

No. 1422-1 Hydrologic Unit 10120203
 Map No. same Basin Belle Fourche R
 Newspaper Lead Daily Call, PO Box 876

Application For Permit To Appropriate Water Within The State Of South Dakota

Check use of water: Industrial ☒ Commercial ☐ Municipal ☐ Other Common Distribution System ☐
 Rural Water System ☐ Suburban Housing ☐ Geothermal Heat ☐ Institutional ☐ Recreational ☐
 Domestic ☐ (above 18gpm) Other ☐

Type of Application: Check one or more of the following

New ☒ Vested Right ☐ Future Use ☐ Change Use ☐

☐ Amend Permit No. _____ with old priority date retained

Change diversion point(s) ☐ Add diversion point(s) ☐ Other ☐

☐ Application to: Change diversion point(s) ☐ Add diversion point(s) ☐ on Permit No. _____

☐ Construction to use water reserved by Future Use Permit No. _____

1. Name of Applicant transferred 3-30-88, St. Joe Richmond Hill, Inc.
St. Joe Gold Corporation 4600 S Ulster St. Suite 300 Phone No. (314) 726-9500
Denver, CO 80237

Post Office Address 7733 Forsyth Blvd., Clayton State Missouri 63105
(Street, RR or Box) (City) Zip Code

2. Amount of water claimed (c.f.s.) 40.81 ac-ft Pond 1, 73.64 ac-ft Pond 2

3. Source of water supply Surface runoff from heap leach mining pads & dry draws

4. Location of point of diversion Headwater of Rubicon Creek T.5N., R.2E. parts of

Section 14, 15, 11 Pond 1; SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 14; SE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 15; Pond 2 NE $\frac{1}{4}$ NE $\frac{1}{4}$

Section 15; NW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 14; all in T5N-R2E County Lawrence

5. Counties where water will be used Lawrence County

6. Annual period during which water is to be used January 1 through December 31
~~March through November~~

7. Give a brief description of proposed project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)
 Incident precipitation, up to the PMP event, will be collected upon the impervious surface of the cyanide heap leach pads and directed to one of two storage reservoirs. The system is designed to totally contain any precipitation coming in contact with the mining/milling process. Collected water will be recycled to the leach cycle. For additional description, please see Richmond Hill Mine Permit Application on file with the South Dakota Dept. of Land and Natural Resources.

Attachments: Attach Form 2A if diversion from a well or dugout, or if storage of water, is proposed. Attach map (see instruction)

STATE OF SOUTH DAKOTA)
 County of _____)

I, George M. Obeldobel, Project Manager - Richmond Hill for St Joe Gold Corp AND the applicant, certify that I have read this application, have examined the attached map and that the matters stated are true and that I intend, and am able to complete the necessary construction.

Signed George M. Obeldobel

Subscribed and sworn to before me this 28th day of September 1987

Mary Agnes H. Nelson
 Notary Public



LEGEND

- ① LEACH PAD NO. 1
- ② LEACH PAD NO. 2
- ③ LEACH PAD NO. 3
- ④ LEACH PAD NO. 4
- ⑤ LEACH PAD NO. 5
- ⑥ POWER TRANSFORMER AND BHP METER
- ⑦ PROCESS FACILITY BUILDINGS, 100,000 GALLON CHLORINE TREATMENT POND AND LABORATORY FACILITIES
- ⑧ 3.5 MILLION GALLON PREGNANT POND
- ⑨ 3.0 MILLION GALLON BARREN POND
- ⑩ 13.3 MILLION GALLON STORM WATER CONTAINMENT POND
- ⑪ 24.0 MILLION GALLON STORM WATER CONTAINMENT POND
- ⑫ HAUL ROAD
- ⑬ RICHMOND HILL MINE PIT
- ⑭ NORTH WASTE AREA
- ⑮ SOUTH WASTE AREA
- ⑯ ACCESS ROAD
- ⑰ ORE CRUSHING, AGGLOMERATION AND STORAGE
- ⑱ PRIMARY LAND APPLICATION AREA
- ⑲ TURNAROUND MINE PIT
- ⑳ LAND APPLICATION EFFLUENT PIPELINE
- ㉑ ADMINISTRATION, MAINTENANCE FACILITIES, PARKING AND SECURITY

NOTE:
THESE DRAWINGS WERE PREPARED FOR STATE OF SOUTH DAKOTA AGENCY REVIEW ONLY AND DO NOT CONSTITUTE OR IMPLY FINAL BIDDABLE CONSTRUCTION DRAWINGS. DRAWINGS WILL BE FINALIZED FOLLOWING RECEIPT OF A MINING PERMIT AND PRIOR TO CONSTRUCTION.

BASE MAP USGS SPEARFISH, S. DAK

44103-D7-024

JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.



161 Mallard Drive, Boise, ID 83706-3974

APPROVED _____ DATE _____
APPROVED _____ DATE _____

ST. JOE GOLD CORPORATION
RICHMOND HILL MINING PROJECT

FACILITIES INDEX MAP

SHEET

G-3

OF SHEETS

Appl. No. 1422-1

**SOUTH DAKOTA
WATER PERMIT**

Date of first receipt of application October 1, 1987

Date of return to applicant for correction, amendments or changes required _____

Date of receipt of corrected application _____

The Water Management Board approved Water Permit Application No. 1422-1

on March 2, 1988 for St. Joe Richmond Hill, Inc.
(Applicant)

4600 S Ulster Street, Suite 300 Denver CO 80237
(Street, RR or Box) (City) (State) (Zip Code)

authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 1422-1 authorizes storage capacities of 41 acre-feet and 74 acre-feet for storm water containment ponds No. 1 and 2, respectively. Pond 1 is to be located in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ section 14; SE $\frac{1}{4}$ NE $\frac{1}{4}$ section 15; both in T5N-R2E with an approximate top embankment elevation of 5583.0 feet msl. Pond 2 is to be located in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ section 15; NW $\frac{1}{4}$ NW $\frac{1}{4}$ section 14; both in T5N-R2E with an approximate top embankment elevation of 5545.0 feet msl.
2. The water appropriated shall be used for the purpose of containing excess runoff from the heap leach pads due to precipitation events which will be recycled into the leach process and may not exceed the amount of water needed for beneficial use for industrial purposes.
3. The water is to be used during the following described annual period: Jan 1 - Dec 31.
4. The date from which applicant may claim the right is October 1, 1987.
5. One-fifth of the construction is to be completed on or before September 2, 1990.
6. All construction is to be completed on or before March 2, 1993.
7. Water is to be put to beneficial use on or before March 2, 1997.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

Approval of this permit is subject to submission of plans and specifications to the chief engineer pursuant to Board Rules Chapter 74:02:08, Safety of Dams prior to construction of the ponds for review and approval. A breach analysis and downstream flood routing report shall be completed prior to determining the hazard classifications for the ponds.

WATER MANAGEMENT BOARD

DEC 1 1988

By: 
Chief Engineer

Division of Water Rights
Dept. of Water and Natural Resources

Supplemental Information

(type or print in ink)

1. Well Information - Proposed construction

- a) Drill Hole Diameter _____ Depth _____
- b) Casing Type _____ Diameter _____ Thickness _____
- c) Screen Type _____ Diameter _____ Thickness _____
- d) Gravel Pack Thickness _____ Length of Gravel Pack _____
- e) Depth to Top of Water Bearing Material _____
- f) Depth to Water (ground surface to water level) _____
- g) Distance to nearest existing domestic well:
- On applicants property _____ On property owned by others _____

2. Dugout Information Estimates

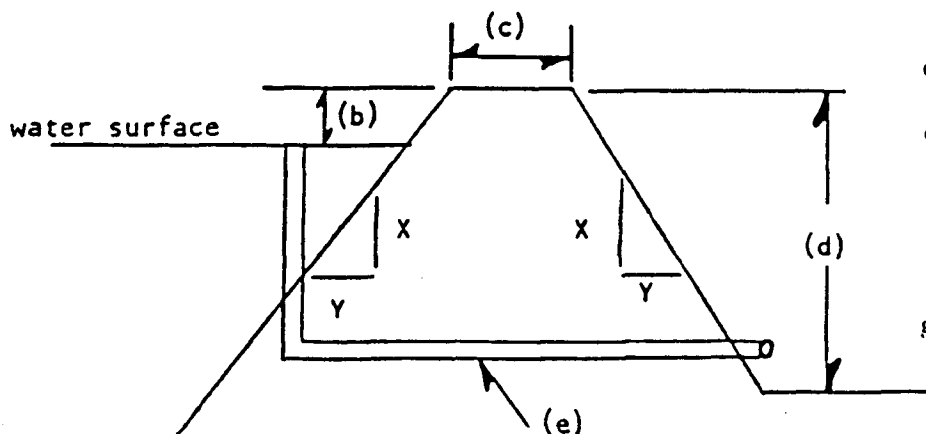
- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

3. Water Storage Dams

If the proposed water use system contains one or more storage dams, please furnish the information requested below. The locations of each dam should be shown on the map submitted with the application.

- a) If a private engineering firm or government agency was involved in the design of this dam please give their name and address

Preliminary design - James M. Montgomery,
Consulting Engineers, Inc. - 161 Mallard
Drive, Boise, ID 83706



- b) Freeboard _____ 2 feet
- c) Crest Width _____ 20 feet
- Crest Length _____ 560 feet
- d) Height _____ 60 feet
- e) Primary Outlet Capacity _____ NA - Total
If Pipe, diameter _____ Containment
PMP Event
- f) Secondary Spillway Capacity _____ NA
Spillway width _____ NA
- g) X & Y Slope
Upstream _____ 2:1
Downstream _____ 2:1
- Surface Area of Impoundment _____ 3.48 ac.
- Storage _____ 40.81 _____ acre feet
- Drainage area above dam _____ 22.82 ac.

George M. Chelidopoulos
Signature of Applicant

RECEIPT

Division of Water Rights

South Dakota Department of Water and Natural Resources

411031

October 29, 1987

Pierre,

(fee sent by George M. Obaldobal, 16466 Saddlecreek Rd. Chesterfield, MO 63017)

RECEIVED OF St. Joe Gold, 7733 Forsyth Blvd., Clayton, Missouri 63105

the following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. <u>1423-1</u> to Appropriate Water, to construct works and to put water to beneficial use _____	150	00
Fee for Application for Permit No. _____ to Appropriate Water for Future Use _____		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____		
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for Certified Copy of _____		
Fee for Print Copy of Map _____		
Fee for Certifying _____		
Fee for _____		
(Any Other Work Provided by Law)	Total	150 00

By

John H. Hinkle

SECTION VI

PROJECT PROCESS WATER BALANCE

Water management will be a critical aspect of the planning and design of process facilities at the Richmond Hill Mining Project. As discussed previously in this report, consideration has been given to the effect the climatic and hydrologic characteristics have on the study area and their relationship with sediment yield from project facilities. The information developed from storm evaluations was used by St. Joe to properly size the stormwater containment system(s) for the mill and processing area. Other project facilities will not require containment of runoff water, but will require management of the runoff by implementation of drainage control structures. Therefore, the only project facility that requires the consideration of maintaining a positive water balance is the mill area and processing facilities.

STORM WATER POND SIZE REQUIREMENT

It was indicated previously in this report that the State of South Dakota Department of Health and Natural Resources stipulates that storm water ponds must be designed to contain the PMP event which is defined as a 19.6 inch rainfall occurring over a six hour period. The project facilities draining to the stormwater ponds are comprised of the leach pads and process building sites. The total drainage area of these facilities (requiring stormwater runoff containment) is 69.5 acres. The total volume of stormwater that could be generated off this area, as a result of the PMP event, is 42.3 million gallons. The stormwater ponds are designed to contain 37.3 million gallons. The process ponds (pregnant and barren ponds) are designed to hold 6.5 million gallons of solution. The planned working solution inventory of each process pond is approximately 1.3 million gallons. The volume of incident precipitation falling on the process ponds generated from the PMP event would be approximately 1.7 million gallons. The volume of incident precipitation falling on the stormwater ponds from the PMP event would be approximately 5.3 million gallons. Thus the excess stormwater that would occur as a result of the PMP event is around 1.7 million gallons, all of which will easily be contained in the saturation process of the ore on the leach pads. Ore loaded on the leach pads will be able to absorb much more than 1.7 million gallons of stormwater in the void space because not all ore on the pads will be leached at the same time; therefore, not all ore on the pads will be saturated. Crushed ore will normally retain about 15% by weight before saturation is reached.

In order to compare the varying impacts from different storm events that have a realistic probability of occurring during the life of the project, the 2, 10, 25, and 50 year rainfall events were analyzed to determine the total runoff volumes, assuming all leach pads are under operation and draining to the process ponds. The 50 year thunderstorm (1 hour event) would generate 3.9 million gallons which could be contained within the process ponds, without having to utilize storage in the stormwater ponds, and still maintain an excess capacity of 0.4 million gallons. This analysis includes both incident precipitation on the ponds and a working inventory of 2.6 million gallons of process solution. The 50 year general rainfall (24 hour event) would generate 10.0 million gallons. This would require 6.0 million gallons of storage capacity of the stormwater ponds if the process ponds were allowed to fill up prior to diversion of runoff into the stormwater ponds.

The proposed operating scenario that St. Joe will utilize in processing ore on the pads will include maintaining two active pads being leached at any one time. Therefore, when a pad(s) is not loaded with ore or the pad(s) are not being leached, runoff will be directed to the stormwater ponds. Under this management scenario, if the two largest pads are being leach, the two process ponds will be capable of containing all but 1.5 million gallons of the stormwater generated by the 100-year, 24-hour storm event from these active pads. The 1.5 million gallons of runoff would be contained in the stormwater ponds or more likely be contained within the ore.

The analysis shows that the summer thunderstorms will be able to be contained within the process ponds storage capacities along with the working inventory of process solution. The 2-year, 24-hour general storm will be able to be stored in the process ponds also. The remainder of the 24 hour general storms will require minor use of the stormwater ponds.

During the spring period the stormwater ponds will be utilized to contain the runoff from snowmelt. Most of this solution will be circulated back to the active pads for saturating ore that has been mined and loaded for leaching during winter months. Land application is included in the design as a back-up.

WATER USE AND SUPPLY REQUIREMENTS

Preliminary water requirements for processing ore at the Richmond Hill Mining Project were developed based on a standard heap leach operating scenario. To assess the water supply needs for the project three main factors have been evaluated:

- o Water required to saturate ore = 100 gal/min.
- o Spray evaporation losses = 4.2%, average annual loss.
- o Normal atmospheric evaporation from ponds = 3.24 inches, average monthly rate from April through October.

Water Required for Ore Saturation

The water requirement for ore saturation will fluctuate annually depending upon the time of year. During the winter months (December through February) leaching activity will be greatly reduced while actual mining and loading ore on the heaps will continue. It is estimated that water required for agglomeration of ore during the winter months will be 10 gal/min. The water requirement necessary to then saturate ore at the beginning of spring (March) will be the greatest at 415 gal/min due to the volume of ore loaded on the leach pads during winter months. A large portion of the snowmelt water will be held within the pore spaces of the new ore reducing the actual amount of solution that runs off to the stormwater ponds. From April through October the water requirement for ore saturation is estimated to be 100 gal/min (Table 6-1).

Evaporation Losses

Spray evaporation losses, normally expressed as a percentage of process solution flow, are determined based upon temperature, wind speed, humidity, operating pressure, and nozzle diameter. Other evaporation losses include process solution in ponds and evaporation from the surface of the ore heaps. The daily rate of

SECTION III

DESIGN CRITERIA

From the standpoint of environmental acceptability, the significant design criteria to be discussed herein include provisions for solution containment and water management, water quality control, and structural stability. All of these will have inherent limits and constraints because of the physical configuration of the particular site and special considerations that must be included in order to correctly operate the mine and the processing facilities. The following summarizes the recommended design criteria for various areas of the proposed Richmond Hill Project. These design criteria represents the recommendation to satisfy the stated goals and objectives which are presented in bold type. Volume IV, Attachment 2 (Richmond Hill Mining Permit Application) provides conceptual construction drawings and material specifications for the lining system of the proposed project.

