



**ROBERTS & SCHAEFER**  
Engineers & Contractors *Company*

Presents

**CONTRACT 6261 CAPITAL COST REPORT**

to

**UMETCO MINERALS CORPORATION**

for the

**URANIUM WASTE STORAGE AND TRUCK WASH SYSTEM**

at

**WHITE MESA MILL SITE NEAR BLANDING, UTAH**

**OPERATING OFFICES**

120 South Riverside Plaza, Chicago, Illinois 60606

5225 Wiley Post Way - Suite 300, Salt Lake City, Utah 84116

2790 Mosside Boulevard, Monroeville, Pennsylvania 15146

(312) 236-7292 (fax 726-2872)

(801) 364-0900 (fax 364-0909)

(412) 373-8020 (fax 373-7065)

9405260155 940325  
PDR ADDCK 04008681  
B PDR

## **PREFACE**

---

On November 4, 1993 Umetco Minerals Corporation, Rust Geotech Inc. and Roberts & Schaefer Company personnel attended a project kickoff meeting at Umetco Minerals, White Mill Site in Blanding, Utah. Options were discussed for the Uranium tailings unloading, conveying and truck wash system at the White Mesa Mill Facility. Under Umetco Minerals Corporation direction, Roberts & Schaefer Company has investigated and prepared a budget capital cost estimate for first year materials, equipment and installation with a delta cost for second year materials, equipment and installation. Design criteria was discussed and is described later in this document.



**TABLE OF CONTENTS**

---

Letter of Transmittal  
Preface  
Table of Contents

**SECTION I** ..... **OBJECTIVES**

**SECTION II** ..... **SYSTEM DESCRIPTION**

Option I First year operation  
Option II Second year operation

**SECTION III** ..... **FACILITY DESCRIPTION**

Products  
Haulage  
Transfers & Hoppers  
Decontamination Pad  
Mobile Equipment  
Field Conveyors

**SECTION IV** ..... **CLARIFICATIONS**

Clarifications

**SECTION V** ..... **ATTACHMENTS**

Drawings  
Capital Cost Estimate  
Equipment List  
Rental Rates

## SECTION I

## OBJECTIVES

As briefly mentioned in the preface, the objective of this report is to provide budget capital costs ( $\pm 10\%$ ) and preliminary general arrangement drawings for the option of truck dump, conveying, and stacking system for the Umetco Minerals Uranium White Mesa disposal site. Following is a more detailed description of the option, its advantage, and estimated capital cost.

Roberts & Schaefer Company has based its design criteria on the information gathered at the site visit and by subsequent phone conversations with Umetco Minerals corporation personnel. The design temperature used was 20 degrees F, the material angle of repose for the conveyor system was established at 35 degrees. The design capacity of the system was based on 610 TPH. The hours of operation of the system was established at (3) eight hour shifts and the haulage was established at (2) 10 hour shifts.

Umetco Minerals in a cooperative effort with Roberts & Schaefer Company have provided an economical way to dump and convey the uranium tailings to the existing cells at the White Mesa site. The placement sequence of the material and the turn around time for the tractor trailer haulage has been considered in the design. The ability to keep haulage equipment undercarriage from contacting the contaminated material dictated the need for a truck dump, and tractor trailer wash station.

## **SECTION II**

## **SYSTEM DESCRIPTION**

Roberts & Schaefer Company has divided the Uranium Tailings waste storage system and truck wash system into first and second year capital cost estimates and operating philosophies.

### **FIRST YEAR OPERATIONS**

The uranium tailings storage system operations start with the unloading of the uranium tailings at the secondary truck dump system. A pad of material is built using the secondary belt feeder and the forty foot starter conveyor. After the completion of the starter pad and the 105 foot radial stacker the secondary system preparation is complete and ready for use as the backup system to the primary unloading system for the first year of operation. The primary system utilizes a 1100 foot field conveyor positioned on the dike between cell #3 and cell #4.

The forty foot starter conveyor (used to set up the secondary system) shall be moved to the end of the 1100 foot field conveyor for use in the preparation of the cell #4 pad. The primary radial stacker and grasshopper transport conveyors shall be placed at the discharge of the 40' starter conveyor. The primary pad will continue to be the storage area for the product being shipped from Monticello, Utah. Only when a the relocation of the mobile conveyors or mechanical malfunction of the system will the secondary storage area be utilized. Roberts & Schaefer Company, with input from Umetco Minerals Corporation have estimated that the pad #4 will be utilized during the first year of operation.

### **OFF SEASON OPERATIONS & CONSTRUCTION**

During the off season (when haulage has stopped) the addition a 600 foot re-locatable conveyor system will be placed into the east end of cell #3, the tail of this conveyor shall be located at the head of the 1100 foot field conveyor and a radial stacker shall be relocated from cell #4 to its new position in cell #3 at the head of the 600 foot re locatable conveyor. The radial stacker shall be move and grasshoppers added as the storage process continues.

The additional 1000 feet of field conveyor support steel will be placed on the dike between cell #3 and cell #4 leaving a space for the relocation of the head frame during the second year operation.

### **SECOND YEAR OPERATION**

This area is now ready for beginning the second year operation. At some time during the second year of operation an addition to the 1100 foot field conveyor of a 1000 foot field conveyor will be accomplished. This addition will make the field conveyor 2100 foot in length. The starter conveyor used in the first year of operation will be placed at the end

of the 2100 foot conveyor in order to start a new pad for the portable equipment. The placement of these portable grasshopper conveyors and the radial stacker should finish the haulage for the second year. Just prior to the completion of the second year (final year) of haulage the emergency space in cell #4 is to be filled with tailings. Coordination with the haulage will need to be considered at this time. An outage of the primary system will be necessary to string the conveyor belting, relocate the head frame and starter conveyor to the west end of cell #3 when the east end of the cell #3 is to its capacity. During this period of time the secondary system shall be available for the storage of material into cell #4.

Details of the capital cost are contained in Section V of this report. The estimated capital cost for this option amounts to **\$2,872,733** for the first year of operation, with an additional **\$186,404** for the second year of operation.

### **SECTION III**

### **FACILITY DESCRIPTION**

The White Mesa Mill disposal site is located approximately 2 miles from Blanding, Utah. The waste product will be hauled approximately twenty miles from the mill tailings site near Monticello, Utah to the White Mesa site. The uranium tailings shall be transported to the site via over-the-highway haul trucks and trailers. The plan incorporates only truck haulage of material to the plant. The unloading system will be shut down over the winter months and the disposal is expected to last two seasons. Design temperature for the plant is 20°F to +105°F. The truck haulage operates 6 days per week, (2) two 10 hours shifts per day. The facility shall operate 6 days per week with three (3) eight hour shifts.

### **PRODUCTS**

The White Mesa facility currently has room in the existing lined cells for the storage of the uranium mine tailings from the Monticello plant site. The uranium tailings have a moisture content that varies from 5% to 30%. The material is sand like with a sieve analysis of 65 to 325 mesh and weighs 2700 pounds per cubic yard.

### **HAULAGE**

All raw materials from the Monticello site are transported to the unloading facility by a fleet of thirty (30) belly dumps and pups tractor-trailers. Each truck trailer shall have the capacity of 28,000 pounds each (gross weight). Tractor-trailers are loaded at the Monticello site by others. The trucks shall deliver material on an approximate 4 minute interval.

### **TRANSFERS AND HOPPERS**

The truck hoppers shall be stainless steel lined with a minimum slope of 60 degrees. The transfer points on the conveyor system shall be equipped with the spray nozzles for the dust suppression of material as needed.

The truck dump station primary and secondary hoppers are constructed of 1/4" mild steel plate lined with stainless steel. A structural steel bridge will be designed between the two truck hoppers. The estimate for bridge is included in the truck dump estimate sheet (I-S-1).

## DECONTAMINATION PAD

The tractor trailer decontamination pad shall be a closed loop system. The wash station will have (40) nozzles to accommodate the cleaning of the undercarriage of trucks at an interval of 4 minutes for each unit. The Uranium tailings cleaned from the truck washing shall be recycled through the clariflocculator as indicated on Roberts & Schaefer drawing 6261-FS1. The recycled water shall also be used for transfer station dust suppression.

## MOBILE EQUIPMENT

The six (6) "Grasshopper type" transfer conveyors (36' x 105') are capable of 610 TPH with a transfer height of 6 feet at the head end discharge. The conveyors are equipped with a 20 HP TEFC, 480 volt, 3 phase, 60 hertz motor, Dodge shaft mounted reducer with V-belt drive and guard, lagged head pulley, flat bar tail pulley, Dodge pillow block bearings, S/A CEMA "C" roller bearing idlers, 2-ply rubber belting,

The two (2) CRS portable Radial stackers (36" x 105') are capable of 610 TPH. The stackers are equipped with 30 HP TEFC electric motors, Dodge shaft mounted reducers with V-belt drives and guards, lagged head pulley, flat bar tail pulleys, Dodge pillow block bearings, S/A CEMA "C" roller bearing idlers, 2-ply rubber belting, single axle carrier with four (4) 10:00 x 20 tires and rims, air brakes, king pin, manual luffing. Electric traversing includes a 3 HP Dodge gear drive, chains and sprockets, motor mount and electric panel with controls and limit switches, and travel folding head and tail sections.

The Transfer conveyor ( 36" X 40' starter conveyor ) is equipped with a 10 HP TEFC electric motor, Dodge shaft mount reducer, V-belt drive and guard, S/A CEMA "C" roller bearing idlers, 2-ply rubber belting.

Budget quotes for the portable conveyors and stackers have been obtained from Crusher Sales and Rental Inc., Cedar City, Utah.

## FIELD CONVEYORS

The field conveyors are supported on steel stringer sections utilizing wood ties as the foundation. Conveyor covers are not included to cover the belt. The conveyor CV-C shall be designed so that it is easily extendible for the second year installation.

The stationary field conveyors will be built on stringer frames supported from wood ties. Conveyor CV-C will be extended from 1100 (first year operation ) to 2100 feet (second year operation). The remainder of the field conveyors shall remain the same length throughout the storage process.



## SECTION IV

## CLARIFICATIONS

### CLARIFICATIONS

The following clarifications are presented to establish the basis for Roberts & Schaefer Company's estimated capital cost and to define our understanding of the work. This report is intended to be as responsive as possible and these clarification statements are intended to identify questions and comments regarding the proposed Scope of Work.

- 1) Roberts & Schaefer Company has excluded all earthwork costs.
- 2) The capital cost estimate is based on the conceptual design drawings developed by Roberts & Schaefer Company. Capital costs have been established utilizing historical unit prices for major mechanical equipment, structural steel, and concrete. Costs for piping, platework, and electrical disciplines have been calculated based on projects similar in nature which have been completed by Roberts & Schaefer Company.
- 3) All costs are in fourth quarter 1993 dollars.
- 4) Cost associated with winter construction are excluded.
- 5) Construction labor is assumed to be competitively bid, open shop labor.
- 6) The estimate is based on new equipment purchases. No evaluation for used equipment has been considered.
- 7) Rental rates for the mobile equipment have been received by Crusher Rental & Sales and may be found in the section V of the report.
- 8) Roberts & Schaefer Company based Construction Management costs on historical percentages of projects similar in nature.
- 9) Mobile conveyor and stacker equipment prices are based on F.O.B. Cedar City, Utah. Mobile equipment prices from Crusher Rental and Sales are good 60 days from the issue of this report.
- 10) Pricing for Conveyor covers have not been included in this estimate.
- 11) Roberts & Schaefer Company has not included pricing for geotechnical investigation, site surveying or permits in the capital cost estimate.
- 12) Escalation factor has not been considered in the preparation of the capital cost estimate.

MRAP - 710002307 - GEOTECHNICAL DATA BASE FOR MONTICELLO MILLSITE CHARACTERIZATION - R.N. MORRIS: CREATED 09/30/91; LAST UP

AREA	DATA SOURC	BORING OR TEST PIT NUMBER	SAMPLE NUMBER & TYPE	TOP OF SAMPLE (FEET)	BASE OF SAMPLE (FEET)	SAMPLE MIDPOINT (FEET)	USCS SYMBOL	MATERIAL TYPE	IN-PLACE DRY DENSITY (PCF)	NATURAL MOIS CONT (PERC)
CARBONATE PILE	BENDIX	MRAP-85-01	MKB-652/ST	6.0	8.0	7.00	CL-ML(?)	Tails-sim(?)		89.6
CARBONATE PILE	BENDIX	MRAP-85-02	MKB-661/ST	2.0	4.0	3.00	SM	Tails-snd		107.5
CARBONATE PILE	BENDIX	MRAP-85-02*	MKB-787/BULK	1.0	1.0	1.00	ML	Cover		NA
CARBONATE PILE	BENDIX	MRAP-85-02*	MKB-788/BULK	3.0	3.0	3.00	SP	Tails-snd		NA
CARBONATE PILE	BENDIX	MRAP-85-02*	MKB-790/BULK	6.0	6.0	6.00	SC(?)	Tails-sim		NA
CARBONATE PILE	BENDIX	MRAP-85-03	MKB-749/ST	2.0	4.0	3.00	CL-ML	Tails-sim&snd		92.1
CARBONATE PILE	D&M	31SW91-045	1/SS	2.0	4.0	3.00	CL	Tails-sim		NA
CARBONATE PILE	D&M	31SW91-045	2/SS	4.5	6.0	5.25	SP-SM	Tails-snd		NA
CARBONATE PILE	D&M	31SW91-045	3/SS	6.0	8.0	7.00	SP-SM	Tails-snd		NA
CARBONATE PILE	D&M	31SW91-045	5/SS	10.0	12.0	11.00	SP-SM	Tails-snd		NA
CARBONATE PILE	D&M	31SW91-045	6/SS	13.0	14.0	13.50	SM	Tails-snd		NA
CARBONATE PILE	D&M	31SW91-045	7/SS	14.0	16.0	15.00	SM	Tails-snd		NA
CARBONATE PILE	D&M	31SW91-045	8/SS	17.4	18.0	17.70	CL/ML/SM	Tails-snd/sim		NA
CARBONATE PILE	D&M	31SW91-045	9/SS	19.5	20.0	19.75	SM	Tails-snd		NA
CARBONATE PILE	D&M	31SW91-045	10/SS	20.2	22.0	21.10	SM	Tails-snd		NA
CARBONATE PILE	D&M	31SW91-045	13/SS	26.2	28.2	27.20	SM	Tails-snd		NA
CARBONATE PILE	D&M	31SW91-045	14/SS	28.3	30.0	29.15	SM	Tails-snd		NA
CARBONATE PILE	D&M	31SW91-045	15/SS	31.2	31.8	31.50	ML/SM	Tails-snd/sim		NA
CARBONATE PILE	D&M	31SW91-045	16/SS	32.7	34.0	33.35	CL/ML/SM	Tails-snd/sim		NA
CARBONATE PILE	D&M	31SW91-045	17/SS	35.0	36.0	35.50	CL/ML/SM	Tails-snd/sim		NA
CARBONATE PILE	D&M	31SW91-045	18/SS	36.0	38.0	37.00	SP-SM	Tails-snd		NA
CARBONATE PILE	D&M	31SW91-045	19/SS	40.0	42.0	41.00	SM	Tails-snd&sim		NA
CARBONATE PILE	D&M	31SW91-045	20/SS	43.0	44.0	43.50	SM	Tails-snd&sim		NA
CARBONATE PILE	D&M	31SW91-045	21/SS	44.5	45.8	45.15	CL	Alluvium		NA
CARBONATE PILE	D&M	31SW91-045	22/SS	46.4	47.5	46.95	CL	Alluvium		NA
CARBONATE PILE	D&M	31SW91-045	23/SS	48.0	50.0	49.00	CL	Alluvium		NA
CARBONATE PILE	D&M	31SW91-045	24/SS	51.0	52.0	51.50	CL	Alluvium		NA
CARBONATE PILE	D&M	31SW91-045	25/SS	52.0	52.3	52.15	CL	Alluvium		NA
CARBONATE PILE	D&M	31SW91-045	26/SS	54.5	56.0	55.25	CL	Alluvium		NA
CARBONATE PILE	D&M	31SW91-046	28/SS	3.0	4.2	3.60	SC/CL	Cover(?)		NA
CARBONATE PILE	D&M	31SW91-046	3B/SS	4.2	5.0	4.60	SM	Tails-snd		NA
CARBONATE PILE	D&M	31SW91-046	4B/SS	8.0	10.0	9.00	CL	Alluvium		NA
CARBONATE PILE	D&M	31SW91-050a	2/SS	3.5	5.5	4.50	SM	Tails-snd(Cover?)		NA
CARBONATE PILE	D&M	31SW91-050a	3/ST	5.5	7.5	6.50	SM	Tails-snd		88.6
CARBONATE PILE	D&M	31SW91-050a	5/SS	10.0	10.5	10.25	SP-SM	Tails-snd		NA
CARBONATE PILE	D&M	31SW91-051	2/ST	5.5	8.0	6.75	SP-SM	Tails-snd		93.5
CARBONATE PILE	D&M	31SW91-051	4/ST	13.0	15.5	14.25	SM	Tails-snd		82.5
CARBONATE PILE	D&M	31SW91-051	5/ST	18.0	20.5	19.25	SM	Tails-snd		87.1
CARBONATE PILE	D&M	31SW91-051	8/SS	33.0	35.0	34.00	SM	Tails-snd		NA
CARBONATE PILE	D&M	31SW91-051	9/SS	38.0	39.5	38.75	SP	Tails-snd		NA
CARBONATE PILE	D&M	31SW91-051	11/SS	43.5	44.4	43.95	CL	Alluvium		NA
CARBONATE PILE	D&M	31SW91-051	12/SS	48.0	49.3	48.65	CL	Alluvium		NA
CARBONATE PILE	D&M	31SW91-052	1/SS	4.2	6.0	5.10	SM/CL	Tails-snd/sim		NA
CARBONATE PILE	D&M	31SW91-052	2/SS	9.5	10.2	9.85	CL	Tails-sim		NA
CARBONATE PILE	D&M	31SW91-052	5/SS	15.0	16.0	15.50	SM	Tails-snd		NA
CARBONATE PILE	D&M	31SW91-052	6/SS	19.0	20.6	19.80	SM	Tails-snd		NA
CARBONATE PILE	D&M	31SW91-052	8/SS	29.2	31.0	30.10	CL	Alluvium		NA
CARBONATE PILE	D&M	31SW91-052	9/SS	3-	36.0	35.00	CL	Alluvium		NA
CARBONATE PILE	D&M	31SW91-052	10/SS	39.0	41.0	40.00	CL	Alluvium		NA
CARBONATE PILE	D&M	31SW91-052	12/SS	49.0	51.0	50.00	CL	Alluvium		NA
CARBONATE PILE	D&M	31SW91-056	1/SS	4.5	5.5	5.00	SM	Tails-snd		NA
CARBONATE PILE	D&M	31SW91-056	5/SS	19.0	19.4	19.20	CL	Alluvium		NA
CARBONATE PILE	D&M	31SW91-056	6/SS	24.0	26.0	25.00	CL	Alluvium		NA
CARBONATE PILE	D&M	31SW91-056	7/SS	29.0	31.0	30.00	CL	Alluvium		NA
CARBONATE PILE	D&M	31SW91-056	8/SS	34.5	34.6	34.55	Km	Shale		NA
CARBONATE PILE	D&M	TP-6	1/ST	3.5	4.0	3.75	SM	Tails-snd		86.1
CARBONATE PILE	D&M	TP-6	-/BULK	4.5	4.5	4.50	SM	Tails-snd		NA
CARBONATE PILE	D&M	TP-6	2/ST	6.0	6.5	6.25	ML	Tails-sim(?)		88.3
CARBONATE PILE	D&M	TP-6	3/ST	9.0	9.5	9.25	ML	Tails-sim(?)		71.0



UPDATED 11/22/91

GRAVITY	SPECIFIC GRAVITY	FRACTION PASSING #4 SIEVE (PERCENT)	FRACTION PASSING #200 SIEVE (PERCENT)	LIQUID LIMIT	PLASTICITY INDEX	ASTM D 698	ASTM D 698	OTHER TESTS
						MAXIMUM DRY DENSITY (PCF)	OPTIMUM MOISTURE CONTENT (PERCENT)	
4.6	2.57	100.0	97.0	NP	NP	NA	NA	Consol w/perm. CMR @15 bar
4.0	2.60	100.0	49.0	NP	NP	NA	NA	Consol w/perm. CMR @15 bar
NA	NA	100.0	66.0	NA	NA	114.7	14.5	
NA	NA	NA	NA	NA	NA	102.9	13.0	
NA	2.70	NA	NA	NA	NA	94.6	28.3	
27.4	2.67	100.0	84.0	20.0	4.0	NA	NA	Consol w/perm. CMR @15 bar
35.8	NA	NA	NA	NA	NA	NA	NA	
3.3	NA	NA	NA	NA	NA	NA	NA	
5.4	2.65	100.0	11.4	NA	NA	NA	NA	
4.5	NA	NA	NA	NA	NA	NA	NA	
5.5	NA	100.0	16.1	NA	NA	NA	NA	
14.4	NA	NA	NA	NA	NA	NA	NA	
27.5	NA	NA	NA	NA	NA	NA	NA	
3.7	2.65	100.0	15.6	NP	NP	NA	NA	
6.3	NA	100.0	23.8	NA	NA	NA	NA	
5.8	NA	NA	NA	NA	NA	NA	NA	
8.6	NA	NA	NA	NA	NA	NA	NA	
38.0	NA	NA	NA	NP	NP	NA	NA	
21.8	NA	NA	NA	NA	NA	NA	NA	
22.9	NA	NA	NA	NA	NA	NA	NA	
24.2	2.70	100.0	9.7	NA	NA	NA	NA	
23.2	NA	NA	NA	NA	NA	NA	NA	
25.2	NA	100.0	14.9	NA	NA	NA	NA	
28.9	NA	NA	NA	NA	NA	NA	NA	
26.8	NA	NA	NA	NA	NA	NA	NA	
23.9	NA	NA	NA	33.9	18.3	NA	NA	
23.0	NA	NA	NA	NA	NA	NA	NA	
28.0	NA	NA	NA	NA	NA	NA	NA	
55.6	NA	NA	NA	NA	NA	NA	NA	
10.9	NA	NA	NA	NA	NA	NA	NA	
12.4	NA	NA	NA	NA	NA	NA	NA	
20.1	NA	NA	NA	NA	NA	NA	NA	
29.7	NA	88.2	12.5	NA	NA	NA	NA	
25.4	NA	NA	NA	NA	NA	NA	NA	
21.3	NA	100.0	7.0	NA	NA	NA	NA	
7.2	NA	100.0	10.2	NA	NA	NA	NA	Triax-CUPP
6.8	NA	100.0	21.8	NA	NA	NA	NA	Triax-CUPP, Perm
7.1	NA	100.0	18.3	NA	NA	NA	NA	Triax-CUPP
11.9	2.78	100.0	14.6	NA	NA	NA	NA	
25.6	NA	NA	NA	NA	NA	NA	NA	
25.5	NA	NA	NA	39.1	19.1	NA	NA	
24.8	NA	NA	NA	NA	NA	NA	NA	
7.7	NA	NA	NA	NA	NA	NA	NA	
31.1	NA	NA	NA	NA	NA	NA	NA	
6.2	NA	100.0	14.9	NA	NA	NA	NA	
8.5	NA	NA	NA	NA	NA	NA	NA	
37.8	2.58	NA	NA	49.0	23.9	NA	NA	
9.2	NA	NA	NA	NA	NA	NA	NA	
22.2	NA	NA	NA	NA	NA	NA	NA	
26.8	NA	NA	NA	NA	NA	NA	NA	
12.4	2.69	100.0	35.7	NA	NA	NA	NA	
15.5	NA	NA	NA	NA	NA	NA	NA	
19.8	NA	NA	NA	NA	NA	NA	NA	
19.4	NA	NA	NA	NA	NA	NA	NA	
3.8	NA	NA	NA	NA	NA	NA	NA	
4.7	NA	NA	NA	NA	NA	NA	NA	
6.1	NA	NA	NA	NP	NP	101.9	17.2	Consol, Perm
20.2	NA	NA	NA	21.5	0.2	NA	NA	
35.4	NA	NA	NA	NA	NA	NA	NA	

ANSTEC  
APERTURE  
CARD

Also Available on  
Aperture Card

9405260155-01

AREA	DATA SOURC	BORING OR TEST PIT NUMBER	SAMPLE NUMBER & TYPE	TOP OF SAMPLE (FEET)	BASE OF SAMPLE (FEET)	SAMPLE MIDPOINT (FEET)	USCS SYMBOL	MATERIAL TYPE	IN-PLACE DRY DENSITY (PCF)	NATURAL MOISTURE CONTENT (PERC)
CARBONATE PILE	D&M	TP-6	4/ST	10.5	11.0	10.75	CL	Tails-sim		70.6
CARBONATE PILE	D&M	TP-6	6/ST	17.0	17.5	17.25	SM	Tails-snd		73.3
CARBONATE PILE	D&M	TP-6	-/BULK	18.0	18.0	18.00	SM	Tails-snd(?)		NA
CARBONATE PILE	D&M	TP-11	-/BULK	6.0	6.0	6.00	SM	Tails-snd(?)		NA
CARBONATE PILE	D&M	TP-11	-/BULK	15.0	15.0	15.00	CL	Tails-sim		NA
VANADIUM PILE	BENDIX	MRAP-85-04	MKB-682/ST	4.0	6.0	5.00	SC	Tails-snd&sim		80.7
VANADIUM PILE	BENDIX	MRAP-85-04*	MKB-783/BULK	1.0	1.0	1.00	ML	Cover		NA
VANADIUM PILE	BENDIX	MRAP-85-04*	MKB-784/BULK	2.0	2.0	2.00	SP	Tails-snd		NA
VANADIUM PILE	BENDIX	MRAP-85-04*	MKB-786/BULK	7.0	7.0	7.00	ML	Tails-sim		NA
VANADIUM PILE	BENDIX	MRAP-85-05	MKB-678/ST	8.0	8.0	8.00	CL-ML	Tails-sim		76.1
VANADIUM PILE	D&M	31SW91-031	3/ST	5.5	7.5	6.50	SM	Tails-snd		NA
VANADIUM PILE	D&M	31SW91-032	1/SS	2.0	3.5	2.75	SM/SC	Cover		NA
VANADIUM PILE	D&M	31SW91-032	2/SS	3.5	5.0	4.25	SM/CL	Tails-snd/sim		NA
VANADIUM PILE	D&M	31SW91-032	3/SS	5.0	6.5	5.75	SM	Tails-snd(?)		NA
VANADIUM PILE	D&M	31SW91-032	5/SS	8.5	10.0	9.25	ML	Tails-sim		NA
VANADIUM PILE	D&M	31SW91-032	6/SS	10.0	11.5	10.75	SM	Tails-snd&sim		NA
VANADIUM PILE	D&M	31SW91-032	7/SS	11.5	13.0	12.25	ML	Tails-sim		NA
VANADIUM PILE	D&M	31SW91-032	9/SS	15.0	16.5	15.75	SM/CL	Tails-snd/sim		NA
VANADIUM PILE	D&M	31SW91-032	10/SS	16.5	18.0	17.25	SM/CL	Tails-snd/sim		NA
VANADIUM PILE	D&M	31SW91-032	11/SS	19.0	19.5	19.25	CL	Alluvium		NA
VANADIUM PILE	D&M	31SW91-032	12/SS	19.5	21.5	20.50	CL	Alluvium		NA
VANADIUM PILE	D&M	31SW91-032	13/SS	21.5	23.5	22.50	CL	Alluvium		NA
VANADIUM PILE	D&M	31SW91-032	14/SS	24.0	25.0	24.50	CL	Alluvium		NA
VANADIUM PILE	D&M	31SW91-032	15/SS	25.5	27.5	26.50	CL	Alluvium		NA
VANADIUM PILE	D&M	31SW91-032	16/SS	27.5	29.5	28.50	CL	Alluvium		NA
VANADIUM PILE	D&M	31SW91-032	17/SS	29.5	31.5	30.50	CL	Alluvium		NA
VANADIUM PILE	D&M	31SW91-032	18/SS	31.5	33.5	32.50	CL	Alluvium		NA
VANADIUM PILE	D&M	31SW91-032	19/SS	33.5	34.8	34.15	CL	Alluvium		NA
VANADIUM PILE	D&M	31SW91-032	20/SS	35.5	37.5	36.50	CL	Alluvium		NA
VANADIUM PILE	D&M	31SW91-032	21/SS	37.5	39.5	38.50	CL	Alluvium		NA
VANADIUM PILE	D&M	31SW91-032	22/SS	39.5	41.0	40.25	CL	Alluvium		NA
VANADIUM PILE	D&M	31SW91-032	23/SS	41.5	42.8	42.15	SC/CL	Alluvium		NA
VANADIUM PILE	D&M	31SW91-032	24/SS	43.5	44.9	44.20	GC	Alluvium		NA
VANADIUM PILE	D&M	31SW91-032	28/SS	48.5	48.9	48.70	Km	Shale		NA
VANADIUM PILE	D&M	31SW91-40b	3/ST	6.0	7.5	6.75	CL	Tails-sim		95.1
VANADIUM PILE	D&M	31SW91-40b	8/SS	13.5	14.8	14.15	CL	Tails-sim		NA
VANADIUM PILE	D&M	31SW91-40b	9/SS	18.5	20.5	19.50	CL	Tails-sim		NA
VANADIUM PILE	D&M	31SW91-40b	11/SS	23.5	25.3	24.40	CL	Tails-sim		NA
VANADIUM PILE	D&M	31SW91-041	1/SS	5.0	6.0	5.50	CL	Tails(?)&sim(?)		NA
VANADIUM PILE	D&M	31SW91-041	2/SS	10.0	11.0	10.50	CL	Alluvium		NA
VANADIUM PILE	D&M	31SW91-041	3/SS	14.0	16.0	15.00	CL	Alluvium		NA
VANADIUM PILE	D&M	31SW91-041	6/SS	24.0	26.0	25.00	CL	Alluvium		NA
VANADIUM PILE	D&M	31SW91-041	7/SS	29.0	31.0	30.00	CL	Alluvium		NA
VANADIUM PILE	D&M	31SW91-041	8/SS	34.5	36.0	35.25	CL	Alluvium		NA
VANADIUM PILE	D&M	31SW91-041	9/SS	39.0	40.0	39.50	SC	Alluvium		NA
VANADIUM PILE	D&M	31SW91-041	10/SS	44.0	44.5	44.25	Kd	Sandstone		NA
VANADIUM PILE	D&M	TP-5	1/ST	4.5	5.0	4.75	SM	Tails-snd		90.1
VANADIUM PILE	D&M	TP-5	2/ST	5.5	6.0	5.75	CL	Tails-sim		76.7
VANADIUM PILE	D&M	TP-5	4/ST	9.0	9.5	9.25	CL	Tails-sim		71.0
VANADIUM PILE	D&M	TP-5	5/ST	11.0	11.5	11.25	CL	Tails-sim		84.8
VANADIUM PILE	D&M	TP-5	7/ST	14.0	14.5	14.25	CL	Tails(?)&sim(?)		69.8
VANADIUM PILE	D&M	TP-12	-/BULK	6.0	6.0	6.00	CL	Tails-sim		NA
VANADIUM PILE	D&M	TP-12	-/BULK	12.0	12.0	12.00	CL	Tails-sim		NA
EAST PILE	BENDIX	MRAP-85-06	MKB-689/ST	2.0	4.0	3.00	SM	Tails-snd		96.4
EAST PILE	BENDIX	MRAP-85-06*	MKB-779/BULK	1.0	1.0	1.00	ML	Cover		NA
EAST PILE	BENDIX	MRAP-85-06*	MKB-780/BULK	3.0	3.0	3.00	SM(?)	Tails-snd		NA
EAST PILE	BENDIX	MRAP-85-06*	MKB-782/BULK	15.0	15.0	15.00	SP(?)	Tails-snd(?)		NA
EAST PILE	BENDIX	MRAP-85-07	MKB-697/ST	2.0	4.0	3.00	SM	Tails-snd		94.0
EAST PILE	BENDIX	MRAP-85-08	MKB-714/ST	12.0	14.0	13.00	CL	Tails-sim		108.6
EAST PILE	BENDIX	MRAP-85-09	MKB-706/ST	4.0	6.0	5.00	ML	Tails-sim		100.7
EAST PILE	D&M	31SW91-002	1/SS	3.5	5.5	4.50	SP	Tails-snd		NA
EAST PILE	D&M	31SW91-002	2/SS	8.5	10.5	9.50	SM/ML	Tails-snd/sim		NA
EAST PILE	D&M	31SW91-002	3/SS	13.5	15.5	14.50	SM/ML	Tails-snd/sim		NA
EAST PILE	D&M	31SW91-002	NA	24.0	25.0	24.50	CL	Alluvium		NA
EAST PILE	D&M	31SW91-002	10/SS	28.0	30.0	29.00	CL	Alluvium		NA
EAST PILE	D&M	31SW91-003	3/SS	7.0	8.3	7.65	ML	MVP spoil		NA

DATED 11/22/91

GRAVITY (PERCENT)	FRACTION PASSING #4 SIEVE (PERCENT)	FRACTION PASSING #200 SIEVE (PERCENT)	LIQUID LIMIT	PLASTICITY INDEX	ASTM D 698	ASTM D 698	OTHER TESTS
					MAXIMUM DRY DENSITY (PCF)	OPTIMUM MOISTURE CONTENT (PERCENT)	
48.3	NA	NA	NA	NA	NA	NA	
19.6	NA	NA	NA	NA	NA	NA	
15.5	NA	100.0	46.4	NA	NA	NA	
15.7	2.76	100.0	47.6	NA	95.1	18.9	
53.1	NA	100.0	91.3	NA	103.7	16.0	Dir Shear, Perm, Mod Proct
39.8	2.62	100.0	44.0	27.0	96.8	24.0	
NA	NA	NA	71.0	NA	NA	NA	Consol w/perm, CMR @15 bar
NA	2.67	NA	NA	NA	114.3	13.7	
NA	2.60	NA	NA	NA	107.6	13.2	
41.7	2.63	100.0	94.0	21.0	113.8	15.3	
9.4	2.69	100.0	21.4	39.1	NA	NA	Consol w/perm, CMR @15 bar
16.8	NA	NA	NA	NA	NA	NA	
18.9	NA	NA	NA	NA	NA	NA	
15.0	NA	NA	NA	NA	NA	NA	
34.1	NA	NA	NA	NA	NA	NA	
11.5	2.69	100.0	21.8	NA	NA	NA	
25.0	NA	NA	NA	NA	NA	NA	
28.0	NA	NA	NA	NA	NA	NA	
16.3	NA	NA	NA	NA	NA	NA	
20.9	NA	NA	NA	NA	NA	NA	
18.7	NA	NA	NA	NA	NA	NA	
20.1	NA	NA	NA	44.3	24.0	NA	
18.0	NA	NA	NA	NA	NA	NA	
23.9	NA	NA	NA	NA	NA	NA	
17.6	NA	NA	NA	NA	NA	NA	
17.9	NA	NA	NA	NA	NA	NA	
19.5	NA	NA	NA	NA	NA	NA	
17.6	NA	NA	NA	37.9	19.1	NA	
23.7	NA	NA	NA	NA	NA	NA	
22.2	NA	NA	NA	NA	NA	NA	
23.1	NA	NA	NA	NA	NA	NA	
23.2	NA	NA	NA	NA	NA	NA	
16.9	NA	NA	NA	NA	NA	NA	
16.6	NA	NA	NA	NA	NA	NA	
25.3	NA	NA	NA	45.7	24.9	NA	Perm, CMR
20.3	2.80	NA	NA	46.7	22.5	NA	
19.4	NA	NA	NA	NA	NA	NA	
23.4	NA	NA	NA	NA	NA	NA	
23.8	NA	NA	NA	31.7	14.0	NA	
21.3	NA	NA	NA	NA	NA	NA	
18.8	NA	NA	NA	NA	NA	NA	
14.9	NA	NA	NA	NA	NA	NA	
19.3	NA	NA	NA	NA	NA	NA	
27.7	NA	NA	NA	NA	NA	NA	
13.2	NA	100.0	40.1	NA	NA	NA	
9.3	NA	NA	NA	NA	NA	NA	
7.4	NA	NA	NA	NP	NP	NA	
51.8	NA	NA	NA	NA	NA	NA	Unconf Comp
45.7	NA	NA	NA	NA	NA	NA	Unconf Comp
16.5	NA	NA	NA	NA	NA	NA	
51.8	NA	NA	NA	NA	NA	NA	
24.3	2.75	NA	NA	29.2	12.3	115.0	14.0 Perm, Mod Proct
53.9	2.84	NA	NA	44.7	20.5	100.7	21.2 Triax-CUPP, Perm, Mod Proct, CMR
5.2	2.67	100.0	42.0	NP	NP	NA	Consol w/perm, CMR @15 bar
NA	NA	100.0	52.0	NA	NA	111.2	14.1
NA	NA	NA	NA	NA	NA	107.1	15.3
NA	2.70	NA	NA	NA	NA	103.6	15.5
9.9	2.61	100.0	19.0	NP	NP	NA	Consol w/perm, CMR @15 bar
34.4	2.70	100.0	81.0	41.0	22.0	NA	Consol w/perm, CMR @15 bar
21.4	2.63	100.0	88.0	42.0	13.0	NA	Consol w/perm, CMR @15 bar
12.8	NA	NA	NA	NA	NA	NA	
15.8	NA	NA	NA	NA	NA	NA	
15.3	NA	NA	NA	NA	NA	NA	
16.5	NA	NA	NA	NA	NA	NA	
16.5	NA	NA	NA	NA	NA	NA	
7.2	NA	NA	NA	NA	NA	NA	

ANSTEC  
APERTURE  
CARD

Also Available on  
Aperture Card

9405260155-02

AREA	DATA SOURC	BORING OR TEST PIT NUMBER	SAMPLE NUMBER & TYPE	TOP OF SAMPLE (FEET)	BASE OF SAMPLE (FEET)	SAMPLE MIDPOINT (FEET)	USCS SYMBOL	MATERIAL TYPE	IN-PLACE DRY DENSITY (PCF)	NATUR MOISTU CONTE (PERCE
EAST PILE	D&M	31SW91-003	9/SS	20.5	22.0	21.25	CL	Tails-sim		NA
EAST PILE	D&M	31SW91-003	11/SS	24.5	26.0	25.25	CL/SM	Tails-snd/sim		NA
EAST PILE	D&M	31SW91-003	12/SS	26.5	28.0	27.25	CL/SM/ML	Tails-snd/sim		NA
EAST PILE	D&M	31SW91-003	13/SS	28.5	30.0	29.25	ML	Tails-snd&sim		NA
EAST PILE	D&M	31SW91-003	19/SS	40.0	40.5	40.25	ML	Alluvium		NA
EAST PILE	D&M	31SW91-003	20/SS	42.0	42.7	42.35	ML	Alluvium		NA
EAST PILE	D&M	31SW91-003	21/SS	46.0	47.5	46.75	ML	Alluvium		NA
EAST PILE	D&M	31SW91-003	22/SS	48.0	49.7	48.85	ML	Alluvium		NA
EAST PILE	D&M	31SW91-004	1/SS	3.5	5.0	4.25	CL	MVP spoil		NA
EAST PILE	D&M	31SW91-004	2/SS	9.5	10.0	9.75	SM	Tails-snd		NA
EAST PILE	D&M	31SW91-004	3/U	14.5	15.0	14.75	CL	Tails-sim	82.1	
EAST PILE	D&M	31SW91-004	4/U	19.5	20.0	19.75	CL	Alluvium	95.9	
EAST PILE	D&M	31SW91-004	5/SS	23.5	25.0	24.25	CL	Alluvium		NA
EAST PILE	D&M	31SW91-004	6/SS	27.0	28.4	27.70	CL	Alluvium		NA
EAST PILE	D&M	31SW91-004	7/SS	28.5	30.0	29.25	CL	Alluvium		NA
EAST PILE	D&M	31SW91-004	8/SS	33.5	35.0	34.25	CL	Alluvium		NA
EAST PILE	D&M	31SW91-004	9/U	39.5	40.0	39.75	CL	Alluvium	100.2	
EAST PILE	D&M	31SW91-008	1/U	4.5	5.0	4.75	SM	Tails-snd	99.2	
EAST PILE	D&M	31SW91-008	4/U	15.0	15.5	15.25	CL	Tails-sim	54.1	
EAST PILE	D&M	31SW91-008	6/U	19.5	20.0	19.75	ML	Tails-sim	84.3	
EAST PILE	D&M	31SW91-008	7/U	23.5	25.0	24.25	CH	Alluvium	67.3	
EAST PILE	D&M	31SW91-008	9/U	28.5	30.0	29.25	CL	Alluvium	81.1	
EAST PILE	D&M	31SW91-009	4/ST	16.0	17.5	16.75	CL	Tails-snd&sim	95.1	
EAST PILE	D&M	31SW91-009	7/ST	20.0	22.0	21.00	CL	Tails-sim	60.0	
EAST PILE	D&M	31SW91-010a	1/SS	9.0	10.5	9.75	CL	Alluvium		NA
EAST PILE	D&M	31SW91-010a	3/SS	19.0	20.5	19.75	CL	Alluvium		NA
EAST PILE	D&M	31SW91-010a	4/SS	24.0	25.5	24.75	CL	Alluvium		NA
EAST PILE	D&M	31SW91-010a	5/SS	29.0	30.5	29.75	CL	Alluvium		NA
EAST PILE	D&M	31SW91-010b	3/SS	34.0	35.5	34.75	CL	Alluvium		NA
EAST PILE	D&M	31SW91-010b	4/SS	39.0	40.5	39.75	CL	Alluvium		NA
EAST PILE	D&M	31SW91-010b	5/SS	44.0	45.5	44.75	CL/SC	Alluvium		NA
EAST PILE	D&M	31SW91-010b	6/SS	49.0	49.5	49.25	SC	Alluvium		NA
EAST PILE	D&M	31SW91-013	3/ST	10.5	12.5	11.50	CL	Tails-sim	59.8	
EAST PILE	D&M	31SW91-013	8/ST	25.5	27.5	26.50	CL-ML	Tails-snd/sim	69.7	
EAST PILE	D&M	31SW91-013	9/SS	28.5	30.5	29.50	CL/SM	Tails-snd/sim		NA
EAST PILE	D&M	31SW91-014	1/U	4.5	5.0	4.75	CL	MVP spoil	108.5	
EAST PILE	D&M	31SW91-014	2/U	9.5	10.0	9.75	SM	Tails-snd	96.7	
EAST PILE	D&M	31SW91-014	3/U	14.5	15.0	14.75	CL	Alluvium[?]	90.4	
EAST PILE	D&M	31SW91-014	7/U	19.5	20.0	19.75	CL	Alluvium[?]	55.0	
EAST PILE	D&M	31SW91-014	9/U	24.0	24.5	24.25	CL	Alluvium[?]	62.6	
EAST PILE	D&M	31SW91-014	16/SS	48.0	49.3	48.65	Km	Shale		NA
EAST PILE	D&M	31SW91-018b	1/U	2.5	3.8	3.15	SM	Tails-snd	88.3	
EAST PILE	D&M	31SW91-018b	2/U	7.5	8.8	8.15	SM	Alluvium	85.6	
EAST PILE	D&M	31SW91-018b	3/U	12.5	13.7	13.10	CL/SC	Alluvium		NA
EAST PILE	D&M	31SW91-019	1/SS	5.5	6.5	6.00	ML	Tails-snd&sim[?]		NA
EAST PILE	D&M	31SW91-019	3/SS	8.0	9.5	8.75	SM	Tails-snd		NA
EAST PILE	D&M	31SW91-019	5/SS	11.0	12.5	11.75	SM	Tails-snd		NA
EAST PILE	D&M	31SW91-019	6/SS	12.5	14.0	13.25	SM	Tails-snd		NA
EAST PILE	D&M	31SW91-019	7/SS	14.0	15.5	14.75	SM	Tails-snd		NA
EAST PILE	D&M	31SW91-019	8/SS	15.5	17.0	16.25	SM	Tails-snd		NA
EAST PILE	D&M	31SW91-019	9/SS	17.0	18.5	17.75	CL	Tails-sim		NA
EAST PILE	D&M	31SW91-019	10/SS	18.5	20.0	19.25	CL	Tails-sim		NA
EAST PILE	D&M	31SW91-019	11/SS	20.0	21.5	20.75	CL	Alluvium[?]		NA
EAST PILE	D&M	31SW91-019	12/SS	21.5	23.0	22.25	CL	Alluvium[?]		NA
EAST PILE	D&M	31SW91-019	15/SS	33.0	33.5	33.25	SC	Alluvium		NA
EAST PILE	D&M	31SW91-020	1/SS	4.0	5.5	4.75	CL	Alluvium		NA
EAST PILE	D&M	31SW91-020	2/SS	9.0	10.5	9.75	CL	Alluvium		NA
EAST PILE	D&M	31SW91-020	3/SS	14.0	15.5	14.75	CL	Alluvium		NA
EAST PILE	D&M	31SW91-020	4/SS	19.0	20.5	19.75	CL	Alluvium		NA
EAST PILE	D&M	31SW91-020	5/SS	24.0	25.5	24.75	CL	Alluvium		NA
EAST PILE	D&M	31SW91-020	6/SS	29.0	30.5	29.75	SC	Alluvium		NA
EAST PILE	D&M	31SW91-020	7/SS	34.0	35.0	34.50	GC	Alluvium		NA
EAST PILE	D&M	31SW91-025	3/U	13.0	13.7	13.35	CL	Alluvium	101.8	
EAST PILE	D&M	31SW91-025	4/U	18.0	19.5	18.75	CL	Alluvium	98.5	
EAST PILE	D&M	31SW91-025	5/SS	23.5	24.8	24.15	SC[?]	Alluvium	97.9	
EAST PILE	D&M	31SW91-025	6/U	29.3	29.8	29.55	Km	Shale	113.4	



DATED 11/22/91

SAMPLER TYPE SPECIFIC GRAVITY (G/CC)	FRACTION PASSING #4 SIEVE (PERCENT)	FRACTION PASSING #200 SIEVE (PERCENT)	LIQUID LIMIT	PLASTICITY INDEX	ASTM D 698	ASTM D 698	OTHER TESTS
					MAXIMUM DRY DENSITY (PCF)	OPTIMUM MOISTURE CONTENT (PERCENT)	
8.2	NA	NA	NA	48.4	22.3	NA	NA
4.5	NA	NA	NA	NA	NA	NA	NA
0.1	NA	NA	NA	NA	NA	NA	NA
8.7	NA	100.0	73.3	NA	NA	NA	NA
4.4	NA	NA	NA	NA	NA	NA	NA
3.6	NA	NA	NA	NA	NA	NA	NA
5.5	NA	NA	NA	NA	NA	NA	NA
4.0	NA	NA	NA	NA	NA	NA	NA
8.4	NA	NA	NA	NA	NA	NA	NA
6.4	NA	NA	NA	NA	NA	NA	NA
3.1	NA	NA	NA	35.5	12.7	NA	NA
3.5	NA	NA	NA	NA	NA	NA	NA
9.6	NA	NA	NA	NA	NA	NA	NA
9.5	NA	NA	NA	NA	NA	NA	NA
8.4	NA	NA	NA	NA	NA	NA	NA
2.7	NA	NA	NA	NA	NA	NA	NA
2.5	NA	NA	NA	NA	NA	NA	NA
7.0	NA	100.0	21.0	NA	NA	NA	NA
2.8	NA	NA	NA	NA	NA	NA	NA
0.1	NA	NA	NA	23.2	2.8	NA	NA Triax-CUPP
7.4	NA	NA	NA	51.4	23.5	NA	NA
4.2	NA	NA	NA	NA	NA	NA	NA
6.0	NA	NA	NA	NA	NA	NA	NA
8.3	NA	NA	NA	NA	NA	NA	NA Unconf Comp, Consol, Perm, CMR
0.8	NA	NA	NA	38.9	18.5	NA	NA
5.2	NA	NA	NA	NA	NA	NA	NA
4.6	NA	NA	NA	NA	NA	NA	NA
5.1	NA	NA	NA	NA	NA	NA	NA
7.9	NA	NA	NA	NA	NA	NA	NA
7.8	NA	NA	NA	NA	NA	NA	NA
1.1	NA	NA	NA	NA	NA	NA	NA
2.7	NA	NA	NA	NA	NA	NA	NA
7.2	NA	NA	NA	NA	NA	NA	NA Unconf Comp
0.6	NA	NA	NA	NA	NA	NA	NA Triax-CUPP, Consol
2.7	NA	NA	NA	NA	NA	NA	NA
8.4	NA	NA	NA	NA	NA	NA	NA
7.8	NA	100.0	22.0	NA	NA	NA	NA Dir Shear
2.5	NA	NA	NA	NA	NA	NA	NA
7.9	NA	NA	NA	NA	NA	NA	NA
2.4	NA	NA	NA	NA	NA	NA	NA
3.4	NA	NA	NA	NA	NA	NA	NA
7.8	NA	NA	NA	NA	NA	NA	NA
2.4	2.81	NA	NA	NA	NA	NA	NA
1.8	NA	NA	NA	NA	NA	NA	NA
10.3	NA	100.0	55.4	NA	NA	NA	NA
12.4	NA	99.2	46.1	NA	NA	NA	NA
8.2	NA	99.5	30.8	NA	NA	NA	NA
9.0	NA	100.0	33.2	NA	NA	NA	NA
17.7	NA	NA	NA	NA	NA	NA	NA
17.9	NA	NA	NA	NA	NA	NA	NA
4.3	NA	NA	NA	35.0	13.9	NA	NA
3.4	NA	NA	NA	44.7	18.3	NA	NA
2.5	NA	NA	NA	NA	NA	NA	NA
2.7	NA	NA	NA	39.0	19.0	NA	NA
5.7	NA	NA	NA	NA	NA	NA	NA
10.9	NA	NA	NA	NA	NA	NA	NA
13.2	NA	NA	NA	NA	NA	NA	NA
16.6	NA	NA	NA	NA	NA	NA	NA
13.8	NA	NA	NA	45.0	23.8	NA	NA
18.0	NA	NA	NA	NA	NA	NA	NA
21.4	NA	NA	NA	NA	NA	NA	NA
16.7	NA	NA	NA	NA	NA	NA	NA
22.9	NA	NA	NA	NA	NA	NA	NA
25.3	NA	NA	NA	NA	NA	NA	NA
23.2	NA	NA	NA	NA	NA	NA	NA
18.1	NA	NA	NA	NA	NA	NA	NA

ANSTEC  
APERTURE  
CARD

Also Available on  
Aperture Card

9405260155-03

AREA	DATA SOURC	BORING OR TEST PIT NUMBER	SAMPLE NUMBER & TYPE	TOP OF SAMPLE (FEET)	BASE OF SAMPLE (FEET)	SAMPLE MIDPOINT (FEET)	USCS SYMBOL	MATERIAL TYPE	IN-PLACE DRY DENSITY (PCF)	NATURAL MOISTURE CONTENT (PERCENT)
EAST PILE	D&M	TP-1	1/ST	6.5	7.0	6.75	CL	MVP spoil	103.3	11
EAST PILE	D&M	TP-1	-/BULK	7.0	7.0	7.00	CL	MVP spoil	NA	18
EAST PILE	D&M	TP-1	2/ST	9.0	9.5	9.25	CL	MVP spoil	86.8	20
EAST PILE	D&M	TP-1	3/ST	14.0	14.5	14.25	SM	Tails-snd	101.9	10
EAST PILE	D&M	TP-1	-/BULK	15.0	15.0	15.00	SM	Tails-snd	NA	10
EAST PILE	D&M	TP-2	1/ST	9.0	9.5	9.25	SM	Tails-sim	91.6	27
EAST PILE	D&M	TP-2	-/BULK	10.0	10.0	10.00	ML	Tails-sim	NA	33
EAST PILE	D&M	TP-2	2/ST	10.5	11.0	10.75	SM	Tails-snd	87.3	1
EAST PILE	D&M	TP-2	3/ST	13.5	14.0	13.75	ML	Tails-snd&sim[?]	65.6	53
EAST PILE	D&M	TP-2	-/BULK	14.0	14.0	14.00	ML	Tails-snd&sim[?]	NA	7
EAST PILE	D&M	TP-2	4/ST	14.5	15.0	14.75	ML	Tails-snd&sim[?]	74.0	25
EAST PILE	D&M	TP-4	-/BULK	9.0	9.0	9.00	ML	Tails-snd&sim	NA	32
EAST PILE	D&M	TP-4	3/ST	9.5	10.0	9.75	ML	Tails-snd&sim	89.6	7
EAST PILE	D&M	TP-4	-/BULK	14.0	14.0	14.00	ML	Tails-snd&sim	NA	14
EAST PILE	D&M	TP-4	5/ST	14.5	15.0	14.75	ML	Tails-snd&sim	61.8	57
ACID PILE	BENDIX	MRAP-85-10	MKB-723/ST	4.0	6.0	5.00	CL	Tails-sim	66.1	43
ACID PILE	BENDIX	MRAP-85-10*	MKB-791/BULK	1.0	1.0	1.00	SM	Cover	NA	NA
ACID PILE	BENDIX	MRAP-85-10*	MKB-792/BULK	3.0	3.0	3.00	SP	Tails-snd	NA	NA
ACID PILE	BENDIX	MRAP-85-10*	MKB-793/BULK	8.0	8.0	8.00	CL	Tails-sim	NA	NA
ACID PILE	BENDIX	MRAP-85-11	MKB-741/ST	4.0	6.0	5.00	CL	Tails-sim	74.8	33
ACID PILE	BENDIX	MRAP-85-12	MKB-732/ST	4.0	6.0	5.00	ML	Tails-sim	76.4	41
ACID PILE	D&M	31SW91-026	1/SS	4.5	5.0	4.75	CL	Tails-snd&sim	NA	31
ACID PILE	D&M	31SW91-026	2/SS	8.5	9.0	8.75	CL	Alluvium	NA	13
ACID PILE	D&M	31SW91-026	5/SS	13.5	14.5	14.00	CL	Alluvium	NA	11
ACID PILE	D&M	31SW91-027	3/ST	6.0	8.0	7.00	CH	Alluvium	71.5	41
ACID PILE	D&M	31SW91-027	4/ST	9.0	11.5	10.25	CH	Alluvium	56.0	71
ACID PILE	D&M	31SW91-027	6/ST	19.0	20.5	19.75	CL/SC	Alluvium	109.3	11
ACID PILE	D&M	31SW91-028	2/SS	4.0	6.0	5.00	SM	Tails-snd[?]	NA	11
ACID PILE	D&M	31SW91-028	3/SS	6.0	6.9	6.45	SM	Tails-snd	NA	NA
ACID PILE	D&M	31SW91-028	4/SS	9.0	10.0	9.50	CL-ML	Tails-sim	NA	31
ACID PILE	D&M	31SW91-028	5/SS	10.5	12.0	11.25	ML	Tails-sim	NA	31
ACID PILE	D&M	31SW91-028	6/SS	13.5	15.0	14.25	ML	Tails-snd&sim	NA	21
ACID PILE	D&M	31SW91-028	7/SS	15.0	17.0	16.00	SM	Tails-snd&sim	NA	11
ACID PILE	D&M	31SW91-028	8/SS	18.0	19.0	18.50	ML	Tails-sim	NA	41
ACID PILE	D&M	31SW91-028	9/SS	19.0	21.0	20.00	ML	Tails-sim	NA	31
ACID PILE	D&M	31SW91-028	10/SS	22.5	23.0	22.75	SM	Tails-snd	NA	61
ACID PILE	D&M	31SW91-028	11/SS	24.0	25.0	24.50	ML/CL	Tails-snd&sim	NA	51
ACID PILE	D&M	31SW91-028	12/SS	25.0	27.0	26.00	ML/CL	Tails-snd&sim	NA	51
ACID PILE	D&M	31SW91-028	13/SS	27.0	29.0	28.00	CL	Tails-snd&sim	NA	51
ACID PILE	D&M	31SW91-028	14/SS	29.0	30.5	29.75	ML/CL	Tails-snd&sim	NA	51
ACID PILE	D&M	31SW91-028	15/SS	31.0	33.0	32.00	CL	Tails-snd&sim	NA	61
ACID PILE	D&M	31SW91-028	16/SS	33.5	34.0	33.75	ML	Tails-snd&sim	NA	41
ACID PILE	D&M	31SW91-028	17/SS	36.0	37.0	36.50	ML/SC	Alluvium[?]	NA	11
ACID PILE	D&M	31SW91-028	18/SS	37.5	39.0	38.25	SC/CL	Alluvium	NA	21
ACID PILE	D&M	31SW91-028	19/SS	39.0	41.0	40.00	CL	Alluvium	NA	21
ACID PILE	D&M	31SW91-034	1/SS	5.0	6.0	5.50	ML/CL	Tails-sim	NA	51
ACID PILE	D&M	31SW91-034	3/SS	14.0	16.0	15.00	CL-ML	Tails-sim	NA	81
ACID PILE	D&M	31SW91-034	7/SS	29.0	29.5	29.25	Km	Shale	NA	11
ACID PILE	D&M	31SW91-035	3/SS	5.0	5.5	5.25	SM	Tails-snd	NA	NA
ACID PILE	D&M	31SW91-035	4/SS	10.0	10.5	10.25	SM	Tails-snd	NA	NA
ACID PILE	D&M	31SW91-035	8/SS	15.0	15.5	15.25	SM	Tails-snd	NA	NA
ACID PILE	D&M	31SW91-035	9/ST	18.0	20.0	19.00	SM	Tails-snd	100.6	11
ACID PILE	D&M	31SW91-035	12/SS	24.5	25.0	24.75	CL/ML	Tails-sim	NA	51
ACID PILE	D&M	TP-7	-/BULK	2.0	2.0	2.00	SM	Tails-snd	NA	NA
ACID PILE	D&M	TP-7	2/ST	5.0	5.5	5.25	CL	Tails-sim	62.5	61
ACID PILE	D&M	TP-7	3/ST	6.5	7.0	6.75	CL	Tails-sim	66.1	51
ACID PILE	D&M	TP-7	4/ST	9.5	10.0	9.75	CL	Tails-sim	51.3	61
ACID PILE	D&M	TP-7	5/ST	12.5	13.0	12.75	CL	Tails-sim	53.1	71
ACID PILE	D&M	TP-7	6/ST	16.5	17.0	16.75	CL	Tails-sim	51.4	81
ACID PILE	D&M	TP-8	1/ST	2.5	3.0	2.75	SM/ML	Tails-snd/sim	76.5	NA
ACID PILE	D&M	TP-8	2/ST	4.5	5.0	4.75	SM	Tails-snd	90.0	NA
ACID PILE	D&M	TP-8	-/BULK	4.5	4.5	4.50	SM	Tails-snd	NA	NA
ACID PILE	D&M	TP-8	3/ST	6.0	6.5	6.25	SM	Tails-snd[?]	82.5	NA
ACID PILE	D&M	TP-8	4/ST	10.0	10.5	10.25	ML	Tails-sim	65.7	NA
ACID PILE	D&M	TP-8	5/ST	12.0	12.5	12.25	CL	Tails-sim	59.2	NA
ACID PILE	D&M	TP-8	-/BULK	13.0	13.0	13.00	CL	Tails-sim	NA	NA

DATED 11/22/91

SPECIFIC GRAVITY (G/T)	FRACTION PASSING #4 SIEVE (PERCENT)	FRACTION PASSING #200 SIEVE (PERCENT)	LIQUID LIMIT	PLASTICITY INDEX	ASTM D 698	ASTM D 698	OTHER TESTS
					MAXIMUM DRY DENSITY (PCF)	OPTIMUM MOISTURE CONTENT (PERCENT)	
1	NA	NA	NA	NA	NA	NA	
2	NA	NA	NA	NA	103.1	18.1	Perm, Mod Proct
4	NA	NA	NA	NA	NA	NA	
4	NA	NA	NA	NA	NA	NA	
8	NA	99.0	31.0	NA	109.4	14.3	
9	NA	NA	NA	NA	NA	NA	
0	NA	NA	NA	NA	103.0	20.0	Consol, CMR
7	NA	NA	NA	NA	NA	NA	
6	NA	NA	NA	NA	NA	NA	
8	NA	100.0	54.4	NA	103.5	17.1	CMR
4	NA	NA	NA	NA	NA	NA	
4	NA	100.0	91.0	NA	98.8	21.5	Dir Shear, Perm, CMR
9	NA	NA	NA	NA	NA	NA	
7	2.71	100.0	56.6	NA	101.8	17.3	Perm, CMR
1	NA	100.0	98.1	NA	NA	NA	
5	2.63	100.0	78.0	29.0	11.0	NA	
NA	NA	100.0	49.0	NA	NA	111.8	16.9
NA	NA	NA	NA	NA	NA	110.4	12.4
NA	2.76	NA	NA	NA	NA	94.5	26.3
9.8	2.69	100.0	72.0	44.0	20.0	NA	NA Consol w/perm, CMR @15 bar
0.5	2.68	100.0	87.0	47.0	10.0	NA	NA Consol w/perm, CMR @15 bar
0.0	NA	NA	NA	33.8	13.1	NA	NA
2.8	NA	NA	NA	NA	NA	NA	NA
7.1	NA	NA	NA	NA	NA	NA	NA
8.0	NA	NA	NA	58.9	28.7	NA	NA Triax-CUPP, Unconf Comp, Perm, CMR
5.2	NA	NA	NA	66.5	31.4	NA	NA Triax-CUPP, Unconf Comp, Consol
8.3	NA	NA	NA	37.4	21.0	NA	NA Triax-CUPP, Unconf Comp, Perm, CMR
7.2	NA	NA	NA	NA	NA	NA	NA
7.2	NA	NA	NA	NA	NA	NA	NA
7.6	2.70	NA	NA	NA	NA	NA	NA
5	NA	NA	NA	34.8	9.6	NA	NA
7.9	NA	100.0	51.7	NA	NA	NA	NA
8.5	NA	100.0	34.7	NA	NA	NA	NA
3.3	NA	NA	NA	NA	NA	NA	NA
9.0	NA	100.0	65.9	NA	NA	NA	NA
0.0	NA	NA	NA	NA	NA	NA	NA
3.1	NA	NA	NA	NA	NA	NA	NA
6.3	NA	NA	NA	NA	NA	NA	NA
6.9	NA	100.0	92.0	NA	NA	NA	NA
1.4	NA	NA	NA	NA	NA	NA	NA
4.7	NA	NA	NA	46.8	21.2	NA	NA
1.3	NA	NA	NA	NA	NA	NA	NA
9.1	NA	NA	NA	NA	NA	NA	NA
0.9	NA	NA	NA	NA	NA	NA	NA
4.5	NA	NA	NA	NA	NA	NA	NA
7.3	NA	NA	NA	NA	NA	NA	NA
7.3	2.86	NA	NA	47.4	17.8	NA	NA
0.1	NA	NA	NA	NA	NA	NA	NA
4.6	NA	100.0	20.7	NA	NA	NA	NA
5.1	NA	NA	NA	NA	NA	NA	NA
5.3	NA	100.0	28.0	NA	NA	NA	NA
3.4	NA	100.0	17.2	NA	NA	NA	NA Dir Shear, Perm, CMR
9.4	NA	NA	NA	46.0	16.3	NA	NA
9.4	2.71	100.0	42.3	NP	NP	109.0	14.5 Triax-CUPP, Consol, Perm, Mod Proct, CMR
2.6	NA	NA	NA	NA	NA	NA	NA Unconf Shear
4.4	NA	NA	NA	NA	NA	NA	NA
5.0	NA	NA	NA	NA	NA	NA	NA Unconf Shear
4.1	NA	NA	NA	NA	NA	NA	NA
5.1	NA	NA	NA	NA	NA	NA	NA Unconf Shear
1.8	NA	NA	NA	NA	NA	NA	NA
9.5	2.82	NA	NA	NA	NA	NA	NA
7.6	NA	100.0	28.9	NA	NA	103.8	15.9 Dir Shear, Perm, Mod Proct, CMR
4.3	NA	NA	NA	NA	NA	NA	NA
0.6	2.76	100.0	63.5	NA	NA	NA	NA
0.9	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA Perm

