Umetco Minerals Corporation

40-8681
X61176

WHITE MESA MILL • P. O. BOX 669 • BLANDING, UTAH 84511
☎ (801) 678-2221

0400868185OR

RETURN ORIGINAL TO PDR, HQ.

September 3, 1993

DOCKETED
SEP 08 1993
USNRC
MAIL SECTION
DOCKET CLERK

URFO
RECEIVED
'93 SEP -7 P3:17

Mr. Ramon E. Hall, Director
United States Nuclear Regulatory Commission
Region IV
Uranium Recovery Field Office
Box 25325
Denver, Colorado 80225

Re: Umetco Minerals Corporation
SUA-1358: Docket No. 40.8681
White Mesa Mill, Blanding, Utah
License Condition 26

Dear Mr. Hall:

Attached is the yearly Technical Evaluation of the tailings Retention System at the White Mesa Mill. The mill is located 5 miles south of Blanding, Utah and is operated by Umetco Minerals Corporation

If you should have any questions please call.

Sincerely,

S. L. Schierman

S. L. Schierman
Department Head HS/EA

100173

DF03

93-0662

Umetco Minerals Corporation

P.O. BOX 1029
GRAND JUNCTION, COLORADO 81502
☎ (303) 245-3700

August 31, 1993

Mr. W. W. Brice
Maintenance Superintendent
Umetco Minerals Corporation
P. O. Box 669
Blanding, Utah 84511

Dear Mr. Brice:

Re: Annual Technical Evaluation of White Mesa Mill Tailings Management System for Period from July 31, 1992 through August 25, 1993
Materials License No. SUA-1358

The annual technical evaluation of the White Mesa mill tailings management system was conducted in Blanding, Utah, on August 25, 1993. The evaluation was performed in accordance with USNRC License No. SUA 1358 and the White Mesa Procedures Manual, Section 3.1, Revision 4, dated February 1991. Other documents utilized as reference material are included in the selected bibliography of this summary report. The purpose of this inspection was to evaluate the tailings management system and procedures for the period from July 31, 1992 through August 25, 1993. The previous inspection covered the period from July 31, 1991 to July 31, 1992. The following paragraphs summarize the findings of the annual technical evaluation.

Evaluation Format

The following format was used in the evaluation of the mill tailings management system.

- Review of the tailings management system procedures and interviews with site personnel and the site manager.

- Review of daily, monthly, quarterly inspection reports.

- Review of maintenance activities affecting the tailings management system.

- Inspection of the embankments, diversion channels, tailings transport system, and ancillary features of the system.

- Inspection of land immediately surrounding the tailings facility.

General

The White Mesa mill has been on standby status since the last annual technical evaluation and no effluents have been discharged from the mill to the tailings system. However, fluids have been transferred between cells and fresh water added to Cells 1I, 3 and 4A. Adding fresh water to the cells to raise the pH was done to help preserve wildlife. Likewise, most of the fluids have been placed in Cell 3 to minimize surface area exposure to wildlife.

Scott Schierman, the White Mesa Radiation Protection Officer/ Environmental Coordinator, has the direct responsibility to see that the mill tailings management system is being operated in accordance with Materials License SUA-1358 and White Mesa tailings management procedures. Mr. Schierman has performed the training of inspection personnel and personally inspects the tailings and ancillary facilities on a weekly, monthly and quarterly basis in accordance with License Condition 26.

Umetco had an extensive groundwater study conducted at the facility which was reported by the writer to the NRC in February, 1993. The study shows that past uranium recovery operations have not impacted the uppermost perched groundwater system at the facility. Umetco has an on-going dust suppression program and has covered portions of tailings Cells 2 and 3. Aerial photography of the mill site and tailings was conducted on August 23, 1993. Mapping will be available to show areas of tailings covered.

Records

Tailings inspection records are being kept on a daily, monthly and quarterly basis. The inspections are summarized in monthly documents for tracking purposes. Copies of selected records are enclosed for review. The records inspected verify activities conducted on the tailings management system.

Tailings and Liquids Disposal Cells

Cell 1I

Cell 1I is used only to evaporate liquids and is not used for tailings disposal. No process solutions were discharged into Cell 1I during the period covered by this technical evaluation. Effluent in this cell was, however, pumped into Cells 3 and 4 during this period. Fresh water was also pumped into Cell 1I from Recapture Reservoir to dilute the high TDS solution and raise the pH of the fluids. The pond was operated well below the allowable freeboard level during the period from July 31, 1992 to August 25, 1993 and was almost dry on the date of the annual inspection.

The daily tailings inspection by White Mesa personnel (January 9, 1993) detected an erosion channel on the liner cover at the east end of Cell 1I. Creation of this erosion channel on the inside of Cell 1I was due to runoff of mill drainage waters that had accumulated in the area of the covered old fly ash pond. The exposed liner ripped which covered an area of approximately 20 square feet. The NRC was notified of the situation and the liner was repaired the latter part of January 1993 (see attached letter.) The repaired liner was then covered with earth material. Inspection of daily records and current observations by the writer indicate the repairs were adequate and the liner/cover is now performing satisfactorily.

Cell 2

Cell 2 is at capacity (except for future final grading in places); therefore, no pumping of fluids into the cell occurred during the review period. Fluids were pumped from the surface pool and the slimes drain of this cell into Cell 3 during the year.

Four feet of random fill cover have been placed on Cell 2 beginning August 24, 1992 and ending in October 1992. Daily inspection reports and attached sketches show the approximate extent of the random fill cover over this cell.

The cover was placed to prevent blowing of tailings and to reduce radon emissions from the pile under the ALARA program. The covering of portions of the cells with random fill also accomplished a preliminary step in the reclamation of the cell. Inspection of Cell 2 on August 25, 1993 indicated no items of concern.

Cell 3

No effluent discharge occurred from the mill in Cell 3 as the facility did not operate during the review period. However, fluids from Cells 1I and 2 were pumped into Cell 3, as well as fresh water from Recapture Reservoir to adjust the pH.

Examination of records and conversations with inspection personnel indicate prairie dogs continue to be a problem with Cell 3. An aggressive extermination program is being implemented to control the rodents. When found all prairie dog holes are further excavated and the synthetic liner inspected for damage. If no damage has occurred to the liner, the holes are then filled with compacted soil. To date, no damage to the synthetic liner has occurred from burrowing animals.

The liner in Cell 3 has experienced exposure in several locations during the review period. These liner exposures have been repaired as soon as practical (weather conditions permitting).

Portions of Cell 3 (see attached sketches) have also been covered with four feet of random fill to prevent tailings blowing and to reduce radon emissions. Bales of straw have also been placed on Cell 3 to reduce blowing of surface material. Inspection of the cell on August 25, 1993 indicates the cell is functioning properly and all repairs were made satisfactorily. No prairie dog holes were found in the cell at the time of the annual inspection.

License Condition 51 dictates that the maximum pond elevation shall not exceed 5603.0 msl. Records and conversations indicate that this elevation has not been exceeded throughout the review period. The present fluid elevation is at 5602.5 feet which is six inches within the maximum pond elevation limit. Plant personnel are monitoring the level daily to maintain the proper freeboard.

Cell 4A

The fluids in Cell 4A presently cover only a very small portion of the bottom of the cell. The exterior embankment was inspected for signs of distress, instability, erosion, burrowing animals and seepage. None of these conditions were observed at the time of inspection and the embankment is in good condition. Vegetative cover on the exterior embankment is sparse to moderate. Liquids were pumped from Cell 1I into Cell 4 during the evaluation period as well as fresh water from Recapture Reservoir. The purpose of pumping fresh water into the cell was to raise the pH of the liquids in the cell.

The defects observed in the synthetic liner during the last technical evaluation were repaired by the lining contractor (Crest Liners, Inc.) in June, July and August, 1993. A portion of the liner in the northeast corner of the pond had to be replaced due to wind damage during repair construction. The contractor completed repair operations on August 20, 1993. Measurements are continuing to be taken in the leak detection system. The average rate into the leak detection system over the past year has averaged 0.011 gallon per minute.

Movement and Settlement Data

Four settlement plates have been installed on Cell 2 tailings to monitor consolidation due to fill placement (see attached figures.) Three plates were installed to evaluate settlement with respect to interim and final reclamation covers. The settlement plate placed on Cell 4A shows virtually no settlement since the last technical evaluation.

There is a problem with the March 22, 1993, settlement readings on all settlement plates. The readings taken on this date were obviously "outliers" and were not resurveyed.

Movement monuments on Cells 3 and 4A were surveyed by Western Engineers on August 11, 1993. (See attached letter.) This survey shows that only insignificant movements have occurred.

Diversion Channels

Records on the diversion channels indicate they were maintained during the evaluation period and were in good shape at the time of the inspection.

Tailings Slurry Transport System

The mill has not operated during the evaluation period; therefore, this system was not used.

Hydraulic and Electrical/Mechanical

The only features still operational involving hydraulic, mechanical, or electrical systems are the leak detection and slime drain pumps and piping and transfer pipelines. Procedures are available for handling piping ruptures or other piping deficiencies. The electrical system is maintained by a licensed electrician. The pumps are the only mechanical features and are maintained as needed.

Conclusions and Recommendations

The tailings management system at the Blanding mill has been operating as designed during the period from July 31, 1992 through August 25, 1993. Maintenance of the system was performed as required. Repairs to the lining system are well documented, inspection records are complete and are in good order. The following items need to be considered in the future operation of the system:

(1) All survey readings on settlement plates, monuments, etc., should be reviewed immediately upon generation of data. Any measurement that is suspect or obviously an "outlier should be resurveyed immediately.

(2) Consideration should be given to lowering the pool level in Cell 3 during the winter months.

(3) The area around the old fly ash pond should be re-evaluated to determine if additional regrading will minimize or control runoff into Cell II.

(4) The prairie dog control program should continue to be pursued aggressively.

(5) The summary sheets of inspections are an excellent management tool. All summary sheets have been reviewed by the site manager. A signature block for the preparer/reviewer of this document should be on each respective sheet.

After reviewing this report, if you have any questions, please do not hesitate to contact the writer.

C. O. Sealy, P.E.
Manager of Engineering

COS/sw

cc: Messrs. J. S. Hamrick
S. L. Schierman
R. A. Van Horn

Selected References

The following documents were used or referenced in the annual technical evaluation of the mill tailings management system:

- U.S. NRC Materials License SUA-1358.

- "Site Selection and Design Study, Tailings Retention and Mill Facilities" by Dames & Moore, May 15, 1978.

- "Environmental Report, White Mesa Uranium Project, San Juan County, Utah".

- "Engineer's Report, Second Phase Design - Cell 3 Tailings Management System, White Mesa Uranium Project, Blanding, Utah" by D'Appolonia Consulting Engineers, February 1982.

- Construction Report, Second Phase, Tailings Management System, White Mesa Uranium Project" by Energy Fuels Nuclear, Inc., March 1, 1983.

- Cell 4 Design - Tailings Management System, White Mesa Project, Blanding, Utah" by Umetco Minerals Corporation, August, 1988.

- "Design, Construction and Inspection of Embankment Retention Systems for Uranium Mills", October, 1980, Nuclear Regulatory Commission Guideline 3.11.1.

- Safety Evaluations of Existing Dams", Bureau of Reclamation.

- "White Mesa Mill - Drainage Report for Submittal to NRC" dated January, 1990.

- White Mesa Procedures Manual - Tailings Management System", Umetco, Revision 4, February 1991.

- "Annual Technical Review of White Mesa Tailings Management System", August 24, 1992.

- "Groundwater Study, White Mesa Mill, Blanding, Utah, Umetco Minerals Corporation, February 1993.

Umetco Minerals Corporation

WHITE MESA MILL • P. O. BOX 868 • BLANDING, UTAH 84511
☎ (801) 678-2221

March 22, 1993

Mr. Ramon E. Hall, Director
U. S. Nuclear regulatory Commission
Region IV
Uranium Recovery Field Office
Box 25325
Denver, CO 80225

Re: Umetco Minerals Corporation
SUA-1358
White Mesa Mill, Utah

Attention: Dana Ward

Dear Mr. Hall:

This letter is to confirm our discussions with your staff concerning our plans to transfer the liquor from Evaporation Cell 1 to Tailings Cell 3. Approximately 180 acre feet of solution will be transferred and Cell 1 will be dry. This will reduce the total pool surface area by sixty acres and should significantly reduce our problems with migratory water fowl using the ponds.

