Melt (not incl. 1.9 gms. to Budge)			18,954.0 gms.
Settlement Assays	Gold		9.767%
	Silver		26.920%
Settlement Date			06/19/89
Market Fix, London p.m.	Gold	06/20/89	\$ 366.60/oz.
Handy & Harman	Silver	06/20/89	\$ 5.315/oz.
<u>Metal Content and Gross Value</u>	Gold	59.519 ozs.	\$21,819.67
	Silver	164.046 ozs.	\$ 871.90
	GROSS TOTAL		\$22,691.57

Less Deductions

Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% X \$21,819.67	\$ 490.94
	Silver	3% X \$ 871.90	\$ 26.16
	TOTAL DEDUCTIONS		\$ 1,017.10

TOTAL DUE TO CLIENT **\$21,674.47**

A wire in the amount of \$21,674.47 will be paid to A.F. BUDGE (MINING) LTD. on or before July 10, 1989.

Thank You.

Yours sincerely,

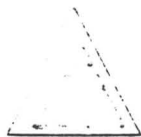
Steve Kay
President

MHO/dlr

cc DT

RECEIVED JUN 26 1989

Martin H. Olwyn
Vice President, Finance



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

July 5, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 777, DORE
STOCK RECEIVED NOTE #: 671

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt			33,909.7 gms.
Net weight of material, After Melt (not incl. 27.5 gms. to Budge)			33,757.9 gms.
Settlement Assays	Gold		10.179%
	Silver		29.706%
Settlement Date			06/29/89
Market Fix, London p.m.	Gold	06/30/89	\$ 373.00/oz.
Handy & Harman	Silver	06/30/89	\$ 5.15/oz.
<u>Metal Content and Gross Value</u>	Gold	110.477 ozs.	\$41,207.92
	Silver	322.412 ozs.	\$ 1,660.42
	GROSS TOTAL		\$42,868.34

Less Deductions


Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% X \$41,207.92	\$ 927.18
	Silver	3% X \$ 1,660.42	\$ 49.81
	TOTAL DEDUCTIONS		\$ 1,476.99

TOTAL DUE TO CLIENT **\$41,391.35**

A wire in the amount of **\$41,391.35** will be paid to **A.F. BUDGE (MINING) LTD.** on or before **July 21, 1989.**

Thank You.

Yours sincerely,


Steve Kay
President

MHO/dlr

cc DT


Martin H. Olwyn
Vice President, Finance



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

July 12, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 778, DORE
STOCK RECEIVED NOTE #: 678

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt			13,122.8 gms.
Net weight of material, After Melt (not incl. 5.7 gms. to Budge)			13,125.7 gms.
Settlement Assays	Gold		11.772%
	Silver		35.589%
Settlement Date			07/11/89
Market Fix, London p.m.	Gold	07/12/89	\$ 379.75/oz.
Handy & Harman	Silver	07/12/89	\$ 5.285/oz.
<u>Metal Content and Gross Value</u>	Gold	49.678 ozs.	\$18,865.22
	Silver	150.186 ozs.	\$ 793.73
	GROSS TOTAL		\$19,658.95

Less Deductions

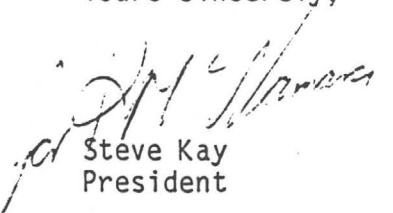
Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% X \$18,865.22	\$ 424.47
	Silver	3% X \$ 793.73	\$ 23.81
	TOTAL DEDUCTIONS		\$ 948.28

TOTAL DUE TO CLIENT **\$18,710.67**

A wire in the amount of \$18,710.67 will be paid to A.F. BUDGE (MINING) LTD. on or before August 1, 1989.

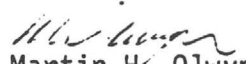
Thank You.

Yours sincerely,


Steve Kay
President

MHO/dlr

cc DT


Martin H. Olwyn
Vice President, Finance



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

July 21, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 795, DORE
STOCK RECEIVED NOTE #: 684

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt			12,839.5 gms.
Net weight of material, After Melt (not incl. 7.3 gms. to Budge)			12,707.2 gms.
Settlement Assays	Gold		12.156%
	Silver		37.980%
Settlement Date			07/18/89
Market Fix, London p.m.	Gold	07/19/89	\$ 370.70/oz.
Handy & Harman	Silver	07/19/89	\$ 5.24/oz.
<u>Metal Content and Gross Value</u>	Gold	49.663 ozs.	\$18,410.07
	Silver	155.166 ozs.	\$ 813.07
	GROSS TOTAL		\$19,223.14

Less Deductions

Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% X \$18,410.07	\$ 414.23
	Silver	3% X \$ 813.07	\$ 24.39
	TOTAL DEDUCTIONS		\$ 938.62

TOTAL DUE TO CLIENT \$18,284.52

A wire in the amount of \$18,284.52 will be paid to A.F. BUDGE (MINING) LTD. on or before August 8, 1989.

