CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
416 W. Congress St., Suite 100
Tucson, Arizona 85701
602-771-1601
http://www.azgs.az.gov
inquiries@azgs.az.gov

MILLSAPS MINERAL SERVICE, INC.

April 13,1987

Ms. Carole O'Brian,Manager
A.F. Budge Mining Limited
Suite 111 B East
7340 Shoeman Lane
Scottsdale, Arizona 85251

DMEA LTD.
APR 17 1987
RECEIVED

Dear Carole:

Here is a rough flowsheet showing the sand slime separation for the Vulture/UVX leach circuit. Making all kinds of assumptions it would seem that with this sort of a scheme you could run 500 tpd to the agitated leach and still run about 1500 tpd to heap leach. This would tend to give maximum cash flow, for minimum time, if that is desirable. I feel that it should be.

There are two big advantages to such a system. The first advantage is that you eliminate the need for agglomeration. Thereby eliminating a possible failure of pellets in the heap. The second advantage is you eliminate the need for a grinding unit. Thereby saving 400 or more horsepower, plus the cost of grinding balls at about fifty cents per ton.

The biggest disadvantage that I see is you will have two carbon adsorption systems. This should still be cheaper than a ball mill.

Labor will be about the same for this sand slime separation as it would be for an agitated leach system incorporating grinding.

Anyway as soon as we get the UVX sample we will start to work on the testing.

As Ever,

Frank

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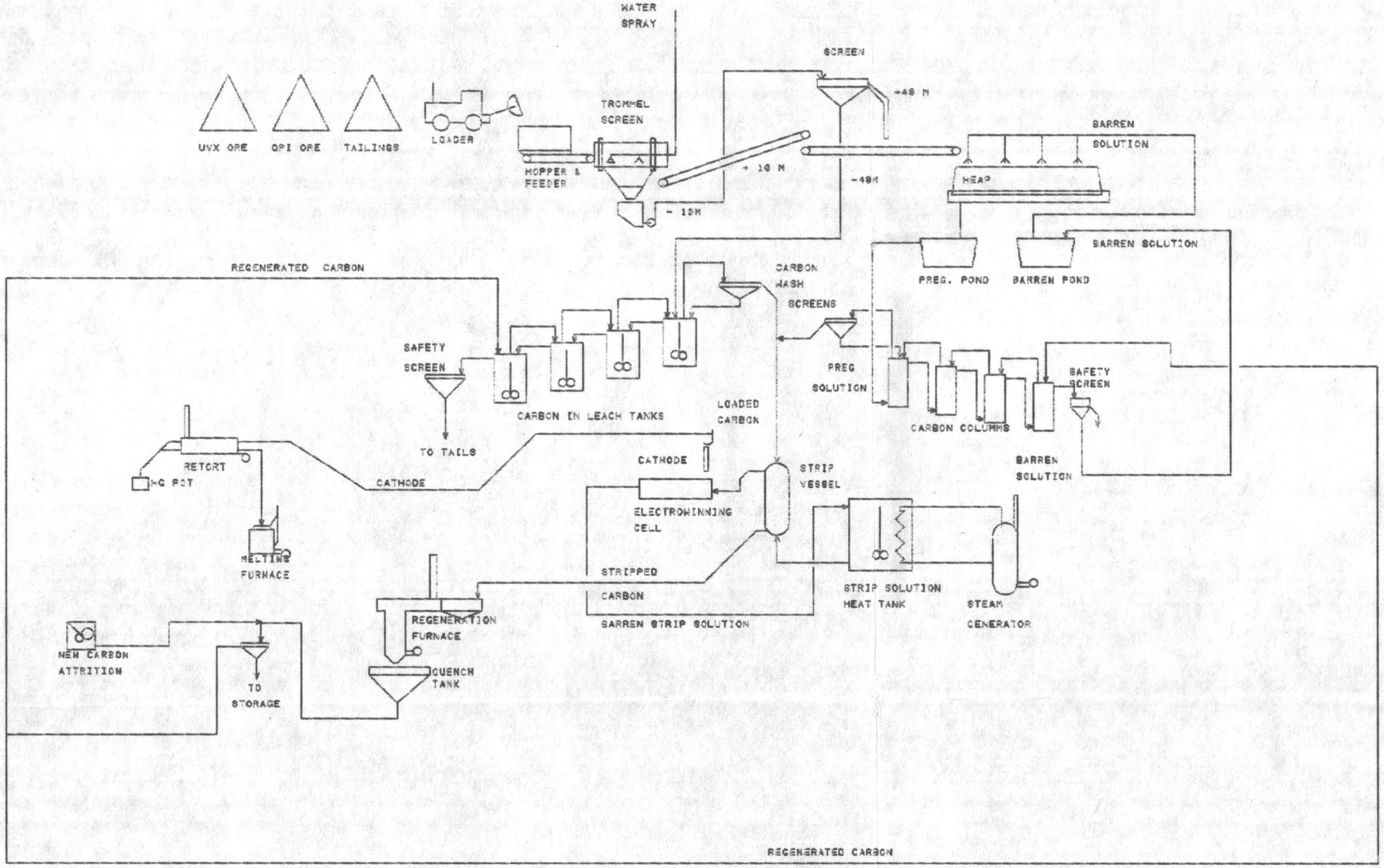

A.F.BUDGE MINING LTD
VULTURE/UVX PROJECTS
SAND SLIME SEPARATION
AGITATED/ HEAP LEACH
PRELIMINARY FLOWSHEET

HILLSAPS MINERAL SERVICE, INC
3865 WASATCH BLVD. RM 202
SALT LAKE CITY, UTAH 84109

MILLSAPS MINERAL SERVICE, INC.

