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The following file is part of the JABA, Inc. Tombstone Mining Records

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Date

6/24/93

To:

Jim BRISCOE

Jabba Inc.

From:

Don Bell

Water Pollution Compliance Unit

- Review
- Note & See Me
- Note & Return
- Comment
- Prepare Draft for:

- Per Conversation
- As Requested
- Necessary Action
- Information

- Assistant Director's Signature
- Director's Signature

Remarks:

Distribution list:

*Mail to:*

Jim Briscoe-Registered Geologist  
Jabba Inc.  
2100 N.Wilmot Rd.  
Tucson Az. 85712  
602-721-1375

Jerry Neidfeldt, President  
Tombstone Development Co.  
P.O.Box 1445  
Grand Island, Nebraska 68803

Jay Skardon Assistant Attorney General  
Andy Rendes, Southern Regional office  
Dave Anderson, APP Hydrology Unit  
Ed Pond, Mining App Unit

TOMBSTONE DEVELOPMENT COMPANY (TDC)  
SITE EVALUATION TRIP

6/22/93 Trip Notes

Present at the site evaluation were:

Andy Rendes, Southern Regional office  
Dave Anderson, APP Hydrology Unit  
Ed Pond, Mining App Unit  
Don Bell, Water Pollution Compliance  
Jim Brisco, Jabba Inc., TDC Representative

Solid waste sites:

Used Mine Tires-what are the applicable regulations to the Mine tires on site? (Dan Zeller) *This is man to contact - 207-4118*

Other items-How is the best way to handle these? Are there exemptions that would allow for the proper disposal of tires, cyanide barrels and pvc pipe on site? (Anything that can be placed in a proper landfill must be placed in an approved landfill). *MIKE KAUSE 207 4119*

Landfill-what is the best way to handle this site? What exemptions might exist? What is the Ag going to do about the illegal dumping on this site. *Still looking into this -*

Old Leach Site-

Facility is to establish a sampling line across the old heap leach area to prove the site is environmentally safe.

Sample the old tailings wash are in a manor which will (a) indicate the tailing are safe and (b) that indicates that the site is not discharging polluted water from rainfall runoff washing through the tailings and off toward waters of the US or other ownership, or into the alluvial aquifers of the creeks.

These are Underground Storage tank type Processes (UST): *Still looking into this*

-Diesel contaminated soils that are next to the diesel tank, that are possible under the tank, that need remediation, need to be identified and quantified.

-The used oil tank that is buried. Needs to be characterized by a used oil dealer, and then hauled off to either a used oil disposal; site or a hazardous waste approved disposal site. The tank then needs to be properly removed through a process that is pre-approved by the UST section.

-All fuel and chemical (hazardous materials) containing tanks need to be properly removed and deposited in the proper place.

Sample assay laboratory sites:

-Chemicals need to be inventoried and labels checked for dates. Out of date chemicals whether dated or not, need to be thrown away by proper manifesting, hauling to a proper disposal site and proper documentation of receipt of these materials.

-Develop proper storage facilities under lock and key for all laboratory and process chemicals and waste products (including barrels).

-Septic tanks and other waste disposal areas need to be

sampled for the disposal of these products.

Monitor wells- *Continue to work on this with Dave Anderson*  
-completion of the original monitoring wells needs to be carried out. Proper sampling of these wells needs to be completed. The coordination of the sampling data from all sources, into a meaningful report document, for presentation to ADEQ for review to indicate the sites aquifers are safe.

Watershed Control Map-

-Develop a site wide watershed control map that will indicate the needed channels, trenches and other erosion and diversion controls that will be needed to maintain control over ponding and pollution control for the site. Proper care through a minimum of a 100 year 24 hour storm is needed.

- Develop a simple Operations and Maintenance program that indicates the proper maintenance of the watershed.

Permits

Pre-application meetings are needed for:

- Aquifer Protection Permits
- NPDES Permits
- Site Closure APP Permits
- UST Closure

Proper documentation for the liability of the site by the owners or the permittees or both will need to be developed and coordinated for the financial ability portions of the permits. This may take many forms but it will have to worked out.

*Remember This is  
Time Consuming  
& you need these prior  
to operations.*

Compliance schedules-

To move the site into "substantial" compliance, a compliance schedule will have to be worked out to spell out or identify the items to be carried out, the responsible people to carry each of these tasks to completion, and the permits that will be sought for what processes. "In substantial Compliance" is needed to refrain from getting into administrative orders and other formal compliance documents.

M E M O

TO: Jesse Grassman  
FROM: James A. Briscoe & Thomas E. Waldrip, Jr.  
DATE: November 10, 1993

RE: Tombstone Development Company property clean-up of assorted trash, equipment, etc. from past operations, Tombstone Mining District, Cochise County, AZ; P#101-01

Jesse:

I would like to take this opportunity to thank you for the job you have undertaken to clean-up the TDC property at Tombstone. To date, I realize that we are only starting on the project, and much remains to be done. However, I feel you are the right person for the job, and through your efforts, the job will be done in a cost-effective and careful manner.

By necessity, Jim and I will have to defer much of the physical labors to you. Our interaction will be on a minimal basis, primarily limited to oversight, management, technical input, and interaction with the client, owners of the stored equipment, and the State. As discussed in the field with you, I will be undertaking a surface evaluation of the areas needing attention. Preliminary evaluation indicates approximately twelve (12) areas of major concern. I will be undertaking a more critical evaluation of each of these areas in the weeks ahead, as well as walking much of the property to ascertain any other problems that might be present. I solicit any input and comments you have concerning this work, especially in pointing out areas of disposed trash.

Jesse, Jim and I have few demands and expectations as far as your work goes. However, we do expect that you do the following:

1. Put in at least forty (40) hours of work per week, weather permitting;
2. Keep accurate records of your time;
3. Concentrate clean up efforts to one area at a time instead of piece-meal work;
4. Avoid further degradation to the environment; and
5. Above all, think safety first.

Currently, we have verbally outlined much of the work in general terms that needs to be accomplished. I would, however, like to memorialize these conversations in this memo to more clearly outline our expectations of your work. These instructions are not set in concrete, but fluid and ever-evolving and open to change. We are undertaking work by phases. My envisioned phases are:

**PHASE I.** Evaluation of the property - review areas needing to be cleaned up and provide for necessary documentation and reporting.

**PHASE II.** Weed and brush removal around building enclosures, work areas or trash sites.

**PHASE III.** Trash pick up, sorting and consolidation.

**PHASE IV.** Extraction of trash and partially buried metal, cans, pipe, etc., using motorized equipment (backhoe) if necessary.

**PHASE V.** Evaluate cleaned up areas, photograph and closure.

**PHASE VI.** Disposal of consolidated waste either on site or elsewhere - burn weeds and organic trash if possible.

Jesse, you will be involved with Phases II, III, IV, and VI

Before embarking on a description of each area to clean up, I would like to make some general suggestions. These are:

1. We need five general areas to consolidate trash and usable supplies at. These are:
  - a. Tires over 36 inches in diameter need to be consolidated along the runway near the deposit of old industrial tires now on the side of the dump.
  - b. New cyanide cans consolidated in or near fenced enclosure of new leach plant.
  - c. Trash near the old trash pile but on top. We should separate at least the following:
    - 1). Tires with and without rims including rubber lined hoses and belt liners.
    - 2). Plastic pipes, buckets, barrels, valves, etc.
    - 3). Pallets, lumber and wood.
    - 4). Organic trash (weeds, branches, etc.).
    - 5). Scrap metal (recyclable) aluminum, copper, stainless and iron.
    - 6). Non-recyclable metal, sheet metal, etc.
    - 7). Batteries
    - 8). Paper, office trash, used items, etc.
    - 9). Old cyanide drums.
  - d. Oil drums, containers, rag filters, grease tubes, etc., should be placed near the underground oil storage tank, near old assay house.
  - e. Usable supplies should be consolidated near the old assay building on an area cleaned of brush and weeds, with same type items grouped together.

Whenever possible, an attempt should be made to place as much of the smaller scrap items in barrels or storage containers. You may find the old used cyanide barrels useful for this purpose (make sure they are clean, however). Useable supplies should (whenever possible) be placed on pallets (line the pallets up in one direction).

I have designated certain colors of spray paint and flagging to indicate ownership and/or usefulness as follows:

1. Blue "G" spray paint = Gianetto equipment (do not remove).
2. White "T" spray paint = TDC equipment or trash used only in areas of Gianetto

- equipment - save for now unless flagged with red flags which should be disposed of.
3. Red flagging = trash or trash located in area - remove all and consolidate to dump, or if steel, cut up and recycle in Tucson.
  4. White flagging = equipment and supplies to be saved and stockpiled at old assay house.
  5. Blue "X" spray paint = plastic pipe to be removed (to be used only in area of new heap leach operation).

We want you to work only 40 hours per week. This work should be strictly for clean-up operation on the property. As I have previously discussed with you, the remaining drill samples need to be loaded and stored in the Butler building. Please keep track of your hours and submit them on the weekly time sheet that I have given you. If we have rainy weather, we may want you to start separating out the samples in the back room (the samples we stacked from just outside the Butler building), but check with Jim or me first. There are 86 holes in total so I would suggest you set up 9 rows of ten each and place each drill hole in a separate pile in the room with the drafting table. As you might remember, the drill holes and intervals were all lumped together in the sacks, so this will probably take some time. Further, any work you do with your Grandad (Steve) should be done per his contracts and agreements with TDC and your wages figured accordingly with the agreed to compensation with him. Likewise, any metal salvage work is on your own time, as you have indicated it would be. Please understand that I am only trying to keep everything straight here, as various tasks are budgeted to different clients and in some cases the same client but different contracts. In short, your work for TDC will concentrate solely on the clean up operation, 40 hours work per week, and not on the drill samples nor the water wells, pumps, etc.

At this point, I see between six and eight weeks of work. I would like to set a goal of having the trash picked up, barrels removed, pipe removed and stacked, tires in order, and in general the property cleaned up by the first of the year. This will be a tough schedule to meet, but I believe it to be reasonable, assuming the weather holds. Additionally, I would like all the remaining outside drill samples stored in the Butler building by November 19th at the latest. I would also like to set a goal of hauling off as much of the scrap steel as possible by the first of the year. We hope to contract with the county to help remove the barrels on the hill and other items, but do not plan on this.

I have currently outlined twelve (12) major areas for your attention. Additional areas also exist, but I have not checked them out as yet. Over the next several weeks I will be outlining work in each that needs to be undertaken along with a time frame of what I feel will be necessary to accomplish the tasks in each area, along with any additional explanation necessary. Please see the following attachments for a start. The areas are assigned in the order that I would like you to perform the tasks in.



## AREA 1

**Location:** East of washing plant, across road along northeast toe of waste dump, starting at tin shed.

**General work:** Clean up and remove all items including shed, barrels, waste PVC pipe, steel, wood & tires, along road and fence line.

**Items to remain:** White chemical pile

**Salvageable materials:** None directly observed - possible 4" metal pipe section. If there is a question, remove, separate and stockpile at the dump site for my review.

**Scrap metal:** Minor amounts of aluminum, scrap steel and stainless steel noted. Amounts limited and scattered. Pick up, separate and stockpile at dump site for future recycling on TDC time.

**Other saleable materials:** Old battery (auto) removed to dump, stockpile for removal to Tucson and recycling.

### Non-usable items:

1. PVC, tires, rubber belts, wooden items & sheet metal to be picked up, transported and stockpiled on dump in appropriate areas.
2. Oil drum to oil area.
3. Cyanide cans to cyanide drum storage area (dump).
4. All small items to be placed in drums or garbage cans at stockpile dump site.
5. Use garden rake to police up broken pipe and conveyor belt fragments.

**Estimated time for job:** 30 man hours.

## AREA 2

**Location:** Runway tire waste dump, south of Westside mine.

**General work:** Clean up and remove all vehicle tires under 36" in diameter. Relocate collected tires to vehicle tire stockpile on dump.