ANSTEC APERTURE CARD

Also Available on Aperture Card

9405260155-04

AREA	DATA SOURC	BORING OR TEST PIT NUMBER	SAMPLE NUMBER & TYPE	TOP OF SAMPLE (FEET)	BASE OF SAMPLE (FEET)	SAMPLE MIDPOINT (FEET)	USCS SYMBOL	MATERIAL TYPE	IN-PLACE DRY DENSITY (PCF)	NATURAL MOISTURE CONTENT (PERCENT)
ACID PILE	D&M	TP-9	1/ST	1.5	2.0	1.75	SM	Tails-snd	89.6	4
ACID PILE	D&M	TP-9	2/ST	3.0	3.5	3.25	SM	Tails-snd	86.0	6
ACID PILE	D&M	TP-9	-/BULK	10.0	10.0	10.00	ML	Alluvium	NA	23
SOMERVILLE TRACT	BENDIX	MRAP-85-17	MKB-766/SS	0.0	2.0	1.00	SC	Alluvium	NA	48
SOMERVILLE TRACT	BENDIX	MRAP-85-17	MKB-830/BULK	0.0	5.0	2.50	ML	Alluvium[Shale?]	NA	1
SOMERVILLE TRACT	BENDIX	MRAP-85-18	MKB-768/SS	0.0	2.0	1.00	CL	Alluvium	NA	14
SOMERVILLE TRACT	BENDIX	MRAP-85-18	MKB-833/BULK	0.0	5.0	2.50	ML	Alluvium	NA	1
BLM COMPOUND	BENDIX	MRAP-85-20	MKB-753/SS	0.0	2.0	1.00	OL	Alluvium	NA	10
BLM COMPOUND	BENDIX	MRAP-85-20	MKB-836/BULK	0.0	3.0	1.50	OL	Alluvium	NA	1
BLM COMPOUND	D&M	36SE91-058	2/SS	3.5	4.5	4.00	CL	Alluvium	NA	21
BLM COMPOUND	D&M	36SE91-058	3B/SS	4.5	5.5	5.00	CL	Alluvium	NA	31
BLM COMPOUND	D&M	36SE91-058	4B/SS	9.0	10.5	9.75	ML	Alluvium	NA	21
VALLEY BOTTOM	BENDIX	MRAP-85-21	MKB-756/SS	0.0	2.0	1.00	OL	Alluvium	NA	NA
VALLEY BOTTOM	BENDIX	MRAP-85-21	MKB-826/BULK	0.0	3.0	1.50	SM	Tails-snd	NA	NA
VALLEY BOTTOM	D&M	31SW91-001	3/SS	3.5	4.8	4.15	CL	Alluvium	NA	1
VALLEY BOTTOM	D&M	31SW91-001	7/SS	8.5	10.0	9.25	CL	Alluvium	NA	1
VALLEY BOTTOM	D&M	31SW91-001	8/SS	13.5	14.3	13.90	CL	Alluvium	NA	1
VALLEY BOTTOM	D&M	31SW91-001	11/BULK	24.0	25.0	24.50	GC	Alluvium	NA	1
VALLEY BOTTOM	D&M	31SW91-023	2/SS	8.6	8.9	8.75	SC	Alluvium	NA	NA
VALLEY BOTTOM	D&M	31SW91-023	3/SS	13.5	13.8	13.65	SW	Alluvium	NA	NA
VALLEY BOTTOM	D&M	31SW91-030	1/SS	4.0	6.0	5.00	CL	Alluvium	NA	1
VALLEY BOTTOM	D&M	31SW91-030	2/SS	9.5	11.0	10.25	SC	Alluvium	NA	1
VALLEY BOTTOM	D&M	31SW91-030	3/SS	14.3	14.7	14.50	Km	Shale	NA	1
VALLEY BOTTOM	D&M	36SE91-071	1/SS	3.5	4.0	3.75	SM	Alluvium	NA	1
VALLEY BOTTOM	D&M	36SE91-071	4/SS	9.5	10.0	9.75	SP	Alluvium	NA	NA
VALLEY BOTTOM	D&M	36SE91-071	6/SS	14.0	14.5	14.25	SM	Alluvium	NA	1
VALLEY BOTTOM	D&M	36SE91-072	1/SS	4.5	5.0	4.75	ML	Alluvium	NA	1
VALLEY BOTTOM	D&M	36SE91-084a	3/SS	5.0	5.5	5.25	ML	Alluvium[?]	NA	NA
VALLEY BOTTOM	D&M	36SE91-084a	4/SS	10.0	10.5	10.25	ML	Alluvium[?]	NA	NA
VALLEY BOTTOM	D&M	36SE91-084a	5/SS	13.5	14.5	14.00	CL	Alluvium[?]	NA	NA
VALLEY BOTTOM	D&M	TP-13	-/BULK	5.0	5.0	5.00	GC	Alluvium	NA	2
MAIN MILLSITE	D&M	31SW91-055b	8/SS	6.0	6.5	6.25	CL	Alluvium	NA	2
MAIN MILLSITE	D&M	31SW91-055b	9A/SS	9.3	9.8	9.55	CL	Alluvium	NA	2
MAIN MILLSITE	D&M	31SW91-055b	10/SS	13.5	15.0	14.25	CL	Alluvium	NA	3
MAIN MILLSITE	D&M	36SE91-061	2/SS	3.8	4.5	4.15	CL	Alluvium[Shale?]	NA	2
MAIN MILLSITE	D&M	36SE91-067a	1B/SS	0.5	2.0	1.25	CL	Fill	NA	1
SOUTH VALLEY WALL	D&M	31SW91-011	3/SS	10.0	10.5	10.25	CL	Alluvium[Shale?]	NA	2
SOUTH VALLEY WALL	D&M	31SW91-021	4/SS	8.5	9.0	8.75	CL	Alluvium	NA	NA
SOUTH VALLEY WALL	D&M	31SW91-022	4/SS	10.0	10.5	10.25	CL	Alluvium	NA	1
SOUTH VALLEY WALL	D&M	31SW91-036	1/SS	2.0	2.5	2.25	CL	Alluvium	NA	NA
SOUTH VALLEY WALL	D&M	31SW91-038	3/SS	9.0	10.3	9.65	CL	Alluvium	NA	1
SOUTH VALLEY WALL	D&M	31SW91-038	4/SS	10.3	11.0	10.65	SC	Alluvium	NA	1
SOUTH VALLEY WALL	D&M	31SW91-038	5/SS	14.0	14.2	14.10	CL	Alluvium	NA	1
SOUTH VALLEY WALL	D&M	31SW91-054	4/SS	4.5	5.0	4.75	CL	Alluvium	NA	1
NORTH VALLEY WALL	D&M	31SW91-016	1B/SS	3.5	5.5	4.50	CL	Alluvium[?]	NA	1
NORTH VALLEY WALL	D&M	31SW91-016	2B/SS	8.5	10.5	9.50	CL	Alluvium[?]	NA	2
NORTH VALLEY WALL	D&M	31SW91-033	1/SS	2.0	4.0	3.00	CL	Alluvium	NA	1
NORTH VALLEY WALL	D&M	31SW91-033	3/SS	9.0	11.0	10.00	CL	Alluvium	NA	1
NORTH VALLEY WALL	D&M	31SW91-053	3B/SS	8.5	9.0	8.75	CL	Alluvium[?]	NA	3
NORTH VALLEY WALL	D&M	31SW91-053	6B/SS	14.5	15.0	14.75	CL	Alluvium[?]	NA	2
NORTH VALLEY WALL	D&M	31SW91-053	7B/SS	18.5	19.0	18.75	CL	Alluvium[?]	NA	2
BLM PROPERTY-NORT	D&M	36SE91-073	1/SS	3.5	3.8	3.65	CL	Alluvium	NA	NA
BLM PROPERTY-NORT	D&M	36SE91-073	3/SS	13.5	14.3	13.90	CL	Alluvium	NA	NA
BLM PROPERTY-NORT	D&M	36SE91-073	4/SS	20.0	20.5	20.25	CL	Alluvium	NA	NA
BLM PROPERTY-NORT	D&M	36SE91-076	3/SS	5.0	5.5	5.25	CL	Alluvium	NA	NA
BLM PROPERTY-NORT	D&M	36SE91-076	4/SS	9.5	10.0	9.75	CL	Alluvium	NA	NA
BLM PROPERTY-NORT	D&M	36SE91-076	6/SS	15.0	15.5	15.25	CL	Alluvium	NA	NA
BLM PROPERTY-NORT	D&M	36SE91-076	7/SS	20.0	20.5	20.25	CL	Alluvium	NA	NA
BLM PROPERTY-NORT	D&M	36SE91-077	2/SS	3.5	4.3	3.90	CL	Alluvium[Loess?]	NA	NA
BLM PROPERTY-NORT	D&M	36SE91-077	3/SS	8.5	9.5	9.00	CL	Alluvium[Loess?]	NA	NA
BLM PROPERTY-NORT	D&M	36SE91-078	2/SS	8.5	9.5	9.00	CL	Alluvium	NA	NA
BLM PROPERTY-NORT	D&M	36SE91-078	3/SS	13.5	14.3	13.90	CL	Alluvium	NA	NA
BLM PROPERTY-NORT	D&M	36SE91-080	2/SS	5.0	6.0	5.50	CL	Alluvium	NA	NA
BLM PROPERTY-NORT	D&M	36SE91-080	3/SS	10.0	10.8	10.40	SW	Alluvium	NA	NA
BLM PROPERTY-NORT	D&M	36SE91-082	2/SS	3.5	4.0	3.75	SM	Alluvium	NA	NA
BLM PROPERTY-NORT	D&M	36SE91-082	3/SS	8.5	10.5	9.50	CL	Alluvium[?]	NA	NA



TESTED 11/22/91

TEST	SPECIFIC GRAVITY	FRACTION PASSING	FRACTION PASSING	LIQUID LIMIT	PLASTICITY INDEX	ASTM D 698	ASTM D 698	OTHER TESTS
		#4 SIEVE (PERCENT)	#200 SIEVE (PERCENT)			MAXIMUM DRY DENSITY (PCF)	OPTIMUM MOISTURE CONTENT (PERCENT)	
5	NA	NA	NA	NA	NA	NA	NA	
6	NA	100.0	16.8	NA	NA	NA	NA	
4	NA	93.8	69.0	34.2	18.1	114.0	14.9	Perm, Mod Proct. CMR
2	2.63	100.0	31.0	33.0	10.0	NA	NA	Perm. CMR @15 bar
A	NA	87.0	81.0	NA	NA	108.3	17.0	
3	2.55	100.0	65.0	32.0	14.0	NA	NA	Perm, Consol w/perm, CMR @15 bar
A	NA	100.0	80.0	NA	NA	103.3	19.0	
8	2.62	100.0	80.0	41.0	7.0	NA	NA	Perm, CMR @15 bar
A	NA	100.0	71.0	NA	NA	101.9	18.9	
4	NA	NA	NA	40.7	20.0	NA	NA	
6	NA	NA	NA	36.0	16.6	NA	NA	
1	NA	100.0	79.2	NA	NA	NA	NA	
5	2.60	NA	NA	30.0	10.0	NA	NA	Perm. CMR @15 bar
A	NA	100.0	43.0	NA	NA	115.2	13.6	
8	NA	NA	NA	NA	NA	NA	NA	
8	NA	NA	NA	NA	NA	NA	NA	
3	NA	NA	NA	NA	NA	NA	NA	
5	NA	NA	NA	NA	NA	NA	NA	
9	NA	NA	NA	NA	NA	NA	NA	
4	NA	NA	NA	NA	NA	NA	NA	
9	NA	NA	NA	NA	NA	NA	NA	
3	NA	NA	NA	NA	NA	NA	NA	
3	NA	NA	NA	NA	NA	NA	NA	
2	NA	83.1	46.7	NA	NA	NA	NA	
1	NA	NA	NA	NA	NA	NA	NA	
8	NA	60.4	18.5	NA	NA	NA	NA	
7	NA	97.3	71.3	NA	NA	NA	NA	
5	NA	100.0	51.4	NA	NA	NA	NA	
9	NA	NA	NA	NA	NA	NA	NA	
2	NA	NA	NA	NA	NA	NA	NA	
2	NA	65.1	41.9	38.4	17.6	116.1	13.2	
7	NA	NA	NA	NA	NA	NA	NA	
3	NA	NA	NA	NA	NA	NA	NA	
6	NA	NA	NA	NA	NA	NA	NA	
9	NA	NA	NA	NA	NA	NA	NA	
8	NA	NA	NA	46.3	23.9	NA	NA	
6	NA	NA	NA	NA	NA	NA	NA	
3	NA	NA	NA	NA	NA	NA	NA	
8	NA	NA	NA	NA	NA	NA	NA	
6	NA	NA	NA	NA	NA	NA	NA	
2	NA	NA	NA	NA	NA	NA	NA	
4	NA	100.0	80.4	43.3	23.4	NA	NA	
9	NA	NA	NA	36.3	17.1	NA	NA	
0	NA	100.0	97.8	NA	NA	NA	NA	
2	NA	NA	NA	NA	NA	NA	NA	
9	NA	NA	NA	33.6	13.8	NA	NA	
1	NA	NA	NA	NA	NA	NA	NA	
3	2.70	NA	NA	48.3	25.0	NA	NA	
8	NA	NA	NA	NA	NA	NA	NA	
1	NA	NA	NA	36.9	15.9	NA	NA	
0	NA	NA	NA	NA	NA	NA	NA	
0	NA	NA	NA	44.9	22.8	NA	NA	
0	NA	NA	NA	41.3	20.7	NA	NA	
7	NA	NA	NA	NA	NA	NA	NA	
6	NA	NA	NA	27.0	9.4	NA	NA	
1	NA	NA	NA	NA	NA	NA	NA	
7	NA	NA	NA	49.9	23.7	NA	NA	
8	NA	NA	NA	NA	NA	NA	NA	
0	NA	NA	NA	NA	NA	NA	NA	
6	NA	NA	NA	NA	NA	NA	NA	
9	NA	NA	NA	44.7	23.4	NA	NA	
9	NA	NA	NA	NA	NA	NA	NA	
6	NA	86.0	38.4	NA	NA	NA	NA	
3	NA	NA	NA	NA	NA	NA	NA	

ANSTEC  
APERTURE  
CARD

Also Available on  
Aperture Card

9405260155-05

AREA	DATA SOURC	BORING OR TEST PIT NUMBER	SAMPLE NUMBER & TYPE	TOP OF SAMPLE (FEET)	BASE OF SAMPLE (FEET)	SAMPLE MIDPOINT (FEET)	USCS SYMBOL	MATERIAL TYPE	IN-PLACE DRY DENSITY (PCF)	NATUR MOISTU CONTE (PERCE
BLM PROPERTY-NORT D&M		TP-10	-/BULK	5.0	5.0	5.00	CL	Loess[?]		NA
BLM PROPERTY-NORT D&M		TP-10	2/ST	6.0	6.5	6.25	CL	Loess[?]		91.7
BLM PROPERTY-NORT D&M		TP-10	4/ST	11.0	11.5	11.25	CL	Loess[?]		109.3

KEY: USCS Unified Soil Classification System group symbol, ASTM D 2487 or D2488 (For rocks, symbol indicates geologic unit)  
 ASTM Test designation of the American Society for Testing and Materials  
 BENDIX \*Data Collection for Engineering for the Uranium Mill Tailings Site and Adjacent Peripheral Properties, Monticello, Utah.\* B  
 D&M \*Final Report, Monticello Remedial Action Project, 1991 Millsite Characterization Study.\* Dames & Moore, September 17, 19  
 \* Sample taken from a test pit excavated next to the designated borehole.  
 [?] Questionable value or identification

MATERIAL TYPE:			OTHER
Tails-snd	Tailings sands		
Tails-sim	Tailings slimes		
Tails-snd/sim	Tailings sands and slimes, interbedded		
Tails-snd&sim	Tailings sands and slimes, mixed		
Cover	Cover material in place on tailings piles		
MVP spoils	Material removed from Monticello Vicinity Properties		
Alluvium	Miscellaneous surficial deposits, mostly stream-laid		
Loess	Windblown fine-grained deposits		SAMPL
Shale	Mancos Shale, usually weathered		
Sandstone	Dakota Sandstone		
Fill	Miscellaneous man-made fill		

All data in this table compiled or interpreted from consultant's reports by R.N. Morris, Chem-Nuclear Geotech, Inc., October 1991. Checked by L.H. Golden &

DATED 11/22/91

GRAVITY (G)	FRACTION PASSING #4 SIEVE (PERCENT)	FRACTION PASSING #200 SIEVE (PERCENT)	LIQUID LIMIT	PLASTICITY INDEX	ASTM D 698	ASTM D 698	OTHER TESTS
					MAXIMUM DRY DENSITY (PCF)	OPTIMUM MOISTURE CONTENT (PERCENT)	
0.9	NA	100.0	86.6	29.5	11.1	107.7	14.2 Mod Proct
0.8	NA	NA	NA	27.9	9.6	NA	NA Unconf Comp
0.7	NA	NA	NA	43.8	21.6	NA	NA Perm

Griffin Field Engineering Corporation, September 1986  
91

TESTS:	Mod Proct	Modified Proctor Compaction
	Unconf Comp	Unconfined compressive strength
	Dir Shear	Direct shear, consolidated-drained
	Triax-CUPP	Triaxial shear, consolidated-undrained with pore pressure measurements
	Consol	One-dimensional consolidation
	Perm	Permeability, falling-head or flexible-membrane
	CMR	Capillary moisture rise

ANSTEC  
APERTURE  
CARD

Also Available on  
Aperture Card

TEST TYPES:	BULK	Disturbed bag sample of loose cuttings or material from test pit
	SS	Disturbed sample from 3.0" O.D. standard split-spoon drive sampler
	ST	Relatively undisturbed sample from 3.0" O.D. thin-walled (Shelby) tube sampler
	U	Relatively undisturbed sample from Dames & Moore Type "U" ring-lined drive sampler

corrected by R.N. Morris, November 1991.

9405260155-06

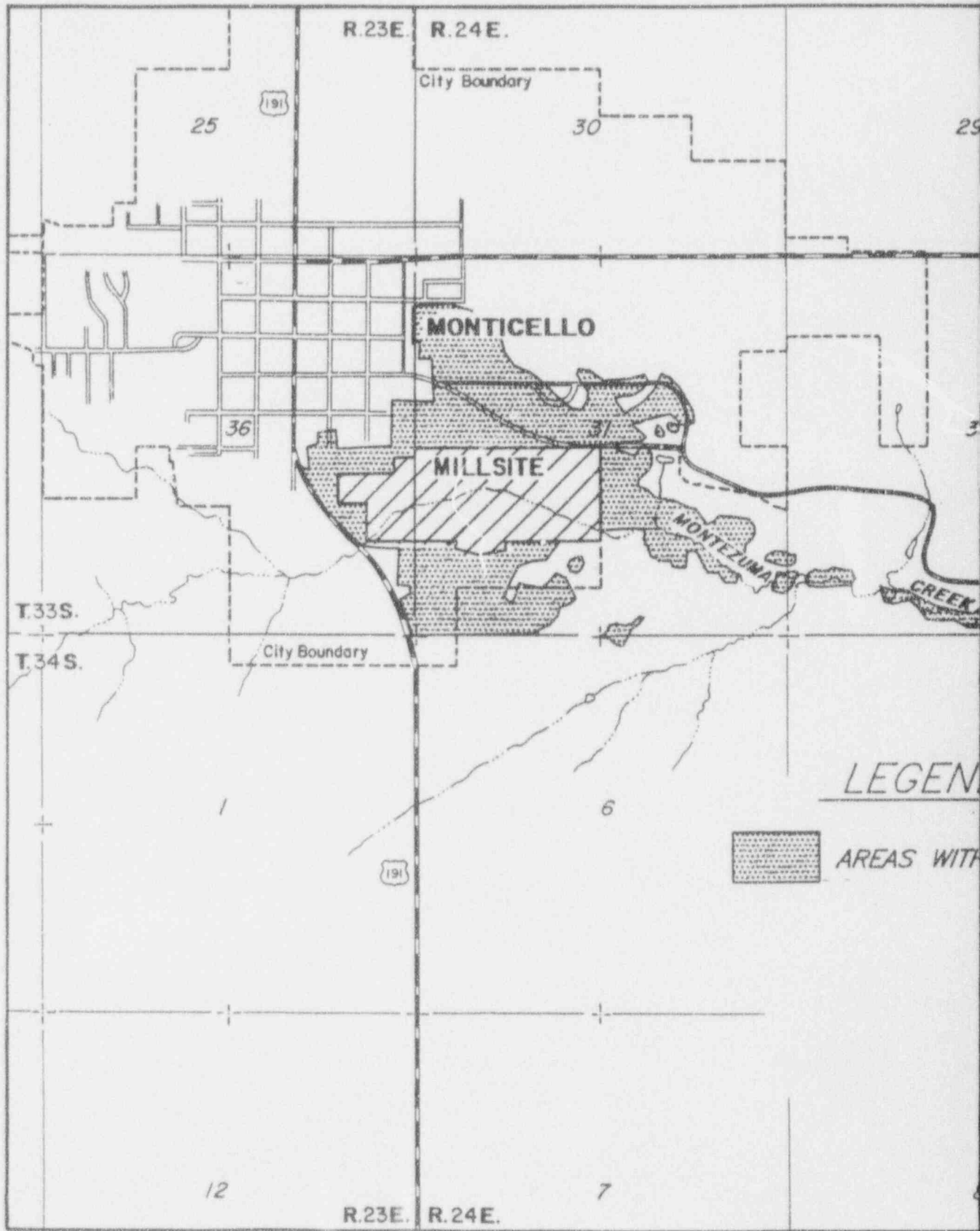
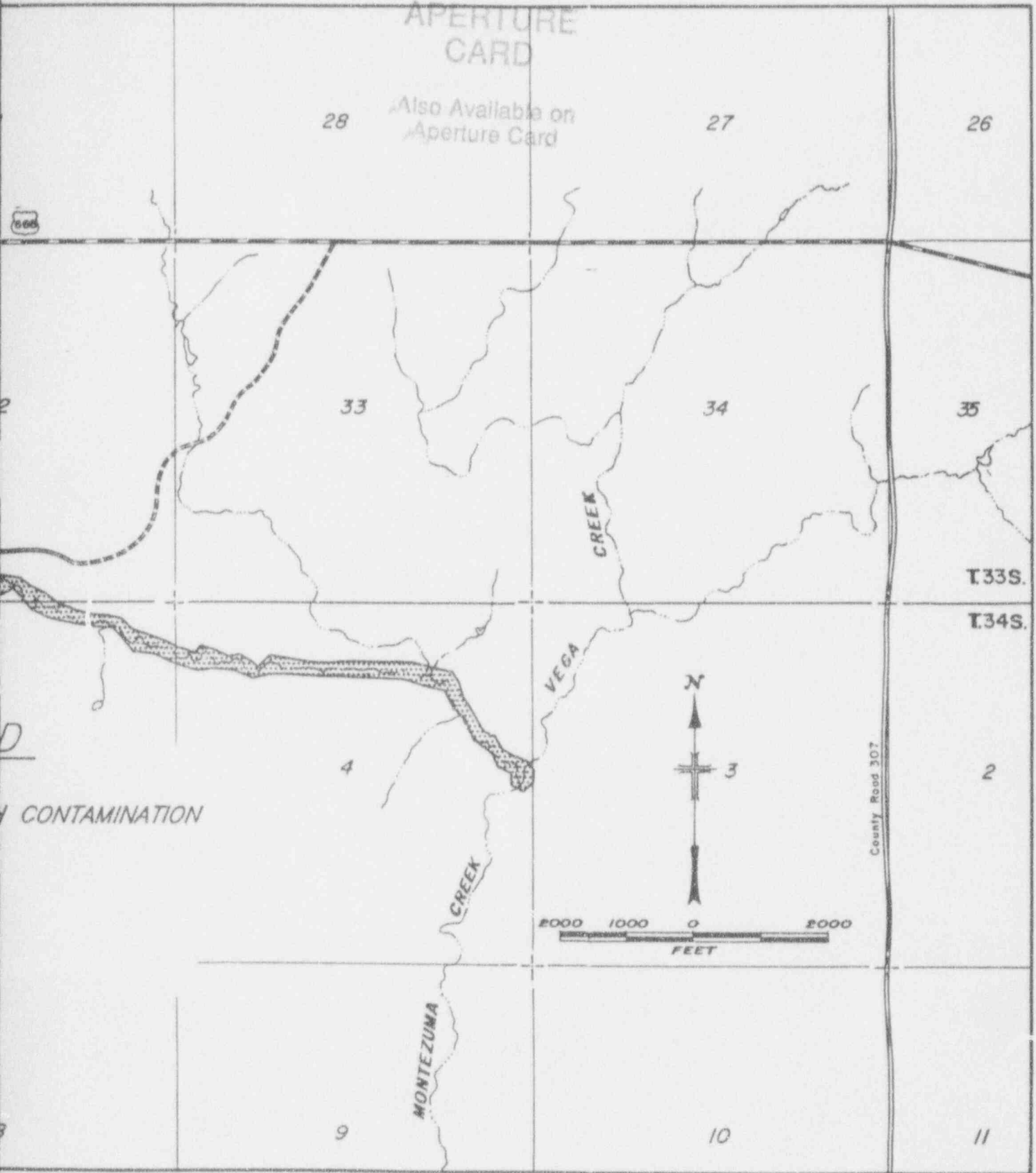


Figure 1-3. Contami

ANSTEC  
APERTURE  
CARD

Also Available on  
Aperture Card

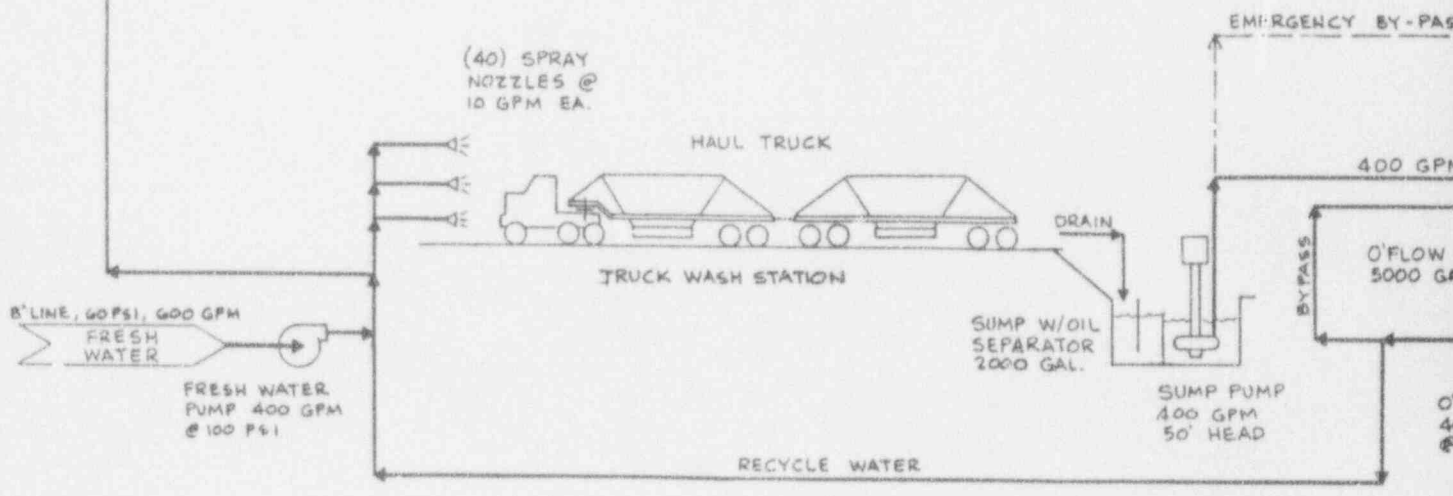
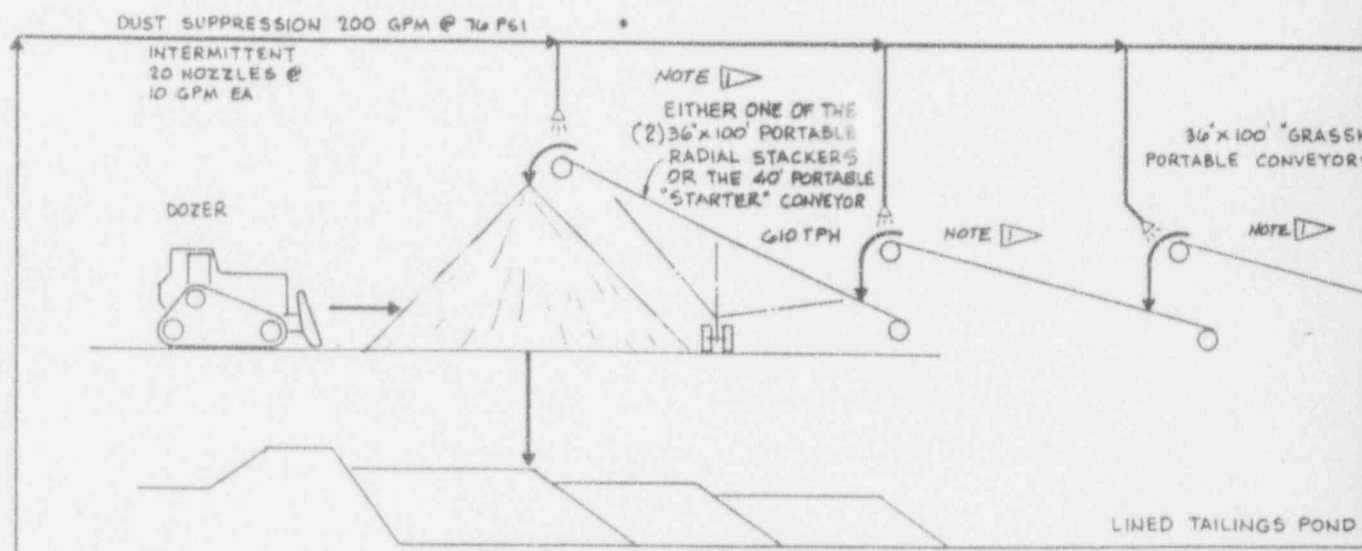
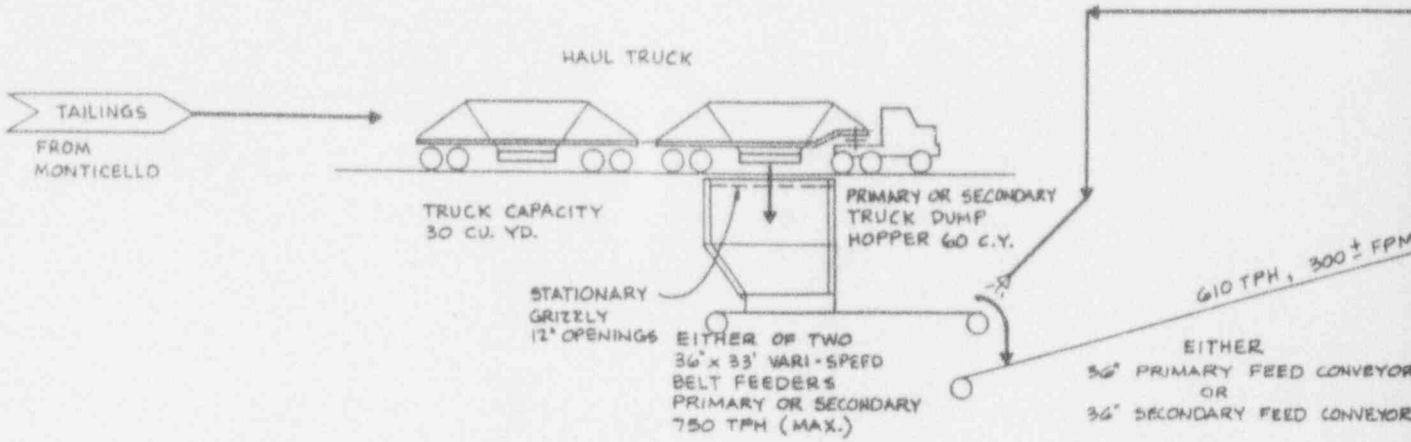


CONTAMINATION

ated Areas Under Investigation

9405260155-07





DATE	DESCRIPTION OF REVISION	DATE	DESCRIPTION OF REVISION

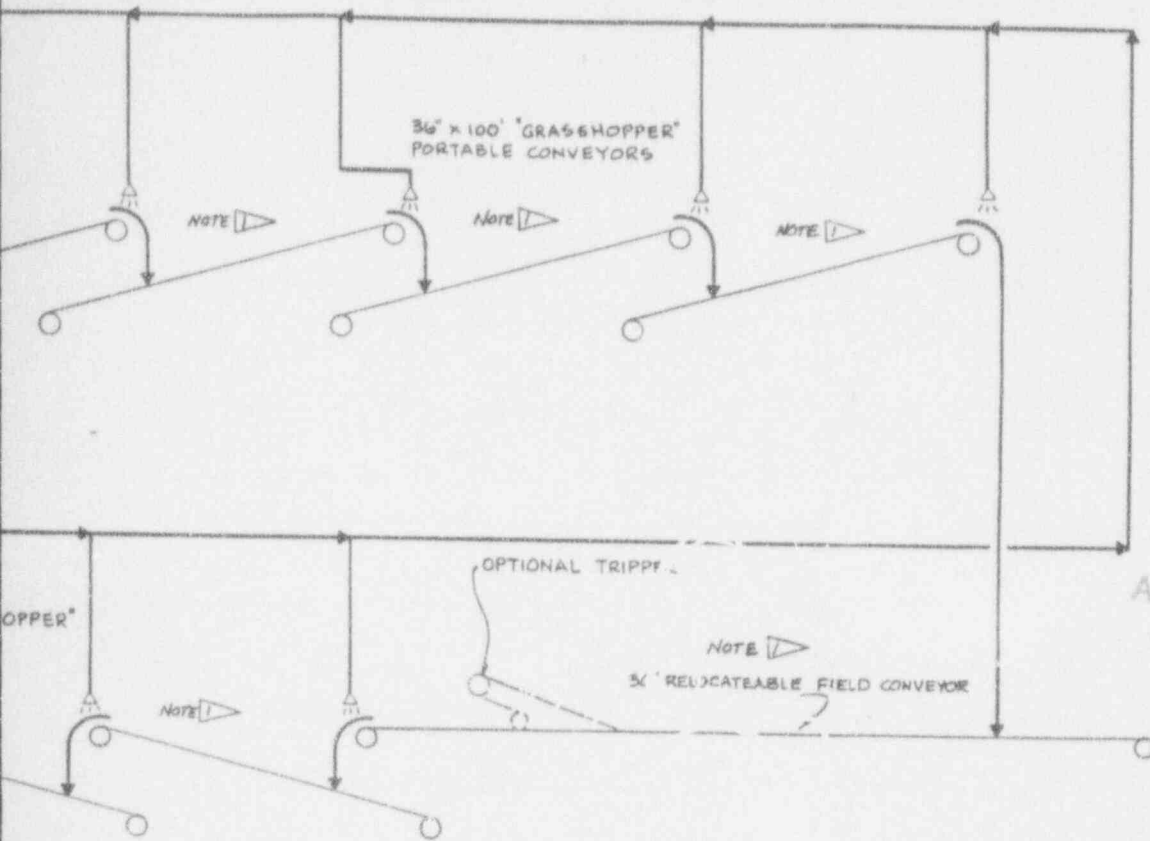
APPROVED

UPDATE

PRELIMINARY FOR COMMENT

NOTE 1: STARTING FROM THE PRIMARY OR SECONDARY FEED CONVEYOR, THIS STRING OF PLACEMENT CONVEYORS SHOWN, REPRESENTS BOTH A PRIMARY AND A SECONDARY PLACEMENT CONVEYING SYSTEM. THE PRIMARY PLACEMENT CONVEYING SYSTEM MAY VARY IN NUMBER OF CONVEYORS FROM ONE TO NINE, AND MAY CONSIST OF ONE OR TWO FIELD CONVEYORS, AND FROM ZERO TO SIX PORTABLE "GRASSHOPPERS", AND EITHER A "STARTER" OR A STACKER. THE LOCATION IN THE STRING

OF ANY ONE OF THESE CONVEYORS MAY VARY, EXCEPT THAT THE STRING ALWAYS ENDS WITH EITHER A "STARTER" OR A STACKER. THE SECONDARY PLACEMENT CONVEYING SYSTEM CONSISTS OF FROM ZERO TO TWO PORTABLE "GRASSHOPPERS" AND EITHER A "STARTER" OR A STACKER. PLEASE REFER TO DRAWING 6261-LS.

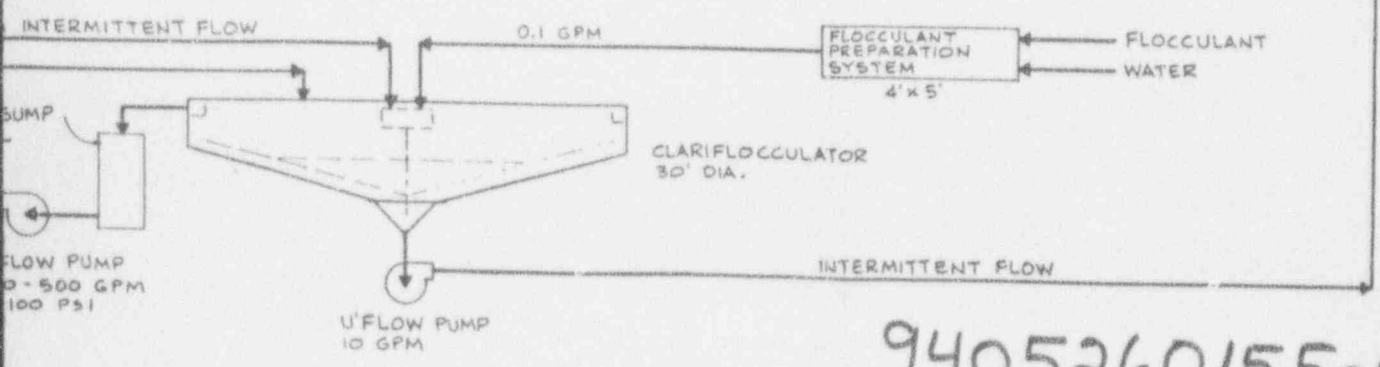
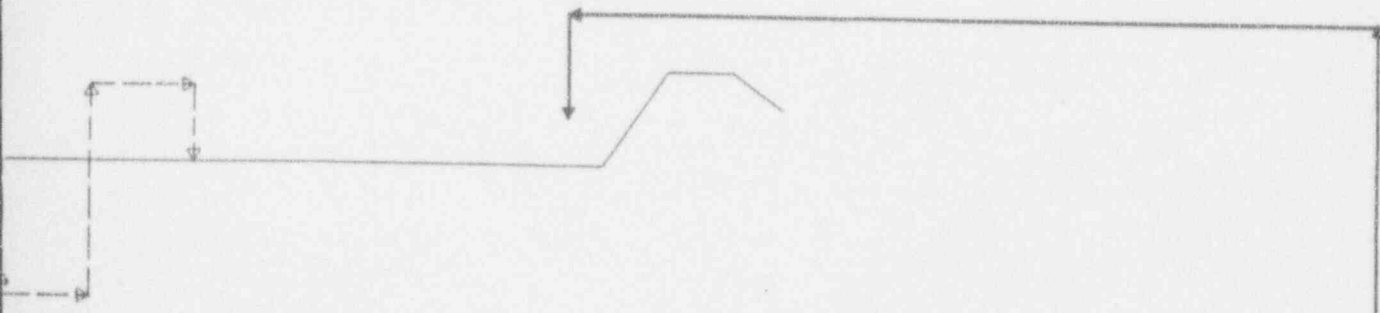


CHARACTERISTICS OF CONVEYED MATERIAL

SAND  
 DENSITY: 95 PCF  
 SIZE: 65 TO 325 MESH  
 MOISTURE: 5% TO 30%  
 REPOSE: 45°

ANSTEC  
 APERTURE  
 CARD

Also Available on  
 Aperture Card



9405260155-08

ORIGINAL

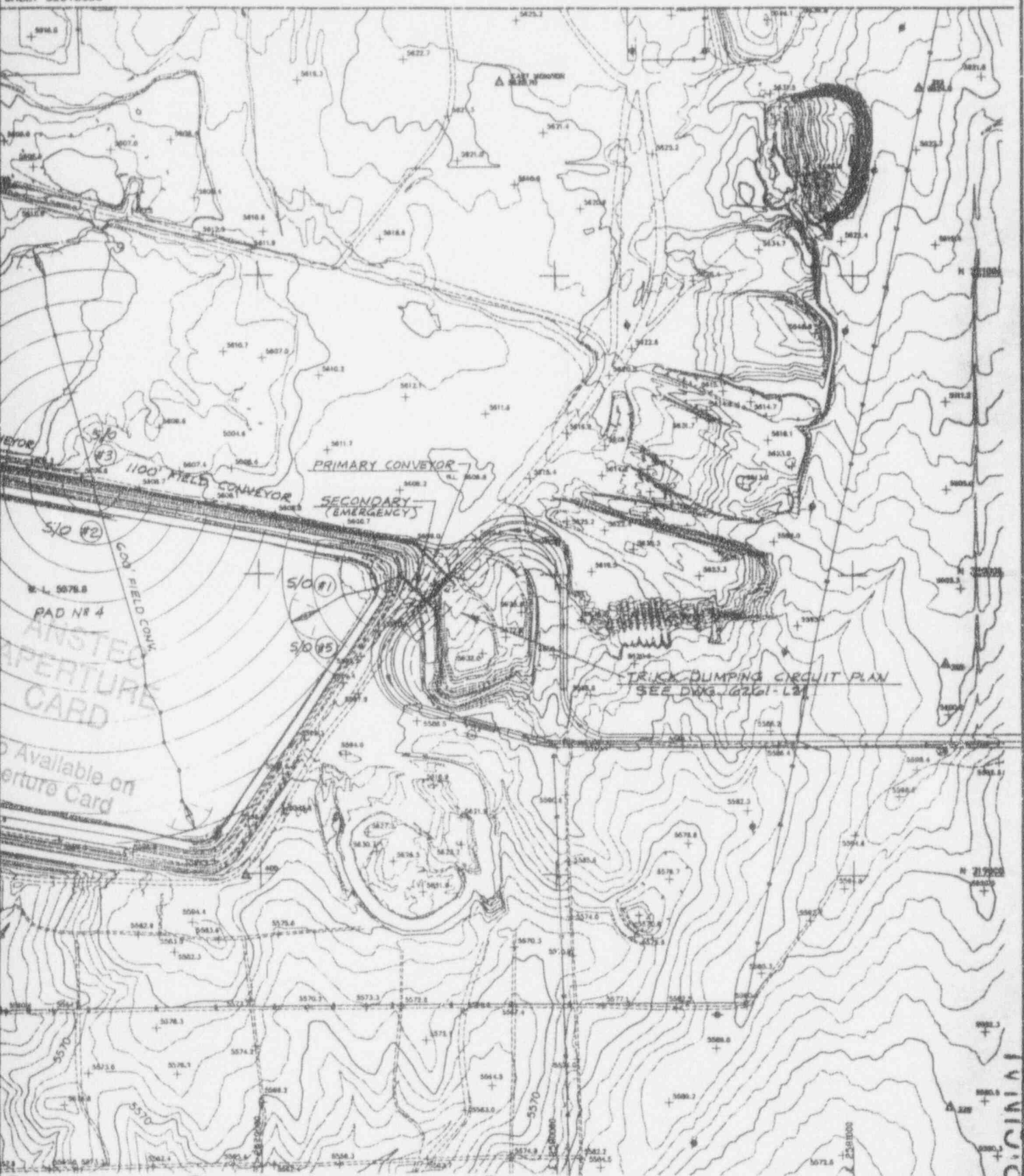
<p><b>ROBERTS &amp; SCHAEFER</b> ENGINEERS AND CONTRACTORS CHICAGO - SALT LAKE CITY</p>	DRAWN BY: MERRELL CHECKED BY: T.E. DATE: 12-6-45	TITLE: FLOW SHEET PROJECT: WHITE MESA MILL SITE CLIENT: UMETCO MINERALS CORP. LOCATION: BLANDING, UTAH	SCALE: NONE DRAWING NO.: 6261-FS1
	PROJECT: WHITE MESA MILL SITE CLIENT: UMETCO MINERALS CORP. LOCATION: BLANDING, UTAH		DATE: 12-6-45
	PROJECT: WHITE MESA MILL SITE CLIENT: UMETCO MINERALS CORP. LOCATION: BLANDING, UTAH		



(S/O) SEQUENCE OF OPERATION : (1) EMERGENCY WORKING PAD, (2) FILL PAD NO 4,  
REFER TO DWG. 6261-L5

		APPROVED	
		SEQUENCE OF OP. & FOR CONN.	
REV	DATE	BY	CHECK
DESCRIPTION OF REVISION		REV	DATE





③ EAST END OF PAD #3, ④ WORKING PAD & WEST END OF PAD #3, ⑤ FILL "EMERGENCY" SPACE.

ORIGINAL

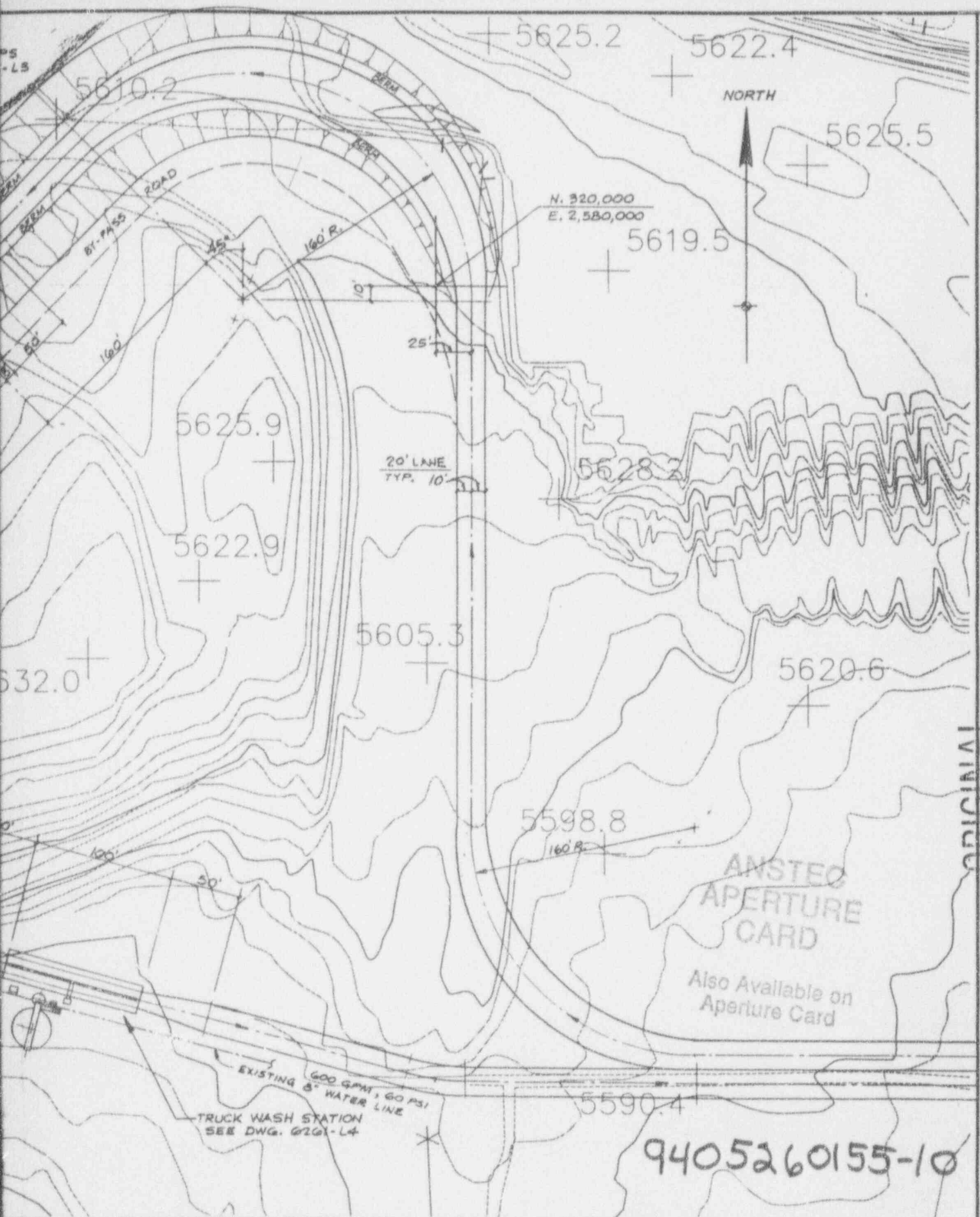
	<b>ROBERTS &amp; SCHAEFER</b> ENGINEERS AND CONSTRUCTORS CHICAGO-PITTSBURGH-SALT LAKE CITY		DRAWN BY J. HIGGINS/HLN CHECKED BY DESIGNED BY PROJECT NO.		<b>SITE PLAN</b> WHITE MESA MILL SITE UMETCO MINERALS CORP. BLANDING, UTAH		SCALE 1"=250' DATE 12-1-93	
					6261-L1			
	<small>THE DRAWING IS FEDERAL AND STATE LAND PROPERTY AND SHALL NOT BE LOANED EXCEPT IN CONNECTION WITH THE PROJECT FOR WHICH IT WAS PREPARED.</small>							

9405260155-09



NO.	DATE	BY	CHECK	DESCRIPTION OF REVISION

1-18-98	HLN	JNS	APPROVED	
1-22-98	HLN	JNS	SHOW POWER & WATER	
12-8-98	HLN	JNS	PRELIMINARY FOR COMME	



NORTH

N. 320,000  
E. 2,580,000



ANSTEO  
APERTURE  
CARD

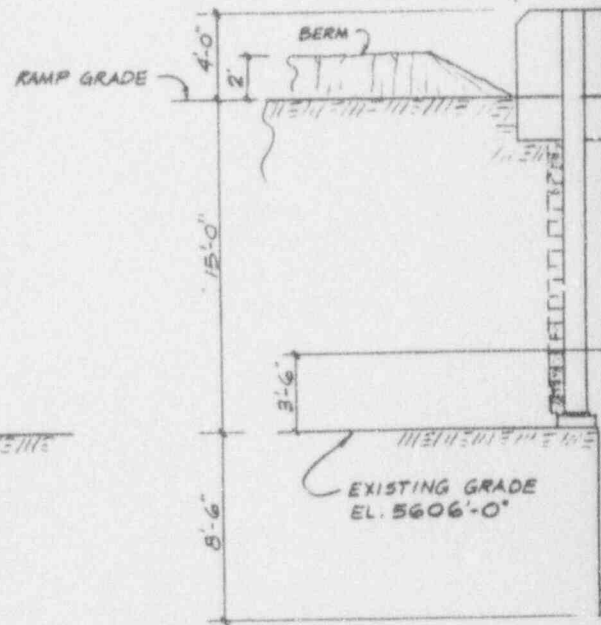
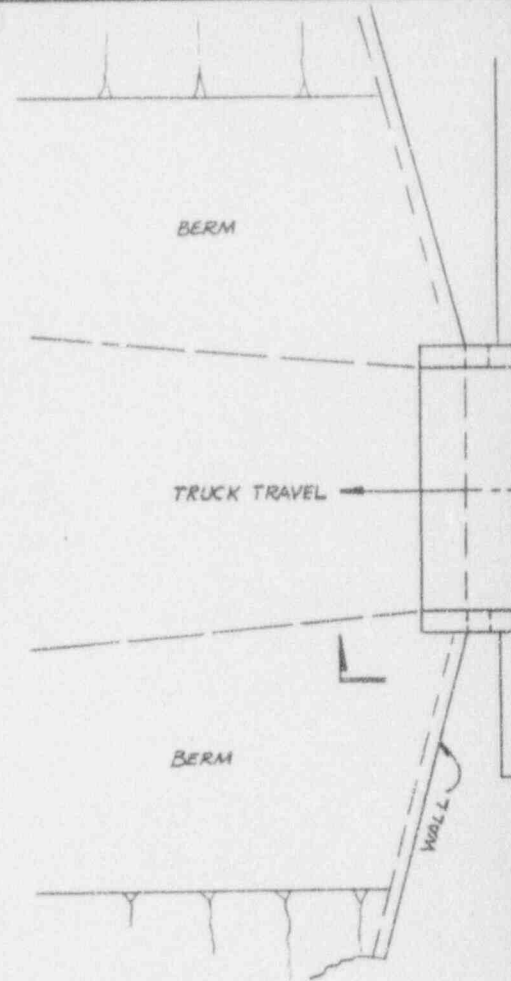
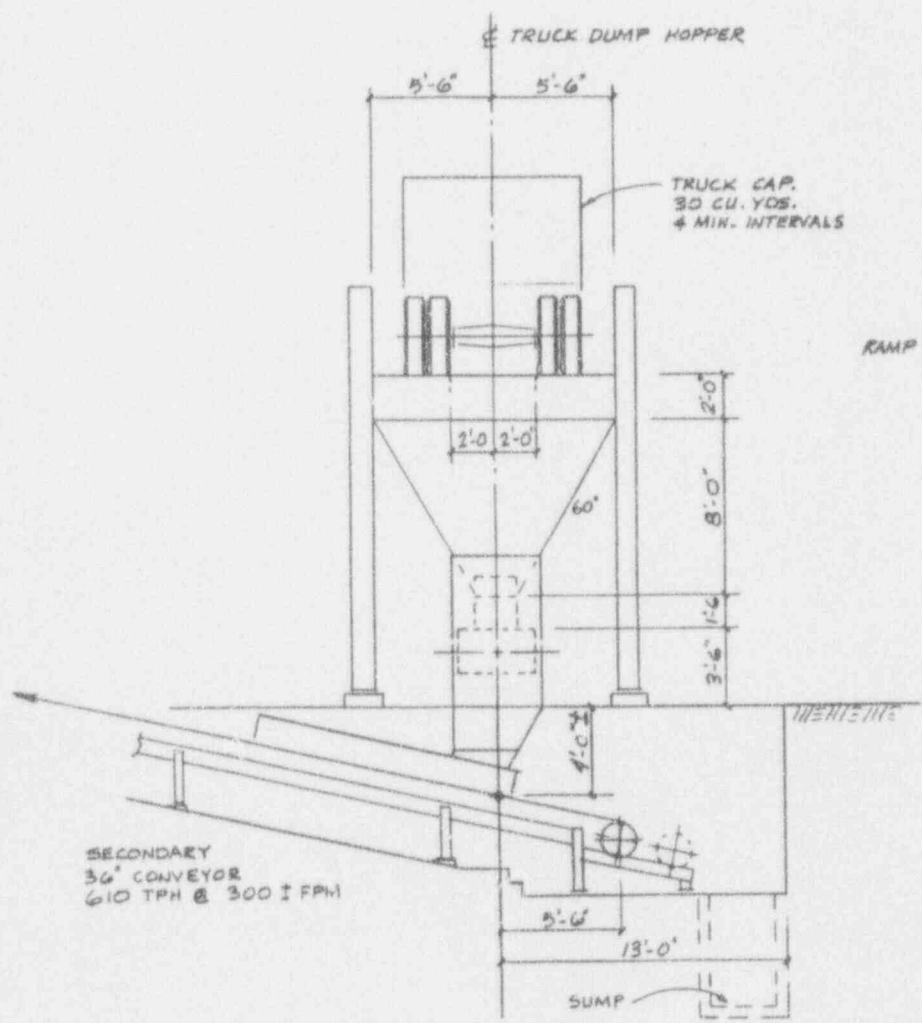
Also Available on  
Aperture Card

TRUCK WASH STATION  
SEE DWG. 6261-L4

9405260155-10

ORIGINAL

 <b>ROBERTS &amp; SCHAEFER</b> ENGINEERS AND CONTRACTORS CHICAGO-PITTSBURGH-SALT LAKE CITY	DRAWN BY J. HIGGINS /HLN CHECKED BY	<b>TRUCK DUMPING AREA PLAN</b> WHITE MESA MILL SITE UMETCO MINERALS CORP. BLANDING, UTAH	SCALE 1"=40' DATE 12-3-78
	PROJECT NO. 6261-L2		THIS DRAWING IS OWNED AND RETAINED AS OUR PROPERTY AND SHALL NOT BE USED OR REPRODUCED IN CONNECTION WITH ANY OTHER PROJECT OR CONTRACT WITHOUT OUR WRITTEN PERMISSION.

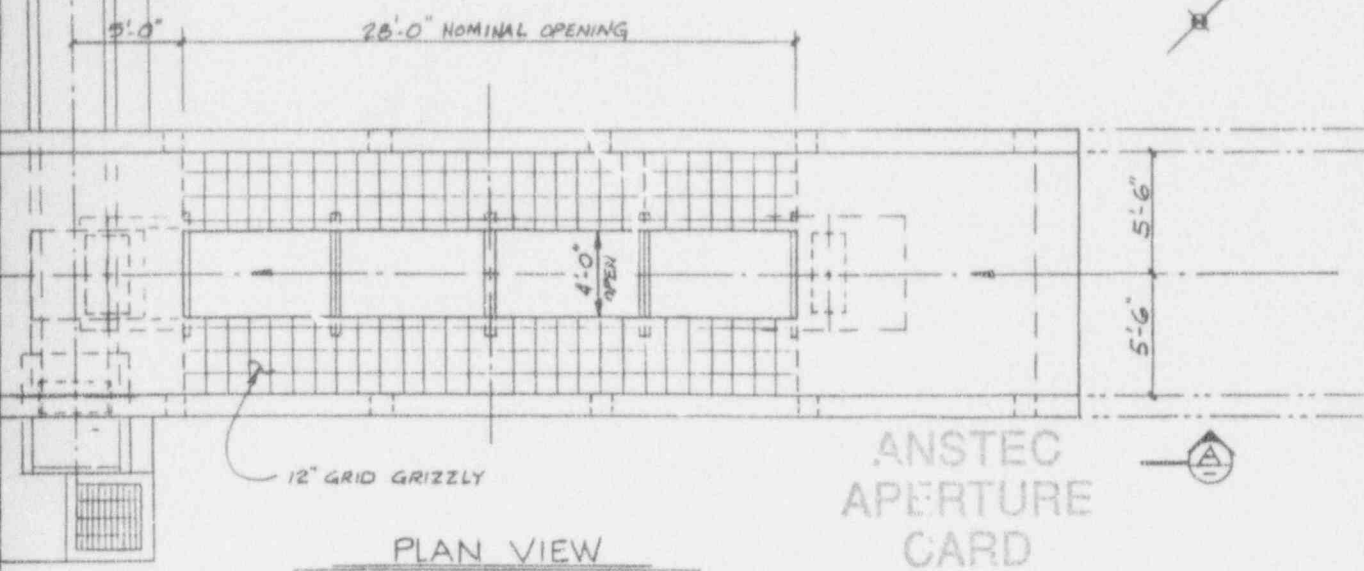
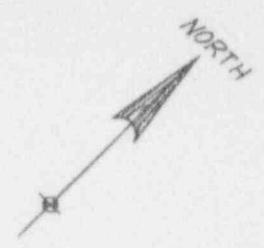


SECTION (B)

		1-18-94	APPROVED
		12-23-93	LABELING CLARIFICATION
		12-8-93	PRELIMINARY FOR COM
DATE	DESCRIPTION OF REVISION	DATE	DESCRIPTION OF REVISION



SECONDARY  
FEED CONV.  
NR CV-1

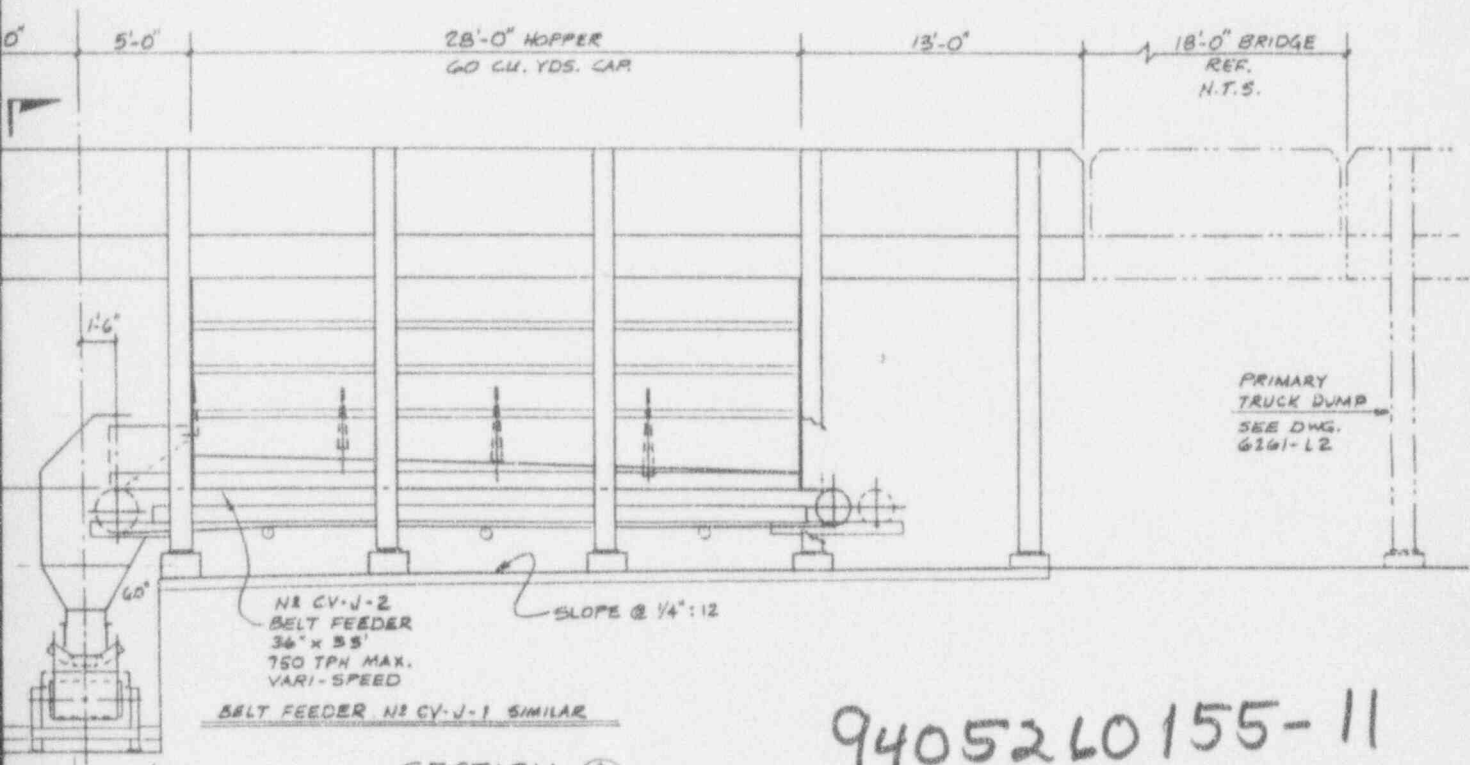


PLAN VIEW

SECONDARY TRUCK DUMP SHOWN  
PRIMARY TRUCK DUMP OPP. HAND

ANSTEC  
APERTURE  
CARD

Also Available on  
Aperture Card

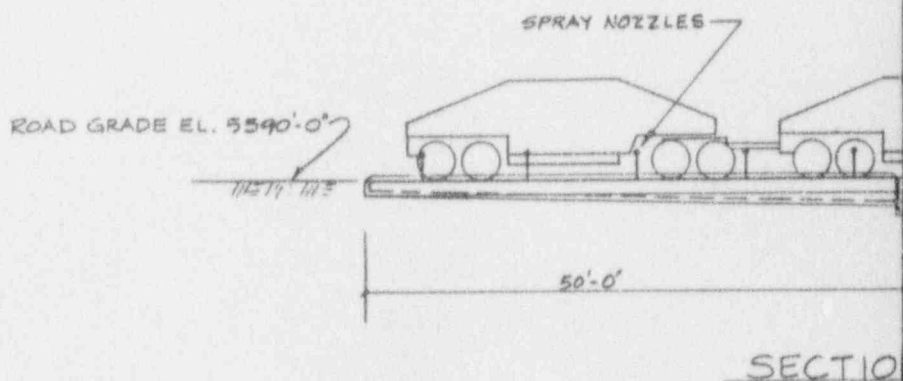
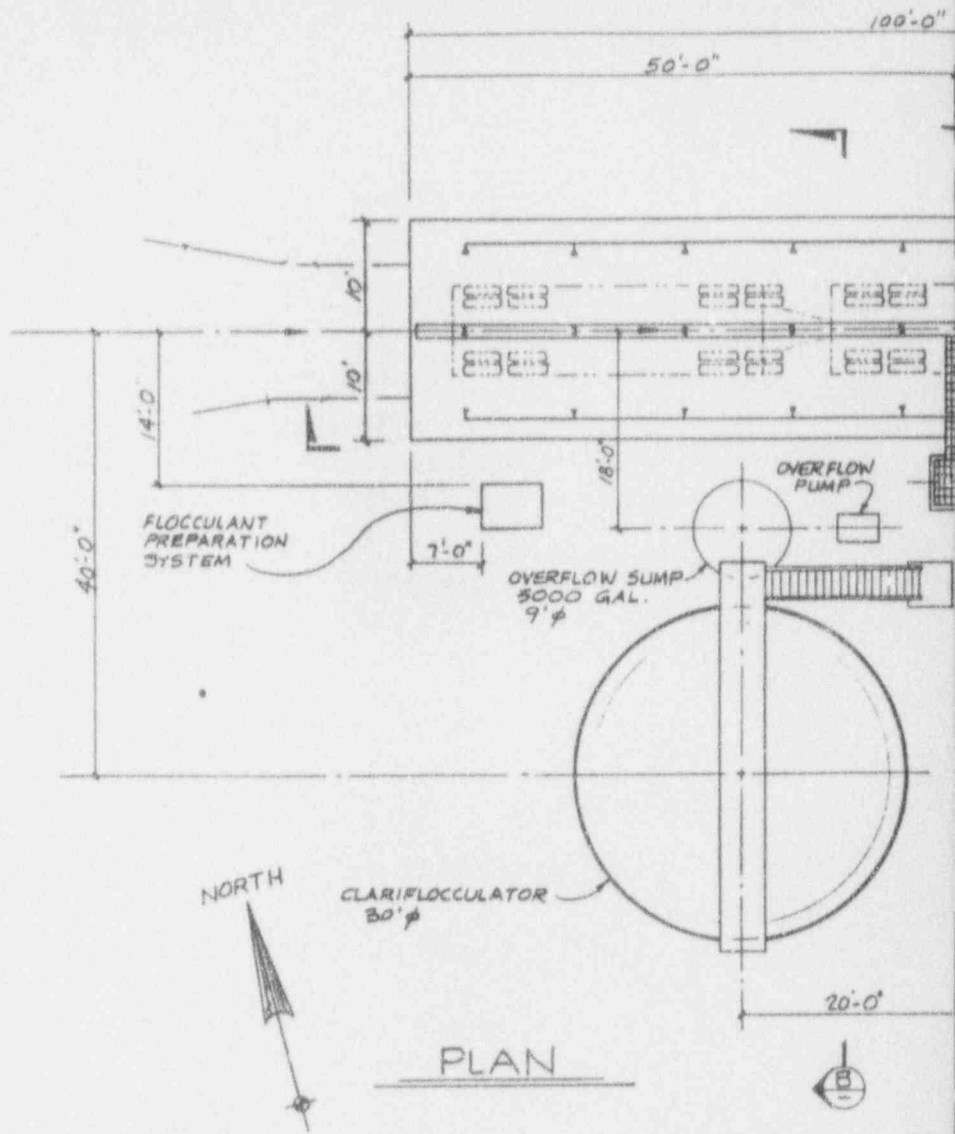


SECTION A

9405260155-11

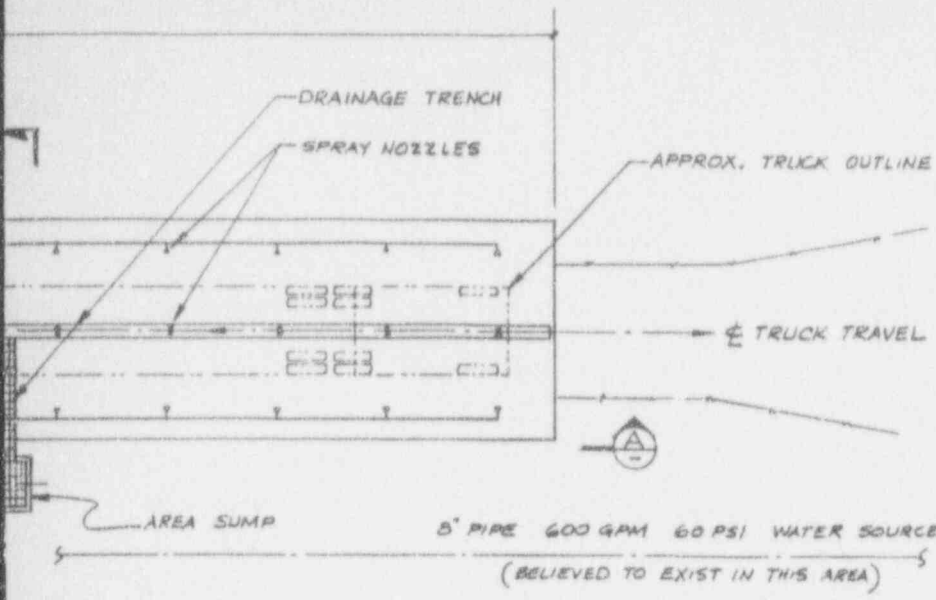
ORIGINAL

<p><b>ROBERTS &amp; SCHAEFER</b> ENGINEERS AND CONTRACTORS CHICAGO - SPLY LAKE CITY</p>	DATE: HLN DRAWN BY: [ ] CHECKED BY: [ ]	PROJECT: TRUCK DUMPS WHITE MESA MILL SITE UMETCO MINERALS CORP. BLANDING, UTAH	SCALE: 1/4" = 1'-0" DATE: 12-3-93 NUMBER: 6261-L3
	THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT AS CONNECTED WITH		
	PROJECT NO.		SHEET NO.
	DRAWING NO.		SHEET NO.