January 7,1987

Mr. A.J. Fernandez
A.J. Budge (Mining) Ltd.
Suite 111 B East
7340 Shoeman Lane
Scottsdale, Arizona 85251

Dear Joe:

Here is the listing of horsepowers required for the Vulture crushing plant. These figures are based upon the figures you gave me as to tonnage , and rock size. Unfortunately the size of the crushers is determined by the rock size of the crusher feed, so that there is no advantage of running two shifts to save on capital for the larger plant. In actual running you will probably save more in operating costs ,over the life of the property by running the crusher only one shift per day than you can save in capital costs by reducing the size of the crushers. This is almost a sure thing if you lease the crushing plant from somebody.

As you will probably power the major units with diesel engines I am listing requirements for both electric and diesel power. The power requirements for the conveyors are at best on the high side, as I only have an arrangement based upon catalog information for elevations,and have applied an starting load factor of 250 percent.

Most of the rental units will have the conveyors included in the package. The only ones you will need will be to feed the agglomerator, and to carry off the pellets. No provisions have been made for dust collection. Unless the demand is there for collection, dust control will be far cheaper both to install and to operate.

I hope that this will enable you to proceed with permitting.

Very truly yours,

Frank

Frank W. Millsaps

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A.J. BUDGE (MINING) LTD.
VULTURE PROJECT
CRUSHING PLANT POWER

Item	Size	Electrical Hp	Diesel Hp.
Feeder, Apron	36"x 17'	10	15
Jaw Crusher	32"x40"	150	200
Conveyor 24"		25	25
Screen, DD	8' x 16'	25	25
Conveyor		25	25
Cone Crusher	5 1/2'	250	325
Roll Crusher*	40" x 30"	250	325
Conveyor, F.O.		10	10

* Alternative to Cone Crusher.

DMEA LTD.
JAN 9 1987
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QPI MINUS 1/2" 72 HOUR B

SIZE FRACTION	WEIGHT	WEIGHT %	ASSAY AU	DISTRIBUTION
minus 1/2" +1/4"	2385.000	47.800	0.024	22.300
minus 1/4 " +6 mesh	965.800	19.300	0.029	10.900
minus 6 +10 mesh	515.000	10.300	0.021	4.200
minus 10 +20 mesh	272.500	5.400	0.018	1.900
minus 20 +35 mesh	141.400	2.800	0.017	1.100
minus 35 mesh	720.900	14.400	0.008	2.300
CALCULATED RESIDUE	5000.600	100.000	0.022	42.700
LEACH SOLUTION	5069.400		0.029	57.300
CALCULATED ORE HEAD	5000.600	100.000	0.051	100.000

QPI MINUS 1/4" 72 HOUR BOTTLE LEACH

SIZE FRACTION	WEIGHT	WEIGHT %	ASSAY AU	DISTRIBUTION
minus 1/4" +6 mesh	1524.000	30.500	0.031	14.300
minus 6 +10 mesh	1277.500	25.600	0.034	13.200
minus 10 +20 mesh	705.700	14.100	0.018	3.900
minus 20 +35 mesh	347.000	7.000	0.030	3.200
minus 35 mesh	1135.600	22.800	0.007	2.400
CACULATED RESIDUE	4989.800	100.000	0.024	37.000
LEACH SOLUTION	5044.200		0.041	63.000
CALCULATED ORE HEAD	4989.800	100.000	0.066	100.000

MILLSAPS MINERAL SERVICE, INC.

August 7,1987

Ms. Carole O'Brien, Manager
A.F. Budge Mining Ltd.
Suite 111 B East
7340 Shoeman Lane
Scottsdale, Arizona 85251

Dear Carole:

Welcome back. I am certain that the vacation was a great success. We all missed you.

Now that the economics on the Vulture dictates an agglomerated heap leach circuit it only remains to decide whether to go with a carbon adsorption or a zinc precipitation recovery system. They both have some advantages and disadvantages so that it really comes down to personal choice. Capital cost wise it is a stand off.

The zinc dust precipitation (Merrill Crowe) system requires less space in the secure area than does the carbon system thereby reducing building cost. The security is better with zinc dust than carbon. There is less metal tied up in inventory. The zinc system allows reduced solution flows with no bad effects, however a zinc precipitation circuit is designed to a maximum flow which should not be exceeded. The zinc precipitation system is sensitive to variation in preg solution grades as the demand for zinc varies with the metal content.Too little zinc and the recovery drops, too much makes for low grade precip and difficult melting. The zinc dust precipitation requires a clear solution, with all plus 5 micron particles being removed.

The carbon system can be operated with dirty solutions, even though it isn't desirable.The carbon system is not sensitive to preg solution grade. The feed flow rate is very critical. The system is designed for a certain flow, and any major deviation from that rate will cause problems. Too low a flow rate will allow channeling, and by passing. Also if the solution is slightly dirty the first carbon column becomes a filter or becomes blocked by the dirt. Too high a flow rate will cause a loss of carbon by over expansion of the bed. By changing the size of carbon from 12 x 30 mesh to

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6 x 16 mesh the flow rate can be increased from 133 gpm to 200 gpm without changing anything else. There is a large inventory of carbon in use, and consequentially there is a large metal inventory in circuit. Security is more of a problem with a carbon circuit. It is more difficult to make a carbon circuit as portable as a Merrill Crowe system

All things considered I would go with zinc dust precipitation because of greater security, and less metal tied up in inventory.

Regardless of the system chosen something will have to be about the mercury. Generally it is precipitated with the gold, either with zinc dust or with electrowinng from the carbon circuit. The precip. is retorted and then melted.The US Bureau of Mines have a process by which the mercury is removed ahead of precipitation. Calcium Sulfide is added to precipitate the mercury as HgS. This will have to be either filtered off, or allowed to settle. The choice of methods depend upon permitting. I talked with Joe about this.