**Items to remain:** All machinery tires greater than 36" in diameter for eventual burial.

**Salvageable materials:** None known.

**Scrap metal:** Several tire rims and large metal blade.

**Other saleable materials:** None known.

**Non-usable items:**

1. All tires under 36" in diameter removed to dump stockpile.
2. Steel items to be removed, stockpiled and recycled at Tucson on TDC time.
3. At west end of area, several sacks of discarded drilling additives should be gathered up and placed on dump for future removal.

**Estimated time for job:** 16 man hours.

## AREA 3

**Location:** Old assay house near Sulphuret mine shaft and 600 feet on all sides.

**General work:** Remove weeds, clean up and remove all items in area including trailer, trash, metal, wood, headframe remnants, and misc. furniture and appliances scattered in area around building.

### Items to remain:

1. Building and supporting infrastructure - await instructions and direction on cleaning out building.
2. Oil storage tank - to be removed later.
3. Tires over city water main valve.
4. Oil drums and misc. oil/petroleum waste stockpile.

**Salvageable materials:** None directly observed - use your discretion. If there is a question, remove, separate and stockpile at dump site for my review.

**Scrap metal:** Numerous odd and end pieces of steel, machinery parts, etc. Noting consolidate, some partially buried. As part of clean up operation, pick up, separate and stockpile at dump site for future recycling on TDC time.

**Other saleable materials:** None directly observed; use your discretion.

### Non-usable items:

1. Clean out all bushes and weeds at least 25 feet from building. Remove to the dump.
2. Pick up all trash, tires, wood and misc. at least 600 feet on a side around building.
3. Cut off old hoist post in concrete slab, flush with surface.
4. Remove what remains of the Sulphuret hoist structure and transport to the dump.
5. Pull trailer apart and take remains to dump area and stockpile.
6. Take all old weathered furniture and appliances to dump and stockpile in appropriate areas.

**Estimated time for job:** 40 man hours - weeds have already been removed from around the building to a great extent.

## AREA 4

**Location:** Area northeast of old heap leach pad and north of guard gate entrance road.

**General work:** Remove weeds from area of guard house, clean up old pallets and misc. trash, including PVC pipe.

**Items to remain:**

1. All pallets with included supplies with blue spray paint "G".
2. Guard house
3. New water well and pipe.
4. Fence.

**Salvageable materials:**

1. Used trash can

**Scrap metal:** Various small pieces of steel with red flags attached - gather and remove to dump site for stockpiling and eventual removal to Tucson for recycling. Larger items can be cut up and removed at your time table, according to scrap steel removal.

**Other saleable material:** Two old equipment batteries - stockpile and recycle in Tucson.

**Non-usable items:**

1. Old pallets - save useable ones near old assay house; the unusable ones stockpile on area of old dump (this has already been done)
2. Pick up and separate scrap steel on dump stockpile.
3. Remove weeds in area of old guard shack.
4. Cut up and remove larger steel items flagged red and recycle on your own time, per agreement.

**Estimated time for job:** 5 man hours

## AREA 5

**Location:** Make-up water pond; PVC pipe to wash plant; Lower roads around Knob Hill.

**General work:** Remove gate valve wooden bridge in make-up water pond; pick up trash along roads to east and south of Knob Hill. Remove PVC ground lines to east of make-up water pond.

**Items to remain:**

1. PVC pipe inside pond banks
2. Valve box on west side of pond.
3. White chemical in overflow area east of pond on plywood.
4. PVC pipe going south to new leaching area along road.

**Salvageable materials:** None noted

**Scrap metal:** Minor amounts (small items)

**Other saleable materials:** None noted

**Non-usable items:**

1. Wooden foot bridge to gate valve (north side of pond) - pull down and remove remains to dump stockpile of wood.
2. Pick up red flagged trash along roads. Transport to dump stockpiles.
3. Drag out, cut, load and transport 8" PVC pipe from make-up pond to washing plant settling tanks; to be stockpiled on dump area.
4. Drag out, cut, load and transport 4 power poles and wire near water well on the southeast side of Knob Hill to the wood storage area on the dump - wire is aluminum.

**Estimated time for job:** 30 man hours

## AREA 6

**Location:** Old carbon stripping plant enclosure (fenced area with two cinder block buildings southwest of guard gate).

**General work:** In the southern one-half of area along the east, west and south fences are stacked numerous pieces of electronic hardware barrels, PVC pipe and misc. bits and pieces of equipment. Remove all items to waste dump storage area except as noted below.

### Items to remain:

1. All items marked with blue spray paint "G"
2. All stainless steel swimming pool filter tanks along east fence.
3. All fiberglass filters stacked in the southeast corner (going to SS filter tanks). Leave them stacked there for the time being.
4. All electronic hardware in area.
5. Buildings and fence.

**Salvageable materials:** None directly observed (use your discretion). If there is a question, remove, separate and stockpile at dump site for my review.

**Scrap metal:** Numerous odd and end pieces of steel, parts, etc. Nothing consolidated. As part of clean up operations, pick up, separate and stockpile at dump site for future recycling on TDC time.

**Other saleable materials:** None directly observed.

### Non-useable items:

1. Clean out all weeds in fence enclosure area.
2. Replace parts on to the SS filter tanks that are scattered around.
3. Pick up all trash, wood, PVC pipe, barrels, etc., and remove to the proper dump storage area.
4. After removal of other materials, try to find open barrels to place the circuit boards into. The remaining electronic equipment should be placed into barrels or stockpiled along south fence, in one area for future disposal. Try to avoid breaking the CRT's.

**Estimated time for job:** 20 man hours.

GARY A. LINDROOS  
P. O. Box 1011  
Tombstone, Arizona 85638  
(602) 456-9160

INVOICE

February 8, 1994

Mr. James Briscoe  
5610 E. Sutler Lane  
Tucson, Arizona 85712

Client: Tombstone Development Corporation, Inc.  
P. O. Box 1445  
Grand Island, Nebraska 68802

February 10, 1994

Gary A. Lindroos      Neutralized and rinsed approximately 100 CN drums  
in PBR CN storage area.      5.0 Hours

February 13, 1994      Prepped and analyzed 13 samples collected by James  
Briscoe. Samples analyzed for Free CN and pH      3.0 Hours

Total Hours      8.0

Pay Rate \$35.00 per Hour  
Total: \$280.00  
Previous Balance: 700.00  
Total Due: \$980.00

Submitted by:

From 1/26/94

- 140.00  
1120.00 JAB

  
Gary A. Lindroos

**received**  
2/15/94

REVIEWED  
J.A.B.

GARY A. LINDROOS  
P. O. Box 1011  
Tombstone, Arizona 85638  
(602) 456-9160

INVOICE

February 8, 1994

Mr. James Briscoe  
5610 E. Sutler Lane  
Tucson, Arizona 85712

Client: Tombstone Development Corporation, Inc.  
P. O. Box 1445  
Grand Island, Nebraska 68802

January 28, 1994

Gary A. Lindroos	Sampled white powdery material around TEI, cyanide drum storage area, analyzed for free CN	2.0 Hours
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January 30, 1994

Gary A. Lindroos	Sampled PBR Well No. 4 @ 0900 hours	0.5 Hours
	Sampled and analyzed soils around TEI cyanide drum storage area	1.5 Hours
	Sampled PBR Well No. 4 @ 1700 hours and packaged samples for shipment to American Analytical Labs	1.0 Hours

February 6, 1994

Gary A. Lindroos	Neutralized and rinsed 75 cyanide drums in PBR CN storage area, moved drums stored in lab area to PBR leach pad No. 2	<u>6.5 Hours</u>
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	Total Hours	11.5 Hours
Pay Rate	\$35.00 per Hour	
	Total	\$402.50
	Previous Balance	<u>297.50</u>
	Total Due:	\$700.00

Submitted by:

  
Gary A. Lindroos

140.00  
840.00 *JAB*



GARY A. LINDROOS  
P. O. Box 1011  
Tombstone, Arizona 85638  
(602) 456-9160

INVOICE

January 26, 1994

Mr. James Briscoe  
5610 E. Sutler Lane  
Tucson, Arizona 85712

Client: Tombstone Development Corporation, Inc.  
P. O. Box 1445  
Grand Island, Nebraska 68802

Gary A. Lindroos	Sampling and analysis of materials	7 hours @ 35.00 Per Hour	\$245.00
Naomi R. Lindroos	Sample Preparation and assaying and clean-up	7 hours @ 7.50 Per Hour	\$ 52.50

Total	\$297.50
Previous Balance	<u>140.00</u>
<b>Total Due:</b>	<b>\$437.50</b>



Submitted by:

A handwritten signature in cursive script that reads "Gary A. Lindroos".

Gary A. Lindroos

Gary A. Lindroos  
P. O. Box 1011  
Tombstone, Arizona 85638

January 9, 1994

TO: Mr. James Briscoe  
5610 E. Sutler Lane  
Tucson, Arizona 85712

CLIENT: Tombstone Development Company

Following are the hours for testing the TDC Well No. 1 on 31 December 1993:

0800 - 1030	Sample Well No. 1, test pH , conductivity and static water level	2.5 hours
2100 - 2200	Sample Well No. 1, test pH, conductivity and static water level	1.5 hours
	Prepared sample bottles for shipment to American Analytical labs	_____

Total 4.0 hours  
Pay Rate: \$35.00 per hour

Total Due: \$140.00

*Gary Lindroos*



**GARY A. LINDROOS**  
**P. O. Box 1011**  
**Tombstone, Arizona 85638**  
**(602) 456-9160**

October 27, 1993

Mr. James Briscoe  
5610 E. Sutler Lane  
Tucson, Arizona 85712

Dear Jim:

Enclosed you will find our last billing for Tombstone Development Company. I went ahead and sent them a copy of the invoice but would appreciate your contacting them and see if we can't get this paid right away. As you know I've been out of work for the past three weeks and we could really use the money right now.

I staked and marked all the sample locations up at the mine. If you need any additional work done let me know and I'll get on it right away. Thanks!

Sincerely,



Gary Lindroos

GARY A. LINDROOS  
P. O. Box 1011  
Tombstone, Arizona 85638  
(602) 456-9160

INVOICE

October 13, 1993

Mr. James Briscoe  
5610 E. Sutler Lane  
Tucson, Arizona 85712

Client: Tombstone Development Corporation, Inc.  
P. O. Box 1445  
Grand Island, Nebraska 68802

Gary A. Lindroos	1 Oct 93	5 Hours @ \$35.00 per hour	\$175.00 for analytical services
Gary A. Lindroos	2 Oct 93	6 Hours @ \$35.00 per hour	210.00 for analytical services
Gary A. Lindroos	13 Oct 93	2.5 Hours @ 35.00 per hour	<u>87.50</u> staking trenches
Total			\$472.50

Naomi R. Lindroos	1 Oct 93	5 Hours @ \$7.50 per hour	\$ 37.50 for Lab work & cleanup
Naomi R. Lindroos	2 Oct 93	6 Hours @ \$7.50 per hour	<u>45.00</u> for Lab work & cleanup
Total			\$ 82.50

**Total Amount Due: \$555.00**

**Bills are due and payable upon receipt.**

GARY A. LINDROOS  
P. O. Box 1011  
Tombstone, Arizona 85638  
(602) 456-9160

October 7, 1993

Mr. James Briscoe  
5610 E. Sutler Lane  
Tucson, Arizona 85712

Dear Jim:

Enclosed please find my billing to Tombstone Development Corporation, Inc. for services we performed October 1st and 2nd 1993. If you have any questions please feel free to call me at any time.