The entire pipeline will be located within the tailings disposal area. The pipeline is heavy duty high density polyethylene and has been pressure tested at two times working pressure. Normal operating pressure is 27 psi and the line was tested at the maximum pressure the pump will produce or 58 psi. All mechanical joints have been eliminated and replaced with fusion welded joints. The pipeline will be inspected every two hours during operation and documented.

Cell 1 is covered with approximately two feet of crystals and past experience indicates we will not experience any problems with dusting from this material after the cell is emptied. This crystal growth was observed during the recent NRC inspection of this facility. The area will be continually monitored and if any problems are noted, corrective action will be taken.

Transfer of solution to Cell 3 will cover a major portion of the sandy beaches that we do not anticipate covering this year. These beaches are below final elevation and additional tailings will be added to these areas during future operations.

As discussed during the recent NRC inspection of our facility we expect to cover all tailings areas possible that are at final elevation. In addition to this work we will continue painting and upgrading of the White Mesa Mill in preparation for future operations.

We would like to start transferring solutions as soon as possible and would appreciate your permission to proceed if concerns have been adequately addressed. If you have any additional questions please call.

Sincerely yours,

Wallace Brice

W. W. Brice
Maintenance Superintendent

Umetco Minerals Corporation

WHITE MESA MILL • P. O. BOX 638 • BLANDING, UTAH 84511
☎ (801) 678-2221

January 19, 1993

Mr. Ramon E. Hall, Director
United States Nuclear Regulatory Commission
Region IV
Uranium Recovery Field Office
Box 25325
Denver, Colorado 80225

Dear Mr. Hall:

As requested by Dana Ward of your office the following is a brief history of the moisture received during December 1992, and January 1993, and the resulting damage to the liner in Cell 1I with actions taken to date to minimize any further damage from occurring.

During December 1992, the White Mesa Mill received 2.56 inches of moisture in the form of snow. Additionally from the period of 1-7-93 to 1-20-93, we have received in the form of rain and snow an additional 5.45 inches of moisture for a total of 8.01 inches of moisture for the two month period.

On January 9, 1993, during the daily tailings inspection the shifter noticed an erosion channel at the east end of Cell 1I. Upon inspection it was noticed that the liner had been damaged. Butch Brice was notified, inspected the area and notified John Hamrick of the situation. Efforts to minimize the amount of water that would be channeled into this area were made as a measure to reduce any further liner damage.

On January 11, 1993 Pete Garcia was informed of the liner damage that occurred at the east end of Cell 1I. The observed damage to the liner is above the current freeboard levels for Cell 1I and posses no additional problems. As of 1-26-93, the current freeboard level in Cell 1I is 5.45 feet.

The liner damage was a result of an erosion channel on the inside of Cell 1I dike from mill drainage waters that have accumulated in the area of the old fly ash pond. The exposed liner ripped and fractured which appears to have damaged approximately 20 square feet of liner along the east inside bank of Cell 1I.

Since discussions with Pete on 1-11-93, we have received an additional 2.23 inches of moisture. With the additional moisture the size of the pool at the old fly ash pond increased and the erosion channel was backfilled to prevent any water from going under the liner and minimizing additional liner damage.

While inspecting the area that had been backfilled an additional area where water was overflowing was discovered under the crusted snow. To minimize erosion to the dike fiberglass troughs were used to extend the water discharge closer to the existing water level.

When weather permits the area where the liner damage has occurred will have the backfill remove and liner repairs made. The areas where erosion has occurred will result in an inspection of the liner if exposed, and the area backfilled or repaired if necessary.

Enclosed is a drawing of the approximate area where the liner damage occurred in Cell 1I.

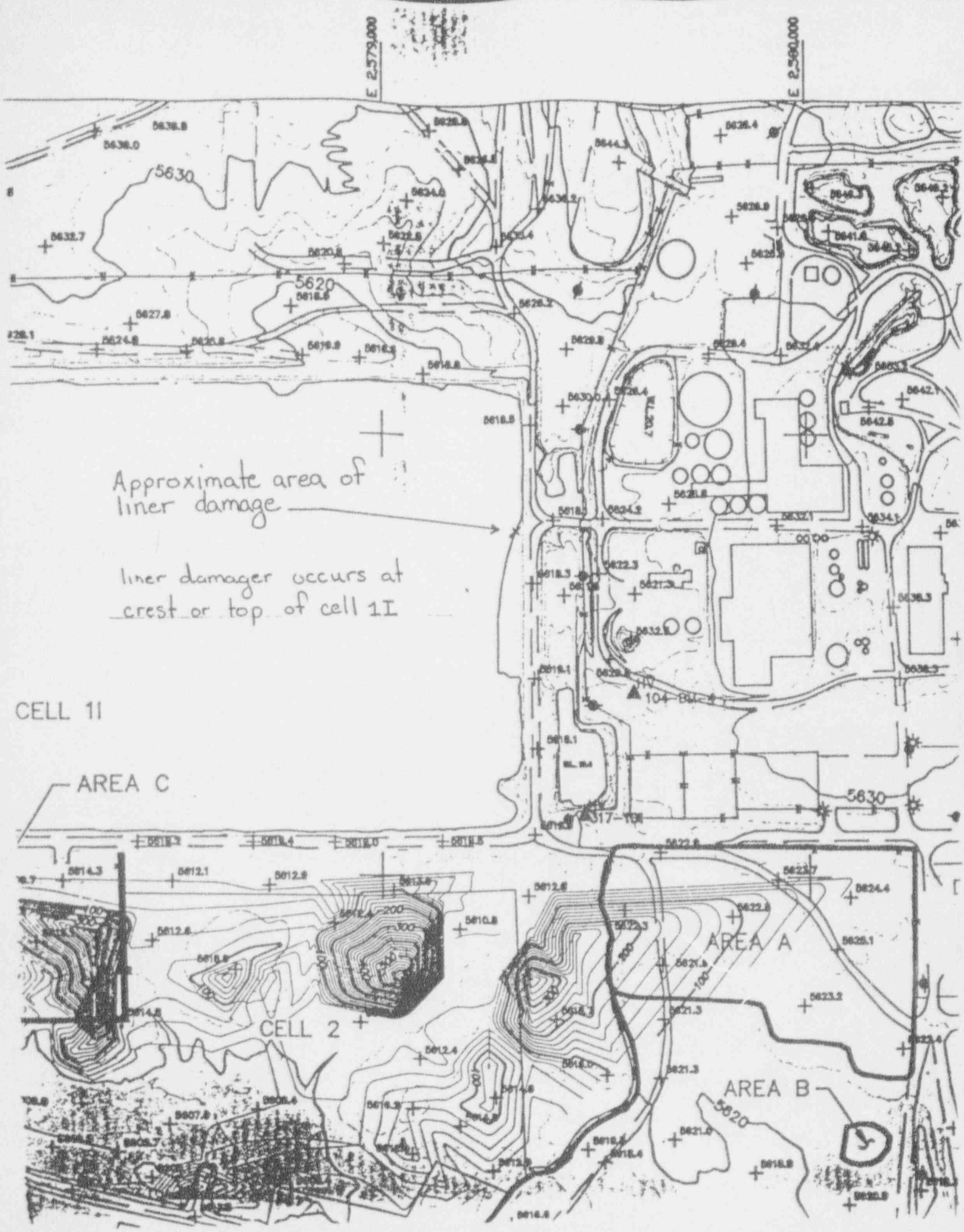
If you should have any questions in regards to this matter please call at 801-678-2221.

Sincerely,

S. L. Schierman

S. L. Schierman
Radiation Safety Officer

cc: Messrs. W. W. Brice
J. S. Hamrick
G. G. Ray
R. A. Van Horn
S. L. Schierman
M. D. Vincelette
G. F. Richards


E 2,579,000
E 2,580,000
5630
5620
Approximate area of liner damage
liner damager occurs at crest or top of cell 1I
CELL 1I
AREA C
CELL 2
AREA A
AREA B
5630
5620

WESTERN ENGINEERS, INC. SINCE 1953
CONSULTING ENGINEERS / LAND SURVEYORS
2150 Hwy. 6 & 50, Grand Junction, CO 81505-9422 • 303/242-5202 • FAX 242-1672

August 20, 1993
Umetco Minerals Corp.
Attn. Mr. Scot Schierman
P.O. Box 669
Blanding, Utah 84511

Dear Scot:

I have enclosed two copies of the Cell 3 and Cell 4 1993 Movement Monitor results for your review, filing and distribution. The survey was conducted by me on August 11 and 12, 1993. Based on comparison with previous data, no significant movement was observed.

I hope that the data will be useful and that you will call me should you require any clarification.

Sincerely,

Richard A. Mason
PLS 6035

WHITE MESA MILL MOVEMENT MONITOR RESULTS
AUG. 11,1993 CELL 3 BLANDING UTAH

MM NO.	D/S	U/S	ELEV.
302	CONTROL		5607.81
303		0.07	5607.88
304	0.00	0.00	5607.89
305		0.03	5607.98
306		0.03	5607.98
307		0.02	5607.60
308		0.05	5607.62
309		0.04	5607.63
310	0.04		5607.66
311	0.03		5607.88
312		0.05	5607.88
313		0.05	5607.94
314		0.06	5608.08
315		0.13	5608.10
316		0.10	5607.97
317		0.06	5607.67
318	0.00	0.00	5607.70
319		0.12	5607.67
320		0.08	5608.08
321		0.09	5608.06
322		0.07	5608.12
323		0.14	5607.99
324		0.15	5607.99
325		0.11	5607.52
326		0.11	5607.73
327		0.10	5607.96
328		0.07	5608.00
329		0.15	5608.01
330		0.06	5607.72
331		0.06	5607.51
332		0.08	5608.01
333	CONTROL		5607.98

NOTES: R.L JOHNSON PT.#102=WEI PT.#302 etc.
POINTS 306,307 REESTABLISHED AFTER BEING DESTROYED(1992)

WHITE MESA MILL MOVEMENT MONITOR RESULTS
AUG. 11,1993 CELL4 S.DIKE BLANDING UTAH

MM NO.	D/S	U/S	ELEV.
400	CONTROL		5584.87
401	0.01		5596.91
402	0.03		5598.20
403	0.06		5598.26
404	0.04		5598.21
405	0.00	0.00	5598.17
406	0.01		5598.14
407	0.01		5598.25

408	0.03		5598.12
409	0.02		5598.12
410	0.01		5598.15
411	0.00	0.00	5597.85
412	0.03		5597.82
413	0.03		5597.88
414	0.04		5597.87
415	0.01		5598.04
416	0.03		5598.08
417	0.00	0.00	5598.16
418		0.01	5598.01
419	0.00	0.00	5597.75
420	0.00	0.00	5598.08
421	0.00	0.00	5598.17
422	0.00	0.00	5598.09
423	0.00	0.00	5598.06
424	0.05		5598.20
425	0.00	0.00	5598.34
426	0.04		5598.56
427	0.00	0.00	5598.86
428	CONTROL		5596.30

WHITE MESA MILL MOVEMENT MONITOR RESULTS
AUG. 11, 1993 CELL4 WEST DIKE BLANDING UTAH

MM NO.	WEST	EAST	ELEV.
429	CONTROL		5562.11
430	CONTROL		5566.54
431	CONTROL		5596.93
432	0.02		5597.42
433	0.03		5597.99
434	0.00	0.00	5598.58
435	0.00	0.00	5598.56
436	0.06		5598.81
437	0.07		5599.88
438	0.09		5600.56
439	0.10		5600.76
440	0.00	0.00	5601.43
441	0.13		5601.89
442	0.06		5602.44
443	0.03		5603.01

444	0.00	0.00	5604.44
445		0.02	5604.16
446	0.00	0.00	5604.52
447	0.00	0.00	5604.54
448	0.07		5605.00
449	0.05		5605.63
450	0.04		5606.11
451	0.00	0.00	5606.93
452	CONTROL		5607.52

NOTE: POINTS 434,438,441,450 MAY HAVE BEEN DISTURBED(1992)