Thinking about the UVX I wonder if it doesn't make more economic sense to ship to a smelter, getting paid for flux where possible and having the rest just go as mine run. I suggested to Joe that he start looking into getting a contract proposal from one or more of the smelters. If this doesn't seem wise we can design a small plant to recover the gold.

Again we are glad you are back. I will be out of town on the 12th, but will call you when I get back into town.

As Ever,

Frank.

Frank.W. Millsaps

MILLSAPS MINERAL SERVICE, INC.

July 9.1987

Ms. Carole O'Brien.Manager
A.F. Budge Mining Limited
Suite 111 B East
7340 Shoeman Lane
Scottsdale. Arizona 85251

Dear Carole:

After so long a time I am sending you an analysis of the recovery systems available for the Vulture. It is a difficult choice on what system to use as we have no real comparison except from lab work.

I don't feel that any more lab work is justified at this time. After permitting is completed there might need to be something done on the problem areas which the econaughts will come up with. but at present we can only guess as what those will be.

I am enclosing several reports from Dawson. recently he has been sending them to me. also a bill. I don't know why he is doing this, but I will find out and have hime send them to you. Also there are a couple of drawings showing the flowsheet. and a general arrangement for the sand slime split.

Hope you had a good Fourth of July.

As ever.

Frank

Frank W. Millsaps

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MILLSAPS MINERAL SERVICES, INC.

July 9,1987

A.F. Budge Mining, Ltd. Vulture Project

Analysis of test work results.

While the size fraction split on the "QPI" at 48 mesh was not encouraging for a sand slime separation circuit to treat the Vulture mine ore there are several factors which still make it an attractive alternative to the straight heap leach.

First such a circuit, as shown on flowsheet drawing 87 – FS1, will generate cash flow within days of start – up, instead of weeks after start – up. The use of the split circuit will eliminate the need for agglomeration, and will yield a heap free of fines which may cause plugging and channeling in the leach. The split circuit will allow flexibility in the amount of both tailings and mine ore treated daily as the two classes of material can be blended through the slime portion of the circuit in any ratio desired, up to the design capacity of the carbon in leach plant. There will be an increase in the recovery of precious metals in the split circuit over a straight heap leach.

There are also a few drawbacks to the sand slime separation circuit. First there will be a higher capital cost to be offset by a limited tonnage or ounces of gold. Then there is a slight increase in the consumption of cyanide. And a problem may arise with permitting of the disposal of the residue. If the leach residue can be disposed of on either newly constructed pad, or on the depleted heaps there should be no problem and could be a slight advantage as there will be some recovery of cyanide, and potentially a slight increase in overall gold recovery due to extended exposure to cyanide solution. Also if this method of disposal can be used there will be no need for a neutralization step in the circuit at a savings in both capital and operating costs.

Summary

Using a split, sand - slime separation , circuit should increase recovery of gold. Test work indicated that on the "QPI: recovery by this circuit should increase from about 52% to about 60 %, on the tailings recovery should increase from about 64 % to almost 83 %.The need for agglomeration will be eliminated thus eliminating the use of 15 pounds of cement per ton for a savings of $ 0.75 per ton. This savings will be partially offset by an increase in cyanide consumption of 1/2 pound per ton or $ 0.48 per ton, and by the need to dispose of the leach residue.

The use of the split circuit will deliver a cash flow within days of start - up.

The operation of the slit circuit will make the operation of the heap easier in that there will be no slimes present to cause blinding or channeling in the heap. The heap can be constructed higher in each lift, actually the final height might be achieved in one lift if such is desired.

It is financially a stand off between the two schemes, the increased recovery will just about balance the increase in capital costs. The is a slight, about $ 0.27 saving in operating costs by going to the sand slime separation, but as this is so close I would figure they are the same. There are potentially some savings in capital cost of the plant by using used equipment where possible. But at this time it isn't feasible to calculate the savings as prices on used equipment are not firm for more than 30 days at most and such equipment is subject to prior sale.

As the capital cost estimate was based on all new equipment and using contractors for site preparation and erection of the plant, there can be some savings realized by the use of used equipment, and "poor boying " the construction. The cost estimate envisions modular skid mounted equipment where ever possible. The estimate is accurate, at the time of estimate, to plus or minus fifteen percent. A ten percent contingency was included to cover any omissions in the estimate.

RECOMMENDATIONS

First, nothing can be gained by more test work at this time.

Second, consideration should be given to installing the split circuit as soon as feasible.

Third, permitting be started immediately to dispose of the leach residue on the pads.

PROCESS DESCRIPTION

The Vulture property consists of stamp mill tailings from previous working of the Vulture mine near Wickenburg Arizona plus a small amount of low grade ore remaining in place from the earlier operation. Test work performed on both the stamp mill tailings and the mine ore indicate that the ore is amenable to heap leaching following agglomeration. However, due the amount of cement required to produce stable pellets recovery of precious metals is reduced.

A scheme for eliminating the need for agglomeration was proposed which consists of wet screening the ore for removal of fine material for separate treatment and heap leaching the coarse material.

Ore from the mine, will be crushed to about 80 % passing 3/8". This crushed ore, either by itself or blended with the existing stamp mill tailings from previous operations will be fed, at a rate sufficient to supply 1000 tons per day of ore to the heaps, to a wet trommel screen having wedge wire screens to remove 100 percent of the minus 10 mesh product. The minus ten mesh material will be further screened at about 48 mesh to produce a feed for the agitated leach. The plus 48 mesh product will join the plus 10 mesh product to become heap feed.

The material to be heaped can now be piled 20 to 30 feet thick as there will be no danger of collapsing the pellets, as there will be no fines requiring agglomeration. The heaps will be sprinkled with a weak cyanide solution at the rate of 0.004 gallons per minute per square foot of area. With a 30 day sprinkling cycle the flow will be 80 gpm using a 30 ft. high heap.