Thank You.

Yours sincerely,

Steve Kay
President

MHO/dlr

cc DT

Martin H. Olwyn
Vice President, Finance



A member of the Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

August 14, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 810, DORE
STOCK RECEIVED NOTE #: 697

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt			34,371.0 gms.
Net weight of material, After Melt (not incl. 4.6 gms. to Budge)			34,307.7 gms.
Settlement Assays	Gold		12.396%
	Silver		36.028%
Settlement Date			08/07/89
Market Fix, London p.m.	Gold	08/08/89	\$ 365.90/oz.
Handy & Harman	Silver	08/08/89	\$ 5.155/oz.
<u>Metal Content and Gross Value</u>	Gold	136.730 ozs.	\$50,029.51
	Silver	397.400 ozs.	\$ 2,048.60
	GROSS TOTAL		\$52,078.11

Less Deductions

Processing Charge (2 Lots at \$500.00 per Lot)			\$ 1,000.00
Retained Percentage	Gold	2.25% X \$50,029.51	\$ 1,125.66
	Silver	3% X \$ 2,048.60	\$ 61.46
	TOTAL DEDUCTIONS		\$ 2,187.12
TOTAL DUE TO CLIENT			\$49,890.99

A wire in the amount of \$49,890.99 will be paid to A.F. BUDGE (MINING) LTD. on or before August 28, 1989.

Thank You.

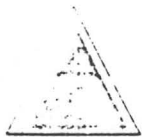
Yours sincerely,

Steve Kay
President

MHO/dlt

cc DT

Martin H. Olwyn
Vice President, Finance



A member of the Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

August 16, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 814, DORE
STOCK RECEIVED NOTE #: 704

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt			20,370.1 gms.
Net weight of material, After Melt (not incl. 6.0 gms. to Budge)			20,326.1 gms.
Settlement Assays	Gold		13.056%
	Silver		37.310%
Settlement Date			08/16/89
Market Fix, London p.m.	Gold	08/17/89	\$ 364.90/oz.
Handy & Harman	Silver	08/17/89	\$ 5.225/oz.
<u>Metal Content and Gross Value</u>	Gold	85.296 ozs.	\$31,124.51
	Silver	243.75 ozs.	\$ 1,273.59
	GROSS TOTAL		\$32,398.10

Less Deductions

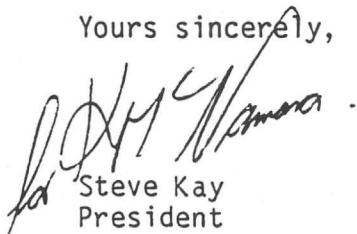
Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% X \$31,124.51	\$ 700.30
	Silver	3% X \$ 1,273.59	\$ 38.20
	TOTAL DEDUCTIONS		\$ 1,238.50

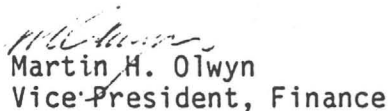
TOTAL DUE TO CLIENT \$31,159.60

A wire in the amount of **\$31,159.60** will be paid to **A.F. BUDGE (MINING) LTD.** on or before **September 6, 1989.**

Thank You.

Yours sincerely,


Steve Kay
President


Martin H. Olwyn
Vice-President, Finance

MHO/dlr

cc DT



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

September 7, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 838, DORE
STOCK RECEIVED NOTE #: 722

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, before melt			37,250.0 gms.
Net weight of material, after melt (not incl. 3.7 gms. to Budge)			37,128.4 gms.
Settlement Assays	Gold		10.881%
	Silver		29.961%
Settlement Date			09/06/89
Market Fix, London p.m.	Gold	09/07/89	\$ 359.20/oz.
Handy & Harman	Silver	09/07/89	\$ 5.10/oz.
<u>Metal Content and Gross Value</u>	Gold	129.887 ozs.	\$46,655.41
	Silver	357.646 ozs.	\$ 1,823.99
	GROSS TOTAL		\$48,479.40

Less Deductions

Processing Charge	Minimum Charge	\$ 500.00
Retained Percentage	Gold 2.25% X \$46,655.41	\$ 1,049.75
	Silver 3% X \$ 1,823.99	\$ 54.72
	TOTAL DEDUCTIONS	\$ 1,604.47

TOTAL DUE TO CLIENT **\$46,874.93**

A wire in the amount of **\$46,874.93** will be paid to **A.F. BUDGE (MINING) LTD.** on or before **September 27, 1989.**

Thank You.