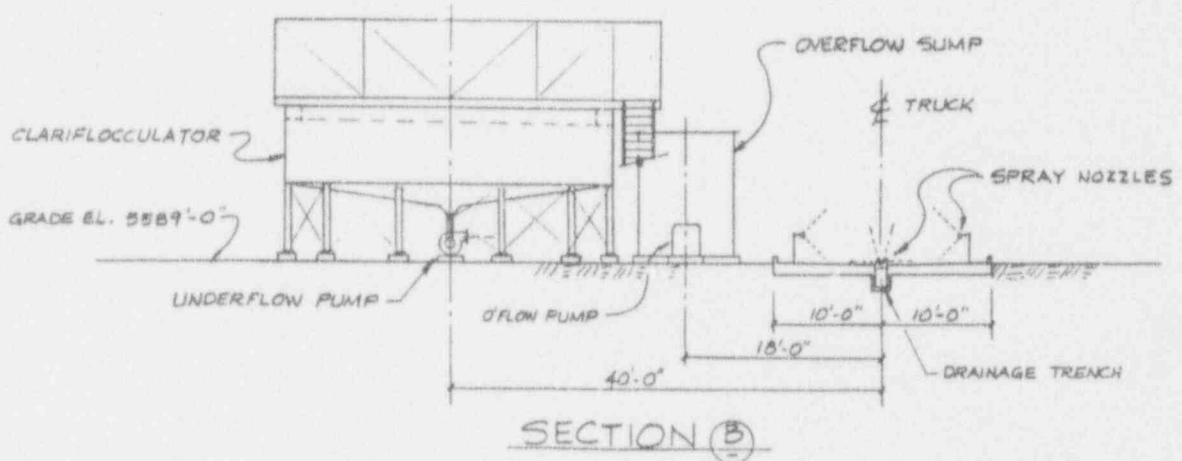
DATE	DESCRIPTION OF REVISION	DATE	DESCRIPTION OF REVISION
		5-18-78	APPROVED
		10-18-78	SHOW WATER SOURCE
		12-8-78	PRELIMINARY FOR (DNR)



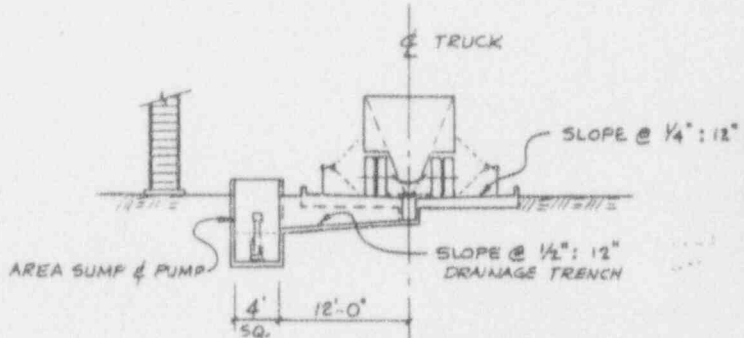
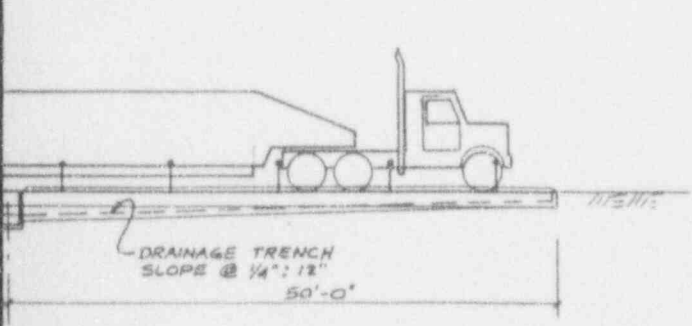


ANSTEC  
 APERTURE  
 CARD

Also Available on  
 Aperture Card



SECTION B

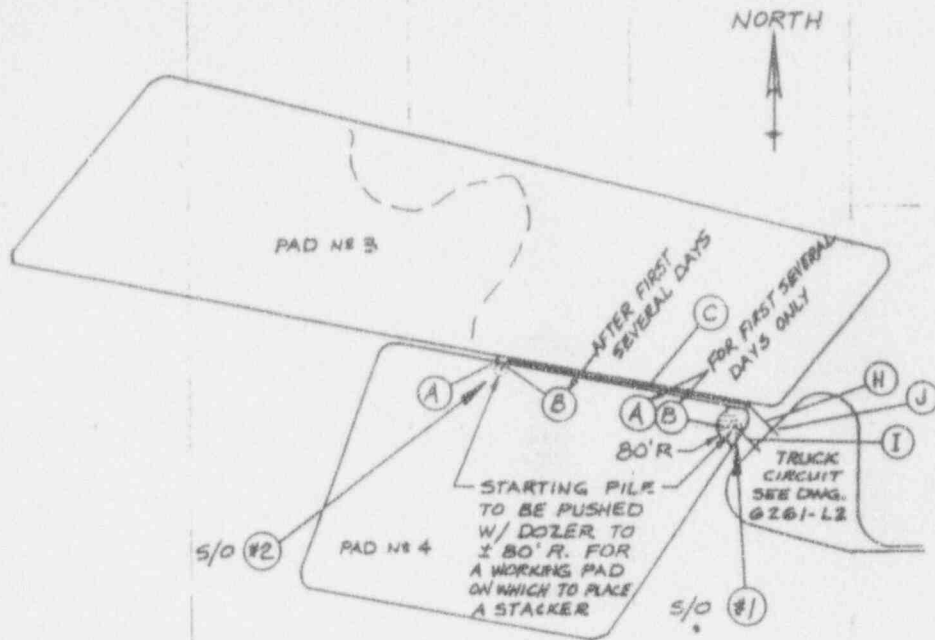


SECTION C

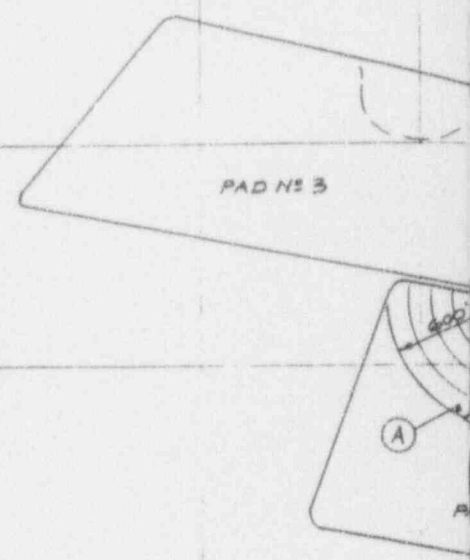
9405260155-12

ORIGINAL

<p><b>ROBERTS &amp; SCHAEFER</b>          ENGINEERS AND ARCHITECTS          CHICAGO - SALT LAKE CITY</p>	DATE BY HLN	TRUCK WASH STATION	SCALE 1/8" = 1'-0" DATE 12-6-93
	CHECKED BY	DRAWN BY	WHITE MESA MILL SITE
	APPROVED BY	UMETCO MINERALS CORP.	6261-L4
	Blanding, Utah		

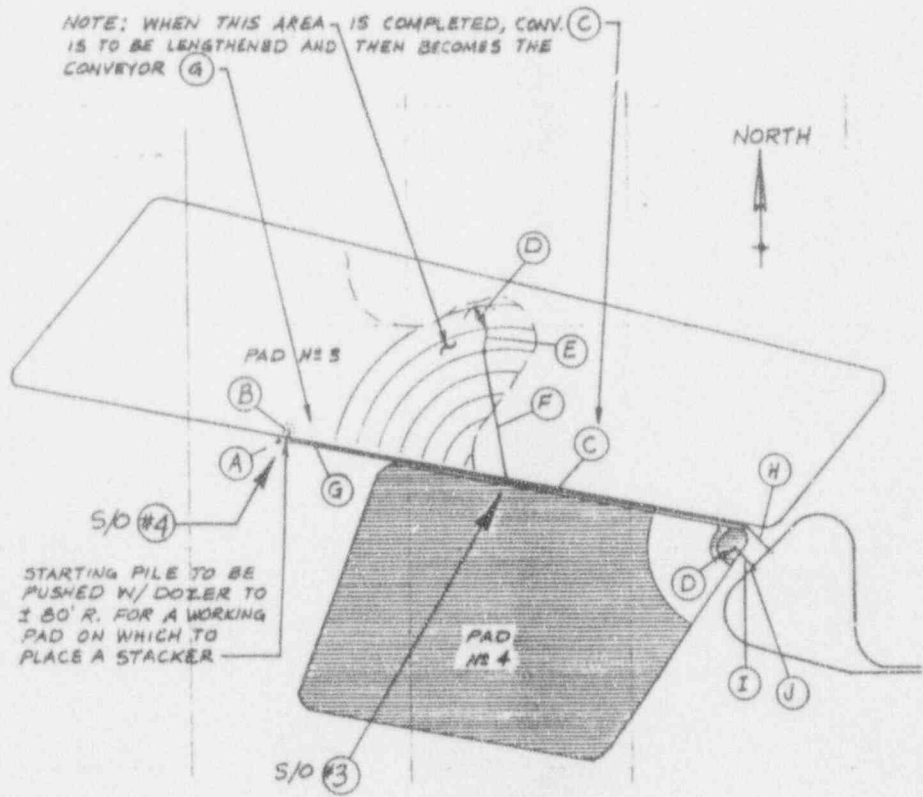


INITIAL SET-UP & 1ST SEASON START-UP

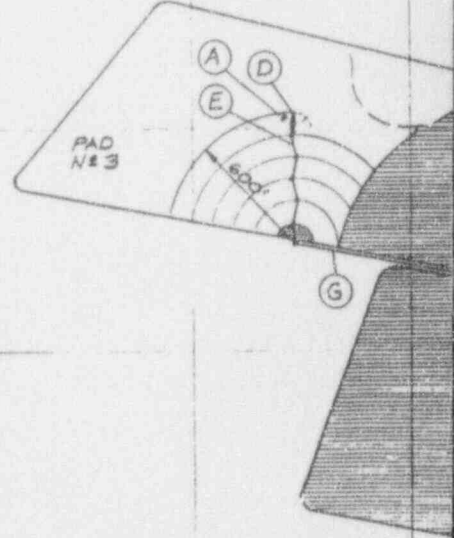


MID - FIRST

- SEQUENCE OF OPERATIONS
- (#1) BUILD A WORKING PAD
  - (#2) PROCEED TO FILL PAD
  - (#3) START 2<sup>ND</sup> SEASON
  - (#4) BUILD A WORKING PAD
  - (#5) JUST PRIOR TO



SECOND SEASON START-UP



MID - SECOND

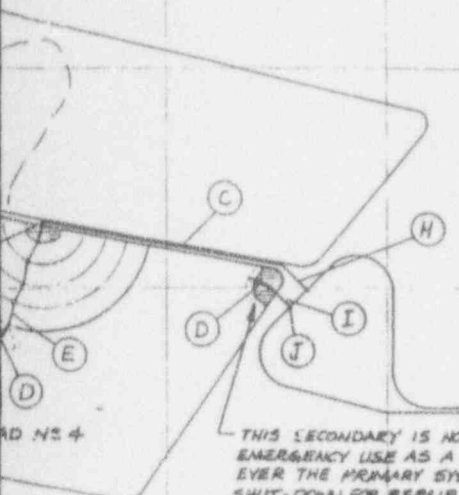
DATE	DESCRIPTION OF REVISION	DATE	DESCRIPTION OF REVISION

1-18-54 APPROVED

11-11-45 PRELIMINARY FOR COMPANY

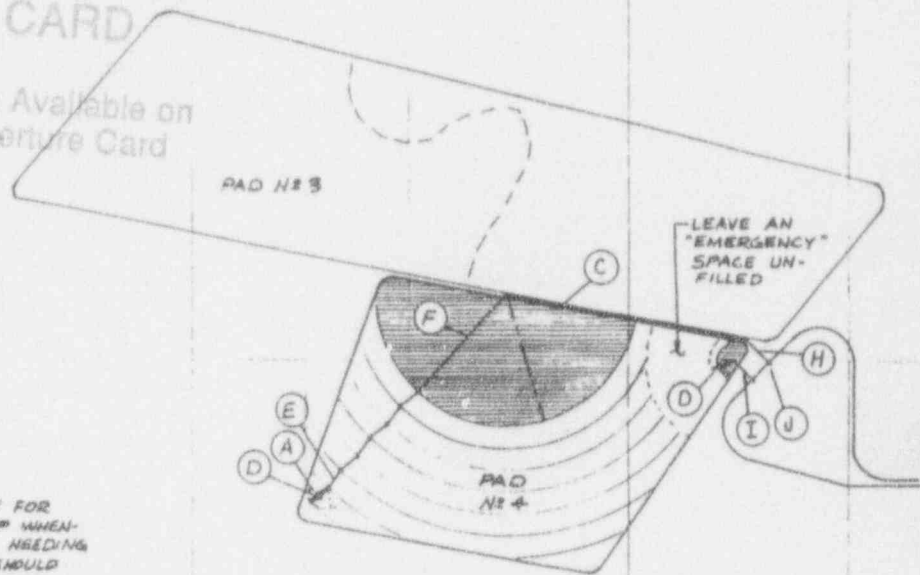
# ANSTEC APERTURE CARD

Also Available on Aperture Card



THIS SECONDARY IS NOW READY FOR EMERGENCY USE AS A BACK-UP WHENEVER THE PRIMARY SYSTEM IS NEEDING SHUT-DOWN FOR REPAIR, BUT SHOULD ONLY BE USED AS LONG AS IS NEEDED, KEEPING SPACE HERE FOR THE DURATION OF THE PROJECT.

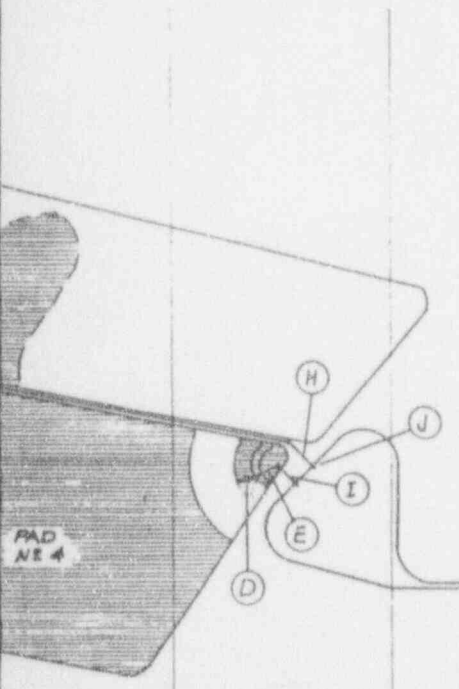
START SEASON



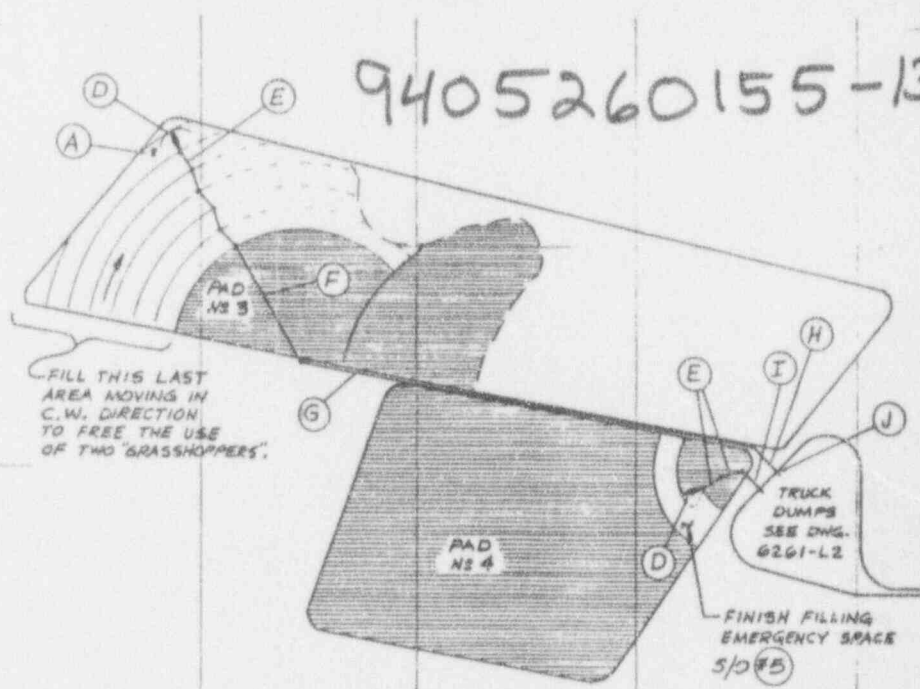
END FIRST SEASON

FOR EMERGENCY OPERATION.  
 TO FILL EAST END OF PAD #3.  
 TO FILL PAD, AND PROCEED TO FILL PAD #3.  
 AT COMPLETION OF PROJECT, FILL THE EMERGENCY SPACE.

- A. (1) BULLDOZER
- B. (1) 40' "STARTER" PORTABLE EQUIP. NO CV-B
- C. (1) 1100' FIELD CONVEYOR CV-C
- D. (2) 100' PORTABLE RADIAL STACKERS CV-D-1 OR 2
- E. (6) 100' PORTABLE "GRASSHOPPER" CONVEYORS CV-E-1 THRU 6
- F. (1) 600' RELOCATEABLE FIELD CONVEYOR CV-F
- G. (1) 1000' FIELD CONVEYOR CV-G
- H. (1) PRIMARY FEED CONVEYOR CV-H
- I. (1) SECONDARY FEED CONVEYOR CV-I
- J. (2) TRUCK DUMP BELT FEEDERS CV-J-1 OR 2



START SEASON



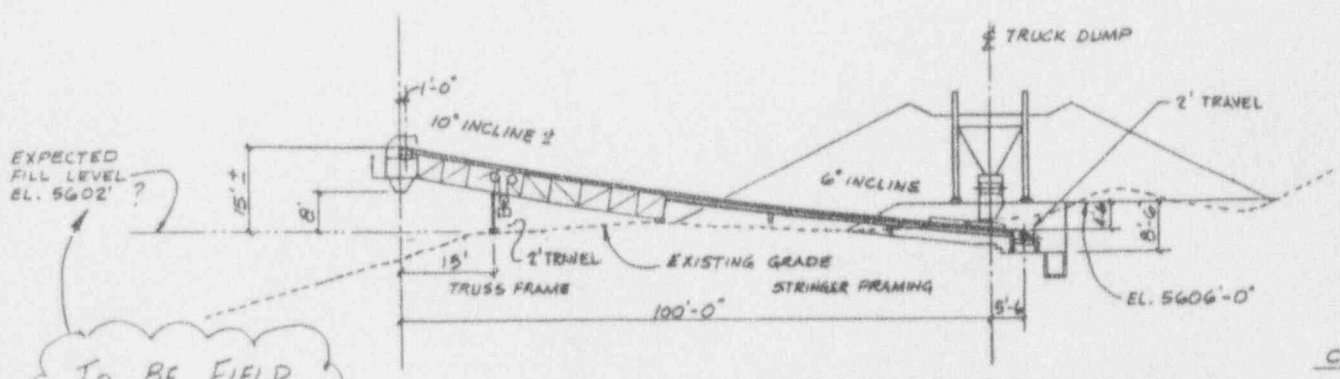
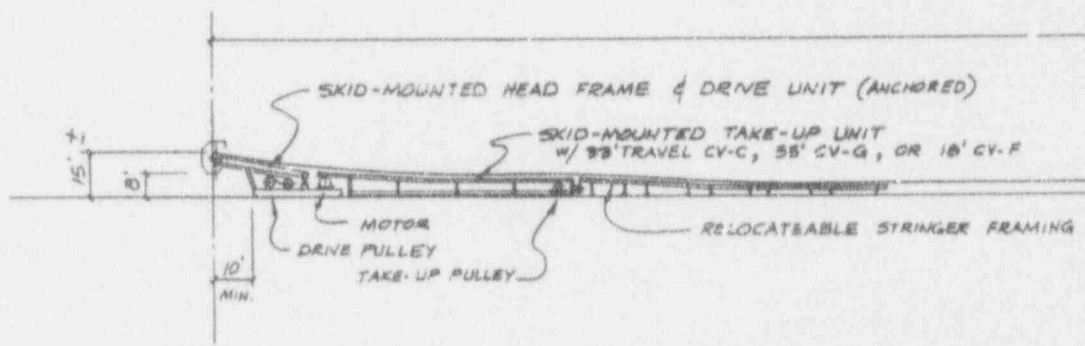
END SECOND SEASON

ORIGINAL

<p><b>ROBERTS &amp; SCHAEFFER</b> ENGINEERS AND CONTRACTORS CHICAGO - SALT LAKE CITY</p>	DRAWN BY: HLN CHECKED BY: APPROVED BY:	TITLE: PLACEMENT PLANS PROJECT: WHITE MESA MILL SITE CLIENT: UMETCO MINERALS CORP. LOCATION: BLANDING, UTAH	SCALE: 1" = 400' DATE: 12-9-95 DRAWING NO: 6261-L5
	PROJECT: WHITE MESA MILL SITE		
	CLIENT: UMETCO MINERALS CORP.		
	LOCATION: BLANDING, UTAH		

THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH

Also  
Ape



To BE FIELD VERIFIED.

**SECONDARY FEED CONVEYOR NO CV-I**

SCALE: 1" = 5'  
60 TPH, 300 ± FPM

CHARACTER  
SA  
SI  
MO  
RE

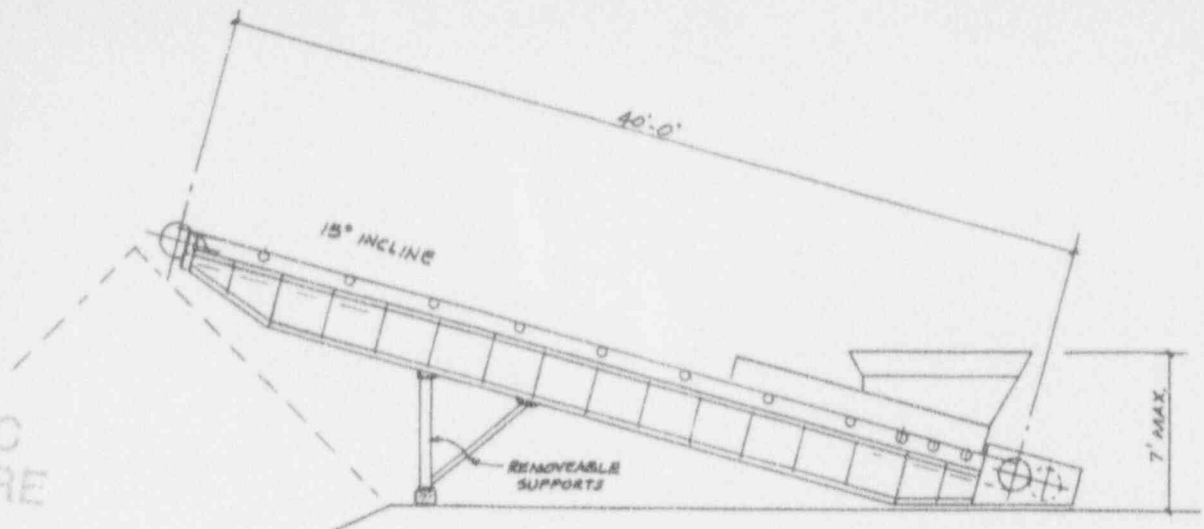
DATE	DESCRIPTION OF REVISION	DATE	DESCRIPTION OF REVISION

APPROVED  
PRELIMINARY



INSTEC  
ERTURE  
CARD

available on  
the web

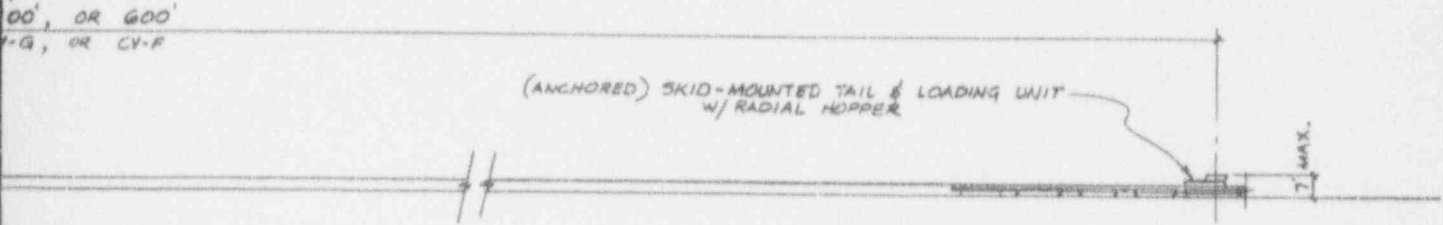


40' "STARTER" PORTABLE CONVEYOR NO CV-B

SCALE: 1/4" = 1'-0"

REFER TO DWG. 6261-L5  
610 TPH

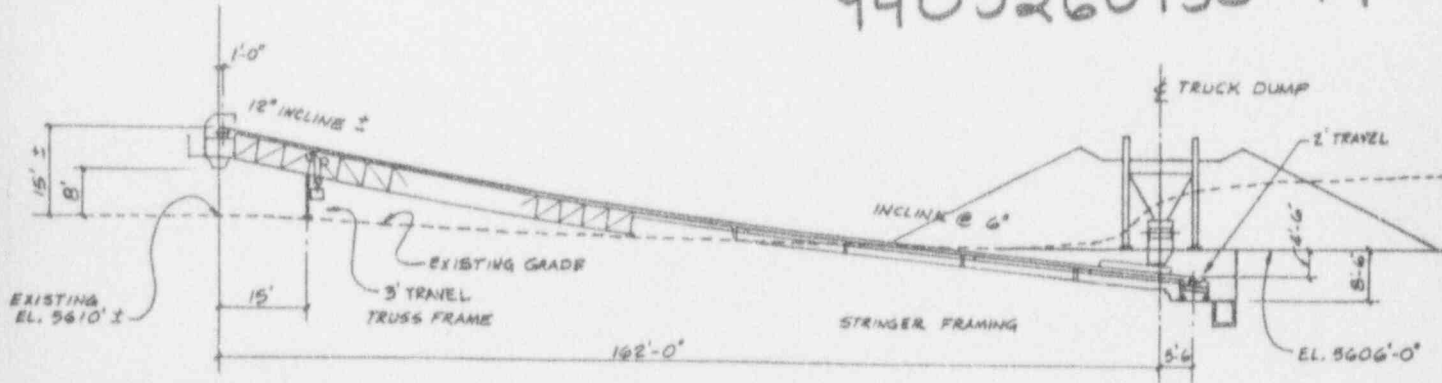
NOTE: CONVEYOR CV-G IS SIMPLY CONVEYOR CV-C EXPENDED TO 2100'.



CONVEYORS NO'S CV-C, CV-G, & CV-F

6261-L5  
30'  
300 ± FPM

9405260155-14



PRIMARY FEED CONVEYOR NO CV-H

SCALE: 1" = 15'  
610 TPH, 300 ± FPM

PROPERTIES OF CONVEYED MATERIAL:  
DENSITY 95 PCF  
MESH: 65 TO 325  
MOISTURE: 5% TO 30%  
LOSS: 45%

ORIGINAL

<p><b>ROBERTS &amp; SCHAEFER</b> ENGINEERS AND CONTRACTORS CHICAGO - SALT LAKE CITY</p>	DRAWN BY: HLN CHECKED BY: [ ] APPROVED BY: [ ]	CONVEYOR PROFILES WHITE MESA MILL SITE LIMETCO MINERALS CORP. BLANDING, UTAH	DATE NOTED: 12-14-98 DRAWING NO.: 6261-L6



SECTION V

ATTACHMENTS

---

**DRAWINGS**

**SECTION V**

**ATTACHMENTS**

---

**CAPITAL COST ESTIMATE**

Contract N° 6261-001  
Umetco Minerals  
White Mesa Uranium Storage Facility

Area	Description	Mech Mat'l	Mech Labor	Piping Mat'l	Piping Labor	Struct Mat'l	Struct Labor	Platewk Mat'l	Platewk Labor	Civil & Concrete Mat'l	Civil & Concrete Labor	Elect Mat'l	Elect Labor	Total
01	First Season Operations	643,169	129,955	61,043	61,043	437,863	149,305	55,956	30,521	53,940	137,475	132,260	142,433	2,034,763
<b>Labor &amp; Material Totals</b>		643,169	129,955	61,043	61,043	437,863	149,305	55,956	30,521	53,940	137,475	132,260	142,433	2,034,763
<b>Contingency by Discipline</b>														
										Engineering Labor (6%)			122,086	
										Construction Management (4.5%)				91,564
<b>Notes:</b>										Contractor Mobilization / Demobilization				15,000
All costs are in fourth quarter 1993 dollars										Equipment Rental				30,000
Earthwork costs are not included										Field Changes (2% of Mat'l & Labor Total)				40,695
Piping, platework and electrical costs are factored										Sales & Use Tax (6.25% on Materials)				86,502
Costs associated with winter construction are excluded										Gen'l Liability Insurance (0.72% of Grand Total)				20,684
Construction labor is assumed to be competitively bid, open shop labor										Geotechnical Investigation				Not Included
										Site Survey				Not Included
										Concrete & Compaction Testing				7,500
										Permits				Not Included
										Escalation				Not Included
										Contractor Fee (8%)				162,781
										<b>Subtotal</b>				<b>2,611,575</b>
										Contingency (10%)				261,158
										<b>Grand Total</b>				<b>2,872,733</b>

Title: Umetco Minerals		By: CH		Project N°: 6261-001		Area N°: 1		Page: 1-M-1				
Description: White Mesa Uranium Storage Facility - Mechanical										Date: Jan-6-94		
Code or Equipment Number	Item Description	Unit	Quantity	Material Cost		Labor Cost						Total
						Manhours		Manhours Cost		Subcontract		
				Unit	Total	Unit	Total	Unit	Total	Unit	Total	
CV-B	<u>Starter Conveyor B</u> 40' Section, 36" Belt Width	Each	1	10600.00	10,600	16.00	16	35.00	560			11,160
CV-C	<u>36" Field Conveyor</u>											
	Head Pulley w/Pillow Blocks	Each	1	1239.00	1,239	24.00	24	35.00	840			2,079
	Tail Pulley w/Pillow Blocks	Each	1	1076.00	1,076	18.00	18	35.00	630			1,706
	Take Up Pulley w/Pillow Blocks	Each	1	1076.00	1,076	18.00	18	35.00	630			1,706
	Benid Pulley w/Pillow Blocks	Each	2	1076.00	2,152	18.00	36	35.00	1,260			3,412
	36" Wide Conveyor Belting	LF	2,248	12.50	28,075	0.20	449	35.00	15,715			43,790
	Belt Splice, Vulcanized	Each	2	250.00	500	40.00	80	35.00	2,800			3,300
	Idlers											
	35" Impact	Each	4	152.00	608	1.00	4	35.00	140			748
	35" Troughing	Each	252	64.00	16,128	0.50	126	35.00	4,410			20,538
	Flat Return	Each	90	32.00	2,880	0.50	45	35.00	1,575			4,455
	Trough Training	Each	10	165.00	1,650	0.50	5	35.00	175			1,825
	20" Transition	Each	2	64.00	128	0.50	1	35.00	35			163
	Return Training	Each	10	135.00	1,350	0.50	5	35.00	175			1,525
	Belt Wipers	Each	1	2800.00	2,800	0.50	1	35.00	35			2,835
	Motor, 75 hp (Sized for final conveyor length)	Each	1	2995.00	2,995	32.00	32	35.00	1,120			4,115
	Speed Reducer	Each	1	10112.00	10,112	48.00	48	35.00	1,680			11,792
CV-E	<u>Portable Conveyors</u> 105' Sections, 36" Belt Width	Each	6	26500.00	159,000	16.00	96	35.00	3,360			162,360
CV-D	<u>Portable Radial Stacker</u> 105' x 36" Wide, Non-luffing Includes Hydraulics, Variable Speed Drive w/ Controls and Limit Switches.	Each	2	52800.00	105,600	200.00	400	35.00	14,000			119,600
	Freight 6%	Lot	1		20,878							20,878
<b>Page Total</b>					368,847		1,404		49,140			417,987
<b>Total from page 1-M-2</b>					274,322		2,309		80,815			355,137
<b>Total</b>					643,169		3,713		129,955			773,124

Code or Equipment Number	Item Description	Unit	Quantity	Material Cost		Labor Cost				Total		
				Unit	Total	Manhours		Manhours Cost			Subcontract	
						Unit	Total	Unit	Total		Unit	Total
CV-F	<b>36" Field Conveyor</b>											
	Head Pulley w/Pillow Blocks	Each	1	1239.00	1,239	24.00	24	35.00	840		2,079	
	Tail Pulley w/Pillow Blocks	Each	1	1,076.00	1,076	18.00	18	35.00	630		1,706	
	Take Up Pulley w/Pillow Blocks	Each	1	1,076.00	1,076	18.00	18	35.00	630		1,706	
	Bend Pulley w/Pillow Blocks	Each	2	1,076.00	2,152	18.00	36	35.00	1,260		3,412	
	36" Wide Conveyor Belting	LF	1,218	12.50	15,225	0.20	244	35.00	8,540		23,705	
	Belt Splice, Vulcanized	Each	2	250.00	500	40.00	80	35.00	2,800		3,300	
	Idlers											
	35" Impact	Each	4	152.00	608	1.00	4	35.00	140		748	
	35" Troughing	Each	142	64.00	9,088	0.50	71	35.00	2,485		11,573	
	Flat Return	Each	55	32.00	1,760	0.50	28	35.00	980		2,740	
	Trough Training	Each	5	165.00	825	0.50	3	35.00	105		930	
	20" Transition	Each	2	64.00	128	0.50	1	35.00	35		163	
	Return Training	Each	5	135.00	675	0.50	3	35.00	105		780	
	Belt Wipers	Each	1	2,800.00	2,800	0.50	1	35.00	35		2,835	
	Motor, 40 hp	Each	1	1,315.00	1,315	32.00	32	35.00	1,120		2,435	
	Speed Reducer	Each	1	5,650.00	5,650	48.00	48	35.00	1,680		7,330	
CV-H	<b>36" Primary Feed Conveyor</b>											
	Head Pulley w/Pillow Blocks	Each	1	1,239.00	1,239	24.00	24	35.00	840		2,079	
	Tail Pulley w/Pillow Blocks	Each	1	1,076.00	1,076	18.00	18	35.00	630		1,706	
	Take Up Pulley w/Pillow Blocks	Each	1	1,076.00	1,076	18.00	18	35.00	630		1,706	
	Bend Pulley w/Pillow Blocks	Each	2	1,076.00	2,152	18.00	36	35.00	1,260		3,412	
	36" Wide Conveyor Belting	LF	420	12.50	5,250	0.20	84	35.00	2,940		8,190	
	Belt Splice, Vulcanized	Each	1	250.00	250	40.00	40	35.00	1,400		1,650	
	Idlers											
	35" Impact	Each	4	152.00	608	1.00	4	35.00	140		748	
	35" Troughing	Each	38	64.00	2,432	0.50	19	35.00	665		3,097	
	Flat Return	Each	16	32.00	512	0.50	8	35.00	280		792	
	Trough Training	Each	1	165.00	165	0.50	1	35.00	35		200	
	20" Transition	Each	2	64.00	128	0.50	1	35.00	35		163	
	Return Training	Each	1	135.00	135	0.50	1	35.00	35		170	
	Belt Wipers	Each	1	2,800.00	2,800	0.50	1	35.00	35		2,835	
	Motor, 40 hp	Each	1	1,315.00	1,315	32.00	32	35.00	1,120		2,435	
	Speed Reducer	Each	1	5,650.00	5,650	48.00	48	35.00	1,680		7,330	
	Freight 5%	Lot	1		4,134						4,134	
<b>Page Total</b>					73,039		946		33,110		106,149	
<b>Total from page 1-M-3</b>					201,283		1,363		47,705		248,988	
<b>Total</b>					274,322		2,309		80,815		355,137	



Description: White Mesa Uranium Storage Facility - Mechanical

Code or Equipment Number	Item Description	Unit	Quantity	Material Cost		Labor Cost				Total		
				Unit	Total	Manhours		Manhours Cost			Subcontract	
						Unit	Total	Unit	Total		Unit	Total
CV-1	<b>36" Secondary Feed Conveyor</b>											
	Head Pulley w/Pillow Blocks	Each	1	1,239.00	1,239	24.00	24	35.00	840		2,079	
	Tail Pulley w/Pillow Blocks	Each	1	1,076.00	1,076	18.00	18	35.00	630		1,706	
	36" Wide Conveyor Belting	LF	420	12.50	5,250	0.20	84	35.00	2,940		8,190	
	Belt Splice, Vulcanized	Each	1	250.00	250	40.00	40	35.00	1,400		1,650	
	Idlers											
	35° Impact	Each	4	152.00	608	1.00	4	35.00	140		748	
	35° Troughing	Each	38	64.00	2,432	0.50	19	35.00	665		3,097	
	Flat Return	Each	16	32.00	512	0.50	8	35.00	280		792	
	Trough Training	Each	1	165.00	165	0.50	1	35.00	35		200	
	20° Transition	Each	2	64.00	128	0.50	1	35.00	35		163	
	Return Training	Each	1	135.00	135	0.50	1	35.00	35		170	
	Belt Wipers	Each	1	2800.00	2,800	0.50	1	35.00	35		2,835	
	Motor, 30 hp	Each	1	1055.00	1,055	32.00	32	35.00	1,120		2,175	
	Speed Reducer	Each	1	3400.00	3,400	48.00	48	35.00	1,680		5,080	
CV-J-1	<b>36" Belt Feeder</b>											
	Head Pulley w/Pillow Blocks	Each	1	1239.00	1,239	24.00	24	35.00	840		2,079	
	Tail Pulley w/Pillow Blocks	Each	1	1076.00	1,076	18.00	18	35.00	630		1,706	
	36" Wide Conveyor Belting	LF	71	12.50	888	0.20	14	35.00	490		1,378	
	Belt Splice, Vulcanized	Each	1	250.00	250	40.00	40	35.00	1,400		1,650	
	Idlers											
	35° Impact	Each	28	152.00	4,256	1.00	28	35.00	980		5,236	
	35° Troughing	Each	2	64.00	128	0.50	1	35.00	35		163	
	Flat Return	Each	5	32.00	160	0.50	3	35.00	105		265	
	Belt Wipers	Each	1	2800.00	2,800	0.50	1	35.00	35		2,835	
	Motor, 60 hp	Each	1	1668.00	1,668	32.00	32	35.00	1,120		2,788	
	Speed Reducer	Each	1	4955.00	4,955	48.00	48	35.00	1,680		6,635	
	Freight 6%	Lot	1		2,188							2,188
	<b>Page Total</b>					38,658		490		17,150		55,808
	<b>Total from page 1-M-4</b>					162,625		873		30,555		193,180
<b>Total</b>					201,283		1,363		47,705		248,988	

Code or Equipment Number	Item Description	Unit	Quantity	Material Cost		Lahor Cost						Total
						Manhours		Manhours Cost		Subcontract		
				Unit	Total	Unit	Total	Unit	Total	Unit	Total	
F-1 & F-3	Clarifloculator 30' Diameter, 148 GPM, 16 TPH Solids	Each	1	120000.00	120,000	600.00	600	35.00	21,000			141,000
P-1	Fresh Water Pump 400 GPM @ 100 PSI	Each	1	4000.00	4,000	16.00	16	35.00	560			4,560
P-2	Sump Pump 400 GPM @ 50' TDH	Each	1	4000.00	4,000	16.00	16	35.00	560			4,560
P-3	Clarifloculator Overflow Pump 500 GPM @ 100 PSI	Each	1	4000.00	4,000	16.00	16	35.00	560			4,560
P-4	Clarifloculator Underflow Pump 10 GPM	Each	1	4000.00	4,000	16.00	16	35.00	560			4,560
CV-J-2	36" Belt Feeder											
	Head Pulley w/Pillow Blocks	Each	1	1239.00	1,239	24.00	24	35.00	840			2,079
	Tail Pulley w/Pillow Blocks	Each	1	1076.00	1,076	18.00	18	35.00	630			1,706
	36" Wide Conveyor Belting	LF	71	12.50	888	0.20	14	35.00	490			1,378
	Belt Splice, Vulcanized	Each	1	250.00	250	40.00	40	35.00	1,400			1,650
	Idlers											
	35" Impact	Each	28	152.00	4,256	1.00	28	35.00	980			5,236
	35" Troughing	Each	2	64.00	128	0.50	1	35.00	35			163
	Flat Return	Each	5	32.00	160	0.50	3	35.00	105			265
	Belt Wipers	Each	1	2800.00	2,800	0.50	1	35.00	35			2,835
	Motor, 60 hp	Each	1	1668.00	1,668	32.00	32	35.00	1,120			2,788
	Speed Reducer	Each	1	4955.00	4,955	48.00	48	35.00	1,680			6,635
	Freight 6%	Lot	1		9,205							9,205
<b>Page Total</b>					162,625		873		30,555			193,180
No other totals to forward												
<b>Total</b>					162,625		873		30,555			193,180

Code or Equipment Number	Item Description	Unit	Quantity	Material Cost		Labor Cost						Total
				Unit	Total	Manhours		Manhours Cost		Subcontract		
						Unit	Total	Unit	Total	Unit	Total	
CV-C	<u>36" Field Conveyor, 1100'</u>											
	Conveyor Stringer w/Legs	Lbs	32,850	0.95	31,208	0.01	329			0.35	11,498	42,706
	Drive Frame & Skid	Lbs	15,500	1.10	17,050	0.01	155			0.35	5,425	22,475
	Bents	Lbs	3,500	0.92	3,220	0.01	35			0.35	1,225	4,445
	Tail Frame	Lbs	1,500	1.10	1,650	0.01	15			0.35	525	2,175
	Take Up Frame, Tower & Trolley	Lbs	12,246	0.95	11,634	0.01	122			0.35	4,286	15,920
	Belt Plow	Each	2	300.00	600	16.00	32			175.00	350	950
	Guards	Lot	1	1150.00	1,150					900.00	900	2,050
	Deck Plate @ Load Points, 12 Ga. Conveyor Cover	Lbs	420	1.10	462	0.01	4			0.35	147	609
CV-F	<u>36" Field Conveyor, 600'</u>											
	Conveyor Stringer w/Legs	Lbs	17,850	0.95	16,958	0.01	179			0.35	6,248	23,206
	Drive Frame & Skid	Lbs	12,300	1.10	13,530	0.01	123			0.35	4,305	17,835
	Bents	Lbs	1,320	0.92	1,214	0.01	13			0.35	462	1,676
	Tail Frame	Lbs	1,500	1.10	1,650	0.01	15			0.35	525	2,175
	Take Up Frame, Tower & Trolley	Lbs	12,246	0.95	11,634	0.01	122			0.35	4,286	15,920
	Belt Plow	Each	2	300.00	600	16.00	32			175.00	350	950
	Guards	Lot	1	1150.00	1,150					900.00	900	2,050
	Deck Plate @ Load Points, 12 Ga. Conveyor Cover	Lbs	420	1.10	462	0.01	4			0.35	147	609
CV-H	<u>36" Primary Feed Conveyor, 167'</u>											
	Conveyor Stringer w/Legs	Lbs	2,940	0.95	2,793	0.01	29			0.35	1,029	3,822
	Trusses	Lbs	9,500	1.20	11,400	0.01	95			0.35	3,325	14,725
	Bents	Lbs	950	0.92	874	0.01	10			0.35	333	1,207
	Tail Frame	Lbs	650	1.10	715	0.01	7			0.35	228	943
	Take Up Frame	Lbs	2,200	1.10	2,420	0.01	22			0.35	770	3,190
	Belt Plow	Each	2	300.00	600	16.00	32			175.00	350	950
	Guards	Lot	1	325.00	325					290.00	290	615
	Deck Plate @ Load Points, 12 Ga. Conveyor Cover	Lbs	420	1.10	462	0.01	4			0.35	147	609
Freight 6%	Lot	1		8,026							8,026	
<b>Page Total</b>					141,787		1,379				48,051	189,838
<b>Total from page 1-S-1</b>					295,876		124				101,254	397,130
<b>Total</b>					437,663		1,503				149,305	586,968

Code or Equipment Number	Item Description	Unit	Quantity	Material Cost		Labor Cost				Total		
						Manhours		Manhours Cost			Subcontract	
				Unit	Total	Unit	Total	Unit	Total		Unit	Total
CV-I	<b>36" Secondary Feed Conveyor, 105'</b>											
	Conveyor Stringer w/Legs	Lbs	1,800	0.95	1,710	0.01	18			0.35	630	2,340
	Trusses	Lbs	5,500	1.20	6,600	0.01	55			0.35	1,925	8,525
	Benus	Lbs	800	0.92	736	0.01	8			0.35	280	1,016
	Tail Frame	Lbs	650	1.10	715	0.01	7			0.35	228	943
	Belt Plow	Each	2	300.00	600	16.00	32			175.00	350	950
	Guards	Lot	1	325.00	325					290.00	290	615
	Deck Plate @ Load Points, 12 Ga. Conveyor Cover	Lbs	420	1.10	462	0.01	4			0.35	147	609
CV-J-2	<b>Belt Feeder</b>											
	Conveyor Stringer	Lb	1,800	0.95	1,710					0.35	630	2,340
	Head Frame	Lb	800	1.10	880					0.35	280	1,160
	Tail Frame	Lb	650	1.10	715					0.35	228	943
	Belt Plow	Each	1	300.00	300					175.00	175	475
	Guards	Lot	1	325.00	325					290.00	290	615
	Deck Plate	Lb	630	1.10	693					0.35	221	914
CV-J-1	<b>Belt Feeder</b>											
	Conveyor Stringer	Lb	1,800	0.95	1,710					0.35	630	2,340
	Head Frame	Lb	800	1.10	880					0.35	280	1,160
	Tail Frame	Lb	650	1.10	715					0.35	228	943
	Belt Plow	Each	1	300.00	300					175.00	175	475
	Guards	Lot	1	325.00	325					290.00	290	615
	Deck Plate	Lb	630	1.10	693					0.35	221	914
MCC Buildings	<b>Pre-Engineered Metal Bldg w/HVAC, 10' x 10'</b>	Each	2	9500.00	19,000					2500.00	5,000	24,000
	Freight 6%	Lot	1		2,364							2,364
	<b>Page Total</b>				41,758		124			12,498	54,256	
<b>Total from page 1-S-1</b>					254,118					88,756	342,874	
<b>Total</b>					295,876		124			101,254	397,130	

Code or Equipment Number	Item Description	Unit	Quantity	Material Cost		Labor Cost						Total
						Manhours		Manhours Cost		Subcontract		
				Unit	Total	Unit	Total	Unit	Total	Unit	Total	
<u>Primary Truck Dump</u>												
	1/4" Mild Steel Plate	Lb	5,655	0.98	5,542					0.35	1,979	7,521
	3/8" Mild Steel Plate	Lb	14,608	0.95	13,878					0.35	5,113	18,991
	1/4" Checkered Plate	Lb	3,927	0.98	3,848					0.35	1,374	5,222
	10" Diameter XS Pipe	Lb	6,131	0.95	5,824					0.35	2,146	7,970
	3/16" Stainless Steel Liner Plate	Lb	7,314	2.40	17,554					0.35	2,560	20,114
	Structural Steel, Heavy	Lb	57,301	0.75	42,976					0.35	20,055	63,031
	Structural Steel, Medium	Lb	15,890	0.90	14,301					0.35	5,562	19,863
	Structural Steel, Light	Lb	12,563	0.98	12,312					0.35	4,397	16,709
<u>Secondary Truck Dump</u>												
	1/4" Mild Steel Plate	Lb	5,655	0.98	5,542					0.35	1,979	7,521
	3/8" Mild Steel Plate	Lb	14,608	0.95	13,878					0.35	5,113	18,991
	1/4" Checkered Plate	Lb	3,927	0.98	3,848					0.35	1,374	5,222
	10" Diameter XS Pipe	Lb	6,131	0.95	5,824					0.35	2,146	7,970
	3/16" Stainless Steel Liner Plate	Lb	7,314	2.40	17,554					0.35	2,560	20,114
	Structural Steel, Heavy	Lb	57,301	0.75	42,976					0.35	20,055	63,031
	Structural Steel, Medium	Lb	15,890	0.90	14,301					0.35	5,562	19,863
	Structural Steel, Light	Lb	12,563	0.98	12,312					0.35	4,397	16,709
Note: 1/2 of bridge is included in each dump												
<u>Overflow Sump</u>												
	9" Diameter x 12' High, Covered											
	Structural Steel, Light	Lbs	933	0.98	914					0.35	327	1,241
	1/4" Plate, A36	Lbs	4,926	1.10	5,419					0.35	1,724	7,143
<u>Truck Wash Pipe Supports</u>												
	Structural Steel, Light	Lbs	950	0.98	931					0.35	333	1,264
	Freight 6%	Lot	1		14,384							14,384

<b>Page Total</b>				254,118								88,756	342,874
No other totals to forward													
<b>Total</b>				254,118								88,756	342,874



Title: Umetco Minerals		By: CH		Project N°: 6261-001		Area N°: 1		Page: 1-C-1				
Description: White Mesa Uranium Storage Facility ~ Concrete		Date: Jan-6-94										
Code or Equipment Number	Item Description	Unit	Quantity	Material Cost		Labor Cost						Total
				Unit	Total	Manhours		Manhours Cost		Subcontract		
						Unit	Total	Unit	Total	Unit	Total	
CV-C	<u>36" Field Conveyor, 1100'</u>											
	Tail, Take Up & Drive Area Foundations	Cy	22	120.00	2,640					260.00	5,720	8,360
	Wood Railroad Ties	Each	55	12.00	660	1.00	55	35.00	1,925			2,585
CV-F	<u>36" Field Conveyor, 600'</u>											
	Tail, Take Up & Drive Area Foundations	Cy	18	120.00	2,160					260.00	4,680	6,840
	Wood Railroad Ties	Each	30	12.00	360	1.00	30	35.00	1,050			1,410
CV-H	<u>36" Primary Feed Conveyor, 167'</u>											
	Tail, Take Up & Drive Area Foundations	Cy	8	120.00	960					260.00	2,080	3,040
CV-I	<u>36" Secondary Feed Conveyor, 105'</u>											
	Tail, Take Up & Drive Area Foundations	Cy	6	120.00	720					260.00	1,560	2,280
	<u>Primary Truck Dump</u>											
	Footings	Cy	46	120.00	5,520					200.00	11,960	17,480
	Primary Feed Conveyor Pit	Cy	30	120.00	3,600					300.00	9,000	12,600
	<u>Secondary Truck Dump</u>											
	Footings	Cy	46	120.00	5,520					260.00	11,960	17,480
	Secondary Feed Conveyor Pit	Cy	30	120.00	3,600					300.00	9,000	12,600
	<u>Primary Dump Retaining Wall</u>											
	Sheet Pile Wall	SF	1,044							12.50	13,050	13,050
	<u>Secondary Dump Retaining Wall</u>											
	Sheet Pile Wall	SF	1,044							12.50	13,050	13,050
	<u>Truck Wash Station</u>											
	Slab On Grade, 100' x 20' x 1'	Cy	79	120.00	9,480					200.00	15,800	25,280
	<u>Clarifloculator</u>											
	Mat Foundation, 40' x 40' x 2'	Cy	127	120.00	15,240					240.00	30,480	45,720
<b>Page Total</b>					50,460		85		2,975		128,340	181,775
<b>Total from page 1-C-2</b>					3,480						6,160	9,640
<b>Total</b>					53,940		85		2,975		134,500	191,415

Code or Equipment Number	Item Description	Unit	Quantity	Material Cost		Manhours		Labor Cost		Subcontract	Total
				Unit	Total	Unit	Total	Unit	Total		
	<b>Overflow Sump</b> Mat Foundation, 12' x 12' x 1.5'	Cy	9	120.00	1,080					2,300	3,240
	<b>MCC Buildings (2)</b> Slab On Grade w/Grade Beam	Cy	20	120.00	2,400					4,000	6,400
<b>Page Total</b>					<b>3,480</b>					<b>6,160</b>	<b>9,640</b>
<b>No other totals to forward</b>					<b>3,480</b>					<b>6,160</b>	<b>9,640</b>

Contract N° 6261-001  
Umetco Minerals  
White Mesa Uranium Storage Facility

Area	Description	Mech Mat'l	Mech Labor	Piping Mat'l	Piping Labor	Struct Mat'l	Struct Labor	Platewk Mat'l	Platewk Labor	Civil & Concrete Mat'l	Civil & Concrete Labor	Elect Mat'l	Elect Labor	Total
02	Second Season Operations	50,562	23,275			30,210	10,500			600	1,750			116,897
<b>Labor &amp; Material Totals</b>		50,562	23,275	0	0	30,210	10,500	0	0	600	1,750	0	0	116,897
<b>Contingency by Discipline</b>														
										Engineering Labor (6%)			7,014	
										Construction Management (4.5%)			5,260	
<b>Notes:</b>										Contractor Mobilization / Demobilization			5,000	
All costs are in fourth quarter 1993 dollars										Equipment Rental			15,000	
Earthwork costs are not included										Field Changes (2% of Mat'l & Labor Total)			2,338	
Piping, platework and electrical costs are factored										Sales & Use Tax (6.25% on Materials)			5,086	
Costs associated with winter construction are excluded										Gen'l Liability Insurance (0.72% of Grand Total)			1,342	
Construction labor is assumed to be competitively bid, open shop labor										Geotechnical Investigation			Not Included	
										Site Survey			Not Included	
										Concrete & Compaction Testing			1,000	
										Permits			Not Included	
										Escalation			Not Included	
										Contractor Fee (9%)			10,521	
										<b>Subtotal</b>			<b>169,458</b>	
										Contingency (10%)			16,946	
										<b>Grand Total</b>			<b>186,404</b>	

Code or Equipment Number	Item Description	Unit	Quantity	Material Cost		Manhours		Manhours Cost		Subcontract		Total
				Unit	Total	Unit	Total	Unit	Total	Unit	Total	
CV-G	36" Field Conveyor Extension, 1000' Conveyor Stringer w/Legs Conveyor Cover	Lbs Lf	30,000 None	0.95	28,500	0.01	300			0.35	10,500	39,000
	Freight 5%	Lot	1		1,710							1,710
	<b>Page Total</b>				30,210		300				10,500	40,710
	<b>No other totals to forward</b>											
	<b>Total</b>				30,210		300				10,500	40,710

Code or Equipment Number	Item Description	Unit	Quantity	Material Cost		Manhours		Manhours Cost		Subcontract		Total
				Unit	Total	Unit	Total	Unit	Total	Unit	Total	
CV-G	36" Field Conveyor Extension, 1000' Wood Railroad Ties	Each	50	12.00	600	1.00	50	35.00	1,750			2,350

Page Total												2,350
No other totals to forward												
Total												2,350



Title: Umetco Minerals		By: CH		Project N°: 6261-001		Area N°: 2		Page: 2-M-1				
Description: White Mesa Uranium Storage Facility								Date: Jan-6-94				
Code or Equipment Number	Item Description	Unit	Quantity	Material Cost		Labor Cost				Total		
				Unit	Total	Manhours		Manhours Cost			Subcontract	
						Unit	Total	Unit	Total		Unit	Total
CV-G	<u>36" Field Conveyor Extension, 1000'</u>											
	36" Wide Conveyor Belting	LF	2,000	12.50	25,000	0.20	400	35.00	14,000		39,000	
	Belt Splice, Vulcanized	Each	2	250.00	500	40.00	80	35.00	2,800		3,300	
	Idlers											
	35° Troughing	Each	250	64.00	16,000	0.50	125	35.00	4,375		20,375	
	Flat Return	Each	100	32.00	3,200	0.50	50	35.00	1,750		4,950	
	Trough Training	Each	10	165.00	1,650	0.50	5	35.00	175		1,825	
	Return Training	Each	10	135.00	1,350	0.50	5	35.00	175		1,525	
	Freight 6%	Lot	1		2,862						2,862	
<b>Page Total</b>					50,562		665		23,275		73,837	
No other totals to forward												
<b>Total</b>					50,562		665		23,275		73,837	

**SECTION V**

**ATTACHMENTS**

---

**EQUIPMENT LIST**

Equipment List

Project Title: URANIUM STORAGE WHITE MESA SITE  
 Client Name: UMETCO MINERALS  
 R&S Project No. 6261-000

Date: 2/22/94  
 Revision: 1

Area	Equip. N <sup>o</sup>	Quantity	Equipment Name	Description/Size	Remarks	Electrical Load Information			
						Kw/Kva	HP	RPM	Volt
	CV-B	1	STARTER CONVEYOR "B"				20		
	CV-C	1	1100 FOOT FIELD CONVEYOR SAME AS CV-G 21200 FOOT CONVEYOR	1100' X 36"	USE SAME MTR AND DRIVE AS CONVEYOR G		75		
	CV-D2	2	STACKER RADIAL DRIVE MECH				3		
	CV-D	2	100 FOOT PORTABLE RADIAL STACKERS NON LUFTING	105' X 36"			30		
	CV-E	6	GRASSHOPPER CONVEYORS	105' X 36"			20		
	CV-F	1	RELOCATABLE FEILD CONVEYOR	600' X 36"			40		
	CV-G	1	FIELD CONVEYOR	2100' X 36"			75		
	CV-H	1	PRIMARY FEED CONVEYOR	167.5' X 36"			40		
	CV-I	1	SECONDARY FEED CONVEYOR	105.5' X 36"			30		
	CV-J	2	BELT FEEDERS	33' X 36"			50		
	P-1	1	FRESH WATER PUMP	400GPM- @100PSI			30		

Equipment List

Project Title: URANIUM STORAGE WHITE MESA SITE  
 Client Name: UMETCO MINERALS  
 R&S Project No. 6261-000

Date: 2/22/94  
 Revision:1

Area	Equip. N <sup>o</sup>	Quantity	Equipment Name	Description/Size	Remarks	Electrical Load Information			
						Kw/Kva	HP	RPM	Volt
	P-2	1	SUMP PUMP	400GPM- 50' HEAD			15		
	P-3	1	CLARIFLOCCULATOR OVERFLOW PUMP	400-500 GPM @ 100PSI			60		
	P-4	1	CLARIFLOCCULATOR UNDERFLOW PUMP	10GPM			5		
	F-1	1	CLARIFLOCCULATOR	30' DIAMETER					
	F3	1	CLARIFLOCCULATOR RAKE MECH				3		

**SECTION V**

**ATTACHMENTS**

---

**RENTAL RATES**

36"x105' CR&S "Grasshopper Type"  
Transfer Conveyors

\$1,850.00 /Month/Each

36"x105' CR&S Portable Radial Stacker

\$3,200.00 /Month/Each

36"x40' Transfer Conveyor (Starter Conveyor)

\$800.00 /Month/Each

Rental priced are based on a minimum of 12 consecutive months, 8 hour/day maximum of 176 hours per month subject to the terms and conditions of the CR&S standard rental agreement.



October 28, 1993

Mr. W.W. (Butch) Brice, Superintendent  
Maintenance & Environmental Services  
UMETCO Minerals Corporation  
P.O. Box 669  
Blanding, UT 84511

Subject: Transmittal of Tailings Chemistry Data

Dear Mr. Brice:

Pursuant to the meeting held on October 20, 1993, RUST Geotech is transmitting the following data:

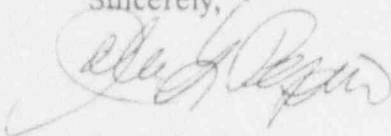
- Monticello Remedial Action Project Analysis of Drilling Data, dated 3/19/87 noting bottom of contamination; and Table 6, Borehole Contamination Summary.
- Bendix Memorandum dated December 3, 1984 results obtained from the Monticello tailings drilling and sampling project with attachments.
- Monticello Mill Tailings Drilling and Sampling Project #00-79-8027.
  - Acid Tailings Pile, dated 5/7/80, pages 1 through 9.
  - Carbonate Tailings Pile, dated 4/17/80, pages 1 through 10.
  - Composite Tailings Samples, dated 6/5/80, page 1 of 1.
  - East Tailings Pile, dated 4/8/80, pages 1 through 23.
  - Special Holes, dated 6/16/80, pages 1 through 5.
  - Vanadium Tailings Pile, dated 5/29/80, pages 1 through 9.
- Monticello Tailings Drilling and Sampling Project drawings BFEC No. Nc 193 Drill Hole As Bid, As Drilled, (1) working drawing (no title).
- Allied Signal Memorandums dated:
  - October 30, 1985 - MRAP
  - January 7, 1986 - Water
  - April 10, 1986 - Water Sampling
  - July 8, 1986 - Water Sampling
  - October 6, 1986 - Water Sampling

Mr. W.W. Brice  
Page 2  
October 28, 1993

- Dames and Moore, Tabular Results from Metals and Radiological Samples, obtained during 1991 investigation, page 1 through 7.

Feel free to contact John Pepin at (801) 587-2615 or Don Leske at (303) 248-6008 regarding any questions you may have.

Sincerely,



John G. Pepin  
Area Manager

jgp/bs

cc: D. N. Leske, DOE-GJPO  
M. E. Madson, RUST Geotech  
H. A. Perry, RUST Geotech

TABULAR RESULTS FROM METALS AND RADIOLOGICAL SAMPLES  
OBTAINED DURING THE 1991 MILLSITE INVESTIGATION

This table was generated by Geotech and inserted as a supplement to the Dames and Moore report.