RICHMOND HILL MINING PROJECT PRELIMINARY GOALS, OBJECTIVES, AND CRITERIA

Description	Units	Size
<u>WATER BALANCE (CAPACITY) & CLIMATE</u>		
Maximum Storm Event (PMP)	inches	19.6
Total Snow Pack Water Content	inches	17.7
Snow Pack March-April Runoff		
Water Content	inches	7.1
First Freeze Day	date	Sept. 20
Last Freeze Day	date	May 24

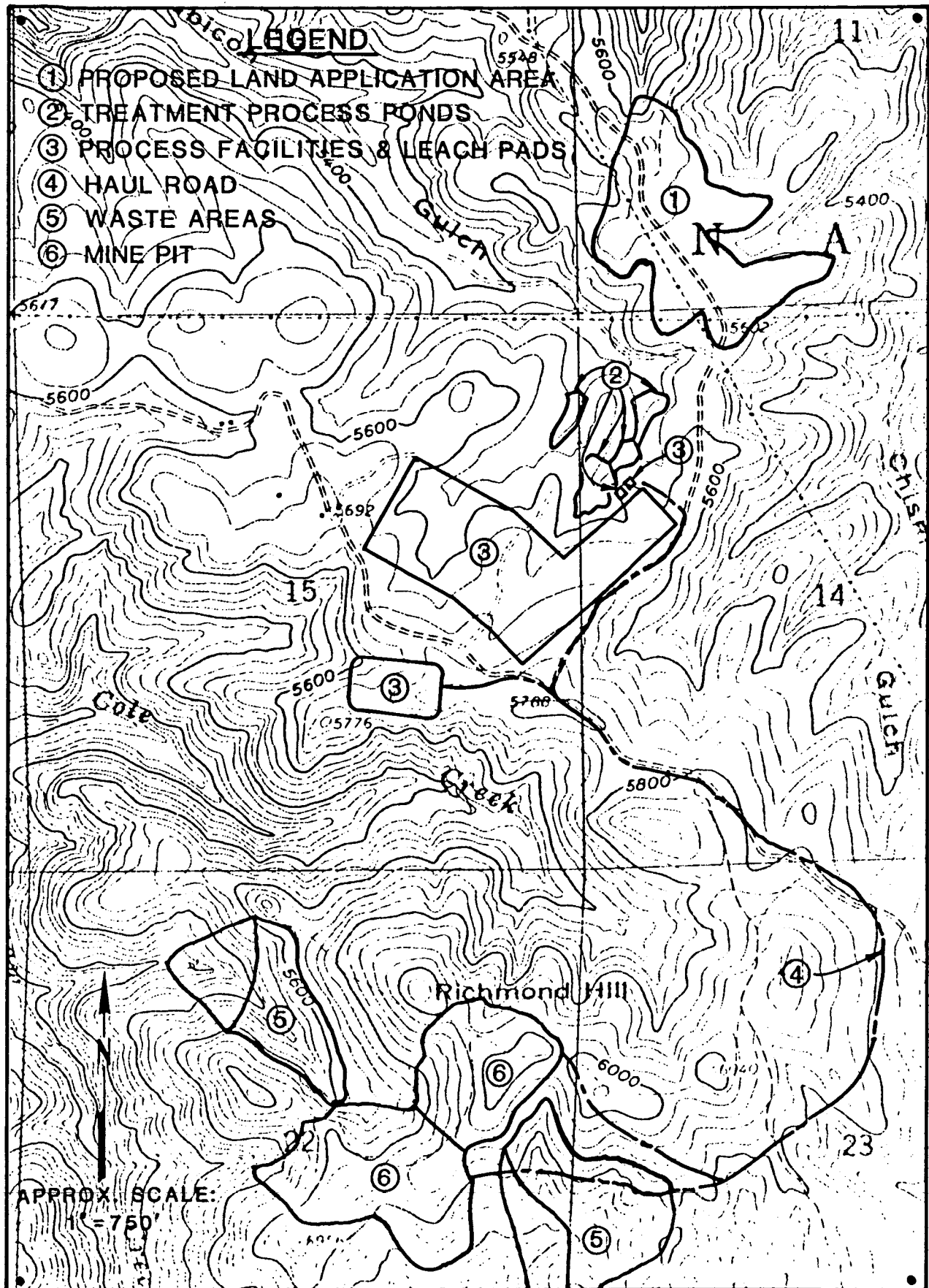
IMPOUNDMENT FACILITIES

(FACILITY GOAL - To ensure the containment of all process solution and process area runoff within impervious and structurally stable impoundments.)

Objectives to be Achieved:

- Compatibility of lining materials and solutions contained
- Long-term resistance of the impoundment liner system to environmental degradation
- Foundation stability of all structures and their related lining system
- Limited elongation and high tear resistance of the flexible membrane liner material
- Good flexibility under expected temperature and loading conditions for flexible membrane liner material
- Reliability of installation techniques for flexible membrane lining system

Description	Units	Size
IMPOUNDMENT FACILITIES (continued)		
o Barren Pond		
Capacity	mill. gal.	3.0
Sideslopes Fills (H:V)	ratio	2:1
Lining System		
- Primary Liner	mil type	60 HDPE
- Secondary Liner	mil type	60 HDPE
Intermediate Leakage		
- Collection	type mil	HDPE Drainage Netting 100-120
- Removal	type Schedule	Perforated Plastic Pipe 80
Pond Bottom Slope (min.)	percent	3+
o Pregnant		
Capacity	mill. gal.	3.5
Sideslopes Fills (H:V)	ratio	2:1
Lining System		
- Primary Liner	mil type	60 HDPE
- Secondary Liner	mil type	60 HDPE
Intermediate Leakage		
- Collection	type mil	HDPE Drainage Netting 100-120
- Removal	type Schedule	Perforated Plastic Pipe 80
Pond Bottom Slope	percent	3+
o Storm Water Containment Pond		
Type	No.	2
Capacity		
- Pond No. 1	mill. gal.	13.3
- Pond No. 2	mill. gal.	24.0
Containment Berm Fill Slope	ratio	2:1
Compacted Fill Berm Slopes	type	rock fill
Fill Face Protection	type	geotextile (100 mil)
Lining System		
- Primary Liner	mil type	80 HDPE
Bedding Layer	type	compacted native soils
Leakage Detection	type	Perforated Plastic pipe geotextile wrapped
	Schedule	80
o Chlorine Dosing Pond		
Capacity	gallons	100,000
Sideslopes	ratio	2:1



RICHMOND HILL MINING PROJECT
FIGURE 2-1

LEGEND

- ① LEACH PAD NO. 1
- ② LEACH PAD NO. 2
- ③ LEACH PAD NO. 3
- ④ LEACH PAD NO. 4
- ⑤ LEACH PAD NO. 5
- ⑥ POWER TRANSFORMER AND BHP METER
- ⑦ PROCESS FACILITY BUILDINGS, 100,000 GALLON CHLORINE TREATMENT POND AND LABORATORY FACILITIES
- ⑧ 3.5 MILLION GALLON PREGNANT POND
- ⑨ 3.0 MILLION GALLON BARREN POND
- ⑩ 13.3 MILLION GALLON STORM WATER CONTAINMENT POND
- ⑪ 24.0 MILLION GALLON STORM WATER CONTAINMENT POND
- ⑫ HAUL ROAD
- ⑬ RICHMOND HILL MINE PIT
- ⑭ NORTH WASTE AREA
- ⑮ SOUTH WASTE AREA
- ⑯ ACCESS ROAD
- ⑰ ORE CRUSHING, AGGLOMERATION AND STORAGE
- ⑱ PRIMARY LAND APPLICATION AREA
- ⑲ TURNAROUND MINE PIT
- ⑳ LAND APPLICATION EFFLUENT PIPELINE
- ㉑ ADMINISTRATION, MAINTENANCE FACILITIES, PARKING AND SECURITY

REV	DATE	BY	DESCRIPTION

SCALE:

1" = 1000'

DESIGNED _____
 DRAWN _____
 CHECKED _____

SUBMITTED

PROJECT ENGINEER _____
 RECOMMENDED _____

JAMES M. MONTGOMERY
 CONSULTING ENGINEERS, INC.

DATE _____
 DATE _____

**JAMES M. MONTGOMERY
 CONSULTING ENGINEERS, INC.**
 181 Mallard Drive House 10 B1/76 5974

JME

APPROVED

APPROVED

DATE

DATE

ST. JOE GOLD CORPORATION
 RICHMOND HILL MINING PROJECT

FACILITIES INDEX MAP

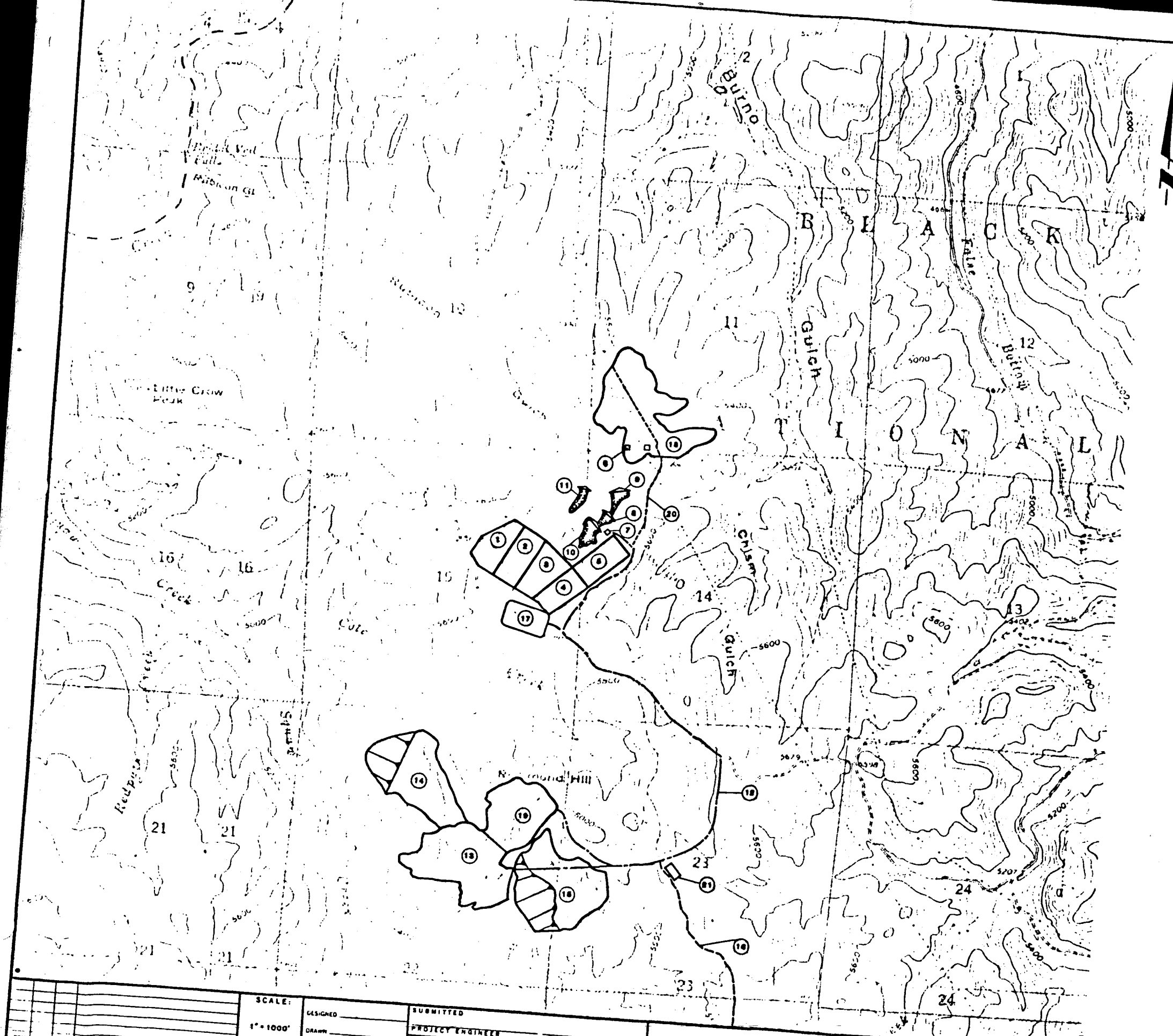
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G-3

Sheet

NOTE

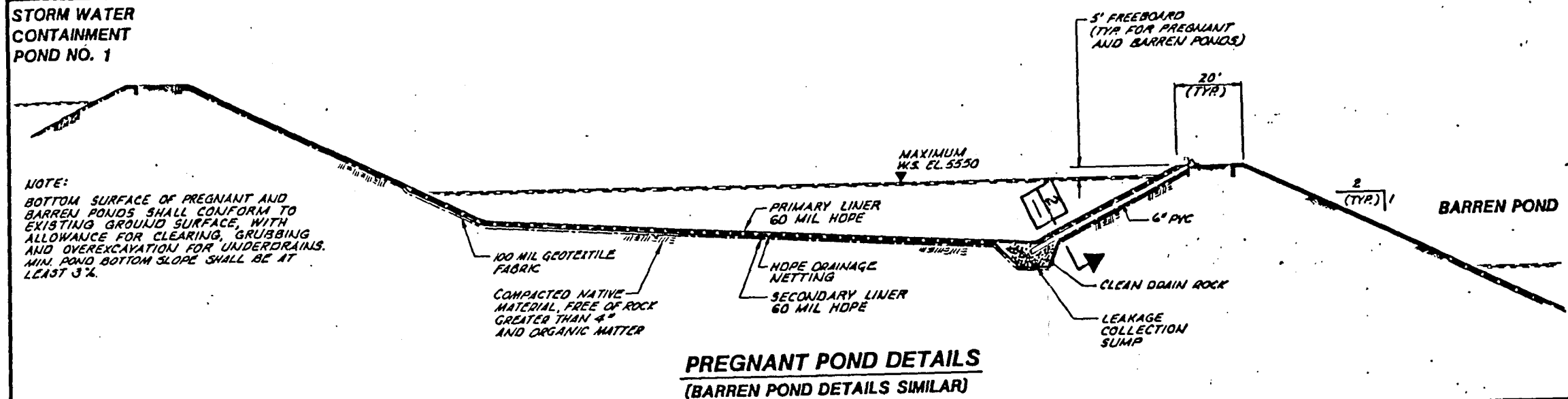
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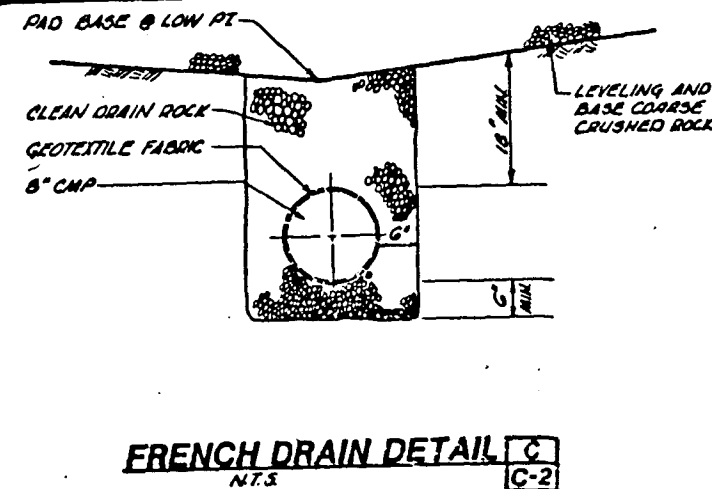
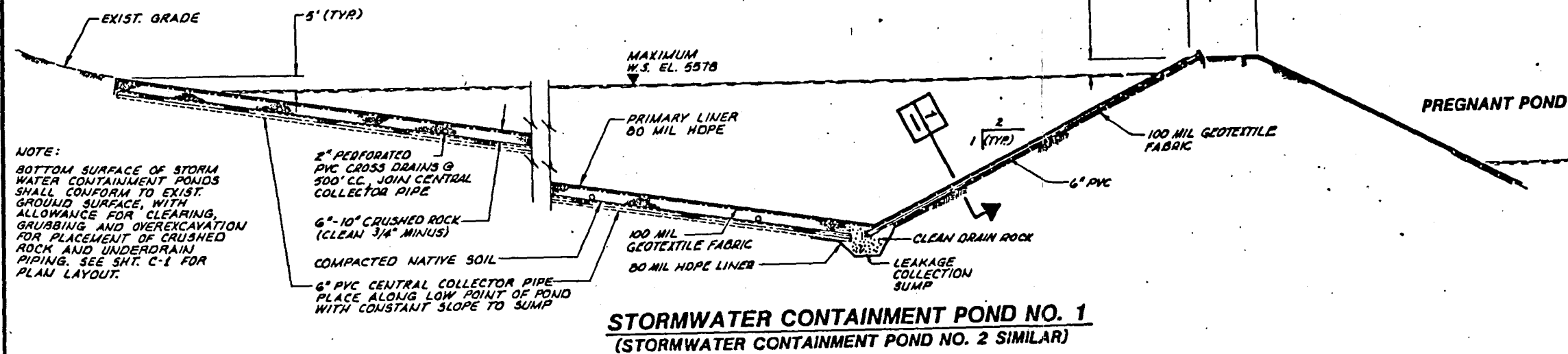
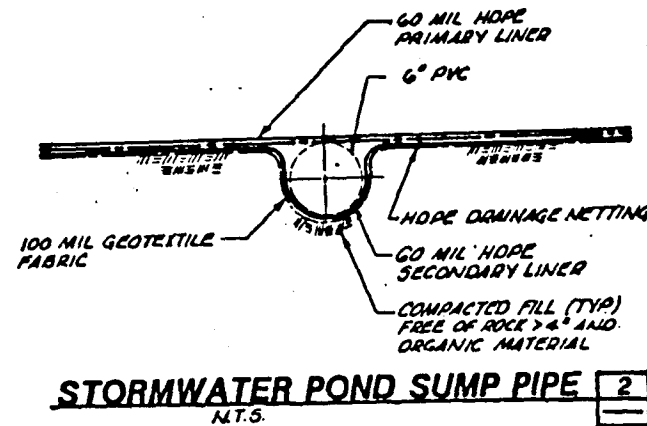
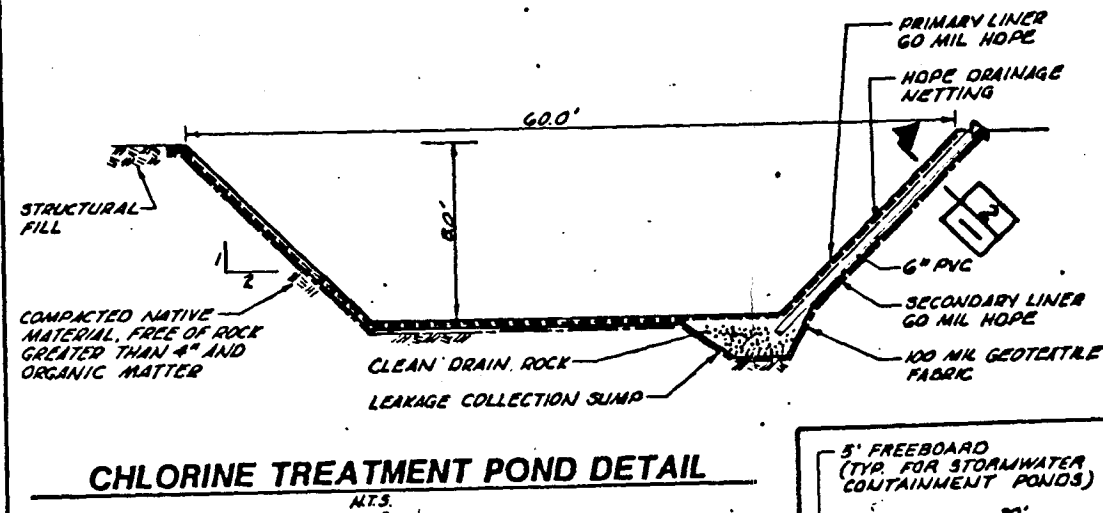
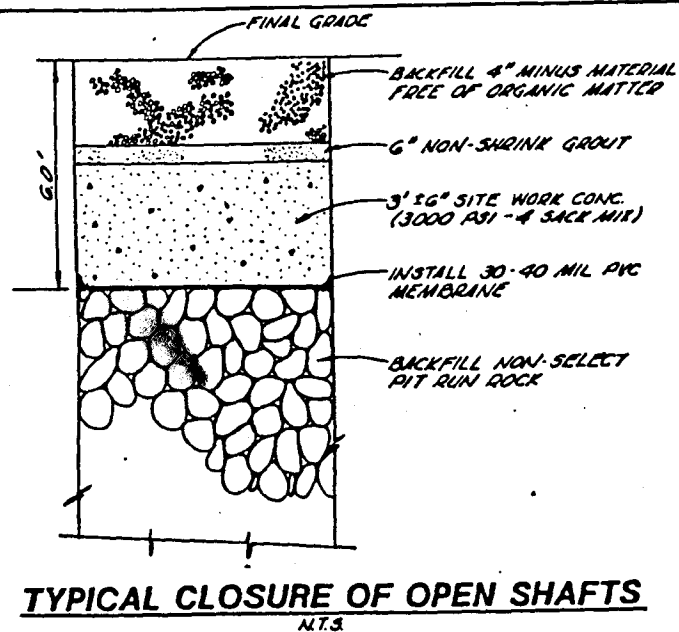
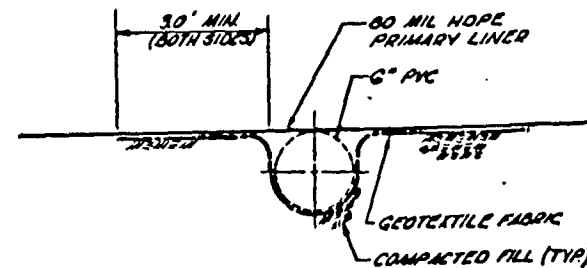
**STORM WATER
CONTAINMENT
POND NO. 1**