The pregnant solution from the heaps will be caught in a pond from which the solution will be pumped to a series of up- flow carbon columns. The columns will be 3' dia. x 5.5 high and arranged in cascade style so that the flow will be counter current to the carbon. The carbon, for convenience of operation will be 6 x 16 mesh, the same mesh as the CIL circuit uses. Each tank will contain 500 pounds of carbon which will be loaded to about 125 ounces of gold per ton of carbon. The carbon will be advanced once per day.

The barren solution from the carbon columns will have the cyanide and caustic strengths adjusted and then returned to a pond for recirculation to the heaps.

The minus 48 mesh material will be pumped to a series of Carbon in Leach tanks. The pulp will have the cyanide and caustic strength adjusted to insure dissolution of the precious metals. Carbon in the amount of 20 grams per liter of pulp will be added to each leach tank. The carbon will be moved countercurrent to the pulp.Following the leach cycle the cyanide in the pulp will be neutralized prior to disposal of the pulp on the heap leach pad.

The carbon will be load to about 125 ounces of precious metal per ton of carbon. Carbon will be advanced through the carbon in leach circuit at the rate of 500 pounds per day.

Carbon from the carbon columns and from carbon in leach will be educted to an acid wash system for removal of salts prior to stripping. The carbon will be placed in an acid resistant tanks where it will receive a water wash. This wash water will be returned to the carbon in leach circuit. Then the carbon will be given a weak acid bath. Either sulfuric or hydrochloric acids may be used. The weak acid is stored for reuse. The carbon is again given a water wash, with this wash water being added to the weak acid. The carbon is then given a caustic wash to insure that all acid has been neutralized.

Following acid treatment the carbon is transferred to a stripping vessel. Hot (190 F) caustic cyanide solution is circulated through the carbon bed at the rate of about two bed volumes per hour. The carbon will be stripped to about 2 to 5 ounces of gold per ton. The strip solution will pass through heat exchangers and then to an electrolytic cell where the precious metals will be plated on a steel wool cathode. The anode is a sheet of stainless steel. The barren strip solution is then recycled through heat exchanges and reheated to temperature and recycled through the stripping cycle.

The carbon in the stripping vessel will be water washed, and then transferred to a drain tank. From the drain tank the carbon, at about 40% water will be fed to the regeneration furnace. The furnace can be either vertical or horizontal. The carbon is heated to about 1150 degrees F and held at this temperature for twenty minutes. It then passes out of the furnace into a quench tank. New carbon is added to the carbon supply as needed. The new and regenerated carbon is screened, to remove any undersize carbon, before being returned to the adsorption circuits.

When the cathode in the electrolytic cell has been loaded, about two pounds of gold per pound of steel wool,it is transferred to the retort for removal of mercury. The retort is heated to about 600/800 degrees F and held at this temperature for 8 hours. The Mercury is driven off, condensed and captured in a water pot. After retorting has been finished the chamber is purged with hot air to make sure that no water is drawn up into the chamber.The retort should operate with either a negative pressure, with an inlet open, or have a positive pressure induced in the chamber.

The sponge from the retort, after cooling, is mixed with flux and fed to the melting furnace to slag off impurities and produce Dore´ bullion which is sent to a refinery for final separation.

COST SUMMARY

A: Equipment Costs		
New Equipment fob factory	$ 678,040	
Est. Frt @ $7.50/cwt		
202895 pounds	15,220	
Sales Tax @ 5%	33,900	
Purchasing @ 6%	40,680	
Unloading & Handling		
@ $0.07/pound	14,200	
Total Cost New Equipment at Site		$782,040
B: Buildings and Structures.		
1. Recovery Building	$ 37,400	
2. Skids, 12 tons of Steel	30,000	
3. 6'x16' Screen Support	12,000	
4. Hopper and Feeder Structure	10,500	
Total Buildings and Structures		89,900
C: Excavation and Backfill		2,775
D: Miscellaneous Equipment Foundations 10 yds of concrete		2,500
E: Electrical Facilities		46,800
F: Equipment Installation		14,200
G: Process and Utility Piping		25,800
H: Instrumentation and Automation (Allowance)		10,000
I: Tailings impoundment (Included in Heaps)		
J: Sewage Disposal (Allowance)		5,000
K: Roads, Yard, Paving & Fencing (Allowance)		10,000
L: Laboratory Equipment (Allowance)		50,000
M: Miscellaneous Steel -Chutes, hoppers, sumps		25,000

Total "A" through "M"	$ 1,063,215
N:Engineering	25,000
O:Construction Fee	55,000
P:Contingencies @ 10%	106,300
Estimated Capital Costs	$ 1,249,515
Start Up Costs @ 1% of Capital Cost	12,500
Total Estimated Capital Costs	$ 1,262,015