REQ# NUMBER	BOREHOLE	SAMPLE ID	LAB ID	15 pCi/g Ra-226 CUTOFF	SAMPLE MIDPOINT	pH	%SOL	AS UG/G	BE UG/G	CD UG/G	CR UG/G	CU UG/G	HG UG/G	LOD %	MO UG/G	NO3 UG/G	PB UG/G	SB UG/G	SE UG/G	TH-230 pCi/g	U UG/G	V UG/G	ZN UG/G	K-40 pCi/g	RA-226 pCi/g	TH-232 pCi/g	
CARBONATE PILE																											
6363	31SW91-44	S-1	189426	12.6	15																				23.16	13.19	1.08
6362	31SW91-44	3	189419	12.6	15.5			26	<5	<2	<50	29	<0.2	18.6	<5	1.8	19	<10	3	22.3	13	433	66				
6363	31SW91-44	S-6	189425	12.6	2																			6.15	111.32	<1.23	
6361	31SW91-44	S-7	189371	12.6	4	7.7																		22.85	29.04	1.23	
6363	31SW91-44		189427	12.6	UK																			<30.7	854.63	<10.64	
6317	31SW91-45	S-4	189020	58.5	9																						
6361	31SW91-45	S-5	189373	58.5	11	8.9																					
6297	31SW91-45	S-11	186743	58.5	23	8.89																					
6317	31SW91-45	S-12	189023	58.5	25																			<23.98	1282.02	<9.91	
6361	31SW91-45	S-19	189374	58.5	41	9																					
6313	31SW91-45	28A	188950	58.5	COMP		86.2	82	<5	9	52	541	<0.2		17	26	60	<10	5	876	568	2670	151				
6313	31SW91-45	28B	188951	58.5	DUP		86.2	85	<5	11	60	488	<0.2		14	20.8	83	<10	5	1032	599	2810	150				
6394	31SW91-46	46-1	189808	6.5	2.25																			16.41	9.76	0.96	
6361	31SW91-50	1	189386	6.5	7	8.2																					
6361	31SW91-50B	-1	189395	>10	4	8.3																					
6361	31SW91-50B	-3	189394	>10	9	8.1																					
6361	31SW91-50	4	189385	6.5	10	8.3																					
6362	31SW91-50B	-6	189409	>10	11			11	<5	<2	<50	27	<0.2	13.8	<5	0.8	15	<10	<2	4.7	8	85	57				
6363	31SW91-50B	-7	189443	>10	11																			24.22	10.82	1.11	
6362	31SW91-51	13	189421	>55.6	53.5			20	<5	2	<50	61	<0.2	13.9	<5	1.2	17	<10	<2	28.1	17	299	93				
6363	31SW91-51		189429	>55.6	UK																			21.29	2.89	0.88	
6361	31SW91-51	51-3	189382	>55.6	4.25	7.7																					
6363	31SW91-51	51-3	189435	>55.6	4.25																			<17.77	896.64	<9.49	
6361	31SW91-51	51-8	189383	>55.6	9	8.1																					
6363	31SW91-51	51-8	189436	>55.6	9																			<50.55	1595.38	<16.21	
6361	31SW91-51	51-23	189384	>55.6	24	8.7																					
6363	31SW91-51	51-23	189437	>55.6	24																			<15	507.49	<5.25	

COMP = Composite Sample  
DUP = Duplicate Sample  
UK = Unknown

REGU NUMBER	BOREHOLE	SAMPLE ID	LAB ID	15 pCi/g Ra-226 CUTOFF	SAMPLE MIDPOINT	pH	%SOL	AS UG/G	BE UG/G	CD UG/G	CR UG/G	CU UG/G	HG UG/G	LOD %	MO UG/G	NO3 UG/G	PB UG/G	SB UG/G	SE UG/G	TH-230 pCi/g	U UG/G	V UG/G	ZN UG/G	K-40 pCi/g	RA-226 pCi/g	TH-232 pCi/g	
6297	31SW91-52	S-1	188757	49	5	7.98																					
6317	31SW91-52	S-3	189004	49	12																			<21.16	824.25	<7.74	
6297	31SW91-52	S-4	188764	49	4	8.84																					
6297	31SW91-52	S-6	188765	49	20	9.24																					
6317	31SW91-52	S-7A	189002	49	24																			<5.02	175.65	<1.9	
6317	31SW91-52	S-7B	189003	49	25																			<19.28	490.92	<5.73	
6313	31SW91-52	S-15	188952	49	COMP		87.9	63	<5	4	<50	490	<0.2		14	2.5	60	<10	4	617	288	1970	151				
6395	31SW91-53	S3-1	189819		4.25	8.1																		<14.14	481.36	<4.1	
6394	31SW91-53	S3-2	189803		4.75																						
6395	31SW91-53	S3-4	189818		9.25	8.1																		<10.71	336.11	<4.14	
6394	31SW91-53	S3-5	189804		9.75																						
6396	31SW91-53	S3-8	189822		19.25			12	<5	<2	<50	26	<0.2	19.2	8	11.3	16	<10	<2	2.4	18	99	69				
6363	31SW91-55	A-1	189438		4																			9.07	127.32	<1.69	
6361	31SW91-55B	-1	189388	4.8	35	7.5																					
6362	31SW91-55B	-6	189406	4.8	6.5			13	<5	<2	<50	68	<0.2	21	6	0.6	21	<10	<2	28.2	16	143	97				
6361	31SW91-55B	-7	189387	4.8	7	7.6																					
6361	31SW91-56	S-1	189375	11.7	4	9																					
6361	31SW91-56	S-2	189376	11.7	10.5	8.3																					
6362	31SW91-56	S-4	189420	11.7	17.5			12	<5	<2	<50	37	<0.2	27.2	7	1.2	18	<10	<2	12	8	109	82				
6363	31SW91-56	S-4	189428	11.7	17.5																			11.55	2.16	0.83	
VANADIUM PILE																											
6361	31SW91-31	1	189379	10.7	4	7.8																					
6363	31SW91-31	2	189432	10.7	5																			<8.43	332.54	<3.06	
6361	31SW91-31	4	189380	10.7	9	7.5																					
6361	31SW91-31	9	189381	10.7	14	8.3																					
6363	31SW91-31	10	189433	10.7	14.5																						
6362	31SW91-31	11	189413	10.7	14			22	<5	<2	<50	23	<0.2	20.6	<5	0.9	17	<10	<2	3.2	8	108	78				
6362	31SW91-31	12	189414	10.7	COMP			48	<5	4	<50	1550	<0.2	19.8	11	1.2	78	<10	38	323	209	1150	132				
6363	31SW91-31	13	189434	10.7	UK																			<6.23	228.36	<2.57	
6317	31SW91-32	S-4	189009	>42.8	7																			<28.34	1049.95	<11.26	
6317	31SW91-32	S-8	189015	>42.8	14																			<47.07	1665.26	<21.09	
6361	31SW91-32	S-11	189372	>42.8	18	9.1																					

COMP = Composite Sample  
DUP = Duplicate Sample  
UK = Unknown

REQ# NUMBER	BOREHOLE	SAMPLE ID	LAB ID	15 pCi/g Ra-226 CUTOFF	SAMPLE MIDPOINT	pH	%SOL	AS UG/G	BE UG/G	CD UG/G	CR UG/G	CU UG/G	HG UG/G	LOD %	MO UG/G	NO3 UG/G	PB UG/G	SB UG/G	SE UG/G	TH-230 pCi/g	U UG/G	V UG/G	ZN UG/G	K-40 pCi/g	RA-226 pCi/g	TH-232 pCi/g
6313	31SW91-32	26A	188966	>42.8	COMP		85.9	26	<5	<2	<50	306	<0.2		7	3.4	57	<10	<2	483.1	228	2440	117			
6313	31SW91-33	S-2	188948	0.5	4.5		67.7	9	<5	<2	<50	40	<0.2		<5	3.4	15	<10	<2	11.6	8	87	71			
6317	31SW91-33	S-2	189021	0.5	5																			12.47	5.26	1.13
6361	31SW91-40B	-1	189370	5.4	4	8.4																		<2.56	120.87	<1.54
6363	31SW91-40B	2	189423	5.4	4.5																					
6361	31SW91-40B	-4	189369	5.4	9	7.8																				
6363	31SW91-40B	-5	189424	5.4	9.5																					
6362	31SW91-40B	-6	189411	5.4	9			9	<5	<2	<50	33	<0.2	16.3	6	1.3	18	<10	<2	6.7	6	87	71			
6362	31SW91-40B	-7	189412	5.4	COMP			49	<5	<2	<50	60	<0.2	14.9	11	10.2	52	<10	6	218.9	151	1490	100			
6317	31SW91-41	S-4	189014	8.6	19																			20.11	3.04	0.93
6313	31SW91-41	S-4	189053	8.6	19		85.2	7	<5	<2	<50	32	<0.2		<5	0.6	20	<10	<2	11.2	6	85	65			
6313	31SW91-41	S-5	188967	8.6	COMP		82	33	<5	3	<50	374	<0.2		11	3.5	93	<10	3	581.3	201	3500	156			
6317	31SW91-41	S-12	189007	8.6	UNK																			<22.8	940.24	<10.02

EAST TAILINGS PILE

6363	31SW91-01	1	189430	4.1	4																				21.27	3.63	<0.24
6361	31SW91-01	2	189377	4.1	4	8																					
6363	31SW91-01	4	189431	4.1	9.5																				21.72	1.74	0.87
6361	31SW91-01	5	189378	4.1	9.5	6.1																					
6362	31SW91-01	6	189408	4.1	8.5			7	<5	<2	<50	20	<0.2	10.1	<5	1.2	17	<10	<2	1.8	4	60	63				
6297	31SW91-02	2-1	188744	29.4	4	7.26																					
6297	31SW91-02	2-3	188742	29.4	14	7.63																					
6297	31SW91-02	2-4	188748	29.4	19	7.7																					
6297	31SW91-02	2-5	188763	29.4	24	8.14																					
6313	31SW91-02	2-6	188943	29.4	24		86.7	7	<5	<2	<50	18	<0.2		<5	0.7	18	<10	<2	3.8	15	50	46				
6317	31SW91-02	2-7	189001	29.4	23.5																			14.49	5.13	0.88	
6313	31SW91-02	2-8	188944	29.4	COMP		87.7	41	<5	3	<50	2490	0.5		27	1.5	61	<10	3	273.6	146	157	168				
6313	31SW91-03	#18	188954	>51.7	COMP		71.3	87	<5	5	<50	2300	<0.2		37	13.7	143	<10	3	821.4	223	397	179				
6313	31SW91-03	25	188955	>53.7	47		78.5	31	<5	<2	<50	25	<0.2		<5	1.1	18	<10	<2	13	18	224	70				
6317	31SW91-04	S-3	189029	43	14.5																			<48.74	1678.72	<20.85	
6317	31SW91-04	S-9	189008	43	739.57																			20.13	2.82	0.93	
6297	31SW91-05	05-1	188747	6.3	4	7.83																					
6313	31SW91-05	S-2	188945	6.3	9.5		89.5	11	<5	<2	<50	37	<0.2		<5	7.4	17	<10	<2	9.5	9	93	68				

COMP = Composite Sample  
DUP = Duplicate Sample  
UNK = Unknown



REQ# NUMBER	BOREHOLE	SAMPLE ID	LAB ID	15 pCl/g Ra-226 CUTOFF	SAMPLE MIDPOINT	pH	%SOL	AS UG/G	BE UG/G	CO UG/G	CR UG/G	CU UG/G	HG UG/G	LOD %	MO UG/G	NO3 UG/G	PB UG/G	SB UG/G	SE UG/G	TH-230 pCl/g	U UG/G	V UG/G	ZN UG/G	K-40 pCl/g	RA-226 pCl/g	TH-232 pCl/g
6297	31SW91-05	05-3	188761	6.3	9.5	7.48																				
6297	31SW91-05	5-4	188735	6.3	9.5	7.68																				
6297	31SW91-08	#2	188767	>34	4	7.58																		<14.4	809.65	<8.69
6317	31SW91-08	08-03	189018	>34	9																			<51.05	1383.5	<11.71
6317	31SW91-08	08-5	189022	>34	14																					
6297	31SW91-08	08-8	188752	>34	24	7.53																				
6297	31SW91-08	08-11	188746	>34	34	7.96																				
6313	31SW91-08	08-12	188956	>34	38		83.1	4	<5	<2	<50	32	<0.2		<5	1.3	24	<10	<2	13.9	7	95	96			
6317	31SW91-08	08-13	189017	>34	39																			25.21	11.79	1.53
6313	31SW91-08	8-14A	188957	>34	COMP		77.9	87	<5	8	<50	2450	<0.2		43	53.3	156	<10	11	810.7	249	665	293			
6313	31SW91-08	8-14B	188958	>34	COMP		77.7	97	<5	8	<50	2670	<0.2		49	36	267	<10	12	849.3	271	711	306			
6297	31SW91-09	09-2	188751	28.6	8	7.69																		16.38	7.96	0.81
6317	31SW91-09	09-#3	189010	28.6	14																			<65.09	2236.99	<23.15
6317	31SW91-09	09-5	189016	28.6	19																					
6297	31SW91-09	09-6	188737	28.6	19	9.11																		14.59	2.7	<0.27
6317	31SW91-09	09-#9	189011	28.6	29																					
6297	31SW91-09	09-10	188750	28.6	29	7.58																		10.05	5.83	1.39
6317	31SW91-09	09-11	189012	28.6	34																					
6313	31SW91-09	09-12	188959	28.6	39		83	9	<5	<2	<50	42	<0.2		<5	0.7	19	<10	<2	10.4	7	96	85			
6297	31SW91-09	09-13	188749	28.6	39	7.78																		10.63	12.62	1.2
6317	31SW91-09	09-14	189013	28.6	39.5																					
6313	31SW91-09	9-15A	188960	28.6	COMP		75.4	93	<5	3	<50	1520	<0.2		37	28.1	102	<10	<2	876.9	353	468	119	11.35	35.69	<0.51
6317	31SW91-10B	S-1	189027	11.8	10																					
6297	31SW91-10B	S-2	188762	11.8	14	7.82																				
6313	31SW91-10B	S-2	188961	11.8	14.5		88.9	11	<5	<2	<50	42	<0.2		<5	54	14	<10	<2	13.4	8	78	62	1.25	7.06	<0.18
6317	31SW91-10B	S-2	189026	11.8	15																					
6297	31SW91-13	13-1	188745	>36.9	4	7.5																				
6297	31SW91-13	13-4	188740	>36.9	14	7.61																		<34.37	1288.47	<11.5
6317	31SW91-13	13-6	189019	>36.9	24																					
6297	31SW91-13	13-7	188739	>36.9	24	7.66																		<48.47	1845.56	<20.78
6317	31SW91-13	13-9	189030	>36.9	29																					
6313	31SW91-13	13-13	188946	>36.9	COMP		72.9	72	<5	9	<50	3300	<0.2		42	2.3	133	<10	<2	1056	310	540	219			
6297	31SW91-14	#3	188755	33.6	10	7.87																				

COMP = Composite Sample  
DUP = Duplicate Sample  
UK = Unknown

REQU NUMBER	BOREHOLE	SAMPLE ID	LAB ID	15 pCi/g Ra-226 CUTOFF	SAMPLE MIDPOINT	pH	%SOL	AS UG/G	BE UG/G	CD UG/G	CR UG/G	CU UG/G	HG UG/G	LOD %	MO UG/G	NO3 US/G	PB UG/G	SB UG/G	SE UG/G	TH-230 pCi/g	U UG/G	V UG/G	ZN UG/G	K-40 pCi/g	RA-226 pCi/g	TH-232 pCi/g
6317	31SW91-14	#4	189024	33.6	9																			<14.15	418.16	<5.1
6297	31SW91-14	#5	188756	33.6	14.5	8.48																		<59.67	1695.54	<20.66
6317	31SW91-14	#8	189025	33.6	19																			59.67	1695.54	20.66
6317	31SW91-14	#8	189025	33.6	19																			25.31	125.9	<1.59
6317	31SW91-14	#11	189028	33.6	28.5																					
6297	31SW91-14	#13	188754	33.6	34	7.89																				
6313	31SW91-14	#14	188962	33.6	38			83.7	15	<5	<2	<50	95	<0.2	12	1.8	29	<10	<2	24.8	24	128	79			
6297	31SW91-15	15-1	188753	0	3	7.45																				
6313	31SW91-15	15#2	188983	0	8			89.5	10	<5	<2	<50	43	<0.2	<5	7	15	<10	<2	11.8	8	87	68			
6313	31SW91-19	S-14	188954	21.6	COMP			76.2	54	<5	7	<50	1730	<0.2	25	0.9	119	<10	7	392.5	181	429	261			
6313	31SW91-20	S-1	188955	0	2			89.2	9	<5	<2	<50	29	<0.2	<5	3	15	<10	<2	9.3	8	62	58			
6317	31SW91-20	S-8	189008	0	2																			18.51	4.2	0.42
6297	31SW91-24	24-1	188738	24.2	4	9.33																				
6317	31SW91-24	24-#2	188999	24.2	4																			<18.61	622.98	<8.74
6317	31SW91-24	24-#3	189000	24.2	9																			<16.92	599.29	<4.81
6297	31SW91-24B	-24B4	188760	24.2	14	7.42																				
6297	31SW91-24	24-5	188736	24.2	14	7.53																				
6313	31SW91-24	24-10	188947	24.2	26.7			85	62	<5	<2	<50	38	<0.2	<5	0.7	20	<10	3	16.7	15	520	80			
6297	31SW91-24B	24-11	188758	24.2	26	7.75																				
6317	31SW91-24	24-12	188998	24.2	26																			18.46	5.92	<0.17
6313	31SW91-24	24-13	188948	24.2	COMP			84.2	74	<5	7	<50	1870	<0.2	34	1.4	98	<10	16	500.3	200	672	193			
6297	31SW91-25	25-1	188741	4	3	7.93																				
6297	31SW91-25	25-6	188766	4	29	7.82																				

ACID PILE

6363	31SW91-21	1	189452	0	3.75																				19.36	3.43	1.16
6361	31SW91-21	2	189401	0	4	8																					
6361	31SW91-21	3	189402	0	9	8.4																					
6363	31SW91-22	1	189453	3	3.5																				18.76	4	0.96
6361	31SW91-22	3	189403	3	9	8.2																					
6363	31SW91-27	2	189440	24	5																				<39.53	1491.44	<17.09
6363	31SW91-26	4	189454	9.7	10																				20.46	2.1	0.88
6363	31SW91-27	5A	189441	24	15																				<46.94	1767.77	<13.15

COMP = Composite Sample  
 DUP = Duplicate Sample  
 UK = Unknown

REQU NUMBER	BOREHOLE	SAMPLE ID	LAB ID	15 pCi/g Ra-226 CUTOFF	SAMPLE MIDPOINT	pH	%SOL	AS UG/G	BE UG/G	CD UG/G	CR UG/G	CU UG/G	HG UG/G	LOD %	MO UG/G	NO3 UG/G	PB UG/G	SB UG/G	SE UG/G	TH-230 pCi/g	U UG/G	V UG/G	ZN UG/G	K-40 pCi/g	RA-226 pCi/g	TH-232 pCi/g
6361	31SW91-27	5B	189393	24	15	7.6																				
6362	31SW91-27	7	189442	24	24.5																			14.24	13.07	<0.22
6361	31SW91-28	S-3	189380	>43.6	6	7.9																				
6361	31SW91-28	S-6	189390	>43.6	13	8.2																				
6361	31SW91-28	S-12	189391	>43.6	25	8.8																				
6361	31SW91-28	S-15	189392	>43.6	31	8.1																				
6362	31SW91-28	S-20	189407	>43.6	42			8	<5	<2	<50	24	<0.2	15	19	188	33	<10	<2	6.4	5	71	63			
6363	31SW91-28	S-20	189439	>43.6	42																			23.09	14.56	0.47
6362	31SW91-28	S-21	189416	>43.6	COMP			94	<5	9	<50	2090	<0.2	23.2	40	277	105	<10	6	956.3	387	2040	210			
6362	31SW91-28	S-22	189405	>43.6	DUP			96	<5	8	<50	2240	<0.2	23	37	256	110	<10	5	901	386	2040	232			
6363	31SW91-34	2	189448	>23.8	10																			<30.6	1344.48	<16.4
6361	31SW91-34	3	189359	>23.8	14	8.1																				
6361	31SW91-34	4	189400	>23.8	20	7.7																				
6363	31SW91-34	4	189449	>23.8	20																			<54.64	1742.46	<19.74
6362	31SW91-34	5	189417	>23.8	COMP			138	<5	8	<50	2410	<0.2	34.6	80	647	92	<10	4	1369	532	2400	201			
6362	31SW91-34	6	189418	>23.8	DUP			132	<5	7	<50	2440	<0.2	34.5	59	632	104	<10	4	1390	519	2130	198			
6363	31SW91-35	1	189445		4.5																			<12.28	375.31	<4.19
6361	31SW91-35	2	189397		4.5	7.9																				
6363	31SW91-35	6	189444		13.5																			<14.43	593.18	<5.39
6361	31SW91-35	7	189398		13.5	8.3																				
6363	31SW91-35	10	189446		24																			<23.62	1818.47	<19.14
6361	31SW91-35	11	189396		24	9.6																				
6363	31SW91-35	15	189447		38.5																			21.75	2.44	<0.22
6362	31SW91-35	16	189410		30			9	<5	<2	<50	18	<0.2	14.8	22	195	18	<10	<2	1.3	3	59	56			
6363	31SW91-36	2	189455	0.3	5.5																			19.46	3.67	0.9
6363	31SW91-37	1	189450	8.1	5																			<8.62	323.04	<3.62
6362	31SW91-37	2	189415	8.1	10			8	<5	<2	<50	27	<0.2	15.9	16	18.7	19	<10	<2	6.6	8	80	66			
6363	31SW91-37	2	189451	8.1	10																			19.48	5.37	<0.21
6363	31SW91-38	2	189456	0	5																			16.19	5.03	1.03

OTHER HOLES

6394	31SW91-11	11-1	189797	0	1																			17.92	2.64	0.88
6396	31SW91-11	11-1	189827	0	1			4	<5	<2	<50	21	<0.2	8.4	8	8.5	19	<10	<2	2.6	16	63	65			

COMP = Composite Sample  
DUP = Duplicate Sample  
UK = Unknown

REQU NUMBER	BOREHOLE	SAMPLE ID	LAB ID	15 pCi/g Ra-226 CUTOFF	SAMPLE MIDPOINT	pH	%SOL	AS UG/G	BE UG/G	CD UG/G	CR UG/G	CU UG/G	HG UG/G	LOD %	MO UG/G	NO3 UG/G	PB UG/G	SB UG/G	SE UG/G	TH-230 pCi/g	U UG/G	V UG/G	ZN UG/G	K-40 pCi/g	RA-226 pCi/g	TH-232 pCi/g
6395	31SW91-17	17-6	189813	0		7.8																				
6396	31SW91-17	17-7	189821	0	COMP			7	<5	<2	<50	43	<0.2	4.5	<5	13.8	19	<10	<2	12.8	22	68	57			
6394	31SW91-23	23-1	189795	0		4.5																	16.43	2.31	1.43	
6383	31SW91-39	1	189457	0		4.5																	18.91	5.39	1.07	
6394	31SW91-42	42-2	189798	0		6.5																	19.31	1.56	<0.09	
6395	31SW91-54	54-1	189815	0		3.75	7.7																			
6394	31SW91-54	54-2	189799	0		4.25																	21.26	1.38	0.87	
6396	31SW91-54	54-3	189823	0		4.75		9	<5	<2	<50	24	<0.2	9.2	<5	2.5	19	<10	<2	1.5	4	75	78			
6394	36SE91-58	58-1	189810	0		2.25																	19.42	1.72	0.86	
6394	36SE91-61	61-1	189811	4		2																	10.68	58.91	<0.81	
6395	36SE91-61	61-1	189817	4		2	7.4																			
6396	36SE91-61	61-3	189828	4		5		12	<5	<2	<50	25	<0.2	16.9	18	3.3	18	<10	<2	1.8	87	78	58			
6394	36SE91-67A	67A-2	189806	NL		4.5																	24.24	149.35	<1.91	
6395	36SE91-71	71-2	189816	9		4.25	8.2																			
6394	36SE91-71	71-3	189805	9		4.75																	<13.21	477.58	<5.79	
6396	36SE91-71	71-5	189824	9		10.25		12	<5	<2	<50	10	<0.2	6.2	<5	1.4	19	<10	<2	0.8	5	53	68			
6394	36SE91-72	72-1A	189807	13		4.75																	19.09	18.72	<0.28	
6394	36SE91-73	73-2	189802	0		9.25																	14.11	2.53	0.91	
6394	31SE91-76	76-1	189796	4.9		4.25																	16.93	50.23	<0.49	
6395	31SE91-76	76-2	189814	4.9		4.75	7.6																			
6396	31SE91-76	76-5	189825	4.9		10.25		4	<5	<2	<50	17	<0.2	14.7	<5	204	16	<10	<2	1.3	3	56	52			
6394	36SE91-77	77-5	189806	2.5		2.5																	12.13	3.03	0.86	
6394	36SE91-76	76-1	189800	0		4.25																	11.95	2.74	1.17	
6394	36SE91-80	80-1	189794	0		1.25																	21.63	1.23	0.89	
6394	36SE91-82	82-4	189801	1.5		0.5																	16.89	58.66	<0.8	
6297	31SW91-83	S-1	188759	NL		8.56																				
6317	31SW91-83	S-4	189005	NL																			17.42	4.47	0.67	
	36SE91-84A	84A-1	189812			1.25																	10.44	5.3	0.79	

REFER TO THE CHEM-NUCLEAR GEOTECH ANALYTICAL LABORATORY REPORTS FOR ORGANIC AND QA SAMPLE RESULTS.

COMP = Composite Sample  
DUP = Duplicate Sample  
UK = Unknown

03/19/87

MONTICELLO REMEDIAL ACTION PROJECT  
ANALYSIS OF DRILLING DATA

Hole No.	Depth to Tailings Inches (Feet)	Depth to Subsurface Inches (Feet)
Acid Tailings		
AA-1	2. NT	
AB-1	19.5 + 2. 12" (1')	234" (19.5')
AC-1	13.5 12" (1')	154" (12.83')
AC-2	25. 12" (1')	224" (18.67')
AD-1	20. NT	230" (19.17')
AE-1	2. NT	
AE-2	10. 12" (1')	114" (9.5')
AE-3	15.5 12" (1')	240" (20')
AE-4	21.5 12" (1')	234" (19.5')
AE-5	19.5 12" (1')	456" (38')
AE-6	38.5 12" (1')	342" (28.5')
AF-1	28.5 12" (1')	
AF-2	1.0 NT	
AF-3	8.0 12" (1')	84" (7')
AF-4	19.5 12" (1')	174" (14.5')
AF-5	17.5 12" (1')	204" (17')
AF-6	25.0 12" (1')	234" (19.5')
AF-7	45.5 12" (1')	474" (39.5')
AG-1	43.5 12" (1')	516" (43')
AG-2	2.0' NT	
AG-3	5.5' 6" (.5')	54" (4.5')
AG-4	17.5 10" (.83')	209" (17.42')
AG-5	23.0 12" (1')	268" (22.33')
AG-6	27.0 + 5 12" (1')	325" (27.08')
AH-1	36.0 12" (1')	426" (35.5')
AI-1	2.0 NT	
AI-2	14.0 12" (1')	54" (4.5')
AI-3	15.5 12" (1')	164" (13.67')
AJ-1	15.0 12" (1')	170" (14.17')
AK-1	9.5 12" (1')	114" (9.5')
	1.5 6" (.5')	12" (1')
Carbonate Tailings		
CA-1	18.5 + 2.5 12" (1')	222" (18.5')
CA-2	29.0 + 2.5 12" (1')	348" (29')
CA-3	CASED HOLE 50' UNKNOWN	600" (50')
CB-1	36.5 12" (1')	432" (36')
CB-2	41.5 12" (1')	486" (40.5')
CB-3	46.5 6" (.5')	558" (46.5')
CB-4	46.5 + 2 12" (1')	534" (44.5')
CB-5	44.5 + 2 12" (1')	534" (44.5')
CC-1	30.0 12" (1')	354" (29.5')
CC-2	36.5 12" (1')	432" (36')
CC-3	40.5 0" (0')	486" (40.5')
CC-4	CASED HOLE 49' UNKNOWN	
CC-5	45.0 12" (1')	534" (44.5')
CC-6	50.5 12" (1')	598" (49.83')

Bottom of (FT) CONTAMINATION

Bottom of TAILINGS

03/19/87



MONTICELLO REMEDIAL ACTION PROJECT  
ANALYSIS OF DRILLING DATA - CONTINUED

PAGE 2 OF 5

Hole No.	Depth to Tailings Inches (Feet)	Depth to Subsurface Inches (Feet)
BOTTOM OF CONT. (FT)		
CG-7	51.5+2	12" (1')
CD-1	15.0+2	12" (1')
CD-2	19.0	12" (1')
CD-3	39.5	12" (1')
CD-4	CASED HOLE 44.0	UNKNOWN
CD-5	41.5+2	12" (1')
CD-6	46.0	12" (1')
CD-7	51.5	12" (1')
CD-8	57.0	UNKNOWN
CE-1	30.5	0" (0')
CE-2	56.0	12" (1')
CE-3	50.5	12" (1')
CF-1	15.0	12" (1')
CF-2	18.5	0" (0')
CG-1	20.0	12" (1')
CG-2	16.5	12" (1')
East Tailings		
A-1	0.5	NT
A-2	5.0	0" (0')
A-3	19.0	0" (0')
A-4	22.0	0" (0')
A-5	39.5	24" (2')
A-6	34.0	24" (2')
A-7	39.0	24" (2')
A-8	39.5	24" (2')
A-9	36.5 + 5.0	24" (2')
B-1	0.5	NT
B-2	11.5	0" (0')
B-3	21.5	17" (1.42')
B-4	26.5	23" (1.92')
B-5	48.5	24" (2')
B-6	35.5	24" (2')
B-7	44.0 + 5.0	24" (2')
B-8	4.5	24" (2')
C-1	0.0	NT
C-2	0.0	NT
C-3	11.5	0" (0')
C-4	19.0	0" (0')
C-5	44.5 + 5.0	0" (0')
C-6	0.0	NT
C-7	40.5	24" (2')
C-8	0.0	NT
D-1	0.0	NT
D-2	19.0	24" (2')
D-3	31.5	30" (2.5')
D-4	42.0 + 2.0	0" (0')

MONTICELLO REMEDIAL ACTION PROJECT  
ANALYSIS OF DRILLING DATA - CONTINUED

PAGE 3 OF 5

Hole No.	Depth to Tailings Inches (Feet)	Depth to Subsurface Inches (Feet)
D-5 37.4 + 3.0	0" (0')	420" (35')
D-6 42.4 + 3.0	0" (0')	480" (40')
D-7 40.0	24" (2')	414" (34.5')
E-1 1.0	NT	
E-2 19.0	24" (2')	120" (10')
E-3 19.0	24" (2')	204" (17')
E-4 32.0	0" (0')	360" (30')
E-5 37.5	UNKNOWN	400" (33.33')
E-6 40.0	0" (0')	420" (35')
415' E-7 39.5	24" (2')	354" (29.5')
F-1 4.5	NT	
F-2 21.0	12" (1')	234" (19.5')
F-3 ?	NT	
F-4 39.5 + 1.0	0" (0')	450" (37.5')
F-5 30.0	0" (0')	360" (30')
F-6 34.5	18" (1.5')	414" (34.5')
F-7 34.5	24" (2')	294" (24.5')
G-1 0.0	NT	
G-2 9.5	NT	
G-3 20.5	24" (2')	234" (19.5')
G-4 40.0	0" (0')	420" (35')
G-5 42.0 + 3.0	0" (0')	<del>580" (48.33')</del> 504" (42')
G-6 31.0	18" (1.5')	354" (29.5')
G-7 22.8 + 3.0	24" (2')	274" (22.83')
H-1 0.0	NT	
H-2 9.5	NT	
H-3 35.0 + 2.5	24" (2')	414" (34.5')
H-4 0.0	NT	
H-5 30.5	12" (1')	414" (34.5')
H-6 25.0	24" (2')	294" (24.5')
I-1 0.0	NT	
I-2 4.5	NT	
I-3 CASED HOLE 16.0	UNKNOWN	
I-4 34.5 + 2.0	24" (2')	414" (34.5')
I-5 29.5	24" (2')	294" (24.5')
I-6 18.5	24" (2')	144" (12')
J-1 0.0	NT	
J-2 4.5	24" (2')	54" (4.5')
J-3 35.5	24" (2')	420" (35')
J-4 31.5	24" (2')	372" (31')
J-5 CASED HOLE 22.0	UNKNOWN	
K-1 2.0	NT	
K-2 15.0	24" (2')	300" (25')
K-3 36.0	24" (2')	426" (35.5')
K-4 31.5	24" (2')	294" (24.5')
K-5 13.0	24" (2')	130" (10.83')

MONTICELLO REMEDIAL ACTION PROJECT  
ANALYSIS OF DRILLING DATA - CONTINUED

Hole No.	Depth to Tailings Inches (Feet)	Depth to Subsurface Inches (Feet)
L-1	0.0	NT
L-2	30.0	24" (2')
L03	22.5+	24" (2')
L-4	17.5	24" (2')
M-1	0.0	NT
M-2	25.0	24" (2')
M-3	25.0	24" (2')
Special Holes		
1-A	1.0'	NT
2-A	50+ ?	NT
3-A	10'	0" (0')
1-C	19.5	12" (1')
2-C	29.5	12" (1')
3-C	24.5	12" (1')
4-C	10.0	0" (0')
5-C	5.0 ?	NT
6-C	5.0 ?	NT
7-C	10.0	0" (0')
8-C	10.0	0" (0')
9-C	7.0	0" (0')
10-C	5.0 ?	NT
11-C	10.0	0" (0')
12-C	10.0	0" (0')
V <sub>2</sub> O <sub>5</sub> Tailings		
VA-1	4.5	12" (1')
VB-1	7.0	12" (1')
VB-2	5.5	12" (1')
VC-1	15.5	12" (1')
VC-2	15.0	12" (1')
VD-1	0.0	NT
VD-2	10.0	12" (1')
VD-3	21.5	12" (1')
VD-4	26.0	12" (1')
VE-1	0.0	NT
VE-2	10.0	12" (1')
VE-3	16.5+11.0	12" (1')
VE-4	19.0	12" (1')
VF-1	0.0	NT
VF-2	15.0	12" (1')
VF-3	15.0	12" (1')
VF-4	20.5	12" (1')
VG-1	0.0	NT
VG-2	10.5	12" (1')
VG-3	12.5	12" (1')
VG-4	19.0	12" (1')
VG-5	21.5	12" (1')
VH-1	13.5	45'
VH-2	<del>11.5</del> 11.5	11'
VH-3	21.0	20.0'
VH-4	22.0	21.0
VI-1	12.5	9.5
VI-2	0.0	NT
VJ-1	8.0	4.5

*Handwritten notes:*  
 100 ft. map  
 100 ft. map  
 100 ft. map  
 100 ft. map

Table 6. Borehole Contamination Summary

Borehole Number	Location	Tailings/Subsurface Interface (ft)	Depth (ft) of Contamination [ $>16\mu\text{Ci}(\text{Ra-226})/\text{g}$ ]	Contaminated Subsurface (difference in ft)
85-01	Carbonate Tailings Pile	34.0	>34.0 <sup>a</sup>	-----
85-02	Carbonate Tailings Pile	51.0	52.0	1.0
85-03	Carbonate Tailings Pile	4.0	4.5	0.5
85-04	Vanadium Tailings Pile	10.5	13.0	2.5
85-05	Vanadium Tailings Pile	7.5	8.5	1.0
85-06	East Tailings Pile	16.0	17.0	1.0
85-07	East Tailings Pile	26.0	29.0	3.0
85-08	East Tailings Pile	28.5	33.5	5.0
85-09	East Tailings Pile	10.0	12.5	2.5
85-10	Acid Tailings Pile	31.5	32.0	0.5
85-11	Acid Tailings Pile	22.5	33.0	10.5
85-12	Acid Tailings Pile	14.5	16.0	1.5
85-13	Mill Area	NT <sup>b</sup>	6.0	-----
85-14	Mill Area	NC <sup>c</sup>	-----	-----
85-15	Borrow Area	NC <sup>c</sup>	-----	-----
85-16	Borrow Area	NC <sup>c</sup>	-----	-----
85-17	Peripheral Property	NC <sup>c</sup>	-----	-----
85-18	Peripheral Property	NT <sup>b</sup>	4.0	-----
85-19	Peripheral Property	NC <sup>c</sup>	-----	-----
85-20	Peripheral Property	NC <sup>c</sup>	-----	-----
85-21	Peripheral Property	5.0	7.0	2.0
85-22	North Millsite Boundary	NC <sup>c</sup>	-----	-----
85-23	North Millsite Boundary	NC <sup>c</sup>	-----	-----
85-24	North Millsite Boundary	NC <sup>c</sup>	-----	-----
85-25	Mill Area	1.0	3.5	2.5
<b>AVERAGE</b>				<b>2.5</b>

<sup>a</sup>Depth of contamination undetermined.

<sup>b</sup>NT = No Tailings.

<sup>c</sup>NC = No Contamination.

MONTICELLO REMEDIAL ACTION PROJECT  
ANALYSIS OF DRILLING DATA

PAGE 1 OF 5

Hole No.	Depth to Tailings Inches (Feet)	Depth to Subsurface Inches (Feet)
<b>Acid Tailings</b>		
AA-1	NT	
AB-1	12" (1')	234" (19.5')
AC-1	12" (1')	154" (12.83')
AC-2	12" (1')	174" (14.5')
AC-3	12" (1')	224" (18.67')
AD-1	NT	
AE-1	NT	
AE-2	12" (1')	114" (9.5')
AE-3	12" (1')	240" (20')
AF-4	12" (1')	234" (19.5')
AE-5	12" (1')	456" (38')
AE-6	12" (1')	342" (28.5')
AF-1	NT	
AF-2	12" (1')	84" (7')
AF-3	12" (1')	174" (14.5')
AF-4	12" (1')	204" (17')
AF-5	12" (1')	234" (19.5')
AF-6	12" (1')	474" (39.5')
AF-7	12" (1')	516" (43')
AG-1	NT	
AG-2	6" (.5')	54" (4.5')
AG-3	10" (.83')	209" (17.42')
AG-4	12" (1')	268" (22.33')
AG-5	12" (1')	325" (27.08')
AG-6	12" (1')	426" (35.5')
AH-1	NT	
AI-1	12" (1')	54" (4.5')
AI-2	12" (1')	164" (13.67')
AI-3	12" (1')	170" (14.17')
AJ-1	12" (1')	114" (9.5')
AK-1	6" (.5')	12" (1')
<b>Carbonate Tailings</b>		
CA-1	12" (1')	222" (18.5')
CA-2	12" (1')	348" (29')
CA-3	CASED HOLE UNKNOWN	600" (50')
CB-1	12" (1')	432" (36')
CB-2	12" (1')	486" (40.5')
CB-3	6" (.5')	558" (46.5')
CB-4	12" (1')	534" (44.5')
CB-5	12" (1')	534" (44.5')
CC-1	12" (1')	354" (29.5')
CC-2	12" (1')	432" (36')
CC-3	0" (0')	486" (40.5')
CC-4	CASED HOLE UNKNOWN	
CC-5	12" (1')	534" (44.5')



MONTICELLO REMEDIAL ACTION PROJECT  
ANALYSIS OF DRILLING DATA - CONTINUED

PAGE 2 OF 5

Hole No.	Depth to Tailings Inches (Feet)	Depth to Subsurface Inches (Feet)
CC-6	12" (1')	598" (49.83')
CC-7	12" (1')	618" (51.5')
CD-1	12" (1')	180" (15')
CD-2	12" (1')	174" (14.5')
CD-3	12" (1')	366" (30.5')
CD-4	CASED HOLE UNKNOWN	
CD-5	12" (1')	498" (41.5')
CD-6	12" (1')	552" (46')
CD-7	12" (1')	612" (51')
CD-8	UNKNOWN	660" (55')
CE-1	0" (0')	354" (29.5')
CE-2	12" (1')	648" (54')
CE-3	12" (1')	606" (50.5')
CF-1	12" (1')	180" (15')
CF-2	0" (0')	200" (16.67')
CG-1	12" (1')	234" (19.5')
CG-2	12" (1')	192" (16')
East Tailings		
A-1	NT	
A-2	0" (0')	54" (4.5')
A-3	0" (0')	216" (18')
A-4	0" (0')	246" (20.5')
A-5	24" (2')	294" (24.5')
A-6	24" (2')	288" (24')
A-7	24" (2')	348" (29')
A-8	24" (2')	288" (24')
A-9	24" (2')	414" (34.5')
B-1	NT	
B-2	0" (0')	54" (4.5')
B-3	17" (1.42')	252" (21')
B-4	23" (1.92')	294" (24.5')
B-5	24" (2')	468" (39')
B-6	24" (2')	414" (34.5')
B-7	24" (2')	528" (44')
B-8	24" (2')	294" (24.5')
C-1	NT	
C-2	NT	
C-3	0" (0')	114" (9.5')
C-4	0" (0')	216" (18')
C-5	0" (0')	534" (44.5')
C-6	UNKNOWN	
C-7	24" (2')	468" (39')
C-8	UNKNOWN	
D-1	NT	
D-2	24" (2')	204" (17')
D-3	30" (2.5')	354" (29.5')

**MONTICELLO REMEDIAL ACTION PROJECT  
ANALYSIS OF DRILLING DATA - CONTINUED**

PAGE 3 OF 5

Hole No.	Depth to Tailings Inches (Feet)	Depth to Subsurface Inches (Feet)
D-4	0" (0')	480" (40')
D-5	0" (0')	420" (35')
D-6	0" (0')	480" (40')
D-7	24" (2')	414" (34.5')
E-1	NT	
E-2	24" (2')	120" (10')
E-3	24" (2')	204" (17')
E-4	0" (0')	360" (30')
E-5	UNKNOWN	400" (33.33')
E-6	0" (0')	420" (35')
E-7	24" (2')	354" (29.5')
F-1	NT	
F-2	12" (1')	234" (19.5')
F-3	UNKNOWN	
F-4	0" (0')	450" (37.5')
F-5	0" (0')	360" (30')
F-6	18" (1.5')	414" (34.5')
F-7	24" (2')	294" (24.5')
G-1	NT	
G-2	NT	
G-3	24" (2')	234" (19.5')
G-4	0" (0')	420" (35')
G-5	0" (0')	580" (48.33')
G-6	18" (1.5')	354" (29.5')
G-7	24" (2')	274" (22.83')
H-1	NT	
H-2	NT	
H-3	24" (2')	414" (34.5')
H-4	UNKNOWN	
H-5	12" (1')	414" (34.5')
H-6	24" (2')	294" (24.5')
I-1	NT	
I-2	NT	
I-3	CASED HOLE UNKNOWN	
I-4	24" (2')	414" (34.5')
I-5	24" (2')	294" (24.5')
I-6	24" (2')	144" (12')
J-1	NT	
J-2	24" (2')	54" (4.5')
J-3	24" (2')	420" (35')
J-4	24" (2')	372" (31')
J-5	CASED HOLE UNKNOWN	
K-1	NT	
K-2	24" (2')	300" (25')
K-3	24" (2')	426" (35.5')
K-4	24" (2')	294" (24.5')

MONTICELLO REMEDIAL ACTION PROJECT  
ANALYSIS OF DRILLING DATA - CONTINUED

PAGE 4 OF 5

<u>Hole No.</u>	<u>Depth to Tailings Inches (Feet)</u>	<u>Depth to Subsurface Inches (Feet)</u>
K-5	24" (2')	130" (10.83')
L-1	NT	
L-2	24" (2')	234" (19.5')
L-3	24" (2')	264" (22')
L-4	24" (2')	204" (17')
M-1	NT	
M-2	(2')	300" (25')
M-3	2')	294" (24.5')
Special Holes		
1-A	NT	
2-A	NT	
3-A	0" (0')	48" (4')
1-C	12" (1')	174" (14.5')
2-C	12" (1')	174" (14.5')
3-C	12" (1')	234" (19.5')
4-C	0" (0')	108" (9')
5-C	NT	
6-C	NT	
7-C	0" (0')	48" (4')
8-C	0" (0')	72" (6')
9-C	0" (0')	48" (4')
10-C	NT	
11-C	0" (0')	72" (6')
12-C	0" (0')	48" (4')
V <sub>2</sub> O <sub>5</sub> Tailings		
VA-1	12" (1')	54" (4.5')
VB-1	12" (1')	94" (7.83')
VB-2	12" (1')	174" (14.5')
VC-1	12" (1')	54" (4.5')
VC-2	12" (1')	174" (14.5')
VD-1	NT	
VD-2	12" (1')	114" (9.5')
VD-3	12" (1')	252" (21')
VD-4	12" (1')	284" (23.67')
VE-1	NT	
VE-2	12" (1')	54" (4.5')
VE-3	12" (1')	198" (16.5')
VE-4	12" (1')	214" (17.83')
VF-1	NT	
VF-2	12" (1')	174" (14.5')
VF-3	12" (1')	162" (13.5')
VF-4	12" (1')	240" (20')
VG-1	NT	
VG-2	12" (1')	54" (4.5')
VG-3	12" (1')	150" (12.5')
VG-4	12" (1')	202" (16.83')

MONTICELLO REMEDIAL ACTION PROJECT  
ANALYSIS OF DRILLING DATA - CONTINUED

PAGE 5 OF 5

<u>Hole No.</u>	<u>Depth to Tailings Inches (Feet)</u>	<u>Depth to Subsurface Inches (Feet)</u>
VG-5	12" (1')	234" (19.5')
VH-1	12" (1')	54" (4.5')
VH-2	12" (1')	132" (11')
VH-3	12" (1')	240" (20')
VH-4	12" (1')	234" (19.5')
VI-1	12" (1')	114" (9.5')
VI-2	NT	
VJ-1	12" (1')	90" (7.6')

187 HOLES

NT indicates no tailings were identified  
UNKNOWN indicates no chemical analysis was performed

CR-RSLTS.TBL:MEMO301:MJP

Internal  
Memorandum



Field Engineering  
Corporation

Grand Junction Operations

P.O. Box 1566  
Grand Junction, CO. 81501  
Tel (303) 242-8621

A Subsidiary of  
The Bendix Corporation

Date December 3, 1984 Letter No.  
To Nick Abramiuk  
From Callie Ridolfi *CR*  
Subject Results Obtained from the Monticello Tailings Drilling and Sampling Project

---

The sample analyses and drilling log notes for the 1979 drilling project on the tailings piles were used to determine, for each hole location, the depth to tailings and depth to subsurface material. From chemical analysis of uranium, tailings were assumed to have a  $U_3O_8$  content greater than or equal to 100 parts per million (ppm).

A map of the hole locations with resulting tailings depths and N-S cross sections of the tailings on 100' centers have been produced.

Attached is a listing of the information developed. The forthcoming assessment of radiometric logs should supplement this data, from which volumes of tailings and contaminated subsurface material can be determined.

CR-RSLTS:MEMO301:MJP



Missed Well  
-8-85 CR

MONTICELLO REMEDIAL ACTION PROJECT  
ANALYSIS OF DRILLING DATA

Hole No.	Depth to Tailings Inches (Feet)	Depth to Subsurface Inches (Feet)
Acid Tailings		
AA-1	NT	
AB-1	12" (1')	234" (19.5')
AC-1	12" (1')	154" (12.83')
AC-2	12" (1')	174" (14.5')
AC-3	12" (1')	224" (18.67')
AD-1	NT	
AE-1	NT	
AE-2	12" (1')	114" (9.5')
AE-3	12" (1')	240" (20')
AE-4	12" (1')	234" (19.5')
AE-5	12" (1')	456" (38')
AE-6	12" (1')	342" (28.5')
AF-1	NT	
AF-2	12" (1')	84" (7')
AF-3	12" (1')	174" (14.5')
AF-4	12" (1')	204" (17')
AF-5	12" (1')	234" (19.5')
AF-6	12" (1')	474" (39.5')
AF-7	12" (1')	516" (43')
AG-1	NT	
AG-2	6" (.5')	54" (4.5')
AG-3	10" (.83')	209" (17.42')
AG-4	12" (1')	268" (22.33')
AG-5	12" (1')	325" (27.08')
AG-6	12" (1')	426" (35.5')
AH-1	NT	
AI-1	12" (1')	54" (4.5')
AI-2	12" (1')	164" (13.67')
AI-3	12" (1')	170" (14.17')
AJ-1	12" (1')	114" (9.5')
AK-1	6" (.5')	12" (1')
Carbonate Tailings		
CA-1	12" (1')	222" (18.5')
CA-2	12" (1')	348" (29')
CA-3	CASED HOLE UNKNOWN	600" (50')
CB-1	12" (1')	432" (36')
CB-2	12" (1')	486" (40.5')
CB-3	6" (.5')	558" (46.5')
CB-4	12" (1')	534" (44.5')
CB-5	12" (1')	534" (44.5')
CC-1	12" (1')	354" (29.5')
CC-2	12" (1')	432" (36')
CC-3	0" (0')	486" (40.5')
CC-4	CASED HOLE 0" (0')	492" (41')
CC-5	12" (1')	534" (44.5')

MONTICELLO REMEDIAL ACTION PROJECT  
ANALYSIS OF DRILLING DATA - CONTINUED

PAGE 2 OF 5

Hole No.	Depth to Tailings Inches (Feet)	Depth to Subsurface Inches (Feet)
CC-6	12" (1')	598" (49.83')
CC-7	12" (1')	618" (51.5')
CD-1	12" (1')	180" (15')
CD-2	12" (1')	174" (14.5')
CD-3	12" (1')	366" (30.5')
CD-4	CASED HOLE 12" (1')	408" (34')
CD-5	12" (1')	498" (41.5')
CD-6	12" (1')	552" (46')
CD-7	12" (1')	612" (51')
CD-8	UNKNOWN	660" (55')
CE-1	0" (0')	354" (29.5')
CE-2	12" (1')	648" (54')
CE-3	12" (1')	606" (50.5')
CF-1	12" (1')	180" (15')
CF-2	0" (0')	200" (16.67')
CG-1	12" (1')	234" (19.5')
CG-2	12" (1')	192" (16')
East Tailings		
A-1	NT	
A-2	0" (0')	54" (4.5')
A-3	0" (0')	216" (18')
A-4	0" (0')	246" (20.5')
A-5	24" (2')	294" (24.5')
A-6	24" (2')	288" (24')
A-7	24" (2')	348" (29')
A-8	24" (2')	288" (24')
A-9	24" (2')	414" (34.5')
B-1	NT	
B-2	0" (0')	54" (4.5')
B-3	17" (1.42')	252" (21')
B-4	23" (1.92')	294" (24.5')
B-5	24" (2')	468" (39')
B-6	24" (2')	414" (34.5')
B-7	24" (2')	528" (44')
B-8	24" (2')	294" (24.5')
C-1	NT	
C-2	NT	
C-3	0" (0')	114" (9.5')
C-4	0" (0')	216" (18')
C-5	0" (0')	534" (44.5')
C-6	0" (0')	444" (37')
C-7	24" (2')	468" (39')
C-8	24" (2')	324" (27')
D-1	NT	
D-2	24" (2')	204" (17')
D-3	30" (2.5')	354" (29.5')

MONTICELLO REMEDIAL ACTION PROJECT  
ANALYSIS OF DRILLING DATA - CONTINUED

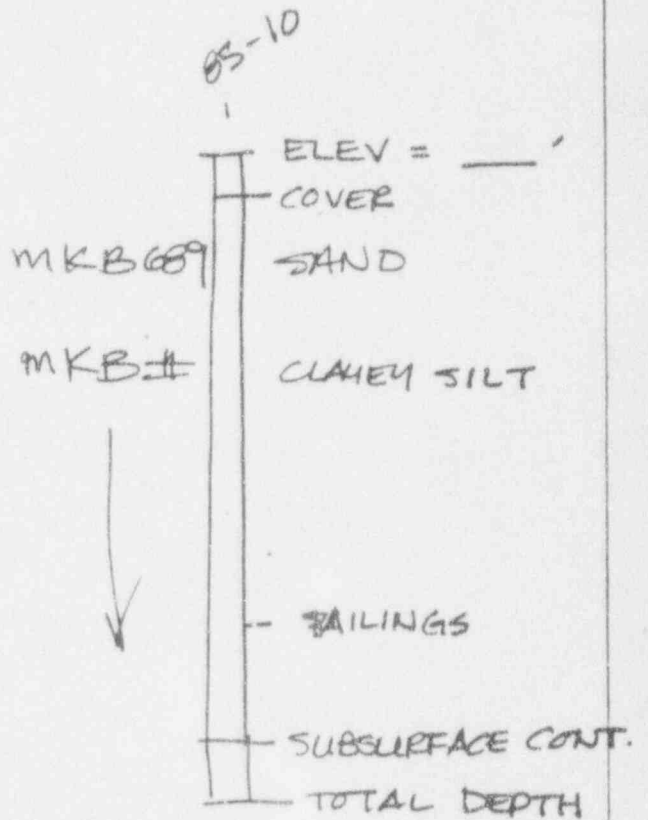
PAGE 3 OF 5

Hole No.	Depth to Tailings Inches (Feet)	Depth to Subsurface Inches (Feet)
D-4	0" (0')	480" (40')
D-5	0" (0')	420" (35')
D-6	0" (0')	480" (40')
D-7	24" (2')	414" (34.5')
E-1	NT	
E-2	24" (2')	120" (10')
E-3	24" (2')	204" (17')
E-4	0" (0')	360" (30')
E-5	UNKNOWN	400" (33.33')
E-6	0" (0')	420" (35')
E-7	24" (2')	354" (29.5')
F-1	NT	
F-2	12" (1')	234" (19.5')
F-3	24" (2')	276" (23')
F-4	0" (0')	450" (37.5')
F-5	0" (0')	360" (30')
F-6	18" (1.5')	414" (34.5')
F-7	24" (2')	294" (24.5')
G-1	NT	
G-2	NT	
G-3	24" (2')	234" (19.5')
G-4	0" (0')	420" (35')
G-5	0" (0')	580" (48.33')
G-6	18" (1.5')	354" (29.5')
G-7	24" (2')	274" (22.83')
H-1	NT	
H-2	NT	
H-3	24" (2')	414" (34.5')
H-4	24" (2')	312" (26')
H-5	12" (1')	414" (34.5')
H-6	24" (2')	294" (24.5')
I-1	NT	
I-2	NT	
I-3	CASED HOLE 24" (2')	168" (14')
I-4	24" (2')	414" (34.5')
I-5	24" (2')	294" (24.5')
I-6	24" (2')	144" (12')
J-1	NT	
J-2	24" (2')	54" (4.5')
J-3	24" (2')	420" (35')
J-4	24" (2')	372" (31')
J-5	CASED HOLE 24" (2')	168" (14')
K-1	NT	
K-2	24" (2')	300" (25')
K-3	24" (2')	426" (35.5')
K-4	24" (2')	294" (24.5')

John - X-sections of tailings

plot holes & locations on an  
overlay

TEST PITS 606



RADIOLOGIC LOG INFO

WELL NO.	TOTAL D. OF CNT.	D. OF TAILS	ID (FT)
260		40'	
46	26'	25'	29
36B	32.5	32	143
1	1'	NT	19
01	NC	NC	43
07	NC	NC	50
04	ABANDONED, NO LOG		
41	15'	12.5'	35
66	NC	NC	68
42	<del>58</del> 48.5	47'	61
2	NC	NC	30
29	?	?	15
38			
71	NO LOG		?
70	NO LOG		?
52			
26B	20.0+	19.5	20
76			
36A	45'	36'	46
27B	NC	NC	10
30B	11'	9.5'	27
58	?	?	15
65	2.5	NT	68
MILL #1			Cased to 103

23	NC	NC
42H	18.0	16.5
39A	??	
17-	NO INFO.	
34	NC INFO.	

P 2A

16  
21  
25  
32  
36

10 SHEETS 3 SQUARE  
21 SHEETS 3 SQUARE  
21 SHEETS 3 SQUARE





N172:

ENIUMH 23100

22100

EA:

June 27th

29

~~30~~

→ show review July 10th to Doc

65' 4 1/2"

95' 1 1/2"

120' 1"

115' 1"

260' 6"

300' 6"

410' 0"

410' 0"

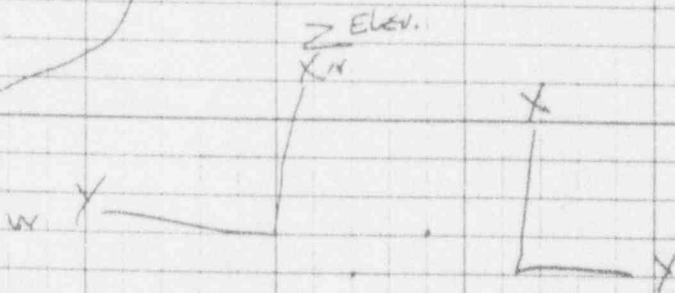
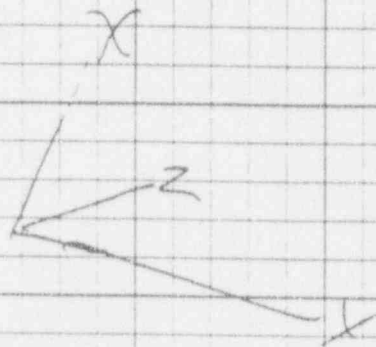
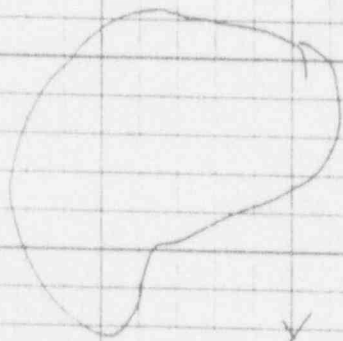
addate falls

600' 6"

UP cuts.

720' 1"

↓ 6"



MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC NC #193

ACID TAILINGS PILE

Date 5-7-80

Page 1 of 9

*200 ppm is tailings  
25 ppm is contaminated*

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
AA-1	700045	MKN 370	0-6	NA	NA	62	286	NA	NA	NA	NA	NA	NA
AA-1	700046	MKN 371	6-12	NA	NA	59	221	NA	NA	NA	NA	NA	NA
AA-1	700046	MKN 372	12-18	NA	NA	27	143	NA	NA	NA	NA	NA	NA
AA-1	700046	MKN 373	18-24	NA	NA	20	143	NA	NA	NA	NA	NA	NA
AB-1	700047	MKN 404	0-54	11.1	NA	92	207	NA	NA	NA	NA	NA	NA
AB-1	700047	MKN 405	54-114	8.8	NA	403	752	NA	NA	NA	NA	NA	NA
AB-1	700047	MKN 406	114-174	21.6	NA	493	1383	NA	NA	NA	NA	NA	NA
AB-1	700047	MKN 407	174-234	31.2	NA	324	1055	NA	NA	NA	NA	NA	NA
AC-1	700046	MKN 388	0-6	NA	NA	10	170	NA	NA	NA	NA	NA	NA
AC-1	700046	MKN 389	6-12	NA	NA	9	157	NA	NA	NA	NA	NA	NA
AC-1	700046	MKN 390	12-54	10.5	NA	169	678	NA	NA	NA	NA	NA	NA
AC-1	700046	MKN 391	54-114	33.6	NA	465	1217	NA	NA	NA	NA	NA	NA
AC-1	700046	MKN 392	114-154	21.0	NA	93	311	NA	NA	NA	NA	NA	NA
AC-1	700046	MKN 393	154-160	NA	NA	139	430	NA	NA	NA	NA	NA	NA
AC-1	700046	MKN 394	160-166	NA	NA	14	152	NA	NA	NA	NA	NA	NA
AC-1	700046	MKN 395	166-172	NA	NA	12	168	NA	NA	NA	NA	NA	NA
AC-1	700047	MKN 396	172-178	NA	NA	7	153	NA	NA	NA	NA	NA	NA
AC-2	700047	MKN 397	0-54	15.1	6.0	157	489	NA	NA	NA	NA	NA	NA
AC-2	700047	MKN 398	54-114	21.0	25.0	414	1723	NA	NA	NA	NA	NA	NA
AC-2	700047	MKN 399	114-174	33.2	19.5	244	928	NA	NA	NA	NA	NA	NA
AC-2	700047	MKN 400	174-234	31.3	17.0	73	457	NA	NA	NA	NA	NA	NA
AC-2	700047	MKN 401	234-286	25.2	14.5	54	296	NA	NA	NA	NA	NA	NA
AC-2	700047	MKN 402	286-292	NA	NA	86	378	NA	NA	NA	NA	NA	NA
AC-2	700047	MKN 403	292-298	NA	NA	18	146	NA	NA	NA	NA	NA	NA
AC-3	700049	MKN 446	0-54	19.1	25.5	285	514	NA	NA	NA	NA	NA	NA
AC-3	700049	MKN 447	54-114	20.6	36.7	436	2100	NA	NA	NA	NA	NA	NA
AC-3	700049	MKN 448	114-174	29.1	24.1	308	1962	NA	NA	NA	NA	NA	NA
AC-3	700049	MKN 449	174-224	29.4	16.3	187	1569	NA	NA	NA	NA	NA	NA
AC-3	700053	MKN 450	224-230	NA	NA	105	705	2	19	106	3	.44	179
AC-3	700053	MKN 451	230-236	NA	NA	33	250	<1	18	186	3	.15	45
AC-3	700053	MKN 452	236-242	NA	NA	5	110	<1	16	204	18	.12	5
AC-3	700053	MKN 453	242-248	NA	NA	7	115	<1	17	159	14	.09	<2

32

AA-1 4932A1



MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC NC #193

ACID TAILINGS PILE

Date 5-7-80  
Page 2 of 9

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCl/g Ra226
AD-1	700046	MKN 374	0-6	NA	NA	26	184	NA	NA	NA	NA	NA	NA
AD-1	700046	MKN 375	6-12	NA	NA	16	111	NA	NA	NA	NA	NA	NA
AD-1	700046	MKN 376	12-18	NA	NA	26	123	NA	NA	NA	NA	NA	NA
AD-1	700046	MKN 377	18-24	NA	NA	16	157	NA	NA	NA	NA	NA	NA
AE-1	700048	MKN 440	0-54	10.0	NA	21	155	NA	NA	NA	NA	NA	NA
AE-1	700048	MKN 441	54-114	16.1	NA	25	175	NA	NA	NA	NA	NA	NA
AE-1	700048	MKN 442	114-120	NA	NA	22	150	NA	NA	NA	NA	NA	NA
AE-1	700048	MKN 443	120-126	NA	NA	10	127	NA	NA	NA	NA	NA	NA
AE-1	700048	MKN 444	126-132	NA	NA	11	120	NA	NA	NA	NA	NA	NA
AE-1	700048	MKN 445	132-138	NA	NA	10	136	NA	NA	NA	NA	NA	NA
AE-2	700048	MKN 431	0-6	NA	NA	7	130	NA	NA	NA	NA	NA	NA
AE-2	700048	MKN 432	6-12	NA	NA	8	109	NA	NA	NA	NA	NA	NA
AE-2	700048	MKN 433	12-54	21.3	14.3	514	1528	NA	NA	NA	NA	NA	NA
AE-2	700048	MKN 434	54-114	22.5	21.6	401	989	NA	NA	NA	NA	NA	NA
AE-2	700048	MKN 435	114-164	23.7	26.5	53	191	NA	NA	NA	NA	NA	NA
AE-2	700048	MKN 436	164-170	NA	NA	51	205	NA	NA	NA	NA	NA	NA
AE-2	700048	MKN 437	170-176	NA	NA	30	121	NA	NA	NA	NA	NA	NA
AE-2	700048	MKN 438	176-182	NA	NA	25	86	NA	NA	NA	NA	NA	NA
AE-2	700048	MKN 439	182-188	NA	NA	6	54	NA	NA	NA	NA	NA	NA
AE-3	700048	MKN 423	0-54	20.5	NA	404	1291	NA	NA	NA	NA	NA	NA
AE-3	700048	MKN 424	54-114	25.7	NA	436	3100	NA	NA	NA	NA	NA	NA
AE-3	700048	MKN 425	114-174	34.2	NA	307	1400	NA	NA	NA	NA	NA	NA
AE-3	700048	MKN 426	174-240	37.0	NA	66	518	NA	NA	NA	NA	NA	NA
AE-3	700048	MKN 427	240-246	NA	NA	121	686	NA	NA	NA	NA	NA	NA
AE-3	700048	MKN 428	246-252	NA	NA	30	212	NA	NA	NA	NA	NA	NA
AE-3	700048	MKN 429	252-258	NA	NA	17	148	NA	NA	NA	NA	NA	NA
AE-3	700048	MKN 430	258-264	NA	NA	9	107	NA	NA	NA	NA	NA	NA
AE-4	700069	MKN 944	0-54	26.0	NA	352	920	NA	NA	NA	NA	NA	NA
AE-4	700069	MKN 945	54-114	19.3	NA	488	2000	NA	NA	NA	NA	NA	NA
AE-4	700069	MKN 946	114-174	24.2	NA	415	4100	NA	NA	NA	NA	NA	NA
AE-4	700069	MKN 947	174-234	26.8	NA	536	7900	NA	NA	NA	NA	NA	NA

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC NC #193

ACID TAILINGS PILE

Date 5-7-80  
Page 3 of 9

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
AE-4	700089	*MKO 580	240-252	NA	NA	12	179	2	14	310	8	.12	30
AE-4	700089	MKO 581	252-264	NA	NA	17	125	2	14	518	12	.06	<2
AE-4	700089	MKO 582	264-276	NA	NA	2	89	1	4	381	15	.04	-2
AE-4	700089	MKO 583	276-288	NA	NA	3	80	1	24	443	2	.06	1
AE-4	700089	MKO 584	288-300	NA	NA	9	116	1	4	385	24	.06	-2
AE-4	700091	MKO 585	300-312	NA	NA	1	71	NA	NA	NA	NA	NA	NA
AE-4	700091	MKO 586	312-324	NA	NA	2	116	NA	NA	NA	NA	NA	NA
AE-4	700091	MKO 587	324-336	NA	NA	4	116	NA	NA	NA	NA	NA	NA
AE-4	700091	MKO 588	336-348	NA	NA	6	125	NA	NA	NA	NA	NA	NA
AE-4	700091	MKO 589	348-360	NA	NA	1	116	NA	NA	NA	NA	NA	NA
AE-5	700049	MKN 454	0-54	12.5	11.1	275	835	NA	NA	NA	NA	NA	NA
AE-5	700049	MKN 455	54-114	30.1	25.3	423	3000	NA	NA	NA	NA	NA	NA
AE-5	700049	MKN 456	114-174	23.8	25.6	449	4000	NA	NA	NA	NA	NA	NA
AE-5	700049	MKN 457	174-234	26.7	26.0	514	4200	NA	NA	NA	NA	NA	NA
AE-5	700049	MKN 458	234-294	32.7	22.5	396	3100	NA	NA	NA	NA	NA	NA
AE-5	700049	MKN 459	294-354	38.5	18.8	191	1532	NA	NA	NA	NA	NA	NA
AE-5	700049	MKN 460	354-414	29.8	16.9	138	1816	NA	NA	NA	NA	NA	NA
AE-5	700049	MKN 461	414-456	13.2	17.0	147	1471	NA	NA	NA	NA	NA	NA
AE-5	700049	MKN 462	456-462	NA	NA	67	343	NA	NA	NA	NA	NA	NA
AE-5	700049	MKN 463	462-468	NA	NA	8	137	NA	NA	NA	NA	NA	NA
AE-5	700049	MKN 464	468-474	NA	NA	9	157	NA	NA	NA	NA	NA	NA
AE-5	700049	MKN 465	474-480	NA	NA	7	130	NA	NA	NA	NA	NA	NA
AE-6	700070	MKN 960	0-54	15.6	NA	250	570	NA	NA	NA	NA	NA	NA
AE-6	700070	MKN 961	54-114	18.0	NA	641	1220	NA	NA	NA	NA	NA	NA
AE-6	700070	MKN 962	114-174	20.6	NA	442	1394	NA	NA	NA	NA	NA	NA
AE-6	700070	MKN 963	174-234	27.2	NA	442	2300	NA	NA	NA	NA	NA	NA
AE-6	700070	MKN 964	234-294	30.2	NA	510	7900	NA	NA	NA	NA	NA	NA
AE-6	700070	MKN 965	294-342	24.0	NA	470	4800	NA	NA	NA	NA	NA	NA
AE-6	700087	*MKO 560	426-438	NA	NA	8	165	<1	18	850	5	.14	<2
AE-6	700087	MKO 561	438-450	NA	NA	5	160	<1	14	757	4	.13	13
AE-6	700087	MKO 562	450-462	NA	NA	79	870	<1	32	682	8	.57	161

\*No samples taken above 240".