NOTE:

BOTTOM SURFACE OF PREGNANT AND BARREN PONDS SHALL CONFORM TO EXISTING GROUND SURFACE, WITH ALLOWANCE FOR CLEARING, GRUBBING AND OVEREXCAVATION FOR UNDERDRAINS. MIN. POND BOTTOM SLOPE SHALL BE AT LEAST 3%.



FACILITY	CAPACITY
BARREN POND	8 MILLION GAL.
PREGNANT POND	25 MILLION GAL.
STORM WATER CONTAINMENT POND NO. 1	18.8 MILLION GAL.
STORM WATER CONTAINMENT POND NO. 2	24 MILLION GAL.



REV	DATE	BY	DESCRIPTION

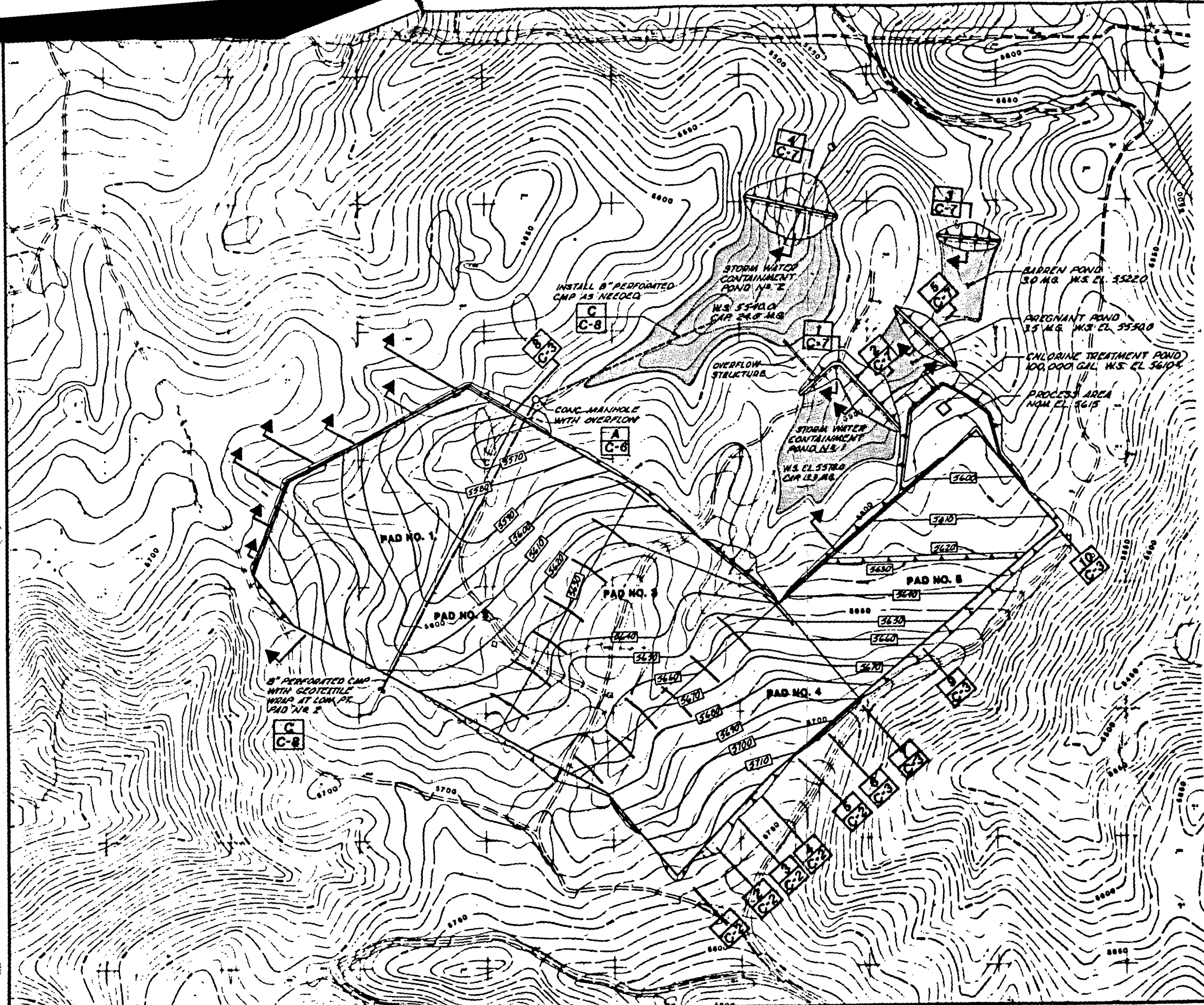
SCALE:	DESIGNED _____	SUBMITTED _____
	DRAWN _____	PROJECT ENGINEER _____
	CHECKED _____	RECOMMENDED _____
		JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.

**JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.**

181 Melard Drive, Boise, ID 83705-3974

APPROVED _____	DATE _____
APPROVED _____	DATE _____

ST. JOE GOLD CORPORATION	SHEET
RICHMOND HILL MINING PROJECT	C-8
POND DETAILS	OF SHEETS



PAD NO. 124		1.761 - 125' HIGH
ORE VOLUME (MILLION CU. YD.)		0.0
EARTHWORK (MILLION CU. YD.)	CUT	0.12
	FILL	0.14
SURFACE AREA (MILLION SQ. FT.) (ACRES)		1.16 (26 ACRES)

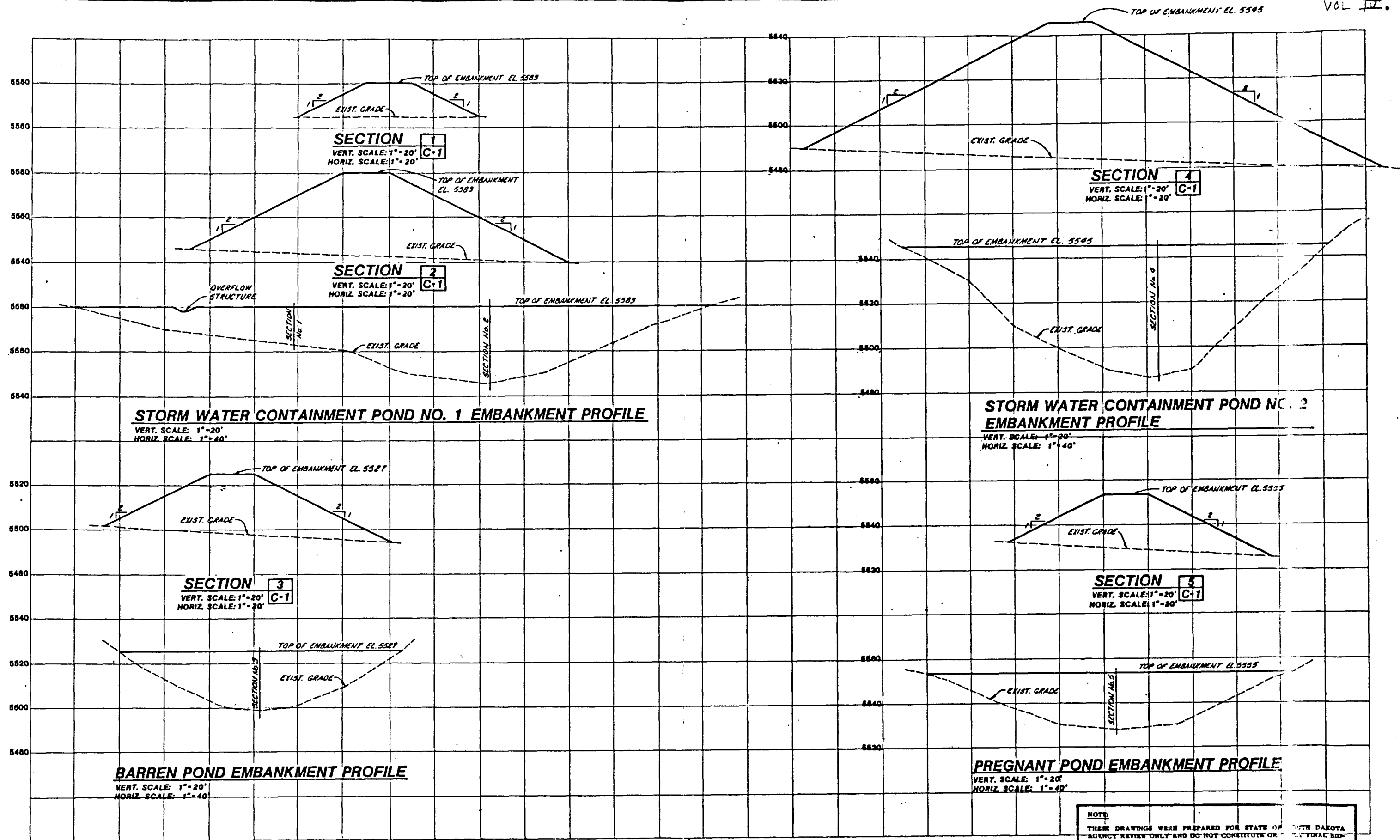
PAD NO. 125		1.761 - 125' HIGH
ORE VOLUME (MILLION CU. YD.)		0.0
EARTHWORK (MILLION CU. YD.)	CUT	0.10
	FILL	0.10
SURFACE AREA (MILLION SQ. FT.) (ACRES)		1.0 (23 ACRES)

PAD NO. 1, 2, 3, 4 & 5 (ASSUMES ALL FIVE PADS BUILT AT THE SAME TIME)		1.761 - 125' HIGH
ORE VOLUME (MILLION CU. YD.)		0.7
EARTHWORK (MILLION CU. YD.)	CUT	0.41
	FILL	0.34
SURFACE AREA (MILLION SQ. FT.) (ACRES)		2.8 (64 ACRES)

NOTES:
1. BECAUSE OF SCALES USED FOR THESE DRAWINGS, AND THE PROBABILITY OF DISTORTION DURING REPRODUCTION, THE ACCURACY OF THE VOLUMES SHOWN SHOULD BE CONSIDERED ACCEPTABLE ONLY WITHIN THE FOLLOWING LIMITS:
FILL +20%
-20%
CUT +20%
-20%
2. ALL SURFACE AREAS ARE LINED.
3. THIS DRAWING REPRESENTS THE ULTIMATE DEVELOPMENT OF THE RICHMOND HILL MINING PROJECT AS IT IS CURRENTLY ENVISIONED FOR THE MINE PERMIT APPLICATION PREPARED FOR THE STATE OF SOUTH DAKOTA.

NOTE:
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REV	DATE	BY	DESCRIPTION	SCALE: 1" = 200'	DESIGNED DRAWN CHECKED	SUBMITTED PROJECT ENGINEER RECOMMENDED JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.	JMM 181 Main Street, Boise, ID 83708-3974	APPROVED DATE	APPROVED DATE	BY JOE GOLD CORPORATION RICHMOND HILL MINING PROJECT GRADING AND DRAINAGE - LEACH PAD AND PROCESSING AREA	SHEET C-1 OF 10 SHEETS
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				SCALE:	DESIGNED _____		SUBMITTED _____		APPROVED _____		ST. JOE GOLD CORPORATION		SHEET	
				AS SHOWN	DRAWN <i>of Hays</i>		PROJECT ENGINEER _____ REC. NO. _____ DATE _____		_____ DATE _____		RICHMOND HILL MINING PROJECT			
					CHECKED _____		RECOMMENDED _____		APPROVED _____		SECTIONS - PROCESS AND		C-7	
REV DATE BY DESCRIPTION					JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.		REC. NO. _____ DATE _____		_____ DATE _____		STORM WATER CONTAINMENT POND 1		OF SHEETS	
					161 Mallard Drive, Boise, ID 83708-3874		JME							

 DAM INSPECTION HYDROLOGIC ANALYSIS - SUMMARY TABLE

ST. JOE MINERALS STORMWATER PONDS
 DAM
 SAFETY
 ANALYSIS
 UNIT GRAPH

SYNDERS 0.500 HOUR UNIT HYDROGRAPH DATA AND PARAMETERS

DURATION	DA	L	LCA	CP	CT	QP	TP	W50	W75	UNIT VOL
HOURS	SO-MI	MILES	MILES			C.F.S	HOURS	HOURS	HOURS	AC-FT
0.500	0.18	0.50	0.25	0.620	0.750	135.5	0.40	0.43	0.26	9.33

PROBABLE MAXIMUM STORM PRECIPITATION AND RUNOFF CHARACTERISTICS

PMP	RAIN	DISTRIBUTION IN PERCENT OF PMP				INT-LOS	INF-RATE	VOLUME IN INCHES		
INDEX	FACTOR	6-HR	12-HR	18-HR	24-HR	INCHES	INCH/HR	RAIN	LOSS	EXCESS
22.00	0.800	100.00	118.00	126.00	132.00	0.0	1.30	23.23	13.36	9.87

LAKE INFLOW HYDROGRAPH ORDINATES

PROBABLE MAXIMUM FLOOD HYDROGRAPH ORDINATES IN CFS AT 0.500 HOUR INTERVALS BEGINNING AT ZERO TIME											
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	16.7	45.3	132.6	764.5	502.3	391.9	211.7	88.6	41.4	21.4
8.7	2.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

LAKE AND DAM INFORMATION

BEGINNING	OUTLET	BOTTOM	SPILLWAY	SPILLWAY	TOP OF DAM	TOP OF DAM	HEIGHT	DOWNSTREAM	N-VALVE	COEF OF
POOL ELEV	INVERT	OF LAKE	CREST	CREST WIDTH	ELEVATION	LENGTH	OF DAM	SLOPE	ON DS	FLOW
FT, MSL	FT, MSL	FT, MSL	FT, MSL	FEET	FT, MSL	FEET	FEET	OF DAM	SLOPE	OVER DAM
55.00	0.0	10.00	55.00	50.0	60.00	300.0	50.0	1V ON 3.00H	0.030	2.90

SUMMARY OF FLOOD ROUTINGS OF INFLOW HYDROGRAPH THROUGH THE LAKE

ROUTING	PERCENT	TOTAL	MAXIMUM	DEPTH OF	ESTIMATED	INITIAL	TOTAL	VOLUME	MAXIMUM
NUMBER	INFLOW	INFLOW	LAKE	LAKE OVER	VELOCITIES	TIME TO	TIME	SPILLED	DISCHARGE
	HYDROGRAPH	VOLUME	ELEVATION	TOP OF DAM	CREST	TOE	OVER TOP	OVER DAM	FROM DAM
		AC-FT	FT, MSL	FEET	FPS	FPS	HOUR	HOURS	CFS
1	100.0	92.	57.46	-2.54	0.0	0.0	0.0	0.0	566.7
2	90.0	83.	57.27	-2.73	0.0	0.0	0.0	0.0	503.4
3	80.0	74.	57.08	-2.92	0.0	0.0	0.0	0.0	439.0
4	70.0	64.	56.88	-3.12	0.0	0.0	0.0	0.0	377.0
5	60.0	55.	56.66	-3.34	0.0	0.0	0.0	0.0	318.9
6	50.0	46.	56.44	-3.56	0.0	0.0	0.0	0.0	260.4
7	40.0	37.	56.21	-3.79	0.0	0.0	0.0	0.0	200.5
8	30.0	28.	55.96	-4.04	0.0	0.0	0.0	0.0	139.2
9	20.0	18.	55.64	-4.36	0.0	0.0	0.0	0.0	92.8
10	10.0	9.	55.32	-4.68	0.0	0.0	0.0	0.0	46.4

(22")
 (PMP)
 92

+

(100
 yr. Flood)
 4.7

= 96.7 ac-ft.