PROCESS DESCRIPTION

A.F.Budge Mining Ltd.
Vulture Project
Equipment List

Item No.	Quantity	Description	Weight	HP	Cost $
1	1	HOPPER 50T	11290		10250
2	1	FEEDER.BELT24"X20'	1000	3	5500
3	1	Scale. Belt	300		5600
4	1	Screen. Trommel	8500	5	22850
5	1	Sump;4x4x6	1200		1050
6	1	Pump. Sand	890	10	5600
7	1	CONVEYOR,24"X60'	3000	5	10500
8	1	STACKER.100'X30'	12000	15	27500
9	1	SCREEN 6'X16'48M	20000	20	41000
10	1	PUMP, PREG SOL.	850	15	5600
11	5	Columns, Carbon	12000		50000
12	1	SCREEN 4X6.28M	800	2	4800
13	1	SCREEN 4'X6'.28M	800	2	4800
14	4	Tanks,CIL	95800		65000
15	4	Agitators. CIL	1600	100	64000
16	9	EDUCTORS	720		2700
17	1	SCREEN 4'X6'28M	800	2	4800
18	1	SCREEN.4X6 28M	800	2	4800
19	1	PUMP, REC.IMP.	385	5	3200
20	1	Acid Wash System	14000	5	31000
21	1	Strip, Vessel	10000		123000
22	1	ELECTROWINNING	900	15	50000
23		Included in #21			
24		Included in # 21			
25		Included in # 26			
26	1	KILN, REGENERATIVE	800	40	40000
27		Included in No.26			
28	1	SCREEN, 3'X6' 20M	750	1	3600
29	1	PUMP, REC. IMP.	385	5	3200
30	1	Retort, Mercury	4500	2	42000
31	1	Melting Furnace	3500	1	12500
32	1	PUMP. BARREN SOL	850	15	5600
33	1	CYANIDE, DESTRUC	1500	5	6000
34	1	Pump, Tailings	850	20	5800
35	1	PUMP,TAIL WATER	800	10	865
36	1	TANK, CN MIXING	2850	5	3225
37	1	Tank, Lime Mixing	2750	2	2875
38	3	Molds, Bullion	1000		5000
39	1	Tank, Mill Water	1750		1450
40	1	Pump,Mill Water	375	10	875
41	1	Blower, air	600	5	1500
		TOTAL	202895	312	678040

MILLSAPS MINERAL SERVICE, INC.

July 9.1987

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A.F. Budge Mining Limited
Suite 111 B East
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Scottsdale. Arizona 85251

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The material to be heaped can now be piled 20 to 30 feet thick as there will be no danger of collapsing the pellets, as there will be no fines requiring agglomeration. The heaps will be sprinkled with a weak cyanide solution at the rate of 0.004 gallons per minute per square foot of area. With a 30 day sprinkling cycle the flow will be 80 gpm using a 30 ft. high heap.

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The carbon will be load to about 125 ounces of precious metal per ton of carbon. Carbon will be advanced through the carbon in leach circuit at the rate of 500 pounds per day.

Carbon from the carbon columns and from carbon in leach will be educted to an acid wash system for removal of salts prior to stripping. The carbon will be placed in an acid resistant tanks where it will receive a water wash. This wash water will be returned to the carbon in leach circuit. Then the carbon will be given a weak acid bath. Either sulfuric or hydrochloric acids may be used. The weak acid is stored for reuse. The carbon is again given a water wash, with this wash water being added to the weak acid. The carbon is then given a caustic wash to insure that all acid has been neutralized.

Following acid treatment the carbon is transferred to a stripping vessel. Hot (190 F) caustic cyanide solution is circulated through the carbon bed at the rate of about two bed volumes per hour. The carbon will be stripped to about 2 to 5 ounces of gold per ton. The strip solution will pass through heat exchangers and then to an electrolytic cell where the precious metals will be plated on a steel wool cathode. The anode is a sheet of stainless steel. The barren strip solution is then recycled through heat exchanges and reheated to temperature and recycled through the stripping cycle.

The carbon in the stripping vessel will be water washed, and then transferred to a drain tank. From the drain tank the carbon, at about 40% water will be fed to the regeneration furnace. The furnace can be either vertical or horizontal. The carbon is heated to about 1150 degrees F and held at this temperature for twenty minutes. It then passes out of the furnace into a quench tank. New carbon is added to the carbon supply as needed. The new and regenerated carbon is screened, to remove any undersize carbon, before being returned to the adsorption circuits.

When the cathode in the electrolytic cell has been loaded, about two pounds of gold per pound of steel wool,it is transferred to the retort for removal of mercury. The retort is heated to about 600/800 degrees F and held at this temperature for 8 hours. The Mercury is driven off, condensed and captured in a water pot. After retorting has been finished the chamber is purged with hot air to make sure that no water is drawn up into the chamber.The retort should operate with either a negative pressure, with an inlet open, or have a positive pressure induced in the chamber.

The sponge from the retort, after cooling, is mixed with flux and fed to the melting furnace to slag off impurities and produce Dore´ bullion which is sent to a refinery for final separation.