\*\* No samples taken between 342" and 426".

2000-10-10

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC NC #193

ACID TAILINGS PILE

Date 5-7-80

Page 4 of 9

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>2</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
AE-6	700087	MKO 563	462-474	NA	NA	26	325	<1	6	757	4	.26	36
AE-6	700087	MKO 564	474-486	NA	NA	22	330	2	14	717	2	.20	33
AE-6	700088	MKO 565	486-498	NA	NA	10	220	NA	NA	NA	NA	NA	NA
AE-6	700088	MKO 566	498-510	NA	NA	16	270	NA	NA	NA	NA	NA	NA
AE-6	700088	MKO 567	510-522	NA	NA	19	310	NA	NA	NA	NA	NA	NA
AE-6	700088	MKO 568	522-534	NA	NA	12	235	NA	NA	NA	NA	NA	NA
AE-6	700088	MKO 569	534-546	NA	NA	12	150	NA	NA	NA	NA	NA	NA
AF-1	700045	MKN 362	0-6	NA	NA	21	196	NA	NA	NA	NA	NA	NA
AF-1	700045	MKN 363	6-12	NA	NA	18	146	NA	NA	NA	NA	NA	NA
AF-1	700045	MKN 364	12-18	NA	NA	10	157	NA	NA	NA	NA	NA	NA
AF-1	700045	MKN 365	18-24	NA	NA	12	134	NA	NA	NA	NA	NA	NA
AF-2	700046	MKN 378	0-54	6.5	NA	63	286	NA	NA	NA	NA	NA	NA
AF-2	700046	MKN 379	54-84	7.1	NA	115	600	NA	NA	NA	NA	NA	NA
AF-2	700046	MKN 380	84-90	NA	NA	79	402	NA	NA	NA	NA	NA	NA
AF-2	700046	MKN 381	90-96	NA	NA	52	270	NA	NA	NA	NA	NA	NA
AF-2	700046	MKN 382	96-102	NA	NA	10	153	NA	NA	NA	NA	NA	NA
AF-3	700070	MKN 955	0-54	16.0	NA	366	1594	NA	NA	NA	NA	NA	NA
AF-3	700070	MKN 956	54-114	14.2	NA	390	1743	NA	NA	NA	NA	NA	NA
AF-3	700070	MKN 957	114-174	25.2	NA	436	1494	NA	NA	NA	NA	NA	NA
AF-3	700070	MKN 958	174-234	26.1	NA	46	210	NA	NA	NA	NA	NA	NA
AF-3	700070	MKN 959	234-240	NA	NA	15	135	NA	NA	NA	NA	NA	NA
AF-3	700093	*MKO 625	180-192	NA	NA	37	175	2	12	314	5	.19	<2
AF-3	700093	MKO 626	192-204	NA	NA	19	180	2	16	278	7	.12	3
AF-3	700093	MKO 627	204-216	NA	NA	12	120	2	12	103	17	.07	6
AF-3	700093	MKO 628	216-228	NA	NA	16	90	1	12	102	23	.04	3
AF-3	700093	MKO 629	228-240	NA	NA	15	150	1	12	162	23	.12	<2
AF-3	700092	MKO 630	240-252	NA	NA	9	80	NA	NA	NA	NA	NA	NA
AF-3	700092	MKO 631	252-264	NA	NA	10	71	NA	NA	NA	NA	NA	NA
AF-3	700092	MKO 632	264-276	NA	NA	2	62	NA	NA	NA	NA	NA	NA
AF-3	700092	MKO 633	276-288	NA	NA	11	62	NA	NA	NA	NA	NA	NA
AF-3	700092	MKO 634	288-300	NA	NA	6	71	NA	NA	NA	NA	NA	NA

\*No samples taken above 180".



MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BEEC NC #193

ACID TAILINGS PILE

Date 5-7-80  
Page 5 of 9

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm CT	% S	pCl/g Ra226
AF-4	700046	MKN 383	0-54	11.1	9.0	185	618	NA	NA	NA	NA	NA	NA
AF-4	700046	MKN 384	54-114	20.5	34.4	501	1669	NA	NA	NA	NA	NA	NA
AF-4	700046	MKN 385	114-174	23.0	35.5	445	1696	NA	NA	NA	NA	NA	NA
AF-4	700046	MKN 386	174-204	24.0	22.2	181	1412	NA	NA	NA	NA	NA	NA
AF-4	700046	MKN 387	204-210	NA	NA	105	935	NA	NA	NA	NA	NA	NA
AF-5	700069	MKN 948	0-6	NA	NA	20	210	NA	NA	NA	NA	NA	NA
AF-5	700070	MKN 949	6-12	NA	NA	32	230	NA	NA	NA	NA	NA	NA
AF-5	700070	MKN 950	12-54	23.8	16.0	273	896	NA	NA	NA	NA	NA	NA
AF-5	700070	MKN 951	54-114	16.1	29.3	542	1868	NA	NA	NA	NA	NA	NA
AF-5	700070	MKN 952	114-174	25.2	28.5	532	1942	NA	NA	NA	NA	NA	NA
AF-5	700070	MKN 953	174-234	30.3	32.0	630	8300	NA	NA	NA	NA	NA	NA
AF-5	700070	MKN 954	234-294	29.3	18.5	99	1096	NA	NA	NA	NA	NA	NA
AF-5	700093	*MKN 615	288-300	NA	NA	18	250	2	22	29	17	.16	28
AF-5	700093	MKN 616	300-312	NA	NA	10	135	2	14	<1	17	.05	<2
AF-5	700093	MKN 617	312-324	NA	NA	4	100	4	10	50	10	<.01	<3
AF-5	700093	MKN 618	324-336	NA	NA	18	70	5	12	50	14	2.05	12
AF-5	700093	MKN 619	336-348	NA	NA	28	130	4	12	47	10	.05	<2
AF-5	700092	MKN 620	348-360	NA	NA	22	27	NA	NA	NA	NA	NA	NA
AF-5	700092	MKN 621	360-372	NA	NA	9	80	NA	NA	NA	NA	NA	NA
AF-5	700092	MKN 622	372-384	NA	NA	7	107	NA	NA	NA	NA	NA	NA
AF-5	700092	MKN 623	384-396	NA	NA	12	71	NA	NA	NA	NA	NA	NA
AF-5	700092	MKN 624	396-408	NA	NA	2	80	NA	NA	NA	NA	NA	NA
AF-6	700047	MKN 408	0-6	NA	NA	30	309	NA	NA	NA	NA	NA	NA
AF-6	700047	MKN 409	6-12	NA	NA	7	148	NA	NA	NA	NA	NA	NA
AF-6	700047	MKN 410	12-54	9.7	4.4	228	425	NA	NA	NA	NA	NA	NA
AF-6	700047	MKN 411	54-114	10.8	28.0	437	1489	NA	NA	NA	NA	NA	NA
AF-6	700047	MKN 412	114-174	16.8	31.5	407	2500	NA	NA	NA	NA	NA	NA
AF-6	700047	MKN 413	174-234	23.5	30.6	528	4300	NA	NA	NA	NA	NA	NA
AF-6	700047	MKN 414	234-294	23.0	31.0	449	5400	NA	NA	NA	NA	NA	NA
AF-6	700047	MKN 415	294-354	26.1	27.9	445	5200	NA	NA	NA	NA	NA	NA
AF-6	700047	MKN 416	354-414	33.9	21.0	243	2800	NA	NA	NA	NA	NA	NA
AF-6	700047	MKN 417	414-474	26.0	21.0	254	3000	NA	NA	NA	NA	NA	NA
AF-6	700047	MKN 418	474-524	20.0	16.45	50	496	NA	NA	NA	NA	NA	NA

\*No samples taken above 288"

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC NC #193

ACID TAILINGS PILE

Date 5-7-80

Page 6 of 9

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT.	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
AF-6	700053	MKN 419	524-530	NA	NA	89	710	<1	28	462	13	.44	114
AF-6	700053	MKN 420	530-536	NA	NA	38	140	<1	25	58	26	.15	<1
AF-6	700053	MKN 421	536-542	NA	NA	17	75	1	18	66	6	.15	4
AF-6	700053	MKN 422	542-548	NA	NA	6	85	<1	16	46	10	.05	<13
AF-7	700070	MKN 966	0-54	18.5	8.75	442	896	NA	NA	NA	NA	NA	NA
AF-7	700070	MKN 967	54-114	13.9	22.9	600	1992	NA	NA	NA	NA	NA	NA
AF-7	700070	MKN 968	114-174	18.8	22.6	537	2300	NA	NA	NA	NA	NA	NA
AF-7	700070	MKN 969	174-234	24.8	20.3	467	1892	NA	NA	NA	NA	NA	NA
AF-7	700070	MKN 970	234-294	26.2	19.5	492	1892	NA	NA	NA	NA	NA	NA
AF-7	700070	MKN 971	294-354	26.4	23.5	568	5500	NA	NA	NA	NA	NA	NA
AF-7	700070	MKN 972	354-414	29.4	22.0	383	3400	NA	NA	NA	NA	NA	NA
AF-7	700070	MKN 973	414-474	38.4	17.0	96	680	NA	NA	NA	NA	NA	NA
AF-7	700071	MKN 974	474-504	17.8	16.3	44	385	NA	NA	NA	NA	NA	NA
AF-7	700071	MKN 975	504-510	NA	NA	591	1818	NA	NA	NA	NA	NA	NA
AF-7	700071	MKN 976	510-516	NA	NA	496	1030	NA	NA	NA	NA	NA	NA
AF-7	700071	MKN 977	516-522	NA	NA	28	205	NA	NA	NA	NA	NA	NA
AF-7	700071	MKN 978	522-528	NA	NA	11	130	NA	NA	NA	NA	NA	NA
AF-7	700087	*MKO 540	468-480	NA	NA	17	150	1	32	885	2	.22	<5
AF-7	700087	MKO 541	480-492	NA	NA	10	150	1	20	1093	4	.11	<3
AF-7	700087	MKO 542	492-504	NA	NA	3	160	<1	18	961	1	.10	<1
AF-7	700087	MKO 543	504-516	NA	NA	4	165	<1	8	961	2	.09	<2
AF-7	700087	MKO 544	516-528	NA	NA	3	140	<1	6	589	2	.12	4
AF-7	700088	MKO 545	528-540	NA	NA	3	120	NA	NA	NA	NA	NA	NA
AF-7	700088	MKO 546	540-552	NA	NA	3	70	NA	NA	NA	NA	NA	NA
AF-7	700088	MKO 547	552-564	NA	NA	2	140	NA	NA	NA	NA	NA	NA
AF-7	700088	MKO 548	564-576	NA	NA	3	105	NA	NA	NA	NA	NA	NA
AF-7	700088	MKO 549	576-582	NA	NA	1	115	NA	NA	NA	NA	NA	NA
AG-1	700044	MKN 329	0-6	NA	NA	44	211	NA	NA	NA	NA	NA	NA
AG-1	700044	MKN 330	6-12	NA	NA	34	211	NA	NA	NA	NA	NA	NA
AG-1	700044	MKN 331	12-18	NA	NA	19	169	NA	NA	NA	NA	NA	NA
AG-1	700044	MKN 332	18-24	NA	NA	20	196	NA	NA	NA	NA	NA	NA

\*No samples taken above 468".

AF-7 6003PM

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC NC #193

ACID TAILINGS PILE

Date 5-7-80

Page 7 of 9

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
AG-2	700044	MKN 333	0-6	NA	NA	3	139	NA	NA	NA	NA	NA	NA
AG-2	700044	MKN 334	6-12	NA	NA	106	246	NA	NA	NA	NA	NA	NA
AG-2	700044	MKN 335	12-54	5.0	NA	498	1473	NA	NA	NA	NA	NA	NA
AG-2	700044	MKN 336	54-60	NA	NA	142	539	NA	NA	NA	NA	NA	NA
AG-2	700044	MKN 337	60-66	NA	NA	21	141	NA	NA	NA	NA	NA	NA
AG-2	700044	MKN 338	66-72	NA	NA	5	87	NA	NA	NA	NA	NA	NA
AG-2	700044	MKN 339	72-78	NA	NA	44	116	NA	NA	NA	NA	NA	NA
AG-3	700044	MKN 340	0-5	NA	NA	2	134	NA	NA	NA	NA	NA	NA
AG-3	700044	MKN 341	5-10	NA	NA	23	127	NA	NA	NA	NA	NA	NA
AG-3	700045	MKN 342	10-54	10.6	5.0	181	404	NA	NA	NA	NA	NA	NA
AG-3	700045	MKN 343	54-114	10.6	24.0	500	1051	NA	NA	NA	NA	NA	NA
AG-3	700045	MKN 344	114-174	18.5	29.5	509	1182	NA	NA	NA	NA	NA	NA
AG-3	700045	MKN 345	174-203	19.5	34.9	580	2900	NA	NA	NA	NA	NA	NA
AG-3	700045	MKN 346	203-209	NA	NA	101	491	NA	NA	NA	NA	NA	NA
AG-4	700045	MKN 347	0-54	12.1	NA	174	12	NA	NA	NA	NA	NA	NA
AG-4	700045	MKN 348	54-114	7.7	NA	282	710	NA	NA	NA	NA	NA	NA
AG-4	700045	MKN 349	114-174	20.0	NA	379	921	NA	NA	NA	NA	NA	NA
AG-4	700045	MKN 350	174-234	21.2	NA	463	1741	NA	NA	NA	NA	NA	NA
AG-4	700045	MKN 351	234-262	22.2	NA	442	4500	NA	NA	NA	NA	NA	NA
AG-4	700053	MKN 352	262-268	NA	NA	273	1519	4	35	1629	12	1.48	595
AG-4	700053	MKN 353	268-274	NA	NA	41	390	<1	15	1416	18	.19	70
AG-4	700053	MKN 354	274-280	NA	NA	9	255	<1	12	460	18	.04	12
AG-4	700053	MKN 355	280-286	NA	NA	7	300	<1	11	655	26	.02	2
AG-5	700045	MKN 356	0-54	9.8	NA	164	407	NA	NA	NA	NA	NA	NA
AG-5	700045	MKN 357	54-114	7.2	NA	311	562	NA	NA	NA	NA	NA	NA
AG-5	700045	MKN 358	114-174	12.0	NA	538	1094	NA	NA	NA	NA	NA	NA
AG-5	700045	MKN 359	174-234	22.5	NA	628	1358	NA	NA	NA	NA	NA	NA
AG-5	700045	MKN 360	234-294	22.8	NA	558	3115	NA	NA	NA	NA	NA	NA
AG-5	700045	MKN 361	294-325	29.0	NA	237	2500	NA	NA	NA	NA	NA	NA
AG-6	700071	MKN 979	0-54	18.3	8.5	412	985	NA	NA	NA	NA	NA	NA
AG-6	700071	MKN 980	54-114	17.3	14.1	389	860	NA	NA	NA	NA	NA	NA

AG-5 679 DM

MONTICELLO, UTAH, HILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027

DFEC NC #193

ACID TAILINGS PILE

Date 5-7-80

Page 8 of 9

HOLE NO.	LAD REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCl/g Ra226
AG-6	700071	MKN 981	114-174	18.1	23.0	482	1992	NA	NA	NA	NA	NA	NA
AG-6	700071	MKN 982	174-234	23.6	30.0	412	3700	NA	NA	NA	NA	NA	NA
AG-6	700071	MKN 983	234-294	26.6	30.0	459	7100	NA	NA	NA	NA	NA	NA
AG-6	700071	MKN 984	294-354	29.4	28.0	465	1270	NA	NA	NA	NA	NA	NA
AG-6	700071	MKN 985	354-414	28.6	17.6	121	1096	NA	NA	NA	NA	NA	NA
AG-6	700076	MKN 986	414-420	NA	NA	204	1494	1	24	673	1	.88	335
AG-6	700076	MKN 987	420-426	NA	NA	218	2415	1	2	1027	12	1.03	315
AG-6	700076	MKN 988	426-432	NA	NA	25	205	<1	28	673	21	.16	19
AG-6	700076	MKN 989	432-438	NA	NA	15	160	<1	32	567	6	.08	7
AG-6	700087	*MKN 521	360-372	NA	NA	14	160	2	24	775	7	.19	15
AG-6	700087	MKN 522	373-384	NA	NA	12	135	1	38	381	8	.13	3
AG-6	700087	MKN 523	384-396	NA	NA	21	255	1	24	217	12	.17	39
AG-6	700087	MKN 524	396-408	NA	NA	8	110	1	16	235	12	.06	3
AG-6	700087	MKN 525	408-420	NA	NA	6	95	1	24	283	8	.04	<2
AG-6	700088	MKN 526	420-432	NA	NA	5	40	NA	NA	NA	NA	NA	NA
AG-6	700088	MKN 527	432-444	NA	NA	6	80	NA	NA	NA	NA	NA	NA
AG-6	700088	MKN 528	444-456	NA	NA	5	135	NA	NA	NA	NA	NA	NA
AG-6	700088	MKN 529	456-462	NA	NA	2	75	NA	NA	NA	NA	NA	NA
AH-1	700045	MKN 366	0-6	NA	NA	40	343	NA	NA	NA	NA	NA	NA
AH-1	700045	MKN 367	6-12	NA	NA	34	275	NA	NA	NA	NA	NA	NA
AH-1	700045	MKN 368	12-18	NA	NA	29	92	NA	NA	NA	NA	NA	NA
AH-1	700045	MKN 369	18-24	NA	NA	19	159	NA	NA	NA	NA	NA	NA
AI-1	700052	MKN 550	0-54	11.0	NA	143	800	NA	NA	NA	NA	NA	NA
AI-1	700052	MKN 551	54-114	17.2	NA	32	205	NA	NA	NA	NA	NA	NA
AI-1	700052	MKN 552	114-144	8.1	NA	44	245	NA	NA	NA	NA	NA	NA
AI-1	700052	MKN 553	144-150	NA	NA	46	515	NA	NA	NA	NA	NA	NA
AI-1	700052	MKN 554	150-156	NA	NA	22	220	NA	NA	NA	NA	NA	NA
AI-1	700052	MKN 555	156-162	NA	NA	25	155	NA	NA	NA	NA	NA	NA
AI-1	700047	MKN 556	162-168	NA	NA	21	187	NA	NA	NA	NA	NA	NA
AI-2	700052	MKN 542	0-6	NA	NA	4	120	NA	NA	NA	NA	NA	NA
AI-2	700052	MKN 543	6-12	NA	NA	8	115	NA	NA	NA	NA	NA	NA
AI-2	700052	MKN 544	12-54	17.8	NA	201	645	NA	NA	NA	NA	NA	NA
AI-2	700052	MKN 545	54-114	19.8	NA	637	1594	NA	NA	NA	NA	NA	NA

\* No samples taken above 360".

AI-2 637PPM

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027

BFEC NC #193

ACID TAILINGS PILE

Date 5-7-80

Page 9 of 9

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
AI-2	700052	MKN 546	114-164	31.9	NA	202	495	NA	NA	NA	NA	NA	NA
AI-2	700052	MKN 547	164-170	NA	NA	77	230	NA	NA	NA	NA	NA	NA
AI-2	700052	MKN 548	170-176	NA	NA	38	205	NA	NA	NA	NA	NA	NA
AI-2	700052	MKN 549	176-182	NA	NA	17	155	NA	NA	NA	NA	NA	NA
AI-3	700047	MKN 557	0-54	12.0	NA	219	750	NA	NA	NA	NA	NA	NA
AI-3	700048	MKN 558	54-114	20.0	NA	460	1123	NA	NA	NA	NA	NA	NA
AI-3	700048	MKN 559	114-164	12.0	NA	159	648	NA	NA	NA	NA	NA	NA
AI-3	700053	MKN 560	164-170	NA	NA	163	765	3	20	567	81	.90	310
AI-3	700053	MKN 561	170-176	NA	NA	43	205	1	10	35	14	.18	37
AI-3	700053	MKN 562	176-182	NA	NA	7	125	1	15	9	30	.25	<2
AI-3	700053	MKN 563	182-188	NA	NA	5	145	1	18	9	25	.21	<2
AJ-1	700052	MKN 537	0-54	11.0	NA	225	600	NA	NA	NA	NA	NA	NA
AJ-1	700052	MKN 538	54-114	16.0	NA	232	575	NA	NA	NA	NA	NA	NA
AJ-1	700052	MKN 539	114-144	24.2	NA	8	175	NA	NA	NA	NA	NA	NA
AJ-1	700052	MKN 540	144-150	NA	NA	86	535	NA	NA	NA	NA	NA	NA
AJ-1	700052	MKN 541	150-156	NA	NA	48	355	NA	NA	NA	NA	NA	NA
AK-1	700052	MKN 533	0-6	NA	NA	73	240	NA	NA	NA	NA	NA	NA
AK-1	700052	MKN 534	6-12	NA	NA	121	140	NA	NA	NA	NA	NA	NA
AK-1	700052	MKN 535	12-18	NA	NA	32	125	NA	NA	NA	NA	NA	NA
AK-1	700052	MKN 536	18-24	NA	NA	13	150	NA	NA	NA	NA	NA	NA



MONTICELLO, UTAH, HILL TAILINGS  
 DRILLING AND SAMPLING PROJECT  
 CARBONATE TAILINGS PILE

PROJECT NO. 00-79-0027  
 BFEC NC #193

Date 4-17-80  
 Page 1 of 10

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm HO <sub>3</sub>	ppm Cl	% S	pCl/g Ra226
CA-1	700057	MKN 667	0-6	NA	NA	106	205	NA	NA	NA	NA	NA	NA
CA-1	700057	MKN 668	6-12	NA	NA	52	220	NA	NA	NA	NA	NA	NA
CA-1	700057	MKN 669	12-54	16.6	7.1	277	4800	NA	NA	NA	NA	NA	NA
CA-1	700057	MKN 670	54-114	15.6	8.5	343	4500	NA	NA	NA	NA	NA	NA
CA-1	700057	MKN 671	114-174	18.7	11.3	321	5000	NA	NA	NA	NA	NA	NA
CA-1	700057	MKN 672	174-198	21.5	15.0	436	5200	NA	NA	NA	NA	NA	NA
CA-1	700057	MKN 673	198-204	NA	NA	202	2900	NA	NA	NA	NA	NA	NA
CA-1	700057	MKN 674	204-210	NA	NA	412	3400	NA	NA	NA	NA	NA	NA
CA-1	700057	MKN 675	210-216	NA	NA	412	3800	NA	NA	NA	NA	NA	NA
CA-1	700057	MKN 676	216-222	NA	NA	900	7100	NA	NA	NA	NA	NA	NA
CA-2	700057	MKN 677	0-54	18.4	7.0	342	4400	NA	NA	NA	NA	NA	NA
CA-2	700057	MKN 678	54-114	15.5	8.7	272	5200	NA	NA	NA	NA	NA	NA
CA-2	700057	MKN 679	114-174	15.7	10.6	319	4600	NA	NA	NA	NA	NA	NA
CA-2	700058	MKN 680	174-234	25.9	16.8	580	6800	NA	NA	NA	NA	NA	NA
CA-2	700058	MKN 681	234-294	23.0	17.4	541	6700	NA	NA	NA	NA	NA	NA
CA-2	700058	MKN 682	294-324	24.9	16.0	711	6600	NA	NA	NA	NA	NA	NA
CA-2	700058	MKN 683	324-330	NA	NA	352	3100	NA	NA	NA	NA	NA	NA
CA-2	700058	MKN 684	330-336	NA	NA	447	6000	NA	NA	NA	NA	NA	NA
CA-2	700058	MKN 685	336-342	NA	NA	423	5600	NA	NA	NA	NA	NA	NA
CA-2	700058	MKN 686	342-348	NA	NA	423	5500	NA	NA	NA	NA	NA	NA
CA-3	700095	*MKN 715	588-600	NA	NA	212	1085	1	16	2	59	.02	<2
CA-3	700095	MKN 716	600-612	NA	NA	14	265	1	10	1	61	.10	12
CA-3	700095	MKN 717	612-624	NA	NA	79	1225	2	20	2	128	.22	30
CA-3	700095	MKN 718	624-636	NA	NA	16	250	1	2	<1	41	.08	<2
CA-3	700095	MKN 719	636-648	NA	NA	18	375	2	10	<1	118	.20	1
CA-3	700094	MKN 720	648-660	NA	NA	7	395	NA	NA	NA	NA	NA	NA
CA-3	700094	MKN 721	660-672	NA	NA	132	830	NA	NA	NA	NA	NA	NA
CA-3	700094	MKN 722	672-684	NA	NA	7	325	NA	NA	NA	NA	NA	NA
CA-3	700094	MKN 723	684-696	NA	NA	155	900	NA	NA	NA	NA	NA	NA
CA-3	700094	MKN 724	696-708	NA	NA	8	240	NA	NA	NA	NA	NA	NA
CB-1	700063	MKN 728	0-54	21.6	6.5	245	4200	NA	NA	NA	NA	NA	NA
CB-1	700063	MKN 729	54-114	17.4	8.0	245	5100	NA	NA	NA	NA	NA	NA
CB-1	700063	MKN 730	114-174	20.0	12.0	369	5000	NA	NA	NA	NA	NA	NA

CA-1 9000PM

## MONTICELLO, UTAH, MILL TAILINGS

## DRILLING AND SAMPLING PROJECT

## CARBONATE TAILINGS PILE

PROJECT NO. 00-79-8027

BFEC NC #193

Date 4-17-80

Page 2 of 10

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
CB-1	700063	MKN 731	174-234	16.8	11.7	453	4600	NA	NA	NA	NA	NA	NA
CB-1	700063	MKN 732	234-294	18.1	7.5	328	4800	NA	NA	NA	NA	NA	NA
CB-1	700063	MKN 733	294-354	20.6	8.5	369	4500	NA	NA	NA	NA	NA	NA
CB-1	700063	MKN 734	354-414	21.2	13.2	286	4300	NA	NA	NA	NA	NA	NA
CB-1	700059	MKN 735	414-420	NA	NA	243	3300	NA	NA	NA	NA	NA	NA
CB-1	700059	MKN 736	420-426	NA	NA	289	3900	NA	NA	NA	NA	NA	NA
CB-1	700059	MKN 737	426-432	NA	NA	266	2800	NA	NA	NA	NA	NA	NA
CB-1	700059	MKN 738	432-438	NA	NA	20	270	NA	NA	NA	NA	NA	NA
CB-2	700061	MKN 739	0-54	26.0	NA	307	5700	NA	NA	NA	NA	NA	NA
CB-2	700061	MKN 740	54-114	17.7	NA	463	6700	NA	NA	NA	NA	NA	NA
CB-2	700061	MKN 741	114-174	26.6	NA	485	5800	NA	NA	NA	NA	NA	NA
CB-2	700061	MKN 742	174-234	29.6	NA	627	6700	NA	NA	NA	NA	NA	NA
CB-2	700061	MKN 743	234-294	20.7	NA	352	5200	NA	NA	NA	NA	NA	NA
CB-2	700061	MKN 744	294-354	26.6	NA	352	5100	NA	NA	NA	NA	NA	NA
CB-2	700061	MKN 745	354-414	28.7	NA	330	4100	NA	NA	NA	NA	NA	NA
CB-2	700061	MKN 746	414-474	15.7	NA	352	4100	NA	NA	NA	NA	NA	NA
CB-2	700060	MKN 747	474-480	NA	NA	352	3971	1	11	58	124	.10	759
CB-2	700060	MKN 748	480-486	NA	NA	151	1818	<1	10	168	137	.25	240
CB-2	700060	MKN 749	486-492	NA	NA	20	290	<1	10	44	152	.40	18
CB-2	700060	MKN 750	492-498	NA	NA	44	285	1	10	53	290	.43	18
CB-3	700058	MKN 698	0-6	NA	NA	94	400	NA	NA	NA	NA	NA	NA
CB-3	700058	MKN 699	6-12	NA	NA	154	290	NA	NA	NA	NA	NA	NA
CB-3	700058	MKN 700	12-54	12.8	11.3	580	7100	NA	NA	NA	NA	NA	NA
CB-3	700059	MKN 716	54-114	14.5	11.1	425	4500	NA	NA	NA	NA	NA	NA
CB-3	700059	MKN 717	114-174	12.8	21.0	653	8200	NA	NA	NA	NA	NA	NA
CB-3	700059	MKN 718	174-234	23.4	22.0	734	8600	NA	NA	NA	NA	NA	NA
CB-3	700059	MKN 719	234-294	20.3	19.5	542	6500	NA	NA	NA	NA	NA	NA
CB-3	700059	MKN 720	294-354	23.3	20.0	960	7700	NA	NA	NA	NA	NA	NA
CB-3	700059	MKN 721	354-414	23.4	14.0	448	3600	NA	NA	NA	NA	NA	NA
CB-3	700059	MKN 722	414-474	23.0	16.6	558	4800	NA	NA	NA	NA	NA	NA
CB-3	700059	MKN 723	474-534	25.2	20.3	520	2600	NA	NA	NA	NA	NA	NA
CB-3	700059	MKN 724	534-540	NA	NA	403	3600	NA	NA	NA	NA	NA	NA
CB-3	700059	MKN 725	540-546	NA	NA	31	585	NA	NA	NA	NA	NA	NA

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC NC #193

CARBONATE TAILINGS PILE

Date 4-17-80  
Page 3 of 10

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCl/g Ra226
CB-3	700059	MKN 726	546-552	NA	NA	311	3300	NA	NA	NA	NA	NA	NA
CB-3	700059	MKN 727	552-558	NA	NA	540	6000	NA	NA	NA	NA	NA	NA
CB-4	700058	MKN 701	0-54	15.1	NA	399	4300	NA	NA	NA	NA	NA	NA
CB-4	700058	MKN 702	54-114	14.1	NA	672	10900	NA	NA	NA	NA	NA	NA
CB-4	700058	MKN 703	114-174	18.9	NA	708	10100	NA	NA	NA	NA	NA	NA
CB-4	700058	MKN 704	174-234	26.5	NA	541	9300	NA	NA	NA	NA	NA	NA
CB-4	700059	MKN 705	234-294	32.5	NA	535	6600	NA	NA	NA	NA	NA	NA
CB-4	700059	MKN 706	294-354	24.9	NA	1790	11500	NA	NA	NA	NA	NA	NA
CB-4	700059	MKN 707	354-414	22.6	NA	1240	7200	NA	NA	NA	NA	NA	NA
CB-4	700059	MKN 708	414-474	24.8	NA	960	4600	NA	NA	NA	NA	NA	NA
CB-4	700059	MKN 709	474-534	28.4	NA	686	3600	NA	NA	NA	NA	NA	NA
CB-4	700060	MKN 710	534-540	NA	NA	886	5088	4	5	303	179	.03	389
CB-4	700060	MKN 711	540-546	NA	NA	1010	3959	4	3	199	88	.02	494
CB-4	700060	MKN 712	546-552	NA	NA	1065	2978	4	9	226	150	.24	449
CB-4	700060	MKN 713	552-558	NA	NA	104	580	1	7	186	47	.29	41
CB-4	700059**	MKN 714	240	NA	NA	471	4200	NA	NA	NA	NA	NA	NA
CB-4	700059**	MKN 715	504	NA	NA	403	2200	NA	NA	NA	NA	NA	NA
CB-5	700058	MKN 687	0-54	20.6	18.0	494	4600	NA	NA	NA	NA	NA	NA
CB-5	700058	MKN 688	54-114	16.5	17.0	593	7200	NA	NA	NA	NA	NA	NA
CB-5	700058	MKN 689	114-174	19.5	14.5	471	6200	NA	NA	NA	NA	NA	NA
CB-5	700058	MKN 690	174-234	20.4	15.0	471	6300	NA	NA	NA	NA	NA	NA
CB-5	700058	MKN 691	234-294	24.4	16.0	685	7000	NA	NA	NA	NA	NA	NA
CB-5	700058	MKN 692	294-354	22.0	13.1	619	6600	NA	NA	NA	NA	NA	NA
CB-5	700058	MKN 693	354-414	22.5	13.1	987	5100	NA	NA	NA	NA	NA	NA
CB-5	700058	MKN 694	414-474	11.6	12.9	1276	6100	NA	NA	NA	NA	NA	NA
CB-5	700058	MKN 695	474-534	11.2	17.5	514	3600	NA	NA	NA	NA	NA	NA
CB-5	700058**	MKN 696	192	NA	NA	449	7700	NA	NA	NA	NA	NA	NA
CB-5	700058**	MKN 697	366	NA	NA	899	5800	NA	NA	NA	NA	NA	NA
CC-1	700063	MKN 751	0-54	24.3	7.2	224	4700	NA	NA	NA	NA	NA	NA
CC-1	700063	MKN 752	54-114	19.7	6.8	286	3700	NA	NA	NA	NA	NA	NA
CC-1	700063	MKN 753	114-174	18.8	8.3	286	3300	NA	NA	NA	NA	NA	NA
CC-1	700063	MKN 754	174-234	28.2	13.8	411	3800	NA	NA	NA	NA	NA	NA

\*\* Special Analyses

00-41790pp-1

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC NC #193

CARBONATE TAILINGS PILE

Date 4-17-80

Page 4 of 10

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	I S	pCi/g Ra226
CC-1	700063	MKN 755	234-294	17.4	17.4	265	2400	NA	NA	NA	NA	NA	NA
CC-1	700063	MKN 756	294-354	13.8	16.6	286	3000	NA	NA	NA	NA	NA	NA
CC-1	700061	MKN 757	354-360	NA	NA	136	2400	NA	NA	NA	NA	NA	NA
CC-1	700061	MKN 758	360-366	NA	NA	8	320	NA	NA	NA	NA	NA	NA
CC-1	700061	MKN 759	366-372	NA	NA	14	405	NA	NA	NA	NA	NA	NA
CC-1	700061	MKN 760	372-378	NA	NA	7	265	NA	NA	NA	NA	NA	NA
CC-2	700063	MKN 761	0-54	26.2	NA	369	6500	NA	NA	NA	NA	NA	NA
CC-2	700063	MKN 762	54-114	28.2	NA	328	4700	NA	NA	NA	NA	NA	NA
CC-2	700063	MKN 763	114-174	24.2	NA	369	5000	NA	NA	NA	NA	NA	NA
CC-2	700063	MKN 764	174-234	23.8	NA	286	3700	NA	NA	NA	NA	NA	NA
CC-2	700063	MKN 765	234-294	29.7	NA	245	3400	NA	NA	NA	NA	NA	NA
CC-2	700063	MKN 766	294-354	18.1	NA	265	4000	NA	NA	NA	NA	NA	NA
CC-2	700063	MKN 767	354-414	10.1	NA	286	4000	NA	NA	NA	NA	NA	NA
CC-2	700063	MKN 768	414-420	NA	NA	349	5500	NA	NA	NA	NA	NA	NA
CC-2	700063	MKN 769	420-426	NA	NA	286	3600	NA	NA	NA	NA	NA	NA
CC-2	700063	MKN 770	426-432	NA	NA	149	2200	NA	NA	NA	NA	NA	NA
CC-2	700063	MKN 771	432-438	NA	NA	22	345	NA	NA	NA	NA	NA	NA
CC-3	700064	MKN 772	0-6	NA	NA	175	345	NA	NA	NA	NA	NA	NA
CC-3	700064	MKN 773	6-12	NA	NA	83	325	NA	NA	NA	NA	NA	NA
CC-3	700064	MKN 774	12-54	29.6	NA	522	8300	NA	NA	NA	NA	NA	NA
CC-3	700064	MKN 775	54-114	16.6	NA	486	9100	NA	NA	NA	NA	NA	NA
CC-3	700064	MKN 776	114-174	21.6	NA	425	5700	NA	NA	NA	NA	NA	NA
CC-3	700082	MKN 777	174-234	20.5	NA	316	5400	NA	NA	NA	NA	NA	NA
CC-3	700064	MKN 778	234-294	15.4	NA	357	4700	NA	NA	NA	NA	NA	NA
CC-3	700064	MKN 779	294-354	25.1	NA	494	6300	NA	NA	NA	NA	NA	NA
CC-3	700064	MKN 780	354-414	23.3	NA	403	5500	NA	NA	NA	NA	NA	NA
CC-3	700064	MKN 781	414-474	27.8	NA	83	1469	NA	NA	NA	NA	NA	NA
CC-3	700064	MKN 782	474-480	NA	NA	266	4700	NA	NA	NA	NA	NA	NA
CC-3	700064	MKN 783	480-486	NA	NA	147	2100	NA	NA	NA	NA	NA	NA
CC-3	700064	MKN 784	486-492	NA	NA	8	235	NA	NA	NA	NA	NA	NA
CC-3	700064	MKN 785	492-498	NA	NA	8	265	NA	NA	NA	NA	NA	NA
CC-4	700095	*MKD 725	576-588	NA	NA	15	290	5	10	2	110	<.01	6
	*No samples taken above 576"												

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-0027

BFEC NC #193

CARBONATE TAILINGS PILE

Date 4-17-80

Page 5 of 10

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
CC-4	700095	MKO 726	588-600	NA	NA	8	255	3	4	2	50	.01	<2
CC-4	700095	MKO 727	600-612	NA	NA	11	220	3	10	<1	35	.01	2
CC-4	700095	MKO 728	612-624	NA	NA	7	200	2	5	1	17	<.01	<2
CC-4	700095	MKO 729	624-636	NA	NA	14	220	2	8	<1	31	.02	<2
CC-4	700094	MKO 730	636-648	NA	NA	10	165	NA	NA	NA	NA	NA	NA
CC-4	700094	MKO 731	648-660	NA	NA	3	190	NA	NA	NA	NA	NA	NA
CC-4	700094	MKO 732	660-672	NA	NA	4	130	NA	NA	NA	NA	NA	NA
CC-4	700094	MKO 733	672-684	NA	NA	32	480	NA	NA	NA	NA	NA	NA
CC-4	700094	MKO 734	684-696	NA	NA	10	365	NA	NA	NA	NA	NA	NA
CC-5	700064	MKN 786	0-54	16.3	11.5	97	1120	NA	NA	NA	NA	NA	NA
CC-5	700064	MKN 787	54-114	10.9	12.4	719	11000	NA	NA	NA	NA	NA	NA
CC-5	700082	MKN 788	114-174	21.1	24.3	649	12000	NA	NA	NA	NA	NA	NA
CC-5	700064	MKN 789	174-234	26.1	21.8	779	9900	NA	NA	NA	NA	NA	NA
CC-5	700064	MKN 790	234-294	25.5	22.5	836	10400	NA	NA	NA	NA	NA	NA
CC-5	700064	MKN 791	294-354	25.1	17.6	784	7600	NA	NA	NA	NA	NA	NA
CC-5	700064	MKN 792	354-414	27.7	24.0	1210	10300	NA	NA	NA	NA	NA	NA
CC-5	700064	MKN 793	414-474	29.0	17.9	772	5800	NA	NA	NA	NA	NA	NA
CC-5	700064	MKN 794	474-534	28.2	21.1	383	3000	NA	NA	NA	NA	NA	NA
CC-5	700061	MKN 795	534-594	NA	NA	95	1095	NA	NA	NA	NA	NA	NA
CC-5	700061	MKN 796	594-654	NA	NA	12	295	NA	NA	NA	NA	NA	NA
CC-5	700061	MKN 797	654-714	NA	NA	14	305	NA	NA	NA	NA	NA	NA
CC-5	700061	MKN 798	714-774	NA	NA	8	270	NA	NA	NA	NA	NA	NA
CC-6	700064	MKN 799	0-54	12.7	NA	427	4500	NA	NA	NA	NA	NA	NA
CC-6	700064	MKN 800	54-114	12.5	NA	767	10200	NA	NA	NA	NA	NA	NA
CC-6	700064	MKN 801	114-174	25.6	NA	780	11200	NA	NA	NA	NA	NA	NA
CC-6	700064	MKN 802	174-234	25.2	NA	1083	10300	NA	NA	NA	NA	NA	NA
CC-6	700065	MKN 803	234-294	28.8	NA	890	9800	NA	NA	NA	NA	NA	NA
CC-6	700065	MKN 804	294-354	18.5	NA	1185	9100	NA	NA	NA	NA	NA	NA
CC-6	700065	MKN 805	354-414	25.3	NA	1330	8900	NA	NA	NA	NA	NA	NA
CC-6	700065	MKN 806	414-474	28.5	NA	970	4600	NA	NA	NA	NA	NA	NA
CC-6	700065	MKN 807	474-534	33.8	NA	1141	5500	NA	NA	NA	NA	NA	NA
CC-6	700065	MKN 808	534-594	25.1	NA	169	1370	NA	NA	NA	NA	NA	NA
CC-6	700062	MKN 809	585-592	NA	NA	737	4964	3	14	314	149	.16	982
CC-6	700062	MKN 810	592-600	NA	NA	863	5584	4	16	270	118	.11	1120



MONTICELLO, UTAH, HILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC NC #193

CARBONATE TAILINGS PILE

Date 4-17-80

Page 6 of 10

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
CC-6	700062	MKN 811	592-598	NA	NA	101	675	1	7	44	124	.25	<41
CC-6	700062	MKN 812	598-604	NA	NA	30	415	<1	12	35	94	.03	32
CC-7	700065	MKN 813	0-54	21.8	NA	838	3800	NA	NA	NA	NA	NA	NA
CC-7	700065	MKN 814	54-114	18.5	NA	765	4200	NA	NA	NA	NA	NA	NA
CC-7	700065	MKN 815	114-174	23.5	NA	847	5300	NA	NA	NA	NA	NA	NA
CC-7	700065	MKN 816	174-234	21.3	NA	608	4700	NA	NA	NA	NA	NA	NA
CC-7	700065	MKN 817	234-294	20.0	NA	770	5600	NA	NA	NA	NA	NA	NA
CC-7	700065	MKN 818	294-354	23.0	NA	1532	7200	NA	NA	NA	NA	NA	NA
CC-7	700065	MKN 819	354-414	27.7	NA	1369	6700	NA	NA	NA	NA	NA	NA
CC-7	700065	MKN 820	414-474	31.6	NA	925	5200	NA	NA	NA	NA	NA	NA
CC-7	700065	MKN 821	474-534	30.5	NA	514	3400	NA	NA	NA	NA	NA	NA
CC-7	700065	MKN 822	534-594	27.7	NA	184	1195	NA	NA	NA	NA	NA	NA
CC-7	700065	MKN 823	594-600	NA	NA	720	4200	NA	NA	NA	NA	NA	NA
CC-7	700065	MKN 824	600-606	NA	NA	758	5000	NA	NA	NA	NA	NA	NA
CC-7	700065	MKN 825	606-612	NA	NA	910	4200	NA	NA	NA	NA	NA	NA
CC-7	700065	MKN 826	612-618	NA	NA	182	1300	NA	NA	NA	NA	NA	NA
CD-1	700068	MKN 892	0-6	NA	NA	9	400	NA	NA	NA	NA	NA	NA
CD-1	700068	MKN 893	6-12	NA	NA	<1	260	NA	NA	NA	NA	NA	NA
CD-1	700068	MKN 894	12-54	22.3	NA	61	535	NA	NA	NA	NA	NA	NA
CD-1	700068	MKN 895	54-114	29.6	NA	351	2200	NA	NA	NA	NA	NA	NA
CD-1	700068	MKN 896	114-174	25.4	NA	52	510	NA	NA	NA	NA	NA	NA
CD-1	700068	MKN 897	174-180	NA	NA	111	1050	NA	NA	NA	NA	NA	NA
CD-2	700068	MKN 898	0-54	23.9	4.0	225	2700	NA	NA	NA	NA	NA	NA
CD-2	700068	MKN 899	54-114	23.1	11.5	351	3000	NA	NA	NA	NA	NA	NA
CD-2	700068	MKN 900	114-174	26.2	15.4	373	2900	NA	NA	NA	NA	NA	NA
CD-2	700068	MKN 901	174-224	29.7	18.0	92	940	NA	NA	NA	NA	NA	NA
CD-3	700066	MKN 855	0-54	26.0	NA	297	3200	NA	NA	NA	NA	NA	NA
CD-3	700066	MKN 856	54-114	19.9	NA	250	3000	NA	NA	NA	NA	NA	NA
CD-3	700066	MKN 857	114-174	18.2	NA	273	2600	NA	NA	NA	NA	NA	NA
CD-3	700066	MKN 858	174-234	16.9	NA	343	2900	NA	NA	NA	NA	NA	NA
CD-3	700066	MKN 859	234-294	20.7	NA	250	2700	NA	NA	NA	NA	NA	NA
CD-3	700066	MKN 860	294-354	24.9	NA	227	2500	NA	NA	NA	NA	NA	NA

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC NC #193

CARBONATE TAILINGS FILE

Date 4-17-80

Page 7 of 10

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
CD-3	700076	MKN 861	354-360	NA	NA	211	2988	2	16	80	79	.07	451
CD-3	700076	MKN 862	360-366	NA	NA	270	2988	2	2	150	102	.05	457
CD-3	700076	MKN 863	366-372	NA	NA	4	1020	1	15	40	71	.05	148
CD-3	700076	MKN 864	372-378	NA	NA	<1	290	<1	14	53	195	.03	12
CD-4	700093	*MKN 635	468-480	NA	NA	17	250	4	12	8	204	<.01	<2
CD-4	700093	MKN 636	480-492	NA	NA	20	245	4	10	9	142	<.01	<2
CD-4	700093	MKN 637	492-504	NA	NA	34	240	5	10	6	110	<.01	<2
CD-4	700093	MKN 638	504-516	NA	NA	28	250	<1	12	5	83	<.01	<2
CD-4	700093	MKN 639	516-528	NA	NA	20	255	<1	14	5	79	<.01	10
CD-4	700092	MKN 640	528-540	NA	NA	5	134	NA	NA	NA	NA	NA	NA
CD-4	700092	MKN 641	540-552	NA	NA	3	134	NA	NA	NA	NA	NA	NA
CD-4	700092	MKN 642	552-564	NA	NA	3	143	NA	NA	NA	NA	NA	NA
CD-4	700092	MKN 643	564-576	NA	NA	5	45	NA	NA	NA	NA	NA	NA
CD-4	700092	MKN 644	576-588	NA	NA	5	54	NA	NA	NA	NA	NA	NA
CD-5	700065	MKN 827	0-54	30.7	NA	383	6800	NA	NA	NA	NA	NA	NA
CD-5	700065	MKN 828	54-114	21.0	NA	383	5000	NA	NA	NA	NA	NA	NA
CD-5	700065	MKN 829	114-174	17.5	NA	383	5200	NA	NA	NA	NA	NA	NA
CD-5	700065	MKN 830	174-234	19.4	NA	427	5500	NA	NA	NA	NA	NA	NA
CD-5	700065	MKN 831	234-294	21.0	NA	318	4100	NA	NA	NA	NA	NA	NA
CD-5	700066	MKN 832	294-354	20.5	NA	340	5300	NA	NA	NA	NA	NA	NA
CD-5	700066	MKN 833	354-414	26.9	NA	483	3300	NA	NA	NA	NA	NA	NA
CD-5	700066	MKN 834	414-474	23.3	NA	366	3400	NA	NA	NA	NA	NA	NA
CD-5	700076	MKN 835	474-486	NA	NA	328	5088	2	5	367	142	.07	692
CD-5	700076	MKN 836	486-486	NA	NA	406	3187	1	10	367	167	.04	336
CD-5	700076	MKN 837	486-492	NA	NA	620	3212	1	10	76	210	.03	257
CD-5	700076	MKN 838	492-498	NA	NA	125	895	1	16	44	84	.05	88
CD-6	700067	MKN 865	0-54	20.7	NA	441	4300	NA	NA	NA	NA	NA	NA
CD-6	700067	MKN 866	54-114	17.3	NA	590	8400	NA	NA	NA	NA	NA	NA
CD-6	700067	MKN 867	114-174	18.8	NA	550	6700	NA	NA	NA	NA	NA	NA
CD-6	700067	MKN 868	174-234	20.5	NA	740	8600	NA	NA	NA	NA	NA	NA
CD-6	700067	MKN 869	234-294	24.2	NA	980	9300	NA	NA	NA	NA	NA	NA
CD-6	700067	MKN 870	294-354	28.8	NA	530	5700	NA	NA	NA	NA	NA	NA
CD-6	700067	MKN 871	354-414	28.9	NA	377	4100	NA	NA	NA	NA	NA	NA

\*No samples taken above 635"

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC NC #193

CARRONATE TAILINGS PILE

Date 4-17-80  
Page 8 of 10

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCl/g Ra226
CD-6	700067	MKN 872	414-474	32.3	NA	206	2500	NA	NA	NA	NA	NA	NA
CD-6	700067	MKN 873	474-534	23.5	NA	198	2400	NA	NA	NA	NA	NA	NA
CD-6	700067	MKN 874	534-540	NA	NA	462	5600	NA	NA	NA	NA	NA	NA
CD-6	700067	MKN 875	540-546	NA	NA	377	4200	NA	NA	NA	NA	NA	NA
CD-6	700067	MKN 876	546-552	NA	NA	125	1600	NA	NA	NA	NA	NA	NA
CD-6	700067	MKN 877	552-558	NA	NA	10	255	NA	NA	NA	NA	NA	NA
CD-7	700066	MKN 839	0-6	NA	NA	227	300	NA	NA	NA	NA	NA	NA
CD-7	700066	MKN 840	6-12	NA	NA	297	360	NA	NA	NA	NA	NA	NA
CD-7	700066	MKN 841	12-54	20.6	NA	413	2800	NA	NA	NA	NA	NA	NA
CD-7	700066	MKN 842	54-114	14.4	NA	529	4100	NA	NA	NA	NA	NA	NA
CD-7	700066	MKN 843	114-174	20.1	NA	436	3700	NA	NA	NA	NA	NA	NA
CD-7	700066	MKN 844	174-234	18.0	NA	660	5300	NA	NA	NA	NA	NA	NA
CD-7	700066	MKN 845	234-294	20.5	NA	911	10500	NA	NA	NA	NA	NA	NA
CD-7	700066	MKN 846	294-354	21.3	NA	960	10100	NA	NA	NA	NA	NA	NA
CD-7	700066	MKN 847	354-414	25.3	NA	870	5800	NA	NA	NA	NA	NA	NA
CD-7	700066	MKN 848	414-474	27.1	NA	468	4100	NA	NA	NA	NA	NA	NA
CD-7	700066	MKN 849	474-534	31.2	NA	560	4500	NA	NA	NA	NA	NA	NA
CD-7	700066	MKN 850	534-594	27.5	NA	150	1100	NA	NA	NA	NA	NA	NA
CD-7	700066	MKN 851	594-600	NA	NA	413	4000	NA	NA	NA	NA	NA	NA
CD-7	700066	MKN 852	600-606	NA	NA	459	3800	NA	NA	NA	NA	NA	NA
CD-7	700066	MKN 853	606-612	NA	NA	459	3500	NA	NA	NA	NA	NA	NA
CD-7	700066	MKN 854	612-618	NA	NA	22	260	NA	NA	NA	NA	NA	NA
CD-8	700093	*MKO 705	648-660	NA	NA	128	2116	<1	2	<1	54	.02	114
CD-8	700093	MKO 706	660-672	NA	NA	32	495	<1	6	<1	27	.03	23
CD-8	700093	MKO 707	672-684	NA	NA	21	570	1	6	<1	31	<.01	23
CD-8	700093	MKO 708	684-696	NA	NA	2	325	<1	6	1	14	<.01	<2
CD-8	700093	MKO 709	696-708	NA	NA	12	455	1	6	<1	20	.07	120
CD-8	700092	MKO 710	708-720	NA	NA	5	370	NA	NA	NA	NA	NA	NA
CD-8	700092	MKO 711	720-732	NA	NA	12	365	NA	NA	NA	NA	NA	NA
CD-8	700092	MKO 712	732-744	NA	NA	37	160	NA	NA	NA	NA	NA	NA
CD-8	700092	MKO 713	744-756	NA	NA	6	210	NA	NA	NA	NA	NA	NA
CD-8	700092	MKO 714	756-768	NA	NA	7	200	NA	NA	NA	NA	NA	NA

\*No samples taken above 6:8".

MONTICELLO, UTAH, HILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027

BFEC NC #193

CARBONATE TAILINGS PILE

Date 4-17-80

Page 9 of 10

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCl/g Ra226
CE-1	700068	MKN 902	0-6	NA	NA	174	415	NA	NA	NA	NA	NA	NA
CE-1	700068	MKN 903	6-12	NA	NA	309	465	NA	NA	NA	NA	NA	NA
CE-1	700068	MKN 904	12-54	20.8	NA	351	3200	NA	NA	NA	NA	NA	NA
CE-1	700068	MKN 905	54-114	19.8	NA	373	5000	NA	NA	NA	NA	NA	NA
CE-1	700069	MKN 906	114-174	18.8	NA	475	3500	NA	NA	NA	NA	NA	NA
CE-1	700082	MKN 907	174-234	18.4	NA	287	5500	NA	NA	NA	NA	NA	NA
CE-1	700068	MKN 908	234-294	27.1	NA	415	4800	NA	NA	NA	NA	NA	NA
CE-1	700068	MKN 909	294-354	11.7	NA	351	3700	NA	NA	NA	NA	NA	NA
CE-1	700076	MKN 910	354-360	NA	NA	93	3835	2	14	318	85	.14	680
CE-1	700076	MKN 911	360-366	NA	NA	43	4158	2	11	602	111	.05	663
CE-1	700076	MKN 912	366-372	NA	NA	15	3137	<1	7	885	140	.04	476
CE-1	700076	MKN 913	372-378	NA	NA	<1	2764	1	6	779	142	.04	391
CE-2	700093	*MKN 675	636-648	NA	NA	218	1718	1	4	<1	59	.02	174
CE-2	700093	MKN 676	648-660	NA	NA	21	455	<1	10	9	36	.02	26
CE-2	700093	MKN 677	660-672	NA	NA	23	465	<1	6	<1	126	.02	20
CE-2	700093	MKN 678	672-684	NA	NA	6	270	<1	10	9	20	<.01	5
CE-2	700093	MKN 679	684-696	NA	NA	8	240	<1	8	11	17	.02	14
CE-2	700092	MKN 680	696-708	NA	NA	24	80	NA	NA	NA	NA	NA	NA
CE-2	700092	MKN 681	708-720	NA	NA	55	357	NA	NA	NA	NA	NA	NA
CE-2	700092	MKN 682	720-732	NA	NA	27	89	NA	NA	NA	NA	NA	NA
CE-2	700092	MKN 683	732-744	NA	NA	112	1000	NA	NA	NA	NA	NA	NA
CE-2	700092	MKN 684	744-756	NA	NA	84	393	NA	NA	NA	NA	NA	NA
CE-3	700067	MKN 878	0-54	29.1	13.6	483	4100	NA	NA	NA	NA	NA	NA
CE-3	700067	MKN 879	54-114	16.7	13.5	765	6800	NA	NA	NA	NA	NA	NA
CE-3	700067	MKN 880	114-174	11.1	12.9	657	6000	NA	NA	NA	NA	NA	NA
CE-3	700067	MKN 881	174-234	14.8	18.1	840	9300	NA	NA	NA	NA	NA	NA
CE-3	700067	MKN 882	234-294	31.7	13.4	790	7300	NA	NA	NA	NA	NA	NA
CE-3	700067	MKN 883	294-354	26.8	13.5	850	6800	NA	NA	NA	NA	NA	NA
CE-3	700067	MKN 884	354-414	28.4	12.0	441	5200	NA	NA	NA	NA	NA	NA
CE-3	700067	MKN 885	414-474	23.9	12.8	394	3900	NA	NA	NA	NA	NA	NA
CE-3	700067	MKN 886	474-534	24.4	13.5	922	4500	NA	NA	NA	NA	NA	NA
CE-3	700067	MKN 887	534-594	24.2	21.1	181	2500	NA	NA	NA	NA	NA	NA
CE-3	700067	MKN 888	594-600	NA	NA	514	5800	NA	NA	NA	NA	NA	NA
CE-3	700067	MKN 889	600-606	NA	NA	394	4300	NA	NA	NA	NA	NA	NA

\*No samples taken above 636".