Sincerely,



Gary A. Lindroos

1 incl - Invoice

GARY A. LINDROOS  
P. O. Box 1011  
Tombstone, Arizona 85638  
(602) 456-9160

INVOICE

October 7, 1993

Mr. James Briscoe  
5610 E. Sutler Lane  
Tucson, Arizona 85712

CLIENT: Tombstone Development Corporation, Inc.  
P. O. Box 1445  
Grand Island, Nebraska 68802

Gary A. Lindroos	1 Oct 93	5 Hours @ \$35.00 per hour	\$175.00 for analytical services
Gary A. Lindroos	2 Oct 93	6 Hours @ \$35.00 per hour	<u>210.00</u> for analytical services
Total			\$385.00

Naomi R. Lindroos	1 Oct 93	5 Hours @ \$7.50 per hour	\$ 37.50 for Lab work & cleanup
Naomi R. Lindroos	2 Oct 93	6 Hours @ \$7.50 per hour	<u>45.00</u> for Lab work & cleanup
Total			\$ 82.50

Total Amount Due: \$ 467.50

Bills are due and payable upon receipt.

GARY A. LINDROOS  
P. O. Box 1011  
Tombstone, Arizona 85638  
(602) 456-9160

October 3, 1993

Mr. James Briscoe  
5610 E. Sutler Lane  
Tucson, Arizona 85712

Dear Jim:

Enclosed you will find the assay results of tests we conducted Friday and Saturday and our time sheets up through 2 October 1993. The cleanup of the sample prep room and laboratory are also finished.

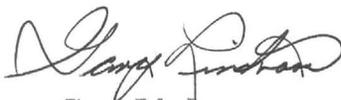
I took solution samples from the four (4) ponds which PBR used in their leaching circuit and ran the assays for free CN, Nitrates as (N), and pH. Sample holes 34 through 43 are from the the PBR Leach Pads.

We still have not received any checks from TDC so if you could send them a friendly reminder it would be most appreciated.

I received a call from Western States Minerals on Friday and am supposed to have an interview with Rick Fiddler within the next week or so. Right now it looks fairly promising so I am keeping my fingers crossed. They are bringing down a mobile lab from Reno and he stated that they are looking for an assayer within the next couple of weeks.

I'm pretty sure we've finished everything that you had scheduled for us to do at the mine site. If you need additional assays or clean-up work done just give us a call.

Sincerely,

  
Gary Lindroos

GARY A. LINDROOS  
P. O. Box 1011  
Tombstone, Arizona 85638

TIME SHEET

2-Oct-93

Client: Tombstone Development Corp.

Pay Rate: \$35.00 per hour

Through Week Ending: 2 Oct 93

Date	Hours	Accum	Description of Work Accomplished
1-Oct-93	5		Sample Trenches, Analyze Free CN Content, pH
2-Oct-93	6		Sample Trenches, Analyze Free CN Content, pH, Clean-up Sample Prep Room and Laboratory, Analyze Pond Samples for Nitrates as (N)
Total Hours	11	54	

NAOMI R. LINDROOS  
P. O. Box 1011  
Tombstone, Arizona 85638

TIME SHEET

24-Sep-93

Client: Tombstone Development Corp.

Pay Rate: \$7.50 per hour

Week Ending: 2 Oct 93

Date	Hours	Accum	Description of Work Accomplished
1-Oct-93	5		Prepared samples for analysis, Cleanup of lab and glassware
2-Oct-93	6		Prepared samples for analysis, cleanup of lab, glassware and cleanup of sample prep room.
Total Hours	11	41	

Gary A. Lindroos  
P. O. Box 1011  
Tombstone, Arizona 85638  
(602) 456-9160

September 19, 1993

Mr. James Briscoe  
5610 E. Sutler Lane  
Tucson, Arizona 85712

Dear Jim:

Yesterday Naomi and I ran 60 samples for free CN and pH. Most of the trenches on the PBR tailings area are finished and all of the samples from the TEI tailings area (No. 19 through 28 and also the No. 7 samples) are completed. The TEI tailings showed <0.01 mg/l of free CN throughout the pad. I am sure these tailings could be sold to your clients as soon as we verify the total cyanide with an independent laboratory.

I am enclosing the assays along with our current time sheets and the equipment price estimate which would make the laboratory fully operational.

As of this date we still have not received any payment for services from TDC. If you could give them a reminder it would be greatly appreciated.

If you have any questions concerning the assays please give me a call.

Sincerely,

  
Gary A. Lindroos

received  
9/22/93



GARY A. LINDROOS  
P. O. Box 1011  
Tombstone, Arizona 85638  
(602) 456-9160

TIME SHEET

Date	Hours	Accum	Description of Work Accomplished
8/14/93	4		Clean-up Lab Building, Start Inventory
8/22/93	3.5		Clean-up Lab Building, Inventory
8/29/93	5		Sample Tailings Pad, Assay for Free CN Work on Lab Clean-up
<b>Total Hours</b>		<b>12.5</b>	
9/4/93	6.5		Sample Trenches, Run Samples for CN Sample Trenches, Sorted old PBR Files
9/11/93	9		Sample Trenches, Analyzed Samples for
9/12/93	6		
<b>Total Hours</b>		<b>34</b>	
9/18/93	9		Sample Trenches, Run Samples for CN
<b>Total Hours</b>		<b>43</b>	

NAOMI R. LINDROOS  
P. O. Box 1011  
Tombstone, Arizona 85638  
(602) 456-9160

TIME SHEET

Date	Hours	Accum	Description of Work Accomplished
8/22/93	3.5		Assist in Inventory and Clean-up
8/29/93	5		Assist in Sampling Tailings Pads, Clean glassware, sample prep and lab clean-up
<b>Total Hours</b>		<b>8.5</b>	
9/4/93	6.5		Sample Trenches 3, 4, 5. Assist in assays, Prepared samples for bottle roll. Assisted in
9/12/93	6		Assay of samples. Clean-up in lab. sample prep and clean-up.
<b>Total Hours</b>		<b>21</b>	
9/18/93	9		Prepared samples for assay. Clean-up glassware.
<b>Total Hours</b>		<b>30</b>	



Gary A. Lindroos  
P. O. Box 1011  
Tombstone, Arizona 85638

September 13, 1993

Mr. James Briscoe  
5610 E. Sutler Lane  
Tucson, Arizona 85712

Dear Jim:

Enclosed are the last bottle rolls and assays which we ran on the trenches and some of the spots you had selected in the slime ponds. I also enclosed Naomi's and my time sheets up to this date.

I estimated the time for completing the cleanup of the Lab and Sample Prep Room as follow:

Lab	3 to 4 Hours
Sample Prep Room	4 to 5 Hours

There are still eleven samples which we have already samples at the trenches but haven't had time to run as yet. I also have a couple more trenches and the ponds to sample. Time permitting we'll try to get back over there one evening this week and finish those assays.

Sincerely,



Gary Lindroos

GARY A. LINDROOS  
P. O. Box 1011  
Tombstone, Arizona 85638  
(602) 456-9160

TIME SHEET

<u>Date</u>	<u>Hours</u>	<u>Description of Work Accomplished</u>	<u>Contractor</u>
8-14-93	4.0	Clean-up Lab Building, Start Inventory	Gary Lindroos
8-22-93	3.5	Clean-up Lab Building, Inventory	Gary Lindroos
8-29-93	5.0	Sample Tailings Pad, Assay for Free CN Work on Lab Clean-up	Gary Lindroos
Total Hours	12.5	$\times \$35 = \$420$	

8-22-93	3.5	Assist in Inventory and Clean-up	Naomi Lindroos
8-29-93	5.0	Assist in Sampling Tailings Pads, Clean glassware, sample prep and clean-up of lab.	Naomi Lindroos
Total Hours	8.5	$\times 7.5 = 63.75$	

9-4-93	6.5	Sample Trenches 3, 4, 5. Run Samples for Free CN content and pH	Gary Lindroos
9-11-93	9.0	Sample Trenches, Sorted old PBR Files	
9-12-93	6.0	Sample Trenches, Analyzed Samples for for Free CN content and pH	
Total Hours	21.5	$\times 35 = 752.50$	

9-4-93	6.5	Sample Trenches 3, 4, 5. Assist in assays, sample prep and clean-up.	Naomi Lindroos
9-12-93	6.0	Prepared samples for bottle roll. Assisted in Assay of samples. Clean-up in lab.	
Total Hours	12.5	$\times 7.5 = 93.75$	

Total: \$1,330

GARY A. LINDROOS  
P. O. Box 1011  
Tombstone, Arizona 85638  
(602) 456-9160

TIME SHEET

<u>Date</u>	<u>Hours</u>	<u>Description of Work Accomplished</u>	<u>Contractor</u>
8-14-93	4.0	Clean-up Lab Building, Start Inventory	Gary Lindroos
8-22-93	3.5	Clean-up Lab Building, Inventory	Gary Lindroos
8-29-93	5.0	Sample Tailings Pad, Assay for Free CN Work on Lab Clean-up	Gary Lindroos
Total Hours	12.5		
8-22-93	3.5	Assist in Inventory and Clean-up	Naomi Lindroos
8-29-93	5.0	Assist in Sampling Tailings Pads, Clean glassware, sample prep and clean-up of lab.	Naomi Lindroos
Total Hours	8.5		
9-4-93	6.5	Sample Trenches 3, 4, 5. Run Samples for Free CN content and pH	Gary Lindroos
9-11-93	9.0	Sample Trenches, Sorted old PBR Files	
9-12-93	6.0	Sample Trenches, Analyzed Samples for for Free CN content and pH	
Total Hours	21.5		
9-4-93	6.5	Sample Trenches 3, 4, 5. Assist in assays, sample prep and clean-up.	Naomi Lindroos
9-12-93	6.0	Prepared samples for bottle roll. Assisted in Assay of samples. Clean-up in lab.	
Total Hours	12.5		

GARY A. LINDROOS  
P. O. Box 1011  
Tombstone, Arizona 85638  
(602) 456-9160

TIME SHEET

<u>Date</u>	<u>Hours</u>	<u>Description of Work Accomplished</u>	<u>Contractor</u>
8-14-93	4.0	Clean-up Lab Building, Start Inventory	Gary Lindroos
8-22-93	3.5	Clean-up Lab Building, Inventory	Gary Lindroos
8-29-93	5.0	Sample Tailings Pad, Assay for Free CN Work on Lab Clean-up	Gary Lindroos

Total Hours 12.5

8-22-93	3.5	Assist in Inventory and Clean-up	Naomi Lindroos
8-29-93	5.0	Assist in Sampling Tailings Pads, Clean glassware, sample prep and clean-up of lab.	Naomi Lindroos

Total Hours 8.5

GARY A. LINDROOS  
P. O. Box 1011  
Tombstone, Arizona 85638  
(602) 456-9160

TIME SHEET

<u>Date</u>	<u>Hours</u>	<u>Description of Work Accomplished</u>	<u>Contractor</u>
8-14-93	4.0	Clean-up Lab Building, Start Inventory	Gary Lindroos
8-22-93	3.5	Clean-up Lab Building, Inventory	Gary Lindroos
8-11-93	3.5	Assist in Inventory and Clean-up	Naomi Lindroos



# American Analytical Laboratories

Tucson — Phoenix — Mexico

## LABORATORY ANALYSIS REPORT

Page 1 of 1

Code: TOMDEV  
 TOMBSTONE DEVELOPMENT CORP.  
 MR. JAMES BRISCOE  
 5610 E. SUTLER LANE  
 TUCSON, AZ 85712-

SAMPLE INFORMATION  
 Sample...: 018795-01  
 Clnt Smp:  
 Descript: WELL WATER  
 Location: TDC, WELL #1  
 Samp D/T: 12/31/93 10:45 AM  
 Sampler.: G. LINDROOS  
 Trans By: R. SMITH  
 Recvd By: G. ABAD  
 Date Rcv: 01/06/94  
 Date Rpt: 01/12/94

Analysis	MCL	Results	Date
6.2 ARSENIC		0.007	01/11/94
BE200.7 BERYLLIUM		<0.003	01/10/94
CD200.7 CADMIUM		<0.007	01/10/94
CR200.7 CHROMIUM		<0.03	01/10/94
335.1 CYANIDE AMENABLE/CHLORINATION		<0.01	01/10/94
335.2 CYANIDES, TOTAL		<0.01	01/10/94
PB200.7 LEAD		0.043	01/12/94
245.1 MERCURY		<0.0001	01/12/94
353.2 NITRATE		2.40	01/11/94
270.2 SELENIUM		0.002	01/11/94
AG200.7 SILVER		<0.01	01/10/94

### Comments:

All units are MG/L unless otherwise specified.  
 ND means analyte not detected.  
 MDL is the Method Detection Limit.