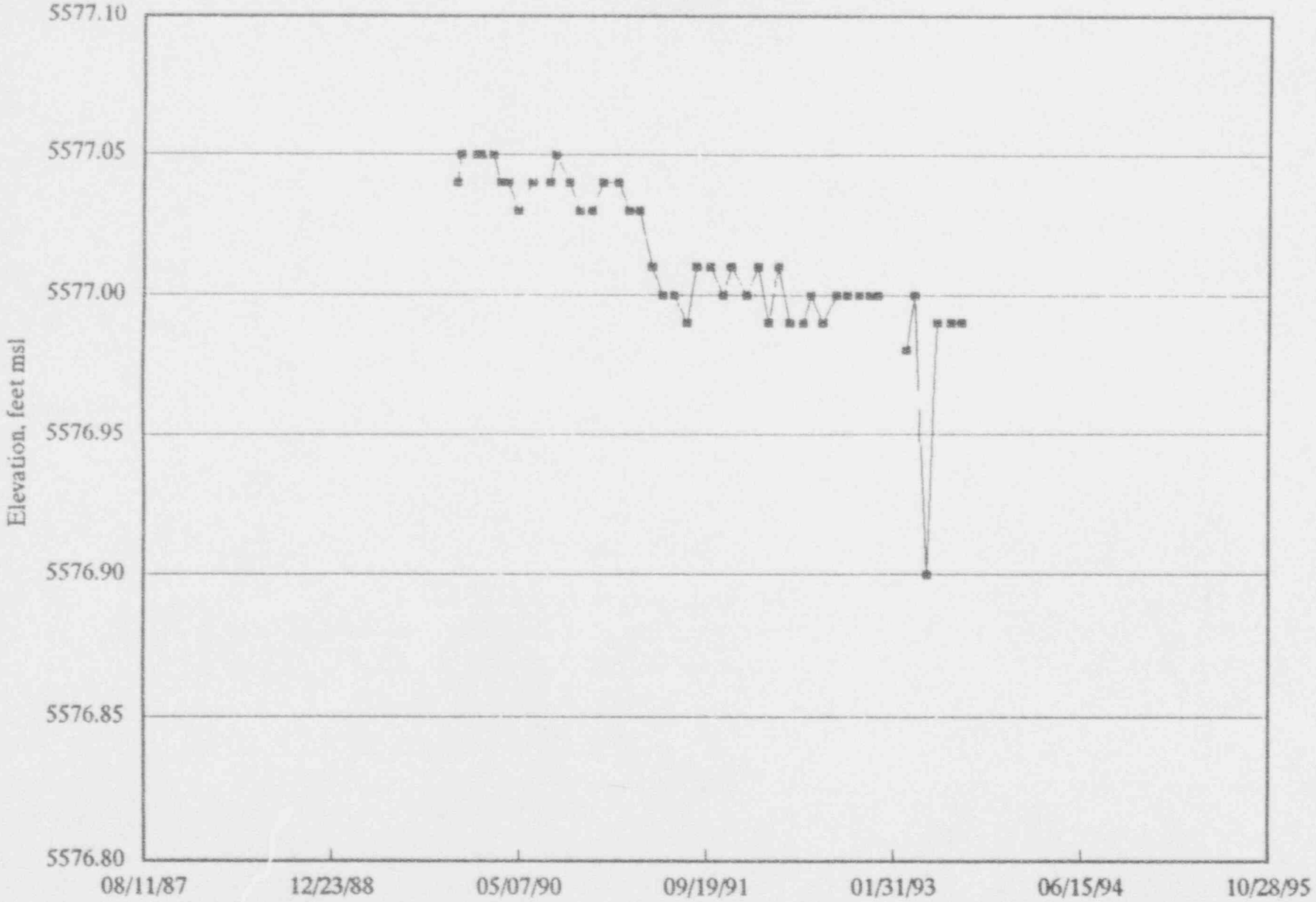
WHITE MESA MILL MOVEMENT MONITOR RESULTS
AUG. 11, 1993 CELL4 S.DIKE BLANDING UTAH

MM NO.	D/S	U/S	ELEV.
453	CONTROL		5583.79
454	0.17		5587.74
455	0.10		5589.72
456	0.26		5590.09
457	0.00	0.00	5591.65
458	CONTROL		5595.33
459	CONTROL		5584.70
460	0.00	0.00	5574.58
461	0.00	0.00	5574.37
462		0.06	5573.78
463		0.06	5573.03
464	CONTROL		5569.74

NOTE: POINTS454,456 REESTABLISHED, POINT 461 DISTURBED(1992)