NE-3 922 PPM



MONTICELLO, UTAH, HILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC NC #193

CARBONATE TAILINGS PILE

Date 4-17-80  
Page 10 of 10

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCl/g Ra226
CE-3	700068	MKN 890	606-612	NA	NA	13	2900	NA	NA	NA	NA	NA	NA
CE-3	700068	MKN 891	612-618	NA	NA	5	365	NA	NA	NA	NA	NA	NA
CF-1	700068	MKN 914	0-54	30.0	NA	288	2600	NA	NA	NA	NA	NA	NA
CF-1	700068	MKN 915	54-114	30.0	NA	246	2500	NA	NA	NA	NA	NA	NA
CF-1	700068	MKN 916	114-174	26.2	NA	191	2200	NA	NA	NA	NA	NA	NA
CF-1	700068	MKN 917	174-180	NA	NA	162	1843	NA	NA	NA	NA	NA	NA
CF-1	700068	MKN 918	180-186	NA	NA	9	280	NA	NA	NA	NA	NA	NA
CF-1	700068	MKN 919	186-192	NA	NA	6	255	NA	NA	NA	NA	NA	NA
CF-1	700069	MKN 920	192-198	NA	NA	22	270	NA	NA	NA	NA	NA	NA
CF-2	700069	MKN 921	0-54	16.6	NA	181	3000	NA	NA	NA	NA	NA	NA
CF-2	700069	MKN 922	54-114	21.1	NA	373	3500	NA	NA	NA	NA	NA	NA
CF-2	700069	MKN 923	114-174	36.1	NA	149	815	NA	NA	NA	NA	NA	NA
CF-2	700069	MKN 924	174-194	29.8	NA	248	1594	NA	NA	NA	NA	NA	NA
CF-2	700069	MKN 925	194-200	NA	NA	279	2700	NA	NA	NA	NA	NA	NA
CF-2	700069	MKN 926	200-206	NA	NA	36	430	NA	NA	NA	NA	NA	NA
CF-2	700069	MKN 927	206-212	NA	NA	32	230	NA	NA	NA	NA	NA	NA
CF-2	700069	MKN 928	212-218	NA	NA	26	265	NA	NA	NA	NA	NA	NA
CG-1	700069	MKN 929	0-54	26.8	12.4	647	3900	NA	NA	NA	NA	NA	NA
CG-1	700069	MKN 930	54-114	27.8	17.0	457	4200	NA	NA	NA	NA	NA	NA
CG-1	700069	MKN 931	114-174	39.5	17.1	310	1170	NA	NA	NA	NA	NA	NA
CG-1	700069	MKN 932	174-234	34.1	16.5	384	2900	NA	NA	NA	NA	NA	NA
CG-1	700076	MKN 933	234-240	NA	NA	25	1070	6	13	26	25	.05	66
CG-1	700076	MKN 934	240-246	NA	NA	13	300	<1	12	18	3	.04	11
CG-1	700076	MKN 935	246-252	NA	NA	10	295	<1	11	9	3	.04	2
CG-1	700076	MKN 936	252-258	NA	NA	16	310	<1	11	9	1	.04	13
CG-2	700069	MKN 937	0-54	16.8	NA	237	2700	NA	NA	NA	NA	NA	NA
CG-2	700069	MKN 938	54-114	22.5	NA	373	4100	NA	NA	NA	NA	NA	NA
CG-2	700069	MKN 939	114-174	28.8	NA	141	910	NA	NA	NA	NA	NA	NA
CG-2	700069	MKN 940	174-180	NA	NA	289	2700	NA	NA	NA	NA	NA	NA
CG-2	700069	MKN 941	180-186	NA	NA	289	2800	NA	NA	NA	NA	NA	NA
CG-2	700069	MKN 942	186-192	NA	NA	135	1370	NA	NA	NA	NA	NA	NA
CG-2	700069	MKN 943	192-198	NA	NA	39	255	NA	NA	NA	NA	NA	NA



MONTICELLO, UTAH, MILL TAILINGS

DRILLING AND SAMPLING PROJECT

COMPOSITE TAILINGS SAMPLES

PROJECT NO. 00-79-8027

BFEC MC #193

Date 6-5-80

Page 1 of 1

TAILINGS PILE	DRUM NO.	LAB REQUISITION NO.	SAMPLE NO.	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>
Acid Tailings Pile	1	700099	MKO 835	288	1868
	2	700099	MKO 836	288	2100
	3	700099	MKO 837	288	2100
East Tailings Pile	1	700099	MKO 838	239	830
	2	700099	MKO 839	240	623
	3	700099	MKO 840	231	830
	4	700099	MKO 841	224	623
V <sub>2</sub> O <sub>5</sub> Tailings Pile	1	700100	MKO 842	320	6400
	2	700100	MKO 843	340	6400
	3	700100	MKO 844	320	6300
	4	700100	MKO 845	320	6500
Carbonate Tailings Pile	1	700100	MKO 846	560	5500
	2	700100	MKO 847	540	5600
	3	700100	MKO 848	560	5600
	4	700100	MKO 849	600	5700
	5	700100	MKO 850	540	5700
	6	700100	MKO 851	580	5900

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC NO #193

EAST TAILINGS PILE

Date 4-8-80  
Page 1 of 23

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
A-1	700029	MKN 001	0-6	NA	NA	39	104	NA	NA	NA	NA	NA	NA
A-1	700029	MKN 002	6-12	NA	NA	9	94	NA	NA	NA	NA	NA	NA
A-1	700029	MKN 003	12-18	NA	NA	9	73	NA	NA	NA	NA	NA	NA
A-1	700029	MKN 004	18-24	NA	NA	6	68	NA	NA	NA	NA	NA	NA
A-2	700030	MKN 029	0-42	8.0	3.5	88	339	NA	NA	NA	NA	NA	NA
A-2	700030	MKN 030	42-48	NA	3.5	265	303	NA	NA	NA	NA	NA	NA
A-2	700030	MKN 031	48-54	A	3.5	157	232	NA	NA	NA	NA	NA	NA
A-2	700030	MKN 032	54-60	NA	3.5	40	259	NA	NA	NA	NA	NA	NA
A-2	700030	MKN 033	60-66	NA	3.5	13	232	NA	NA	NA	NA	NA	NA
A-3	700030	MKN 034	0-210	100.0	NA	220	1151	NA	NA	NA	NA	NA	NA
A-3	700030	MKN 035	210-216	NA	NA	241	1035	NA	NA	NA	NA	NA	NA
A-3	700030	MKN 036	216-222	NA	NA	99	152	NA	NA	NA	NA	NA	NA
A-3	700030	MKN 037	222-228	NA	NA	25	134	NA	NA	NA	NA	NA	NA
A-4	700029	MKN 013	0-54	3.5	3.0	92	395	NA	NA	NA	NA	NA	NA
A-4	700029	MKN 014	54-120	20.8	17.0	335	608	NA	NA	NA	NA	NA	NA
A-4	700029	MKN 015	120-180	19.2	19.5	283	1138	NA	NA	NA	NA	NA	NA
A-4	700029	MKN 016	180-240	30.0	20.0	344	286	NA	NA	NA	NA	NA	NA
A-4	700031	MKN 038	240-246	NA	NA	173	161	<1	16	37	54	.90	288.0
A-4	700031	MKN 039	246-252	NA	NA	68	232	<1	17	26	37	.23	22
A-4	700031	MKN 040	252-258	NA	NA	46	205	<1	14	26	32	.19	13
A-4	700031	MKN 041	258-264	NA	NA	56	223	<1	17	26	41	.20	12
A-5	700082	MKO 295	0-54	9.0	NA	102	544	NA	NA	NA	NA	NA	NA
A-5	700082	MKO 296	54-114	33.0	NA	179	766	NA	NA	NA	NA	NA	NA
A-5	700082	MKO 297	114-174	38.0	NA	167	652	NA	NA	NA	NA	NA	NA
A-5	700082	MKO 298	174-234	39.8	NA	144	393	NA	NA	NA	NA	NA	NA
A-5	700082	MKO 299	234-294	31.5	NA	136	411	NA	NA	NA	NA	NA	NA
A-5	700082	MKO 300	294-354	17.3	NA	40	277	NA	NA	NA	NA	NA	NA
A-5	700082	MKO 301	354-414	19.5	NA	26	241	NA	NA	NA	NA	NA	NA
A-5	700082	MKO 302	414-474	35.0	NA	64	295	NA	NA	NA	NA	NA	NA
A-5	700082	MKO 303	474-504	8.0	NA	9	187	NA	NA	NA	NA	NA	NA
A-5	700082	MKO 304	504-510	NA	NA	74	339	NA	NA	NA	NA	NA	NA
A-5	700082	MKO 305	510-516	NA	NA	52	232	NA	NA	NA	NA	NA	NA

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027

BFEC NO #193

EAST TAILINGS PILE

Date 4-8-80

Page 2 of 23

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>308</sub>	ppm V <sub>205</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
A-5	700082	MKO 306	516-522	NA	NA	16	205	NA	NA	NA	NA	NA	NA
A-5	700082	MKO 307	522-528	NA	NA	58	205	NA	NA	NA	NA	NA	NA
A-6	700082	MKO 317	0-6	NA	NA	8	161	NA	NA	NA	NA	NA	NA
A-6	700082	MKO 318	6-12	NA	NA	2	125	NA	NA	NA	NA	NA	NA
A-6	700082	MKO 319	12-18	NA	NA	5	125	NA	NA	NA	NA	NA	NA
A-6	700082	MKO 320	18-24	NA	NA	3	96	NA	NA	NA	NA	NA	NA
A-6	700082	MKO 321	24-48	16.2	NA	69	184	NA	NA	NA	NA	NA	NA
A-6	700082	MKO 322	48-108	25.5	NA	336	1448	NA	NA	NA	NA	NA	NA
A-6	700082	MKO 323	108-168	20.6	NA	359	812	NA	NA	NA	NA	NA	NA
A-6	700082	MKO 324	168-228	26.8	NA	276	431	NA	NA	NA	NA	NA	NA
A-6	700082	MKO 325	228-288	42.4	NA	111	185	NA	NA	NA	NA	NA	NA
A-6	700082	MKO 326	288-348	45.2	NA	58	140	NA	NA	NA	NA	NA	NA
A-6	700082	MKO 327	348-408	25.2	NA	63	143	NA	NA	NA	NA	NA	NA
A-6	700082	MKO 328	408-456	6.8	NA	12	80	NA	NA	NA	NA	NA	NA
A-6	700085	MKO 329	456-462	NA	NA	137	230	<1	12	53	44	.38	175
A-6	700085	MKO 330	462-468	NA	NA	96	173	<1	16	40	25	.25	85
A-6	700085	MKO 331	468-474	NA	NA	28	137	<1	26	18	19	.02	9
A-6	700085	MKO 332	474-480	NA	NA	16	177	<1	26	18	18	.03	5
A-7	700082	MKO 308	0-48	18.0	NA	130	375	NA	NA	NA	NA	NA	NA
A-7	700082	MKO 309	48-108	24.2	NA	244	1678	NA	NA	NA	NA	NA	NA
A-7	700082	MKO 310	108-168	22.0	NA	374	1044	NA	NA	NA	NA	NA	NA
A-7	700082	MKO 311	168-228	31.2	NA	364	549	NA	NA	NA	NA	NA	NA
A-7	700082	MKO 312	228-288	39.0	NA	286	527	NA	NA	NA	NA	NA	NA
A-7	700082	MKO 313	288-348	40.2	NA	104	339	NA	NA	NA	NA	NA	NA
A-7	700082	MKO 314	348-408	48.4	NA	22	196	NA	NA	NA	NA	NA	NA
A-7	700082	MKO 315	408-468	26.8	NA	84	312	NA	NA	NA	NA	NA	NA
A-7	700082	MKO 316	468-528	13.0	NA	15	179	NA	NA	NA	NA	NA	NA
A-8	700083	MKO 353	0-48	20.5	NA	77	136	NA	NA	NA	NA	NA	NA
A-8	700083	MKO 354	48-108	19.8	NA	305	892	NA	NA	NA	NA	NA	NA
A-8	700083	MKO 355	108-168	22.4	NA	288	950	NA	NA	NA	NA	NA	NA
A-8	700083	MKO 356	168-228	25.2	NA	386	364	NA	NA	NA	NA	NA	NA
A-8	700083	MKO 357	228-288	28.4	NA	266	166	NA	NA	NA	NA	NA	NA
A-8	700083	MKO 358	288-348	42.6	NA	67	149	NA	NA	NA	NA	NA	NA

A-8 386ppm

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC NC #193

EAST TAILINGS PILE

Date 4-8-80  
Page 3 of 23

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
A-8	700083	MKO 359	348-408	45.0	NA	80	118	NA	NA	NA	NA	NA	NA
A-8	700083	MKO 360	408-468	31.7	NA	42	102	NA	NA	NA	NA	NA	NA
A-8	700085	MKO 361	468-474	NA	NA	52	232	<1	12	40	23	.18	57
A-8	700085	MKO 362	474-480	NA	NA	13	150	<1	2	75	20	.04	7
A-8	700085	MKO 363	480-486	NA	NA	2	121	<1	6	22	10	<.01	<2
A-8	700085	MKO 364	486-492	NA	NA	9	137	1	2	44	44	.04	<2
A-9	700079	MKO 260	0-54	22.4	NA	205	570	NA	NA	NA	NA	NA	NA
A-9	700079	MKO 261	54-114	17.4	NA	296	1544	NA	NA	NA	NA	NA	NA
A-9	700079	MKO 262	114-174	16.3	NA	352	500	NA	NA	NA	NA	NA	NA
A-9	700079	MKO 263	174-234	26.0	NA	379	290	NA	NA	NA	NA	NA	NA
A-9	700079	MKO 264	234-294	30.0	NA	244	330	NA	NA	NA	NA	NA	NA
A-9	700079	MKO 265	294-354	27.0	NA	136	165	NA	NA	NA	NA	NA	NA
A-9	700079	MKO 266	354-414	22.8	NA	84	170	NA	NA	NA	NA	NA	NA
A-9	700079	MKO 267	414-420	NA	NA	120	320	NA	NA	NA	NA	NA	NA
A-9	700079	MKO 268	420-426	NA	NA	92	200	NA	NA	NA	NA	NA	NA
A-9	700079	MKO 269	426-432	NA	NA	170	135	NA	NA	NA	NA	NA	NA
A-9	700079	MKO 270	432-438	NA	NA	247	575	NA	NA	NA	NA	NA	NA
B-1	700030	MKN 046	0-54	3.4	5.3	10	187	NA	NA	NA	NA	NA	NA
B-2	700032	MKN 069	0-54	9.7	12.5	240	1419	NA	NA	NA	NA	NA	NA
B-2	700032	MKN 070	54-114	13.3	16.8	85	893	NA	NA	NA	NA	NA	NA
B-2	700030	MKN 051	114-120	NA	NA	34	286	NA	NA	NA	NA	NA	NA
B-2	700030	MKN 052	120-126	NA	NA	38	295	NA	NA	NA	NA	NA	NA
B-2	700030	MKN 053	126-132	NA	NA	47	393	NA	NA	NA	NA	NA	NA
B-2	700030	MKN 054	132-138	NA	NA	30	259	NA	NA	NA	NA	NA	NA
B-3	700030	MKN 042	0-6	NA	NA	24	187	NA	NA	NA	NA	NA	NA
B-3	700030	MKN 043	6-12	NA	NA	7	134	NA	NA	NA	NA	NA	NA
B-3	700030	MKN 044	12-17	NA	NA	32	375	NA	NA	NA	NA	NA	NA
B-3	700030	MKN 045	17-21	NA	NA	151	1134	NA	NA	NA	NA	NA	NA
B-3	700032	MKN 065	21-54	15.9	14.5	194	1366	NA	NA	NA	NA	NA	NA
B-3	700032	MKN 066	54-114	22.5	21.0	226	1160	NA	NA	NA	NA	NA	NA
B-3	700032	MKN 067	114-174	36.9	30.5	423	2660	NA	NA	NA	NA	NA	NA
B-3	700032	MKN 068	174-234	32.2	22.0	298	1651	NA	NA	NA	NA	NA	NA

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC NC #193

EAST TAILINGS PILE

Date 4-8-80

Page 4 of 23

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCl/g Ra226
B-3	700030	MKN 047	234-240	NA	NA	94	214	NA	NA	NA	NA	NA	NA
B-3	700030	MKN 048	240-246	NA	NA	151	223	NA	NA	NA	NA	NA	NA
B-3	700030	MKN 049	246-252	NA	NA	107	161	NA	NA	NA	NA	NA	NA
B-3	700030	MKN 050	252-258	NA	NA	91	179	NA	NA	NA	NA	NA	NA
B-4	700032	MKN 074	0-9	NA	NA	11	161	NA	NA	NA	NA	NA	NA
B-4	700032	MKN 075	9-15	NA	NA	3	179	NA	NA	NA	NA	NA	NA
B-4	700032	MKN 077	15-19	NA	NA	5	152	NA	NA	NA	NA	NA	NA
B-4	700032	MKN 078	19-23	NA	NA	29	589	NA	NA	NA	NA	NA	NA
B-4	700034	MKN 098	23-54	7.4	4.9	111	535	NA	NA	NA	NA	NA	NA
B-4	700034	MKN 099	54-114	28.2	22.1	301	1046	NA	NA	NA	NA	NA	NA
B-4	700034	MKN 100	114-174	22.1	33.2	762	3100	NA	NA	NA	NA	NA	NA
B-4	700034	MKN 101	174-234	25.5	25.2	490	1494	NA	NA	NA	NA	NA	NA
B-4	700034	MKN 102	234-294	30.5	25.4	433	870	NA	NA	NA	NA	NA	NA
B-4	700032	MKN 076	294-300	NA	NA	137	419	NA	NA	NA	NA	NA	NA
B-4	700032	MKN 079	300-306	NA	NA	41	187	NA	NA	NA	NA	NA	NA
B-4	700032	MKN 080	306-312	NA	NA	34	187	NA	NA	NA	NA	NA	NA
B-4	700032	MKN 081	312-318	NA	NA	25	187	NA	NA	NA	NA	NA	NA
B-5	700083	MKO 365	0-48	19.0	NA	36	160	NA	NA	NA	NA	NA	NA
B-5	700083	MKO 366	48-108	12.4	NA	275	822	NA	NA	NA	NA	NA	NA
B-5	700083	MKO 367	108-168	20.6	NA	349	1171	NA	NA	NA	NA	NA	NA
B-5	700083	MKO 368	168-228	26.0	NA	293	617	NA	NA	NA	NA	NA	NA
B-5	700083	MKO 369	228-288	34.0	NA	369	706	NA	NA	NA	NA	NA	NA
B-5	700083	MKO 370	288-348	44.6	NA	20	532	NA	NA	NA	NA	NA	NA
B-5	700083	MKO 371	348-408	36.5	NA	115	328	NA	NA	NA	NA	NA	NA
B-5	700083	MKO 372	408-468	41.3	NA	80	210	NA	NA	NA	NA	NA	NA
B-5	700083	MKO 373	468-474	NA	NA	211	215	NA	NA	NA	NA	NA	NA
B-5	700083	MKO 374	474-480	NA	NA	38	117	NA	NA	NA	NA	NA	NA
B-5	700083	MKO 375	480-486	NA	NA	17	138	NA	NA	NA	NA	NA	NA
B-5	700083	MKO 376	486-492	NA	NA	7	127	NA	NA	NA	NA	NA	NA
B-6	700082	MKO 333	0-48	18.7	8.5	95	235	NA	NA	NA	NA	NA	NA
B-6	700082	MKO 334	48-108	20.9	20.0	260	495	NA	NA	NA	NA	NA	NA
B-6	700082	MKO 335	108-168	23.8	28.3	432	1370	NA	NA	NA	NA	NA	NA



MONTICELLO, UTAH, HILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-B027  
BFEC NO. #193

EAST TAILINGS PILE

Date 4-8-80

Page 5 of 23

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
B-6	700082	MKO 336	168-228	24.6	26.4	403	1068	NA	NA	NA	NA	NA	NA
B-6	700082	MKO 337	228-288	29.6	23.5	323	510	NA	NA	NA	NA	NA	NA
B-6	700082	MKO 338	288-348	37.8	23.0	291	452	NA	NA	NA	NA	NA	NA
B-6	700082	MKO 339	348-408	43.0	25.2	236	309	NA	NA	NA	NA	NA	NA
B-6	700082	MKO 340	408-414	NA	NA	106	251	NA	NA	NA	NA	NA	NA
B-6	700082	MKO 341	414-420	NA	NA	33	240	NA	NA	NA	NA	NA	NA
B-6	700082	MKO 342	420-426	NA	NA	18	249	NA	NA	NA	NA	NA	NA
B-6	700082	MKO 343	426-432	NA	NA	13	246	NA	NA	NA	NA	NA	NA
B-7	700082	MKO 344	0-48	18.7	NA	136	293	NA	NA	NA	NA	NA	NA
B-7	700083	MKO 345	48-108	10.2	NA	220	300	NA	NA	NA	NA	NA	NA
B-7	700083	MKO 346	108-168	8.5	NA	439	1336	NA	NA	NA	NA	NA	NA
B-7	700083	MKO 347	168-228	14.7	NA	370	1328	NA	NA	NA	NA	NA	NA
B-7	700083	MKO 348	228-288	15.3	NA	212	769	NA	NA	NA	NA	NA	NA
B-7	700083	MKO 349	288-348	24.5	NA	334	471	NA	NA	NA	NA	NA	NA
B-7	700083	MKO 350	348-408	39.4	NA	293	237	NA	NA	NA	NA	NA	NA
B-7	700083	MKO 351	408-468	37.3	NA	76	143	NA	NA	NA	NA	NA	NA
B-7	700083	MKO 352	468-528	36.6	NA	101	131	NA	NA	NA	NA	NA	NA
B-8	700080	MKO 283	0-54	14.1	NA	120	450	NA	NA	NA	NA	NA	NA
B-8	700080	MKO 284	54-114	17.0	NA	213	1693	NA	NA	NA	NA	NA	NA
B-8	700080	MKO 285	114-174	15.5	NA	312	1010	NA	NA	NA	NA	NA	NA
B-8	700080	MKO 286	174-234	24.8	NA	312	575	NA	NA	NA	NA	NA	NA
B-8	700080	MKO 287	234-294	27.8	NA	216	540	NA	NA	NA	NA	NA	NA
B-8	700080	MKO 288	294-354	18.3	NA	88	345	NA	NA	NA	NA	NA	NA
B-8	700080	MKO 289	354-414	19.9	NA	29	195	NA	NA	NA	NA	NA	NA
B-8	700080	MKO 290	414-474	25.7	NA	8	165	NA	NA	NA	NA	NA	NA
B-8	700080	MKO 291	474-480	NA	NA	93	320	NA	NA	NA	NA	NA	NA
B-8	700080	MKO 292	480-486	NA	NA	42	250	NA	NA	NA	NA	NA	NA
B-8	700080	MKO 293	486-492	NA	NA	13	95	NA	NA	NA	NA	NA	NA
B-8	700080	MKO 294	492-498	NA	NA	26	125	NA	NA	NA	NA	NA	NA
C-1	700029	MKN 005	0-6	NA	NA	4	73	NA	NA	NA	NA	NA	NA
C-1	700029	MKN 006	6-12	NA	NA	7	62	NA	NA	NA	NA	NA	NA
C-1	700029	MKN 007	12-18	NA	NA	5	62	NA	NA	NA	NA	NA	NA
C-1	700029	MKN 008	18-24	NA	NA	5	78	NA	NA	NA	NA	NA	NA

MORTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC HC #193

EAST TAILINGS PILE

Date 4-8-80  
Page 6 of 23

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCl/g Ra226
C-2	700032	MKN 073	0-54	10.5	4.0	NA	170	NA	NA	NA	NA	NA	NA
C-2	700031	MKN 055	54-60	NA	NA	4	179	<1	8	18	28	.16	5
C-2	700031	MKN 056	60-66	NA	NA	3	205	<1	11	18	29	.05	<2
C-2	700031	MKN 057	66-72	NA	NA	4	268	<1	4	26	50	.04	2
C-2	700031	MKN 058	72-78	NA	NA	11	152	<1	6	26	81	.02	9
C-3	700033	MKN 095	0-114	30.2	25.0	410	2600	NA	NA	NA	NA	NA	NA
C-3	700032	MKN 059	114-120	NA	NA	92	768	NA	NA	NA	NA	NA	NA
C-3	700032	MKN 060	120-126	NA	NA	60	196	NA	NA	NA	NA	NA	NA
C-3	700032	MKN 061	126-132	NA	NA	60	196	NA	NA	NA	NA	NA	NA
C-3	700032	MKN 062	132-138	NA	NA	51	196	NA	NA	NA	NA	NA	NA
C-4	700032	MKN 071	0-54	7.4	4.1	266	1454	NA	NA	NA	NA	NA	NA
C-4	700032	MKN 072	54-114	13.6	7.3	210	785	NA	NA	NA	NA	NA	NA
C-4	700033	MKN 096	114-174	26.0	23.0	374	1856	NA	NA	NA	NA	NA	NA
C-4	700033	MKN 097	174-216	18.4	25.5	410	2100	NA	NA	NA	NA	NA	NA
C-4	700032	MKN 063	216-222	NA	NA	91	250	NA	NA	NA	NA	NA	NA
C-4	700032	MKN 064	222-228	NA	NA	55	214	NA	NA	NA	NA	NA	NA
C-5	700034	MKN 126	0-54	5.3	5.6	208	772	NA	NA	NA	NA	NA	NA
C-5	700034	MKN 127	54-114	11.6	8.5	195	1096	NA	NA	NA	NA	NA	NA
C-5	700034	MKN 128	114-174	25.3	16.2	257	1195	NA	NA	NA	NA	NA	NA
C-5	700034	MKN 129	174-234	21.0	26.8	477	1643	NA	NA	NA	NA	NA	NA
C-5	700034	MKN 130	234-294	18.0	30.1	433	1170	NA	NA	NA	NA	NA	NA
C-5	700034	MKN 131	294-354	21.1	31.0	477	1170	NA	NA	NA	NA	NA	NA
C-5	700034	MKN 132	354-414	22.2	29.0	389	1195	NA	NA	NA	NA	NA	NA
C-5	700034	MKN 133	414-474	27.1	22.5	179	765	NA	NA	NA	NA	NA	NA
C-5	700034	MKN 134	474-534	18.9	19.2	301	1145	NA	NA	NA	NA	NA	NA
C-6	700087	*MKN 481	443-455	NA	NA	21	130	1	24	629	48	.24	<2
C-6	700087	MKN 482	455-467	NA	NA	16	125	1	24	664	46	.12	<2
C-6	700087	MKN 483	467-479	NA	NA	14	125	1	20	810	44	.14	<1
C-6	700087	MKN 484	479-491	NA	NA	14	135	2	20	518	35	.11	7
C-6	700087	MKN 485	491-503	NA	NA	13	186	1	12	350	20	.05	<2

\*No samples taken above 354"

177 02M

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC NC #193

EAST TAILINGS PILE

Date 4-8-80

Page 7 of 23

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCl/g Ra226
C-6	700088	MKO 486	503-515	NA	NA	13	285	NA	NA	NA	NA	NA	NA
C-6	700088	MKO 487	515-527	NA	NA	15	195	NA	NA	NA	NA	NA	NA
C-6	700088	MKO 488	527-539	NA	NA	16	300	NA	NA	NA	NA	NA	NA
C-6	700088	MKO 489	539-551	NA	NA	7	210	NA	NA	NA	NA	NA	NA
C-6	700088	MKO 490	551-563	NA	NA	9	175	NA	NA	NA	NA	NA	NA
C-7	700083	MKO 377	0-48	25.5	NA	219	592	NA	NA	NA	NA	NA	NA
C-7	700083	MKO 378	48-108	29.7	NA	282	638	NA	NA	NA	NA	NA	NA
C-7	700083	MKO 379	108-168	26.2	NA	500	1130	NA	NA	NA	NA	NA	NA
C-7	700083	MKO 380	168-228	30.2	NA	453	935	NA	NA	NA	NA	NA	NA
C-7	700083	MKO 381	228-288	33.9	NA	393	490	NA	NA	NA	NA	NA	NA
C-7	700083	MKO 382	288-348	40.4	NA	294	515	NA	NA	NA	NA	NA	NA
C-7	700083	MKO 383	348-408	39.9	NA	123	257	NA	NA	NA	NA	NA	NA
C-7	700083	MKO 384	408-468	44.3	NA	59	135	NA	NA	NA	NA	NA	NA
C-7	700083	MKO 385	468-474	NA	NA	280	401	NA	NA	NA	NA	NA	NA
C-7	700083	MKO 386	474-480	NA	NA	242	378	NA	NA	NA	NA	NA	NA
C-7	700083	MKO 387	480-486	NA	NA	103	205	NA	NA	NA	NA	NA	NA
C-7	700083	MKO 388	486-482	NA	NA	19	141	NA	NA	NA	NA	NA	NA
C-8	700087	*MKO 501	354-366	NA	NA	36	160	1	14	13	38	.14	<2
C-8	700087	MKO 502	366-378	NA	NA	34	150	3	10	13	21	.06	21
C-8	700087	MKO 503	378-390	NA	NA	49	155	2	10	13	20	.11	18
C-8	700087	MKO 504	390-402	NA	NA	43	150	2	10	13	12	.05	11
C-8	700087	MKO 505	402-414	NA	NA	21	175	1	8	13	5	.22	<2
C-8	700088	MKO 506	414-426	NA	NA	20	150	NA	NA	NA	NA	NA	NA
C-8	700088	MKO 507	426-438	NA	NA	13	115	NA	NA	NA	NA	NA	NA
C-8	700088	MKO 508	438-450	NA	NA	21	130	NA	NA	NA	NA	NA	NA
C-8	700088	MKO 509	450-462	NA	NA	12	130	NA	NA	NA	NA	NA	NA
C-8	700088	MKO 510	462-474	NA	NA	12	125	NA	NA	NA	NA	NA	NA
D-1	700033	MKN 082	0-114	10.2	NA	17	241	NA	NA	NA	NA	NA	NA
D-1	700033	MKN 083	114-120	NA	NA	16	214	NA	NA	NA	NA	NA	NA
D-1	700033	MKN 084	120-126	NA	NA	14	232	NA	NA	NA	NA	NA	NA
D-1	700033	MKN 085	126-132	NA	NA	4	187	NA	NA	NA	NA	NA	NA
D-1	700033	MKN 086	132-138	NA	NA	4	187	NA	NA	NA	NA	NA	NA
*No samples taken above 354"													

C-7 1130ppm

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027

BFEC NO #193

EAST TAILINGS PILE

Date 4-8-80

Page 8 of 23

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	µCi/g Ra226
D-2	700034	MKN 103	0-54	11.9	NA	345	1792	NA	NA	NA	NA	NA	NA
D-2	700034	MKN 105	54-114	15.8	NA	345	2400	NA	NA	NA	NA	NA	NA
D-2	700034	MKN 106	114-174	24.5	NA	477	2200	NA	NA	NA	NA	NA	NA
D-2	700034	MKN 107	174-204	12.1	NA	323	1370	NA	NA	NA	NA	NA	NA
D-2	700031	MKN 087	204-210	NA	NA	45	268	<1	31	53	60	.09	21
D-2	700031	MKN 088	210-216	NA	NA	29	187	<1	22	106	51	.08	10
D-2	700031	MKN 089	216-222	NA	NA	37	205	<1	22	56	193	.08	9
D-2	700031	MKN 090	222-228	NA	NA	36	205	<1	20	53	215	.09	6
D-3	700034	MKN 108	0-54	5.0	NA	166	847	NA	NA	NA	NA	NA	NA
D-3	700034	MKN 109	54-114	23.2	NA	257	1494	NA	NA	NA	NA	NA	NA
D-3	700034	MKN 110	114-174	42.4	NA	301	1569	NA	NA	NA	NA	NA	NA
D-3	700034	MKN 111	174-234	27.0	NA	477	1718	NA	NA	NA	NA	NA	NA
D-3	700034	MKN 112	234-294	28.6	NA	389	1295	NA	NA	NA	NA	NA	NA
D-3	700034	MKN 113	294-354	18.1	NA	301	1021	NA	NA	NA	NA	NA	NA
D-3	700033	MKN 091	354-360	NA	NA	72	428	NA	NA	NA	NA	NA	NA
D-3	700033	MKN 092	360-366	NA	NA	26	196	NA	NA	NA	NA	NA	NA
D-3	700033	MKN 093	366-372	NA	NA	38	179	NA	NA	NA	NA	NA	NA
D-3	700033	MKN 094	372-378	NA	NA	43	214	NA	NA	NA	NA	NA	NA
D-4	700084	MKO 412	0-60	17.8	NA	269	1512	NA	NA	NA	NA	NA	NA
D-4	700084	MKO 413	60-120	27.7	NA	223	2100	NA	NA	NA	NA	NA	NA
D-4	700084	MKO 414	120-180	39.0	NA	169	1285	NA	NA	NA	NA	NA	NA
D-4	700084	MKO 415	180-240	25.4	NA	398	2200	NA	NA	NA	NA	NA	NA
D-4	700084	MKO 416	240-300	34.0	NA	416	1589	NA	NA	NA	NA	NA	NA
D-4	700084	MKO 417	300-360	39.3	NA	346	1428	NA	NA	NA	NA	NA	NA
D-4	700084	MKO 418	360-420	44.1	NA	159	916	NA	NA	NA	NA	NA	NA
D-4	700084	MKO 419	420-480	38.0	NA	107	357	NA	NA	NA	NA	NA	NA
D-4	700085	MKO 420	480-486	NA	NA	177	1525	3	2	22	44	.32	377
D-4	700085	MKO 421	486-492	NA	NA	170	1603	4	26	44	58	.41	390
D-4	700085	MKO 422	492-498	NA	NA	204	1704	4	2	44	50	.35	556
D-4	700085	MKO 423	498-504	NA	NA	119	1407	1	30	81	118	.29	119
D-5	700083	MKO 389	0-60	24.3	11.5	309	392	NA	NA	NA	NA	NA	NA
D-5	700083	MKO 390	60-120	29.3	15.0	225	598	NA	NA	NA	NA	NA	NA
D-5	700083	MKO 391	120-180	28.5	25.5	432	1080	NA	NA	NA	NA	NA	NA

D-3 477ppm

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027

BFEC NC #193

EAST TAILINGS PILE

Date 4-8-80

Page 9 of 23

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCl/g Ra226
D-5	700083	MKO 392	180-240	30.2	34.5	482	1528	NA	NA	NA	NA	NA	NA
D-5	700083	MKO 393	240-300	35.0	29.5	436	623	NA	NA	NA	NA	NA	NA
D-5	700083	MKO 394	300-360	41.2	23.7	131	279	NA	NA	NA	NA	NA	NA
D-5	700083	MKO 395	360-420	40.3	22.5	86	208	NA	NA	NA	NA	NA	NA
D-5	700085	MKO 396	420-426	NA	NA	271	1423	1	4	22	36	.87	425
D-5	700085	MKO 397	426-432	NA	NA	368	1560	2	39	22	35	1.07	498
D-5	700085	MKO 398	432-438	NA	NA	316	1575	3	34	225	59	1.02	481
D-5	700085	MKO 399	438-444	NA	NA	177	909	1	<2	26	41	.55	245
D-6	700083	MKO 400	0-60	23.6	NA	295	362	NA	NA	NA	NA	NA	NA
D-6	700083	MKO 401	60-120	25.7	NA	325	405	NA	NA	NA	NA	NA	NA
D-6	700083	MKO 402	120-180	32.4	NA	418	713	NA	NA	NA	NA	NA	NA
D-6	700084	MKO 403	180-240	31.2	NA	420	1324	NA	NA	NA	NA	NA	NA
D-6	700084	MKO 404	240-300	31.7	NA	507	717	NA	NA	NA	NA	NA	NA
D-6	700084	MKO 405	300-360	39.5	NA	296	576	NA	NA	NA	NA	NA	NA
D-6	700084	MKO 406	360-420	38.7	NA	100	227	NA	NA	NA	NA	NA	NA
D-6	700084	MKO 407	420-480	40.2	NA	75	171	NA	NA	NA	NA	NA	NA
D-6	700084	MKO 408	480-486	NA	NA	405	503	NA	NA	NA	NA	NA	NA
D-6	700084	MKO 409	486-492	NA	NA	340	855	NA	NA	NA	NA	NA	NA
D-6	700084	MKO 410	492-498	NA	NA	343	912	NA	NA	NA	NA	NA	NA
D-6	700084	MKO 411	498-504	NA	NA	151	462	NA	NA	NA	NA	NA	NA
D-7	700079	MKO 248	0-54	20.8	NA	250	650	NA	NA	NA	NA	NA	NA
D-7	700079	MKO 249	54-114	15.3	NA	379	1718	NA	NA	NA	NA	NA	NA
D-7	700079	MKO 250	114-174	18.0	NA	490	1843	NA	NA	NA	NA	NA	NA
D-7	700079	MKO 251	174-234	20.7	NA	435	1320	NA	NA	NA	NA	NA	NA
D-7	700079	MKO 252	234-294	23.4	NA	400	720	NA	NA	NA	NA	NA	NA
D-7	700079	MKO 253	294-354	29.3	NA	352	895	NA	NA	NA	NA	NA	NA
D-7	700079	MKO 254	354-414	26.8	NA	167	415	NA	NA	NA	NA	NA	NA
D-7	700079	MKO 255	414-474	27.4	NA	95	260	NA	NA	NA	NA	NA	NA
D-7	700079	MKO 256	474-480	NA	NA	62	250	NA	NA	NA	NA	NA	NA
D-7	700079	MKO 257	480-486	NA	NA	15	105	NA	NA	NA	NA	NA	NA
D-7	700079	MKO 258	486-492	NA	NA	18	90	NA	NA	NA	NA	NA	NA
D-7	700079	MKO 259	492-498	NA	NA	12	115	NA	NA	NA	NA	NA	NA



MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027

BFECC NO #193

EAST TAILINGS PILE

Date 4-8-80

Page 10 of 23

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	µCi/g Ra226
E-1	700029	MKN 009	0-6	NA	NA	8	78	NA	NA	NA	NA	NA	NA
E-1	700029	MKN 010	6-12	NA	NA	21	83	NA	NA	NA	NA	NA	NA
E-1	700029	MKN 011	12-18	NA	NA	7	125	NA	NA	NA	NA	NA	NA
E-1	700029	MKN 012	18-24	NA	NA	11	130	NA	NA	NA	NA	NA	NA
E-2	700035	MKN 135	0-54	6.4	NA	214	2300	NA	NA	NA	NA	NA	NA
E-2	700035	MKN 136	54-114	31.3	NA	142	1345	NA	NA	NA	NA	NA	NA
E-2	700035	MKN 137	114-174	19.7	NA	111	985	NA	NA	NA	NA	NA	NA
E-2	700035	MKN 138	174-180	NA	NA	33	365	NA	NA	NA	NA	NA	NA
E-2	700035	MKN 139	180-186	NA	NA	6	210	NA	NA	NA	NA	NA	NA
E-2	700035	MKN 140	186-192	NA	NA	4	200	NA	NA	NA	NA	NA	NA
E-2	700035	MKN 141	192-198	NA	NA	5	200	NA	NA	NA	NA	NA	NA
E-3	700035	MKN 142	0-54	10.0	5.8	112	870	NA	NA	NA	NA	NA	NA
E-3	700035	MKN 143	54-114	26.8	16.9	183	1140	NA	NA	NA	NA	NA	NA
E-3	700035	MKN 144	114-174	24.6	25.8	455	1718	NA	NA	NA	NA	NA	NA
E-3	700035	MKN 145	174-204	20.7	30.2	542	2400	NA	NA	NA	NA	NA	NA
E-3	700036	MKN 146	204-210	NA	NA	83	510	1	22	66	227	.35	154
E-3	700036	MKN 147	210-216	NA	NA	35	200	<1	15	75	73	.19	4
E-3	700036	MKN 148	216-222	NA	NA	35	200	<1	15	62	96	.18	13
E-3	700036	MKN 149	222-228	NA	NA	41	200	<1	14	44	73	.17	2
E-4	700084	MKO 424	0-60	23.2	NA	329	1373	NA	NA	NA	NA	NA	NA
E-4	700084	MKO 425	60-120	24.4	NA	82	743	NA	NA	NA	NA	NA	NA
E-4	700084	MKO 426	120-180	32.3	NA	304	2200	NA	NA	NA	NA	NA	NA
E-4	700084	MKO 427	180-240	30.0	NA	406	1967	NA	NA	NA	NA	NA	NA
E-4	700084	MKO 428	240-300	44.0	NA	234	1196	NA	NA	NA	NA	NA	NA
E-4	700084	MKO 429	300-360	40.5	NA	131	450	NA	NA	NA	NA	NA	NA
E-4	700084	MKO 430	360-366	NA	NA	41	227	NA	NA	NA	NA	NA	NA
E-4	700084	MKO 431	366-372	NA	NA	21	179	NA	NA	NA	NA	NA	NA
E-4	700084	MKO 432	372-378	NA	NA	19	205	NA	NA	NA	NA	NA	NA
E-4	700084	MKO 433	378-384	NA	NA	17	225	NA	NA	NA	NA	NA	NA
E-5	700087	*MKO 491	388-400	NA	NA	189	290	1	46	810	106	.92	493
E-5	700087	MKO 492	400-412	NA	NA	44	155	1	18	850	24	.08	17

\*No samples taken above 388"

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
DFEC NC #193

EAST TAILINGS PILE

Date 4-8-80

Page 11 of 23

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
E-5	700087	MKO 493	412-424	NA	NA	62	165	1	24	885	32	.19	55
E-5	700087	MKO 494	424-436	NA	NA	39	170	1	4	810	8	.15	6
E-5	700087	MKO 495	436-448	NA	NA	83	230	2	28	810	44	.42	152
E-5	700088	MKO 496	448-460	NA	NA	13	120	NA	NA	NA	NA	NA	NA
E-5	700088	MKO 497	460-472	NA	NA	11	115	NA	NA	NA	NA	NA	NA
E-5	700088	MKO 498	472-484	NA	NA	12	150	NA	NA	NA	NA	NA	NA
E-5	700088	MKO 499	484-496	NA	NA	15	215	NA	NA	NA	NA	NA	NA
E-5	700088	MKO 500	496-508	NA	NA	12	305	NA	NA	NA	NA	NA	NA
E-6	700084	MKO 441	0-60	19.7	NA	454	781	NA	NA	NA	NA	NA	NA
E-6	700084	MKO 442	60-120	25.1	NA	280	718	NA	NA	NA	NA	NA	NA
E-6	700084	MKO 443	120-180	33.3	NA	290	1430	NA	NA	NA	NA	NA	NA
E-6	700084	MKO 444	180-240	29.4	NA	555	2600	NA	NA	NA	NA	NA	NA
E-6	700084	MKO 445	240-300	36.3	NA	404	1300	NA	NA	NA	NA	NA	NA
E-6	700084	MKO 446	300-360	38.0	NA	269	1312	NA	NA	NA	NA	NA	NA
E-6	700084	MKO 447	360-420	39.4	NA	135	448	NA	NA	NA	NA	NA	NA
E-6	700084	MKO 448	420-480	42.8	NA	83	311	NA	NA	NA	NA	NA	NA
E-7	700079	MKO 271	0-54	19.8	NA	8	105	NA	NA	NA	NA	NA	NA
E-7	700080	MKO 272	54-114	13.9	NA	271	1055	NA	NA	NA	NA	NA	NA
E-7	700080	MKO 273	114-174	20.0	NA	409	1668	NA	NA	NA	NA	NA	NA
E-7	700080	MKO 274	174-234	24.0	NA	381	995	NA	NA	NA	NA	NA	NA
E-7	700080	MKO 275	234-294	27.9	NA	312	615	NA	NA	NA	NA	NA	NA
E-7	700080	MKO 276	294-354	31.0	NA	192	470	NA	NA	NA	NA	NA	NA
E-7	700080	MKO 277	354-414	31.6	NA	77	245	NA	NA	NA	NA	NA	NA
E-7	700080	MKO 278	414-474	34.8	NA	48	235	NA	NA	NA	NA	NA	NA
E-7	700080	MKO 279	474-480	NA	NA	15	155	NA	NA	NA	NA	NA	NA
E-7	700080	MKO 280	480-486	NA	NA	<1	155	NA	NA	NA	NA	NA	NA
E-7	700080	MKO 281	486-492	NA	NA	1	175	NA	NA	NA	NA	NA	NA
E-7	700080	MKO 282	492-498	NA	NA	4	175	NA	NA	NA	NA	NA	NA
F-1	700035	MKN 114	0-54	8.5	NA	17	260	NA	NA	NA	NA	NA	NA
F-1	700035	MKN 115	54-78	12.4	NA	7	215	NA	NA	NA	NA	NA	NA
F-1	700035	MKN 116	78-84	NA	NA	6	200	NA	NA	NA	NA	NA	NA
F-1	700035	MKN 117	84-90	NA	NA	5	200	NA	NA	NA	NA	NA	NA

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027

BFEC NC #193

EAST TAILINGS PILE

Date 4-8-80

Page 12 of 23

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCl/g Ra226
F-1	700035	MKN 118	90-96	NA	NA	3	200	NA	NA	NA	NA	NA	NA
F-1	700035	MKN 119	96-102	NA	NA	4	175	NA	NA	NA	NA	NA	NA
F-2	700037	MKN 164	0-6	NA	NA	6	145	NA	NA	NA	NA	NA	NA
F-2	700037	MKN 165	6-12	NA	NA	9	180	NA	NA	NA	NA	NA	NA
F-2	700037	MKN 166	12-16	NA	NA	155	971	NA	NA	NA	NA	NA	NA
F-2	700037	MKN 167	16-54	7.2	NA	144	1071	NA	NA	NA	NA	NA	NA
F-2	700037	MKN 168	54-114	16.4	NA	204	1544	NA	NA	NA	NA	NA	NA
F-2	700037	MKN 169	114-174	34.8	NA	114	847	NA	NA	NA	NA	NA	NA
F-2	700037	MKN 170	174-234	14.1	NA	64	645	NA	NA	NA	NA	NA	NA
F-2	700037	MKN 171	234-240	NA	NA	48	530	NA	NA	NA	NA	NA	NA
F-2	700037	MKN 172	240-246	NA	NA	46	430	NA	NA	NA	NA	NA	NA
F-2	700037	MKN 173	246-252	NA	NA	31	390	NA	NA	NA	NA	NA	NA
F-2	700037	MKN 174	252-258	NA	NA	7	202	NA	NA	NA	NA	NA	NA
F-3	700087	*MKN 511	234-246	NA	NA	20	240	3	12	26	21	.05	<2
F-3	700087	MKN 512	246-258	NA	NA	17	215	3	10	18	12	.01	1
F-3	700087	MKN 513	258-270	NA	NA	25	355	1	10	22	21	.04	29
F-3	700087	MKN 514	270-282	NA	NA	7	200	2	6	18	7	.02	6
F-3	700087	MKN 515	282-294	NA	NA	6	220	3	6	22	5	.01	<2
F-3	700088	MKN 516	294-306	NA	NA	7	225	NA	NA	NA	NA	NA	NA
F-3	700088	MKN 517	306-318	NA	NA	7	240	NA	NA	NA	NA	NA	NA
F-3	700088	MKN 518	318-330	NA	NA	5	230	NA	NA	NA	NA	NA	NA
F-3	700088	MKN 519	330-342	NA	NA	8	250	NA	NA	NA	NA	NA	NA
F-3	700088	MKN 520	342-354	NA	NA	5	255	NA	NA	NA	NA	NA	NA
F-4	700086	MKN 457	0-60	20.3	NA	182	578	NA	NA	NA	NA	NA	NA
F-4	700086	MKN 458	60-120	27.0	NA	170	1303	NA	NA	NA	NA	NA	NA
F-4	700086	MKN 459	120-180	31.1	NA	230	2100	NA	NA	NA	NA	NA	NA
F-4	700086	MKN 460	180-240	31.7	NA	416	2600	NA	NA	NA	NA	NA	NA
F-4	700086	MKN 461	240-300	35.3	NA	501	1980	NA	NA	NA	NA	NA	NA
F-4	700086	MKN 462	300-360	40.5	NA	412	1178	NA	NA	NA	NA	NA	NA
F-4	700086	MKN 463	360-420	31.3	NA	136	380	NA	NA	NA	NA	NA	NA
F-4	700086	MKN 464	420-450	26.3	NA	94	237	NA	NA	NA	NA	NA	NA
F-4	700086	MKN 465	450-456	NA	NA	254	2100	NA	NA	NA	NA	NA	NA

\* No samples taken above 234"

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-0027  
BFEC NC #193

EAST TAILINGS PILE

Date 4-8-80  
Page 13 of 23

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
F-4	700086	MKO 466	456-462	NA	NA	345	2200	NA	NA	NA	NA	NA	NA
F-4	700086	MKO 467	462-468	NA	NA	223	2300	NA	NA	NA	NA	NA	NA
F-4	700086	MKO 468	468-474	NA	NA	130	1742	NA	NA	NA	NA	NA	NA
F-5	700084	MKO 434	0-60	22.4	NA	247	612	NA	NA	NA	NA	NA	NA
F-5	700084	MKO 435	60-120	29.3	NA	562	1699	NA	NA	NA	NA	NA	NA
F-5	700084	MKO 436	120-180	32.7	NA	444	2300	NA	NA	NA	NA	NA	NA
F-5	700084	MKO 437	180-240	31.6	NA	346	2500	NA	NA	NA	NA	NA	NA
F-5	700084	MKO 438	240-300	35.8	NA	410	1858	NA	NA	NA	NA	NA	NA
F-5	700084	MKO 439	300-360	38.2	NA	253	634	NA	NA	NA	NA	NA	NA
F-5	700084	MKO 440	360-420	39.6	NA	9	345	NA	NA	NA	NA	NA	NA
F-6	700079	MKO 233	0-6	NA	NA	9	160	NA	NA	NA	NA	NA	NA
F-6	700079	MKO 234	6-12	NA	NA	10	145	NA	NA	NA	NA	NA	NA
F-6	700079	MKO 235	12-18	NA	NA	24	205	NA	NA	NA	NA	NA	NA
F-6	700079	MKO 236	18-24	NA	NA	84	365	NA	NA	NA	NA	NA	NA
F-6	700079	MKO 237	24-54	18.3	NA	156	710	NA	NA	NA	NA	NA	NA
F-6	700079	MKO 238	54-114	17.4	NA	390	1693	NA	NA	NA	NA	NA	NA
F-6	700079	MKO 239	114-174	22.3	NA	412	1868	NA	NA	NA	NA	NA	NA
F-6	700079	MKO 240	174-234	23.0	NA	258	735	NA	NA	NA	NA	NA	NA
F-6	700079	MKO 241	234-294	19.9	NA	490	530	NA	NA	NA	NA	NA	NA
F-6	700079	MKO 242	294-354	23.8	NA	379	855	NA	NA	NA	NA	NA	NA
F-6	700079	MKO 243	354-414	27.8	NA	164	760	NA	NA	NA	NA	NA	NA
F-6	700079	MKO 244	414-426	NA	NA	12	225	1	4	40	66	.03	24
F-6	700079	MKO 245	420-426	NA	NA	95	645	1	32	186	77	.93	337
F-6	700079	MKO 246	426-432	NA	NA	11	305	1	7	111	123	.16	16
F-6	700081	MKO 247	432-438	NA	NA	<1	180	<1	6	58	151	.08	1
F-7	700079	MKO 226	0-54	21.3	NA	189	780	NA	NA	NA	NA	NA	NA
F-7	700079	MKO 227	54-114	17.0	NA	302	1618	NA	NA	NA	NA	NA	NA
F-7	700079	MKO 228	114-174	21.9	NA	280	630	NA	NA	NA	NA	NA	NA
F-7	700079	MKO 229	174-234	19.4	NA	346	365	NA	NA	NA	NA	NA	NA
F-7	700079	MKO 230	234-294	29.2	NA	196	370	NA	NA	NA	NA	NA	NA
F-7	700079	MKO 231	294-354	30.3	NA	59	205	NA	NA	NA	NA	NA	NA
F-7	700079	MKO 232	354-414	28.0	NA	70	195	NA	NA	NA	NA	NA	NA

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC NC #193

EAST TAILINGS PILE

Date 4-8-80

Page 14 of 23

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
G-1	700029	MKN 017	0-6	NA	NA	8	57	NA	NA	NA	NA	NA	NA
G-1	700029	MKN 018	6-12	NA	NA	11	99	NA	NA	NA	NA	NA	NA
G-1	700029	MKN 019	12-18	NA	NA	5	73	NA	NA	NA	NA	NA	NA
G-1	700029	MKN 020	18-24	NA	NA	7	94	NA	NA	NA	NA	NA	NA
G-2	700035	MKN 120	0-54	11.5	NA	54	545	NA	NA	NA	NA	NA	NA
G-2	700035	MKN 121	54-114	16.5	NA	74	690	NA	NA	NA	NA	NA	NA
G-2	700035	MKN 122	114-120	NA	NA	8	220	NA	NA	NA	NA	NA	NA
G-2	700035	MKN 123	120-126	NA	NA	5	190	NA	NA	NA	NA	NA	NA
G-2	700035	MKN 124	126-132	NA	NA	4	165	NA	NA	NA	NA	NA	NA
G-2	700035	MKN 125	132-138	NA	NA	4	175	NA	NA	NA	NA	NA	NA
G-3	700037	MKN 156	0-54	9.2	2.6	25	170	NA	NA	NA	NA	NA	NA
G-3	700037	MKN 157	54-114	13.4	22.8	263	1594	NA	NA	NA	NA	NA	NA
G-3	700037	MKN 158	114-174	43.7	32.6	402	2300	NA	NA	NA	NA	NA	NA
G-3	700037	MKN 159	174-234	26.9	23.4	208	1295	NA	NA	NA	NA	NA	NA
G-3	700037	MKN 160	234-240	NA	NA	38	370	NA	NA	NA	NA	NA	NA
G-3	700037	MKN 161	240-246	NA	NA	23	615	NA	NA	NA	NA	NA	NA
G-3	700037	MKN 162	246-252	NA	NA	15	235	NA	NA	NA	NA	NA	NA
G-3	700037	MKN 163	252-258	NA	NA	9	190	NA	NA	NA	NA	NA	NA
G-4	700084	MKO 449	0-60	13.0	NA	330	1470	NA	NA	NA	NA	NA	NA
G-4	700084	MKO 450	60-120	23.9	NA	244	2200	NA	NA	NA	NA	NA	NA
G-4	700084	MKO 451	120-180	28.4	NA	260	2000	NA	NA	NA	NA	NA	NA
G-4	700084	MKO 452	180-240	29.6	NA	356	2000	NA	NA	NA	NA	NA	NA
G-4	700084	MKO 453	240-300	32.4	NA	463	2700	NA	NA	NA	NA	NA	NA
G-4	700084	MKO 454	300-360	37.6	NA	443	1394	NA	NA	NA	NA	NA	NA
G-4	700084	MKO 455	360-420	35.7	NA	175	627	NA	NA	NA	NA	NA	NA
G-4	700084	MKO 456	420-480	35.9	NA	97	373	NA	NA	NA	NA	NA	NA
G-5	700086	MKO 469	0-60	17.8	NA	253	1109	NA	NA	NA	NA	NA	NA
G-5	700086	MKO 470	60-120	29.0	NA	194	3300	NA	NA	NA	NA	NA	NA
G-5	700086	MKO 471	120-180	34.7	NA	288	3200	NA	NA	NA	NA	NA	NA
G-5	700086	MKO 472	180-240	31.7	NA	450	2700	NA	NA	NA	NA	NA	NA
G-5	700086	MKO 473	240-300	33.2	NA	392	2100	NA	NA	NA	NA	NA	NA

7-1 11.30PM



MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027

BFC NC #193

EAST TAILINGS PILE

Date 4-8-80

Page 15 of 23

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCl/g Ra226
G-5	700086	MKO 474	300-360	37.9	NA	296	969	NA	NA	NA	NA	NA	NA
G-5	700086	MKO 475	360-420	35.7	NA	88	473	NA	NA	NA	NA	NA	NA
G-5	700086	MKO 476	420-480	39.2	NA	80	446	NA	NA	NA	NA	NA	NA
G-5	700086	MKO 477	480-486	NA	NA	284	3500	NA	NA	NA	NA	NA	NA
G-5	700086	MKO 478	486-492	NA	NA	347	3900	NA	NA	NA	NA	NA	NA
G-5	700086	MKO 479	492-498	NA	NA	334	3600	NA	NA	NA	NA	NA	NA
G-5	700086	MKO 480	498-504	NA	NA	298	3600	NA	NA	NA	NA	NA	NA
G-6	700078	MKO 207	0-6	NA	NA	4	160	NA	NA	NA	NA	NA	NA
G-6	700078	MKO 208	6-12	NA	NA	15	195	NA	NA	NA	NA	NA	NA
G-6	700078	MKO 209	12-18	NA	NA	37	340	NA	NA	NA	NA	NA	NA
G-6	700078	MKO 210	18-24	NA	NA	146	695	NA	NA	NA	NA	NA	NA
G-6	700078	MKO 211	24-54	18.6	NA	152	755	NA	NA	NA	NA	NA	NA
G-6	700078	MKO 212	54-114	14.5	NA	287	1718	NA	NA	NA	NA	NA	NA
G-6	700078	MKO 213	114-174	21.5	NA	313	1967	NA	NA	NA	NA	NA	NA
G-6	700078	MKO 214	174-234	21.2	NA	348	1195	NA	NA	NA	NA	NA	NA
G-6	700078	MKO 215	234-294	23.9	NA	504	765	NA	NA	NA	NA	NA	NA
G-6	700078	MKO 216	294-354	30.1	NA	340	660	NA	NA	NA	NA	NA	NA
G-6	700078	MKO 217	354-360	NA	NA	186	665	NA	NA	NA	NA	NA	NA
G-6	700079	MKO 218	360-366	NA	NA	346	565	NA	NA	NA	NA	NA	NA
G-6	700079	MKO 219	366-372	NA	NA	346	335	NA	NA	NA	NA	NA	NA
G-6	700079	MKO 220	372-378	NA	NA	26	165	NA	NA	NA	NA	NA	NA
G-7	700079	MKO 221	0-54	15.2	NA	141	625	NA	NA	NA	NA	NA	NA
G-7	700079	MKO 222	54-114	16.0	NA	280	1693	NA	NA	NA	NA	NA	NA
G-7	700079	MKO 223	114-174	16.6	NA	214	735	NA	NA	NA	NA	NA	NA
G-7	700079	MKO 224	174-234	24.0	NA	236	580	NA	NA	NA	NA	NA	NA
G-7	700079	MKO 225	234-274	28.3	NA	346	550	NA	NA	NA	NA	NA	NA
H-1	700037	MKN 150	0-54	9.2	5.5	10	215	NA	NA	NA	NA	NA	NA
H-1	700037	MKN 151	54-102	9.9	7.0	6	200	NA	NA	NA	NA	NA	NA
H-1	700037	MKN 152	102-108	NA	NA	9	135	NA	NA	NA	NA	NA	NA
H-1	700037	MKN 153	108-114	NA	NA	6	215	NA	NA	NA	NA	NA	NA
H-1	700037	MKN 154	114-120	NA	NA	3	215	NA	NA	NA	NA	NA	NA
H-1	700037	MKN 155	120-126	NA	NA	4	210	NA	NA	NA	NA	NA	NA

21 5/20/80

MONTICELLO, UTAH, HILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC NC #193

EAST TAILINGS PILE

Date 4-8-80

Page 16 of 23

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCl/g Ra226
H-2	700038	MKN 182	0-54	6.9	NA	75	757	NA	NA	NA	NA	NA	NA
H-2	700038	MKN 183	54-114	22.3	NA	68	423	NA	NA	NA	NA	NA	NA
H-2	700038	MKN 184	114-160	10.2	NA	9	225	NA	NA	NA	NA	NA	NA
H-2	700038	MKN 185	160-166	NA	NA	59	614	NA	NA	NA	NA	NA	NA
H-2	700038	MKN 186	166-172	NA	NA	39	439	NA	NA	NA	NA	NA	NA
H-2	700038	MKN 187	172-178	NA	NA	8	184	NA	NA	NA	NA	NA	NA
H-2	700038	MKN 188	178-184	NA	NA	5	189	NA	NA	NA	NA	NA	NA
H-3	700038	MKN 189	0-54	2.0	NA	70	484	NA	NA	NA	NA	NA	NA
H-3	700038	MKN 190	54-114	17.7	NA	260	1237	NA	NA	NA	NA	NA	NA
H-3	700038	MKN 191	114-174	8.3	NA	186	853	NA	NA	NA	NA	NA	NA
H-3	700038	MKN 192	174-234	18.0	NA	163	682	NA	NA	NA	NA	NA	NA
H-3	700038	MKN 193	234-294	16.3	NA	123	589	NA	NA	NA	NA	NA	NA
H-3	700038	MKN 194	294-354	8.8	NA	181	812	NA	NA	NA	NA	NA	NA
H-3	700038	MKN 195	354-414	2.2	NA	123	575	NA	NA	NA	NA	NA	NA
H-3	700038	MKN 196	414-417	NA	NA	112	728	NA	NA	NA	NA	NA	NA
H-4	700087	*MKN 530	319-331	NA	NA	54	140	2	14	18	55	.11	13
H-4	700087	MKN 531	331-343	NA	NA	44	175	1	4	49	35	.16	8
H-4	700087	MKN 532	343-355	NA	NA	44	180	2	16	18	35	.13	15
H-4	700087	MKN 533	355-367	NA	NA	18	260	1	16	84	12	.03	<2
H-4	700087	MKN 534	363-379	NA	NA	38	375	1	26	66	15	.04	12
H-4	700088	MKN 535	379-391	NA	NA	23	335	NA	NA	NA	NA	NA	NA
H-4	700088	MKN 536	391-403	NA	NA	25	305	NA	NA	NA	NA	NA	NA
H-4	700088	MKN 537	403-415	NA	NA	10	290	NA	NA	NA	NA	NA	NA
H-4	700088	MKN 538	415-427	NA	NA	14	335	NA	NA	NA	NA	NA	NA
H-4	700088	MKN 539	427-436	NA	NA	10	295	NA	NA	NA	NA	NA	NA
H-5	700038	MKN 197	0-6	NA	NA	9	130	NA	NA	NA	NA	NA	NA
H-5	700038	MKN 198	6-12	NA	NA	15	268	NA	NA	NA	NA	NA	NA
H-5	700038	MKN 199	12-18	NA	NA	116	1050	NA	NA	NA	NA	NA	NA
H-5	700038	MKN 200	18-54	7.5	7.0	192	825	NA	NA	NA	NA	NA	NA
H-5	700038	MKN 201	54-114	21.0	26.0	372	1669	NA	NA	NA	NA	NA	NA
H-5	700038	MKN 202	114-174	19.0	24.5	277	1507	NA	NA	NA	NA	NA	NA

\*No samples taken above 319"

MONTICELLO, UTAH, HILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027

BFEC NC #193

EAST TAILINGS PILE

Date 4-8-80

Page 17 of 23

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
H-5	700039	MKN 203	174-234	15.5	23.5	250	1323	NA	NA	NA	NA	NA	NA
H-5	700039	MKN 204	234-294	18.1	22.4	239	939	NA	NA	NA	NA	NA	NA
H-5	700039	MKN 205	294-354	8.0	18.6	156	844	NA	NA	NA	NA	NA	NA
H-5	700039	MKN 206	354-414	7.1	19.6	217	944	NA	NA	NA	NA	NA	NA
H-5	700039	MKN 207	414-421	NA	NA	82	446	NA	NA	NA	NA	NA	NA
H-5	700039	MKN 208	421-428	NA	NA	34	59	NA	NA	NA	NA	NA	NA
H-5	700039	MKN 209	428-435	NA	NA	31	59	NA	NA	NA	NA	NA	NA
H-6	700039	MKN 210	0-54	6.8	10.0	225	1401	NA	NA	NA	NA	NA	NA
H-6	700039	MKN 211	54-114	12.0	14.8	230	903	NA	NA	NA	NA	NA	NA
H-6	700039	MKN 212	114-174	15.2	18.1	375	1576	NA	NA	NA	NA	NA	NA
H-6	700039	MKN 213	174-234	18.3	18.5	529	2515	NA	NA	NA	NA	NA	NA
H-6	700039	MKN 214	234-294	21.6	15.0	189	718	NA	NA	NA	NA	NA	NA
H-6	700039	MKN 215	294-300	NA	NA	108	461	NA	NA	NA	NA	NA	NA
H-6	700039	MKN 216	300-306	NA	NA	12	155	NA	NA	NA	NA	NA	NA
H-6	700039	MKN 217	306-312	NA	NA	9	95	NA	NA	NA	NA	NA	NA
H-6	700039	MKN 218	312-318	NA	NA	7	152	NA	NA	NA	NA	NA	NA
I-1	700031	MKN 021	0-6	NA	NA	9	223	<1	10	26	6	.03	<2
I-1	700031	MKN 022	6-12	NA	NA	3	241	<1	9	22	2	.02	<2
I-1	700031	MKN 023	12-18	NA	NA	3	250	<1	9	22	4	.03	<2
I-1	700031	MKN 024	18-24	NA	NA	6	223	<1	9	18	14	.02	1
I-2	700038	MKN 175	0-54	4.4	NA	15	211	NA	NA	NA	NA	NA	NA
I-2	700038	MKN 176	54-114	10.7	NA	7	207	NA	NA	NA	NA	NA	NA
I-2	700038	MKN 177	114-174	11.1	NA	8	232	NA	NA	NA	NA	NA	NA
I-2	700038	MKN 178	174-234	9.1	NA	18	218	NA	NA	NA	NA	NA	NA
I-2	700036	MKN 179	234-240	NA	NA	6	195	<1	9	22	39	.04	9
I-2	700036	MKN 180	240-246	NA	NA	3	185	<1	8	44	111	.04	1
I-2	700036	MKN 181	246-252	NA	NA	6	190	<1	8	26	51	.06	16
I-3	700087	*MKN 570	156-168	NA	NA	32	260	8	20	31	202	.04	15
I-3	700087	MKN 571	168-180	NA	NA	32	200	5	22	13	232	.05	3
I-3	700087	MKN 572	180-192	NA	NA	32	245	4	18	13	7	.12	<2
I-3	700087	MKN 573	192-204	NA	NA	13	245	5	12	13	220	.03	<2

\*No samples taken above 156"

MONTICELLO, UTAH, HILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
DFEC NC #193

EAST TAILINGS PILE

Date 4-8-80  
Page 18 of 23

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT.	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
I-3	700087	MKO 574	204-216	NA	NA	13	225	5	12	13	211	.02	7
I-3	700088	MKO 575	216-228	NA	NA	16	240	NA	NA	NA	NA	NA	NA
I-3	700088	MKO 576	228-240	NA	NA	12	240	NA	NA	NA	NA	NA	NA
I-3	700088	MKO 577	240-252	NA	NA	12	255	NA	NA	NA	NA	NA	NA
I-3	700088	MKO 578	252-264	NA	NA	10	240	NA	NA	NA	NA	NA	NA
I-3	700088	MKO 579	264-276	NA	NA	10	215	NA	NA	NA	NA	NA	NA
I-4	700078	MKO 164	0-54	16.2	NA	163	1569	NA	NA	NA	NA	NA	NA
I-4	700078	MKO 165	54-114	15.6	NA	249	1345	NA	NA	NA	NA	NA	NA
I-4	700078	MKO 166	114-174	19.0	NA	342	1967	NA	NA	NA	NA	NA	NA
I-4	700078	MKO 167	174-234	19.1	NA	503	1942	NA	NA	NA	NA	NA	NA
I-4	700078	MKO 168	234-294	27.0	NA	503	1618	NA	NA	NA	NA	NA	NA
I-4	700078	MKO 169	294-354	28.2	NA	120	815	NA	NA	NA	NA	NA	NA
I-4	700078	MKO 170	354-414	29.8	NA	191	1394	NA	NA	NA	NA	NA	NA
I-5	700078	MKO 171	0-54	19.2	NA	173	970	NA	NA	NA	NA	NA	NA
I-5	700078	MKO 172	54-114	18.0	NA	207	1025	NA	NA	NA	NA	NA	NA
I-5	700078	MKO 173	114-174	13.9	NA	503	2600	NA	NA	NA	NA	NA	NA
I-5	700078	MKO 174	174-234	23.8	NA	401	1743	NA	NA	NA	NA	NA	NA
I-5	700078	MKO 175	234-294	32.1	NA	150	645	NA	NA	NA	NA	NA	NA
I-5	700078	MKO 176	294-354	28.0	NA	58	275	NA	NA	NA	NA	NA	NA
I-6	700042	MKN 301	0-42	10.1	11.0	237	1868	NA	NA	NA	NA	NA	NA
I-6	700042	MKN 302	42-102	16.2	11.5	173	1150	NA	NA	NA	NA	NA	NA
I-6	700044	MKN 303	102-138	11.0	26.7	407	2313	NA	NA	NA	NA	NA	NA
I-6	700042	MKN 304	138-144	NA	NA	257	985	NA	NA	NA	NA	NA	NA
I-6	700042	MKN 305	144-150	NA	NA	76	175	NA	NA	NA	NA	NA	NA
I-6	700042	MKN 306	150-156	NA	NA	23	55	NA	NA	NA	NA	NA	NA
I-6	700042	MKN 307	156-162	NA	NA	23	55	NA	NA	NA	NA	NA	NA
J-1	700039	MKN 219	0-54	3.1	NA	7	218	NA	NA	NA	NA	NA	NA
J-1	700039	MKN 220	54-114	8.3	NA	9	252	NA	NA	NA	NA	NA	NA
J-1	700039	MKN 221	114-174	8.0	NA	7	252	NA	NA	NA	NA	NA	NA
J-1	700039	MKN 222	174-180	NA	NA	9	39	NA	NA	NA	NA	NA	NA
J-1	700039	MKN 223	180-186	NA	NA	7	200	NA	NA	NA	NA	NA	NA
J-1	700039	MKN 224	186-192	NA	NA	8	216	NA	NA	NA	NA	NA	NA

T-4 503000

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC NC #193

EAST TAILINGS PILE

Date 4-8-80  
Page 19 of 23

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
J-1	700039	MKN 225	192-198	NA	NA	8	200	NA	NA	NA	NA	NA	NA
J-2	700040	MKN 226	0-54	5.6	14.0	100	466	NA	NA	NA	NA	NA	NA
J-2	700040	MKN 227	54-114	2.4	13.8	38	295	NA	NA	NA	NA	NA	NA
J-2	700040	MKN 228	114-174	5.3	15.0	43	366	NA	NA	NA	NA	NA	NA
J-2	700049	MKN 229	174-234	6.8	13.5	62	407	NA	NA	NA	NA	NA	NA
J-2	700036	MKN 230	234-240	NA	NA	33	245	<1	10	80	116	.09	45
J-2	700036	MKN 231	240-246	NA	NA	13	155	<1	3	613	76	.05	2
J-2	700036	MKN 232	246-252	NA	NA	4	150	<1	9	296	65	.10	27
J-2	700036	MKN 233	252-258	NA	NA	5	230	<1	10	336	56	.06	<2
J-3	700040	MKN 243	0-6	NA	NA	7	134	NA	NA	NA	NA	NA	NA
J-3	700040	MKN 244	6-12	NA	NA	11	196	NA	NA	NA	NA	NA	NA
J-3	700040	MKN 245	12-18	NA	NA	57	543	NA	NA	NA	NA	NA	NA
J-3	NA	*MKN 246	18-24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
J-3	700040	MKN 247	24-54	6.7	NA	87	768	NA	NA	NA	NA	NA	NA
J-3	700040	MKN 248	54-114	16.5	NA	250	1262	NA	NA	NA	NA	NA	NA
J-3	700040	MKN 249	114-174	11.7	NA	252	941	NA	NA	NA	NA	NA	NA
J-3	700040	MKN 250	174-234	13.2	NA	247	848	NA	NA	NA	NA	NA	NA
J-3	700040	MKN 251	234-294	25.0	NA	196	725	NA	NA	NA	NA	NA	NA
J-3	700040	MKN 252	294-354	23.4	NA	53	564	NA	NA	NA	NA	NA	NA
J-3	700040	MKN 253	354-414	14.0	NA	59	414	NA	NA	NA	NA	NA	NA
J-3	700040	MKN 254	414-420	NA	NA	114	594	NA	NA	NA	NA	NA	NA
J-3	700041	MKN 255	420-426	NA	NA	23	355	NA	NA	NA	NA	NA	NA
J-3	700041	MKN 256	426-432	NA	NA	11	259	NA	NA	NA	NA	NA	NA
J-3	700041	MKN 257	432-438	NA	NA	7	141	NA	NA	NA	NA	NA	NA
J-4	700078	MKO 183	0-54	19.5	NA	127	975	NA	NA	NA	NA	NA	NA
J-4	700078	MKO 184	54-114	16.4	NA	224	910	NA	NA	NA	NA	NA	NA
J-4	700078	MKO 185	114-174	15.7	NA	324	985	NA	NA	NA	NA	NA	NA
J-4	700078	MKO 186	174-234	19.6	NA	503	1444	NA	NA	NA	NA	NA	NA
J-4	700078	MKO 187	234-294	24.7	NA	452	955	NA	NA	NA	NA	NA	NA
J-4	700078	MKO 188	294-354	26.0	NA	125	555	NA	NA	NA	NA	NA	NA
J-4	700078	MKO 189	354-360	NA	NA	166	700	NA	NA	NA	NA	NA	NA
J-4	700078	MKO 190	360-366	NA	NA	189	835	NA	NA	NA	NA	NA	NA
	*No sample taken												



MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
SFEC NC #193

EAST TAILINGS PILE

Date 4-8-80  
Page 20 of 23

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	µCi/g Ra226
J-4	700078	MKO 191	366-372	NA	NA	240	970	NA	NA	NA	NA	NA	NA
J-4	700078	MKO 192	372-378	NA	NA	97	410	NA	NA	NA	NA	NA	NA
J-5	700087	*MKO 550	174-186	NA	NA	39	155	<1	22	31	12	.10	9
J-5	700087	MKO 551	186-198	NA	NA	43	145	<1	18	58	18	.14	2
J-5	700087	MKO 552	198-210	NA	NA	38	150	<1	22	26	50	.13	4
J-5	700087	MKO 553	210-222	NA	NA	49	180	<1	24	53	39	.12	8
J-5	700087	MKO 554	222-234	NA	NA	38	160	<1	22	120	30	.08	12
J-5	700088	MKO 555	234-246	NA	NA	50	145	NA	NA	NA	NA	NA	NA
J-5	700088	MKO 556	246-258	NA	NA	50	155	NA	NA	NA	NA	NA	NA
J-5	700088	MKO 557	258-270	NA	NA	25	125	NA	NA	NA	NA	NA	NA
J-5	700088	MKO 558	270-282	NA	NA	19	125	NA	NA	NA	NA	NA	NA
J-5	700088	MKO 559	282-294	NA	NA	12	100	NA	NA	NA	NA	NA	NA
K-1	700029	MKN 025	0-6	NA	NA	27	213	NA	NA	NA	NA	NA	NA
K-1	700029	MKN 026	6-12	NA	NA	27	192	NA	NA	NA	NA	NA	NA
K-1	700029	MKN 027	12-18	NA	NA	28	208	NA	NA	NA	NA	NA	NA
K-1	700029	MKN 028	18-24	NA	NA	29	229	NA	NA	NA	NA	NA	NA
K-2	700040	MKN 234	0-54	3.5	NA	104	614	NA	NA	NA	NA	NA	NA
K-2	700040	MKN 235	54-114	18.5	NA	235	934	NA	NA	NA	NA	NA	NA
K-2	700040	MKN 236	114-174	14.2	NA	243	1219	NA	NA	NA	NA	NA	NA
K-2	700040	MKN 237	174-234	10.0	NA	158	969	NA	NA	NA	NA	NA	NA
K-2	700040	MKN 238	234-294	4.0	NA	148	989	NA	NA	NA	NA	NA	NA
K-2	700040	MKN 239	294-300	NA	NA	111	532	NA	NA	NA	NA	NA	NA
K-2	700040	MKN 240	300-306	NA	NA	14	205	NA	NA	NA	NA	NA	NA
K-2	700040	MKN 241	306-312	NA	NA	8	161	NA	NA	NA	NA	NA	NA
K-2	700040	MKN 242	312-318	NA	NA	11	166	NA	NA	NA	NA	NA	NA
K-3	700041	MKN 266	0-54	4.5	5.1	50	246	NA	NA	NA	NA	NA	NA
K-3	700041	MKN 267	54-114	3.0	10.6	152	753	NA	NA	NA	NA	NA	NA
K-3	700041	MKN 268	114-174	18.8	16.5	242	1157	NA	NA	NA	NA	NA	NA
K-3	700041	MKN 269	174-234	12.5	16.5	189	766	NA	NA	NA	NA	NA	NA
K-3	700041	MKN 270	234-294	14.8	15.5	137	616	NA	NA	NA	NA	NA	NA
K-3	700041	MKN 271	294-354	6.0	14.7	77	436	NA	NA	NA	NA	NA	NA

\*No samples taken above 174"

K-2 243 ppm

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC NC #193

EAST TAILINGS PILE

Date 4-8-80  
Page 21 of 23

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
K-3	700041	MKN 272	354-414	11.9	17.5	114	609	NA	NA	NA	NA	NA	NA
K-3	700041	MKN 273	414-420	NA	NA	244	525	NA	NA	NA	NA	NA	NA
K-3	700041	MKN 274	420-426	NA	NA	110	411	NA	NA	NA	NA	NA	NA
K-3	700041	MKN 275	426-432	NA	NA	17	389	NA	NA	NA	NA	NA	NA
K-3	700041	MKN 276	432-438	NA	NA	22	398	NA	NA	NA	NA	NA	NA
K-4	700078	MKO 193	0-6	NA	NA	20	195	NA	NA	NA	NA	NA	NA
K-4	700078	MKO 194	6-12	NA	NA	22	245	NA	NA	NA	NA	NA	NA
K-4	700078	MKO 195	12-18	NA	NA	13	230	NA	NA	NA	NA	NA	NA
K-4	700078	MKO 196	18-24	NA	NA	28	465	NA	NA	NA	NA	NA	NA
K-4	700078	MKO 197	24-54	13.5	NA	132	905	NA	NA	NA	NA	NA	NA
K-4	700078	MKO 198	54-114	18.3	NA	150	1115	NA	NA	NA	NA	NA	NA
K-4	700078	MKO 199	114-174	15.8	NA	219	920	NA	NA	NA	NA	NA	NA
K-4	700078	MKO 200	174-234	19.1	NA	401	1270	NA	NA	NA	NA	NA	NA
K-4	700078	MKO 201	234-294	28.5	NA	194	395	NA	NA	NA	NA	NA	NA
K-4	700078	MKO 202	294-354	25.8	NA	63	305	NA	NA	NA	NA	NA	NA
K-4	700081	MKO 203	354-360	NA	NA	88	495	1	27	102	182	.38	147
K-4	700081	MKO 204	360-366	NA	NA	34	370	<1	6	35	51	.11	64
K-4	700081	MKO 205	366-372	NA	NA	13	615	1	27	26	42	.03	15
K-4	700081	MKO 206	372-378	NA	NA	104	405	7	24	102	37	.43	176
K-5	700042	MKN 308	0-54	10.1	4.9	116	820	NA	NA	NA	NA	NA	NA
K-5	700044	MKN 309	54-114	10.0	7.5	105	819	NA	NA	NA	NA	NA	NA
K-5	700044	MKN 310	114-130	18.5	15.7	207	1255	NA	NA	NA	NA	NA	NA
K-5	700043	MKN 311	130-136	NA	NA	82	535	NA	NA	NA	NA	NA	NA
K-5	700043	MKN 312	136-142	NA	NA	118	165	NA	NA	NA	NA	NA	NA
K-5	700043	MKN 313	142-148	NA	NA	134	170	NA	NA	NA	NA	NA	NA
K-5	700043	MKN 314	148-154	NA	NA	114	145	NA	NA	NA	NA	NA	NA
L-1	700041	MKN 258	0-54	5.0	10.0	19	223	NA	NA	NA	NA	NA	NA
L-1	700041	MKN 259	54-114	5.3	5.6	19	204	NA	NA	NA	NA	NA	NA
L-1	700041	MKN 260	114-174	4.2	12.0	24	209	NA	NA	NA	NA	NA	NA
L-1	700041	MKN 261	174-234	4.6	11.0	11	187	NA	NA	NA	NA	NA	NA
L-1	700041	MKN 262	234-240	NA	NA	21	230	NA	NA	NA	NA	NA	NA
L-1	700041	MKN 263	240-246	NA	NA	9	198	NA	NA	NA	NA	NA	NA

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BTEC NC #193

EAST TAILINGS PILE

Date 4-8-80  
Page 22 of 23

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCl/g Ra226
L-1	700041	MKN 264	246-252	NA	NA	10	200	NA	NA	NA	NA	NA	NA
L-1	700041	MKN 265	252-258	NA	NA	7	189	NA	NA	NA	NA	NA	NA
L-2	700041	MKN 277	0-54	7.0	NA	44	453	NA	NA	NA	NA	NA	NA
L-2	700041	MKN 278	54-114	5.4	NA	209	414	NA	NA	NA	NA	NA	NA
L-2	700041	MKN 279	114-174	6.2	NA	143	343	NA	NA	NA	NA	NA	NA
L-2	700042	MKN 280	174-234	12.8	NA	111	265	NA	NA	NA	NA	NA	NA
L-2	700042	MKN 281	234-294	7.2	NA	60	210	NA	NA	NA	NA	NA	NA
L-2	700042	MKN 282	294-354	8.6	NA	34	225	NA	NA	NA	NA	NA	NA
L-2	700042	MKN 283	354-360	NA	NA	27	240	NA	NA	NA	NA	NA	NA
L-2	700042	MKN 284	360-366	NA	NA	5	265	NA	NA	NA	NA	NA	NA
L-3	700078	MKN 177	0-54	12.7	NA	135	790	NA	NA	NA	NA	NA	NA
L-3	700078	MKN 178	54-114	12.8	NA	201	1010	NA	NA	NA	NA	NA	NA
L-3	700078	MKN 179	114-174	17.8	NA	222	1370	NA	NA	NA	NA	NA	NA
L-3	700078	MKN 180	174-234	19.1	NA	214	950	NA	NA	NA	NA	NA	NA
L-3	700078	MKN 181	234-264	24.3	NA	375	575	NA	NA	NA	NA	NA	NA
L-3	700078	MKN 182	264-270	NA	NA	145	785	NA	NA	NA	NA	NA	NA
L-4	700044	MKN 321	0-54	10.0	8.5	124	725	NA	NA	NA	NA	NA	NA
L-4	700044	MKN 322	54-114	11.8	11.3	248	1159	NA	NA	NA	NA	NA	NA
L-4	700044	MKN 323	114-174	25.3	14.9	162	694	NA	NA	NA	NA	NA	NA
L-4	700044	MKN 324	174-204	9.3	13.8	98	387	NA	NA	NA	NA	NA	NA
L-4	700036	MKN 325	204-210	NA	NA	127	635	5	22	62	107	.44	182
L-4	700036	MKN 326	210-216	NA	NA	13	115	<1	10	9	35	.05	8
L-4	700036	MKN 327	216-222	NA	NA	18	105	<1	20	9	10	.01	4
L-4	700036	MKN 328	222-228	NA	NA	10	85	<1	10	26	62	.01	<2
M-1	700042	MKN 293	0-54	7.0	NA	19	215	NA	NA	NA	NA	NA	NA
M-1	700042	MKN 294	54-114	6.2	NA	17	220	NA	NA	NA	NA	NA	NA
M-1	700042	MKN 295	114-174	7.7	NA	12	200	NA	NA	NA	NA	NA	NA
M-1	700042	MKN 296	174-234	4.6	NA	10	190	NA	NA	NA	NA	NA	NA
M-1	700042	MKN 297	234-240	NA	NA	25	205	NA	NA	NA	NA	NA	NA
M-1	700042	MKN 298	240-246	NA	NA	12	200	NA	NA	NA	NA	NA	NA
M-1	700042	MKN 299	246-252	NA	NA	4	180	NA	NA	NA	NA	NA	NA
M-1	700042	MKN 300	252-258	NA	NA	4	180	NA	NA	NA	NA	NA	NA

275230

MONTICELLO, UTAH, HILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC NC #193

EAST TAILINGS PILE

Date 4-8-80  
Page 23 of 23

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
M-2	700042	MKN 285	0-54	11.3	NA	235	1195	NA	NA	NA	NA	NA	NA
M-2	700042	MKN 286	54-115	27.5	NA	136	915	NA	NA	NA	NA	NA	NA
M-2	700042	MKN 287	114-174	14.2	NA	128	775	NA	NA	NA	NA	NA	NA
M-2	700042	MKN 288	174-234	14.2	NA	52	440	NA	NA	NA	NA	NA	NA
M-2	700042	MKN 289	234-294	14.5	NA	19	415	NA	NA	NA	NA	NA	NA
M-2	700036	MKN 290	294-300	NA	NA	196	715	2	29	80	87	.68	276
M-2	700036	MKN 291	300-306	NA	NA	39	430	1	14	26	60	.23	57
M-2	700036	MKN 292	306-312	NA	NA	9	455	1	10	22	46	.04	<2
M-3	700044	MKN 315	0-54	8.1	7.1	61	791	NA	NA	NA	NA	NA	NA
M-3	700044	MKN 316	54-114	10.0	16.3	194	1264	NA	NA	NA	NA	NA	NA
M-3	700044	MKN 317	114-174	12.6	17.5	418	1812	NA	NA	NA	NA	NA	NA
M-3	700044	MKN 318	174-234	16.5	19.3	431	1792	NA	NA	NA	NA	NA	NA
M-3	700044	MKN 319	234-294	17.1	19.3	297	1060	NA	NA	NA	NA	NA	NA
M-3	700044	MKN 320	294-300	NA	NA	42	120	NA	NA	NA	NA	NA	NA

M-3 431 ppm

## MONTICELLO, UTAH, MILL TAILINGS

PROJECT NO. 00-79-8027

## DRILLINGS AND SAMPLING PROJECT

BFEC NC #193

## SPECIAL HOLES

Date 6-16-80

Page 1 of 5

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>
A-1	700072	MKO 006	0-12	NA	NA	31	130
A-1	700072	MKO 007	12-24	NA	NA	11	115
A-1	700072	MKO 008	24-36	NA	NA	15	130
A-1	700072	MKO 009	36-48	NA	NA	4	145
A-1	700072	MKO 010	48-60	NA	NA	8	140
A-1	700072	MKO 011	60-72	NA	NA	5	140
A-1	700072	MKO 012	72-84	NA	NA	4	160
A-1	700072	MKO 013	84-96	NA	NA	5	150
A-2	700072	MKO 014	0-12	NA	NA	32	195
A-2	700072	MKO 015	12-24	NA	NA	36	190
A-2	700072	MKO 016	24-36	NA	NA	44	240
A-2	700072	MKO 017	36-48	NA	NA	36	190
A-2	700072	MKO 018	48-60	NA	NA	36	195
A-2	700072	MKO 019	60-72	NA	NA	34	170
A-2	700072	MKO 020	72-84	NA	NA	34	175
A-2	700072	MKO 021	84-96	NA	NA	42	185
A-2	700072	MKO 022	96-108	NA	NA	24	165
A-2	700072	MKO 023	108-120	NA	NA	17	140
A-3	700072	MKO 024	0-12	NA	NA	112	775
A-3	700072	MKO 025	12-24	NA	NA	110	520
A-3	700072	MKO 026	24-36	NA	NA	93	510
A-3	700072	MKO 027	36-48	NA	NA	104	520
A-3	700072	MKO 028	48-60	NA	NA	98	470
A-3	700073	MKO 029	60-72	NA	NA	91	375
A-3	700073	MKO 030	72-84	NA	NA	56	285
A-3	700073	MKO 031	84-96	NA	NA	61	275
A-3	700073	MKO 032	96-108	NA	NA	46	225
A-3	700073	MKO 033	108-120	NA	NA	26	200
C-1	700071	MKN 990	12-54	NA	NA	459	4300
C-1	700071	MKN 991	54-114	NA	NA	272	3312

C-1 459 ppm



## MONTICELLO, UTAH, MILL TAILINGS

PROJECT NO. 00-79-8027

DRILLINGS AND SAMPLING PROJECT

BFEC NC #193

SPECIAL HOLES

Date 6-16-89

Page 2 of 5

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>
C-1	700071	MKN 992	114-174	NA	NA	319	3400
C-1	700071	MKN 993	174-234	NA	NA	90	1170
C-2	700071	MKN 994	12-54	NA	NA	366	3200
C-2	700071	MKN 995	54-114	NA	NA	249	3200
C-2	700071	MKN 996	114-174	NA	NA	249	3200
C-2	700071	MKN 997	174-234	NA	NA	88	1145
C-2	700071	MKN 998	234-294	NA	NA	62	720
C-2	700071	MKN 999	294-354	NA	NA	37	495
C-3	700071	MKO 001	12-54	NA	NA	342	3100
C-3	700071	MKO 002	54-114	NA	NA	389	3700
C-3	700071	MKO 003	114-174	NA	NA	342	2400
C-3	700071	MKO 004	174-234	NA	NA	164	1295
C-3	700071	MKO 005	234-294	NA	NA	62	525
C-4	700073	MKO 034	0-12	NA	NA	199	595
C-4	700073	MKO 035	12-24	NA	NA	492	630
C-4	700073	MKO 036	24-36	NA	NA	460	520
C-4	700073	MKO 037	36-48	NA	NA	597	470
C-4	700073	MKO 038	48-60	NA	NA	537	370
C-4	700073	MKO 039	60-72	NA	NA	242	290
C-4	700073	MKO 040	72-84	NA	NA	172	285
C-4	700073	MKO 041	84-96	NA	NA	166	250
C-4	700073	MKO 042	96-108	NA	NA	121	250
C-4	700073	MKO 043	108-120	NA	NA	54	225
C-5	700073	MKO 044	0-12	NA	NA	66	285
C-5	700073	MKO 045	12-23	NA	NA	56	285
C-5	700073	MKO 046	24-56	NA	NA	51	250
C-5	700073	MKO 047	36-48	NA	NA	26	299
C-5	700073	MKO 048	48-60	NA	NA	56	255
C-5	700073	MKO 049	60-72	NA	NA	12	255

C-4 597 um

## MONTICELLO, UTAH, MILL TAILINGS

PROJECT NO. 00-79-8027

## DRILLINGS AND SAMPLING PROJECT

Date 6-16-80

BFEC NC #193

## SPECIAL HOLES

Page 3 of 5

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>
C-5	700073	MKO 050	72-84	NA	NA	7	225
C-5	700073	MKO 051	84-96	NA	NA	7	250
C-5	700073	MKO 052	96-108	NA	NA	5	255
C-5	700073	MKO 053	108-120	NA	NA	7	245
C-6	700074	MKO 054	0-12	NA	NA	72	595
C-6	700074	MKO 055	12-24	NA	NA	51	405
C-6	700074	MKO 056	24-36	NA	NA	66	490
C-6	700074	MKO 057	36-48	NA	NA	51	370
C-6	700074	MKO 058	48-60	NA	NA	28	305
C-6	700074	MKO 059	60-72	NA	NA	12	240
C-6	700074	MKO 060	72-84	NA	NA	8	245
C-6	700074	MKO 061	84-96	NA	NA	9	230
C-6	700074	MKO 062	96-108	NA	NA	6	235
C-6	700074	MKO 063	108-120	NA	NA	6	255
C-7	700074	MKO 064	0-12	NA	NA	362	1992
C-7	700074	MKO 065	12-24	NA	NA	321	2200
C-7	700074	MKO 066	24-36	NA	NA	247	1818
C-7	700074	MKO 067	36-48	NA	NA	103	920
C-7	700074	MKO 068	48-60	NA	NA	44	525
C-7	700074	MKO 069	60-72	NA	NA	24	360
C-7	700074	MKO 070	72-84	NA	NA	16	310
C-7	700074	MKO 071	84-96	NA	NA	71	400
C-7	700074	MKO 072	96-108	NA	NA	27	325
C-7	700074	MKO 073	108-120	NA	NA	24	350
C-8	700074	MKO 074	0-12	NA	NA	146	515
C-8	700074	MKO 075	12-24	NA	NA	262	1070
C-8	700074	MKO 076	24-36	NA	NA	224	2800
C-8	700074	MKO 077	36-48	NA	NA	326	4400
C-8	700074	MKO 078	48-60	NA	NA	243	3700

C-7 362ppm

## MONTICELLO, UTAH, MILL TAILINGS

PROJECT NO. JO-79-8027

DRILLINGS AND SAMPLING PROJECT

BFEC NC #193

SPECIAL HOLES

Date 6-16-80

Page 4 of 5

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>
C-8	700074	MKO 079	60-72	NA	NA	127	1370
C-8	700074	MKO 080	72-84	NA	NA	30	320
C-8	700074	MKO 081	84-96	NA	NA	16	180
C-8	700074	MKO 082	96-108	NA	NA	24	280
C-8	700074	MKO 083	108-120	NA	NA	35	405
C-9	700074	MKO 084	0-12	NA	NA	271	1130
C-9	700074	MKO 085	12-24	NA	NA	177	1025
C-9	700074	MKO 086	24-36	NA	NA	91	760
C-9	700074	MKO 087	36-48	NA	NA	113	1230
C-9	700074	MKO 088	48-60	NA	NA	88	1743
C-9	700074	MKO 089	60-72	NA	NA	38	815
C-9	700074	MKO 090	72-84	NA	NA	41	675
C-9	700074	MKO 091	84-96	NA	NA	7	460
C-9	700074	MKO 092	96-108	NA	NA	24	420
C-9	700074	MKO 093	108-120	NA	NA	27	570
C-10	700074	MKO 094	0-12	NA	NA	69	480
C-10	700074	MKO 095	12-24	NA	NA	41	295
C-10	700074	MKO 096	24-36	NA	NA	55	555
C-10	700074	MKO 097	36-48	NA	NA	30	1090
C-10	700074	MKO 098	48-60	NA	NA	27	995
C-10	700074	MKO 099	60-72	NA	NA	22	810
C-10	700074	MKO 100	72-84	NA	NA	27	810
C-10	700074	MKO 101	84-96	NA	NA	19	895
C-10	700074	MKO 102	96-108	NA	NA	24	935
C-10	700074	MKO 103	108-120	NA	NA	27	935
C-11	700075	MKO 104	0-12	NA	NA	189	540
C-11	700075	MKO 105	12-24	NA	NA	187	670
C-11	700075	MKO 106	24-36	NA	NA	247	1010
C-11	700075	MKO 107	36-48	NA	NA	364	2900

C-11 364 ppm

## MONTICELLO, UTAH, MILL TAILINGS

PROJECT NO. 00-79-8027

DRILLINGS AND SAMPLING PROJECT

BFEC NC #193

SPECIAL HOLES

Date 6-16-80

Page 5 of 5

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>
C-11	700075	MKO 108	48-60	NA	NA	294	2200
C-11	700075	MKO 109	60-72	NA	NA	109	830
C-11	700075	MKO 110	72-84	NA	NA	32	235
C-11	700075	MKO 111	84-96	NA	NA	18	230
C-11	700075	MKO 112	96-108	NA	NA	21	270
C-11	700075	MKO 113	108-120	NA	NA	42	345
C-12	700075	MKO 114	0-12	NA	NA	161	545
C-12	700075	MKO 115	12-24	NA	NA	184	680
C-12	700075	MKO 116	24-36	NA	NA	142	625
C-12	700075	MKO 117	36-48	NA	NA	149	670
C-12	700075	MKO 118	48-60	NA	NA	63	540
C-12	700075	MKO 119	60-72	NA	NA	16	310
C-12	700075	MKO 120	72-84	NA	NA	18	260
C-12	700075	MKO 121	84-96	NA	NA	21	250
C-12	700075	MKO 122	96-108	NA	NA	18	225
C-12	700075	MKO 123	108-120	NA	NA	21	220

C-11 294ppm

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-0027

BFEC NC #193

V<sub>2</sub>O<sub>5</sub> TAILINGS FILE

Date 5-29-80

Page 1 of 9

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCl/ly Ra226
VA-1	700057	MKN 666	0-54	8.6	NA	30	430	NA	NA	NA	NA	NA	NA
VB-1	700057	MKN 651	0-6	NA	NA	36	390	NA	NA	NA	NA	NA	NA
VB-1	700057	MKN 652	6-12	28.7	NA	60	325	NA	NA	NA	NA	NA	NA
VB-1	700057	MKN 653	12-54	41.0	NA	343	5600	NA	NA	NA	NA	NA	NA
VB-1	700057	MKN 654	54-94	NA	NA	181	4300	NA	NA	NA	NA	NA	NA
VB-1	700057	MKN 655	94-100	NA	NA	126	2300	NA	NA	NA	NA	NA	NA
VB-1	700057	MKN 656	100-106	NA	NA	36	500	NA	NA	NA	NA	NA	NA
VB-1	700057	MKN 657	106-112	NA	NA	6	245	NA	NA	NA	NA	NA	NA
VB-1	700057	MKN 658	112-118	NA	NA	5	220	NA	NA	NA	NA	NA	NA
VB-2	700057	MKN 659	6-54	31.6	5.5	137	3290	NA	NA	NA	NA	NA	NA
VB-2	700057	MKN 660	54-114	45.8	13.3	343	5200	NA	NA	NA	NA	NA	NA
VB-2	700057	MKN 661	114-174	56.1	18.0	181	2000	NA	NA	NA	NA	NA	NA
VB-2	700060	MKN 662	174-180	NA	NA	285	4432	1	10	88	26	.05	308
VB-2	700060	MKN 663	180-186	NA	NA	240	4308	1	11	208	116	.04	283
VB-2	700060	MKN 664	186-192	NA	NA	15	315	1	7	58	62	.03	<17
VB-2	700060	MKN 665	192-198	NA	NA	6	215	<1	7	53	105	<.01	<2
VC-1	700055	MKN 598	0-6	NA	NA	31	375	NA	NA	NA	NA	NA	NA
VC-1	700055	MKN 599	6-12	NA	NA	60	590	NA	NA	NA	NA	NA	NA
VC-1	700055	MKN 600	12-54	27.8	NA	195	5700	NA	NA	NA	NA	NA	NA
VC-1	700055	MKN 601	54-114	74.0	NA	79	1265	NA	NA	NA	NA	NA	NA
VC-1	700055	MKN 602	114-174	32.0	NA	41	990	NA	NA	NA	NA	NA	NA
VC-1	700055	MKN 603	174-180	NA	NA	58	1095	NA	NA	NA	NA	NA	NA
VC-1	700055	MKN 604	180-186	NA	NA	33	715	NA	NA	NA	NA	NA	NA
VC-1	700055	MKN 605	186-192	NA	NA	7	210	NA	NA	NA	NA	NA	NA
VC-1	700055	MKN 606	192-198	NA	NA	6	180	NA	NA	NA	NA	NA	NA
VC-2	700055	MKN 607	0-54	25.7	7.6	267	4600	NA	NA	NA	NA	NA	NA
VC-2	700055	MKN 608	54-114	53.4	23.0	499	11000	NA	NA	NA	NA	NA	NA
VC-2	700055	MKN 609	114-174	59.3	18.6	415	5100	NA	NA	NA	NA	NA	NA
VC-2	700055	MKN 610	174-180	NA	NA	246	6500	NA	NA	NA	NA	NA	NA
VC-2	700055	MKN 611	180-186	NA	NA	7	315	NA	NA	NA	NA	NA	NA
VC-2	700055	MKN 612	186-192	NA	NA	5	240	NA	NA	NA	NA	NA	NA

VC-2 499 ppm



MINTEGELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
DFEC NO #193

V<sub>2</sub>O<sub>5</sub> TAILINGS PILE

Date 5-29-00  
Page 2 of 9

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. NET WT/GIT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	Z S	pCi/g Ra226
VC-2	700055	MKN 613	192-198	NA	NA	8	245	NA	NA	NA	NA	NA	NA
VD-1	700056	MKN 646	0-54	4.7	NA	34	240	NA	NA	NA	NA	NA	NA
VD-1	700056	MKN 647	54-60	NA	NA	40	355	NA	NA	NA	NA	NA	NA
VD-1	700056	MKN 648	60-66	NA	NA	36	240	NA	NA	NA	NA	NA	NA
VD-1	700056	MKN 649	66-72	NA	NA	29	220	NA	NA	NA	NA	NA	NA
VD-1	700056	MKN 650	72-78	NA	NA	23	215	NA	NA	NA	NA	NA	NA
VD-2	700056	MKN 631	0-54	29.0	NA	211	3700	NA	NA	NA	NA	NA	NA
VD-2	700056	MKN 632	54-114	52.0	NA	298	6700	NA	NA	NA	NA	NA	NA
VD-2	700056	MKN 633	114-120	NA	NA	150	3200	NA	NA	NA	NA	NA	NA
VD-2	700056	MKN 634	120-126	NA	NA	12	350	NA	NA	NA	NA	NA	NA
VD-2	700056	MKN 635	126-132	NA	NA	5	205	NA	NA	NA	NA	NA	NA
VD-2	700056	MKN 636	132-138	NA	NA	8	235	NA	NA	NA	NA	NA	NA
VD-3	700075	MKO 147	0-54	17.0	NA	2	355	NA	NA	NA	NA	NA	NA
VD-3	700075	MKO 148	54-114	23.1	NA	1	345	NA	NA	NA	NA	NA	NA
VD-3	700075	MKO 149	114-174	30.0	NA	1	365	NA	NA	NA	NA	NA	NA
VD-3	700075	MKO 150	174-234	28.6	NA	1	315	NA	NA	NA	NA	NA	NA
VD-3	700076	MKO 151	234-240	NA	NA	406	6205	2	14	49	202	.07	717
VD-3	700076	MKO 152	240-246	NA	NA	474	5088	1	12	128	131	.04	700
VD-3	700076	MKO 153	246-252	NA	NA	406	4964	1	14	62	189	.05	681
VD-3	700076	MKO 154	252-258	NA	NA	34	590	<1	12	66	246	.04	25
VD-3	700093	*MKO 685	192-204	NA	NA	52	1494	<1	10	9	23	.25	101
VD-3	700093	MKO 686	204-216	NA	NA	4	200	<1	8	7	118	.16	8
VD-3	700093	MKO 687	216-228	NA	NA	49	960	<1	10	12	181	.02	69
VD-3	700093	MKO 688	228-240	NA	NA	4	180	<1	8	12	138	<.01	5
VD-3	700093	MKO 689	240-252	NA	NA	4	175	<1	8	<1	174	.01	<2
VD-3	700092	MKO 690	252-264	NA	NA	7	98	NA	NA	NA	NA	NA	NA
VD-3	700092	MKO 691	264-276	NA	NA	17	225	NA	NA	NA	NA	NA	NA
VD-3	700092	MKO 692	276-288	NA	NA	7	225	NA	NA	NA	NA	NA	NA
VD-3	700092	MKO 693	288-300	NA	NA	10	210	NA	NA	NA	NA	NA	NA
VD-3	700092	MKO 694	300-312	NA	NA	34	185	NA	NA	NA	NA	NA	NA
VD-4	700056	MKN 637	0-54	34.1	10.6	341	7200	NA	NA	NA	NA	NA	NA

\*No samples taken above 192".

> 100 ppm U<sub>3</sub>O<sub>8</sub>

VD-3 4/4/00

MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC NC #193

V<sub>2</sub>O<sub>5</sub> TAILINGS FILE

Date 5-29-80  
Page 3 of 9

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCl/g Ra226
VD-4	700056	MKN 638	54-114	32.6	13.1	319	5600	NA	NA	NA	NA	NA	NA
VD-4	700056	MKN 639	114-174	47.8	14.8	298	6200	NA	NA	NA	NA	NA	NA
VD-4	700056	MKN 640	174-234	52.7	16.8	233	7300	NA	NA	NA	NA	NA	NA
VD-4	700056	MKN 641	234-284	57.5	17.1	176	5100	NA	NA	NA	NA	NA	NA
VD-4	700056	MKN 642	284-290	NA	NA	276	5000	NA	NA	NA	NA	NA	NA
VD-4	700056	MKN 643	290-296	NA	NA	254	5200	NA	NA	NA	NA	NA	NA
VD-4	700056	MKN 644	296-302	NA	NA	194	4500	NA	NA	NA	NA	NA	NA
VD-4	700056	MKN 645	302-308	NA	NA	25	590	NA	NA	NA	NA	NA	NA
VE-1	700054	MKN 585	0-50	7.0	NA	12	175	NA	NA	NA	NA	NA	NA
VE-1	700054	MKN 586	50-56	NA	NA	21	185	NA	NA	NA	NA	NA	NA
VE-1	700054	MKN 587	56-62	NA	NA	21	190	NA	NA	NA	NA	NA	NA
VE-1	700054	MKN 588	62-68	NA	NA	3	180	NA	NA	NA	NA	NA	NA
VE-1	700054	MKN 589	68-74	NA	NA	1	180	NA	NA	NA	NA	NA	NA
VE-2	700054	MKN 579	0-54	58.4	10.0	159	3500	NA	NA	NA	NA	NA	NA
VE-2	700054	MKN 580	54-114	45.2	10.1	58	1370	NA	NA	NA	NA	NA	NA
VE-2	700054	MKN 581	114-120	NA	NA	52	1100	NA	NA	NA	NA	NA	NA
VE-2	700054	MKN 582	120-126	NA	NA	6	200	NA	NA	NA	NA	NA	NA
VE-2	700054	MKN 583	126-132	NA	NA	9	190	NA	NA	NA	NA	NA	NA
VE-2	700054	MKN 584	132-138	NA	NA	4	195	NA	NA	NA	NA	NA	NA
VE-3	700056	MKN 622	0-6	NA	NA	55	370	NA	NA	NA	NA	NA	NA
VE-3	700056	MKN 623	6-12	NA	NA	21	210	NA	NA	NA	NA	NA	NA
VE-3	700056	MKN 624	12-54	29.3	NA	146	1220	NA	NA	NA	NA	NA	NA
VE-3	700056	MKN 625	54-114	45.5	NA	987	24100	NA	NA	NA	NA	NA	NA
VE-3	700056	MKN 626	114-174	54.2	NA	194	11790	NA	NA	NA	NA	NA	NA
VE-3	700060	MKN 627	174-180	NA	NA	641	13279	5	21	168	77	.23	848
VE-3	700060	MKN 628	180-186	NA	NA	441	10424	5	8	53	100	.14	882
VE-3	700060	MKN 629	186-192	NA	NA	731	14272	7	27	62	113	.22	1090
VE-3	700060	MKN 630	192-198	NA	NA	441	57521	8	16	531	123	.24	286
VE-4	700055	MKN 614	0-54	31.3	7.6	202	5500	NA	NA	NA	NA	NA	NA
VE-4	700055	MKN 615	54-114	42.5	21.9	341	11000	NA	NA	NA	NA	NA	NA
VE-4	700055	MKN 616	114-174	52.5	25.6	795	14100	NA	NA	NA	NA	NA	NA

VE-3 987ppm

MORTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC NO #193

V<sub>2</sub>O<sub>5</sub> TAILINGS PILE

Date 5-29-80  
Page 4 of 9

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	ppm/g Ra226
VE-3	700055	MKN 617	174-214	51.4	21.2	341	9100	NA	NA	NA	NA	NA	NA
VE-4	700055	MKN 618	214-220	NA	NA	155	3600	NA	NA	NA	NA	NA	NA
VE-4	700055	MKN 619	220-226	NA	NA	21	320	NA	NA	NA	NA	NA	NA
VE-4	700055	MKN 620	226-232	NA	NA	16	245	NA	NA	NA	NA	NA	NA
VE-4	700055	MKN 621	232-238	NA	NA	12	310	NA	NA	NA	NA	NA	NA
VF-1	700054	MKN 564	0-54	12.3	NA	85	760	NA	NA	NA	NA	NA	NA
VF-1	700054	MKN 565	54-84	14.2	NA	80	960	NA	NA	NA	NA	NA	NA
VF-1	700054	MKN 566	84-90	NA	NA	89	865	NA	NA	NA	NA	NA	NA
VF-1	700054	MKN 567	90-96	NA	NA	51	565	NA	NA	NA	NA	NA	NA
VF-1	700054	MKN 568	96-102	NA	NA	45	355	NA	NA	NA	NA	NA	NA
VF-1	700054	MKN 569	102-108	NA	NA	26	190	NA	NA	NA	NA	NA	NA
VF-2	700077	MKO 155	0-6	NA	NA	86	1245	NA	NA	NA	NA	NA	NA
VF-2	700077	MKO 156	6-12	NA	NA	38	275	NA	NA	NA	NA	NA	NA
VF-2	700077	MKO 157	12-54	14.2	NA	235	4800	NA	NA	NA	NA	NA	NA
VF-2	700077	MKO 158	54-114	27.3	NA	573	11300	NA	NA	NA	NA	NA	NA
VF-2	700077	MKO 159	114-174	31.6	NA	163	3800	NA	NA	NA	NA	NA	NA
VF-2	700077	MKO 160	174-180	NA	NA	16	510	NA	NA	NA	NA	NA	NA
VF-2	700077	MKO 161	180-186	NA	NA	7	220	NA	NA	NA	NA	NA	NA
VF-2	700082	MKO 162	186-192	NA	NA	7	214	NA	NA	NA	NA	NA	NA
VF-2	700077	MKO 163	192-198	NA	NA	8	245	NA	NA	NA	NA	NA	NA
VF-2	700093	*MKO 695	120-132	NA	NA	35	445	<1	8	5	86	<.01	37
VF-2	700093	MKO 696	132-144	NA	NA	10	190	<1	8	2	77	<.01	2
VF-2	700093	MKO 697	144-156	NA	NA	4	395	<1	8	4	68	<.01	18
VF-2	700093	MKO 698	156-168	NA	NA	7	205	<1	10	2	52	<.01	5
VF-2	700093	MKO 699	168-180	NA	NA	13	370	<1	4	2	45	<.01	23
VF-2	700092	MKO 700	180-192	NA	NA	4	205	NA	NA	NA	NA	NA	NA
VF-2	700092	MKO 701	192-204	NA	NA	37	420	NA	NA	NA	NA	NA	NA
VF-2	700092	MKO 702	204-216	NA	NA	7	210	NA	NA	NA	NA	NA	NA
VF-2	700092	MKO 703	216-228	NA	NA	7	305	NA	NA	NA	NA	NA	NA
VF-2	700092	MKO 704	228-240	NA	NA	5	190	NA	NA	NA	NA	NA	NA
VF-3	700054	MKN 570	0-6	NA	NA	47	375	NA	NA	NA	NA	NA	NA
VF-3	700054	MKN 571	6-12	NA	NA	13	160	NA	NA	NA	NA	NA	NA
VF-3	700054	MKN 572	12-54	33.3	8.5	174	3800	NA	NA	NA	NA	NA	NA

\*No samples taken above 120"

VF-2 573ppm

MONTICELLO, UTAH, HILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
DFEC NC #193

V<sub>2</sub>O<sub>5</sub> TAILINGS PILE

Date 5-29-80

Page 5 of 9

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
VF-3	700054	MKN 573	54-114	47.0	25.0	856	13400	NA	NA	NA	NA	NA	NA
VF-3	700054	MKN 574	114-162	64.0	18.3	203	3400	NA	NA	NA	NA	NA	NA
VF-3	700060	MKN 575	162-168	NA	NA	174	3312	4	28	51	360	.20	161
VF-3	700060	MKN 576	168-174	NA	NA	27	240	1	8	49	173	.11	9
VF-3	700060	MKN 577	174-180	NA	NA	35	670	2	9	80	118	.13	37
VF-3	700060	MKN 578	180-186	NA	NA	6	220	1	8	44	97	.06	6
VF-4	700075	MKO 124	0-54	23.5	NA	247	6300	NA	NA	NA	NA	NA	NA
VF-4	700075	MKO 125	54-114	24.5	NA	525	11000	NA	NA	NA	NA	NA	NA
VF-4	700075	MKO 126	114-174	23.5	NA	800	14800	NA	NA	NA	NA	NA	NA
VF-4	700075	MKO 127	174-234	27.0	NA	72	2300	NA	NA	NA	NA	NA	NA
VF-4	700075	MKO 128	234-240	NA	NA	212	5100	NA	NA	NA	NA	NA	NA
VF-4	700075	MKO 129	240-246	NA	NA	74	2500	NA	NA	NA	NA	NA	NA
VF-4	700075	MKO 130	246-252	NA	NA	1	430	NA	NA	NA	NA	NA	NA
VF-4	700075	MKO 131	252-258	NA	NA	8	370	NA	NA	NA	NA	NA	NA
VF-4	700093	*MKO 665	222-234	NA	NA	23	815	<1	6	6	131	.02	47
VF-4	700093	MKO 666	234-246	NA	NA	4	205	1	12	13	195	<.01	<2
VF-4	700093	MKO 667	246-258	NA	NA	5	200	<1	12	12	195	.01	<2
VF-4	700093	MKO 668	258-270	NA	NA	7	175	<1	14	4	195	<.01	7
VF-4	700093	MKO 669	270-282	NA	NA	4	175	<1	12	5	191	.01	5
VF-4	700092	MKO 670	282-294	NA	NA	6	98	NA	NA	NA	NA	NA	NA
VF-4	700092	MKO 671	294-306	NA	NA	9	89	NA	NA	NA	NA	NA	NA
VF-4	700092	MKO 672	306-318	NA	NA	37	98	NA	NA	NA	NA	NA	NA
VF-4	700092	MKO 673	318-330	NA	NA	7	107	NA	NA	NA	NA	NA	NA
VF-4	700092	MKO 674	330-342	NA	NA	4	89	NA	NA	NA	NA	NA	NA
VG-1	700050	MKN 494	0-54	15.3	NA	76	1419	NA	NA	NA	NA	NA	NA
VG-1	700050	MKN 495	54-74	9.6	NA	41	644	NA	NA	NA	NA	NA	NA
VG-1	700050	MKN 496	74-80	NA	NA	40	618	NA	NA	NA	NA	NA	NA
VG-1	700050	MKN 497	80-86	NA	NA	44	646	NA	NA	NA	NA	NA	NA
VG-1	700050	MKN 498	86-92	NA	NA	7	266	NA	NA	NA	NA	NA	NA
VG-1	700050	MKN 499	92-98	NA	NA	44	209	NA	NA	NA	NA	NA	NA
VG-2	700050	MKN 500	0-6	NA	NA	19	269	NA	NA	NA	NA	NA	NA
VG-2	700050	MKN 501	6-12	NA	NA	65	1633	NA	NA	NA	NA	NA	NA

\*No samples taken above 222".

VF-3 856 ppm

MONTICELLO, UTAH, HILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC. NC #193

V<sub>2</sub>O<sub>5</sub> TAILINGS PILE

Date 5-29-80  
Page 6 of 9

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
VG-2	700050	MKN 502	12-54	28.6	NA	116	1321	NA	NA	NA	NA	NA	NA
VG-2	700051	MKN 503	54-114	26.6	NA	17	385	NA	NA	NA	NA	NA	NA
VG-2	700051	MKN 504	114-120	NA	NA	56	1070	NA	NA	NA	NA	NA	NA
VG-2	700051	MKN 505	120-126	NA	NA	23	550	NA	NA	NA	NA	NA	NA
VG-2	700051	MKN 506	126-132	NA	NA	5	220	NA	NA	NA	NA	NA	NA
VG-2	700051	MKN 507	132-138	NA	NA	5	225	NA	NA	NA	NA	NA	NA
VG-3	700051	MKN 518	0-54	34.6	NA	256	4000	NA	NA	NA	NA	NA	NA
VG-3	700051	MKN 519	54-114	47.8	NA	921	12800	NA	NA	NA	NA	NA	NA
VG-3	700051	MKN 520	114-144	67.4	NA	399	7600	NA	NA	NA	NA	NA	NA
VG-3	700051	MKN 521	144-150	NA	NA	116	2300	NA	NA	NA	NA	NA	NA
VG-3	700051	MKN 522	150-156	NA	NA	6	275	NA	NA	NA	NA	NA	NA
VG-3	700051	MKN 523	156-162	NA	NA	5	205	NA	NA	NA	NA	NA	NA
VG-3	700051	MKN 524	162-168	NA	NA	9	295	NA	NA	NA	NA	NA	NA
VG-4	700051	MKN 525	0-54	29.3	12.5	194	3700	NA	NA	NA	NA	NA	NA
VG-4	700051	MKN 526	54-114	46.8	22.2	685	10700	NA	NA	NA	NA	NA	NA
VG-4	700051	MKN 527	114-174	67.2	29.7	2719	22600	NA	NA	NA	NA	NA	NA
VG-4	700051	MKN 528	174-202	53.5	19.8	328	4000	NA	NA	NA	NA	NA	NA
VG-4	700051	MKN 529	202-208	NA	NA	199	2700	NA	NA	NA	NA	NA	NA
VG-4	700051	MKN 530	208-214	NA	NA	23	400	NA	NA	NA	NA	NA	NA
VG-4	700051	MKN 531	214-220	NA	NA	28	845	NA	NA	NA	NA	NA	NA
VG-4	700052	MKN 532	220-226	NA	NA	54	825	NA	NA	NA	NA	NA	NA
VG-5	700054	MKN 590	0-54	26.0	4.8	277	5000	NA	NA	NA	NA	NA	NA
VG-5	700054	MKN 591	54-114	27.0	9.3	343	5500	NA	NA	NA	NA	NA	NA
VG-5	700054	MKN 592	114-174	71.4	11.1	255	4700	NA	NA	NA	NA	NA	NA
VG-5	700055	MKN 593	174-234	56.8	9.5	162	5000	NA	NA	NA	NA	NA	NA
VG-5	700060	MKN 594	234-240	NA	NA	216	3511	4	9	124	103	.08	330
VG-5	700060	MKN 595	240-246	NA	NA	158	3227	5	3	159	94	.07	274
VG-5	700060	MKN 596	246-252	NA	NA	98	2141	3	11	111	202	.11	138
VG-5	700060	MKN 597	252-258	NA	NA	29	765	2	9	22	40	.06	43
VH-1	700075	MKO 132	0-54	28.6	NA	121	3100	NA	NA	NA	NA	NA	NA
VH-1	700075	MKO 133	54-114	23.0	NA	32	665	NA	NA	NA	NA	NA	NA

VG-4 2719 PPM



MONTICELLO, UTAH, MILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027

BFEC NC #193

V<sub>2</sub>O<sub>5</sub> TAILINGS PILE

Date 5-29-80

Page 7 of 9

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
VH-1	700075	MKO 134	114-144	9.6	NA	21	525	NA	NA	NA	NA	NA	NA
VH-1	700075	MKO 135	144-150	NA	NA	72	1700	NA	NA	NA	NA	NA	NA
VH-1	700075	MKO 136	150-156	NA	NA	60	1400	NA	NA	NA	NA	NA	NA
VH-1	700075	MKO 137	156-162	NA	NA	70	1800	NA	NA	NA	NA	NA	NA
VH-1	700075	MKO 138	162-168	NA	NA	2	220	NA	NA	NA	NA	NA	NA
VH-1	700093	*MKO 645	72-84	NA	NA	17	230	1	10	7	33	<.01	<3
VH-1	700093	MKO 646	84-96	NA	NA	15	220	<1	10	10	31	<.01	<2
VH-1	700093	MKO 647	96-108	NA	NA	14	205	<1	10	6	36	<.01	<2
VH-1	700093	MKO 648	108-120	NA	NA	9	205	<1	8	5	20	<.01	5
VH-1	700093	MKO 649	120-132	NA	NA	17	225	<1	8	-1	36	<.01	<2
VH-1	700092	MKO 650	132-144	NA	NA	11	116	NA	NA	NA	NA	NA	NA
VH-1	700092	MKO 651	144-156	NA	NA	4	116	NA	NA	NA	NA	NA	NA
VH-1	700092	MKO 652	156-168	NA	NA	11	116	NA	NA	NA	NA	NA	NA
VH-1	700092	MKO 653	168-180	NA	NA	2	107	NA	NA	NA	NA	NA	NA
VH-1	700092	MKO 654	180-192	NA	NA	6	116	NA	NA	NA	NA	NA	NA
VH-2	700050	MKN 487	0-54	36.4	11.4	292	7200	NA	NA	NA	NA	NA	NA
VH-2	700050	MKN 488	54-114	36.0	16.5	345	7900	NA	NA	NA	NA	NA	NA
VH-2	700050	MKN 489	114-132	53.8	18.8	245	3300	NA	NA	NA	NA	NA	NA
VH-2	700050	MKN 490	132-138	NA	NA	91	1635	NA	NA	NA	NA	NA	NA
VH-2	700050	MKN 491	138-144	NA	NA	4	223	NA	NA	NA	NA	NA	NA
VH-2	700050	MKN 492	144-150	NA	NA	3	278	NA	NA	NA	NA	NA	NA
VH-2	700050	MKN 493	150-156	NA	NA	9	287	NA	NA	NA	NA	NA	NA
VH-3	700051	MKN 508	0-6	NA	NA	27	235	NA	NA	NA	NA	NA	NA
VH-3	700051	MKN 509	6-12	NA	NA	17	185	NA	NA	NA	NA	NA	NA
VH-3	700051	MKN 510	12-54	43.7	10.6	237	5600	NA	NA	NA	NA	NA	NA
VH-3	700051	MKN 511	54-114	52.5	24.0	1276	12400	NA	NA	NA	NA	NA	NA
VH-3	700051	MKN 512	114-174	62.0	21.6	659	10100	NA	NA	NA	NA	NA	NA
VH-3	700051	MKN 513	174-234	54.7	21.5	1407	9400	NA	NA	NA	NA	NA	NA
VH-3	700053	MKN 514	234-240	NA	NA	487	6081	4	15	62	207	.14	473
VH-3	700053	MKN 515	240-246	NA	NA	28	485	1	10	44	185	.05	17
VH-3	700053	MKN 516	246-252	NA	NA	18	505	1	9	53	239	.05	16
VH-3	700053	MKN 517	252-258	NA	NA	12	270	1	10	44	235	.04	5

\*No samples taken above 72"

VH-3 1407 ppm

MONTICELLO, UTAH, HILL TAILINGS  
DRILLING AND SAMPLING PROJECT

PROJECT NO. 00-79-8027  
BFEC NC #193

V<sub>2</sub>O<sub>5</sub> TAILINGS PILE

Date 5-29-80  
Page 8 of 9

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCl/g Ra226
VH-4	700050	MKN 479	0-54	32.6	14.5	260	5400	NA	NA	NA	NA	NA	NA
VH-4	700050	MKN 480	54-114	39.6	13.9	454	7000	NA	NA	NA	NA	NA	NA
VH-4	700050	MKN 481	114-174	48.0	16.0	270	4200	NA	NA	NA	NA	NA	NA
VH-4	700050	MKN 482	174-234	51.8	17.3	4	3700	NA	NA	NA	NA	NA	NA
VH-4	700053	MKN 483	234-240	NA	NA	299	3847	7	10	243	221	.06	341
VH-4	700053	MKN 484	240-246	NA	NA	184	4219	7	10	84	140	.06	227
VH-4	700053	MKN 485	246-252	NA	NA	195	4716	8	12	146	196	.07	299
VH-4	700053	MKN 486	252-258	NA	NA	82	1843	4	11	58	213	.08	81
VI-1	700050	MKN 474	0-6	NA	NA	24	305	NA	NA	NA	NA	NA	NA
VI-1	700050	MKN 475	6-12	NA	NA	10	176	NA	NA	NA	NA	NA	NA
VI-1	700050	MKN 476	12-54	75.0	NA	202	3500	NA	NA	NA	NA	NA	NA
VI-1	700050	MKN 477	54-114	46.0	NA	290	4100	NA	NA	NA	NA	NA	NA
VI-1	700050	MKN 478	114-150	31.3	NA	72	1507	NA	NA	NA	NA	NA	NA
VI-2	700075	MKO 139	0-54	17.6	NA	2	255	NA	NA	NA	NA	NA	NA
VI-2	700075	MKO 140	54-114	20.0	NA	7	255	NA	NA	NA	NA	NA	NA
VI-2	700075	MKO 141	114-174	30.2	NA	2	310	NA	NA	NA	NA	NA	NA
VI-2	700075	MKO 142	174-204	20.5	NA	3	260	NA	NA	NA	NA	NA	NA
VI-2	700075	MKO 143	204-210	NA	NA	2	410	NA	NA	NA	NA	NA	NA
VI-2	700075	MKO 144	210-216	NA	NA	3	270	NA	NA	NA	NA	NA	NA
VI-2	700075	MKO 145	216-222	NA	NA	10	350	NA	NA	NA	NA	NA	NA
VI-2	700075	MKO 146	222-228	NA	NA	2	245	NA	NA	NA	NA	NA	NA
VI-2	700093	*MKO 655	144-156	NA	NA	81	1718	1	10	15	70	.62	130
VI-2	700093	MKO 656	156-168	NA	NA	3	225	<1	10	6	100	<.01	<2
VI-2	700093	MKO 657	168-180	NA	NA	16	450	<1	10	13	110	<.01	20
VI-2	700093	MKO 658	180-192	NA	NA	5	190	<1	10	12	123	<.01	<2
VI-2	700093	MKO 659	192-204	NA	NA	21	565	<1	6	<1	107	<.01	28
VI-2	700092	MKO 660	204-216	NA	NA	1	134	NA	NA	NA	NA	NA	NA
VI-2	700092	MKO 661	216-228	NA	NA	13	241	NA	NA	NA	NA	NA	NA
VI-2	700092	MKO 662	228-240	NA	NA	6	107	NA	NA	NA	NA	NA	NA
VI-2	700092	MKO 663	240-252	NA	NA	10	179	NA	NA	NA	NA	NA	NA
VI-2	700092	MKO 664	252-264	NA	NA	6	89	NA	NA	NA	NA	NA	NA
*No samples taken above 144"													

VH-4 454ppm

MONTICELLO, UTAH, MILL TAILINGS  
 DRILLING AND SAMPLING PROJECT

PROJECT NO. 90-79-8027  
 BFEC NC #193

V<sub>2</sub>O<sub>5</sub> TAILINGS PILE

Date 5-29-80

Page 9 of 9

HOLE NO.	LAB REQUISITION NO.	SAMPLE NO.	DEPTH (INCHES)	LBS. WET WEIGHT	% MOISTURE	ppm U <sub>3</sub> O <sub>8</sub>	ppm V <sub>2</sub> O <sub>5</sub>	ppm Se	ppm Mo	ppm NO <sub>3</sub>	ppm Cl	% S	pCi/g Ra226
VJ-1	700049	MKN 466	0-6	NA	NA	34	230	NA	NA	NA	NA	NA	NA
VJ-1	700049	MKN 467	6-12	NA	NA	50	329	NA	NA	NA	NA	NA	NA
VJ-1	700049	MKN 468	12-54	25.0	15.3	181	7000	NA	NA	NA	NA	NA	NA
VJ-1	700049	MKN 469	54-90	59.6	13.2	97	3300	NA	NA	NA	NA	NA	NA
VJ-1	700049	MKN 470	90-96	NA	NA	67	1506	NA	NA	NA	NA	NA	NA
VJ-1	700049	MKN 471	96-102	NA	NA	13	378	NA	NA	NA	NA	NA	NA
VJ-1	700049	MKN 472	102-108	NA	NA	4	209	NA	NA	NA	NA	NA	NA
VJ-1	700049	MKN 473	108-114	NA	NA	3	201	NA	NA	NA	NA	NA	NA

VJ-1 181ppm



Bendix  
Aerospace

# Memorandum

Bendix Field Engineering Corporation  
Grand Junction Operations  
Grand Junction, Colorado

Date: 30 October 1985

To: S. Wagner and D. Ealey

From: N. Korte *NK*

Subject: MRAP and GJPORAP monitoring

## MRAP

*January - monitoring plan due*

During FY-1986 plan for semi-annual monitoring with one additional short trip in the summer. We will work out all details of wells and analyses later. During FY-1986 drop from the analytical list Ba, Zn, Fe, Mn and Si.

## GJPORAP

Sampling for GJPORAP in FY-1986 will be quarterly. Drop Ba, Zn, Fe, Mn and Si and check with me prior to each trip to determine the number of wells and analyses.

NK/ir

xc: N. Abramiuk  
R. Chessmore



Date: January 7, 1986  
 To: Nic Korte  
 From: Sandy Wagner *SW*  
 Subject: January 1986 Water Sampling, GJPO

The winter water sampling for the GJPO compound is scheduled for January 6-13, depending on the weather. The following sites and analyses listed here are in accord with various conversations and information given in regard to this sampling.

All well locations and surface water sites (listed below) will be analyzed for: As, Mo, Se, V, U, Na, K, Ca, Mg, Cl, SO<sub>4</sub>, NO<sub>3</sub>, PO<sub>4</sub>, and Ra-226 (starred sites only); physical parameters: pH, Eh, temp., CDT, alkalinity, and DTW. Two 125-ml samples should be adequate for these analyses, one liter additional for the Ra analysis.

The RCRA samples will be slightly modified from last year. Those parameters required are: Cl, Mn, Fe, Na, SO<sub>4</sub>, phenols, TOC, TOX, Ra-226. pH and CDT are also required. Four replicate readings of each of these physical parameters will be taken and recorded on the field log sheet. Additional analyses will require the collection of two extra liters, one filtered and acidified and the other taken directly from the well as is.

Five additional Gunnison River samples will be collected and analyzed for the same parameters as were done in the October 1985 sampling (As, Mo, V, Se, U).

Sample Sites

Gunnison upstream			GJ84-1
Gunnison downstream	84-S		GJ84-2
Gunnison middle	76-S		GJ84-3
*Dike ditch	P-10		GJ84-4
*North pond	11-1S		GJ84-5 (RCRA)
*Lagoon	14-6N-A		GJ84-6
6	14-6N-B	17-13N (RCRA)	GJ84-7
2A	P-9	15-17N (RCRA)	GJ84-8 (RCRA)
3-3N-A	P-7	10-19N (RCRA)	GJ84-9 (RCRA)
3-3N-B	12-7N-A		GJ84-10
5-12N-A	12-7N-B		GJ84-11
5-12N-B		P-8	GJ84-12
1-9S-A	P-3 Shallow		
1-9S-B	P-3 Deep		



Nic Korta  
January 7, 1986  
Page 2

Sample Sites (Continued)

P-1-A	11-15N
6-2N	13-16N-A (RCRA)
3-3S	13-16N-B
10-2N-A	14-13N-A
10-2N-B	14-13N-B
9-6N	11-12N-A
North well	11-12N-B
South well	P-4 Deep
13-10W	

SW:jp

cc: D. Ealey

Date: April 10, 1986  
To: Nic Korte  
From: Sandy Wagner *SW*  
Subject: April 1986 Water Sampling, GJPO

The spring water sampling for the GJPO compound is scheduled for April 14-18, depending on the weather. The following sites and analyses listed here are in accord with various conversations and information given in regard to this sampling.

All well locations and surface water sites (list attached) will be analyzed for: As, Mo, Se, V, U, Na, K, Ca, Mg, Cl, SO<sub>4</sub>, NO<sub>3</sub>, PO<sub>4</sub>, and Ra-226 (starred sites only); physical parameters: pH, Eh, temp., CDT, alkalinity, and DTW. Two 125-ml samples should be adequate for these analyses, one liter additional for the Ra analysis.

An unfiltered, acidified sample for metals (125 ml) should be collected for all RCRA wells. These samples should then be digested and analyzed for As, Se, U, Mn, Fe, Na in addition to the analysis of the filtered sample for the same parameters.

Additional samples for speciation of organics will be collected from well 13-16N (S): VOA, acids, B/N, plus identification [PCBs (\$175), VOA (\$200), acids (\$250), B/N (\$375)] of any other peaks.

The RCRA samples will be slightly modified from last year. Those parameters required are: Cl, Mn, Fe, Na, SO<sub>4</sub>, phenols, TOC, TOX, Ra-226. Four replicate readings of each of the physical parameters (pH and CDT) will be taken and recorded on the field log sheet. TOC and TOX will also be run in quadruplicate.

#### Attachment

cc: D. Ealey  
B. Brayton  
S. Ball  
E. Reid

GJ COMPOUND SAMPLING POINTS

Gunnison upstream  
Gunnison midstream  
Gunnison downstream  
\*Dike ditch  
\*North pond  
\*South pond (lagoon)  
North well  
South well  
P-1-A  
P-1-B  
P-2-A  
P-2-B  
P-3-A  
P-3-B  
P-4-A  
P-5  
P-6  
P-7  
P-8  
P-9  
P-10  
GJ84-1  
GJ84-2  
GJ84-3  
GJ84-4 (RCRA)  
GJ84-5 (RCRA)  
GJ84-6  
GJ84-7  
GJ84-8 (RCRA)  
GJ84-9 (RCRA)  
GJ84-10  
GJ84-11  
GJ84-12  
1-9S-A  
1-9S-B  
3-3N-A  
3-3N-B  
3-3S  
5-12N-A  
5-12N-B  
6-2N  
7-6S  
8-4S  
9-6N  
9-11N  
10-2N-A  
10-2N-B  
10-19N (RCRA)  
11-11S  
11-12N-A  
11-12N-B  
11-15N

GJ Sampling Points Continued

- 12-7N-A
- 12-7N-B
- 13-10N
- 13-16N-A (south) (RCFA)
- 13-16N-B (north)
- 14-6N-A
- 14-6N-B
- 14-13N-A
- 14-13N-B
- 15-17N (RCRA)
- 17-13N (RCRA)



Bendix  
Aerospace

Bendix Field Engineering Corporation  
Grand Junction Operations  
Grand Junction, Colorado

Date: July 8, 1986  
To: Dennis Ealey  
From: Sandy Wagner *SW*  
Subject: July 1986 Water Sampling, GJPO

The summer water sampling for the GJPO compound is scheduled for July 14-18, depending on the weather. The following sites and analyses listed here are given in regard to this sampling:

All well locations and surface water sites (list attached) will be analyzed for: As, Mo, Se, V, U, Na, K, Ca, Mg, Cl, SO<sub>4</sub>, NO<sub>3</sub>, PO<sub>4</sub>, and Ra-226 (starred sites only); physical parameters: pH, Eh, temp., CDT, alkalinity, and DTW. Two 125-ml samples should be adequate for these analyses, one liter additional for the Ra analysis.

An unfiltered, acidified sample for metals (1000 ml) should be collected for all RCRA wells. These samples should then be digested and analyzed for As, Se, U, Mn, Fe, Na for total metals.

Additional samples for speciation of organics will be collected from wells 13-16N(S), P-7, 10-19N, GJ84-5: VOA, B/N, plus identification of any other peaks.

The RCRA parameters required are: Cl, Mn, Fe, Na, SO<sub>4</sub>, phenols, TOC, TOX, Ra-226. Four replicate readings of each of the physical parameters (pH and CDT) will be taken and recorded on the field log sheet. TOC and TOX will also be run in quadruplicate.

The required sampling bottles for the analyses requested are as follows:

<u>Size</u>	<u>Bottle Type</u>	<u>Preservative</u>	<u>Filtered</u>	<u>Analysis</u>
125 ml	poly	nitric acid	yes	metals, dissolved
1000 ml	poly	nitric acid	no	metals, total
125 ml	poly	4 <sup>0</sup> C	yes	anions, dissolved
1 liter	poly	nitric acid	yes	Ra-226
1 liter	glass	1.0 ml H <sub>2</sub> SO <sub>4</sub>	no	TOC & phenols
1 liter	glass	none 4 <sup>0</sup> C	no	TOX
1 liter	glass	none 4 <sup>0</sup> C	no	B/N
40-ml vial	glass	none 4 <sup>0</sup> C	no	VOAs

Please collect the organic samples (VOA, B/N) with the bladder pump fitted with Teflon tubing, if possible. Otherwise, use the Teflon bailers.

*also 125 ml with H<sub>2</sub>SO<sub>4</sub> for nitrate*



Dennis Ealey  
Page 2  
July 8, 1986

Ship the B/N and VOA samples out overnight delivery to get to RMAL before Friday (18th).

Mitch has prepared QC samples for all parameters. Please submit them as a field sample. A minimum of 10% of the samples shall be collected as blind duplicates.

#### Attachments

cc: M. Abbate  
B. Brayton  
S. Ball  
E. Reid  
N. Korte

GW COMPOUND SAMPLING POINTS

Gunnison upstream  
Gunnison midstream  
Gunnison downstream

\*Dike ditch  
\*North pond  
\*South pond (lagoon)  
North well  
South well

P-1-A

P-1-B

P-2-A

P-2-B

P-3-A

P-3-B

P-4-A

~~P-5~~

P-6

P-7

P-8

P-9

P-10

GJ84-1

GJ84-2

GJ84-3

GJ84-4 (RCRA)

GJ84-5 (RCRA)

GJ84-6

GJ84-7

GJ84-8 (RCRA)

GJ84-9 (RCRA)

GJ84-10

GJ84-11

GJ84-12

1-9S-A

1-9S-B

3-3N-A

3-3N-B

3-3S

5-12N-A

5-12N-B

6-2N

7-6S

8-4S

9-6N

~~9-11N~~

10-2N-A

10-2N-B

10-19N (RCRA)

11-1S

11-12N-A

11-12N-B

11-15N

too dirty - sewer sludge

destroyed

GJ Sampling Points Continued

12-7N-A  
12-7N-B  
13-10N  
13-16N-A (south) (RCRA)  
13-16N-B (north)  
14-6N-A  
14-6N-B  
14-13N-A  
14-13N-B  
15-17N (RCRA)  
17-13N (RCRA)

Bendix  
Aerospace

Date: September 19, 1986  
 To: Dennis Ealey  
 From: Sandy Wagner SW  
 Subject: October 1986 Water Sampling, GJPO

The fall water sampling effort for the GJPO compound is scheduled for October 6-10, depending on the weather and personnel available. The following sites and analyses listed here are given in regard to this sampling:

All well locations and surface water sites (list attached) will be analyzed for dissolved metals: As, Mo, Se, V, U, Na, K, Ca, Mg; (anions): Cl, SO<sub>4</sub>, NO<sub>3</sub>, PO<sub>4</sub>; and Ra-226 (starred sites only); physical parameters: pH, Eh, temp., CDT, alkalinity, and DTW.