Analyst(s)



# American Analytical Laboratories

Tucson — Phoenix — Mexico

## LABORATORY ANALYSIS REPORT

Page 1 of 1

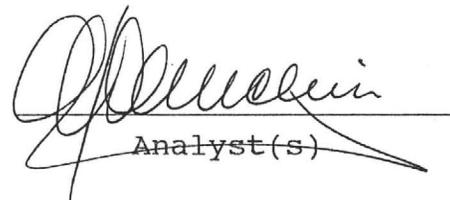
Code: TOMDEV  
 TOMBSTONE DEVELOPMENT CORP.  
 MR. JAMES BRISCOE  
 5610 E. SUTLER LANE  
 TUCSON, AZ 85712-

SAMPLE INFORMATION  
 Sample...: 018795-02  
 Clnt Smp:  
 Descript: WELL WATER  
 Location: TDC, WELL #1  
 Samp D/T: 12/31/94 09:55 PM  
 Sampler.: G. LINDROOS  
 Trans By: R. SMITH  
 Recvd By: G. ABAD  
 Date Rcv: 01/06/94  
 Date Rpt: 01/12/94

Analysis	MCL	Results	Date
6.2 ARSENIC		0.009	01/11/94
BE200.7 BERYLLIUM		<0.003	01/10/94
CD200.7 CADMIUM		<0.016	01/10/94
CR200.7 CHROMIUM		<0.03	01/10/94
335.1 CYANIDE AMENABLE/CHLORINATION		<0.01	01/10/94
335.2 CYANIDES, TOTAL		<0.01	01/10/94
PB200.7 LEAD		0.041	01/12/94
245.1 MERCURY		<0.0001	01/12/94
353.2 NITRATE		2.69	01/11/94
270.2 SELENIUM		<0.002	01/11/94
AG200.7 SILVER		<0.01	01/10/94

### Comments:

All units are MG/L unless otherwise specified.  
 ND means analyte not detected.  
 MDL is the Method Detection Limit.

  
 Analyst(s)

GARY A. LINDROOS  
P. O. Box 1011  
Tombstone, Arizona 85638

January 26, 1994

Mr. James Briscoe  
5610 East Sutler Lane  
Tucson, Arizona 85712

Client: Tombstone Development Company  
P. O. Box 1445  
Grand Island, Nebraska 68802

Following are results of sample analysis for pH and free cyanide content of samples located on the TDC property:

Sample Identification	Location	pH	Free CN ppm
Mix Tank No. 1	Sample Prep Room	9.0	<0.002
Mix Tank No. 2	Sample Prep Room	10.0	<0.002
No. 3, 55 gallon drum	Sample Prep Room	9.0	<0.002
No. 4, 55 gallon drum	Sample Prep Room	9.0	<0.002
No. 5, 55 gallon drum	Sample Prep Room	9.0	0.700
No. 6, 55 gallon drum	Sample Prep Room	9.0	<0.002
No. 7, 55 gallon drum	Sample Prep Room	9.0	0.075
No. 8, 55 gallon drum	Sample Prep Room	9.0	0.060
No. 9, Composite 5 Drums	Carbon Stripper Tanks	10.0	0.019
No. 10, 55 gallon Drum	Lab Yard, South End	7.0	<0.002
Soil, South Side	TEI CN Drum Storage	9.5	0.130
Soil, North Side	TEI CN Drum Storage	8.5	0.120
Soil, Below	TEI CN Drum Storage	7.0	<0.002
White Powder	West side of Bunker Hill Lab	11.0	<0.002
Copper Sulphate	West side of Bunker Hill Lab	6.0	<0.002
White Powder	On Road by TEI Reservoir	10.5	0.210
Silica Sand	North side of Butler Building	6.5	0.018
3 Drums Nitric Acid	TEI Dump Area	5.0	
3 Drums Ammonium Hydrox.	TEI Dump Area	11.0	

Recommend that the contaminated materials be spread out on a plastic liner and treated with calcium hypochlorite for neutralization, then retested for free cyanide content. Once the materials are neutralized they could be stored on one of the existing tailings pad disposal areas.

Respectfully submitted:

  
Gary A. Lindroos

GARY A. LINDROOS  
P. O. Box 1011  
Tombstone, Arizona 85638

February 9, 1994

Mr. James Briscoe  
5610 East Sutler Lane  
Tucson, Arizona 85712

Client: Tombstone Development Company  
P. O. Box 1445  
Grand Island, Nebraska 68802

Following are results of sample analysis for pH and free cyanide content of samples located on the TDC property. Samples were collected and analyzed on January 28, 1994.

Sample Identification	Location	pH	Free CN ppm
No. 1 (White Material)	TEI CN Drum Storage	9.0	<0.002
No. 2 (White Material)	TEI CN Drum Storage	8.5	<0.002
No. 3 (White Material)	TEI CN Drum Storage	8.2	<0.002

Following are results of sample analysis of PBR Well No. 4 taken on January 30, 1994:

Time Sampled	pH	Conductivity	Static Water Level	Free CN	Nitrates
0900	6.8	24	616 ft	<0.002	7.2
1700	6.8	24	616 ft	<0.002	7.2

Respectfully submitted:

  
Gary A. Lindroos

GARY A. LINDROOS  
P. O. Box 1011  
Tombstone, Arizona 85638

January 9, 1994

Mr. James Briscoe  
5610 E. Sutler Lane  
Tucson, Arizona 85712

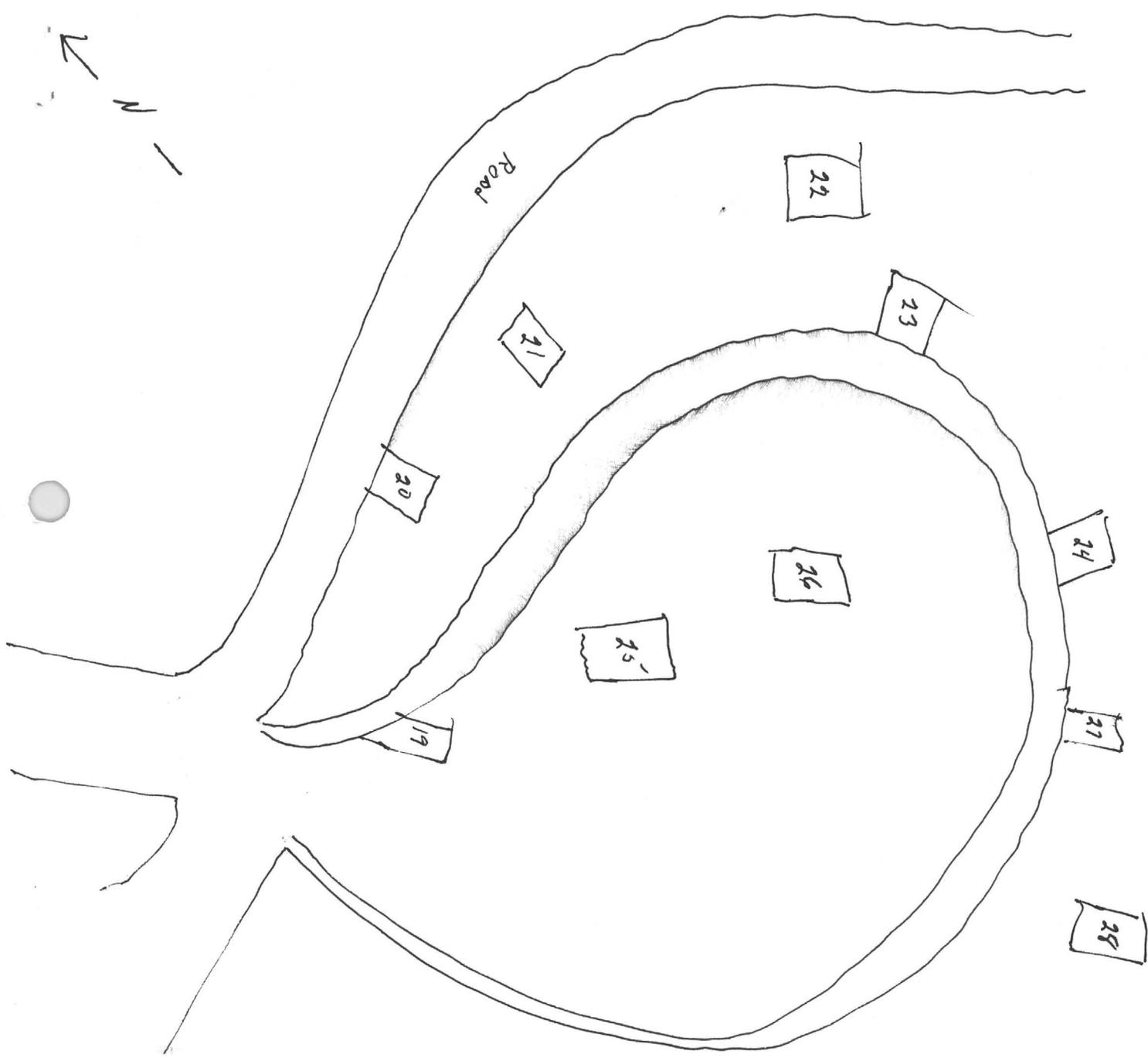
Following are testing results conducted on TDC Well 1 on December 31,  
1993:

Sample I. D.	Date	Time	pH	Conductivity	Static Water Level
TDC Well 1	12/31/93	10:45 a.m.	6.6	21	464.1
TDC Well 1	12/31/93	9:55 p.m.	6.6	21	465.3