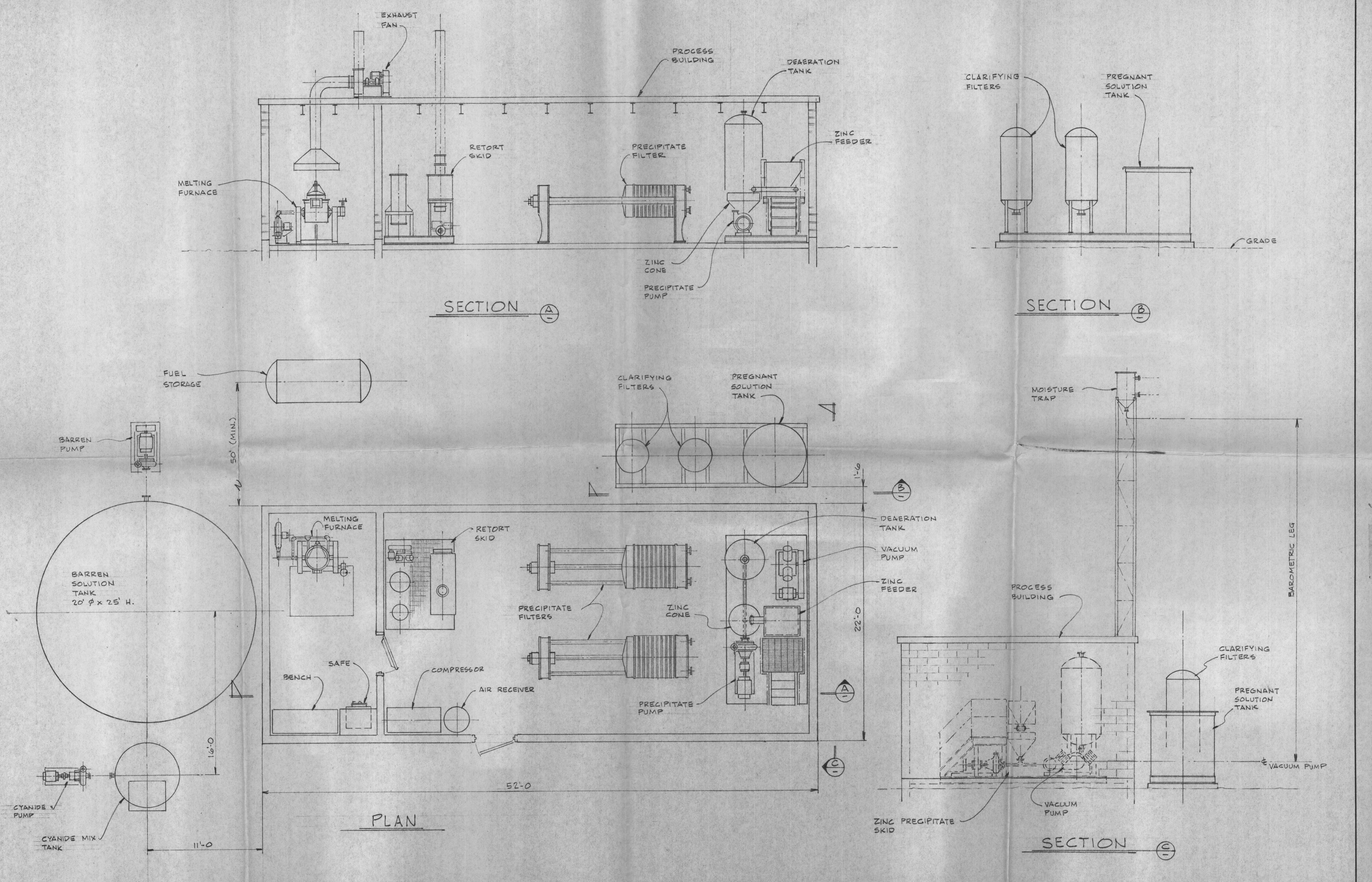
COST SUMMARY

A: Equipment Costs		
New Equipment fob factory	$ 678,040	
Est. Frt @ $7.50/cwt		
202895 pounds	15,220	
Sales Tax @ 5%	33,900	
Purchasing @ 6%	40,680	
Unloading & Handling		
@ $0.07/pound	14,200	
Total Cost New Equipment at Site		$782,040
B:Buildings and Structures.		
1. Recovery Building	$ 37,400	
2. Skids, 12 tons of Steel	30,000	
3. 6'x16' Screen Support	12,000	
4. Hopper and Feeder Structure	10,500	
Total Buildings and Structures		89,900
C:Excavation and Backfill		2,775
D:Miscellaneous Equipment Foundations 10 yds of concrete		2,500
E:Electrical Facilities		46,800
F:Equipment Installation		14,200
G:Process and Utility Piping		25,800
H:Instrumentation and Automation (Allowance)		10,000
I:Tailings impoundment (Included in Heaps)		
J:Sewage Disposal (Allowance)		5,000
K:Roads, Yard, Paving & Fencing (Allowance)		10,000
L:Laboratory Equipment (Allowance)		50,000
M:Miscellaneous Steel -Chutes, hoppers, sumps		25,000

Total "A" through "M"	$ 1,063,215
N:Engineering	25,000
O:Construction Fee	55,000
P:Contingencies @ 10%	106,300
Estimated Capital Costs	$ 1,249,515
Start Up Costs @ 1% of Capital Cost	12,500
Total Estimated Capital Costs	$ 1,262,015

A.F.Budge Mining Ltd.
Vulture Project
Equipment List

Item No.	Quantity	Description	Weight	HP	Cost $
1	1	HOPPER 50T	11290		10250
2	1	FEEDER.BELT24"X20'	1000	3	5500
3	1	Scale, Belt	300		5600
4	1	Screen, Trommel	8500	5	22850
5	1	Sump;4x4x6	1200		1050
6	1	Pump, Sand	890	10	5600
7	1	CONVEYOR,24"X60'	3000	5	10500
8	1	STACKER,100'X30'	12000	15	27500
9	1	SCREEN 6'X16'48M	20000	20	41000
10	1	PUMP, PREG SOL.	850	15	5600
11	5	Columns, Carbon	12000		50000
12	1	SCREEN 4X6,28M	800	2	4800
13	1	SCREEN 4'X6',28M	800	2	4800
14	4	Tanks,CIL	95800		65000
15	4	Agitators, CIL	1600	100	64000
16	9	EDUCTORS	720		2700
17	1	SCREEN 4'X6'28M	800	2	4800
18	1	SCREEN,4X6 28M	800	2	4800
19	1	PUMP, REC.IMP.	385	5	3200
20	1	Acid Wash System	14000	5	31000
21	1	Strip, Vessel	10000		123000
22	1	ELECTROWINNING	900	15	50000
23		Included in #21			
24		Included in # 21			
25		Included in # 26			
26	1	KILN, REGENERATIVE	800	40	40000
27		Included in No.26			
28	1	SCREEN, 3'X6' 20M	750	1	3600
29	1	PUMP, REC. IMP.	385	5	3200
30	1	Retort, Mercury	4500	2	42000
31	1	Melting Furnace	3500	1	12500
32	1	PUMP, BARREN SOL	850	15	5600
33	1	CYANIDE, DESTRUC	1500	5	6000
34	1	Pump, Tailings	850	20	5800
35	1	PUMP,TAIL WATER	800	10	865
36	1	TANK, CN MIXING	2850	5	3225
37	1	Tank, Lime Mixing	2750	2	2875
38	3	Molds, Bullion	1000		5000
39	1	Tank, Mill Water	1750		1450
40	1	Pump,Mill Water	375	10	875
41	1	Blower, air	600	5	1500
		TOTAL	202895	312	678040