Yours sincerely,

Steve Kay
President

MHO/dlr

cc DT

Martin H. Olwyn
Vice President, Finance



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

September 14, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 846, DORE
STOCK RECEIVED NOTE #: 729

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, before melt			12,418.8 gms.
Net weight of material, after melt (not incl. 4.6 gms. to Budge)			12,378.6 gms.
Settlement Assays	Gold		15.136%
	Silver		39.310%
Settlement Date			09/11/89
Market Fix, London p.m.	Gold	09/12/89	\$ 358.60/oz.
Handy & Harman	Silver	09/12/89	\$ 5.07/oz.
<u>Metal Content and Gross Value</u>	Gold	60.238 ozs.	\$21,601.35
	Silver	156.446 ozs.	\$ 793.18
	GROSS TOTAL		\$22,394.53

Less Deductions

Processing Charge	Minimum Charge	\$ 500.00
Retained Percentage	Gold 2.25% X \$21,601.35	\$ 486.03
	Silver 3% X \$ 793.18	\$ 23.80
	TOTAL DEDUCTIONS	\$ 1,009.83

TOTAL DUE TO CLIENT **\$21,384.70**

A wire in the amount of \$21,384.70 will be paid to A.F. BUDGE (MINING) LTD. on or before October 2, 1989.

Thank You.

Yours sincerely,

Steve Kay
President

MHO/dlr

cc PM

Martin H. Olwyn
Vice President, Finance



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

September 29, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 857, DORE
STOCK RECEIVED NOTE #: 741

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, before melt			23,194.8 gms.
Net weight of material, after melt (not incl. 2.4 gms. to Budge)			23,120.0 gms.
Settlement Assays	Gold		15.415%
	Silver		39.197%
Settlement Date			09/22/89
Market Fix, London p.m.	Gold	09/25/89	\$ 367.35/oz.
Handy & Harman	Silver	09/25/89	\$ 5.285/oz.
<u>Metal Content and Gross Value</u>	Gold	114.584 ozs.	\$42,092.43
	Silver	291.361 ozs.	\$ 1,539.84
	GROSS TOTAL		\$43,632.27

Less Deductions

Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% X \$42,092.43	\$ 947.08
	Silver	3% X \$ 1,539.84	\$ 46.20
	TOTAL DEDUCTIONS		\$ 1,493.28

TOTAL DUE TO CLIENT **\$42,138.99**

A wire in the amount of **\$42,138.99** will be paid to **A.F. BUDGE (MINING) LTD.** on or before **October 13, 1989.**

Thank You.

Yours sincerely,

for Steve Kay

Steve Kay
President

MHO/dlr

cc PM

Martin H. Olwyn
Martin H. Olwyn
Vice President, Finance



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

October 5, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 867, DORE
STOCK RECEIVED NOTE #: 747

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, before melt			18,531.5 gms.
Net weight of material, after melt (not incl. 3.5 gms. to Budge)			18,505.0 gms.
Settlement Assays	Gold		12.841%
	Silver		32.032%
Settlement Date			09/29/89
Market Fix, London p.m.	Gold	10/02/89	\$ 366.50/oz.
Handy & Harman	Silver	10/02/89	\$ 5.23/oz.
<u>Metal Content and Gross Value</u>	Gold	76.397 ozs.	\$27,999.50
	Silver	190.574 ozs.	\$ 996.70
	GROSS TOTAL		\$28,996.20

Less Deductions

Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% X \$27,999.50	\$ 629.99
	Silver	3% X \$ 996.70	\$ 29.90
	TOTAL DEDUCTIONS		\$ 1,159.89

TOTAL DUE TO CLIENT **\$27,836.31**

A wire in the amount of \$27,836.31 will be paid to A.F. BUDGE (MINING) LTD. on or before October 20, 1989.

Thank You.

Yours sincerely,

Steve Kay
President

MHO/dlr

cc PM

Martin H. Olwyn
Vice President, Finance



GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

A member of the
Orion Corporation Group

October 6, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 872, DORE
STOCK RECEIVED NOTE #: 752

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, before melt			22,025.7 gms.
Net weight of material, after melt (not incl. 3.3 gms. to Budge)			21,946.2 gms.
Settlement Assays	Gold		12.229%
	Silver		30.776%
Settlement Date			10/05/89
Market Fix, London p.m.	Gold	10/06/89	\$ 363.00/oz.
Handy & Harman	Silver	10/06/89	\$ 5.125/oz.
<u>Metal Content and Gross Value</u>	Gold	86.286 ozs.	\$31,321.82
	Silver	217.151 ozs.	\$ 1,112.90
	GROSS TOTAL		\$32,434.72