 DAM INSPECTION HYDROLOGIC ANALYSIS - SUMMARY TABLE

ST. JOE MINERALS STORMWATER PONDS
 DAM
 SAFETY
 ANALYSIS
 UNIT GRAPH

SYNDERS 0.500 HOUR UNIT HYDROGRAPH DATA AND PARAMETERS

DURATION HOURS	DA SQ-MI	L MILES	LCA MILES	CP	CT	QP C.F.S	TP HOURS	W50 HOURS	W75 HOURS	UNIT VOL AC-FT
0.500	0.18	0.50	0.25	0.620	0.750	136.5	0.40	0.43	0.26	9.33

PROBABLE MAXIMUM STORM PRECIPITATION AND RUNOFF CHARACTERISTICS

PMP INDEX	RAIN FACTOR	DISTRIBUTION IN PERCENT OF PMP				INT-LOS INCHES	INF-RATE INCH/HR	VOLUME IN INCHES		
		6-HR	12-HR	18-HR	24-HR			RAIN	LOSS	EXCESS
19.60	0.800	100.00	118.00	126.00	132.00	0.0	1.30	20.70	12.57	8.13

LAKE INFLOW HYDROGRAPH ORDINATES

PROBABLE MAXIMUM FLOOD HYDROGRAPH ORDINATES IN CFS AT 0.500 HOUR INTERVALS BEGINNING AT ZERO TIME											
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	6.5	28.0	103.3	665.1	431.5	333.1	172.6	62.9	23.5	7.0
2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

LAKE AND DAM INFORMATION

BEGINNING POOL ELEV FT, MSL	OUTLET INVERT FT, MSL	BOTTOM OF LAKE FT, MSL	SPILLWAY CREST FT, MSL	SPILLWAY CREST WIDTH FEET	TOP OF DAM ELEVATION FT, MSL	TOP OF DAM LENGTH FEET	HEIGHT OF DAM FEET	DOWNSTREAM SLOPE OF DAM	N-VALVE ON DS SLOPE	COEF OF FLOW OVER DAM
55.00	0.0	10.00	55.00	50.0	60.00	300.0	50.0	1V ON 3.00H	0.030	2.90

SUMMARY OF FLOOD ROUTINGS OF INFLOW HYDROGRAPH THROUGH THE LAKE

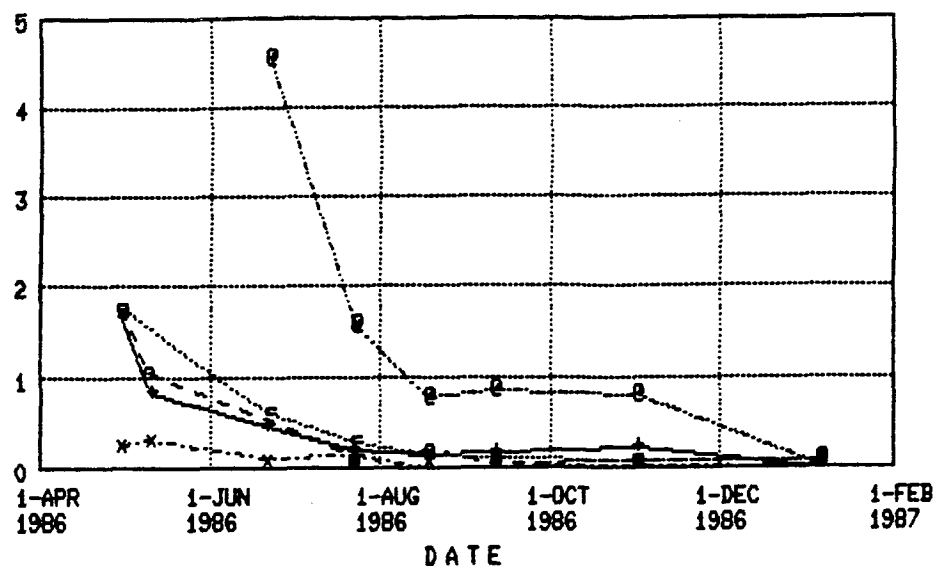
ROUTING NUMBER	PERCENT @000 INFLOW HYDROGRAPH	TOTAL INFLOW VOLUME AC-FT	MAXIMUM LAKE ELEVATION FT, MSL	DEPTH OF LAKE OVER TOP OF DAM FEET	ESTIMATED VELOCITIES CREST FPS	TOE FPS	INITIAL TIME TO OVER TOP HOUR	TOTAL TIME OVER DAM HOURS	VOLUME SPILLED OVER DAM AC-FT	MAXIMUM DISCHARGE FROM DAM CFS
1	100.0	76.0	57.20	-2.80	0.0	0.0	0.0	0.0	0.0	478.2
2	90.0	68.0	57.03	-2.97	0.0	0.0	0.0	0.0	0.0	422.0
3	80.0	61.0	56.85	-3.15	0.0	0.0	0.0	0.0	0.0	370.2
4	70.0	53.0	56.66	-3.34	0.0	0.0	0.0	0.0	0.0	320.1
5	60.0	46.0	56.47	-3.53	0.0	0.0	0.0	0.0	0.0	269.8
6	50.0	38.0	56.28	-3.72	0.0	0.0	0.0	0.0	0.0	218.7
7	40.0	30.0	56.08	-3.92	0.0	0.0	0.0	0.0	0.0	165.7
8	30.0	23.0	55.82	-4.18	0.0	0.0	0.0	0.0	0.0	119.5
9	20.0	15.0	55.55	-4.45	0.0	0.0	0.0	0.0	0.0	79.7
10	10.0	8.0	55.27	-4.73	0.0	0.0	0.0	0.0	0.0	39.8

(19.6")
 (PMP)
 76 + 4.7 = 80.7 ac-ft
 (yr 100 Flood)

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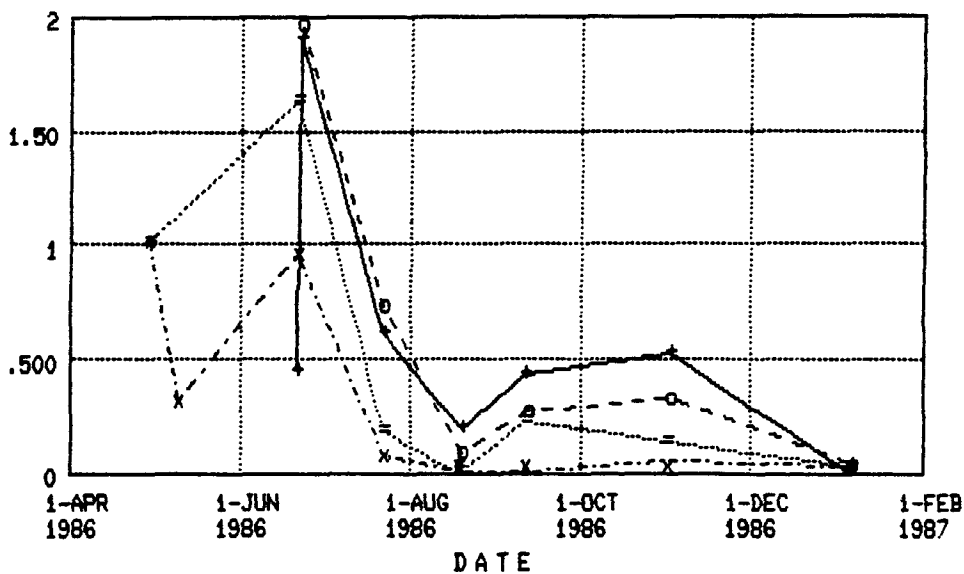
LEGEND

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 **Department of
Water & Natural Resources**

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

July 16, 1987

George M Obeldobel
St. Joe Minerals Corporation
7733 Forsyth Boulevard
Clayton MI 63105

Dear Mr. Obeldobel:

This letter is in response to a recent review of State Laws by the Attorney General's Office regarding construction of dams on dry draws. A water permit is required for construction of dams on dry draws impounding more than 25 acre-feet of water pursuant to SDCL 46-5-8. The applicability of this statute to mining operations is based on a legal interpretation by the Attorney General's Office regarding a proposed increase in the size of a tailings dam owned by Homestake Mining Company. Therefore, all mining operations with dams or impoundments that will impound more than 25 acre feet of water will need to obtain a water permit pursuant to SDCL 46-5-8. In addition to obtaining a water permit, plans and specifications for each dam or impoundment will also need to be approved pursuant to Safety of Dams Rules Chapter 74:02:08.

Enclosed is one set of permit application forms. One application can be made for all proposed dams impounding more than 25 acre-feet of water. Please complete the permit application according to the instruction sheet and return with the application fee. Contact us if you have any questions. This application may be considered in December with your other permit application.

Sincerely,



RON DUVAL
Natural Resources Engineer

RD:ks

enclosure

JAMES M. MONTGOMERY, CONSULTING ENGINEERS, INC.



161 Mallard Drive, Boise, ID 83706-3974 / (208) 345-5865

St. Joe Gold Corp.

DATE: 9/25/87

7733 Forsyth Blvd.

SUBJECT Additional Water Rights

Clayton, Missouri 63105

Richmond Hill

Attn: George Obeldobel

1818.0024

Gentlemen:

The following items are: ☐ Requested

☒ Enclosed

☐ Sent separately via Federal Express

☐ Report

☐ Specification

☐ Cost Estimate

☐ Shop Drawings

☐ Test Result

☐ Prints

☐ Test Sample

☒ Other

No. of Copies	Description
2	Copies of Completed Application

These data are submitted:

☐ At your request

☒ For your action

☐ For your approval

☐ For your files

☐ For your review

☐ For your information

General Remarks: George, you need to sign where indicated and send to SDDLNR

(Attn: Ron Duvall). The berm (aka dam) structures really need more design information before submitting pursuant to Safety of Dams Rules, however your cover letter may want to reference the Permit Application.

Very truly yours,

Encls. ☒
Copies to:

JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.

GO-4(4/86)

By: Edwin T. Cryer

ST. JOE

MINERALS CORPORATION

7733 FORSYTH BOULEVARD
CLAYTON, MISSOURI 63105

TELEX 44-7636

314-726-9500

GEORGE M. OBELDOBEL

DIRECTOR OF METALLURGY

314-854-9612



September 29, 1987

Mr. Ron Duvall
Natural Resources Engineer
South Dakota Department of Water
and Natural Resources
Joe Foss Building
523 East Capitol
Pierre, SD 57501-3181

Dear Ron:

In reference to your letter to me of 16 July 1987 (Attorney General's review of dams on dry draws), I have completed the applications which you sent me. I have attached maps showing the location of the facilities with the application. If you require more details, they are all available in our mine permit application submitted to the DWNR on 2 April 1987 or feel free to call me.

Flow in the draw where we will place our dam is approximated by sampling point 2 on the attached graph. As you can see, flow peaks at 0.3cfs during spring snowmelt and is zero most of the year.

Thank you for your help on this item.

Sincerely,

George M. Obeldobel/psb

GMO/slb

cc: E. Cryer
P. Fuller

ST. JOE

MINERALS CORPORATION

7733 FORSYTH BOULEVARD
CLAYTON, MISSOURI 63105

GEORGE M. OBELDOBEL
DIRECTOR OF METALLURGY
314-854-9612

TELEX 79-7140

October 27, 1987

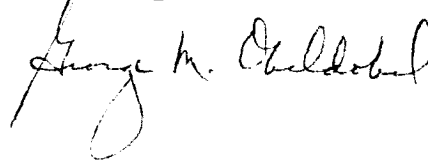
Mr. Ron Duvall
Natural Resources Engineer
South Dakota Department of Water
and Natural Resources
Joe Foss Building
523 East Capitol
Pierre, SD 57501-3181

Dear Ron:

Please find attached the \$150 water rights application fee for St. Joe Gold's dry draw dam application I sent you on 29 September 1987.

Thank you for the help.

Sincerely,



GMO/slb

cc: E. Cryer
P. Fuller



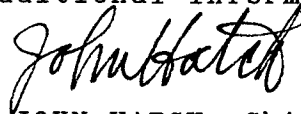
RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 1422-1, St. Joe Gold Corporation

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Division, Department of Water and Natural Resources concerning Water Permit Application No. 1422-1, St. Joe Gold Corporation, 7733 Forsyth Blvd, Clayton MO.

The Chief Engineer is recommending APPROVAL of Application No. 1422-1 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) in the public interest with the following qualification:

Approval of this permit is subject to submission of plans and specifications to the chief engineer pursuant to Board Rules Chapter 74:02:08, Safety of Dams prior to construction of the ponds for review and approval. A breach analysis and downstream flood routing report shall be completed prior to determining the hazard classifications for the ponds.

See the attached report for additional information.



JOHN HATCH, Chief Engineer
October 26, 1987

REPORT ON APPLICATION NO. 1422-1
St. Joe Gold Corporation
October 22, 1987

Application No. 1422-1, St. Joe Gold Corporation, proposes to construct two dams which will serve as storm water containment ponds. Pond No. 1 is to be located in the SW1/4 NW1/4 of Section 14 and SE1/4 NE1/4 of Section 15, both in T5N, R2E. It will have an approximate top embankment elevation of 5583.0 feet mean sea level (msl). Pond No. 2 is to be located in the NE1/4 NE1/4 of Section 15 and NW1/4 NW1/4 of Section 14, both in T5N, R2E. It will have an approximate top embankment elevation of 5545.0 feet msl.

Project Description

The purpose of the two storm water containment ponds will be to store excess water from the leaching pads which occurs as a result of rainfall or snowmelt runoff. Only runoff which has been contaminated by the leaching process will be directed to the storm water ponds. The excess water will then be circulated back to the active pads for saturating ore that has been mined and loaded for the leaching process.

The dam on Pond No. 1 will be constructed to a height of 36 feet and have a storage capacity of 41 acre-feet with two feet of freeboard. The dam on Pond No. 2 will be constructed to a height of 60 feet and have a storage capacity of 74 acre-feet with two feet of freeboard.

Hydrology

The two dams were designed to contain the Probable Maximum Precipitation (PMP) event without overtopping. Complete storage of a PMP event is necessary to prevent contaminated water from being discharged downstream.

The "Hydrologic Analysis Program" put out by the U.S. Army Corps of Engineers was used to predict the Probable Maximum Flow (PMF) which would occur as a result of a PMP in the drainage area. The volume of water produced by a 100 year storm was also calculated. The combined volume of flow from these two events equalled 81 acre-feet which is well below the 115 acre-feet of storage available in the two ponds. Therefore, it appears that the storm water containment ponds have been designed to totally store the worst predictable precipitation event.

Existing Water Rights

Existing water rights should not be affected by this application. Rubicon Gulch is basically a dry draw in this area with no existing water rights. The system is essentially a non-consumptive structure.

Conclusions

1. The two storm water containment ponds, as proposed, will have enough storage to totally contain a PMP event plus a 100 year flood situation.
2. Approval of this permit is subject to submission of plans and specifications to the chief engineer pursuant to Board Rules Chapter 74:02:08, Safety of Dams prior to construction of the dam for review and approval. A breach analysis and downstream flood routing report shall be completed prior to determining the hazard classification for the ponds.
3. The application will not adversely affect existing water rights.

James L. Wendte /ks
James L. Wendte
Natural Resources Engineer

WATER RIGHTS DIVISION
(605) 773-3352

October 29, 1987

Nick Meinhardt
Citizens Law Center
P.O. Box 9034
Rapid City, South Dakota 57709

Dear Mr. Meinhardt:

Enclosed is a copy of the public notice for Water Permit Application No. 1422-1, St. Joe Gold Corporation. The notice explains the relationship between Application Nos. 1372-1 and 1422-1.

Please contact us if you have any questions.

Sincerely,



Ron Duvall
Natural Resources Engineer

RD:ms
Enc.



Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

October 28, 1987

Lead Daily Call
PO Box 876
Lead, South Dakota 57754

Dear Sir:

Enclosed is a Notice of Hearing on Application No. 1422-1. Please publish this notice once each week for two consecutive weeks in your paper. The first publication should be on or before November 4, 1987.