Respectfully submitted,

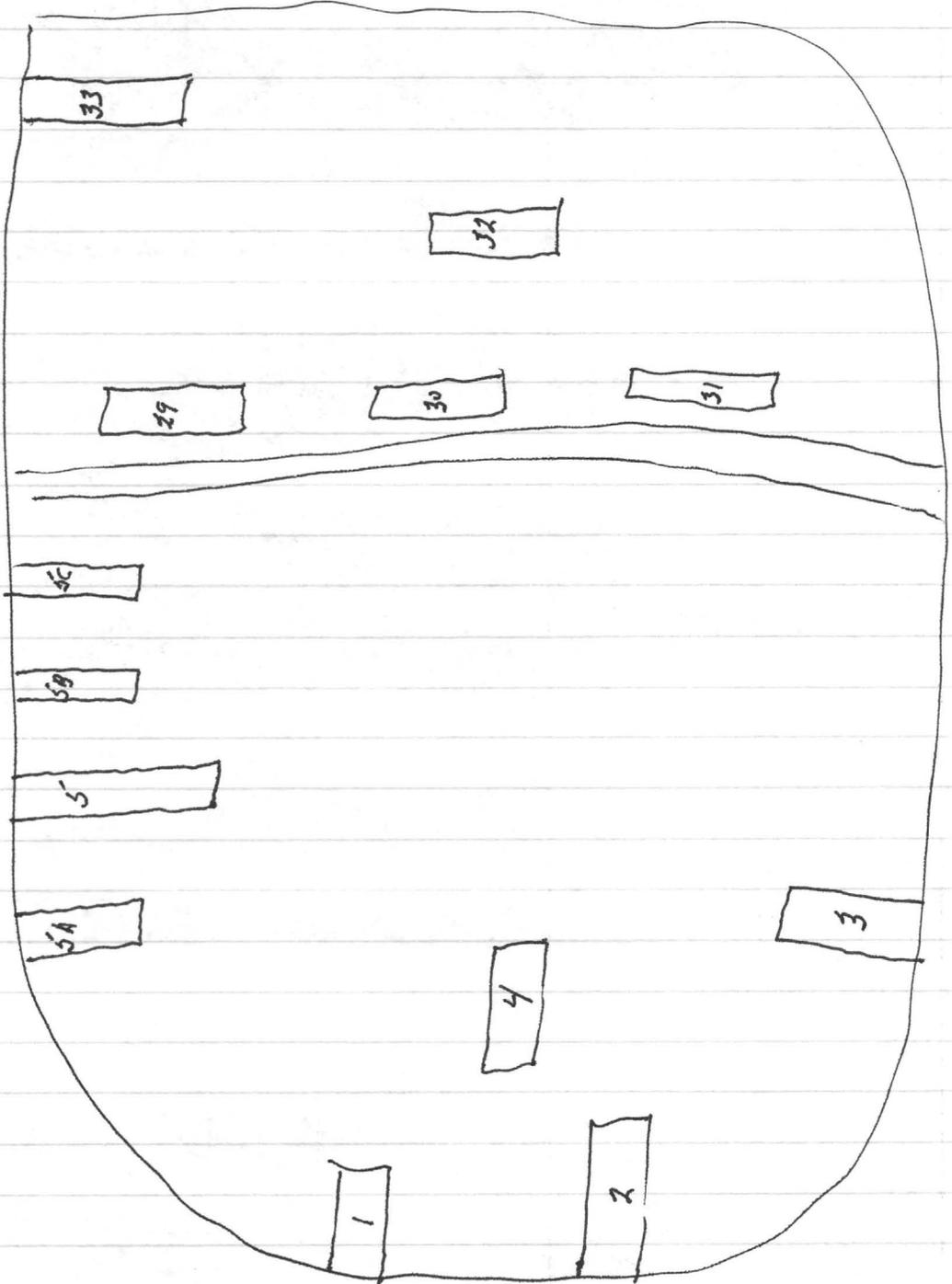
  
Gary A. Lindroos

TEI Tailings Pile



Settling Tanks

PBR TAILINGS PAD



GARY A. LINDROOS  
P. O. Box 1011  
Tombstone, Arizona 85638  
(602) 456-9160

October 3, 1993

Mr. James Briscoe  
5610 E. Sutler Lane  
Tucson, Arizona 85712

CERTIFICATE OF ANALYSIS

<u>Sample Identification</u>	<u>Mg/L free CN</u>	<u>Nitrates as (N)</u>	<u>pH</u>
No. 35	<0.01		6.8
No. 36	<0.01		6.6
No. 37	<0.01		6.7
No. 38	0.017		6.7
No. 39	0.043		6.5
No. 40	0.014		6.5
No. 41	<0.01		7.0
No. 42	<0.01		6.5
No. 43	<0.01		6.5
Preg. Solution Pond	<0.01	52.0	6.5
Barren Solution Pond	<0.01	27.0	6.5
Neutralization Pond	<0.01	1.2	6.6
Backwash Pond (Sediments)	<0.01	84.0	6.5
No. 13	0.025		7.0
No. 14	0.180		7.0
No. 15	<0.01		6.4
No. 16	<0.01		6.6
No. 17	<0.01		6.7
No. 18	<0.01		6.6

*282 Leach page*

14160  
GARY A. LINDROOS  
10-3-93  
ARIZONA, U.S.A.

## EQUIPMENT REQUIRED FOR BASIC LABORATORY SETUP

<u>Item</u>	<u>Approximate Cost</u>
Chipmunk or roll crusher	\$ 2000.00
Pulverizer	3000.00
Small Drying Oven	250.00
5 HP motor for Legend Crusher	250.00
Electrical Boxes for Crushers and Pulverizer & Furnace	100.00
Air Compressor	350.00
Acetylene Tank	100.00
Pulp Balance	750.00
Micro Balance (for Au & Ag Fire Assays)	2500.00 (Used)
New AA Standards	
Reagents for Fire Assays:	
Soda Ash	
Borax	
Litharge	
Silica	
Potassium Nitrate	
Bone Ash	
Additional reagents will be needed for special assays	
We should have 2 Cyanide First Aid Kits	300.00

CERTIFICATE OF ANALYSIS						
18-Sep-93						
Sample ID	Mg/L Free Cn	pH	Sample ID	Mg/L Free Cn	pH	
No. 19 0' - 3'	<0.01	6.5	No. 28 0' - 3'	<0.01	6.5	
3' - 6'	<0.01	6.5	3' - 6'	<0.01	6.5	
6' - 9'	<0.01	6.5	6' - 9'	<0.01	6.4	
9' - 12'	<0.01	6.5	9' - 12'	<0.01	6.5	
No. 20 0' - 3'	<0.01	6.4	No. 29 0' - 3'	0.98	7.2	
3' - 6'	<0.01	6.5	3' - 6'	1.96	7.4	
6' - 9'	<0.01	6.4	6' - 8.5'	1.44	6.8	
No. 21 0' - 3'	<0.01	6.5	No. 30 0' - 3'	0.72	6.5	
3' - 6'	<0.01	6.6	3' - 6'	0.86	6.9	
6' - 9'	<0.01	6.5	No. 32 0' - 3'	0.13	6.5	
No. 22 0' - 3'	<0.01	6.5	3' - 6'	0.11	6.5	
3' - 6'	<0.01	6.7	6' - 9'	0.48	6.9	
6' - 9'	<0.01	6.5	No. 33 0' - 3'	0.19	6.6	
9' - 12'	<0.01	6.5	3' - 6'	0.56	7.0	
No. 23 0' - 3'	<0.01	6.6	6' - 9'	0.05	7.0	
3' - 6'	<0.01	6.7	9' - 11'	0.04	6.5	
6' - 9'	<0.01	6.4	No. 34 0' - 3'	<0.01	6.4	
9' - 11'	<0.01	6.5	3' - 6'	<0.01	6.4	
No. 24 0' - 3'	<0.01	6.3	6' - 9'	<0.01	6.5	
3' - 6'	<0.01	6.5	9' - 11'	<0.01	6.6	
6' - 9'	<0.01	6.5	5C 6' - 9'	<0.01	6.5	
9' - 12'	<0.01	6.5	9' - 12'	<0.01	6.5	
No. 25 0' - 3'	<0.01	6.5	12' - 14'	<0.01	6.5	
3' - 6'	<0.01	6.5	5D 0' - 3'	<0.01	6.4	
6' - 9'	<0.01	6.6	3' - 6'	<0.01	6.6	
9' - 12'	<0.01	6.5	6' - 9'	<0.01	6.4	
No. 26 0' - 3'	<0.01	6.4				
3' - 6'	<0.01	6.4				
6' - 9'	<0.01	6.6				
9' - 11'	<0.01	6.5				
No. 27 0' - 3'	<0.01	6.6				
3' - 6'	<0.01	6.4				
6' - 9'	<0.01	6.4				
9' - 11'	<0.01	6.5				

} > 500  
Lead  
part.



Note: Holes No. 19 through No. 28 are from old TEI Tailings Pad  
Instrumentation: Hach DR 1A Colorimeter

GARY A. LINDROOS  
P. O. Box 1011  
Tombstone, Arizona 85638  
(602) 456-9160

September 13, 1993

Mr. James Briscoe  
5610 E. Sutler Lane  
Tucson, Arizona 85712

CERTIFICATE OF ANALYSIS

<u>Sample Identification</u>	<u>Free Cyanide</u>	<u>pH</u>
No. 6 Overburden from Pit	<0.01	6.6
No. 7A 0' - 3' from bottom	<0.01	6.4
3' - 6' from bottom	<0.01	6.8
No. 7B 0' - 4' from bottom	<0.01	6.8
4' - 10' from bottom	<0.01	6.5
No. 7C 0' - 3' from bottom	<0.01	6.7
3' - 8' from bottom	<0.01	6.5
No. 7D 0' - 3' from bottom	<0.01	6.6
3' - 7' from bottom	<0.01	6.5
7' - 10' from bottom	<0.01	6.4
No. 1 0' - 3' from top	<0.01	6.6
3' - 6' from top	<0.01	6.8
6' - 9' from top	<0.01	6.5
9' - 12' from top	<0.01	6.7
No. 2 0' - 3' from top	<0.01	6.7
3' - 6' from top	<0.01	6.8
6' - 9' from top	<0.01	6.4
9' - 12' from top	<0.01	6.5
No. 5A 0' - 3'	0.960	7.0
3' - 6'	1.040	7.2
6' - 9'	0.032	6.5
9' - 13'	<0.01	6.5



Page 2 (Certificate of Analysis) Continued

<u>Sample Identification</u>	<u>Mg/L Free CN</u>	<u>pH</u>
5B 0' - 3'	0.01	7.2
3' - 6'	1.24	7.4
6' - 9'	1.50	6.8
9' - 12'	0.16	6.6
5C 0' - 3'	<0.01	6.5
3' - 6'	<0.01	6.7
No. 9	<0.01	6.5
No. 10	<0.01	6.5
No. 11	<0.01	6.4
No. 12	<0.01	6.5



Gary A. Lindroos  
P. O. Box 1011  
Tombstone, Arizona 85638

September 6, 1993

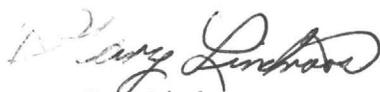
Jim Briscoe  
5610 E. Sutler Lane  
Tucson, Arizona 85712

Dear Jim:

Enclosed you will find the Assays of the trench samples which were taken at 3 foot intervals. Bar graphs were also prepared of the cyanide content and pH. Trench No. 3 appears to have the highest levels of cyanide, it is located on the north edge of the pad. I hope these will be useful to you. Since Trench No. 1 and Trench No. 2 didn't show any cyanide in the initial testing I did not sample or run these. Do you think it is necessary? If so, let me know and I'll get back up there sometime this week and run them.

Naomi and I both spent 6.5 hours sampling and running the cyanide tests on Saturday 9/4/1993. We did some clean-up in the lab building. The electricity has been turned on but, the water still is not on.

Sincerely,

  
Gary Lindroos

PBR TAILINGS PADS

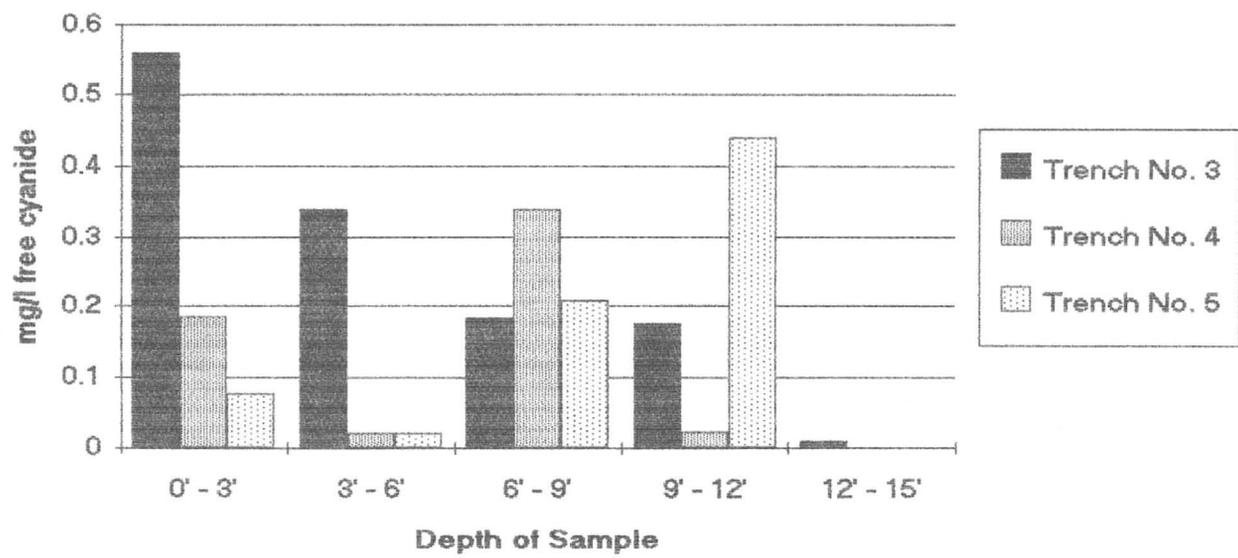
#####

Location	Free CN Trench No. 3	Free CN Trench No. 4	Free CN Trench No. 5	pH Trench No. 3	pH Trench No. 4	pH Trench No. 5
0'-3'	0.56	0.186	0.078	6.5	6.4	6.9
3'-6'	0.34	0.02	0.02	7	6.5	6.5
6'-9'	0.184	0.34	0.208	7.2	6.5	7.3
9'-12'	0.176	0.022	0.44	7	6.5	6.5
12'-15'	0.01			6.8		