Less Deductions

Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% X \$31,321.82	\$ 704.74
	Silver	3% X \$ 1,112.90	\$ 33.39
	TOTAL DEDUCTIONS		\$ 1,238.13

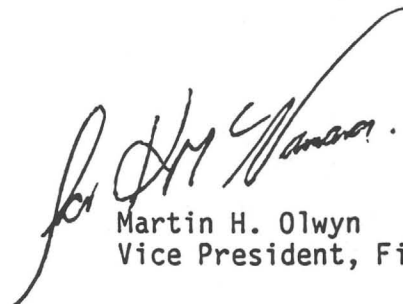
TOTAL DUE TO CLIENT **\$31,196.59**

A wire in the amount of \$31,196.59 will be paid to A.F. BUDGE (MINING) LTD. on or before October 26, 1989.

Please note that 96.0 gms. of iron obtained from dore was returned to Kappes Cassidy.

Thank You.
Yours sincerely,

for 
Steve Kay
President


Martin H. Olwyn
Vice President, Finance

MHO/dlr
cc PM



GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

A member of the
Orion Corporation Group

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

October 10, 1989

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 856, SLAG
STOCK RECEIVED NOTE #: 756

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Net weight of material received			5,078 lbs.
Moisture			0.42%
Net dry weight of material			5,056.7 lbs.
Settlement Assays	Gold		10.012 oz/t
	Silver		26.785 oz/t
Settlement Date			10/06/89
Market Fix, London p.m.	Gold	10/09/89	\$ 362.90/oz.
Handy & Harman	Silver	10/09/89	\$ 5.08/oz.
<u>Metal Content and Gross Value</u>	Gold	25.314 ozs.	\$9,186.45
	Silver	67.722 ozs.	\$ 344.03
	GROSS TOTAL		\$9,530.48

Less Deductions

Processing Charge, 5,078 lbs. x \$0.475/lb.			\$2,412.05
Retained Percentage	Gold	5% x \$9,186.45	\$ 459.32
	Silver	Deduct first 5 oz/t	\$ 64.22
		10% of 21.785 oz/t	\$ 27.98
Sampling and Assay Charge			\$ 250.00
	TOTAL DEDUCTIONS		\$3,213.57

TOTAL DUE TO CLIENT **\$6,316.91**

A wire in the amount of \$6,316.91 will be paid to A.F. BUDGE (MINING) LTD. on or before November 6, 1989.

Thank You.

Yours sincerely,

Steve Kay
President

MHO/dlr

cc DT

for Martin H. Olwyn
Vice President, Finance



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

October 30, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 882, DORE
STOCK RECEIVED NOTE #: 771

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, before melt			47,165.6 gms.
Net weight of material, after melt (not incl. 3.7 gms. to Budge)			46,948.2 gms.
Settlement Assays	Gold		13.819%
	Silver		34.862%
Settlement Date			10/20/89
Market Fix, London p.m.	Gold	10/23/89	\$ 365.50/oz.
Handy & Harman	Silver	10/23/89	\$ 5.065/oz.
<u>Metal Content and Gross Value</u>	Gold	208.587 ozs.	\$76,238.55
	Silver	526.214 ozs.	<u>\$ 2,665.27</u>
	GROSS TOTAL		\$78,903.82

Less Deductions

Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% x \$76,238.55	\$ 1,715.37
	Silver	3% x \$ 2,665.27	<u>\$ 79.96</u>
	TOTAL DEDUCTIONS		\$ 2,295.33

TOTAL DUE TO CLIENT **\$76,608.49**

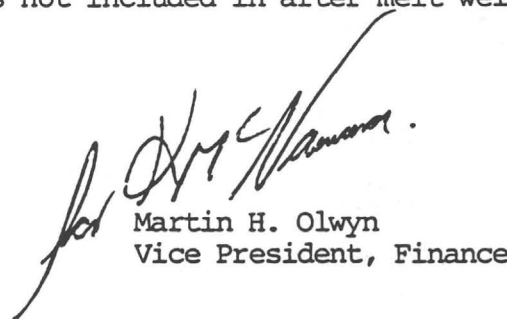
A wire in the amount of \$76,608.49 will be paid to A.F. BUDGE (MINING) LTD. on or before **November 10, 1989.**

Please note that 112.6 gms. of iron obtained from dore was returned to Kappes Cassidy with client sample and was not included in after melt weight.

Thank You.