The APPLICANT MUST VERIFY TO YOU THAT THE NOTICE IS TO BE PUBLISHED, before you make the first publication. Please BILL the APPLICANT for the cost of publication. The APPLICANT is St. Joe Gold Corporation, 7733 Forsyth Blvd., Clayton, Missouri 63105.

A copy of BOTH publications must be SENT to the WATER RIGHTS DIVISION. IMMEDIATELY return the FIRST publication with the FIRST Transmittal form on the bottom of this page. The first copy is needed to check the publication for errors so any corrections can be made in the second publication. Publication errors can invalidate the public notice and cause the applicant costly delays.

Please be sure the SECOND publication is returned IMMEDIATELY with the enclosed Proof of Publication form. DO NOT WAIT until the end of the month or the billing cycle. The permit application cannot be considered by the Water Management Board until proof of publication has been received.

Sincerely,

Ron Duvall
Natural Resources Engineer
605 773-3352

enclosures

-----CUT HERE-----

FIRST TRANSMITTAL NOTICE

No. _____

TO: Water Rights Division
Joe Foss Building
Pierre SD 57501-3181

Date _____

We are in receipt of your letter of _____ enclosing Notice of Hearing to
Appropriate Water by Application No. _____ which was first published in our issue
of _____. ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.

Name

Newspaper



Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

Water Rights Division
(605) 773-3352

October 28, 1987

NOTE:

TO BE SURE OF PUBLICATION ON
THE CORRECT DATES, CONTACT THE
NEWSPAPER RIGHT AWAY.

St. Joe Gold Corporation
7733 Forsyth Blvd.
Clayton, Missouri 63105

Dear Sir:

Your Application No. 1422-1 for a permit to appropriate water for

industrial use, has been examined and found to
comply with the South Dakota Water Laws and applicable rules. A notice of
your intent to appropriate water has been sent to the Publisher of the

Lead Daily Call

printed at Lead

South Dakota. For your information, a copy of this notice, the recommendation
of the Chief Engineer and a report on the application are enclosed. Please
review this notice prior to publication and notify this office, if you have
any corrections or questions.

BE SURE TO CONTACT THE ABOVE NEWSPAPER IMMEDIATELY TO AUTHORIZE PUBLICATION
OF YOUR NOTICE OF INTENT TO APPROPRIATE WATER AND TO ARRANGE FOR PAYMENT.
Early contact with the paper can eliminate delays. The publisher has been
instructed to publish your notice once each week for two consecutive weeks
with the last publication to occur at least twenty days before the board
meeting. We must receive Proof of Publication before the application can be
considered by the Water Management Board.

Sincerely,

RON DUVAL
Natural Resources Engineer

enclosures

Instruction to Newspaper - Publish first publication of the following Notice on or before November 4, 1987 with 2nd publication 1 week later. The applicant is responsible for payment.

NOTICE OF HEARING on Application No. 1422-1 to Appropriate Water

Notice is hereby given that St. Joe Gold Corporation whose mailing address is 7733 Forsyth Blvd., Clayton MO 63105 has filed an application for a permit to construct two storm water containment ponds located on dry draws. Pond 1 (41 acre-feet storage capacity) is to be located in the SW 1/4 NW 1/4 Section 14; SE 1/4 NE 1/4 Section 15; both in T5N, R2E with an approximate top embankment elevation of 5583.0 feet mean sea level (msl). Pond 2 (74 acre-feet storage capacity) is to be located in the NE 1/4 NE 1/4 Section 15; NW 1/4 NW 1/4 Section 14; both in T5N, R2E with an approximate top embankment elevation of 5545.0 feet msl. The purpose of the two ponds is to contain excess runoff from heap leach pads due to precipitation events including a Probable Maximum Precipitation event. The ponds are to be constructed as part of a proposed heap leach ore-processing facility operated by St. Joe Gold Corporation. Water collected in the ponds will be recycled into the leach process. Water Permit Application No. 1372-1 for St. Joe Minerals Corporation appropriates water to supply the proposed heap leach operation and is scheduled for consideration at the December, 1987 Water Management Board meeting. The two ponds authorized by this application are part of the same proposed heap leach operation. Application No. 1422-1 is scheduled to be considered with Application No. 1372-1.

Pursuant to SDCL 46-2A-2 the Chief Engineer of the Water Rights Division recommends APPROVAL of Application No. 1422-1 because 1) unappropriated water is available, 2) will be no unlawful impairment of existing rights, 3) it is a beneficial use of water and 4) it is in the public interest.

The application will be considered by the Water Management Board at Howard Johnson's, Roosevelt and Jefferson Rooms, 2211 LaCrosse, Rapid City SD on December 3, 1987 at 8:30 am.

The recommendation of the Chief Engineer is not final or binding upon the Board and the Board is authorized to 1) approve, 2) approve the with qualifications, 3) defer, or 4) deny the application after it reaches a conclusion based upon facts presented at the public hearing. Any interested person who may be affected by a Board decision and who intends to participate in the hearing before the Board and present evidence or cross-examine witnesses according to SDCL 1-26, must file a written petition with BOTH the applicant and the Chief Engineer by November 20, 1987. The petition may be informal, but it must include a statement describing the petitioner's interest in the application, the reasons for the petitioner's opposition to or support of the application, and the signature and mailing address of the petitioner or his legal counsel if legal counsel is obtained. The applicant need not file a petition.

This application is made pursuant to the provisions of SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-15; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-2-17; 46-2A-1 thru 46-2A-10, 46-2A-12, 46-2A-14, 46-2A-15, 46-5-1 thru 46-5-11, 46-5-13 thru 46-5-15, 46-5-24, 46-5-25, 46-5-30.2, 46-5-30.4, 46-5-31; and Board Rules ARSD 74:02:01:01 thru 74:02:01:15; 74:02:08:01 thru 74:02:08:11.

(continued)

This hearing is an adversary proceeding. The applicant or any person, after filing a petition, has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

Any person wishing a copy of the Chief Engineer's recommendation, further information on this application or to assure access to the hearing by the handicapped can contact the Water Rights Division, Joe Foss Bldg, Pierre SD (605 773-3352) for assistance prior to the hearing date. The time of the hearing will be automatically extended for at least twenty days upon written request of the applicant or person who has filed a petition to oppose or support the application. The request for extension must be filed with the Chief Engineer by November 20, 1987.

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County Lawrence) ss.

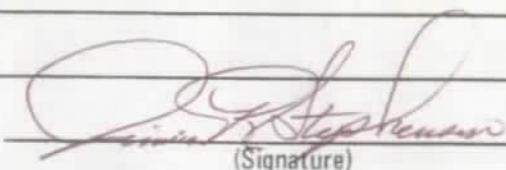
I, Jimmie R. Stephenson hereby
certify that the annexed printed copy of Notice of Intent to Appropriate
Water was taken from the Lead Daily Call

A newspaper which during the whole time of publication of said notice
herein after stated, has been and is printed and published in the _____
City _____ of _____ Lead _____

County of Lawrence and State of South Dakota;
that the said notice was published in said newspaper on the following
two dates:

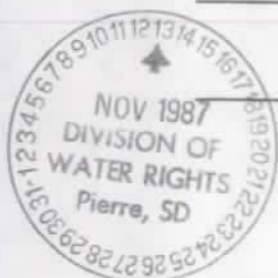
November 4th, 1987

November 11th, 1987


(Signature)

Publisher
(Title)

11-11-87
(Date Signed)



Cost of Printing: _____
123 lines x .2564 = 31.54
123 lines x .2051 = 25.23
Total = 56.77

NOTICE OF HEARING
ON
Application
No. 1422-1 to
Appropriate Water

Notice is hereby given that St. Joe Gold Corporation whose mailing address is 7733 Forsyth Blvd., Clayton MO 63105 has filed an application for a permit to construct two storm water containment ponds located on dry draws. Pond 1 (41 acre-feet storage capacity) is to be located in the SW 1/4 NW 1/4 Section 14; SE 1/4 NE 1/4 Section 15; both in T5N, R2E with an approximate top embankment elevation of 5583.0 feet mean sea level (msl). Pond 2 (74 acre-feet storage capacity) is to be located in the NE 1/4 NE 1/4 Section 15; NW 1/4 NW 1/4 Section 14; both in T5N, R2E with an approximate top embankment elevation of 5545.0 feet msl. The purpose of the two ponds is to contain excess runoff from heap leach pads due to precipitation events including a Probable Maximum Precipitation event. The ponds are to be constructed as part of a proposed heap leach ore-processing facility operated by St. Joe Gold Corporation. Water collected in the ponds will be recycled into the leach process. Water Permit Application No. 1372-1 for St. Joe Minerals Corporation appropriates water to supply the proposed heap leach operation and is scheduled for consideration at the December, 1987 Water Management Board meeting. The two ponds authorized by this application are part of the same proposed heap leach operation. Application No. 1422-1 is scheduled to be considered with Application No. 1372-1.

Pursuant to SDCL 46-2A-2 the Chief Engineer of the Water Rights Division recommends APPROVAL of Application No. 1422-1 because 1) unappropriated water is available, 2) will be no unlawful impairment of existing rights, 3) it is a beneficial use of water and 4) it is in the public interest.

The application will be considered by the Water Management Board at Howard Johnson's Roosevelt and Jefferson Rooms, 2211 LaCrosse, Rapid City SD on December 3, 1987 at 8:30 am.

The recommendation of the Chief Engineer is not final or binding upon the Board and the Board is authorized to 1) approve 2) approve with qualifications, 3) defer, or 4) deny this application after it reaches a conclu-

sion based upon facts presented at the public hearing. Any interested person who may be affected by a Board decision and who intends to participate in the hearing before the Board and present evidence or cross-examine witnesses according to SDCL 1-26, must file a written petition with BOTH the applicant and the Chief Engineer by November 20, 1987. The petition may be informal, but it must include a statement describing the petitioner's interest in the application, the reasons for the petitioner's opposition to or support of the application, and the signature and mailing address of the petitioner or his legal counsel if legal counsel is obtained. The applicant need not file a petition.

The application is made pursuant to the provisions of SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-15; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-2-17; 46-2A-1 thru 46-2A-10, 46-2A-12, 46-2A-14, 46-2A-15, 46-5-1 thru 46-5-11, 46-5-13 thru 46-5-15, 46-5-24, 46-5-25, 46-5-30.2, 46-5-30.4, 46-5-31; and Board Rules ARSD 74:02:01:01 thru 74:02:01:15; 74:02:08:01 thru 74:02:08:11.

This hearing is an adversary proceeding. The applicant or any person, after filing a petition, has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

Any person wishing a copy of the Chief Engineer's recommendation, further information on this application or to assure access to the hearing by the handicapped can contact the Water Rights Division, Joe Foss Bldg, Pierre SD (605 773-3352) for assistance prior to the hearing date. The time of the hearing will be automatically extended for at least twenty days upon written request of the applicant or person who has filed a petition to oppose or support the application. The request for extension must be filed with the Chief Engineer by November 20, 1987.



Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

December 10, 1987

NOTICE

TO: St. Joe Gold Corporation
7733 Forsyth Blvd.
Clayton MO 63105

FROM: John Hatch, Chief Engineer
Water Rights Division
605 773-3352

A handwritten signature in cursive script, reading "John Hatch". The signature is written in dark ink and is positioned to the right of the typed name "John Hatch, Chief Engineer".

SUBJECT: Preparation of Findings of Fact, Conclusions of Law and Final
Decision

The Water Management Board has directed John Guhin, the Board's attorney to prepare proposed Findings of Fact, Conclusions of Law and a Final Decision on approval of Water Permit Application No. 1422-1. The Board will consider the proposed Findings, Conclusions and Final Decision at 1:15 pm, March 2, 1988 in Room 216, Joe Foss Building, 523 E Capitol, Pierre SD. The agenda time is an estimate. The actual time of consideration may be delayed due to prior agenda items.

The Board has requested that a copy of the proposed Findings, Conclusions and Final Decision be mailed to each Board member (copy enclosed) by February 11, 1988. Any comments pertaining to the proposed Findings, Conclusions and Decision are to be mailed to each Board member, the Board attorney and the Division of Water Rights by February 19, 1988.

The public hearing on Application No. 1422-1 was completed December 3, 1987. No additional testimony on this application will be received on March 2, 1988.

cc: Harold Deering, Assistant Attorney General
John Guhin, Assistant Attorney General

CERTIFICATION

I hereby certify that on December 10, 1987 I have personally deposited with the U.S. Mail, postage prepaid envelopes containing Notice for Preparation of Findings, Conclusions and a Final Decision on Water Permit Application No. 1422-1 addressed as shown on the notice.

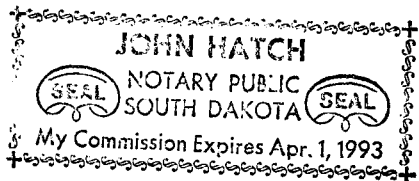
Karen Schlaak

KAREN SCHLAAK
Senior Secretary

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 11th day of December, 1987.

John Hatch
Notary Public



SOUTH DAKOTA
Department of
Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

March 15, 1988

Water Management Board:

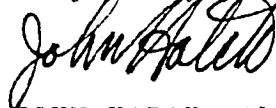
Following the March 2 and 3 Board meeting, we found that the beneficial use conclusion of law was not included in the Findings of Fact, Conclusions of Law and Final Decision (FC & D) for the St. Joe Gold Corporation Permit No. 1422-1. There were no parties of record in opposition to No. 1422-1.

Mr. Guhin, the Board attorney is out of his office this week. Unless Mr. Guhin or Board members advise otherwise, we are planning to add the following Conclusion of Law to the FC & D for No. 1422-1 before Chairman Gunderson signs the FC & D.

"The proposed use of water for mining purposes is a beneficial use."

We are asking St. Joe Gold to stipulate in writing, agreement with the addition of the beneficial use conclusion of law. Unless Mr. Guhin advises otherwise, we will ask the Board to concur at the May meeting and after the fact with Chairman Gunderson's action to sign the changed FC & D.

Very truly yours,



JOHN HATCH, Chief Engineer
Water Rights Division
605 773-3352

cc: John Guhin, Assistant Attorney General
Harold Deering, Assistant Attorney General
A. P. Fuller, Attorney

RECEIPT

Division of Water Rights

South Dakota Department of Water and Natural Resources

411184

Pierre, March 29, 1988

PAID OF Fuller & Co. LTD, PO Box 898, Lead, SD 57754 for St. Joe Richmond Hill, Inc.
the following amount in fees for services rendered as provided for by law: 4600 S. Ulster St., Suite 300
Denver, CO 80237

Fee for Application for Permit No. _____ to Appropriate Water, to construct works and to put water to beneficial use _____

Fee for Application for Permit No. _____ to Appropriate Water for Future Use _____

Fee to retain Future Use Permit No. _____ after period of seven years.

Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____

Fee for Filing Transfer Form 1422-1

2 50

Fee for Filing Extension Request _____

Fee for Certified Copy of _____

Fee for Print Copy of Map _____

Fee for Certifying _____

Fee for _____

(Any Other Work Provided by Law)

Total

2 50

By

Chief Engineer

JOHN HATCH

QTS

SOUTH DAKOTA
Department of
Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

March 30, 1988

1372-1
1422-1

A.P. Fuller
Fuller & Co., Ltd.
PO Box 898
Lead SD 57754

Dear Mr. Fuller:

Enclosed are receipt Nos. 411182 and 411184, in the amount of \$2.50 each, which you paid for filing a "Notice of Transfer" for Water Permit No. 1372-1 and Water Permit Application No. 1422-1. Permit No. 1372-1 and Application No. 1422-1 are now listed in the name of St. Joe Richmond Hill, Inc.

If you have any questions concerning the transfers, please contact us.

Sincerely,

Genny McMath

GENNY MCMATH
Natural Resource Analyst
605 773-3352

enclosures

cc: St. Joe Richmond Hill, Inc.
4600 S Ulster St, Suite 300
Denver CO 80237

STATE OF SOUTH DAKOTA
BEFORE THE WATER MANAGEMENT BOARD



IN THE MATTER OF THE APPLICATION	)	FINDINGS OF FACT,
FOR WATER PERMIT NO. 1422-1, ST.	)	CONCLUSIONS OF LAW AND
JOE GOLD CORPORATION	)	FINAL DECISION

FINDINGS OF FACT

1. This is an application for a permit to construct two ponds in a dry draw to contain surface runoff from a heap leaching pad. The heap leaching pad will be part of an open pit mining operation to be put in place by the applicant.

2. The ponds will also gather incidental surface water runoff and direct precipitation.

3. The probable maximum precipitation event plus a 100 year storm event would produce approximately 81 acre feet in the basin. The combined storage of the two ponds will be 115 acre feet. The storage capacity of the dams substantially exceeds the requirements of the State's Safety of Dams Program.

4. The provision of storage space for containment of a large amount of water in the ponds is highly desirable from the standpoint of the public interest.

CONCLUSIONS OF LAW

1. There is a reasonable probability that there is unappropriated water available for the applicant's proposed use.

2. The proposed diversion can be developed without unlawful impairment of existing rights.

2a. The proposed use of water for mining purposes is a beneficial use.

3. The proposed use is in the public interest.

FINAL DECISION

The application for Water Permit No. 1422-1 is granted with the following qualifications.

1. Approval of this permit is subject to submission of plans and specifications to the Chief Engineer pursuant to Board Rules Chapter 74:02:08, Safety of Dams prior to construction of the ponds for review and approval. The breach analysis and downstream routing report shall be completed prior to determining the hazard classifications for the ponds.