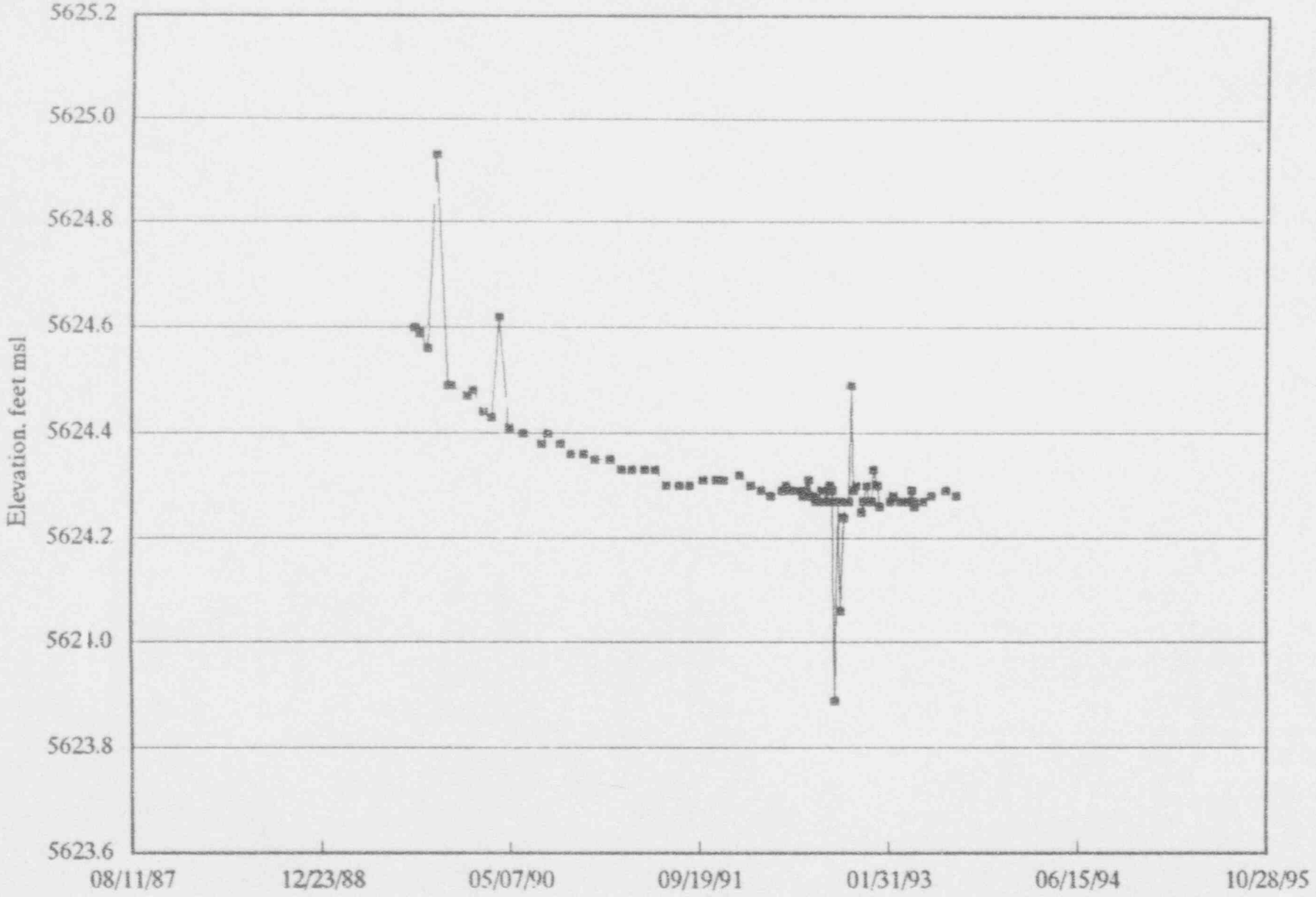
White Mesa Mill

Cell 4A Settlement Plate



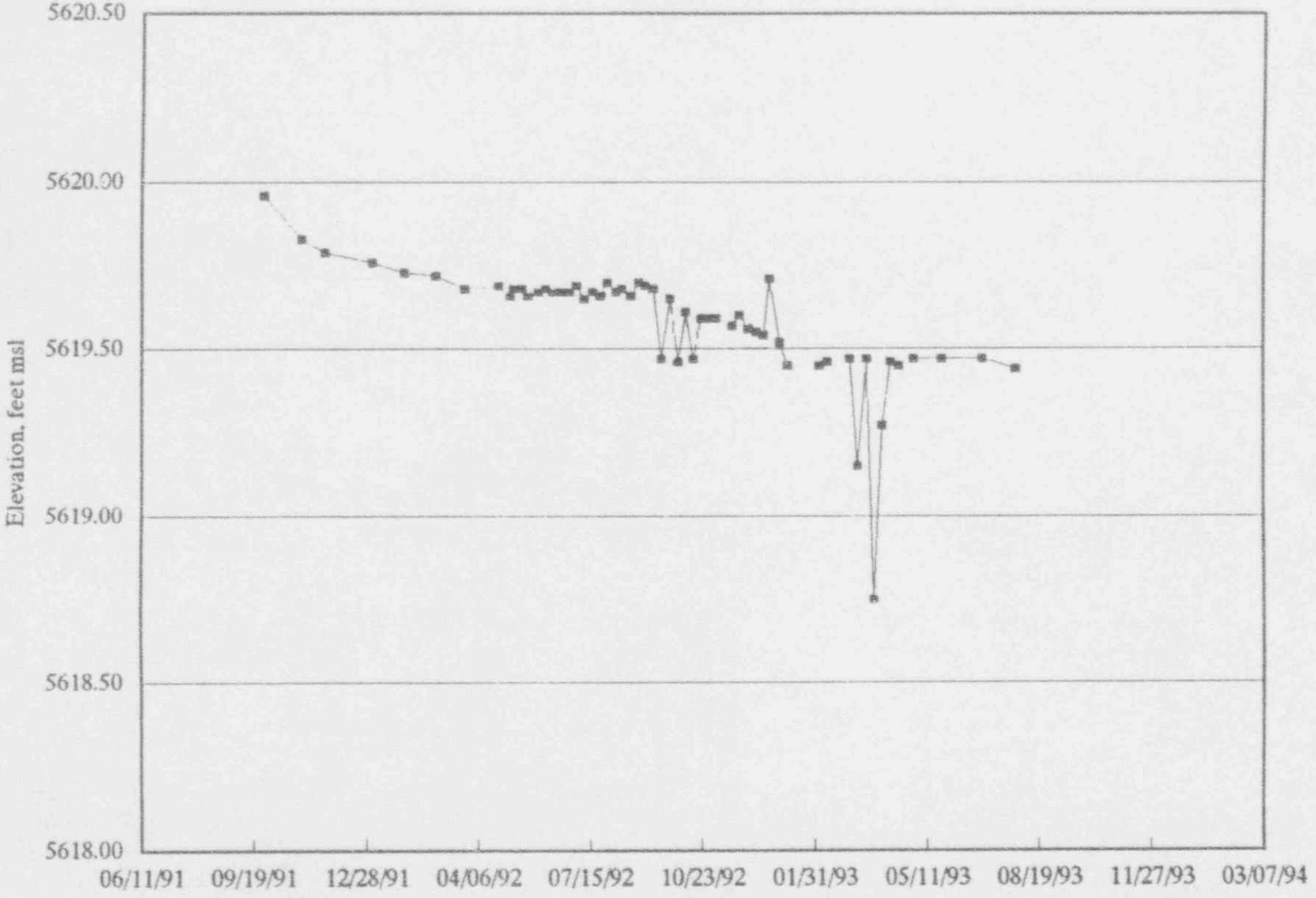
White Mesa Mill

Cell 2 East Settlement Plate



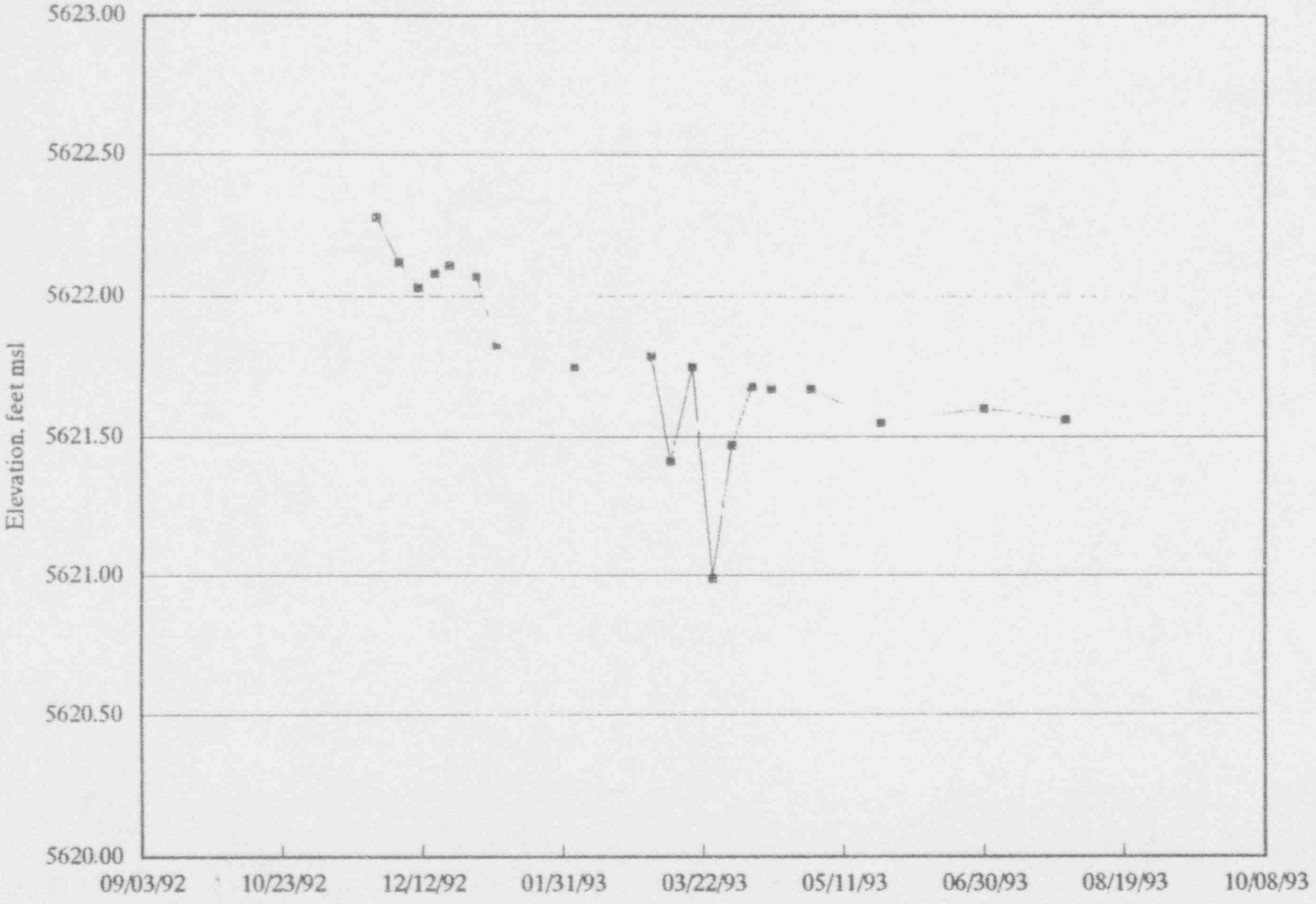
White Mesa Mill

Cell 2 West Settlement Plate



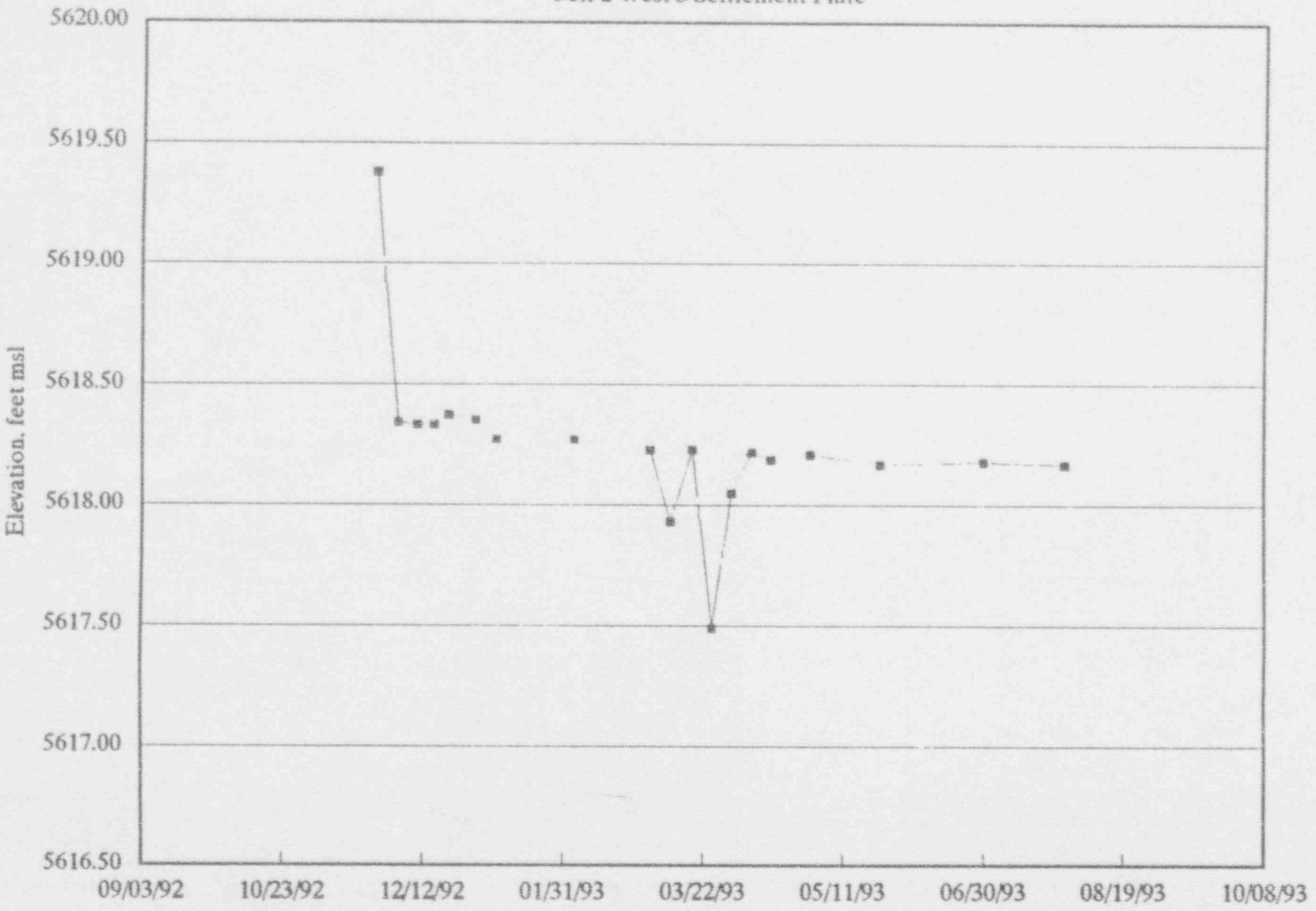
White Mesa Mill

Cell 2 West 2 Settlement Plate



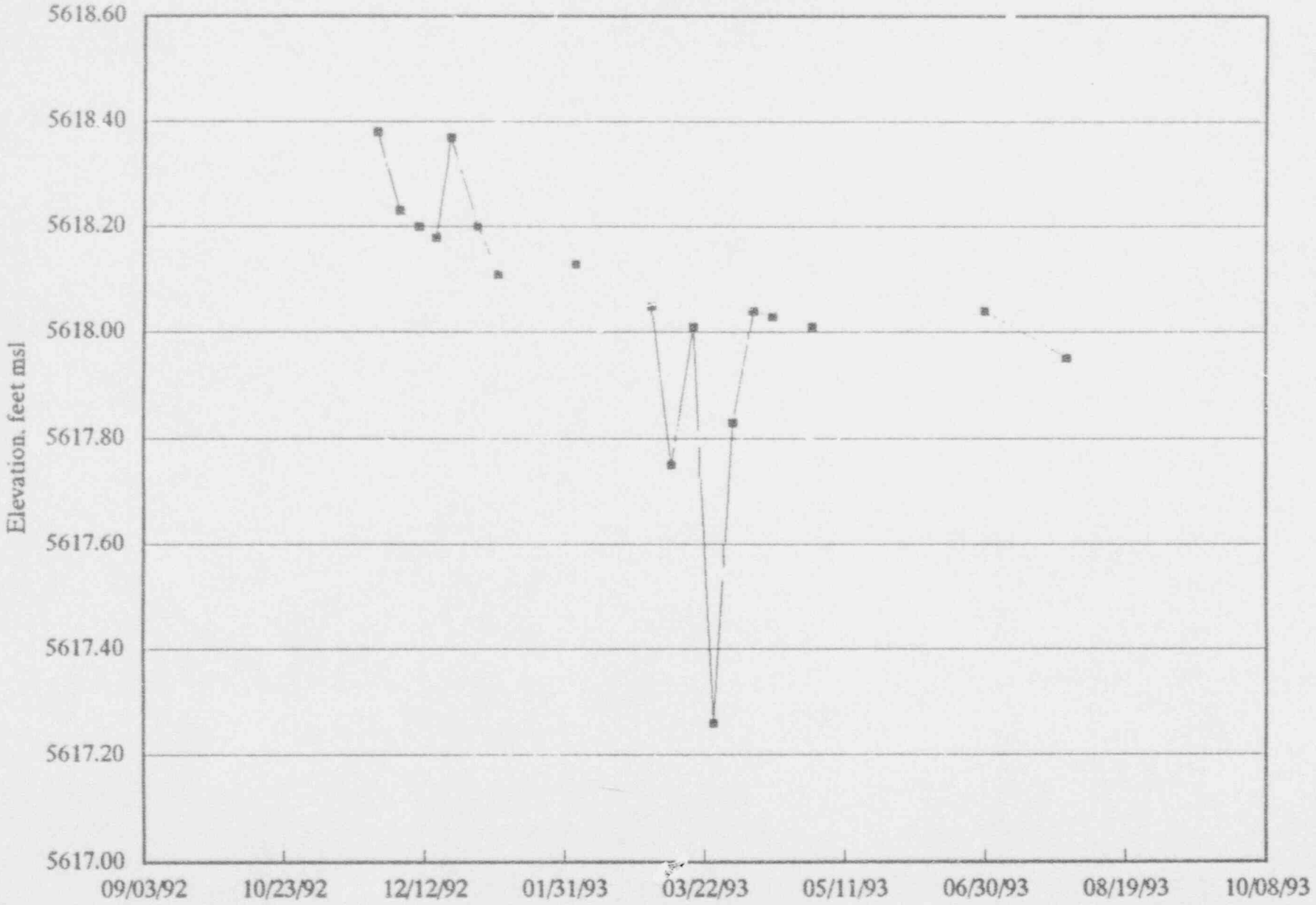
White Mesa Mill

Cell 2 West 3 Settlement Plate



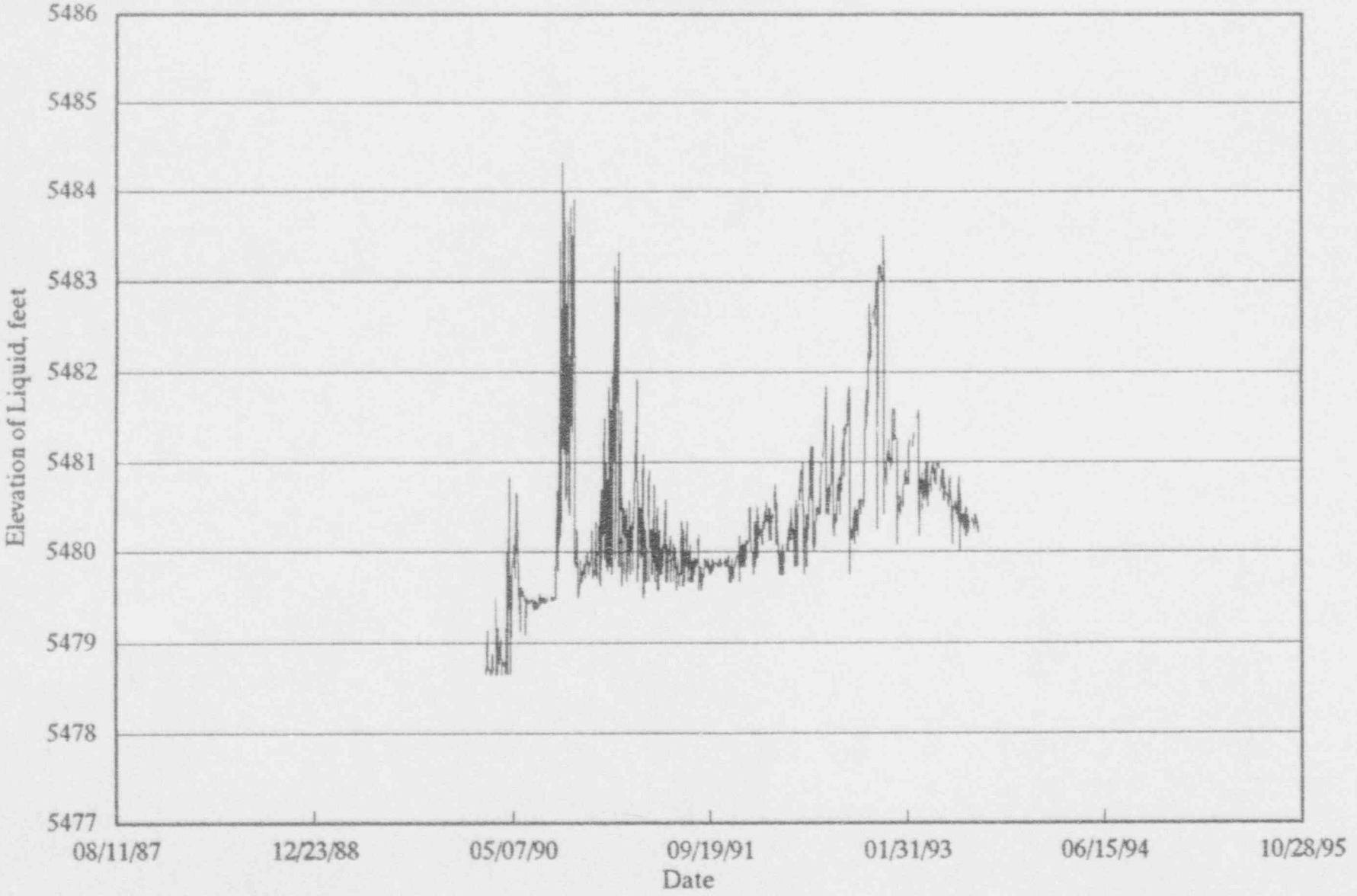
White Mesa Mill

Cell 2 West 4 Settlement Plate



Cell 4A Leak Detection System

Daily Measurements



Thru 10-31-91

Rev. by
UB 9/20/92

LC26492

C2 = Cell 2, etc.
FAP = Fly Ash Pond

Date	Report Frequency	Area	Carried Forward?	General Observations – Observations of Potential Concern
07/01/92	Daily	C4a	yes	Liner repairs being planned
07/01/92	Daily	C4a	no	Prairie was observed at solution edge in C4a. Burrow at NE corner at fence
07/02/92	Daily	C1I	no	Islands devoloping in C1I due to evaporation of solutions
07/06/92	Daily	C2	yes	Pumping C2 slimes drain into C3
07/13/92	Daily	C1I	no	Covered 3 areas of exposed liner along west bank of C3
07/20/92	Daily	C3	no	Prairie dog holes found inside of dike on C3. Holes excavated no liner damage
07/27/92	Daily	C3	no	Covered small section of liner at west corner of C3
07/27/92	Daily	C2	no	Pumped solution from rains in C2 into C3
07/02/92	Weekly	C2	yes	Pumping C2 slimes drain into C3
07/09/92	Weekly	C2	no	Pumped solution pool in C2 into C3
07/16/92	Weekly	C2	no	3 days spent on prairie dog control. Dirt from fuel tanks being placed near dump
07/23/92	Weekly	C2	no	Pumped solution pool in C2 into C3. C2 slimes drain still pumping
07/30/92	Weekly	C4a	no	Pumped C4a leak detection system
07/31/92	Monthly	ALL	no	Annual tailings inspection conducted on 7-14-92 by Frank Weber
07/31/92	Monthly	Div	yes	Tumble weeds need cleaned out of the diversion ditches

Monthly Inspection Data

Date: 7-30-92

1. Slurry Pipeline

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

NO DISCHARGE

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Monthly Inspection Data

Date: 7-30-92

Inspector: D.S. Schiemon

2. Surface Water Control Structures

Diversion Ditch 1: Need tumble weeds cleaned from ditch

Diversion Ditch 2: need some tumble weeds removed

Diversion Ditch 3: need tumble weeds removed and side gravel topsoiled

Diversion Berm 2: ok looks good

Mill and Facilities Area Sedimentation Pond:

ok

Remarks: Annual tailings inspection completed. Having some problems with prairie dogs at cell 3.

Overspray Minimization Evaluation: None observed