Yours sincerely,


Steve Kay
President


Martin H. Olwyn
Vice President, Finance

MHO/dlr

cc DT



GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

A member of the
Orion Corporation Group

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

October 31, 1989

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 888, DORE & ZINC PRECIPITATE
STOCK RECEIVED NOTE #: 777

Dear Dale,

Below are the settlement data related to the recent shipment of material:

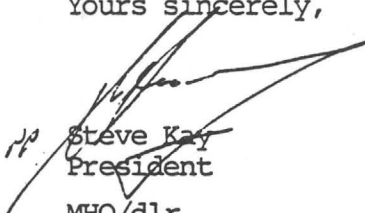
	<u>DORE</u>		<u>ZN PRECIP</u>
Gross weight of material, before melt	11,939.8 grs.		
Net weight of material, after melt	11,890.0 grs.		861.65 grs.
	(not incl. 4.6 grs. to Budge)		(Net dry wt.)
Settlement Assays			
Gold	17.572%		3.22%
Silver	46.489%		8.43%
Settlement Date	10/26/89		
Market Fix, London p.m.	Gold 10/27/89	\$ 372.60/oz.	
Handy & Harman	Silver 10/27/89	\$ 5.20/oz.	
<u>Metal Content and Gross Value</u>			
Gold 67.173 ozs.	\$25,028.66	0.892 ozs.	\$ 332.36
Silver 177.715 ozs.	\$ 924.12	2.335 ozs.	\$ 12.14
GROSS TOTAL	\$25,952.78		\$ 344.50
<u>Less Deductions</u>			
Processing Charge	Minimum Charge \$ 500.00		\$ 0.00
Retained Percentage	Gold 2.25% x \$25,028.66 \$ 563.14		\$ 0.00
	Silver 3% x \$ 924.12 \$ 27.72		\$ 0.00
	TOTAL DEDUCTIONS		\$ 0.00
TOTAL DUE TO CLIENT	\$24,861.92		\$ 344.50

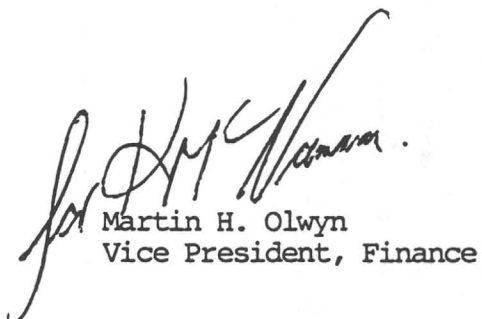
A wire in the amount of \$25,206.42 will be paid to A.F. BUDGE (MINING) LTD. on or before November 16, 1989.

Please note that zinc precipitate was taken by Kevin McNamara at mine site. No deductions.

Thank You.

Yours sincerely,


Steve Kay
President


Martin H. Olwyn
Vice President, Finance

MHO/dlr
cc DT



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

November 6, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 899, DORE
STOCK RECEIVED NOTE #: 783

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, before melt			10,177.6 gms.
Net weight of material, after melt (not incl. 3.8 gms. to Budge)			10,105.4 gms.
Settlement Assays	Gold		15.523%
	Silver		41.421%
Settlement Date			11/03/89
Market Fix, London p.m.	Gold	11/06/89	\$ 379.75/oz.
Handy & Harman	Silver	11/06/89	\$ 5.23/oz.
<u>Metal Content and Gross Value</u>	Gold	50.434 ozs.	\$19,152.31
	Silver	134.575 ozs.	\$ 703.83
	GROSS TOTAL		\$19,856.14

Less Deductions


Processing Charge	Minimum Charge	\$	500.00
Retained Percentage	Gold 2.25% x \$19,152.31	\$	430.93
	Silver 3% x \$ 703.83	\$	21.11
	TOTAL DEDUCTIONS	\$	952.04

TOTAL DUE TO CLIENT **\$18,904.10**

A wire in the amount of \$18,904.10 will be paid to A.F. BUDGE (MINING) LTD. on or before November 27, 1989.


Thank You.

Yours sincerely,

for 
Steve Kay
President

MHO/dlr

cc DT


Martin H. Olwyn
Vice President, Finance



GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

A member of the
Orion Corporation Group

November 13, 1989

RECEIVED NOV 17 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 905, DORE
STOCK RECEIVED NOTE #: 787

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, before melt			9,589.4 gms.
Net weight of material, after melt (not incl. 3.1 gms. to Budge)			9,583.0 gms.
Settlement Assays	Gold		12.090%
	Silver		32.302%
Settlement Date			11/06/89
Market Fix, London p.m.	Gold	11/07/89	\$ 384.10/oz.
Handy & Harman	Silver	11/07/89	\$ 5.255/oz.
<u>Metal Content and Gross Value</u>	Gold	37.249 ozs.	\$14,307.34
	Silver	99.523 ozs.	\$ 522.99
	GROSS TOTAL		\$14,830.33

Less Deductions

Processing Charge	Minimum Charge	\$ 500.00
Retained Percentage	Gold 2.25% x \$14,307.34	\$ 321.92
	Silver 3% x \$ 522.99	\$ 15.69
	TOTAL DEDUCTIONS	\$ 837.61

TOTAL DUE TO CLIENT **\$13,992.72**

A wire in the amount of \$13,992.72 will be paid to A.F. BUDGE (MINING) LTD. on or before November 29, 1989.