BY THE BOARD:

Marian B. Gunderson



Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

May 5, 1988

NOTICE

TO: St. Joe Gold Richmond Hill, Inc.
4600 S Ulster St.
Suite 300
Denver CO 80237

FROM: John Hatch, Chief Engineer
Water Rights Division
605 773-3352

SUBJECT: Adoption of Findings of Fact, Conclusions of Law and Final
Decision

This is to notify you that a Final Decision, including Findings of Fact, Conclusions of Law were adopted by the Water Management Board for Application No. 1422-1 which was considered at the December 3, 1987 meeting.

Enclosed is a copy of the final Decision, Findings and Conclusion as adopted by the board. South Dakota Statutes provide that the decision of the Board may be appealed to the Courts.

cc: Peter Fuller, Attorney



CERTIFICATION

I hereby certify that on May 5, 1988 I have personally deposited with the U.S. Mail, postage prepaid envelopes containing Notice on Adoption of Findings of Fact, Conclusions of Law and Final Decision on Application No. 1422-1 addressed as follows:

St. Joe Richmond Hill, Inc.
4600 S Ulster St
Suite 300
Denver CO 80237

Peter Fuller, Attorney
PO Box 898
Lead SD 57754

Karen Schlaak

KAREN SCHLAACK
Senior Secretary

STATE OF SOUTH DAKOTA)
COUNTY OF HUGHES) SS

Sworn to, before me, this 6th day of May, 1988.



John Hatch
Notary Public

 **Department of
Water & Natural Resources**

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

May 17, 1988

George Obeldobel
Dallhold Corp.
1600 Stout Street
Suite 1910
Denver, Colorado 80202

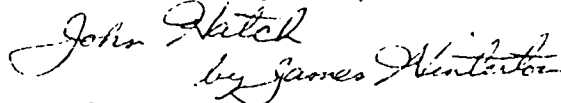
Dear Mr. Obeldobel:

We have reviewed the plans and specifications for the Richmond Hill Mining Project Stormwater Containment Pond. The plans and specifications as submitted are approved.

Our review was to determine compliance with Water Management Board Rules Chapter 74:02:08, Safety of Dams which state that dams constructed to store tailings shall be sized to retain the PMF plus at least a 100-year flood. Approval applies only to the portion of the plans and specifications that involve the storage of the PMF plus 100 year flood. Approval of these plans and specifications does not release St. Joe-Richmond Hill Inc. from the responsibility for operating and maintaining the stormwater containment pond in good repair to assure safety.

If you have any questions, please contact us.

Very truly yours,


by James Hinton

John Hatch, Chief Engineer
Water Rights Division
605 773-3352



May 6, 1980

Memo

To: John Hatch

From: Dale N. Sullivan

re: Richmond Hill Mining Project

We have reviewed Richmond Hill mining project plans and specifications. The plans and specifications comply with our Safety of Dams rules and regulations. The pond will contain the PMF plus a 100-year frequency storm without overtopping.

Review of safety of dams permit application
for the Richmond Hill Mining Project
Stormwater containment pond submitted
by St Joe-Richmond Hill Inc.
April 1988

Prepared by Jim Wendte/David Brown
May 2, 1988

Prepared for Gale Selken

St. Joe proposes to construct a stormwater containment dam to retain 100 % of the PMP (19.6 inches as determined by St. Joe, 6 hour duration) with 5 feet of free board. HMR No. 51 PMP estimates for the stormwater containment dam are as follows: 21.5 inches/6 hour duration, 25.5 inches/12 hour duration, 27 inches/24 hour duration, 29.5 inches/48 hour duration, and 31 inches/72 hour duration. The 100 year 24 hour precipitation event for the stormwater containment dam is 5 inches (SCS National Engineering Field Manual).

The drainage area above the stormwater containment dam during Phase I is 28 acres. The amount of run off that can be expected from the PMP event (19.6 inches) during Phase I is 46 acre-feet. Using HMR No. 51 72 hour PMP estimate of 31 inches, 72 acre-feet of runoff could enter the stormwater containment dam. Using the 100 year 24 hour storm of 5 inches, 12 acre-feet of runoff could enter the stormwater containment dam.

The drainage area above the stormwater containment dam during Phase II is 75 acres. The amount of runoff that can be expected from the PMP event (19.6 inches) during Phase II is 123 acre-feet. Using HMR No. 51 72 hour PMP estimate of 31 inches, 194 acre-feet of runoff could enter the stormwater containment dam. Using the 100 year 24 hour storm of 5 inches, 31 acre-feet could enter the storm water containment dam.

The stormwater containment dam is to be constructed in two phases as expansion of the mining site warrants. Under the definitions of the State of South Dakota's Dam Safety Regulations, the stormwater containment dam has the following criteria:

	Maximum Storage*	Total Storage	Height	Size	Category	Embankment Crest Length(ft)
	(ac-ft)	(ac-ft)	(ft)			
Phase I	21.4	74	51	Intermediate	3	270
Phase II	40.1	210	78	Intermediate	3	380

*With 5 feet of free board, as described by St Joe, Note: storage values do not match submitted plans

The embankment slopes are to be constructed with slopes of 2 horizontal to 1 vertical. Four test holes were drilled within the embankment area (20 to 33 feet in depth) by a professional geologist. Samples were visually classified and a geotechnical evaluation (logs enclosed in report, laboratory tests conducted on test hole samples) was conducted.

The stability of the embankment slopes was analyzed using the simplified Janbu method of slices as represented in the STABL4 computer program developed at Purdue University. Both circular arc and sliding block failure mechanisms were considered and analyzed even though the sliding block mechanism was considered most appropriate given the shallow soil over rock profile. The minimum computed safety factor was approximately 1.6.

A network of french drains will be installed below the impoundment area and under the dam to relieve any groundwater drainage that may build up under the dam structure. A breach analysis of the proposed structure was not performed as per the DISCUSSION OF BREACH POTENTIAL, in ATTACHMENT 7 of the submitted report.

The containment dam has been provided with a pumped land application system to remove excess drainage, following treatment, to levels acceptable to the State of South Dakota. Discharge to the land application site would only be considered in the event of extreme precipitation or the equivalent snowfall-runoff when the Company felt it was necessary to treat and dispose of excess water to maintain the integrity and storage capacity of the system.

St. Joe has submitted all of the required plans and specifications as directed by Chapter 74:02:08:09 Safety of Dams Rules.

Conclusions

1. St Joe has submitted all the required plans and specifications as required by Chapter 74:02:08:09 Safety of Dams Rules.
2. The Stormwater Containment Dam is Capable of retaining 100 % of the PMF, *plus a 100 year 24 hour Frequency storm.*
3. A breach analysis was not conducted.



Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501

Water Rights Division
605 773-3352

DEC 1 1988

St. Joe Richmond Hill, Inc.
4600 S. Ulster Street, Suite 300
Denver, Colorado 80237

Dear Sir:

Enclosed herewith is your Water Permit No. 1422-1 as approved by the Water Management Board authorizing you to construct your water diversion system and put the water to beneficial use, not exceeding the limits as specified in said Water Permit No. 1422-1.

Also enclosed is Form 10, Notice of Completion of Works and Application of Water to Beneficial Use, which you are to complete and submit to the Chief Engineer when you have completed the system and/or have put the water to beneficial use. An inspection can then be scheduled so that your Water License may be issued to you, thus completing your acquisition of a Water Right.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Division

JH:ms

enclosure

PLEASE NOTE: Certain changes can be made in your permit within the five year construction period, usually without affecting the priority date provided an application to amend your permit is made within the five year period-i.e. changes in location or number of diversion points (wells) or location of land to be irrigated. Well locations for wells into the same aquifer can be moved up to 660 feet without application.

Applications to amend a permit after the five year construction period will be assigned a new priority date. Applications to change water sources, to add lands or increase original diversion rates, if approved will usually receive the date of the new application as a priority date regardless of the five year construction period.



Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

1372-1
1422-1

May 17, 1989

Max Main
618 State Street
Belle Fourche, SD 57717-1419

Dear Mr. Main:

Enclosed are the copies you requested of Water Permit Nos. 1372-1 and 1422-1. These permits are listed in the name of St. Joe Richmond Hill, Inc.

If you have any questions, please contact me.

Sincerely,

GENNY McMATH
Natural Resources Analyst
Water Rights Division
(605) 773-3352

enclosures



 **Department of
Water & Natural Resources**

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

September 7, 1989

Mike Carter
Bond Gold - Richmond Hill
PO Box 892
Lead SD 57754

Dear Mr. Carter:

This letter is in regard to Water Permit Nos. 1372-1 and 1422-1 for mining operations at the Richmond Hill project.

The permits were formerly held by St. Joe Gold Corporation and are currently under the name of St. Joe Richmond Hill, Inc. Enclosed is a copy of the transfer of ownership forms with blank forms to transfer the permits to Bond Gold - Richmond Hill. A \$2.50 transfer fee also needs to be submitted with each transfer form.

The Water Management Board approved Permit No. 1372-1 with a qualification that flows over Bridal Veil Falls be monitored for a period three years to establish an average monthly flow. I am writing to determine if Bond Gold - Richmond Hill is complying with the qualification. Please forward a copy of the flow data to the Division of Water Rights by September 15, 1989, or inform us that no flow data is being collected. Enclosed is a copy of Permit No. 1372-1 with the attached qualifications.

Please contact me if you have any questions.

Sincerely,



Ron Duvall
Natural Resources Engineer
605 773-3352

enc.

cc: Eric Holm
Pete Fuller



 **Department of
Water & Natural Resources**

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

October 17, 1989

Ellen A. Cerruti, Legal Assistant
Bond Gold Richmond Hill
4600 S Ulster St.
Suite 300
Denver CO 80237

Dear Ms. Cerruti:

Enclosed are receipts which were paid for the transfer of Water Permit Nos. 1372-1 and 1422-1.

Our records now show Bond Gold Richmond Hill as the owner of these Water Rights.

Sincerely,



KAREN SCHLAAK
Senior Secretary
605 773-3352

enclosures



RECEIPT

Division of Water Rights

South Dakota Department of Water and Natural Resources

411930

Pierre, October 4, 1989

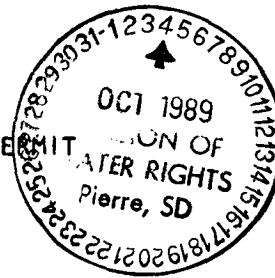
RECEIVED OF Bond Gold Richmond Hill, 4600 S. Ulster, Suite 300 Denver, CO
the following amount in fees for services rendered as provided for by law: 80237

Fee for Application for Permit No. _____ to Appropriate Water, to construct works and to put water to beneficial use _____		
Fee for Application for Permit No. _____ to Appropriate Water for Future Use _____		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____		
Fee for Filing Transfer Form <u>Water Right No. 1422-1</u>	2	50
Fee for Filing Extension Request _____		
Fee for Certified Copy of _____		
Fee for Print Copy of Map _____		
Fee for Certifying _____		
Fee for _____		
(Any Other Work Provided by Law)	Total	2 50

By

John Hatch
Chief Engineer

NOTICE OF TRANSFER OF WATER PERMIT



NO. _____

TO: Water Rights
Foss Building
Pierre, SD 57501

Date: October 3, 1989

This is to notify you that the title to the lands described as follows:

Headwater of Rubicon Creek T5N, R2E, parts of Section 14, 15, 11,

County of Lawrence, SD

~~formerly~~ owned by St. Joe Richmond Hill, Inc. 4600 S. Ulster St., Ste. 300, Denver, Colorado 80237, which corporation has effected a change of name to
~~has been transferred to~~ Bond Gold Richmond Hill Inc.

(please include complete mailing address)

together with any rights to the beneficial use of water thereon as evidenced by

Water Right Permit No. 1422-1 as provided for in SDCL 46-5-32 and 46-5-33.

You are therefore hereby requested to file this "Notice of Transfer of Water Permit" in its appropriate file at the Div. of Water Rights, Water Management Board as evidence of the change of ownership.

A copy of the change of corporate name, as filed with the Delaware Secretary of State is attached hereto.

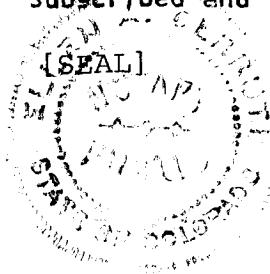
A fee of Two Dollars and Fifty Cents (\$2.50) is hereto attached to cover filing fees as required under SDCL 46-2-13.

COLORADO
STATE OF ~~SOUTH DAKOTA~~)
City and) ss.
County of Denver)

I, Douglas D. Foote being first duly sworn on my Vice President of oath depose and say:
That my relation to the above described undertaking is that of Owner, that I have read the above foregoing statement, and I know of my own personal knowledge that the information herein stated is true.


(Signed)
Douglas D. Foote, Vice President

Subscribed and sworn to before me this 3rd Day of October, 1989.



Ellen A. Cerruti
(Notary Public)

My commission expires December 15, 1991

State of Delaware

PAGE 1
DOCUMENT
SURCHARGE
PAID \$3.00

16855

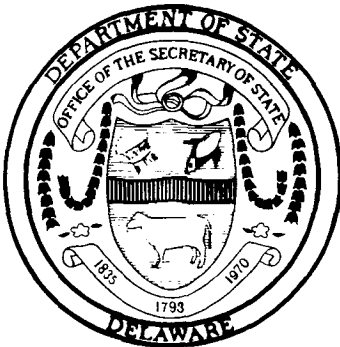


Office of Secretary of State



I, MICHAEL HARKINS, SECRETARY OF STATE OF THE STATE OF
DELAWARE DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT
COPY OF THE CERTIFICATE OF AMENDMENT OF ST. JOE RICHMOND HILL,
INC. FILED IN THIS OFFICE ON THE TWENTY-FIFTH DAY OF APRIL, A.D.
1988, AT 1:15 O'CLOCK P.M.

| | | | |



888116057

Michael Harkins, Secretary of State

AUTHENTICATION: 11672353

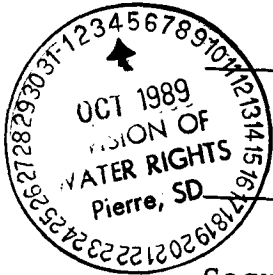
DATE: 04/25/1988

FILED 1:15 PM

CERTIFICATE OF AMENDMENT
OF THE
CERTIFICATE OF INCORPORATION
OF
ST. JOE RICHMOND HILL, INC.

APR 25 1988

[Signature]
SECRETARY OF STATE



Pursuant to Section 242 of the
General Corporation Law of the State of Delaware

We, the undersigned, being the Vice President and Assistant Secretary of St. Joe Richmond Hill, Inc., a corporation organized and existing under the General Corporation Law of the State of Delaware (the "Corporation"), do hereby certify as follows:

FIRST: That the name of the Corporation is St. Joe Richmond Hill, Inc.

SECOND: That the Corporation was incorporated under the laws of the State of Delaware on January 25, 1988.

THIRD: That the Certificate of Incorporation of the Corporation is hereby amended to change the name of the Corporation.

FOURTH: To accomplish the foregoing amendment the entire first article of the Certificate of Incorporation is stricken out as it now exists and the following new article is inserted in lieu and instead thereof:

"1. Name. The name of the corporation is Bond Gold Richmond Hill Inc., hereinafter referred to as the "Corporation"."

FIFTH: That such amendment has been duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

21st IN WITNESS WHEREOF, we have signed this certificate this day of April, 1988.

[Signature]
Douglas D. Foote, Vice President

RECEIVED FOR RECORD

JUN - 11 1988

WILLIAM J. Money, Recorder

Attest:

[Signature]
Elizabeth R. Jarvis, Assistant Secretary

Morris Nichols Cusht & Tunnelli
SC/RLS

INDEXED

68596 15

f.



Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

December 13, 1989

Pat Gochnour
Bond Gold Corp.
4600 S. Ulster, Suite 300
Denver, Colorado 80237

Dear Mr. Gochnour:

This letter serves as a follow up to the phone conversation you had with Tim Schaal, staff engineer, on December 4, 1989 concerning Water Permit No. 1422-1. Bond Gold Richmond Hill, Inc was issued this permit for two storm water containment ponds at the Richmond Hill Mining Project.

We received a letter from Bond Gold Richmond Hill Inc. dated April 18, 1989 indicating that the two ponds were redesigned into one pond. A Notice of Completion of Works and some information on the engineering design and modification of the ponds also accompanied this letter.

The letter asked that a technical modification to the permit be issued by the Department approving the construction of the single pond and that the single pond design be approved and the Notice of Completion of Work and Application of Water to Beneficial Use be accepted with the modification and approval issued from the Department.

The Department's Office of Minerals and Mining advised us that they consider a technical modification has already been covered by their approval of the single pond construction. The Water Rights Division will conduct a Final Inspection on Water Permit No. 1422-1 when the project is completed. If all requirements are met, a Water Licence will be issued. The information we received on the design of the single containment pond indicates that the project involves a second phase of construction to raise the embankment to the final design elevation. A Final Inspection will not be conducted until after we receive notice that this Phase is completed.

The single containment pond will have a larger storage capacity than the two ponds. The information we received indicates that the single pond will hold 51.3 million gallons or 157.43 acre-feet of water. Water Permit No. 1422-1 indicates that the total storage capacity of ponds 1 and 2 is 114.45 acre-feet. The provision for the additional storage is highly desirable from the standpoint of public interest. Since the yield (considering the PMF plus a 100 year storm) from the drainage above the containment dam is only 81 acre-feet, an amendment to Water Permit No. 1422-1 will not be necessary.