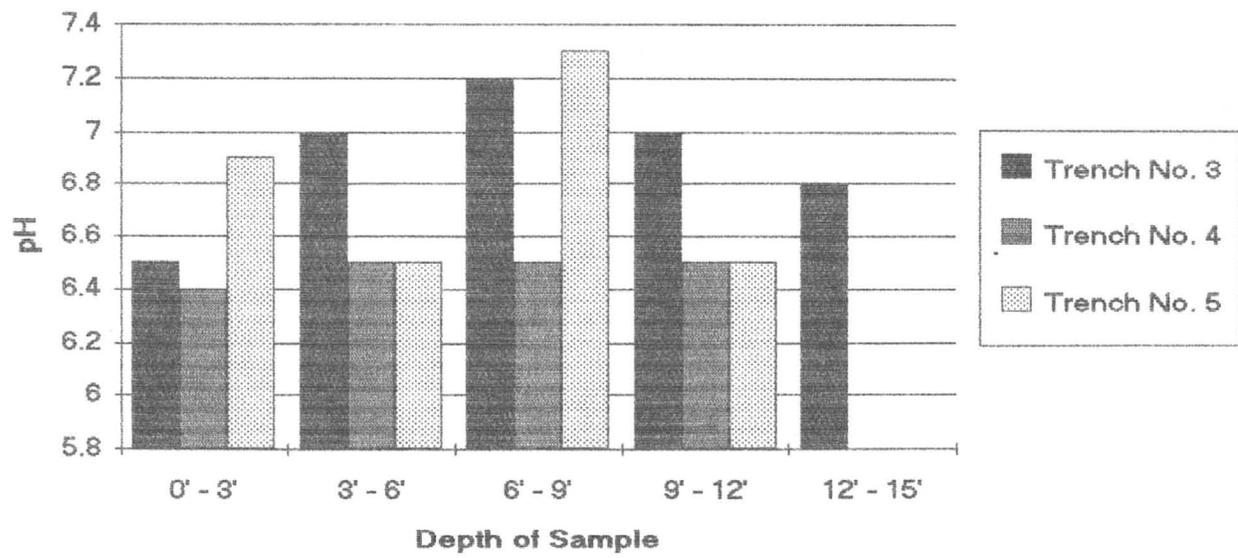
Free Cyanide is measured in Mg/L  
Instrumentation: Hach DR 1A Colorimeter



### PBR Tailings Pad - September 6, 1993



### PBR Tailings Pad pH - September 6, 1993



GARY A. LINDROOS  
P. O. Box 1011  
Tombstone, Arizona 85638  
(602) 456-9160

August 30, 1993

Mr. James Briscoe  
5610 E. Suttle Lane  
Tucson, Arizona 85712

Dear Jim:

Naomi and I went over to the lab today and checked the inventory in the sample prep building and did a little clean-up while there. There is a jaw crusher still in the building, however the motor is missing. I think we had a 5 HP motor on that crusher when PBR was there. The electrical boxes have been stripped off the wall, so those would have to be replaced. We found a few more items in that building which I hadn't put on the original inventory, so I've updated that and am sending a new inventory list to you.

There are a total of 2 fluorescent lights left in the sample prep room, 4 light fixtures have been removed. The vacuum filter has what looks like muddy precipitates in them. I'll try to clean that out and save them for future assay.

I will try to get back over there in the next couple of days to finish the sampling of the trenches at the three foot intervals and get the results to you.

Sincerely,

  
Gary Lindroos

## INVENTORY (PBR LAB)

### Equipment

Quantity	Item Description	Condition
1	Fire Assay Furnace, Cress, Electric Model C-1632SP, SN 8902	Good
1	Electric Hotplate, Lindberg	Fair
1	Fume Hood	Fair
1	Perkin Elmer Model 460 AA SN 107979	Good
1	Corning Hot Plate Stirrer	Fair
1	Magnister, Magnetic Stirrer, SN 0672	Fair
1	Lab Jaw Crusher (Legend), No Motor	Good
Misc.	Fire Assay Tools & Pouring Molds	Fair
1	Gilson Mini Splitter, Model SP3	Fair
1	Riffle Splitter (3/4" opening)	Good
1	Electric Muffle Furnace (Lindberg) Model No. 51442, SN 800003	Fair
1	Muffle Furnace (gas) 8" x 12" x 14"	Poor

## Equipment Needed for Basic Laboratory Setup

Chipmunk or roll crusher  
Pulverizer  
Small Drying Oven  
5 HP motor for Legend Crusher  
Electrical Boxes for Crushers and Pulverizer  
Air Compressor  
Acetylene Tank  
Pulp Balance  
Micro Balance (for Au & Ag Fire Assays)

New AA Standards

Reagents for Fire Assays:

Soda Ash

Borax

Litharge

Silica

Potassium Nitrate

Bone Ash

Additional reagents will be needed for special assays

We should have 2 Cyanide First Aid Kits (as required by State and Federal Mining Law)

## INVENTORY (PBR LAB)

### Equipment & Glassware

Quantity	Item Description	Condition
1	Fire Assay Furnace, Cress, Electric Model C-1632SP, SN 8902	Good
1	Electric Hotplate, Lindberg	Fair
1	Fume Hood	Fair
1	Perkin Elmer Model 460 AA SN 107979	Good
1	Corning Hot Plate Stirrer	Fair
1	Magnister, Magnetic Stirrer, SN 0672	Fair
1	Lab Jaw Crusher (Legend), No Motor	Good
Misc.	Fire Assay Tools & Pouring Molds	Fair
3	Graduated Cylinders, 100 ml	
10	Flask, 125 ml	
2	Flask, 250 ml	
2	Flask, 500 ml	
2	Flask, 1000 ml	
2	Flask, 2000 ml	
10	Beaker, 150 ml	
5	Beaker, 200 ml	
12	Beaker, 250 ml	
16	Beaker, 400 ml	
2	Beaker, 500 ml	
1	Beaker, 100 ml	
6	Beaker, 50 ml	
2	Wheaton, Cyanide Distillation Apparatus	
17	Nessler Tubes, 100 ml	
Misc.	AA Standards	
Misc.	pH Buffer Solutions	
600	1 1/2" Cupels	
80	Crucibles (30 Gram)	
1	Chlorine Test Kit	
1	Cyanide Test Kit (Hach)	
1	Digital pH Meter	

## Inventory (Chemicals)

Quantity	Item Description
2 bottles	Acetic Acid
1 gallon	Chloroform
6 bottles	Sulfuric Acid
2 bottles	Nitric Acid
1 bottle	Phosphoric Acid
1 bottle	Formaldehyde (37%)
500 ml	Pyridine
500 ml	Methyl Red Indicator
250 ml	Chloramine T
125 grams	Barbituric Acid
10 grams	Dimethylamino-Benzlrodanine
200 ml	Diethylene Glycol Dibutyl Ether
25 grams	Phenolphthalein
500 grams	Pottasium Cyanide
1 lb	Sodium Cyanide
900 ea	Chlorine Reagent Powder Pillows
20 boxes	Nitraver 5 Reagent Powder Pillows
4 boxes	CyaniVer 3, Reagent Powder Pillows
9 boxes	Cyaniver 4, Reagent Powder Pillows
3 boxes	Cyaniver 5, Reagent Powder Pillows
8 boxes	Hexaver CDTA Reagent
1 bottle	MercuVer 2 Reagent
350 pounds	Sodium Bromide
3 bottles	Ammonium Hydroxide
500 ml	Hydrogen Peroxide (30%)
2 pounds	Potassium Permanganate
1/2 pound	Sodium Acetate
1/2 pound	Zinc Acetate
4 pounds	Manganese Dioxide
1/2 pound	Zinc Powder
1/4 pound	Lead Acetate
300 ml	Wetting Agent
4 pounds	Potassium Chlorate
100 ml	Rubbing Alcohol
2 pounds	Urea
1 pound	Sodium Thiosulfate
1/2 pound	Potassium Iodide
1/4 pound	Iodine Crystals

**Chemical Inventory (Continued)**

<u>Quantity</u>	<u>Item Description</u>
1/4 pound	Zinc Sulphate
1/2 pound	Lead Nitrate
1/2 pound	Starch, Soluble Powder
1/2 pound	Calcium Hydroxide
1/2 pound	Oxalic Acid
1 pound	Sodium Hydroxide
2 1/4 pounds	Potassium Dichromate
1 pound	Ammonium Chloride
1/2 pound	Potassium Iodide
200 ml	Silver Nitrate Solution (Dilute)
2 liters	Acetone
2 liters	Methylisobutyle Ketone
1 pound	Tin (Metal)
1 pound	Test Lead (Granular)
2 liter	Oxalic Acid (0.1 N)
1 gallon	Chelating Agent

GARY A. LINDROOS  
P. O. Box 1011  
Tombstone, Arizona 85638  
(602) 456-9160

August 29, 1993

Mr. James Briscoe  
5610 E. Sutler Lane  
Tucson, Arizona 85712

Dear Jim:

Enclosed you will find the assay results of the PBR Tailings which Tombstone Development Company requested we analyze for Free Cyanide. I am also enclosing a brief description of the procedures used for the analysis.

Sincerely,



Gary A. Lindroos

400  
5000  
12 cum 02  
# 35

## Cyanide Determination

Range 0 - 0.20 mg/L

Pyridine-Pyrazolone Method

Using CyaniVer 3, 4 and 5 Cyanide Reagents

200 grams Tailings (or soils)

200 ml of Distilled Water

Sample is agitated on a roll table for 1 hour

Filter sample

1. Take a water sample by filling a clean 25 ml graduated cylinder to the 25 ml mark. Pour the sample into a clean sample cell.
2. Add the contents of one CyaniVer 3 Cyanide Reagent Powder Pillow, stopper the sample cell and shake for 30 seconds. Allow the sample to stand 30 seconds.
3. Add the contents of one CyaniVer 4 Cyanide Reagent Powder Pillow, stopper the sample cell and shake for 10 seconds. Proceed immediately with step 4.
4. Add the contents of one CyaniVer 5 Cyanide Reagent Powder Pillow, stopper the sample cell and shake vigorously for 15 seconds. If cyanide is present, a pink color will develop which will turn blue after a few minutes. Allow at least 30 minutes after the addition of the CyaniVer 5 Cyanide Reagent Powder Pillow before proceeding with Steps 7 and 8.
5. Insert the Cyanide (CyaniVer Method) Meter Scale into the meter and select the 610 nm color filter. Close the light shield.
6. Set the Power switch to LEFT SET and adjust the LEFT SET control to align the meter needle with the infinity mark at the extreme left of the scale arc.
7. Fill a clean sample cell to the 25 ml mark with the original water sample and place it into the cell holder. Close the light shield. Set the Power switch to ON and adjust the RIGHT SET control for a reading of zero mg/L.
8. Place the prepared sample in the cell holder and close the light shield. Read the mg/L Cyanide (CN).

GARY A. LINDROOS  
P. O. Box 1011  
Tombstone, Arizona 85638  
(602) 456-9160

August 29, 1993

Mr. James Briscoe  
5610 E. Sutler Lane  
Tucson, Arizona 85712

CERTIFICATE OF ANALYSIS

<u>Sample Identification</u>	<u>Free Cyanide</u>	<u>pH</u>	<u>Sample by</u>
No. 1 (J. Briscoe)	<0.01	6.5	J. Briscoe
No. 7 (J. Briscoe)	<0.01	6.5	J. Briscoe
No. 1 Tailings Pad	<0.01	6.6	G. Lindroos
No. 2 Tailings Pad	<0.01	6.4	G. Lindroos
No. 3 Tailings Pad	0.80	7.2	G. Lindroos
No. 4 Tailings Pad	0.04	6.5	G. Lindroos
No. 5 Tailings Pad	0.75	7.3	G. Lindroos

Method of Analysis:

Pyridine-Pyrazolone Method  
Using CyaniVer 3, 4 and 5 Cyanide Reagents (Hach Co.)