Thank You.

Yours sincerely,

for Steve Kay

Steve Kay
President

MHO/dlr

cc DT

M. H. Olwyn
Martin H. Olwyn
Vice President, Finance



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

November 15, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

RECEIVED NOV 18 1989

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 906, DORE
STOCK RECEIVED NOTE #: 792

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, before melt			15,990.6 gms.
Net weight of material, after melt (not incl. 2.5 gms. to Budge)			15,921.8 gms.
Settlement Assays	Gold		14.579%
	Silver		38.757%
Settlement Date			11/13/89
Market Fix, London p.m.	Gold	11/14/89	\$ 388.25/oz.
Handy & Harman	Silver	11/14/89	\$ 5.33/oz.
<u>Metal Content and Gross Value</u>	Gold	74.630 ozs.	\$28,975.10
	Silver	198.396 ozs.	\$ 1,057.45
	GROSS TOTAL		\$30,032.55
<u>Less Deductions</u>			
Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% x \$28,975.10	\$ 651.94
	Silver	3% x \$ 1,057.45	\$ 31.72
	TOTAL DEDUCTIONS		\$ 1,183.66
TOTAL DUE TO CLIENT			\$28,848.89

A wire in the amount of \$28,848.89 will be paid to A.F. BUDGE (MINING) LTD. on or before December 6, 1989.

Thank You.

Yours sincerely,

for Steve Kay
President

MHO/dlr

cc DT

Martin H. Olwyn
Vice President, Finance



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

December 4, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 925, DORE
STOCK RECEIVED NOTE #: 803

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, before melt			17,034.5 gms.
Net weight of material, after melt (not incl. 2.1 gms. to Budge)			16,945.1 gms.
Settlement Assays	Gold		14.665%
	Silver		40.331%
Settlement Date			11/29/89
Market Fix, London p.m.	Gold	11/30/89	\$ 408.15/oz.
Handy & Harman	Silver	11/30/89	\$ 5.74/oz.
<u>Metal Content and Gross Value</u>	Gold	79.895 ozs.	\$32,609.14
	Silver	219.722 ozs.	\$ 1,261.20
	GROSS TOTAL		\$33,870.34

Less Deductions

Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% x \$32,609.14	\$ 733.71
	Silver	3% x \$ 1,261.20	\$ 37.84
	TOTAL DEDUCTIONS		\$ 1,271.55

TOTAL DUE TO CLIENT **\$32,598.79**

A wire in the amount of \$32,598.79 will be paid to A.F. BUDGE (MINING) LTD. on or before December 20, 1989.

Thank You.

Yours sincerely,

Steve Kay
President

SK/dlr

cc DT

Kevin Keating
Marketing Executive



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

December 4, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 934, DORE
STOCK RECEIVED NOTE #: 808

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, before melt		8,891.8 gms.
Net weight of material, after melt (not incl. 2.5 gms. to Budge)		8,856.5 gms.
Settlement Assays	Gold	15.412%
	Silver	42.852%
Settlement Date		11/30/89
Market Fix, London p.m.	Gold	12/01/89 \$ 413.85/oz.
Handy & Harman	Silver	12/01/89 \$ 5.69/oz.
<u>Metal Content and Gross Value</u>	Gold	43.884 ozs. \$18,161.39
	Silver	122.018 ozs. \$ 694.28
	GROSS TOTAL	\$18,855.67

Less Deductions


Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% x \$18,161.39	\$ 408.63
	Silver	3% x \$ 694.28	\$ 20.83
	TOTAL DEDUCTIONS		\$ 929.46

TOTAL DUE TO CLIENT **\$17,926.21**

A wire in the amount of \$17,926.21 will be paid to A.F. BUDGE (MINING) LTD. on or before December 21, 1989.

Thank You.

Yours sincerely,



Steve Kay
President

SK/dlr

cc DT



Kevin Keating
Marketing Executive



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

December 29, 1989

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 928, SLAG
STOCK RECEIVED NOTE #: 843

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Net weight of material received			1,029.3 lbs.
Moisture			0.13%
Net dry weight of material			1,028.0 lbs.
Settlement Assays	Gold		3.265 oz/t
	Silver		9.176 oz/t
Settlement Date			12/28/89
Market Fix, London p.m.	Gold	12/29/89	\$402.90/oz.
Handy & Harman	Silver	12/29/89	\$ 5.18/oz.
<u>Metal Content and Gross Value</u>	Gold	1.678 ozs.	\$676.07
	Silver	4.716 ozs.	\$ 24.42
	GROSS TOTAL		\$700.49