December 13, 1989
Pat Gochmour
Page 2

Water Permit Application No. 1422-1 has a breach analysis and downstream flood routing qualification. A statement addressing the breach analysis was included with the original plans and specifications; however, the Water Management Board will need to address this issue. Bond Gold Richmond Hill, Inc. should petition the Board requesting them to waive the breach analysis based on the statements in the original application or complete the breach analysis and submit it to the Division of Water Rights.

If you have any question, please let us know.

Sincerely,



Gale N. Selken, P.E.
Natural Resources Engineer IV
for John Hatch, Chief Engineer
Water Rights Division

cc: Mike Cepak, Office of Minerals and Mining

Fuller & Co., Ltd.

203 W. MAIN - P.O. BOX 898
LEAD, SOUTH DAKOTA 57754
TELEPHONE (605) 584-2440
TELECOPIER (605) 584-2946

April 18, 1989



Mr. John Hatch
Department of Water & Natural Resources
Joe Foss Building
523 East Capitol
Pierre, SD 57501

Re: Bond Gold Richmond Hill, Inc.
Water Right No. 1422-1
Previously St. Joe Gold Water Right No. 1422-1

Dear John:

Enclosed please find Notice of Completion of Works, copy of Receipt from the Division of Water Rights for the payment of the fee, the letter from the Department of December 1, 1988, the Application for Permit for Ponds 1 and 2, the Findings of Fact and Conclusions of Law concerning the water right, the Stipulation changing Findings of Fact 2a and maps showing the engineering design and modification of Ponds 1 and 2 into a pond.

As we have discussed, Ponds 1 and 2 were redesigned into one pond which shows in Exhibits A, A1 and A2.

We would ask that under the statutes and the rules and regulations that a technical modification to the permit be issued by the Department approving the construction of the single pond and that such single pond is approved and the Notice of Completion of Work and Application of Water to Beneficial Use is accepted with the modification and approval issued from the Department.

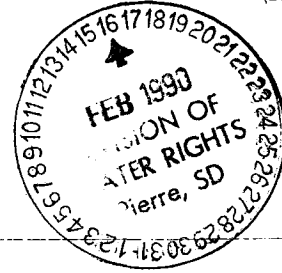
Yours truly,

FULLER & CO., LTD.

A. P. Fuller
A. P. Fuller

APF/slc

cc: Pat Gochncur (wo/enc)
Mike Carter (wo/enc)



JMM James M. Montgomery
Consulting Engineers Inc.

February 14, 1990



Mr. Gale N. Selken, P.E.
Water Rights Division
South Dakota Department of Water & Natural Resources
Joe Foss Building
523 East Capitol
Pierre, SD 57501-3181

Subject: Richmond Hill Project Dam-Breach Analysis

Dear Mr. Selken:

This letter is written on behalf of Bond Gold Richmond Hill, Inc., in reply to your January 12, 1990 letter requiring a dam breach analysis of the stormwater pond embankment at the Richmond Hill Project. The purpose of this letter is to present, for your review and approval, the method of breach analysis and breach criteria that will be used in the modeling effort.

The criteria that is being proposed is based on the breach parameters that are recommended by Fread in *The NWS Dambrk Model: Theoretical Background/User Documentation*, June 20, 1988, D. L. Fread. The method of analysis and the individual parameters are presented below.

- **Method of Analysis**-The HEC-1 Flood Hydrograph Package, Army Corps of Engineers Hydrologic Engineering Center, December, 1988 computer model will be used. This model will be used to route the flood wave resulting from a fair weather breach of the stormwater containment pond, at its PMP design capacity (53.1 mill gal at a water surface elevation of 5530 feet MSL).
- **Dam Breach Parameters**-The following breach parameters are based on the median value recommended by Fread for engineered, compacted, earthen structures:

Average Width of Breach-three times the height of pond embankment at its downstream toe;

Horizontal Component of Side Slope of Breach-0.5;

Time to Failure (time to fully form the breach)-0.5 hours.

The shape of the breach will be assumed to be trapezoidal in cross-section.

February 14, 1990

- 
- **Flood Wave Routing** -The flood wave that results from the breach of the stormwater pond embankment will be routed down Rubicon Gulch, over Bridal Veil Falls into Spearfish Creek, then down Spearfish Creek approximately 3.5 miles to Canyon Campground. The cross-sections developed for the flood routing will be computed using USGS 7.5 minute quad maps (1:24,000; 40 foot contour interval) of the study reach, which are the only topographic maps available of the Spearfish Canyon area. The cross-sections will be spaced 500 to 1500 feet apart, depending on gradient, river structures (e.g. Bridal Veil Falls), and location of buildings adjacent to Spearfish Creek.
 - **Presentation of Results**-The results of this dam breach analysis will be presented in a technical memorandum which will summarize the results of the resulting flood wave as it travels down Spearfish Canyon. The results will be presented in a tabular format, showing the approximate elevation and depth of the wave, and the time to occurrence for each cross-section. The memorandum would be accompanied by a copy of the USGS 7.5 minute quad maps showing the location of the cross-sections used in the study.

Please review the proposed method of analysis, and breach and routing parameters that are discussed in this letter at your earliest convenience. We would like to receive your comments no later than February 26, 1990, so that we may proceed with this study. If you have any questions regarding the parameters discussed in this letter, please call me at (208) 345-5865.

Sincerely,



Scott Benowitz, P.E.

cc: Pat Gochnour, Bond Gold Richmond Hill Inc.

File: 1818.0041



Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

February 21, 1990

Scott Benowitz P.E.
Montgomery Engineering
161 Mallard Drive
Boise, Idaho 83706-3974

Subject: Richmond Hill Project Dam-Breach Analysis

Dear Mr. Benowitz:

I have reviewed the proposed parameters for the breach analysis for Richmond Hill project outlined in your February 14, 1990 letter. I agree with the selected parameters for the analysis and with the proposed method for presentation of results.

If you change any of the parameters during the study please contact me.

Sincerely,

A handwritten signature in cursive script that reads "Gale N. Selken".

Gale N. Selken P.E.
Natural Resources Engineer
Water Rights Division
605 773-3352

cc: Pat Gochnour, Bond Gold Richmond Hill Inc.

 **Department of
Water & Natural Resources**

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

September 4, 1990

Pat Gochmour, Manager
Environmental Affairs and Permitting
Bond Gold Corporation
4600 S. Ulster Street
Suite 300
Denver, Colorado 80237

Dear Mr. Gochmour:

We have reviewed the technical memorandum concerning the Richmond Hill Dam Breach Study for the Richmond Hill Mining Project stormwater containment pond. We concur with the results of the study and agree that an Emergency Preparedness Plan (EPP) is not needed since the flood wave resulting from a fair-weather breach of the stormwater containment pond is comparable to a 60-year runoff event in Spearfish Creek at the Canyon Campground.

The stormwater containment pond embankment will be classified as an intermediate sized (greater than 40 feet high) category 3 dam.

If you have any questions, please let us know.

Sincerely,



Gale N. Selken, P.E.
Natural Resources Engineer IV
for John Hatch, Chief
Water Rights Division

cc: Mike Cepak, Office of Minerals and Mining

LAC Minerals (USA) LLC

Richmond Hill Mine



Water Rights



F4I

LAC

P.O. Box 892
Lead, SD 57754
(605) 578-2138

March 30, 2000

Mr. Mike Cepak
Natural Resource Engineer
Minerals and Mining Program
SD DENR
Joe Foss Building
523 East Capitol
Pierre, SD 57501



Dear Mike:

This letter is to inform the SD Department of Environment and Natural Resources that LAC Minerals (USA) Inc. has changed from a Delaware Corporation to a Delaware Limited Liability Company. This change of name did not involve any assets exchanges. LAC will now be doing business as LAC Minerals (USA) LLC. Please notify the appropriate departments and note this change for your records.

In addition, as you know, I will no longer be working for LAC on a full time basis. For future correspondence, please address the letters to Gene Fuller, Field Engineer, at this address. I will continue to consult for LAC and plan to be involved on various aspects of the Richmond Hill project on an on-going basis for at least the next year.

Please feel free to contact me regarding any additional information you may need.

LAC MINERALS (USA) LLC

Todd A. Duex
General Manager

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 1422-1

I have this day, Aug 18, 2017 made a thorough examination of the water use system constructed by LAC Minerals LLC (formerly Bond Gold Richmond Hill), 11457 Bobtail Gulch St., Central City, SD 57754 of Permit No. 1422-1, bearing the priority of 10/1/1987 authorizing storm water containment storage capacities of 41 ac-ft. and 74 ac-ft. for industrial purposes, in Lawrence County.

Inspection contact & relationship to permit holder, if applicable: **Mark Tieszen, Environmental Manager**
Gene Fuller, Environmental Specialist
correspondence: **% Jeff Burich, Closure Manager**
775-397-6819

A. Works used to divert the water:

Permit # 1422-1 authorized two storm water containment ponds of 41 ac-ft. and 74 ac-ft. respectively. The ponds were redesigned in 1989 and combined into one pond. The constructed pond is HDPE lined with a surface area of 9.3 acres, maximum depth of 61 ft. and total storage capacity of 241.4 acre feet at the top of embankment elevation 5539.2.

Dam Information:

- 1) Height to crest 79.0 feet from downstream toe
- 2) Height to primary spillway N/A feet from downstream toe
- 3) Height to secondary spillway N/A feet from downstream toe
- 4) Crest width 20 feet
- 5) Crest length 400 feet
- 6) Embankment Side Slopes 2:1
- 7) Maximum Storage @ 5 ft. freeboard 197 ac-ft
- 8) Surface Area @ crest elevation 9.3 acres
- 9) Storage at crest elevation 241.4 ac-ft
- 10) Date constructed: Fall 1988

B. Works used to transport and apply water to beneficial use:

Runoff into the storm water containment pond was recycled for heap leaching operations prior to cessation of the gold processing in 1995. Since 1995 runoff water is pumped back to the water treatment plant Feed Pond prior to undergoing biological treatment at the plant. The treatment plant discharges to Rubicon Gulch.

C. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by: Yes
list any extended period of nonuse: none
- 2) Exceptions to compliance are: none

D. Condition and Location:

1. The system is in good condition with the diversion point located as follows:
408' S and 417' E of NW corner Section 14 T5N R2E (44.401365, -103.848154).
2. The works are capable of diverting and conveying to the place of use **241.4** acre feet of water which is used for **industrial** use and the license should be issued for 115.0 acre feet.
3. All structures, wells and lands on map Yes

E. Comments or other permit(s) associated with the project:

Note: The storm water runoff volume from the area draining into the storm water containment pond is 81 acre-feet and the license is issued for the 115 acre-feet as permitted. LAC Minerals also holds Permit No. 1372-1 for up to 14 wells with a total appropriation of 0.89 cfs.

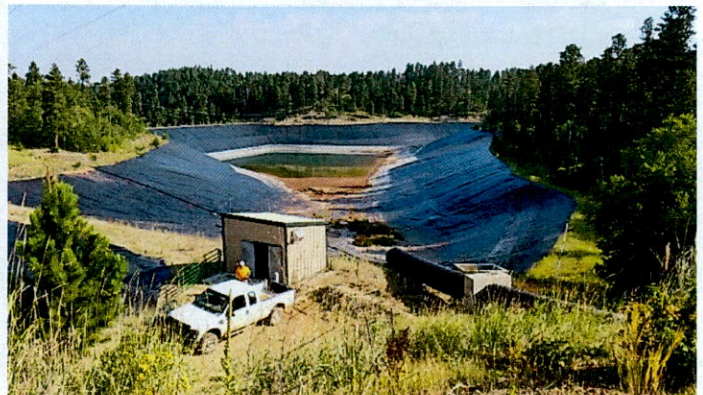


Steven Quissell
Water Rights Inspector
DENR Water Rights Program

Date Report Completed: Aug 29, 2017



Storm water containment pond, water treatment plant in background (view from embankment)



Storm water containment pond
(view from water treatment plant)



Feed Pond for water treatment plant

Water Rights # 1372-1 and 1422-1
LAC Minerals LLC
August 18, 2017

Sec 10
T005N
R02E

Sec 11
T005N
R02E

Sec 12
T005N
R02E

Supply Well SW-15
Lat: 44.400266
Lon: -103.848806

Storm Water Pond diversion pt.
Lat: 44.401365 Lon: -103.848154

Storm Water Pond
Pond Crest Elev. 5540.0
Bottom of Pool El. 5480.0

Water Treatment Plant Feed Pond
(former Preg Pond)

Sludge Pond (former Barren Pond)

Water Treatment Plant

Sec 16
T005N
R02E

Sec 15
T005N
R02E

Sec 14
T005N
R02E

Sec 13
T005N
R02E

Supply Well SW-2
Lat: 44.395415
Lon: -103.852735

Supply Well SW-8
Lat: 44.397812
Lon: -103.846008

Steven Quissell
Water Rights Inspector
DENR Water Rights Program



Sec 22
T005N
R02E

Sec 23
T005N
R02E

Sec 24
T005N
R02E

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, IGA, swisstopo, and the GIS User Community

Stormwater Pond

Revised 11/16/93
1 canister

ELEV	SURFACE AREA	INTERVAL	FT ³	GALLONS/FT	CUMULATIVE GALLONS
5479	483				0
5480	1,634	1	1,059	7,918	7,918
81	3,516	1	2,575	19,261	27,179
82	6,060	1	4,788	35,814	62,993
83	8,532	1	7,296	54,574	117,567
84	11,248	1	9,890	73,977	191,544
5485	14,339	1	12,794	95,695	287,239
86	18,038	1	16,189	121,090	408,329
87	21,866	1	19,952	149,241	557,570
88	25,501	1	23,684	177,153	734,723
89	30,809	1	28,155	210,599	945,322
5490	35,752	1	33,281	248,938	1,194,261
91	41,325	1	38,539	288,268	1,482,529
92	46,974	1	44,150	330,238	1,812,767
93	53,111	1	50,043	374,318	2,187,085
94	59,773	1	56,442	422,186	2,609,271
5495	68,438	1	64,106	479,509	3,088,780
96	77,248	1	72,843	544,866	3,633,646
97	85,556	1	81,402	608,887	4,242,533
98	92,552	1	89,054	666,124	4,908,657
99	99,292	1	95,922	717,497	5,626,153
5500	105,825	1	102,559	767,138	6,393,291
1	113,049	1	109,437	818,589	7,211,879
2	120,089	1	116,569	871,936	8,083,816
3	126,201	1	123,145	921,125	9,004,940
4	132,205	1	129,203	966,438	9,971,379
5505	138,329	1	135,267	1,011,797	10,983,176
6	144,387	1	141,358	1,057,358	12,040,534
7	150,814	1	147,601	1,104,052	13,144,585
8	157,917	1	154,366	1,154,654	14,299,239
9	165,755	1	161,836	1,210,533	15,509,773
5510	172,746	1	169,251	1,265,994	16,775,766
11	179,777	1	176,262	1,318,436	18,094,202
12	187,554	1	183,666	1,373,818	19,468,020
13	195,023	1	191,289	1,430,838	20,898,858
14	201,948	1	198,486	1,484,672	22,383,530
5515	208,844	1	205,396	1,536,362	23,919,892
16	216,143	1	212,494	1,589,451	25,509,343
17	223,210	1	219,677	1,643,180	27,152,523
18	230,155	1	226,683	1,695,585	28,848,109
19	236,716	1	233,436	1,746,098	30,594,206
5520	244,736	1	240,726	1,800,630	32,394,837
21	253,115	1	248,926	1,861,963	34,256,799
22	260,840	1	256,978	1,922,192	36,178,991
23	267,856	1	264,348	1,977,323	38,156,314
24	275,225	1	271,541	2,031,123	40,187,437
5525	282,083	1	278,654	2,084,332	42,271,769
26	289,498	1	285,791	2,137,713	44,409,482
27	297,122	1	293,310	2,193,959	46,603,441
28	304,478	1	300,800	2,249,984	48,853,425
29	312,092	1	308,285	2,305,972	51,159,396
5530	324,685	1	318,389	2,381,546	53,540,942
31	332,695	1	328,690	2,458,601	55,999,544
32	341,443	1	337,069	2,521,276	58,520,820
33	350,282	1	345,863	2,587,052	61,107,871
34	359,387	1	354,835	2,654,162	63,762,033
5535	367,958	1	363,673	2,720,270	66,482,304
36	377,550	1	372,754	2,788,200	69,270,503
37	386,236	1	381,893	2,856,560	72,127,063
38	395,572	1	390,904	2,923,962	75,051,025
5539.2	405,295	1.2	480,520	3,594,291	78,645,316