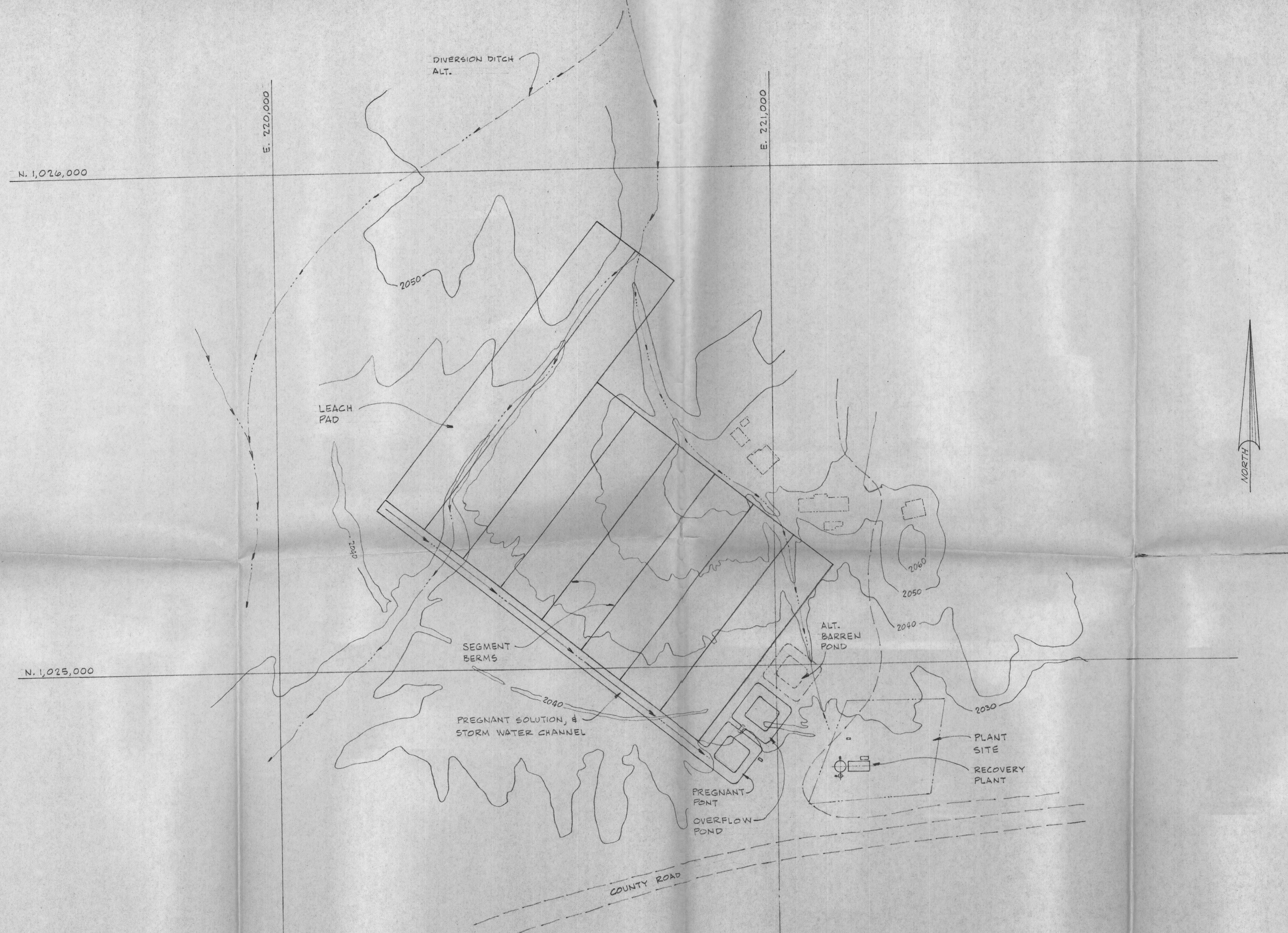
REV.	DATE	DESCRIPTION OF REVISION	REV.	DATE	DESCRIPTION OF REVISION

MILLSAPS MINERAL SERVICE INC.
SALT LAKE CITY, UTAH

RECOVERY PLANT ARRANGEMENT
HEAP LEACH GOLD RECOVERY PLANT
VULTURE PROJECT
A.F. BUDGE (MINING) LTD.

MADE BY MERRELL
CHECKED BY
DIRECTED BY
APPROVED BY
SCALE 1/4" = 1'-0
DATE 3-1-87
DRAWING NO. 87-101
REV.

104001



REV.	DATE	DESCRIPTION OF REVISION	REV.	DATE	DESCRIPTION OF REVISION

MILLSAPS MINERAL SERVICE INC.
SALT LAKE CITY, UTAH

PLOT PLAN
HEAP LEACH GOLD RECOVERY PLANT
VULTURE PROJECT
A.F. BUDGE (MINING) LTD.

MADE BY MERRELL
CHECKED BY
DIRECTED BY
APPROVED BY
SCALE 1" = 100'
DATE 2-28-87
DRAWING NO. 87-100
REV.
©

REV.	DATE	DESCRIPTION OF REVISION	REV.	DATE	DESCRIPTION OF REVISION
			1	4-10-88	GEN. UPDATE / ZINC PRECIP.