Less Deductions

Processing Charge, 1,028.0 lbs. x \$0.475/lb. (\$488.30) Min. Chg.			\$500.00
Retained Percentage	Gold	5% x \$676.07	\$ 33.80
	Silver	Deduct first 5 oz/t	\$ 13.31
		10% of 4.176 oz/t	\$ 1.11
Sampling and Assay Charge			<u>\$250.00</u>
	TOTAL DEDUCTIONS		\$798.22

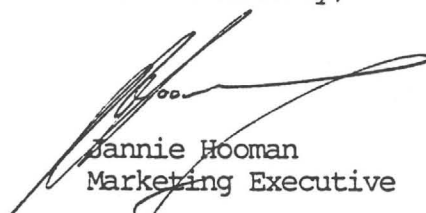
TOTAL DUE TO GD RESOURCES

\$ 97.73

The above amount owed to GD will be deducted from a future settlement statement.

Thank You.

Yours sincerely,


Jannie Hooman
Marketing Executive

JH/rlr

cc DT


Kevin Keating
Marketing Executive



A member of the
Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

December 15, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 941, DORE
STOCK RECEIVED NOTE #: 818

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, before melt			16,687.8 gms.
Net weight of material, after melt (not incl. 52.2 gms. to Budge)			16,424.0 gms.
Settlement Assays	Gold		12.715%
	Silver		36.832%
Settlement Date			12/12/89
Market Fix, London p.m.	Gold	12/13/89	\$ 413.00/oz.
Handy & Harman	Silver	12/13/89	\$ 5.54/oz.
<u>Metal Content and Gross Value</u>	Gold	67.141 ozs.	\$27,729.23
	Silver	194.489 ozs.	\$ 1,077.47
	GROSS TOTAL		\$28,806.70
 <u>Less Deductions</u>			
Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% x \$27,729.23	\$ 623.91
	Silver	3% x \$ 1,077.47	\$ 32.32
	TOTAL DEDUCTIONS		\$ 1,156.23
TOTAL DUE TO CLIENT			\$27,650.47

A wire in the amount of \$27,650.47 will be paid to A.F. BUDGE (MINING) LTD. on or before January 4, 1990.

* NOTE: Client sample contained 50.0 gms. iron.

Thank You.

Yours sincerely,


Steve Kay
President

SK/dlr

cc DT


Kevin Keating
Marketing Executive



A member of the Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

March 21, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 656, DORE
STOCK RECEIVED NOTE #: 574

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt			15,761.8 gms.
Net weight of material, After Melt (not incl. 3.6 gms. to Budge)			15,695.7 gms.
Settlement Assays	Gold		14.333%
	Silver		42.900%
Settlement Date			03/17/89
Market Fix, London p.m.	Gold	03/20/89	\$ 395.50/oz.
Handy & Harman	Silver	03/20/89	\$ 6.14/oz.
<u>Metal Content and Gross Value</u>	Gold	72.328 ozs.	\$28,605.72
	Silver	216.486 ozs.	\$ 1,329.22
	GROSS TOTAL		\$29,934.94

Less Deductions

Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% X \$28,605.72	\$ 643.63
	Silver	3% X \$ 1,329.22	\$ 39.88
	TOTAL DEDUCTIONS		\$ 1,183.51

TOTAL DUE TO CLIENT **\$28,751.43**

The amount of \$28,751.43 will be offset against the sodium cyanide shipment (your P.O. # V012489-1), leaving a balance of \$29,489.87 which will be debited from the next bars.

Thank You.

Yours sincerely,

Steve J. Kay
President

MHO/dlr

cc DT

Martin H. Olwyn
Vice President, Finance



A member of the Orion Corporation Group

GD RESOURCES INC.

450 E. Glendale Avenue
Sparks Nevada 89431
Telephone (702) 358-9229
FAX (702) 358-9275

March 24, 1989

A.F. Budge (Mining) Limited
4301 N. 75th St. # 101
Scottsdale, AZ 85251

ATTN: Dale Allen, Production Manager

SETTLEMENT STATEMENT
COLLECTION NOTE #: 663, DORE
STOCK RECEIVED NOTE #: 579

Dear Dale,

Below are the settlement data related to the recent shipment of material:

Gross weight of material, Before Melt			14,467.4 gms.
Net weight of material, After Melt (not incl. 4.5 gms. to Budge)			14,374.8 gms.
Settlement Assays	Gold		13.579%
	Silver		35.448%
Settlement Date			03/22/89
Market Fix, London p.m.	Gold	03/23/89	\$ 394.90/oz.
Handy & Harman	Silver	03/23/89	\$ 6.00/oz.
<u>Metal Content and Gross Value</u>	Gold	62.757 ozs.	\$24,782.74
	Silver	163.827 ozs.	\$ 982.96
	GROSS TOTAL		\$25,765.70