WEEKLY INSPECTION DATA

Date: 7-30-92

Inspector: Schierman/Wilson

1. Pond Elevations (msl, ft)
   - Cell 1-I: 5610.33
   - Cell 2: dry
   - Cell 3: 5596.13
   - Cell 4A: 5571.6

2. Underdrain Liquid Levels
   - Cell 1-I: dry
   - Cell 2: 35.60' to liq, 2,870, ..., pumped
   - Cell 3: dry
   - Cell 4A: 119'10"

3. Tailings Area Inspection (Note dispersal of blowing tailings)

none noted

Control Methods Implemented: none needed

Remarks: #2 Slimes pumping, pumped Cell 4A LD on 7-28-92 118'8" → 120'3"

Contaminated Waste Dump: dump area & signage in good shape

Cell 2E 5624.27
Cell 2W 5619.70

DAILY INSPECTION DATA

Inspector: Gary Holyoak
Date: 7-21-92
Accompanied by:
Time:

Any Item not "ok" must be documented. A check mark = OK, X = Action Required.

I. TAILINGS SLURRY TRANSPORT SYSTEM

Inspection Items	Condition of Potential Concern	Cell 1-I	Cell 2	Cell 3	Cell 4A
* Slurry Pipeline	Leaks, Damage, Blockage, Sharp Bends	ok	ok	ok	ok
* Pipeline Joints	Leaks, Loose Connections	NO SLURRY DISCHARGE			
* Pipeline Supports	Damage, Loss of Support				
* Valves	Leaks, Blocked, Closed				
* Point(s) of Discharge	Improper Location or Orientation				

II. OPERATIONAL SYSTEMS

Inspection Items	Conditions of Potential Concern	Cell 1-I	Cell 2	Cell 3	Cell 4A
* Water Level	Greater Than Operating Level, Large Change Since Previous Inspection	✓	✓	✓	✓
* Beach	Cracks, Severe Erosion, Subsidence	✓	✓	✓	✓
* Liner and Cover	Erosion of Cover, Exposure of Liner	✓	✓	✓	✓

III. DIKES AND EMBANKMENTS

Inspection Items	Conditions of Potential Concern	Dike 1-I	Dike 1-IA	Dike 2	Dike 3	Dike 4A-S	Dike 4A-N
* Slopes	Sloughs or Sliding Cracks, Bulges, Subsidence, Severe Erosion, Moist Areas, Areas of Seepage Outbreak	✓	✓	✓	✓	✓	✓
* Crest	Cracks, Subsidence, Severe Erosion	✓	✓	✓	✓	✓	

IV. FLOW RATES	Slurry Line(s)	Pond Return	S-X Tails	Spray System
* GPM	0	0	0	0

V. PHYSICAL INSPECTION OF SLURRY LINE(S) No, Drill Down

* Walked to Discharge Point ____Yes ✓ No
* Observed Entire Discharge Line ____Yes ✓ No

Inspector: Gary Holbrook
Date: 7/1/92

VI. DUST CONTROL

	Cell 2	Cell 3	Cell 4A
* Dusting Some	✓	✓	✓
* Wind Movement of Tailings S to E	✓	✓	✓

Precipitation: 0 inches liquid
General Meteorological Conditions: Windy & cloudy.

VII. DAILY LEAK DETECTION CHECK

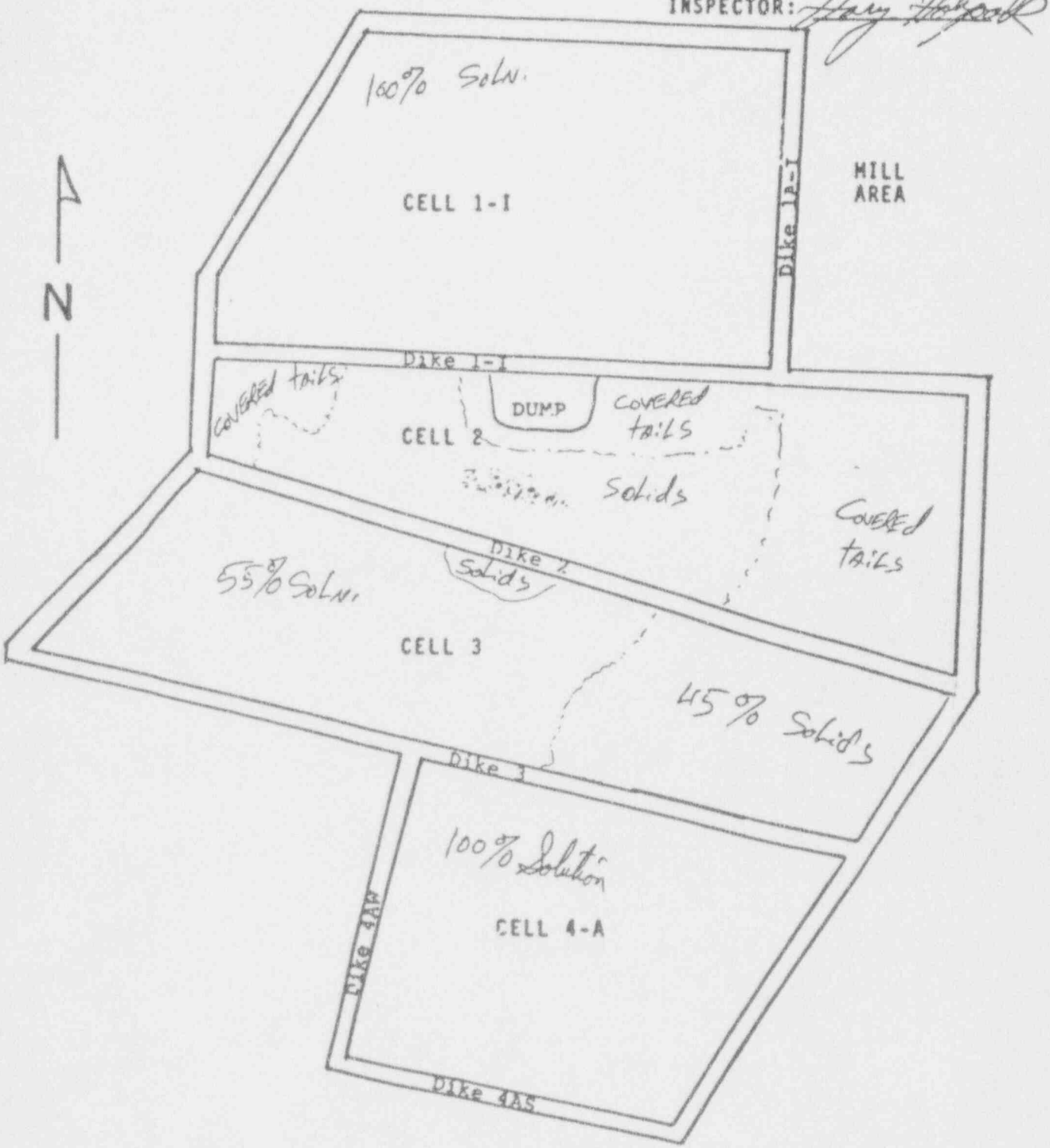
* Leak Detection System Under Cell 4-A Checked. 18'11" Wet ____ Dry

Initial level 18'11"
Final level —
Gallons pumped 0

VIII. Observations of Potential Concern	Action Required
prairie dog was down to solution edge in cell 4-A N-E corner has a burrow at fence row.	trap or gas it.