Instrumentation:

Hach Model DR/1A Colorimeter

Respectfully Submitted:



Jim  
FYI

**PBR MINERALS, INC.**  
P.O. BOX 370  
Tombstone, Arizona 85638

August 23, 1988

Mr. Fred Peel  
GEOCHEMICAL ENGINEERING  
274 Union Blvd., Ste. 460  
Lakewood, CO

Dear Fred:

Please find the following tonnage report from T.E.I. past production records.

These records were obtained from a hard copy generated by T.E.I.'s computer. Take note that there is no information pertaining to production from January, 1980 thru December, 1980. The production for 1980 was less than 50% of 1981's production, therefore this would represent an estimated 100,000 tons of ore processed.

Assuming that the production remained at the same rate as the first half of 1983, then the production rate from June 1983 thru June 1984 would be an additional 700,000 tons of ore processed.

We have the floppy disks that contain the production records for June 1983 thru June 1984, but unfortunately with our current computer system we are unable to retrieve these records. We have contacted the dealer that handles the type of computer that these records were generated on. The dealer will obtain the necessary software to convert these floppy disks to our current computer system.

I'm very confident that when this data is obtained it will reflect 800,000 tons of processed ore from June 3, 1983 thru June 4, 1984, instead of the estimated 700,000 tons.

These tonnage figures are based on belt scales that were placed between the crusher and the pelletizing unit.

Taking all of these figures into consideration, the gross volume of ore by T.E.I. was 2,109,245 tons processed.

T.E.I. in their endeavor to wash the tails and generate a marketable aggregate, processed approximately 40,000 tons of

received  
9/22/93



Mr. Fred Peel  
Past Tonnage  
Page 2

this material. Thus leaving a remaining quantity of 2,069,245 tons of material prior to PBR Minerals.

During T.E.I.'s operation, there was an considerable amount of this material used for surfacing haul roads in the pit and waste dump areas. This amount could be as high as 180,000 tons of material that was used for surfacing during the operation under T.E.I., thus leaving 1,969,245 tons.

PBR Minerals, Inc. in washing the material, removed an estimated 125,000 tons from the T.E.I. leached stockpile. So therefore, there should be an estimated 1,844,245 tons remaining.

I feel very confident in these numbers and I'm sure that within the next week I will have documentation generated from the T.E.I. floppy's that will substantiate the total tonnage.

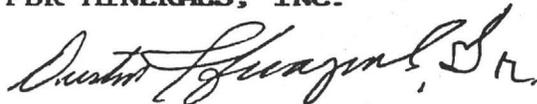
In using Cooper Aerial's volume calculations and Western Technology's weight calculation average of 122.6 pounds per cubic foot, the total tonnage would be 1,574,136.8 tons. — or  $16.3 \frac{f^3}{T}$

It appears to me that the tonnage should be in excess of Cooper's findings based on past production records that I have reviewed over the past few days. As soon as this information is retrievable by our computer, I will supply you with hard copies of this information.

I'm sure that you will have questions concerning this matter so please feel free to call me. If your work schedule is such that you cannot call during working hours, then you may call me at my home in the evening at (602) 457-3997.

Sincerely,

PBR MINERALS, INC.



Dustin L. Escapule, Sr.

### Total Tonnage

The following are records of tonnage mined at the Contention-Grand Central open pit mine from 1981 to the present.

DATE	ORE	MIDGRADE	WASTE
Jan 81	11,900	80	32,500
Feb 81	4,800	1,100	46,000
Mar 81	5,800	4,600	20,000
Apr 81	24,510	13,700	22,085
May 81	29,016	4,602	14,886
Jun 81	12,918	2,688	31,770
Jul 81	12,918	4,704	33,212
Aug 81	27,051	0	22,951
Sep 81	21,312	0	0
Oct 81	22,747	67,098	100,766
Nov 81	43,813	28,659	114,240
Dec 81	65,802	45,973	154,559
<b>TOTAL 81</b>	<b>282,587</b>	<b>173,204</b>	<b>592,969</b>
Jan 82	55,742	37,598	123,446
Feb 82	53,120	34,641	187,352
Mar 82	49,700	100,600	141,187
Apr 82	71,896	33,835	70,456
May 82	52,886	4,410	108,724
Jun 82	61,479	0	162,023
Jul 82	60,863	39,576	180,457
Aug 82	52,558	52,234	159,667
Sep 82	52,315	32,557	188,436
Oct 82	56,170	63,470	73,963
Nov 82	66,080	14,579	103,419
Dec 82	46,307	41,574	154,459
<b>TOTAL 82</b>	<b>679,116</b>	<b>455,074</b>	<b>2,246,558</b>
Jan 83	52,308	16,139	138,005
Feb 83	46,760	2,632	140,750
Mar 83	57,067	10,650	135,541
Apr 83	58,225	2,608	171,390
May 83	72,086	0	158,683
Jun 83	61,096	0	301,792
<b>83 TO DATE</b>	<b>347,542</b>	<b>32,029</b>	<b>1,046,161</b>
<b>TOTAL</b>	<b>1,309,245</b>	<b>660,307</b>	<b>3,885,688</b>
	=====	=====	=====

TOTAL TONNAGE MOVED FROM THE OPEN PIT: 5,855,240



PBR MINERALS,  
INCORPORATED

March 2, 1988

Mr. Jay Moyes  
Meyer, Hendricks, Victor, Osborn & Maledon  
Suite 4000  
2700 North Third Street  
Phoenix, Arizona 85004

Dear Jay:

Please find the enclosed cross-sections indicating the volume of materials that have been removed from the old TEI ponds. Exhibit A, is a cross section of the Old Line Pond and Exhibit B, is a cross section of the Old Spray Pond. These exhibits will correlate with Exhibit C which is a Grid Map of the Clean-up area. The numbers (or Stations) establish the fifty foot grid which is required by Part 2, Section A1 para c of the Groundwater Protection Permit G-001-02. The circled numbers on Exhibit C indicate the total cyanide as reported by Smith and Smith Laboratories.

As of today we have removed approximately 30,000 tons of contaminated material from the Old Preg Pond and Lined Pond. Unfortunately we have been unable to remove a significant amount of material from the Overflow Pond due to the fact the material was saturated to the point where it has been virtually impossible to put any equipment in that area. Due to the fact that it has been dry for the past two months we are going to once again attempt to put the dozer into the pond area to push the mud out and transport it to the process facility.

We have conducted numerous in house analysis for free cyanide on the materials from all three areas and approximately 95 per cent of these samples have shown virtually no free cyanide. As you can see on Exhibit C all of the total cyanides are way above our allowable limits. This is of great concern to us due to the fact that we have removed virtually all of the material down to the natural soils and still are indicating high total cyanides. ADEQ has recently issued a permit for a cyanide leaching operation located about a mile west of our facility and has no mention of total cyanide and has allowable limits 100 times the limit stated in our permit. If the State would ammend our permit to read as this new cyanide leaching permit does, 95 per cent of our clean-up would be completed.

If the State does not ammend our current permit we are looking at a considerable amount of material which still has to be removed from three areas. To remove the next five foot increment from the entire area would represent approximately 51,000 tons. At our current rate of excavation it would require approximately two months to complete this phase of the clean-up. This does not necessarily mean that the clean-up would be completed, it would only mean that we would be at a point to re-sample and re-assay the fifty foot grid. At this point it is impossible to predict a completion date of the clean-up with our current limits of total cyanide.

3104 EAST CAMELBACK RD.  
SUITE 603  
PHOENIX, ARIZONA 85016  
PHONE 602/457-2282

Mr. Jay Moyes  
Page 2  
March 2, 1988

If you have any questions about the contents of this letter please feel free to call me.

Sincerely yours,

  
Dustin Escapule

DE:gl

cc - Ray Harper  
Jack Schissler  
Mike Ashworth

TEI PREGNANT SOLUTION POND

Gross Section Facing South

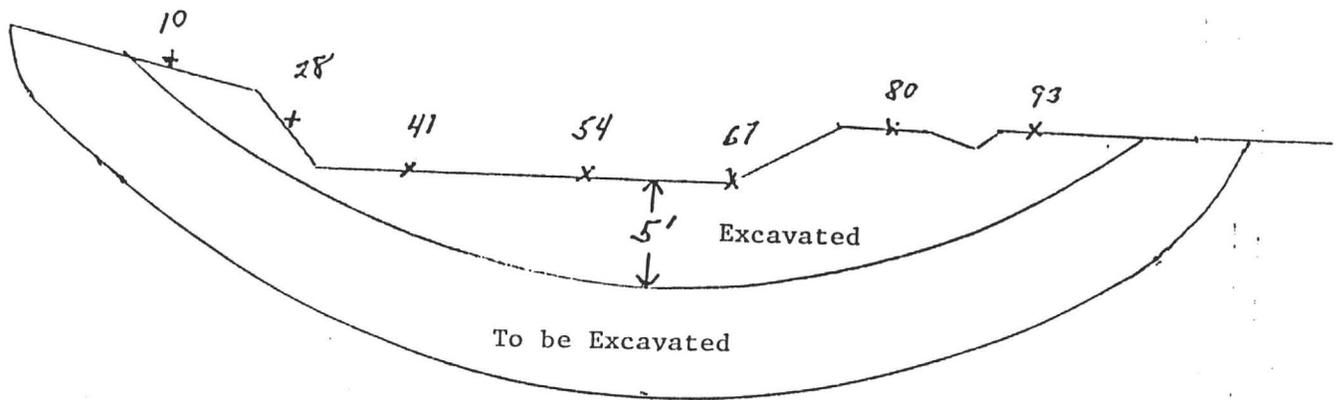
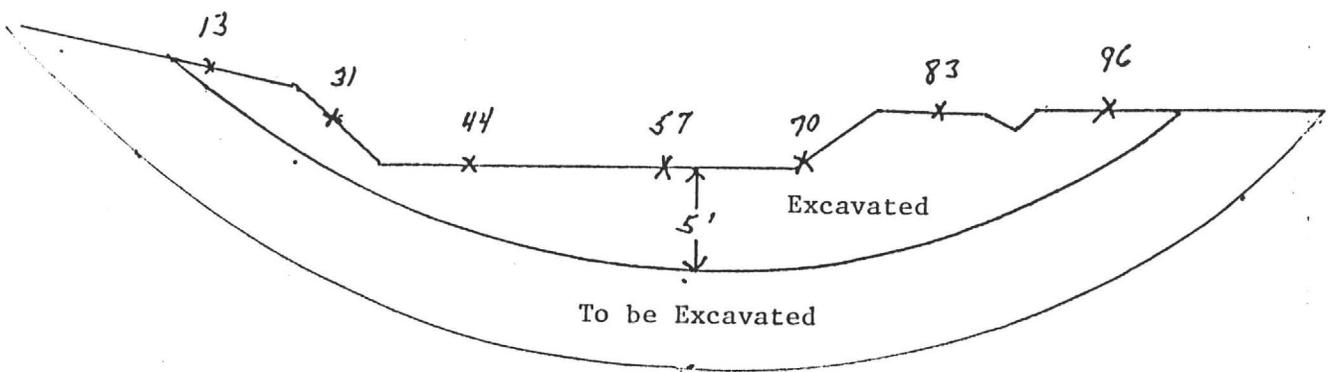


Exhibit A

TEI WATER SPRAY POND

Cross Section Facing South





# Arizona Testing Laboratories

817 West Madison Street □ Phoenix, Arizona 85007 □ 602/254-6181

For: Cochise Silver Mines, Inc.  
Attn: Mr. Gary Lindroos  
Post Office Box 158  
Tombstone, Arizona 85638