Less Deductions

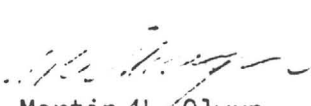
Processing Charge		Minimum Charge	\$ 500.00
Retained Percentage	Gold	2.25% X \$24,782.74	\$ 557.61
	Silver	3% X \$ 982.96	\$ 29.49
	TOTAL DEDUCTIONS		\$ 1,087.10
TOTAL DUE TO CLIENT			\$24,678.60

The amount of **\$24,678.60** will be offset against the balance of \$29,489.87 (CN # 656) for the sodium cyanide shipment (your P.O. # V012489-1), leaving a balance of **\$4,811.27** which will be debited from the next bars.

Thank You.

Yours sincerely,


Steve J. Kay
President


Martin H. Olwyn
Vice President, Finance

MHO/dlr

cc DT

Rec'd 2/20/90

Remarks

As defined in the original Option and Lease Agreement on the Vulture property, dated July 1, 1984, "Net Returns" shall mean the total dollar value received from the purchaser of Leased Substances, less:

- (a) any weighing, sampling, penalty, processing or other charges assessed by the purchaser;
- (b) selling charges;
- (c) any sales, severance, gross production or similar taxes
- (d) the cost of transportation from the Property to the Purchaser
- (e) all processing and recovery costs incurred beyond the point at which leaching reagents are applied to the ore being treated (including the cost of reagents)

Advance Minimum Royalty payments made to November 30, 1988

1985	\$31,500.00
1986	\$46,821.38
1987	\$62,500.00
1988	\$60,500.00

Totals \$201,321.38

First dore pour: September 29, 1988

	December 1988	January 1989	February 1989
Gross Value of Production	\$120,140.22	\$79,689.05	\$105,482.60
Severance Tax	(\$2,751.35)	(\$1,521.71)	(\$2,281.58)
Processing and Recovery Costs (including reagents)	(\$36,429.73)	(\$38,747.55)	(\$37,245.63)
"Net Return"	\$80,959.14	\$39,419.79	\$65,955.39
Gold Price	\$418.15	\$404.10	\$387.35
Royalty			\$3,957.32
			6.0%
	\$5,667.14	\$2,759.39	7.0%
Advance Royalty paid	\$5,000.00	\$5,000.00	\$5,000.00
	March 1989	April 1989	May 1989
Gross Value of Production	\$183,540.29	\$109,065.39	\$99,084.45
Severance Tax	(\$3,879.23)	(\$2,100.34)	(\$1,945.87)

Processing and Recovery Costs (including reagents)		(\$43,937.53)	(\$42,642.82)	(\$39,087.44)
"Net Return"		\$135,723.53	\$64,322.23	\$58,051.14
Gold Price		\$390.30	\$384.42	\$371.11
Royalty	6.0% 7.0%	\$8,143.41	\$3,859.33	\$3,483.07
Advance Royalty paid		\$4,500.00	\$4,500.00	\$4,500.00

		June 1989	July 1989	August 1989
Gross Value of Production		\$95,718.81	\$90,960.20	\$80,877.50
Severence Tax		(\$1,913.76)	(\$1,781.58)	(\$1,376.05)
Processing and Recovery Costs (including reagents)		(\$39,374.78)	(\$40,055.19)	(\$36,108.69)
"Net Return"		\$54,430.27	\$49,123.43	\$43,392.76
Gold Price		\$367.57	\$375.00	\$364.48
Royalty	6.0% 7.0%	\$3,265.82	\$2,947.41	\$2,603.57
Advance Royalty paid		\$4,500.00	\$4,500.00	\$4,500.00

		September 1989	October 1989	November 1989
Gross Value of Production		\$127,457.72	\$114,731.58	\$117,445.03
Severence Tax		(\$2,024.81)	(\$1,625.82)	(\$1,581.75)
Processing and Recovery Costs (including reagents)		(\$40,053.07)	(\$41,580.09)	(\$35,827.58)
"Net Return"		\$85,379.84	\$71,525.67	\$80,035.70
Gold Price		\$361.75	\$367.07	\$392.29
Royalty	6.0% 7.0%	\$5,122.79	\$4,291.54	\$4,802.14
Advance Royalty paid		\$4,500.00	\$4,000.00	\$4,000.00

	December 1989
Gross Value of Production	\$64,970.80
Severence Tax	(\$1,005.53)
Processing and Recovery Costs (including reagents)	(\$35,172.19)
"Net Return"	\$28,793.08
Gold Price	\$409.15
Royalty	6.0%
	7.0%
Advance Royalty paid	\$2,015.52
	\$4,500.00