DAILY . SPECTION REPORT
TAILINGS SLURRY DISCHARGE LOCATION

DATE: 7-1-92
INSPECTOR: Gary Hathcock



Rev. by WB
9/17/92

LC26492

C2 = Cell 2, etc.
FAP = Fly Ash Pond

Date	Report Frequency	Area	Carried Forward?	General Observations -- Observations of Potential Concern
08/01/92	Daily	C4a	yes	Liner repairs being planned
08/03/92	Daily	C3	no	Walked C3 for additional prairie dog holes. Found 4 no damage filled in holes
08/04/92	Daily	C1I	no	Islands devoloping in C1I geting larger due to evaporation of solutions
08/04/92	Daily	C2	yes	Pumping C2 slimes drain into C3
08/23/92	Daily	C2	no	Pumped solution from rains in C2 into C3
08/24/92	Daily	C2	yes	Started placing cover on C2. Covered exposed liner west bank C3
08/06/92	Weekly	C3	no	Checked bank of C3 for prairie dog holes none found
08/12/92	Weekly	C2	no	C2 slimes drain pumping into C3. No dog holes found on C3 dike
08/20/92	Weekly	C2	no	Cover on C2 scheduled to start next week
08/27/92	Weekly	C3	yes	3 prairie dog holes found inside of C3 dike, dug out, no damage, filled in
08/31/92	Monthly	C3	no	Aditional prairie dog holes found on inside of dike on C3, no damage
08/31/92	Monthly	ALL	no	started cover placement on C2 8-24-92
08/31/92	Monthly	Div	yes	Tumble weeds need cleaned out of the diversion ditches

Monthly Inspection Data

Date: 8/31/92

1. Slurry Pipeline

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

NO DISCHARGE

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Monthly Inspection Data

Date: 8/31/92

Inspector: Schinman

2. Surface Water Control Structures

Diversion Ditch 1: Some work on to maintain weed removal is needed. Bottom of ditch needs to be leveled in areas that have shifted.

Diversion Ditch 2: }

Diversion Ditch 3: }

Diversion Berm 2: Looks good

Mill and Facilities Area Sedimentation Pond:

Remarks: Started placement of covers on 8/24/92

C2 slimes drain still pumping

Some additional prairie dog holes found in C3 no damage and filled in

Overspray Minimization Evaluation:

No overspray observed.

WEEKLY INSPECTION DATA

Date: 27 August 1992

Inspector: S.R.C./D.R.W.

1. Pond Elevations (msl, ft)

Cell 1-I: 5609.94

Cell 2: dry

Cell 3: 5595.82

Cell 4A: 5570.5 est.

2. Underdrain Liquid Levels

Cell 1-I: dry

Cell 2: 3578' to liq., 2,690 µhmos, Qpu

Cell 3: dry

Cell 4A: 1188"

3. Tailings Area Inspection (Note dispersal of blowing tailings)

slim to none

Control Methods Implemented: covering on 2 raised this week, no others needed

Remarks: 3 dog holes on inside of 3, dug out, no damages, filled back, 2 slimes still pumping

Contaminated Waste Dump: dump area & sign in good shape

Cell 2E 5624.30

Cell 2W 569.70

Cell 4A 5577.0

DAILY INSPECTION DATA

Inspector: Scott I. Scherman
Date: 8-31-92
Accompanied by: —
Time: 9:00 - 9:45

Any Item not "ok" must be documented. A check mark = OK, X = Action Required.

I. TAILINGS SLURRY TRANSPORT SYSTEM Inspection Items	Condition of Potential Concern	Cell 1-I	Cell 2	Cell 3	Cell 4A
• Slurry Pipeline	Leaks, Damage, Blockage, Sharp Bends	✓	✓	✓	✓
Pipeline Joints	Leaks, Loose Connections	✓	✓	✓	✓
• Pipeline Supports	Damage, Loss of Support	✓	✓	✓	✓
• Valves	Leaks, Blocked, Closed	✓	✓	✓	✓
• Point(s) of Discharge	Improper Location or Orientation	✓	✓	✓	✓

II. OPERATIONAL SYSTEMS Inspection Items	Conditions of Potential Concern	Cell 1-I	Cell 2	Cell 3	Cell 4A
• Water Level	Greater Than Operating Level, Large Change Since Previous Inspection	✓	✓	✓	✓
• Beach	Cracks, Severe Erosion, Subsidence	✓	✓	✓	✓
• Liner and Cover	Erosion of Cover, Exposure of Liner	✓	✓	✓	*

III. DIKES AND EMBANKMENTS Inspection Items	Conditions of Potential Concern	Dike 1-I	Dike 1-IA	Dike 2	Dike 3	Dike 4A-S	Dike 4A-N
• Slopes	Sloughs or Sliding Cracks, Bulges, Subsidence, Severe Erosion, Moist Areas, Areas of Seepage Outbreak	✓	✓	✓	✓	✓	✓
• Crest	Cracks, Subsidence, Severe Erosion	✓	✓	✓	✓	✓	✓

IV. FLOW RATES	Slurry Line(s)	Pond Return	S-X Tails	Spray System
⊘ • GPM	⊘	⊘	⊘	⊘

* Cell 4a liner repairs planned

V. PHYSICAL INSPECTION OF SLURRY LINE(S)

• Walked to Discharge Point	___ Yes	✓ No
• Observed Entire Discharge Line	✓ Yes	___ No

Inspector: Ichiman
Date: 8-31-92

I. DUST CONTROL

	Cell 2	Cell 3	Cell 4A
• Dusting	✓	✓	✓
• Wind Movement of Tailings	✓	✓	✓

Precipitation: 0.21 inches liquid
General Meteorological Conditions: Estimate of dusting in C2 at winds >25 mph = 30%
Estimate of dusting in C3 at winds >25 mph = 25%

II. DAILY LEAK DETECTION CHECK

• Leak Detection System Under Cell 4A Checked. ✓ Wet ____ Dry

Initial level 118' 8"
Final level ____
Gallons pumped ____

VIII. Observations of Potential Concern

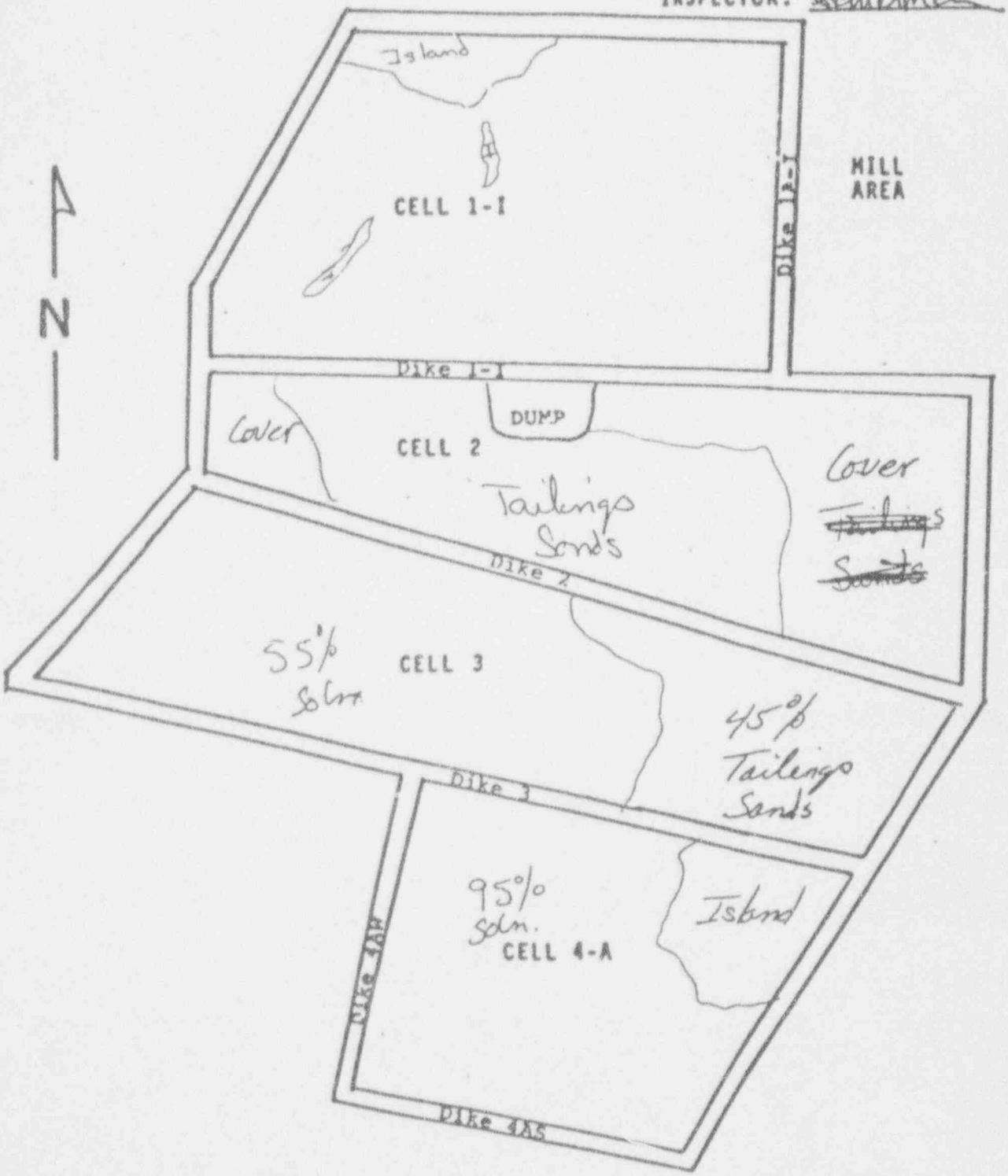
Started placing cover on Cell 2 on 8/24/92

Action Required

DAILY INSPECTION REPORT
TAILINGS SLURRY DISCHARGE LOCATION

DATE: 8/31/92

INSPECTOR: ~~Schuiman~~



LC26992

C2 = Cell 2, etc.
FAP = Fly Ash Pond

Date	Report Frequency	Area	Carried Forward?	General Observations - Observations of Potential Concern
09/01/92	Daily	C4a	yes	Liner repairs being planned
09/01/92	Daily	C2	yes	Placement of cover material on C2 continues
09/01/92	Daily	C2	yes	Pumping C2 slimes drain into C3
09/01/92	Daily	C4	no	Survey crew working around C4
09/01/92	Daily	C2	no	Pumped solution pool from rains in C2 into C3
09/02/92	Daily	C2	yes	Islands devoloping in C1I and C4
09/14/92	Daily	C2	no	Shut down C2 slimes drain low flow. Notified Butch problem corrected
09/17/92	Daily	C2	no	Pumped solution pool from C2 into C3
09/19/92	Daily	C2	no	Pumped solution pool from C2 into C3. Received .76 inches of rain
09/20/92	Daily	C2	no	Pumped solution pool from C2 into C3.
09/21/92	Daily	C1I	no	3ft section of exposed liner observed on east bank C1I Covered by Shifter
09/28/92	Daily	C2	yes	Slimes drain pump at C2 not operating. Electrical problems being worked on
09/30/92	Daily	C2	no	Slimes drain pump on C2 repaired
09/02/92	Weekly	C3	no	Walked south side of C3 dike no prairie dog holes found
09/09/92	Weekly	C2	no	Pumped C4A leak detection On 9-8-92. Pumped solution pool in C2 into C3
09/17/92	Weekly	C2	yes	Slimes drain on C2 pumping
09/24/92	Weekly	C3	no	Checked south side of C3 for prairie dog holes none found on inside of dike
09/01/92	Monthly	Div	no	Tumble weeds have been cleaned out of the diversion ditches. Locks good

Rev. by
W. Bain

Inspector Schiesman
Date 9/30/92

WHITE MESA PROCEDURES MANUAL

Quarterly Inspection Data

1. Embankment Inspection: Embankments look good. Some prairie dog holes observed on inside dike of cell 3 no damage occured. Exposed liners noted during daily inspections were covered looks good.

2. Operations/Maintenance Review:
Maintenance placing cover on cell 2.
Slimes drain being pumped from cell 2 into Cell 3 Pump repairs 9/30/92

3. Post-construction Changes:
Fly Ash pond filled

4. Summary: Cell 4a liner repairs being evaluated by Eng Dept.
Some repairs needed to restricted area fence north of Cell

Monthly Inspection Data

Date: 9/30/98

1. Slurry Pipeline

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

NO DISCHARGE

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

WEEKLY TAILINGS INSPECTION

DATE: 24 Sept. 1992
INSPECTOR: S.R.C./J.R.W.