Max SS35.7 Ekv

09/03/97

Holes in
Liner
News 1-1005

SS4.2

Top Embankment →

Richmond Hill

PREG POND: 2012 Revised Volumes

* Fred Pond

Elevation	Stage Volume (cubic feet)	Volume (cubic feet)	gallons	gallons/foot
5527.0	356.43	356.43	2,666.5	2,666.5
5528.0	1,979.10	2,335.53	17,472.1	14,805.6
5529.0	3,609.50	5,945.03	44,474.8	27,002.7
5530.0	5,251.02	11,196.05	83,757.7	39,282.9
5531.0	6,984.01	18,180.06	136,005.0	52,247.4
5532.0	8,858.79	27,038.85	202,277.6	66,272.6
5533.0	10,892.94	37,931.79	283,767.7	81,490.1
5534.0	13,153.44	51,085.23	382,168.6	98,400.9
5535.0	15,672.88	66,758.11	499,417.4	117,248.8
5536.0	18,423.22	85,181.33	637,241.5	137,824.1
5537.0	21,340.62	106,521.95	796,890.7	159,649.2
5538.0	24,416.53	130,938.48	979,550.8	182,660.1
5539.0	27,506.52	158,445.00	1,185,327.0	205,776.3
5540.0	30,563.98	189,008.98	1,413,976.2	228,649.1
5541.0	33,639.07	222,648.05	1,665,630.1	251,653.9
5542.0	36,753.88	259,401.93	1,940,585.8	274,955.8
5543.0	39,942.37	299,344.30	2,239,394.7	298,808.9
5544.0	43,222.89	342,567.19	2,562,745.1	323,350.4
5545.0	46,581.82	389,149.01	2,911,223.7	348,478.6
5546.0	49,968.33	439,117.34	3,285,036.8	373,813.1
5547.0	53,254.84	492,372.18	3,683,436.3	398,399.5
5548.0	56,516.46	548,888.64	4,106,235.9	422,799.6
5549.0	59,826.44	608,715.08	4,553,797.5	447,561.6
5550.0	63,210.67	671,925.75	5,026,676.5	472,879.0
5551.0	66,683.45	738,609.20	5,525,535.4	498,858.9
5552.0	70,235.29	808,844.49	6,050,965.6	525,430.2
5553.0	73,855.90	882,700.39	6,603,481.6	552,516.0
5554.0	77,556.33	960,256.72	7,183,680.5	580,198.9

7,183,680.5

Richmond Hill

BARREN POND: 2012 Revised Volumes

Elevation	Stage Volume (cubic feet)	Volume (cubic feet)	Cummulative Gallons	gallons/foot
5558.0	8,028.0	8,028.0	60,057.5	60,057.5
5559.0	21,119.2	29,147.2	218,050.2	157,992.7
5560.0	25,300.4	54,447.6	407,322.5	189,272.3
5561.0	29,587.4	84,035.0	628,665.8	221,343.3
5562.0	34,139.9	118,174.9	884,066.4	255,400.6
5563.0	38,962.8	157,137.7	1,175,547.1	291,480.7
5564.0	43,853.8	200,991.5	1,503,617.4	328,070.3
5565.0	48,996.0	249,987.5	1,870,156.5	366,539.1
5566.0	54,489.9	304,477.4	2,277,795.4	407,638.9
5567.0	60,336.2	364,813.6	2,729,170.5	451,375.1
5568.0	66,536.5	431,350.1	3,226,930.1	497,759.6
5569.0	72,885.2	504,235.3	3,772,184.3	545,254.2
5570.0	79,321.7	583,557.0	4,365,589.9	593,405.6
5570.5	42,244.0	625,801.0	4,681,617.3	316,027.4
5571.0	43,999.0	669,800.0	5,010,773.8	329,156.5
				5,010,773.8

* SLUDGE Pond

Arleth & Assoc. Calculations done in Jan-Feb 2013 from

1422-1



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
www.state.sd.gov

October 2, 2017

1372-1
1422-1

Jeff Burich, Closure Mgr
LAC Minerals LLC
11457 Bobtail Gulch St
Central City SD 57754

Dear Mr. Burich:

On August 18, 2017 the investigation of the water use systems, including the extent of application of water to beneficial use, as developed under Water Permit Nos. 1372-1 and 1422-1, was completed by Steve Quissell, a staff engineer with our program.

The final water right document, the water license, can now be issued for both water permits. State law requires that we charge a \$50.00 fee (each) for the investigation and issuance of the water license. The licensed water rights will be similar to a property right that can not be lost as long as the water use continues and you abide by the permit requirements.

A review of the files found that although we were notified of the change between Bond Gold Richmond Hill to LAC Minerals LLC many years ago, no formal transfer of ownership or name change was filed and for some reason, no follow-up was done on our part. Prior to licensing, this needs to be taken care of so the files are up to date.

Enclosed are partially completed Notice of Transfer of Ownership forms for filing the ownership changes or in this case, name changes. Please review and make any necessary corrections. Upon completion, please sign the forms and return them to our office with a required filing fee of \$50.00 each.

The total due for the investigation and licensing of the water permits and for filing the ownership changes is \$200. The check or money order for the fee can be made payable to the Water Rights Program.

If you have any questions, please contact me.

Sincerely,

A handwritten signature in black ink that reads "Genny McMath". The signature is written in a cursive, flowing style.

Genny McMath
Water Rights Program
(605) 773-3352

LAC Minerals (USA) LLC

Richmond Hill Mine



LAC

RECEIVED

OCT 27 2017

WATER RIGHTS
PROGRAM

11457 Bobtail Gulch Street
Central City, SD 57754

October 23, 2017

Ms. Genny McMath
Water Rights Program
SD Dept. of Environment and Natural Resources
523 East Capitol / Joe Foss Building
Pierre, SD 57501-3182

Re: **Water Permit Nos. 1372-1 and 1422-1 – Water License and Transfer of Ownership Fees**

Dear Ms. McMath:

Enclosed are the completed *Notice of Transfer of Ownership* forms and a check for \$200.00 to cover the fees for filing the ownership changes (\$100) and the fees for the investigation and issuance of the water licenses (\$100) for Water Permit Nos. 1372-1 and 1422-1.

Please contact me at 722-4796 if you have any questions or need further information.

Sincerely,

Jeff Burich
Closure Manager

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date October 30, 2017

RECEIVED OF Lac Minerals USA, Inc. 2270 Corporate Circle Suite 100 Henderson NV 89074

The following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. <u>1422-1</u> to Appropriate Water, to construct and to put water to beneficial use	50	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____		
Fee for Filing Transfer Form <u>1422-1</u>	50	00
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	100 00

No. **08371**

By Jeanne Goodman
Chief Engineer *Jm*

NOTICE OF TRANSFER OF OWNERSHIP

RECEIVED

OCT 27 2017

WATER RIGHTS
PROGRAM

To: Chief Engineer
Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181

No. 1422-1

Date: October 23, 2017

I/We request that Water Permit No. 1422-1

formerly owned by: Bond Gold Richmond Hill

be transferred to: (name & address) LAC Minerals (USA) LLC

Telephone No. (605) 722-4796

Title to the following described land(s)/property has been transferred as described above:

pond located in the NW 1/4 Section 14, T5N, R2E

I/We understand that the validity of Water Permit No. 1422-1 has not been determined by this transfer action. If I/We have any questions on validity, I/We understand that only the Water Management Board has the authority to determine if a water permit/right is valid (see note).

You are requested to file this "Notice of Transfer" in the appropriate file with the Water Rights Program, as evidence of the change of ownership.

A fee of Fifty Dollars (\$50.00) is required to cover the filing fees as required under SDCL 46-2-13. This form must be signed by the new owner.

I/We Jeff Berich, the new ^{Closure Manager} owner, certify that the above information is true and correct.



(Signed by new owner)

NOTE: Water permits may be cancelled for nonconstruction after the five year construction period has expired. Once a water permit is developed and the water used, the permit becomes a right. A water right may be lost for three reasons:

1. Abandonment - no intent to use water and use is abandoned.
2. Forfeiture - no use of water for three year period without legal excuse.
3. For a third violation of a condition of a water permit/right.



1422-1
**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

JUN 18 2018

1372-1
1422-1

Mark Tieszen
Environmental Manager
LAC Minerals (USA) LLC
11457 Bobtail Gulch St
Central City SD 57754

Dear Mr. Tieszen:

Enclosed are Water License Nos. 1372-1 and 1422-1. These are the final water right documents completing the process of obtaining Water Rights. Included with the licenses is a map prepared by the staff engineer who conducted the field investigation.

As long as you use the water beneficially, as stated in the Water License, State Water Laws provide that you have a continuing right to use the water.

Sincerely,

Jeanne Goodman, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 1422-1

(1) LAC Minerals (USA) LLC, 11457 Bobtail Gulch St., Central City SD 57754 holds Water Permit No. 1422-1, authorizing storage of runoff water in two containment ponds (41 acre feet and 74 acre feet respectively). The water is appropriated for industrial purposes in containing excess runoff from heap leach ponds during precipitation events. The project is located in Lawrence County, South Dakota. Permit No. 1422-1, with a priority date of October 1, 1987 was approved March 2, 1988 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before March 2, 1993 and for the application to beneficial use of said water on or before March 2, 1997.

An investigation of the system found the ponds were redesigned in 1989 and combined into one pond. Runoff into the storm water containment pond was recycled for heap leaching operations prior to cessation of the gold processing in 1995. Since 1995, runoff water is pumped back to the water treatment plant "feed pond" prior to undergoing biological treatment at the plant. The treatment plant discharges to Rubicon Gulch.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to impound 115 acre feet of water per second for beneficial use. The pond is located:

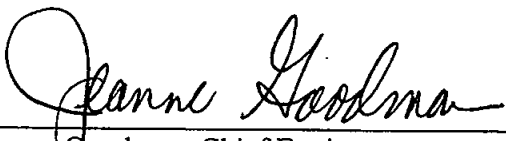
- 408'S and 417'E of the NW corner of Section 14 T5N R2E (NW ¼ NW ¼)
Latitude 44.401365, Longitude -103.848154

(3) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use.

(4) Pursuant to South Dakota Water Law 46-5-30.1 LAC Minerals (USA) LLC, 11457 Bobtail Gulch St., Central City SD 57754 the holder and/or owner of Water Right No. 1422-1 is issued a license to impound water, the right to store 115 acre feet of runoff water with a priority date of October 1, 1987 at the location specified in (2) of this license for industrial purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 1422-1 and subject to the following qualification:

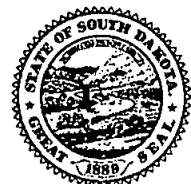
- Approval of this permit is subject to submission of plans and specifications to the chief engineer pursuant to Board Rules Chapter 74:02:08, Safety of Dams prior to construction of the ponds for review and approval. A breach analysis and downstream flood routing report shall be completed prior to determining the hazard classifications for the ponds. *Plans and specifications were submitted and approved – see letter in file dated May 17, 1988).*



Jeanne Goodman, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

JUN 18 2018

date



October 1, 2023

Delivered via Certified Mail

South Dakota Department of Agriculture and Natural Resources
Water Rights Program
523 East Capitol Avenue
Pierre, SD 57501-3182

Re: Notice of Transfer of Ownership of Water Right/Permit Nos. 1372-1 and 1422-1; Transfer to Homestake Mining Company of California

Water Rights Program,

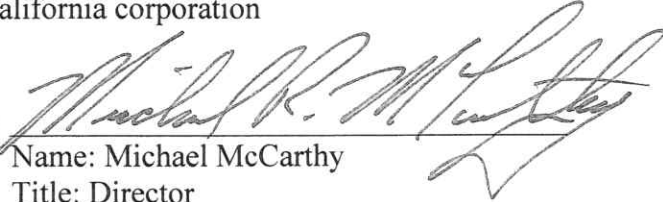
Barrick Gold Corporation has completed an internal corporate re-organization, wherein LAC Minerals (USA) LLC ("LAC") merged into Homestake Mining Company of California ("HMC"). The merger was complete on September 30, 2023. In furtherance of the merger, LAC and HMC request that Water Right/Permit Numbers 1372-1 and 1422-1 be transferred from LAC to HMC. Attached is a Notice of Transfer of Ownership of Water Right/Permit Numbers 1372-1 and 1422-1.

Should you have any questions about the corporate re-organization or the attached Notices of Transfer of Ownership, please contact Mark Tiezen at HMC at (605) 722-4860 or via email at mtiezen@barrick.com.

Sincerely,

HOMESTAKE MINING COMPANY OF CALIFORNIA,
a California corporation

By:


Name: Michael McCarthy

Title: Director

NOTICE OF TRANSFER OF OWNERSHIP

For assistance call (605) 773-3352

Mail to: SD DANR, Water Rights Program
523 E Capitol Ave
Pierre, SD 57501-3182

Water Right/Permit No. 1422-1

Date: October 1, 2023

I/We request that Water Right/Permit No. 1422-1 formerly owned by:
LAC Minerals (USA) LLC be transferred to:

New Owner Name: Homestake Mining Company of California
Address: 310 S. Main Street, Ste. 1150 mobile: 605-722-4680
City, State, Zip Salt Lake City, UT 84101 email: mtiezen@barrick.com

Title to the following described land(s)/property has been transferred as described above:

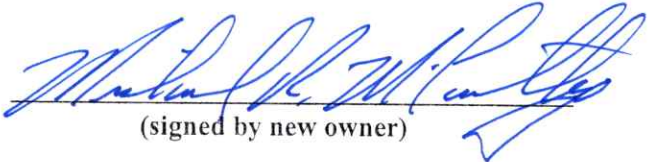
408'S and 417'E of the NW corner of Section 14 T5N R2E (NW1/4NW1/4)
Latitude 44.401365, Longitude -103.848154

☒ I understand that the validity of Water Right/Permit No. 1422-1 has not been determined by this transfer action. If I have any questions on validity, I understand that only the Water Management Board has the authority to determine if a water right/permit is valid (see note below).

You are requested to file this "Notice of Transfer" in the appropriate file with the Water Rights Program, as evidence of the change of ownership.

A fee of Fifty Dollars (\$50.00) is included to cover the filing fee as required by SDCL 46-2-13.

Michael McCarthy, Director for Homestake
I, Mining Company of California, the new owner, certify that the above information
is true and correct.


(signed by new owner)

NOTE: Water permits may be cancelled for nonconstruction after the five-year construction period has expired. Once a water permit is developed, an inspection is conducted to issue a water right license for the project as developed. A water permit/right may be cancelled for one or more of the following reasons:

1. Abandonment - no intent to use water and use is abandoned.
2. Forfeiture - no use of water for three-year period without legal excuse.
3. For a third violation of a condition of a water permit/right.

RECEIVED

OCT 02 2023

OFFICE OF
WATER

PAID

OCT 02 2023

Ck#

000197

Rec't#

1012/23

**LAW OFFICES OF
BENNETT MAIN GUBBRUD & WILLERT, P.C.**

A PROFESSIONAL CORPORATION

618 STATE STREET

BELLE FOURCHE, SOUTH DAKOTA 57717

TEL (605) 892-2011

Email: bellelaw@bellelaw.com

MAX MAIN, Associate Emeritus*

DWIGHT A. GUBBRUD*

*LICENSED in SOUTH DAKOTA and WYOMING

Est. 1908

KELLEN B. WILLERT**

**LICENSED in SOUTH DAKOTA, WYOMING and COLORADO

September 29, 2023

SD DANR, Water Rights Program
C/O Amanda Dewell
523 E. Capitol Ave.
Pierre, SD 57501

**RE: LAC Minerals (USA) LLC Transfer of Water Rights; Our File
No. 2365.315023.**

Dear Amanda:

Enclosed is our firm's check in the amount of \$100 to pay the fees to transfer Water Right Nos. 1372-1 and 1422-1 from LAC Minerals (USA) LLC to Homestake Mining Company California.

Thank you for your assistance.

Sincerely,

BENNETT MAIN GUBBRUD & WILLERT, P.C.

Dwight A. Gubbrud

DAG/ak

cc: Client (by email)

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Agriculture and Natural Resources

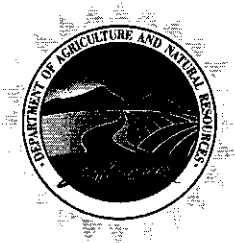
Date October 2, 2023

RECEIVED OF Bennett Main Gubbard & Willert PC Attorneys at Law 618 State Street, Belle Fourche SD 57717

The following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. _____ to Appropriate Water, to construct and to put water to beneficial use	\$ _____
Fee for Application for Permit No. _____ to Appropriate Water for Future use	\$ _____
Fee to retain Future Use Permit No. _____ after period of seven years.	\$ _____
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____	\$ _____
Fee for Filing Transfer Form <u>1422-1</u>	\$ <u>50.00</u>
Fee for _____	\$ _____
Fee for Issuing New Well Driller's License No. _____	\$ _____
Fee for Renewal of Well Driller's License No. _____	\$ _____
Fee for Issuing Well Pump Installer's License No. _____	\$ _____
Fee for Renewal of Well Pump Installer's License No. _____	\$ _____
(Any Other Work Provided by Law)	
TOTAL	\$ <u>50.00</u>

By Eric Gronlund
Chief Engineer
em



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

October 2, 2023

1372-1
1422-1

Homestake Mining Company of California
c/o Mark Tiezen
310 S Main St, Ste 1150
Salt Lake City UT, 84101

Dear Mr. Tiezen:

I have received your "Notice of Transfer of Ownership" forms and the required fees. Enclosed are receipts of payment for your records.

Water Right Nos. 1372-1 & 1422-1 previously owned by LAC Minerals (USA) LLC are now listed under Homestake Mining Company of California. I have also updated your contact information in our system.

As a reminder, so long as you use the water beneficially, as stated in the Water Rights, State Water Laws provide that you have a continuing right to use the water. Should the water not be put to beneficial use for a period longer than 3 consecutive years, without legal excuse, the Rights will be subject to cancellation.

If you have any questions, please contact me.

Sincerely,

Amanda Dewell
Water Rights Program
605 773-3352
Amanda.Dewell@state.sd.us

enclosures