MILLSAPS MINERAL SERVICE INC.
SALT LAKE CITY, UTAH

PLOT PLAN
HEAP LEACH GOLD RECOVERY PLANT
VULTURE PROJECT
A.F. BUDGE (MINING) LTD.

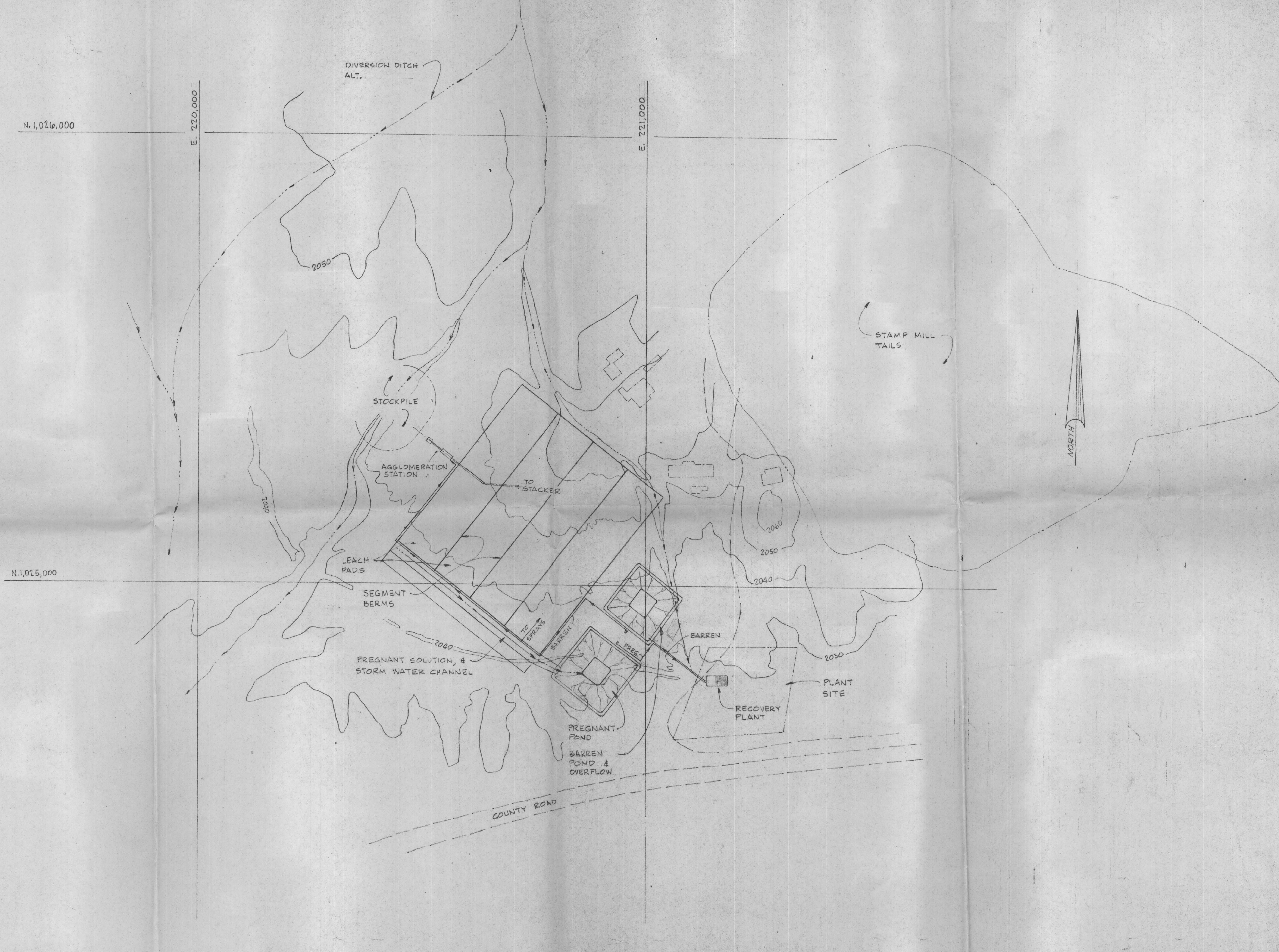
MADE BY: MERRELL
CHECKED BY:
DIRECTED BY:
APPROVED BY:
SCALE: 1" = 100'
DATE: 2-28-87
DRAWING NO.: 87-100
REV.: 1

REV.	DATE	DESCRIPTION OF REVISION	REV.	DATE	DESCRIPTION OF REVISION
			1	4-10-88	GEN. UPDATE / ZINC PRECIP.

MILLSAPS MINERAL SERVICE INC.
SALT LAKE CITY, UTAH

PLOT PLAN
HEAP LEACH GOLD RECOVERY PLANT
VULTURE PROJECT
A.F. BUDGE (MINING) LTD.

MADE BY	MERRELL
CHECKED BY	
DIRECTED BY	
APPROVED BY	
SCALE	1" = 100'
DATE	2-28-87
DRAWING NO.	87-100
REV.	1



REV.	DATE	DESCRIPTION OF REVISION	REV.	DATE	DESCRIPTION OF REVISION
			3	5-11-88	MOVED RECOVERY PLANT
			2	4-16-88	REWORK PADS & ACCESSORIES
			1	4-10-88	GEN. UPDATE / ZINC PRECIP.

MILLSAPS MINERAL SERVICE INC.
SALT LAKE CITY, UTAH

PLOT PLAN	MADE BY MERRELL	SCALE 1" = 100'	DATE 2-28-87
HEAP LEACH GOLD RECOVERY PLANT	CHECKED BY / DIRECTED BY	DRAWING NO. 87-100	REV. 3
VULTURE PROJECT	APPROVED BY		
A.F. BUDGE (MINING) LTD.		©	