1. Pond Elevations (msl, ft)

Cell 1–I: 5609.65
Cell 2: dry
Cell 3: 5595.15
Cell 4A: NA/ about pond E 50½

2. Underdrain liquid levels

Cell 1–I: dry
Cell 2: 35.71' to liq, 2,870 gal 1½ gal
Cell 3: dry
Cell 4A: 119.7"

3. Settlement monitors

Cell 2 East: 5624.06
Cell 2 West: 5619.65
Cell 4A Toe: 5577.0

4. Tailings Area Inspection (Note dispersal of blowing tailings) none noted

5. Control Methods Implemented: still covering on Cell 2

6. Remarks: #2 Slimes drain still pumping, went on dog (prairie) patrol today

7. Contaminated Waste Dump: dump area is moving on out in cell 2 due to covering, sign is out of way of machinery but in good visibility

DAILY INSPECTION DATA

Inspector: S. CHRISTENSEN
Date: 9-30-92
Accompanied by:
Time: 1:15 pm

Any Item not "ok" must be documented. A check mark = OK, X = Action Required.

I. TAILINGS SLURRY TRANSPORT SYSTEM

Inspection Items	Condition of Potential Concern	Cell 1-I	Cell 2	Cell 3	Cell 4A
• Slurry Pipeline	Leaks, Damage, Blockage, Sharp Bends	✓	✓	✓	✓
Pipeline Joints	Leaks, Loose Connections	✓	✓	✓	✓
• Pipeline Supports	Damage, Loss of Support	✓	✓	✓	✓
• Valves	Leaks, Blocked, Closed	✓	✓	✓	✓
• Point(s) of Discharge	Improper Location or Orientation	✓	✓	✓	✓

II. OPERATIONAL SYSTEMS

Inspection Items	Conditions of Potential Concern	Cell 1-I	Cell 2	Cell 3	Cell 4A
• Water Level	Greater Than Operating Level, Large Change Since Previous Inspection	✓	✓	✓	✓
• Beach	Cracks, Severe Erosion, Subsidence	✓	✓	✓	✓
• Liner and Cover	Erosion of Cover, Exposure of Liner	✓	✓	✓	✓

III. DIKES AND EMBANKMENTS

Inspection Items	Conditions of Potential Concern	Dike 1-I	Dike 1-IA	Dike 2	Dike 3	Dike 4A-S	Dike 4A-N
• Slopes	Sloughs or Sliding Cracks, Bulges, Subsidence, Severe Erosion, Moist Areas, Areas of Seepage Outbreak	✓	✓	✓	✓	✓	✓
• Crest	Cracks, Subsidence, Severe Erosion	✓	✓	✓	✓	✓	✓

IV. FLOW RATES

	Slurry Line(s)	Pond Return	S-X Tails	Spray System
• GPM				

No Flows - Mill Down

V. PHYSICAL INSPECTION OF SLURRY LINE(S)

- Walked to Discharge Point ✓ Yes ____ No
- Observed Entire Discharge Line ✓ Yes ____ No

Inspector: S. Christensen
Date: 9-30-92

	Cell 2	Cell 3	Cell 4A
I. DUST CONTROL			
• Dusting • Wind Movement of Tailings NONE			
Precipitation: 0 inches liquid General Meteorological Conditions:			

II. DAILY LEAK DETECTION CHECK

• Leak Detection System Under Cell 4 Checked. ✓ Wet ____ Dry

Initial level 119' 7 1/4"
Final level _____
Gallons pumped _____

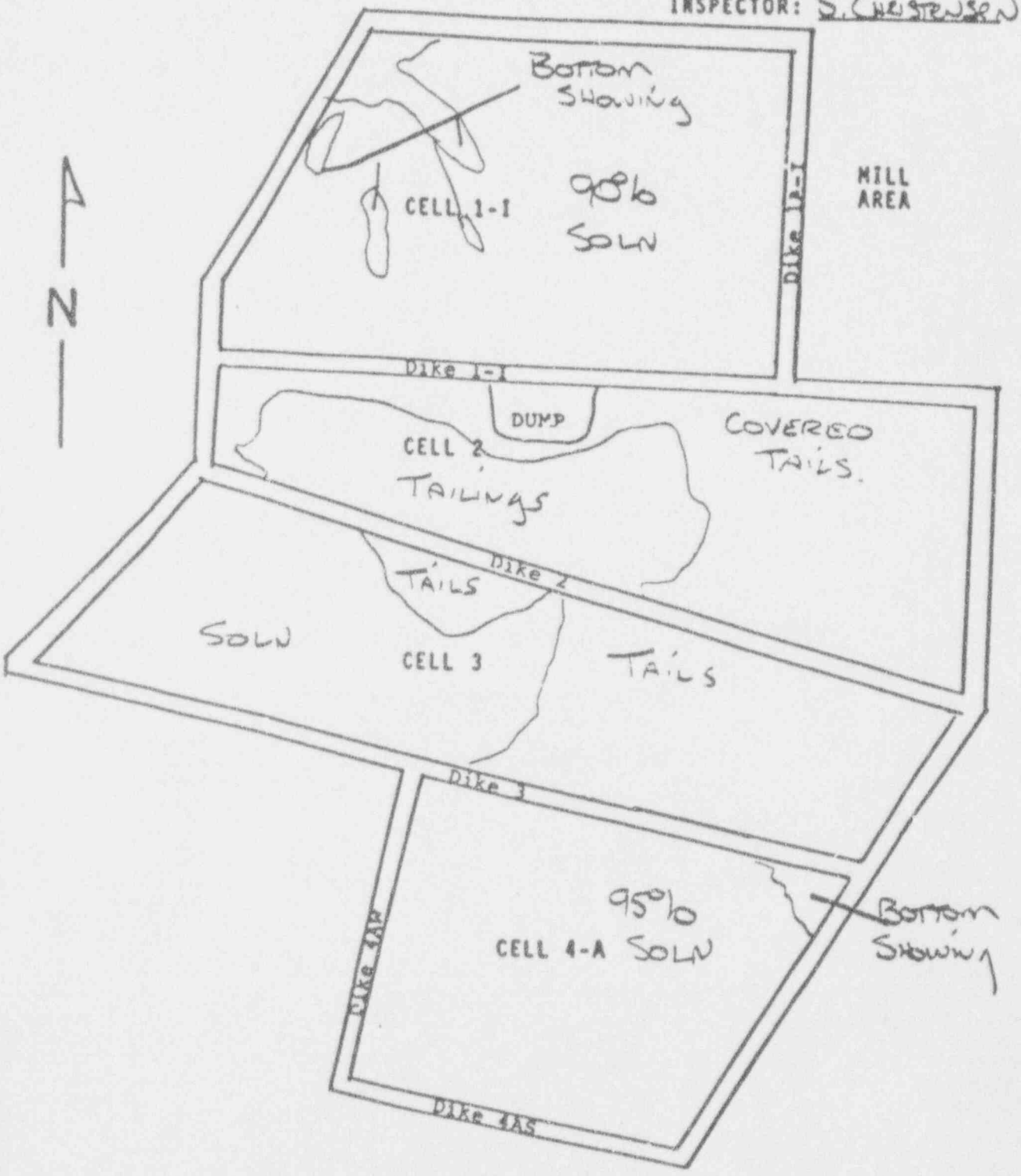
III. Observations of Potential Concern

Covering Cell # 2
Stines sump pump is pumping Again

Action Required

DAILY SPECTION REPORT
TAILINGS SL. .F DISCHARGE LOCATION

DATE: 9-30-92
INSPECTOR: S. CHRISTENSEN



White Mesa Mill

Date: 20-Dec-92

Reviewed W. B. by 12/21/92

LC261092

C2 = Cell 2, etc.
FAP = Fly Ash Pond

Date	Report Frequency	Area	Carried Forward?	General Observations -- Observations of Potential Concern
10/01/92	Daily	C4a	yes	Liner repairs being planned
10/01/92	Daily	C2	yes	Placement of cover material on C2 continues
10/01/92	Daily	C2	yes	Pumping C2 slimes drain into C3
10/05/92	Daily	C3	yes	Some evidenance of tailings movement from C3. C3 cover placement planned
10/14/92	Daily	C2	yes	Placement of cover material on C2 has been haulted temporarily
10/19/92	Daily	C2	no	Pumped solution pool from C2 into C3
10/22/92	Daily	C2	no	C2 slimes drain pump not pumping. Bruce will check on it
10/23/92	Daily	C2	no	C2 slimes drain pump is repaired and working
10/24/92	Daily	C2	yes	C2 slimes drain pump running but not pumping any solutions turned pump off
10/25/92	Daily	C2	no	Pumped solution pool from C2 into C3.
10/26/92	Daily	C3	no	Covered 1ft area of exposed liner on west end of C3
10/31/92	Daily	C2	no	Pumped solution pool from C2 into C3.
10/01/92	Weekly	C2	yes	Slimes drain pump on C2 repaired and pumping
10/08/92	Weekly	C3	yes	Some wind movement of tailings from C3. C2 slimes drain pump not working
10/15/92	Weekly	C2	yes	Slimes drain pump not working new pump has been ordered
10/21/92	Weekly	C2	yes	Slimes drain on C2 repaired. C4 leak detection pump burned up parts ordered
10/28/92	Weekly	C2	no	Pumped solution pool from C2 into C3
10/31/92	Monthly	C2	no	Cover placement stopped on C2 due to equipment problems

Monthly Inspection Data

Date: 10/31/92

1. Slurry Pipeline

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

DISCHARGE N/A

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Monthly Inspection Data

Date: 10/31/12

Inspector: Scherman

2. Surface Water Control Structures

Diversion Ditch 1: Good

Diversion Ditch 2: Good

Diversion Ditch 3: Good

Diversion Berm 2: Good

Mill and Facilities Area Sedimentation Pond:

- NA -

Remarks: Cover placement started on cell 2 due to equipment breakdown.

Overspray Minimization Evaluation:

None noted

WEEKLY TAILINGS INSPECTION

DATE: 1 October 1992
INSPECTOR: S.L.S. / S.R.C.

1. Pond Elevations (msl, ft)
   - Cell 1-I: 5609.58
   - Cell 2: dry
   - Cell 3: ~~5597.68~~ 5595.46
   - Cell 4A: about panel 50 1/4 E (not across bottom)

2. Underdrain liquid levels
   - Cell 1-I: dry
   - Cell 2: dry (could not get conductivity in puddle)
   - Cell 3: dry
   - Cell 4A: 119.7

3. Settlement monitors
   - Cell 2 East: 5624.24
   - Cell 2 West: 5619.46
   - Cell 4A Toe: monthly

4. Tailings Area Inspection (Note dispersal of blowing tailings) none noted

5. Control Methods Implemented: none needed

6. Remarks: #2 Slimes drain pumping again, #2 Standpipe did not have enough water in the bottom to get a conductivity on the water

7. Contaminated Waste Dump: dump area being pushed out, sign not right next to area to keep it out of workers road, visible in area - Shungle

WEEKLY TAILINGS INSPECTION

DATE: October 28, 1992
INSPECTOR: S.R.C./J.R.W.

1. Pond Elevations (msl, ft)
   - Cell 1-I: 5609.14
   - Cell 2: dry
   - Cell 3: 5593.44
   - Cell 4A: not covering bottom

2. Underdrain liquid levels
   - Cell 1-I: dry
   - Cell 2: 35.87' to liq, 2,930 gallons, Open
   - Cell 3: dry
   - Cell 4A: 117'6" pump out of order

3. Settlement monitors
   - Cell 2 East: 5624.29
   - Cell 2 West: 5619.59
   - Cell 4A Toe: 5577.01

4. Tailings Area Inspection (Note dispersal of blowing tailings) none noted

5. Control Methods Implemented: real wet spell, none needed

6. Remarks: Cell 2 Slimes pump in working order again & pumping good stream. Pumped Cell 2 piddle today. Pump in Cell 4 leak detector is burnt up; parts are ordered

7. Contaminated Waste Dump: dump area & dikes in good shape

DAILY INSPECTION DATA

Inspector: M Gallagher
Date: 10/31/92
Accompanied by: —
Time: 1100

y Item not "ok" must be documented. A check mark = OK, X = Action Required.