Date: June 18, 1987

Lab. No.: 3466

Sample: Soil

Marked: Preg. Sol. Pond

Received: 6/1/87

Submitted by: Same

## REPORT OF LABORATORY TESTS

EPA Method 9010

<u>Samples Marked</u>	<u>Total Cyanide</u>
1	0.20 ppm (mg/kg)
2	1.7
3	0.35
4	0.41
5	0.34
6	0.12
7	1.1
8	1.4
9	2.0
10	8.0
11	1.4
25	0.83
26	< 0.05
27	0.11
28	2.9
29	5.0
38	< 0.05
39	1.1
40	2.2
41	1.2
42	0.86
51	0.26
52	3.5
53	1.9
54	3.5
55	0.58
64	0.65
65	0.90
66	2.9
67	0.16
68	1.0
77	0.33
78	1.2
79	0.70
80	0.13
81	0.67
90	0.23
91	0.71
92	0.35
93	0.68
94	0.93

< = less than

3ccs:  
Arizona Dept. of Health Services  
Office of Waste & Water Quality Mgmt.  
Compliance Section  
2005 North Central Avenue  
Phoenix, AZ 85004

Respectfully submitted,  
ARIZONA TESTING LABORATORIES

  
Robert J. Drake

Grid Sta showing Total CN Content

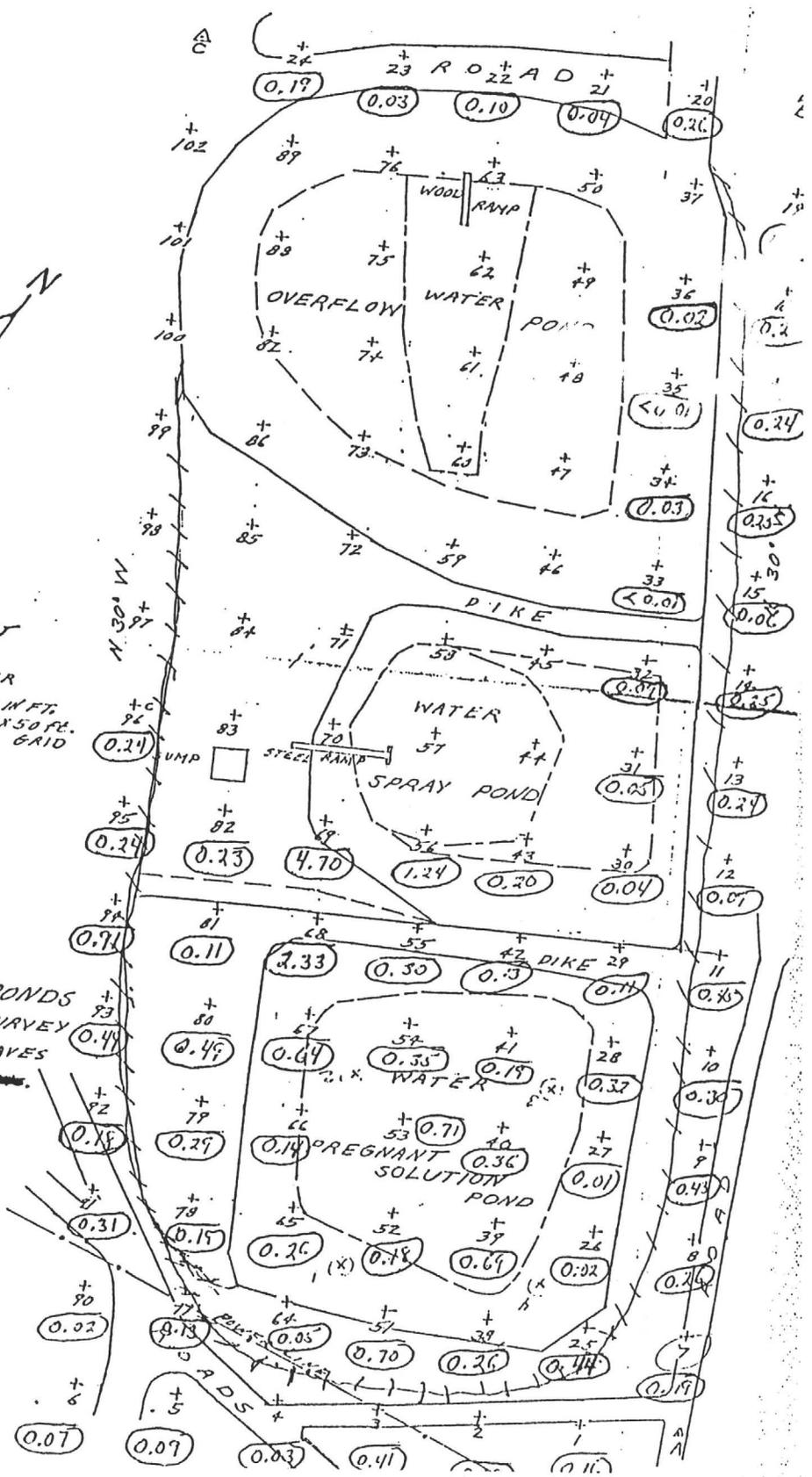
37

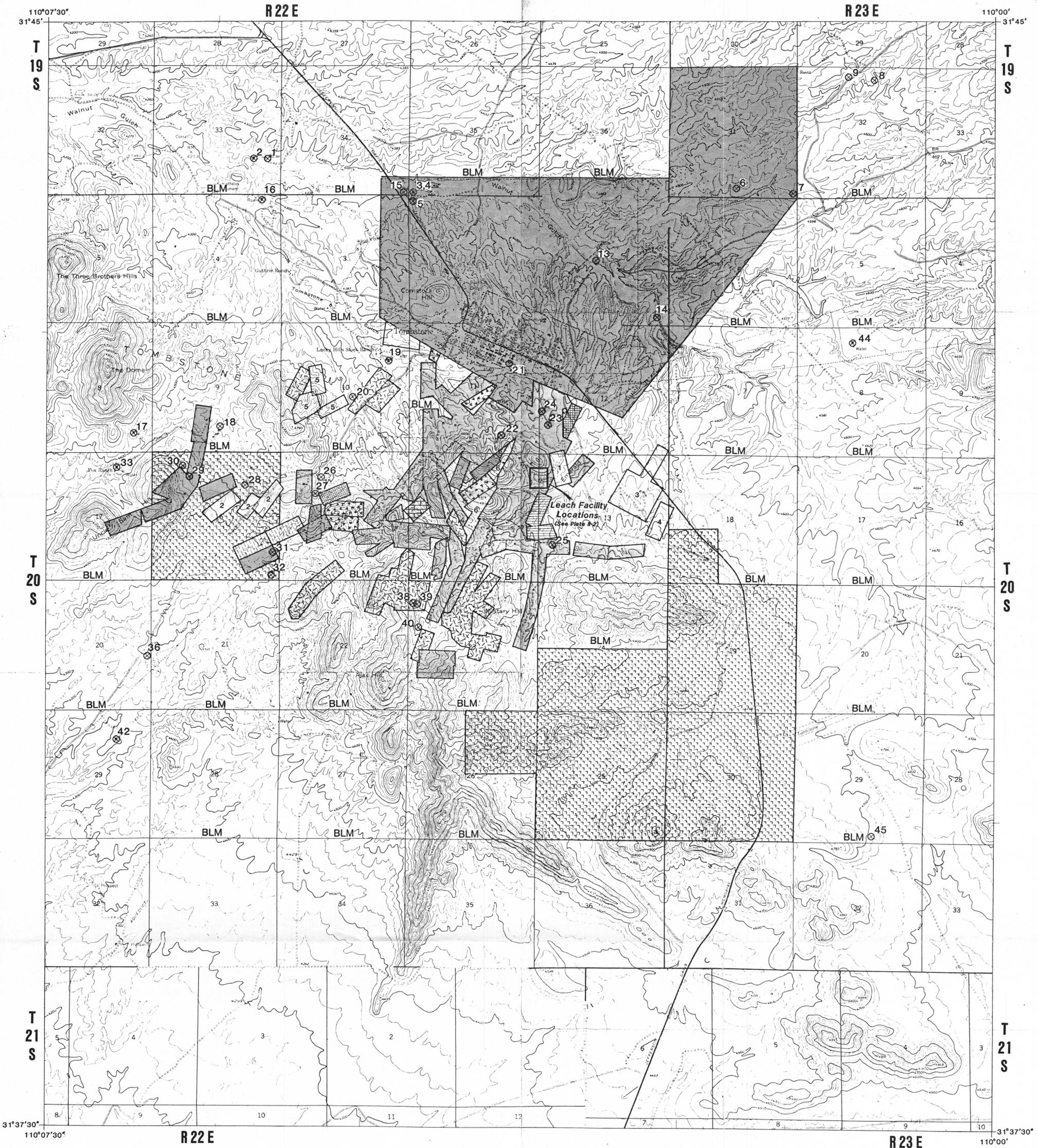
LEGEND:  
 - - - - - CREST  
 - - - - - 70%  
 - - - - - WATER  
 + STATION ELEVATION IN FT.  
 + STATION ON 50X50 FT.  
 21 STATION NO. GRID

T.E.I. SOLUTION PONDS  
 TRANSIT AND TAPE SURVEY  
 APRIL, 1987 A.V. GRAVES

PBR MINERALS, INC.

EXHIBIT C





**Land Ownership**

	Bureau of Land Management
	Tombstone Development Corp. / PBR Minerals, Inc.
	Urban Area
	State of Arizona
	Haber Corp. Tombstone, Arizona
	Escapule Tombstone, Arizona

**Legend:**

	Bill Hart
	Bill Smith Tombstone, Arizona
	Bob Crist Tucson, Arizona
	Mrs. Betty Austing Tombstone, Arizona
	Lewis Tucson, Arizona
	University of Arizona Tucson, Arizona

- |   |                                           |
|---|-------------------------------------------|
| 1 | Tracy Thomas Tombstone, Arizona           |
| 2 | Tombstone Silver Mines Tombstone, Arizona |
| 3 | 3-Star Oil Company Houston, Texas         |
| 4 | Harry Hughs Tombstone, Arizona            |
| 5 | Tima and Assoc. Tucson, Arizona           |
| 6 | City of Tombstone                         |

Registered Water Well



SCALE: 1:24000  
0 2,000 4000'  
FEET

**GEOCHEMICAL ENGINEERING, INC.**  
Denver, Colorado

**PBR MINERALS, INCORPORATED**  
Grand Central Leaching Facility  
Tombstone, Arizona

Plate II-1  
Facility Location Map,  
Land Ownership,  
and  
Registered Water Wells

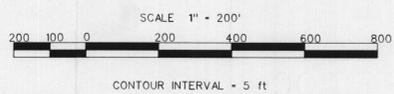
(8/21/89)



Produced for Excellon Resources USA inc.  
 by The Orthoshop - Tucson  
 AerialPhoto Date - October 12 1992

Ground control provided by the A-TEAM Professional Associates, Inc.  
 using NAD83 State Plane coordinates for the Arizona Eastern Zone

1	2	3
4	5	6
7	8	9
10	11	12
13	14	15



- |              |     |           |     |              |     |
|--------------|-----|-----------|-----|--------------|-----|
| Grid         | +   | Building  | □   | Concrete     | --- |
| Control      | △   | Trailer   | ▤   | Cattle Guard | —   |
| Index        | ○   | Fence     | —   | Hydrant      | ⊕   |
| Contour      | —   | Rail      | —   | Pole         | •   |
| Intermediate | —   | Tank      | ○   | Light Pole   | ⊛   |
| Spot         | +   | Stream    | —   | Mine Shaft   | ⊞   |
| Elevation    | +   | Pond      | —   | Cuts         | —   |
| Paved Road   | —   | Scar      | —   | Toe          | —   |
| Dirt Road    | --- | Wash      | --- | Crest        | --- |
| Trail        | --- | Pipe Line | --- | Prospect     | ⌘   |

# TOMBSTONE COCHISE CO., ARIZONA