An unfiltered, acidified sample for metals (1000 ml) should be collected for all RCRA wells identified on the attached list. These samples should then be digested and analyzed for total metals: As, Se, U, Mn, Fe, and Na--check EPA SW-846 methods.

The RCRA parameters required are: Cl, Mn, Fe, Na, SO<sub>4</sub>, phenols, TOC, TOX, Ra-226. Four replicate readings of each of the physical parameters (pH and CDT) will be taken and recorded on the field log sheet. TOC and TOX will also be run in quadruplicate.

The required sampling bottles for the analyses requested are as follows:

<u>Size</u>	<u>Bottle Type</u>	<u>Preservative</u>	<u>Filtered</u>	<u>Analysis</u>
125 ml	poly	sulfuric	yes	nitrate
125 ml	poly	nitric acid	yes	metals, dissolved
1000 ml	poly	nitric acid	no	metals, total
125 ml	poly	4° C	yes	anions, dissolved
1 liter	poly	nitric acid	yes	Ra-226
1 liter	glass	1.0 ml H <sub>2</sub> SO <sub>4</sub>	no	TOC & phenols
1 liter	glass	none 4° C	no	TOX

Mary has completed a well log list with depths to screen from top of casing. Mitch has prepared QC samples and trip blanks for all parameters. Please submit them as field samples. A minimum of 10% of the samples shall be collected as blind duplicates.

Dennis Ealey  
Page 2  
September 19, 1986

Please provide me with a post-trip memo describing the sampling effort and include personnel, methods, equipment, weather, and problem areas.

SW:jp

Attachments

cc: M. Abbate  
B. Brayton  
S. Ball  
E. Reid  
C. Turner  
M. Costello



Gunnison upstream  
Gunnison midstream  
Gunnison downstream  
\*Dike ditch  
\*North pond  
\*South pond (lagoon)  
North well  
South well  
P-1-A  
P-1-B  
P-2-A  
P-2-B  
P-3-A  
P-3-B  
P-4-A

P-6  
P-7  
P-8  
P-9  
P-10  
GJ84-1  
GJ84-2  
GJ84-3  
GJ84-4 (RCRA)  
GJ84-5 (RCRA)  
GJ84-6  
GJ84-7  
GJ84-8 (RCRA)  
GJ84-9 (RCRA)  
GJ84-10  
GJ84-11  
GJ84-12  
1-95-A  
1-95-B  
3-3N-A  
3-3N-B  
3-3S  
5-12N-A  
5-12N-B  
6-2N  
7-6S  
8-4S  
9-6N

10-2N-A  
10-2N-B  
10-19N (RCRA)  
11-1S  
11-12N-A  
11-12N-B  
11-15N



Service Through Technology

INCORPORATED

## Memorandum

UNC Technical Services Inc.  
P.O. Box 4000  
2597 B.N. Road  
Grand Junction, Colorado 81502-5504  
303/242-8621

**Date:** November 4, 1986  
**To:** Sandy Wagner  
**From:** Dennis Ealey *DE*  
**Subject:** OCTOBER 1986 WATER SAMPLING, GJPO

The quarterly sampling of the ground and surface water at the Grand Junction Project Office was completed on October 6 thru October 13. See the attached list for sample numbers and sample sites.

The procedures as listed in the "Environmental Sciences Procedure Manual" were used.

All wells with the exception of GJ84-10 and GJ84-11 were sampled with a masterflex portable pump model 7549 and purged with a masterflex model 7570. GJ84-10 and 11 were sampled with the new Fultz pump. All RCRA analysis for organics were sampled with a teflon bailer.

There were six wells sampled in duplicate, one Q.C. sample, two equipment blanks and one trip blank. See attached list for sites and sample numbers.

Wells P-1-B and P-2-B were dry and well GJ84-7 has been removed because the property is scheduled to be sold.

All depth to water were measured from the top of the well casing.

DTE:jb

## GJ COMPOUND SAMPLING POINTS

<u>Sample Number</u>	<u>Sample Site</u>	<u>Samples Collected</u>			
MMZ 001	Gunnison upstream	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 002	Gunnison midstream	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 003	Gunnison downstream	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 004	*Ditch Dike	Dissolved Metals	Anions	Dissolved Nitrate	226Ra
MMZ 005	*North Pond	Dissolved Metals	Anions	Dissolved Nitrate	226Ra
MMZ 006	*South Pond (lagoon)	Dissolved Metals	Anions	Dissolved Nitrate	226Ra
MMZ 007	North Well	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 008	South Well	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 009	P-1-A	Dissolved Metals	Anions	Dissolved Nitrate	
	P-1-B	Well Dry			
MMZ 011	P-2-A	Dissolved Metals	Anions	Dissolved Nitrate	
	P-2-B	Well Dry			
MMZ 013	P-3-A	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 014	P-3-B	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 015	P-4-A	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 016	Duplicate of MMZ 004	Dissolved Metals	Anions	Dissolved Nitrate	226Ra
MMZ 017	P-6	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 018	P-7	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 019	P-8	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 020	P-9	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 021	P-10	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 022	GJ84-1	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 023	GJ84-2	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 024	GJ84-3	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 025	GJ84-4 (RCRA)	RCRA			
MMZ 026	GJ84-5 (RCRA)	RCRA			
MMZ 027	GJ84-6	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 028	GJ84-7	Well Destroyed			
MMZ 029	GJ84-8 (RCRA)	RCRA			
MMZ 030	GJ84-9 (RCRA)	RCRA			
MMZ 031	GJ84-10	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 032	GJ84-11	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 033	GJ84-12	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 034	1-9S-A	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 035	1-9S-B	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 036	3-3N-A	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 037	3-3N-B	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 038	3-3S	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 039	5-12N-A	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 040	5-12N-B	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 041	6-2N	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 042	7-6S	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 043	8-4S	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 044	9-6N	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 045	Duplicate of MMZ 025	RCRA			
MMZ 046	10-2N-A	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 047	10-2N-B	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 048	10-19N (RCRA)	RCRA			
MMZ 049	11-1S	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 050	11-12N-A	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 051	11-12N-B	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 052	11-15N	Dissolved Metals	Anions	Dissolved Nitrate	
MMZ 053	Dummy Well P-11 QC	RCRA			
MMZ 054	Equipment Blank	Dissolved Metals	Anions	Dissolved Nitrate	

<u>Sample Number</u>	<u>Sample Location</u>	<u>Samples Collected</u>		
MMZ 055	12-7N-A	Dissolved Metals	Anions	Dissolved Nitrate
MMZ 056	12-7N-B	Dissolved Metals	Anions	Dissolved Nitrate
MMZ 057	13-10N	Dissolved Metals	Anions	Dissolved Nitrate
MMZ 058	13-16N-A(south)(RCRA)	RCRA		
MMZ 059	13-16N-B(north)	Dissolved Metals	Anions	Dissolved Nitrate
MMZ 060	14-6N-A	Dissolved Metals	Anions	Dissolved Nitrate
MMZ 061	14-6N-B	Dissolved Metals	Anions	Dissolved Nitrate
MMZ 062	14-13N-A	Dissolved Metals	Anions	Dissolved Nitrate
MMZ 063	14-13N-B	Dissolved Metals	Anions	Dissolved Nitrate
MMZ 064	15-17N (RCRA)	RCRA		
MMZ 065	17-13N (RCRA)	RCRA		
MMZ 066	Duplicate of MMZ 019	Dissolved Metals	Anions	Dissolved Nitrate
MMZ 067	Duplicate of MMZ 041	Dissolved Metals	Anions	Dissolved Nitrate
MMZ 068	Duplicate of MMZ 038	Dissolved Metals	Anions	Dissolved Nitrate
MMZ 069	Duplicate of MMZ 017	Dissolved Metals	Anions	Dissolved Nitrate
MMZ 070	Equipment Blank	Dissolved Metals	Anions	Dissolved Nitrate
MMZ 072	Trip Blank	RCRA		

RCRA Samples Collected

<u>SIZE</u>	<u>BOTTLE TYPE</u>	<u>PRESERVATIVE</u>	<u>FILTERED</u>	<u>ANALYSIS</u>
125ml	POLY	SULFURIC	YES	NITRATE
125ml	POLY	NITRIC	YES	METALS, DISSOLVED
1000ml	POLY	NITRIC	NO	METALS, TOTAL
125ml	POLY	4°C	YES	ANIONS, DISSOLVED
1000ml	POLY	NITRIC	YES	220 <sub>Ra</sub>
1000ml	GLASS	SULFURIC	NO	TOC & PHENOLS
1000ml	GLASS	4°C	NO	TOX

**REQUEST FOR ANALYTICAL SERVICES**  
Analytical Chemistry Laboratory

Originator Sandy Wagner  
 Department Number 231  
 Project Title Grand Junction DOE Compound  
 Problem Being Studied GJPO Water Sampling 1/7-1/13/86

Requisition Number 800689  
 Date Submitted 86 | 01 | 07  
 Date Required \_\_\_\_\_  
 Project Number 174808000

**ELEMENTAL ANALYSES** (Indicate by element or compound symbol)

Na	K	Ca	Mg	Cl	SO4	NO3	PO4	As
Mo	Se	V	U					

**ISOTOPE ANALYSES** (Indicate by isotope symbol)


**OTHER ANALYSES**

- Organic Carbon
- Total Carbon
- Carbonate Carbon
- Bulk Density
- Grain Density
- Other Alky, Eh, Temp, Depth to Water
- LOI 1000°C
- LOD 110°C
- pH
- Conductivity
- Magnetic Susceptibility

**Special Instructions If Required**

Acceptable  
 Acceptable with Modification

Sandy Wagner 1/14/86

Project Manager \_\_\_\_\_ Date \_\_\_\_\_



**LIST OF SAMPLES**  
**Sample Department**

Requisition Number 800639

Date Received 861010 *NY*

Originator Sandy Wagner

Project Number 174802000

Sample Type: Rock  Soil  Sediment  Water  Other \_\_\_\_\_ Site Number (Lab use only) CW12

Sample Ticket	Lab Number	FOR LAB USE ONLY	Sample Ticket	Lab Number	FOR LAB USE ONLY
MMV 856	112372	<input checked="" type="checkbox"/> P-9			
MMV 857	73	<input type="checkbox"/> 14-13A-A	90699-1	MC	<input type="checkbox"/>
MMV 858	74	<input type="checkbox"/> 14-13A-B	90699-2	MC	<input type="checkbox"/>
MMV 859	75	<input type="checkbox"/> 17-13N	90699-3	MC	<input type="checkbox"/>
6. MMV 860	76	<input type="checkbox"/> 11-19-N	30. 90699-4	MC	<input type="checkbox"/>
MMV 861	77	<input type="checkbox"/> 8-7	90699-5	MC	<input type="checkbox"/>
MMV 862	78	<input type="checkbox"/> 5-17-N	90699-6	7, 8, 9, 10	<input type="checkbox"/> CU
MMV 863	79	<input type="checkbox"/> 17-3-A	90699-11, 12, 13, 14, 15		<input type="checkbox"/>
MMV 864	80	<input type="checkbox"/> 11-15-N	(Ca, S, Mg, AS, SO, L, G, V)		<input type="checkbox"/>
10. MMV 865	81	<input type="checkbox"/> 13-16-B	35. 90699-16, 17, 18, 19, 20		<input type="checkbox"/>
MMV 866	82	<input type="checkbox"/> 13-16-A	(Cl, SO, PO <sub>4</sub> )		<input type="checkbox"/>
MMV 867	83	<input type="checkbox"/> 6-TR4-11			<input type="checkbox"/>
MMV 868	84	<input type="checkbox"/> 6-TR4-10	90699-21, 22, 23, 24		<input type="checkbox"/>
		<input type="checkbox"/>	40. (NO <sub>3</sub> )		<input type="checkbox"/>
15.		<input type="checkbox"/>			<input type="checkbox"/>
		<input type="checkbox"/>			<input type="checkbox"/>
		<input type="checkbox"/>			<input type="checkbox"/>
		<input type="checkbox"/>			<input type="checkbox"/>
		<input type="checkbox"/>			<input type="checkbox"/>
20.		<input type="checkbox"/>			<input type="checkbox"/>
		<input type="checkbox"/>			<input type="checkbox"/>
		<input type="checkbox"/>			<input type="checkbox"/>
		<input type="checkbox"/>			<input type="checkbox"/>
		<input type="checkbox"/>			<input type="checkbox"/>
25.		<input type="checkbox"/>	50.		<input type="checkbox"/>

Comments \_\_\_\_\_

For Lab Use Only  
 Control Samples Inserted

Disposition of Samples: Return  Store  Destroy

REPORT OF ANALYTICAL RESULTS

REQUESTED BY: WAGNER  
PROJECT: 1Z4808000

REQUISITION NO. 800689

DATE: 03-APR-86

LOCATION	BENDIX TICKET NO.	BENDIX LAB NO.	Na mg/l	K mg/l	Ca mg/l	Mg mg/l	Cl mg/l	SO4 mg/l	NO3 mg/l
GUNNISON UP	MMV 801	112322	33.	2.30	59.0	21.8	5.5	187.	3.
GUNNISON DN	MMV 802	112323	34.	2.32	60.8	21.8	5.6	186.	3.
GUNNISON MD	MMV 807	112324	32.	2.32	58.8	21.8	5.7	187.	3.
DIKE DITCH	MMV 809	112325	284.	24.9	199.	56.0	64.1	1110.	<1.
NORTH POND	MMV 810	112326	1130.	29.2	258.	196.	411.	3300.	3.
SOUTH POND	MMV 811	112327	155.	8.06	38.4	15.8	140.	235.	<1.
NORTH WELL	MMV 839	112355	166.	16.3	112.	16.6	35.9	474.	<1.
SOUTH WELL	MMV 840	112356	211.	16.1	183.	44.8	109.	733.	<1.
GJ84-1	MMV 843	112359	228.	15.9	181.	34.8	143.	427.	<1.
GJ84-2	MMV 844	112360	744.	11.7	213.	25.4	130.	1670.	<1.
GJ84-3	MMV 838	112354	477.	20.4	376.	77.4	200.	1590.	26.7
GJ84-4	MMV 820	112336	1120.	16.6	385.	71.8	226.	2920.	<1.
GJ84-5	MMV 819	112335	1350.	18.9	428.	170.	392.	3640.	<1.
GJ84-6	MMV 822	112338	201.	4.26	176.	57.6	152.	686.	<1.
GJ84-7	MMV 823	112339	938.	11.6	514.	189.	502.	2920.	<1.
GJ84-8	MMV 824	112340	920.	8.44	106.	26.2	40.1	2100.	<1.
GJ84-9	MMV 827	112343	430.	8.70	137.	20.4	25.7	1020.	<1.
GJ84-10	MMV 868	112384	399.	5.24	141.	30.0	101.	1060.	<1.
GJ84-11	MMV 867	112383	146.	2.70	81.6	23.8	7.6	169.	<1.
GJ84-12	MMV 837	112353	404.	19.9	428.	66.8	208.	1630.	16.1
P-1-A	MMV 826	112342	325.	6.74	183.	37.4	64.3	979.	3.
P-1-A	MMV 830	112346	322.	6.84	180.	37.8	66.1	971.	3.
P-2-A	MMV 813	112329	457.	11.2	409.	115.	304.	1860.	4.
P-3-A	MMV 863	112379	335.	9.44	195.	39.4	54.0	1040.	<1.
P-4-A	MMV 821	112337	1450.	25.7	399.	249.	510.	4080.	<1.
P-6	MMV 812	112328	414.	7.84	120.	22.4	70.0	890.	18.9
P-7	MMV 861	112377	1140.	16.6	469.	105.	304.	3150.	<1.
P-8	MMV 835	112351	326.	8.88	224.	79.6	133.	992.	94.1
P-9	MMV 856	112372	50.4	3.06	112.	28.8	7.4	249.	<1.
P-10	MMV 849	112365	406.	10.8	422.	100.	134.	1870.	3.
1-9S-A	MMV 829	112345	360.	8.06	146.	24.8	42.1	928.	<1.
1-9S-B	MMV 828	112344	304.	8.94	218.	56.2	54.6	1040.	24.0
3-3N-A	MMV 814	112330	474.	10.3	315.	58.0	130.	1640.	<1.
3-3N-B	MMV 815	112331	527.	10.2	268.	69.8	141.	1610.	23.3
3-3S	MMV 831	112347	658.	9.66	268.	100.	197.	1840.	73.7
5-12N-A	MMV 817	112333	391.	7.30	362.	133.	225.	1570.	5.
5-12N-B	MMV 818	112334	390.	7.58	353.	131.	230.	1650.	12.1
6-2N	MMV 825	112341	311.	9.64	281.	81.8	111.	1230.	72.2
7-6S	MMV 848	112364	258.	6.06	188.	74.0	63.7	779.	77.1
8-4-S	MMV 851	112367	464.	10.6	437.	98.2	135.	1990.	11.8
8-4-S	MMV 852	112368	463.	10.5	439.	97.8	131.	1960.	13.7
8-4-S	MMV 853	112369	462.	10.6	422.	97.0	130.	1970.	13.8
9-6-N	MMV 834	112350	268.	7.06	185.	80.0	102.	773.	80.6
10-2N-A	MMV 833	112349	830.	16.2	491.	214.	188.	3010.	308.
10-2N-B	MMV 832	112348	590.	14.3	429.	139.	190.	2300.	91.6

*[Signature]*  
Q.C. COORDINATOR



REPORT OF ANALYTICAL RESULTS

REQUESTED BY: WAGNER  
PROJECT: 1Z4808000

REQUISITION NO. 800689

DATE: 03-APR-86

LOCATION	BENDIX TICKET NO.	BENDIX LAB NO.	$\mu$ hos/ cm CDT	mg/l CaCO3 ALKY	Eh mv	Temp. °C	DEPTH TO WATER
GUNNISON UP	MMV 801	112322	413.	117.	+180.	2.5	-----
GUNNISON DN	MMV 802	112323	415.	129.	+180.	2.0	-----
GUNNISON MD	MMV 807	112324	402.	127.	+180.	3.	-----
DIKE DITCH	MMV 809	112325	1716.	213.	+190.	5.	-----
NORTH POND	MMV 810	112326	3900.	223.	+190.	5.	-----
SOUTH POND	MMV 811	112327	1001.	84.	+170.	5.5	-----
NORTH WELL	MMV 839	112355	1215.	197.	- 60.	11.	6.1 Ft.
SOUTH WELL	MMV 840	112356	1600.	303.	-115.	13.	6.04 Ft.
GJ84-1	MMV 843	112359	1664.	473.	- 90.	13.	7.68 Ft.
GJ84-2	MMV 844	112360	2976.	404.	- 50.	14.	7.27 Ft.
GJ84-3	MMV 838	112354	3136.	381.	+125.	13.	6.33 Ft.
GJ84-4	MMV 820	112336	3350.	475.	+130.	11.5	7.75 Ft.
GJ84-5	MMV 819	112335	5198.	514.	+ 10.	11.	9.78 Ft.
GJ84-6	MMV 822	112338	1518.	217.	+160.	12.	18.2 Ft.
GJ84-7	MMV 823	112339	4590.	517.	- 25.	11.	12.75 Ft.
GJ84-8	MMV 824	112340	2985.	334.	+140.	13.5	16.25 Ft.
GJ84-9	MMV 827	112343	1943.	233.	- 50.	11.5	19.93 Ft.
GJ84-10	MMV 868	112384	2125.	155.	+ 80.	14.	33.77 Ft.
GJ84-11	MMV 867	112383	990.	449.	+ 30.	12.	26.39 Ft.
GJ84-12	MMV 837	112353	2880.	407.	+115.	13.	6.18 Ft.
P-1-A	MMV 826	112342	1696.	283.	+170.	13.	11.54 Ft.
P-1-A	MMV 830	112346	1696.	283.	+170.	13.	11.54 Ft.
P-2-A	MMV 813	112329	2625.	235.	+160.	14.	14.45 Ft.
P-3-A	MMV 863	112379	1980.	327.	- 30.	12.	4.375 Ft.
P-4-A	MMV 821	112337	5738.	424.	+100.	11.	8.32 Ft.
P-6	MMV 812	112328	1782.	283.	+170.	12.	10.7 Ft.
P-7	MMV 861	112377	4615.	515.	- 70.	12.5	12.96 Ft.
P-8	MMV 835	112351	2108.	394.	+160.	14.	5.32 Ft.
P-9	MMV 856	112372	813.	235.	+ 40.	14.	17.58 Ft.
P-10	MMV 849	112365	2880.	319.	+190.	13.	16.52 Ft.
1-9S-A	MMV 829	112345	1800.	259.	+125.	15.5	13.3 Ft.
1-9S-B	MMV 828	112344	1860.	271.	+160.	14.5	12.96 Ft.
3-3N-A	MMV 814	112330	2375.	224.	+140.	14.	11.25 Ft.
3-3N-B	MMV 815	112331	2583.	243.	+145.	14.5	4.0 Ft.
3-3S	MMV 831	112347	3038.	279.	+160.	14.5	12.76 Ft.
5-12N-A	MMV 817	112333	2565.	348.	+175.	11.	8.7 Ft.
5-12N-B	MMV 818	112334	2640.	368.	+160.	12.	8.4 Ft.
6-2N	MMV 825	112341	2156.	289.	+170.	14.	13.07 Ft.
7-6S	MMV 848	112364	1792.	384.	+150.	13.	17.5 Ft.
8-4-S	MMV 851	112367	3105.	339.	+180.	11.	5.81 Ft. .45 $\mu$
8-4-S	MMV 852	112368	3105.	339.	+180.	11.	5.81 Ft. .2 $\mu$
8-4-S	MMV 853	112369	3105.	339.	+180.	11.	5.81 Ft. .1 $\mu$
9-6-N	MMV 834	112350	1853.	410.	+145.	20.5	11.15 Ft.
10-2N-A	MMV 833	112349	4380.	479.	+160.	15.5	12.1 Ft.
10-2N-B	MMV 832	112348	3240.	401.	+180.	15.5	12.1 Ft.

*Jim T. Lab*  
Q.C. COORDINATOR

REPORT OF ANALYTICAL RESULTS

REQUESTED BY: WAGNER  
PROJECT: 1Z4808000

REQUISITION NO. 800689

DATE: 03-APR-86

LOCATION	BENDIX TICKET NO.	BENDIX LAB NO.	Na mg/l	K mg/l	Ca mg/l	Mg mg/l	Cl mg/l	SO4 mg/l	NO3 mg/l
10-19-N	MMV 860	112376	1580.	22.6	485.	238.	522.	4380.	<1.
11-1-S	MMV 850	112366	710.	13.3	357.	156.	129.	2510.	76.5
11-12N-A	MMV 847	112363	361.	9.68	244.	73.6	140.	1070.	67.
11-12N-B	MMV 846	112362	358.	9.56	242.	73.8	142.	1070.	69.1
11-15-N	MMV 864	112380	1200.	16.7	530.	178.	503.	3500.	1.
12-7N-A	MMV 841	112357	214.	14.5	196.	42.0	174.	513.	<1.
12-7N-B	MMV 842	112358	214.	14.6	207.	42.8	175.	527.	<1.
13-10-N	MMV 836	112352	455.	19.1	401.	53.2	189.	1620.	3.
13-16-A, SOUTH	MMV 866	112382	2010.	21.8	452.	153.	410.	3020.	<1.
13-16-B, NORTH	MMV 865	112381	1170.	21.2	389.	98.4	258.	3040.	3.
14-6N-A	MMV 854	112370	103.	13.0	54.4	11.8	12.4	206.	10.
14-6N-B	MMV 855	112371	214.	15.2	145.	30.0	81.8	490.	<1.
14-13N-A	MMV 857	112373	514.	18.3	340.	72.8	174.	1640.	6.
14-13N-B	MMV 858	112374	444.	12.2	272.	70.6	158.	1350.	16.8
15-17-N	MMV 862	112378	1040.	15.0	302.	70.0	185.	2570.	<1.
17-13-N	MMV 859	112375	124.	3.78	89.4	25.0	9.7	405.	<1.
17-13-N	MMV 845	112361	123.	3.68	85.2	24.6	9.5	418.	<1.
-----	MMV 816	112332	0.1	<0.01	0.08	0.34	17.9	6.9	<1.

*Sam Luby*  
\_\_\_\_\_  
Q.C. COORDINATOR



REPORT OF ANALYTICAL RESULTS

REQUESTED BY: WAGNER  
PROJECT NO: 124808000

REQUISITION NO. 800689

DATE: 03-APR-86

LOCATION	BENDIX TICKET NO.	BENDIX LAB NO.	PO4 mg/l	As mg/l	Mo mg/l	Se mg/l	V mg/l	U mg/l	pH
10-19-N	MMV 860	112376	<0.1	<.01	.16	<.005	<.01	1.3	7.3
11-1-S	MMV 850	112366	<0.1	<.01	.24	.039	.01	1.7	7.05
11-12N-A	MMV 847	112363	0.1	.049	.04	.045	.19	0.4	7.1
11-12N-B	MMV 846	112362	0.1	.037	.04	.045	.18	0.5	7.05
11-15-N	MMV 864	112380	0.1	<.01	.23	<.005	<.01	1.5	7.1
12-7N-A	MMV 841	112357	6.9	.03	.01	<.005	<.01	2.	7.0
12-7N-B	MMV 842	112358	6.8	.03	<.01	<.005	<.01	2.	7.0
13-10-N	MMV 836	112352	0.2	.08	.89	<.005	.17	2.0	7.05
13-16-A, SOUTH	MMV 866	112382	0.2	.03	.02	<.005	<.01	0.3	6.9
13-16-B, NORTH	MMV 865	112381	0.2	<.01	.31	<.005	.03	1.1	7.1
14-6N-A	MMV 854	112370	0.9	.190	.05	<.005	.02	46.	7.2
14-6N-B	MMV 855	112371	0.5	.175	.04	<.005	.08	0.3	7.0
14-13N-A	MMV 857	112373	0.1	.01	.43	<.005	.02	1.3	7.0
14-13N-B	MMV 858	112374	<0.1	<.01	.36	<.005	.03	0.9	7.05
15-17-N	MMV 862	112378	<0.1	<.01	.31	<.005	<.01	1.6	7.3
17-13-N	MMV 859	112375	<0.1	<.01	.03	<.005	<.01	43.	7.4
17-13-N	MMV 845	112361	<0.1	<.01	.03	<.005	<.01	43.	7.4
-----	MMV 816	112332	<0.1	<.01	<.01	<.005	<.01	<.1	---

  
Q.C. COORDINATOR

REPORT OF ANALYTICAL RESULTS

REQUESTED BY: WAGNER  
PROJECT NO: 1Z4808000

REQUISITION NO. 800689

DATE: 03-APR-86

LOCATION	BENDIX TICKET NO.	BENDIX LAB NO.	$\mu\text{mhos}/$ cm CDT	mg/l CaCO <sub>3</sub> ALKY	Eh mv	TEMP. °C	DEPTH TO WATER
10-19-N	MMV 860	112376	7260.	572.	- 80.	12.	14.08 Ft.
11-1-S	MMV 850	112366	3782.	361.	+160.	15.	17 Ft.
11-12N-A	MMV 847	112363	2275.	391.	+150.	12.5	4.5 Ft.
11-12N-B	MMV 846	112362	2244.	380.	+160.	12.	4.57 Ft.
11-15-N	MMV 864	112380	5805.	659.	+ 50.	11.	5.39 Ft.
12-7N-A	MMV 841	112357	1696.	446.	- 80.	13.	7.4 Ft.
12-7N-B	MMV 842	112358	1674.	443.	-110.	14.	9.98 Ft.
13-10-N	MMV 836	112352	2688.	405.	+160.	13.	6.5 Ft.
13-16-A, SOUTH	MMV 866	112382	7425.	2915.	-390.	11.	5.46 Ft.
13-16-B, NORTH	MMV 865	112381	5280.	725.	-320.	12.	5.25 Ft.
14-6N-A	MMV 854	112370	558.	196.	+140.	13.5	16.35 Ft.
14-6N-B	MMV 855	112371	1460.	349.	- 50.	13.5	16.89 Ft.
14-13N-A	MMV 857	112373	2938.	417.	+100.	14.	6.875 Ft.
14-13N-B	MMV 858	112374	2711.	390.	+50.	10.	7.52 Ft.
15-17-N	MMV 862	112378	4375.	516.	-150.	14.	16.44 Ft.
17-13-N	MMV 859	112375	910.	168.	+100.	12.5	16.71 Ft.
17-13-N	MMV 845	112361	910.	168.	+100.	12.5	16.71 Ft.
-----	MMV 816	112332	-----	-----	-----	-----	-----

*Sam T. Gil*

Q.C. COORDINATOR

BENDIX FIELD ENGINEERING CORP.  
P.O. BOX 1569  
GRAND JUNCTION, COLORADO 81502

PAGE 2

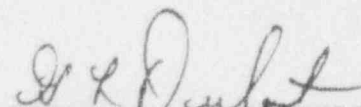
REPORT OF ANALYTICAL RESULTS

REQUESTOR WAGNER  
PROJECT: 124808000

REQUISITION 800725

DATE: 20-MAY-86

	BENDIX TICKET NO.	BENDIX LAB NO.	FE MG/L	NA NONE	U UG/L
GJ84-4	MMY 007	114482	0.15	1000.	
GJ84-5	MMY 8	114483	0.56	915.	
GJ84-8	MMY 9	114484	0.13	858.	18.
GJ84-9	MMY 10	114485	0.43	448.	16.
000000	MMY 11	114486	< 0.05	0.64	< 3.
17-13N	MMY 12	114487	8.7	108.	36.
10-19N	MMY 014	114488	59.	1500.	
15-17N	MMY 15	114489	180.	1260.	
000000	MMY 16	114490	0.21	1.13	< 3.
1316N-A	MMY 17	114491	2.1	1800.	



-----  
G.C. COORDINATOR

BENDIX FIELD ENGINEERING CORP.  
P.O. BOX 1569  
GRAND JUNCTION, COLORADO 81502

PAGE 1

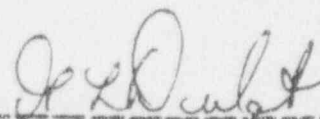
REPORT OF ANALYTICAL RESULTS

REQUESTOR WAGNER  
PROJECT: 1Z4808000

REQUISITION 800725

DATE: 20-MAY-86

	BENDIX TICKET NO.	BENDIX LAB NO.	AS MG/L	SE MG/L	MN MG/L
GJ84-4	MMY 007	114482	< 0.005	< 0.005	2.9
GJ84-5	MMY 8	114483	< 0.005	< 0.005	0.98
GJ84-8	MMY 9	114484	< 0.005	< 0.005	0.13
GJ84-9	MMY 10	114485	< 0.005	< 0.005	0.38
000000	MMY 11	114486	< 0.005	< 0.005	< 0.03
17-13N	MMY 12	114487	0.014	< 0.005	1.6
10-19N	MMY 014	114488	0.073	< 0.005	10.
15-17N	MMY 15	114489	0.078	< 0.005	9.8
000000	MMY 16	114490	< 0.005	< 0.005	< 0.03
1316N-A	MMY 17	114491	< 0.005	< 0.005	5.2



G.C. COORDINATOR

BENDIX FIELD ENGINEERING CORP.  
P.O. BOX 1569  
GRAND JUNCTION, COLORADO 81502

PAGE 3

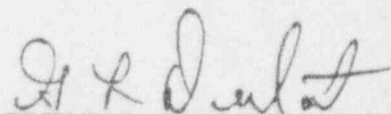
REPORT OF ANALYTICAL RESULTS

REQUESTOR WAGNER  
PROJECT: 124808000

REQUISITION 800725

DATE: 20-MAY-86

	BENDIX TICKET NO.	BENDIX LAB NO.	U UG/L
GJ84-4	MMY 007	114482	900.
GJ84-5	MMY 8	114483	500.
GJ84-8	MMY 9	114484	
GJ84-9	MMY 10	114485	
000000	MMY 11	114486	
17-13N	MMY 12	114487	
10-19N	MMY 014	114488	1200.
15-17N	MMY 15	114489	1200.
000000	MMY 16	114490	
1316N-A	MMY 17	114491	200.



-----  
G.C. COORDINATOR



REPORT OF ANALYTICAL RESULTS

REQUESTED BY: WAGNER REQUISITION NO. 800689 DATE: 03-APR-86  
 PROJECT: 1Z4808000 Sampled Jan. 6-14, 1986

LOCATION	BENDIX TICKET NO.	BENDIX LAB NO.	Na mg/l	K mg/l	Ca mg/l	Mg mg/l	Cl mg/l	SO4 mg/l	NO3 mg/l
GUNNISON UP	MMV 801	112322	33.	2.30	59.0	21.8	5.5	187.	3.
GUNNISON DN	MMV 802	112323	34.	2.32	60.8	21.8	5.6	186.	3.
GUNNISON MD	MMV 807	112324	32.	2.32	58.8	21.8	5.7	187.	3.
DIKE DITCH	MMV 809	112325	284.	24.9	199.	56.0	64.1	1110.	<1.
NORTH POND	MMV 810	112326	1130.	29.2	258.	196.	411.	3300.	3.
SOUTH POND	MMV 811	112327	155.	8.06	38.4	15.8	140.	235.	<1.
NORTH WELL	MMV 839	112355	166.	16.3	112.	16.6	35.9	474.	<1.
SOUTH WELL	MMV 840	112356	211.	16.1	183.	44.8	109.	733.	<1.
GJ84-1	MMV 843	112359	228.	15.9	181.	34.8	143.	427.	<1.
GJ84-2	MMV 844	112360	744.	11.7	213.	25.4	130.	1670.	<1.
GJ84-3	MMV 838	112354	477.	20.4	376.	77.4	200.	1590.	26.7
GJ84-4	MMV 820	112336	1120.	16.6	385.	71.8	226.	2920.	<1.
GJ84-5	MMV 819	112335	1350.	18.9	428.	170.	392.	3640.	<1.
GJ84-6	MMV 822	112338	201.	4.26	176.	57.6	152.	686.	<1.
GJ84-7	MMV 823	112339	938.	11.6	514.	189.	502.	2920.	<1.
GJ84-8	MMV 824	112340	920.	8.44	106.	26.2	40.1	2100.	<1.
GJ84-9	MMV 827	112343	430.	8.70	137.	20.4	25.7	1020.	<1.
GJ84-10	MMV 868	112384	399.	5.24	141.	30.0	101.	1060.	<1.
GJ84-11	MMV 867	112383	146.	2.70	81.6	23.8	7.6	169.	<1.
GJ84-12	MMV 837	112353	404.	19.9	428.	66.8	208.	1630.	16.1
P-1-A	MMV 826	112342	325.	6.74	183.	37.4	64.3	979.	3.
P-1-A	MMV 830	112346	322.	6.84	180.	37.8	66.1	971.	3.
P-2-A	MMV 813	112329	457.	11.2	409.	115.	304.	1860.	4.
P-3-A	MMV 863	112379	335.	9.44	195.	39.4	54.0	1040.	<1.
P-4-A	MMV 821	112337	1450.	25.7	399.	249.	510.	4080.	<1.
P-6	MMV 812	112328	414.	7.84	120.	22.4	70.0	890.	18.9
P-7	MMV 861	112377	1140.	16.6	469.	105.	304.	3150.	<1.
P-8	MMV 835	112351	326.	8.88	224.	79.6	133.	992.	94.1
P-9	MMV 856	112372	50.4	3.06	112.	28.8	7.4	249.	<1.
P-10	MMV 849	112365	406.	10.8	422.	100.	134.	1870.	3.
1-9S-A	MMV 829	112345	360.	8.06	146.	24.8	42.1	928.	<1.
1-9S-B	MMV 828	112344	304.	8.94	218.	56.2	54.6	1040.	24.0
3-3N-A	MMV 814	112330	474.	10.3	315.	58.0	130.	1640.	<1.
3-3N-B	MMV 815	112331	527.	10.2	268.	69.8	141.	1610.	23.3
3-3S	MMV 831	112347	658.	9.66	268.	100.	197.	1840.	73.7
5-12N-A	MMV 817	112333	391.	7.30	362.	133.	225.	1570.	5.
5-12N-B	MMV 818	112334	390.	7.58	353.	131.	230.	1650.	12.1
6-2N	MMV 825	112341	311.	9.64	281.	81.8	111.	1230.	72.2
7-6S	MMV 848	112364	258.	6.06	188.	74.0	63.7	779.	77.1
8-4-S	MMV 851	112367	464.	10.6	437.	98.2	135.	1990.	11.8
8-4-S	MMV 852	112368	463.	10.5	439.	97.8	131.	1960.	13.7
8-4-S	MMV 853	112369	462.	10.6	422.	97.0	130.	1970.	13.8
9-6-N	MMV 834	112350	268.	7.06	185.	80.0	102.	773.	80.6
10-2N-A	MMV 833	112349	830.	16.2	491.	214.	188.	3010.	308.
10-2N-B	MMV 832	112348	590.	14.3	429.	139.	190.	2300.	91.6

*[Signature]*  
 Q.C. COORDINATOR

REPORT OF ANALYTICAL RESULTS

REQUESTED BY: WAGNER REQUISITION NO. 800689 DATE: 03-APR-86  
PROJECT: 124808000 Sampled Jan. 6-14, 1986

LOCATION	BENDIX TICKET NO.	BENDIX LAB NO.	PO4 mg/l	As mg/l	Mo mg/l	Se mg/l	V mg/l	U mg/l	pH
GUNNISON UP	MMV 801	112322	<0.1	<.01	<.01	<.005	<.01	5.	8.1
GUNNISON DN	MMV 802	112323	<0.1	<.01	<.01	<.005	<.01	5.	8.0
GUNNISON MD	MMV 807	112324	<0.1	<.01	<.01	<.005	<.01	5.	8.0
DIKE DITCH	MMV 809	112325	<0.1	<.01	.43	<.005	<.01	1.7	7.2
NORTH POND	MMV 810	112326	<0.1	<.01	.06	<.005	<.01	0.7	7.6
SOUTH POND	MMV 811	112327	1.3	<.01	.01	<.005	<.01	0.1	9.3
NORTH WELL	MMV 839	112355	1.3	.45	.05	<.005	.01	35.	7.05
SOUTH WELL	MMV 840	112356	5.6	.14	<.01	<.005	.02	74.	7.1
GJ84-1	MMV 843	112359	4.2	.33	<.01	<.005	<.01	3.	7.2
GJ84-2	MMV 844	112360	0.2	.28	.03	<.005	.01	57.	7.3
GJ84-3	MMV 838	112354	0.3	.046	.33	<.005	.17	0.8	7.1
GJ84-4	MMV 820	112336	<0.1	<.01	.35	<.005	<.01	1.2	7.2
GJ84-5	MMV 819	112335	<0.1	<.01	.18	<.005	<.01	0.7	7.2
GJ84-6	MMV 822	112338	<0.1	<.01	.02	<.005	<.01	20.	7.3
GJ84-7	MMV 823	112339	<0.1	<.01	<.01	<.005	<.01	63.	6.95
GJ84-8	MMV 824	112340	<0.1	<.01	.02	<.005	<.01	15.	7.65
GJ84-9	MMV 827	112343	<0.1	<.01	.01	<.005	<.01	12.	7.4
GJ84-10	MMV 868	112384	<0.1	<.01	<.01	<.005	<.01	8.	7.7
GJ84-11	MMV 867	112383	0.2	<.01	<.01	<.005	<.01	6.	7.15
GJ84-12	MMV 837	112353	0.3	.067	.54	<.005	.20	1.8	7.1
P-1-A	MMV 826	112342	<0.1	<.01	.39	.043	<.01	1.2	7.75
P-1-A	MMV 830	112346	<0.1	<.01	.39	.044	<.01	1.3	7.75
P-2-A	MMV 813	112329	<0.1	<.01	<.01	<.005	<.01	48.	7.5
P-3-A	MMV 863	112379	<0.1	<.01	.16	<.005	<.01	0.5	7.05
P-4-A	MMV 821	112337	<0.1	<.01	.06	<.005	<.01	0.2	7.25
P-6	MMV 812	112328	0.1	<.01	.02	<.005	<.01	98.	7.7
P-7	MMV 861	112377	0.1	<.01	.30	<.005	<.01	1.6	7.3
P-8	MMV 835	112351	0.5	.020	.02	.035	.12	0.4	7.05
P-9	MMV 856	112372	<0.1	<.01	.19	<.005	.06	0.2	7.0
P-10	MMV 849	112365	<0.1	<.01	.46	.044	.30	3.6	6.9
1-9S-A	MMV 829	112345	<0.1	<.01	.01	<.005	<.01	62.	7.9
1-9S-B	MMV 828	112344	<0.1	<.01	.02	.049	<.01	0.5	7.35
3-3N-A	MMV 814	112330	<0.1	<.01	<.01	<.005	<.01	39.	7.65
3-3N-B	MMV 815	112331	0.1	<.01	<.01	.033	<.01	41.	7.5
3-3S	MMV 831	112347	<0.1	<.01	.01	.063	.01	80.	7.3
5-12N-A	MMV 817	112333	<0.1	<.01	<.01	<.005	<.01	59.	7.35
5-12N-B	MMV 818	112334	<0.1	<.01	<.01	.014	<.01	56.	7.0
6-2N	MMV 825	112341	<0.1	<.01	.10	.085	.01	0.6	7.5
7-6S	MMV 848	112364	<0.1	<.01	.19	.074	.01	1.4	6.8
8-4-S	MMV 851	112367	0.2	<.01	1.48	.224	.66	2.8	6.9
8-4-S	MMV 852	112368	<0.1	<.01	1.45	.224	.66	2.6	6.9
8-4-S	MMV 853	112369	0.2	<.01	1.48	.232	.70	2.1	6.9
9-6-N	MMV 834	112350	0.4	<.01	.02	.021	<.01	0.3	7.15
10-2N-A	MMV 833	112349	0.9	<.01	.28	.064	<.01	2.7	7.1
10-2N-B	MMV 832	112348	0.1	<.01	.51	.054	<.01	2.4	7.1

*Wm. J. Dule*  
Q.C. COORDINATOR

REPORT OF ANALYTICAL RESULTS

REQUESTED BY: WAGNER

REGUISITION NO. 800689

DATE: 03-APR-86

PROJECT: 1Z4808000 Sampled Jan. 6-14, 1986

LOCATION	BENDIX TICKET NO.	BENDIX LAB NO.	$\mu$ mhos/ cm CDT	mg/l CaCO <sub>3</sub> ALKY	Eh mv	Temp. °C	DEPTH TO WATER
GUNNISON UP	MMV 801	112322	413.	117.	+180.	2.5	-----
GUNNISON DN	MMV 802	112323	415.	129.	+180.	2.0	-----
GUNNISON MD	MMV 807	112324	402.	127.	+180.	3.	-----
DIKE DITCH	MMV 809	112325	1716.	213.	+190.	5.	-----
NORTH POND	MMV 810	112326	3900.	223.	+190.	5.	-----
SOUTH POND	MMV 811	112327	1001.	84.	+170.	5.5	-----
NORTH WELL	MMV 839	112355	1215.	197.	- 60.	11.	6.1 Ft.
SOUTH WELL	MMV 840	112356	1600.	303.	-115.	13.	6.04 Ft.
GJ84-1	MMV 843	112359	1664.	473.	- 90.	13.	7.68 Ft.
GJ84-2	MMV 844	112360	2976.	404.	- 50.	14.	7.27 Ft.
GJ84-3	MMV 838	112354	3136.	381.	+125.	13.	6.33 Ft.
GJ84-4	MMV 820	112336	3350.	475.	+130.	11.5	7.75 Ft.
GJ84-5	MMV 819	112335	5198.	514.	+ 10.	11.	9.78 Ft.
GJ84-6	MMV 822	112338	1518.	217.	+160.	12.	18.2 Ft.
GJ84-7	MMV 823	112339	4590.	517.	- 25.	11.	12.75 Ft.
GJ84-8	MMV 824	112340	2985.	334.	+140.	13.5	16.25 Ft.
GJ84-9	MMV 827	112343	1943.	233.	- 50.	11.5	19.93 Ft.
GJ84-10	MMV 868	112384	2125.	155.	+ 80.	14.	33.77 Ft.
GJ84-11	MMV 867	112383	990.	449.	+ 30.	12.	26.39 Ft.
GJ84-12	MMV 837	112353	2880.	407.	+115.	13.	6.18 Ft.
P-1-A	MMV 826	112342	1696.	283.	+170.	13.	11.54 Ft.
P-1-A	MMV 830	112346	1696.	283.	+170.	13.	11.54 Ft.
P-2-A	MMV 813	112329	2625.	235.	+160.	14.	14.45 Ft.
P-3-A	MMV 863	112379	1980.	327.	- 30.	12.	4.375 Ft.
P-4-A	MMV 821	112337	5738.	424.	+100.	11.	8.32 Ft.
P-6	MMV 812	112328	1782.	283.	+170.	12.	10.7 Ft.
P-7	MMV 861	112377	4615.	515.	- 70.	12.5	12.96 Ft.
P-8	MMV 835	112351	2108.	394.	+160.	14.	5.32 Ft.
P-9	MMV 856	112372	813.	235.	+ 40.	14.	17.58 Ft.
P-10	MMV 849	112365	2880.	319.	+190.	13.	16.52 Ft.
1-9S-A	MMV 829	112345	1800.	259.	+125.	15.5	13.3 Ft.
1-9S-B	MMV 828	112344	1860.	271.	+160.	14.5	12.96 Ft.
3-3N-A	MMV 814	112330	2375.	224.	+140.	14.	11.25 Ft.
3-3N-B	MMV 815	112331	2583.	243.	+145.	14.5	4.0 Ft.
3-3S	MMV 831	112347	3038.	279.	+160.	14.5	12.76 Ft.
5-12N-A	MMV 817	112333	2565.	348.	+175.	11.	8.7 Ft.
5-12N-B	MMV 818	112334	2640.	368.	+160.	12.	8.4 Ft.
6-2N	MMV 825	112341	2156.	289.	+170.	14.	13.07 Ft.
7-6S	MMV 848	112364	1792.	384.	+150.	13.	17.5 Ft.
8-4-S	MMV 851	112367	3105.	339.	+180.	11.	5.81 Ft. .45 $\mu$
8-4-S	MMV 852	112368	3105.	339.	+180.	11.	5.81 Ft. .2 $\mu$
8-4-S	MMV 853	112369	3105.	339.	+180.	11.	5.81 Ft. .1 $\mu$
9-6-N	MMV 834	112350	1853.	410.	+145.	20.5	11.15 Ft.
10-2N-A	MMV 833	112349	4380.	479.	+160.	15.5	12.1 Ft.
10-2N-B	MMV 832	112348	3240.	401.	+180.	15.5	12.1 Ft.

*[Signature]*  
Q.C. COORDINATOR

REPORT OF ANALYTICAL RESULTS

REQUESTED BY: WAGNER REQUISITION NO. 800689 DATE: 03-APR-86  
PROJECT: 1Z4808000 Sampled Jan. 6-14, 1986

<u>LOCATION</u>	<u>BENDIX TICKET NO.</u>	<u>BENDIX LAB NO.</u>	<u>Na mg/l</u>	<u>K mg/l</u>	<u>Ca mg/l</u>	<u>Mg mg/l</u>	<u>Cl mg/l</u>	<u>SO4 mg/l</u>	<u>NO3 mg/l</u>
10-19-N	MMV 860	112376	1580.	22.6	485.	238.	522.	4380.	<1.
11-1-S	MMV 850	112366	710.	13.3	357.	156.	129.	2510.	76.5
11-12N-A	MMV 847	112363	361.	9.68	244.	73.6	140.	1070.	67.
11-12N-B	MMV 846	112362	358.	9.56	242.	73.8	142.	1070.	69.1
11-15-N	MMV 864	112380	1200.	16.7	530.	178.	503.	3500.	1.
12-7N-A	MMV 841	112357	214.	14.5	196.	42.0	174.	513.	<1.
12-7N-B	MMV 842	112358	214.	14.6	207.	42.8	175.	527.	<1.
13-10-N	MMV 836	112352	455.	19.1	401.	53.2	189.	1620.	3.
13-16-A, SOUTH	MMV 866	112382	2010.	21.8	452.	153.	410.	3020.	<1.
13-16-B, NORTH	MMV 865	112381	1170.	21.2	389.	98.4	258.	3040.	3.
14-6N-A	MMV 854	112370	103.	13.0	54.4	11.8	12.4	206.	10.
14-6N-B	MMV 855	112371	214.	15.2	145.	30.0	81.8	490.	<1.
14-13N-A	MMV 857	112373	514.	18.3	340.	72.8	174.	1640.	6.
14-13N-B	MMV 858	112374	444.	12.2	272.	70.6	158.	1350.	16.8
15-17-N	MMV 862	112378	1040.	15.0	302.	70.0	185.	2570.	<1.
17-13-N	MMV 859	112375	124.	3.78	89.4	25.0	9.7	405.	<1.
17-13-N	MMV 845	112361	123.	3.68	85.2	24.6	9.5	418.	<1.
-----	MMV 816	112332	0.1	<0.01	0.08	0.34	17.9	6.9	<1.

*Wm T. Salts*  
\_\_\_\_\_  
Q.C. COORDINATOR

REPORT OF ANALYTICAL RESULTS

REQUESTED BY: WAGNER REQUISITION NO. 800689 DATE: 03-APR-86  
PROJECT NO: 1Z4808000 Sampled Jan. 6-14, 1986

LOCATION	BENDIX TICKET NO.	BENDIX LAB NO.	PO4 mg/l	As mg/l	Mo mg/l	Se mg/l	V mg/l	U mg/l	pH
10-19-N	MMV 860	112376	<0.1	<.01	.16	<.005	<.01	1.3	7.3
11-1-S	MMV 850	112366	<0.1	<.01	.24	.039	.01	1.7	7.05
11-12N-A	MMV 847	112363	0.1	.049	.04	.045	.19	0.4	7.1
11-12N-B	MMV 846	112362	0.1	.037	.04	.045	.18	0.5	7.05
11-15-N	MMV 864	112380	0.1	<.01	.23	<.005	<.01	1.5	7.1
12-7N-A	MMV 841	112357	6.9	.03	.01	<.005	<.01	2.	7.0
12-7N-B	MMV 842	112358	6.8	.03	<.01	<.005	<.01	2.	7.0
13-10-N	MMV 836	112352	0.2	.08	.89	<.005	.17	2.0	7.05
13-16-A, SOUTH	MMV 866	112382	0.2	.03	.02	<.005	<.01	0.3	6.9
13-16-B, NORTH	MMV 865	112381	0.2	<.01	.31	<.005	.03	1.1	7.1
14-6N-A	MMV 854	112370	0.9	.190	.05	<.005	.02	46.	7.2
14-6N-B	MMV 855	112371	0.5	.175	.04	<.005	.08	0.3	7.0
14-13N-A	MMV 857	112373	0.1	.01	.43	<.005	.02	1.3	7.0
14-13N-B	MMV 858	112374	<0.1	<.01	.36	<.005	.03	0.9	7.05
15-17-N	MMV 862	112378	<0.1	<.01	.31	<.005	<.01	1.6	7.3
17-13-N	MMV 859	112375	<0.1	<.01	.03	<.005	<.01	43.	7.4
17-13-N	MMV 845	112361	<0.1	<.01	.03	<.005	<.01	43.	7.4
-----	MMV 816	112332	<0.1	<.01	<.01	<.005	<.01	<.1	---

*Wm. T. Doherty*  
\_\_\_\_\_  
Q.C. COORDINATOR



REPORT OF ANALYTICAL RESULTS

REQUESTED BY: WAGNER REQUISITION NO. 800689 DATE: 03-APR-86  
PROJECT NO: 1Z4808000 Jan. 6-14, 1986

<u>LOCATION</u>	<u>BENDIX TICKET NO.</u>	<u>BENDIX LAB NO.</u>	<u>umhos/ cm CDT</u>	<u>mg/l CaCO3 ALKY</u>	<u>Eh mv</u>	<u>TEMP. °C</u>	<u>DEPTH TO WATER</u>
10-19-N	MMV 860	112376	7260.	572.	- 80.	12.	14.08 Ft.
11-1-S	MMV 850	112366	3782.	361.	+160.	15.	17 Ft.
11-12N-A	MMV 847	112363	2275.	391.	+150.	12.5	4.5 Ft.
11-12N-B	MMV 846	112362	2244.	380.	+160.	12.	4.57 Ft.
11-15-N	MMV 864	112380	5805.	659.	+ 50.	11.	5.39 Ft.
12-7N-A	MMV 841	112357	1696.	446.	- 80.	13.	7.4 Ft.
12-7N-B	MMV 842	112358	1674.	443.	-110.	14.	9.98 Ft.
13-10-N	MMV 836	112352	2688.	405.	+160.	13.	6.5 Ft.
13-16-A, SOUTH	MMV 866	112382	7425.	2915.	-390.	11.	5.46 Ft.
13-16-B, NORTH	MMV 865	112381	5280.	725.	-320.	12.	5.25 Ft.
14-6N-A	MMV 854	112370	558.	196.	+140.	13.5	16.35 Ft.
14-6N-B	MMV 855	112371	1460.	349.	- 50.	13.5	16.89 Ft.
14-13N-A	MMV 857	112373	2938.	417.	+100.	14.	6.875 Ft.
14-13N-B	MMV 858	112374	2711.	390.	+50.	10.	7.52 Ft.
15-17-N	MMV 862	112378	4375.	516.	-150.	14.	16.44 Ft.
17-13-N	MMV 859	112375	910.	168.	+100.	12.5	16.71 Ft.
17-13-N	MMV 845	112361	910.	168.	+100.	12.5	16.71 Ft.
-----	MMV 816	112332	-----	-----	-----	-----	-----

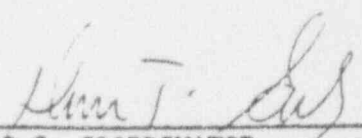
*[Signature]*  
Q.C. COORDINATOR

REPORT OF ANALYTICAL RESULTS

REQUESTED BY: WAGNER REQUISITION NO. 800692 DATE: 03-APR-86  
PROJECT: 124808000

<u>LOCATION</u>	<u>BENDIX TICKET #</u>	<u>BENDIX LAB #</u>	<u>TOX µg/l</u>	<u>TOC mg/l</u>	<u>Mn mg/l</u>	<u>Phenol mg/l</u>	<u>pH</u>	<u>CDT µmhos/cm</u>	<u>Ra-226 pCi/l</u>
GJ84-5	MMV 819	112335	62.	12.3	3.55	< 0.01	7.2	5198.	<1.0
			86.	12.4			7.2	5130.	
			44.	12.0			7.2	5198.	
			51.	12.0			7.2	5198.	
GJ84-4	MMV 820	112336	30.	8.9	3.50	< 0.01	7.2	3350.	<1.0
			40.	9.1			7.2	3350.	
			36.	8.7			7.2	3350.	
			30.	8.6			7.2	3350.	
GJ84-8	MMV 824	112340	21.	2.1	0.41	< 0.01	7.65	2985.	<1.0
			11.	2.1			7.65	2921.	
			20.	2.1			7.60	2985.	
			23.	2.2			7.60	2985.	
GJ84-9	MMV 827	112343	13.	2.6	0.40	< 0.01	7.4	1943.	<1.0
			7.	3.0			7.4	1943.	
			8.	2.8			7.4	1977.	
			<5.	2.5			7.4	1943.	
17-13-N	MMV 845	112361	26.	3.5	1.28	< 0.01	7.4	910.	<1.0
			12.	4.0			7.4	910.	
			15.	4.0			7.4	910.	
			<5.	3.6			7.4	910.	
17-13-N	MMV 859	112375	8.	3.5	1.29	< 0.01	7.4	910.	<1.0
			7.	3.7			7.4	910.	
			<5.	3.6			7.4	910.	
			9.	3.5			7.4	910.	
10-19-N	MMV 860	112376	62.	15.7	5.96	< 0.01	7.3	7260.	<1.0
			71.	15.8					
			56.	15.8					
			47.	15.8					
15-17-N	MMV 862	112378	36.	14.0	3.67	< 0.01	7.3	4375.	<1.0
			27.	13.9			7.3	4375.	
			31.	14.0			7.3	4375.	
			24.	13.8			7.3	4375.	
13-16-A	MMV 866	112382	400.	40.7	2.78	< 0.01	6.9	7425.	3.2
			280.	44.3					
			225.	42.7					
			440.	37.4					

to quadruplicate readings for wells #10-19-N and #13-16-A on pH and CDT.

  
Q.C. COORDINATOR

**REQUEST FOR ANALYTICAL SERVICES**  
**Analytical Chemistry Laboratory**

Originator Sandy Wagner  
 Department Number 231  
 Project Title Grand Junction DOE Compound  
 Problem Being Studied RCRA Analyses for 1/7-1/13/86  
GJPO

Requisition Number 800692  
 Date Submitted 86 Year 01 Month 07 Day  
 Date Required \_\_\_\_\_  
 Project Number 1Z4808000 Product \_\_\_\_\_ Phase \_\_\_\_\_ Activity \_\_\_\_\_

**ELEMENTAL ANALYSES** (Indicate by element or compound symbol)

Mn	TOC	TOX	Phenols					

**ISOTOPE ANALYSES** (Indicate by isotope symbol)

<sup>226</sup> Ra								

**OTHER ANALYSES**

- |   |   |
|---|---|
| <input type="checkbox"/> Organic Carbon   | <input type="checkbox"/> LOI 1000°C                               |
| <input type="checkbox"/> Total Carbon     | <input type="checkbox"/> LOD 110°C                                |
| <input type="checkbox"/> Carbonate Carbon | <input checked="" type="checkbox"/> pH in Quadruplicate           |
| <input type="checkbox"/> Bulk Density     | <input checked="" type="checkbox"/> Conductivity in Quadruplicate |
| <input type="checkbox"/> Grain Density    | <input type="checkbox"/> Magnetic Susceptibility                  |
| <input type="checkbox"/> Other _____      |   |

**Special Instructions if Required**

pH, CDT, TOC, TOX in Quadruplicate

- Acceptable  
 Acceptable with Modification

Sandy Wagner 1/14/86

Project Manager Date

BENDIX FIELD ENGINEERING CORP.  
P.O. BOX 1569  
GRAND JUNCTION, COLORADO 81502

PAGE 1

REPORT OF ANALYTICAL RESULTS

REQUESTOR KORTE  
PROJECT: 124808000

REQUISITION 800690

DATE: 11-APR-86

	BENDIX TICKET NO.	BENDIX LAB NO.	U UG/L	AS MG/L	MO MG/L
GUN.R.S/W OF P-1	MMV 803	112385	3.	< .01	< .01
GUN.R.S OF 7-6S	MMV 804	112386	4.	< .01	< .01
GUN.R.W OF 11-1S	MMV 805	112387	4.	< .01	< .01
GUN.R.W OF 14-16N	MMV 806	112388	4.	< .01	< .01
GUN.R.N/W OF 17-13N	MMV 808	112389	4.	< .01	< .01

*Robert F. LaS*  
-----  
S.C. COORDINATOR

BENDIX FIELD ENGINEERING CORP.  
P.O. BOX 1559  
GRAND JUNCTION, COLORADO 81502

PAGE 2

REPORT OF ANALYTICAL RESULTS

REQUESTOR KORTE  
PROJECT: 124808000

REQUISITION 800690

DATE: 11-APR-86

	BENDIX TICKET NO.	BENDIX LAB NO.	SE MG/L	V MG/L
GUN.R.S/W OF P-1	MMV 803	112385	< .005	< .01
GUN.R.S OF 7-6S	MMV 804	112386	< .005	< .01
GUN.R.W OF 11-1S	MMV 805	112387	< .005	< .01
GUN.R.W OF 14-16N	MMV 806	112388	< .005	< .01
GUN.R.N/W OF 17-13N	MMV 803	112389	< .005	< .01

  
-----  
S.C. COORDINATOR



**REQUEST FOR ANALYTICAL SERVICES**  
Analytical Chemistry Laboratory

Originator Nic Korte  
 Department Number 251  
 Project Title Grand Junction DOE Compound  
 Problem Being Studied Gunnison River Samples  
1/7/86

Requisition Number 800690  
 Date Submitted 86 01 02A  
 Date Required \_\_\_\_\_  
 Project Number 174808000

**ELEMENTAL ANALYSES** (Indicate by element or compound symbol)

As	Mo	V	Se	U				

**ISOTOPE ANALYSES** (Indicate by isotope symbol)


**OTHER ANALYSES**

- Organic Carbon
- Total Carbon
- Carbonate Carbon
- Bulk Density
- Grain Density
- Other \_\_\_\_\_
- LOI 1000°C
- LOD 110°C
- pH
- Conductivity
- Magnetic Susceptibility

**Special Instructions If Required**

Acceptable  
 Acceptable with Modification

*for NIK*  
*Sawley Wagner 1/14/86*

\_\_\_\_\_  
 Project Manager

\_\_\_\_\_  
 Date

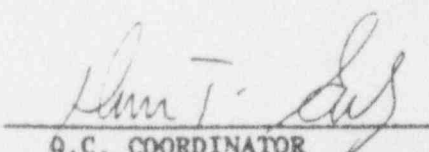
REPORT OF ANALYTICAL RESULTS

REQUESTED BY: WAGNER REQUISITION NO. 800692 DATE: 03-APR-86  
PROJECT: 1Z4808000

Sample Date 1/86

LOCATION	BENDIX TICKET #	BENDIX LAB #	TOX µg/l	TOC mg/l	Mn mg/l	Phenol mg/l	pH	CDT µmbos/cm	Ra-226 pCi/l
GJ84-5	MMV 819	112335	62. 86. 44. 51.	12.3 12.4 12.0 12.0	3.55	< 0.01	7.2 7.2 7.2 7.2	5198. 5130. 5198. 5198.	<1.0
GJ84-4	MMV 820	112336	30. 40. 36. 30.	8.9 9.1 8.7 8.6	3.50	< 0.01	7.2 7.2 7.2 7.2	3350. 3350. 3350. 3350.	<1.0
GJ84-8	MMV 824	112340	21. 11. 20. 23.	2.1 2.1 2.1 2.2	0.41	< 0.01	7.65 7.65 7.60 7.60	2985. 2921. 2985. 2985.	<1.0
GJ84-9	MMV 827	112343	13. 7. 8. <5.	2.6 3.0 2.8 2.5	0.40	< 0.01	7.4 7.4 7.4 7.4	1943. 1943. 1977. 1943.	<1.0
17-13-N	MMV 845	112361	26. 12. 15. <5.	3.5 4.0 4.0 3.6	1.28	< 0.01	7.4 7.4 7.4 7.4	910. 910. 910. 910.	<1.0
17-13-N	MMV 859	112375	8. 7. <5. 9.	3.5 3.7 3.6 3.5	1.29	< 0.01	7.4 7.4 7.4 7.4	910. 910. 910. 910.	<1.0
10-19-N	MMV 860	112376	62. 71. 56. 47.	15.7 15.8 15.8 15.8	5.96	< 0.01	7.3	7260.	<1.0
15-17-N	MMV 862	112378	36. 27. 31. 24.	14.0 13.9 14.0 13.8	3.67	< 0.01	7.3 7.3 7.3 7.3	4375. 4375. 4375. 4375.	<1.0
13-16(A)	MMV 866	112382	400. 280. 225. 440.	40.7 44.3 42.7 37.4	2.78	< 0.01	6.9	7425.	3.2

No quadruplicate readings for wells #10-19-N and #13-16(A) on pH and CDT.

  
Q.C. COORDINATOR



**Allied** Bendix  
Aerospace

# Memorandum

Bendix Field Engineering Corporation  
Grand Junction Operations  
Grand Junction, Colorado

Date: May 29, 1986

To: File

From: Sandy Wagner

Subject: QC for 1/86 GJPO Water

The following data are from a QC sample and field duplicates submitted with the 1/86 GJPO water samples.

	<u>Known Value</u>	<u>Result</u>
SO <sub>4</sub>	7.2	6.9
Cl	17.8	17.9

Duplicate 17-13N (RCRA only)

TOX -	26 ug/l	8
-	12 ug/l	7
-	15 ug/l	<5
-	<5 ug/l	9
TOC -	3.5 mg/l	3.5
-	4.0	3.7
-	4.0	3.6
-	3.6	3.5
Mn	1.28	1.29
Phenols	<0.01	<0.01
Ra-226	<1.0 pCi/l	<1.0

Duplicates

	<u>P-1A</u>		<u>17-13N</u>	
	<u>1</u>	<u>2</u>	<u>1</u>	<u>2</u>
Na	325	322	124	123
K	6.74	6.83	3.78	3.68
Ca	183	180	89.4	85.2
Mg	37.4	37.8	25.0	24.6
Cl	64.3	66.1	9.7	9.5
SO <sub>4</sub>	979	971	405	418
NO <sub>3</sub>	3	3	<1	<1
PO <sub>4</sub>	<0.1	<0.1	<0.1	<0.1
As	<0.1	<0.1	<0.1	<0.1
Mo	.39	.39	.03	.03
Se	.043	.044	<.005	<.005
V	<.01	<.01	<0.1	<0.1
U	1.2	1.3	43	43

**OVERSIZE  
DOCUMENT  
PAGE PULLED**

---

**SEE APERTURE CARDS**

---

NUMBER OF OVERSIZE PAGES FILMED ON APERTURE CARDS 3

---

9405260155-15,16,17

APERTURE CARD/HARD COPY AVAILABLE FROM

RECORDS AND REPORTS MANAGEMENT BRANCH