I. TAILINGS SLURRY TRANSPORT SYSTEM Inspection Items	Condition of Potential Concern	Cell 1-I	Cell 2	Cell 3	Cell 4A
		ok	ok	ok	ok
• Slurry Pipeline	Leaks, Damage, Blockage, Sharp Bends	↓	↓	↓	↓
Pipeline Joints	Leaks, Loose Connections				
• Pipeline Supports	Damage, Loss of Support				
• Valves	Leaks, Blocked, Closed				
• Point(s) of Discharge	Improper Location or Orientation				

OPERATIONAL SYSTEMS Inspection Items	Conditions of Potential Concern	Cell 1-I	Cell 2	Cell 3	Cell 4A
		✓	✓	✓	✓
• Water Level	Greater Than Operating Level, Large Change Since Previous Inspection				
• Beach	Cracks, Severe Erosion, Subsidence	✓	✓	✓	✓
• Liner and Cover	Erosion of Cover, Exposure of Liner	✓	✓	✓	✓

. DIKES AND EMBANKMENTS Inspection Items	Conditions of Potential Concern	Dike 1-I	Dike 1-IA	Dike 2	Dike 3	Dike 4A-S	Dike 4A-W
		✓	✓	✓	✓	✓	✓
• Slopes	Sloughs or Sliding Cracks, Bulges, Subsidence, Severe Erosion, Moist Areas, Areas of Seepage Outbreak						
• Crest	Cracks, Subsidence, Severe Erosion	✓	✓	✓	✓	✓	✓

FLOW RATES	Slurry Line(s)	Pond Return	S-X Tails	Spray System
• GPM	0	0	0	0

PHYSICAL INSPECTION OF SLURRY LINE(S) Mill down no discharge

• Walked to Discharge Point — ___ Yes X No
• Observed Entire Discharge Line — X Yes ___ No

Inspector: M Leibrys
Date: 10-31-92

DUST CONTROL

Cell 2	Cell 3	Cell 4A
✓	✓	✓
✓	✓	—

* Dusting
* Wind Movement of Tailings

Precipitation: .43 inches liquid
neral Meteorological Conditions:
VAr Clouds & Cold

Pumped Sol from Cell #2 to Cell #3.

. DAILY LEAK DETECTION CHECK

* Leak Detection System Under Cell 4A Checked. X Wet ___ Dry

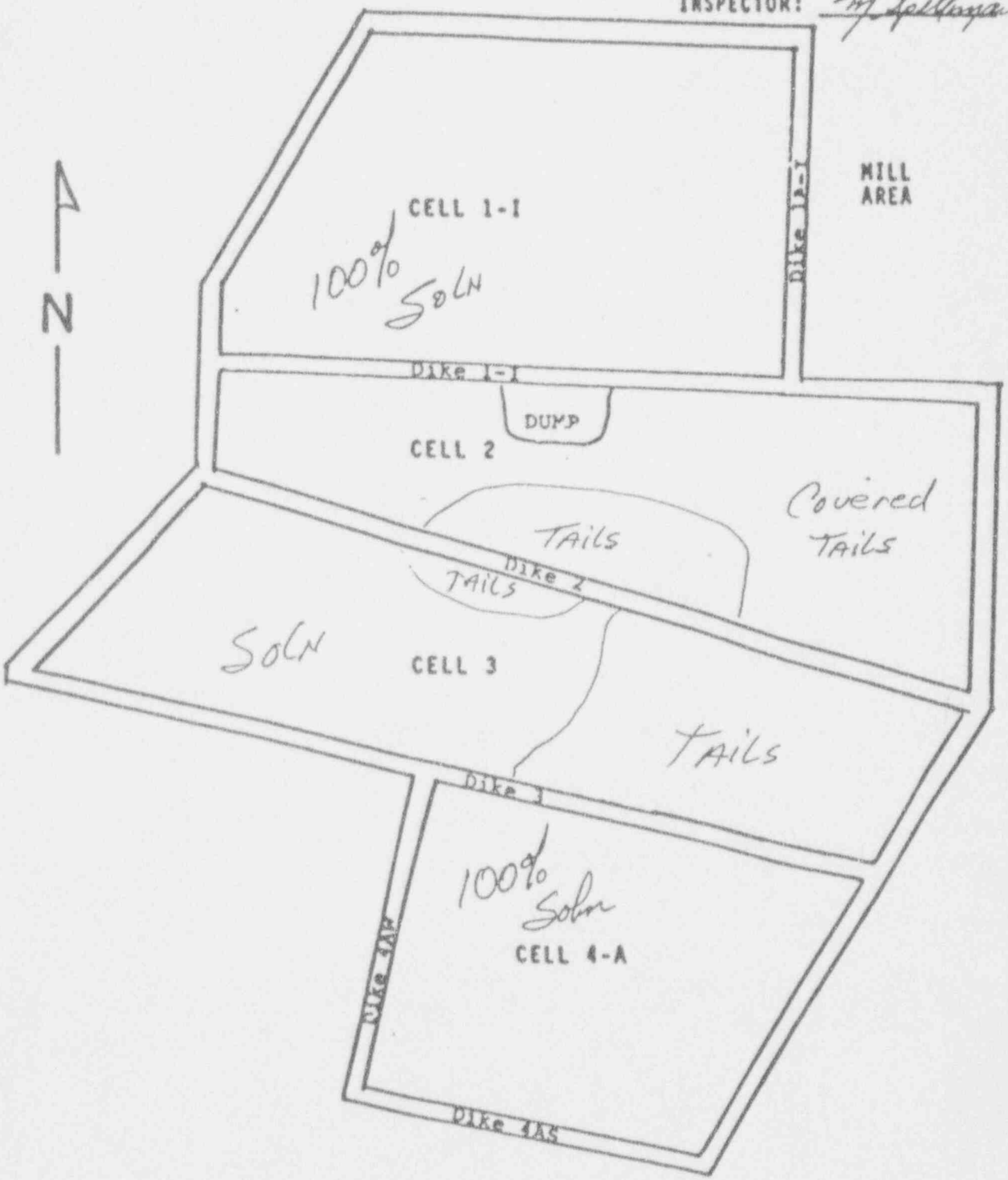
Initial level 117'6"
Final level ___
Gallons pumped ___

I. Observations of Potential Concern	Action Required

DAILY INSPECTION REPORT
TAILINGS SLURRY DISCHARGE LOCATION

DATE: 10-31-97

INSPECTOR: M. Gallagher



White Mesa Mill Date: 20-Dec-92 Page 1

Reviewed by WB 12/28/92

LC261192

C2 = Cell 2, etc.
FAP = Fly Ash Pond

Date	Report Frequency	Area	Carried Forward?	General Observations - Observations of Potential Concern
11/01/92	Daily	C4a	yes	Liner repairs being planned
11/01/92	Daily	C1	no	Covered section of exposed liner at east end of C1
11/02/92	Daily	C2	no	Covered 6' by 8' section of exposed liner west end of C2
11/12/92	Daily	C3	no	Pumping solutions from C1 into C3
11/16/92	Daily	C2	yes	Placing cover at west end of C2 at this time
11/17/92	Daily	C3	no	Pumping solutions from C1 into C3
11/18/92	Daily	C3	no	Pump in C1 is being repaired
11/19/92	Daily	C3	yes	Pumping solution from C1 into C3
11/20/92	Daily	C2	yes	Slimes drain pump not working power off to that area of tails
11/21/92	Daily	C2	no	Cleaned crystalls off sump pump in C1
11/22/92	Daily	C2	yes	C1 pump out for repairs. Solution pool C2 needs pumped when power returned
11/25/92	Daily	C2	yes	Pumping solution pool from C2 to C3. C1 pumping into C3 scratched
11/30/92	Daily	C3	no	Some evidence of dusting in C3. Started cover placement at east end C3
11/04/92	Weekly	C2	no	C2 slimes drain pumping. C4A leak detection pump down one on order
11/14/92	Weekly	C2	no	Spent week on tailings with consulant no survey done
11/18/92	Weekly	C2	no	Slimes drain on C2 pumping. pumping C1 into C3. C4A pump not here
11/25/92	Weekly	C2	no	3 new movement monitors surveyed in on C2. Shifter pumped pool at C2 into C3
11/30/92	Monthly	C3	no	Started cover placement at west end C3. 3 settlement plates added to C2 cover

Monthly Inspection Data

Date: 11/30/92

1. Slurry Pipeline

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

NO DISCHARGE

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Monthly Inspection Data

Date: 11/30/92

Inspector: Schuman

2. Surface Water Control Structures

Diversion Ditch 1: Good no problems observed

Diversion Ditch 2: Good no problems observed

Diversion Ditch 3: Good no problems observed

Diversion Berm 2: Good no problems observed

Mill and Facilities Area Sedimentation Pond: - NA -

Remarks: Cover placement finished on cell 2 for year. Added three additional ~~cracked~~ settlement plates to cover on cell 2. Started cover placement on cell 3.

Overspray Minimization Evaluation:

None noted.

WEEKLY TAILINGS INSPECTION

DATE: 11-25-92
INSPECTOR: S.R.C. / J.R.W.

1. Pond Elevations (msl, ft)
   - Cell 1-I: 5608.23
   - Cell 2: dry
   - Cell 3: 5595.57
   - Cell 4A: West Edge of Panel 50

2. Underdrain liquid levels
   - Cell 1-I: dry
   - Cell 2: 35.49 to liq, 1,570 µmhos, @ pum
   - Cell 3: dry
   - Cell 4A: 116'9"

3. Settlement monitors
   - Cell 2 East: 5624.27
   - Cell 2 West: ① 5619.6 ② 5617.28 ③ 5619.38 ④ 5618.
   - Cell 4A Toe: 5577.0

4. Tailings Area Inspection (Note dispersal of blowing tailings) none noted

5. Control Methods Implemented: cover to start Monday Nov. 30 on Cell 3

6. Remarks: did the initial levels on 3 new movement monitors on Cell 2 Cover area, will number these on their poles, shifter pumped puddle in Cell 2, slimes drain line frozen so no pumping there today

7. Contaminated Waste Dump: dump area & sign in good shape

DAILY INSPECTION DATA

Inspector: A. L. Scherman
Date: 11/30/92
Accompanied by: S.R. Watson
Time: 9:00 AM to 11:00 AM

Any Item not "ok" must be documented. A check mark = OK, X = Action Required.

I. TAILINGS SLURRY TRANSPORT SYSTEM

Inspection Items	Condition of Potential Concern	Cell 1-I	Cell 2	Cell 3	Cell 4A
* Slurry Pipeline	Leaks, Damage, Blockage, Sharp Bends	✓	✓	✓	✓
* Pipeline Joints	Leaks, Loose Connections	✓	✓	✓	✓
* Pipeline Supports	Damage, Loss of Support	✓	✓	✓	✓
* Valves	Leaks, Blocked, Closed	✓	✓	✓	✓
* Point(s) of Discharge	Improper Location or Orientation	✓	✓	✓	✓

I. OPERATIONAL SYSTEMS

Inspection Items	Conditions of Potential Concern	Cell 1-I	Cell 2	Cell 3	Cell 4A
* Water Level	Greater Than Operating Level, Large Change Since Previous Inspection	✓	✓	✓	✓
* Beach	Cracks, Severe Erosion, Subsidence	✓	✓	✓	✓
* Liner and Cover	Erosion of Cover, Exposure of Liner	✓	✓	✓	*

II. DIKES AND EMBANKMENTS

Inspection Items	Conditions of Potential Concern	Dike 1-I	Dike 1-IA	Dike 2	Dike 3	Dike 4A-S	Dike 4A-W
* Slopes	Sloughs or Sliding Cracks, Bulges, Subsidence, Severe Erosion, Moist Areas, Areas of Seepage Outbreak	✓	✓	✓	✓	✓	✓
* Crest	Cracks, Subsidence, Severe Erosion	✓	✓	✓	✓	✓	✓

V. FLOW RATES	Slurry Line(s)	Pond Return	S-X Tails	Spray System
0 * GPM				0

Liner ~~[illegible]~~ repairs planned to cell 4a.

V. PHYSICAL INSPECTION OF SLURRY LINE(S)

* Walked to Discharge Point ______ Yes ✓ No
* Observed Entire Discharge Line ✓ Yes ______ No

Inspector: Schierman
Date: 11/30/92

	Cell 2	Cell 3	Cell 4A
. DUST CONTROL			
* Dusting	✓	✓	✓
* Wind Movement of Tailings	✓	*	✓

Estimate of potential for dusting from cell 2 in winds >25 mph is 15%
Estimate of potential for dusting from cell 3 in winds >25 mph is 85%

Precipitation: _____ inches liquid
General Meteorological Conditions:

II. DAILY LEAK DETECTION CHECK

* Leak Detection System Under Cell 4a Checked. ✓ Wet ____ Dry

Initial level 117'
Final level _____
Gallons pumped _____

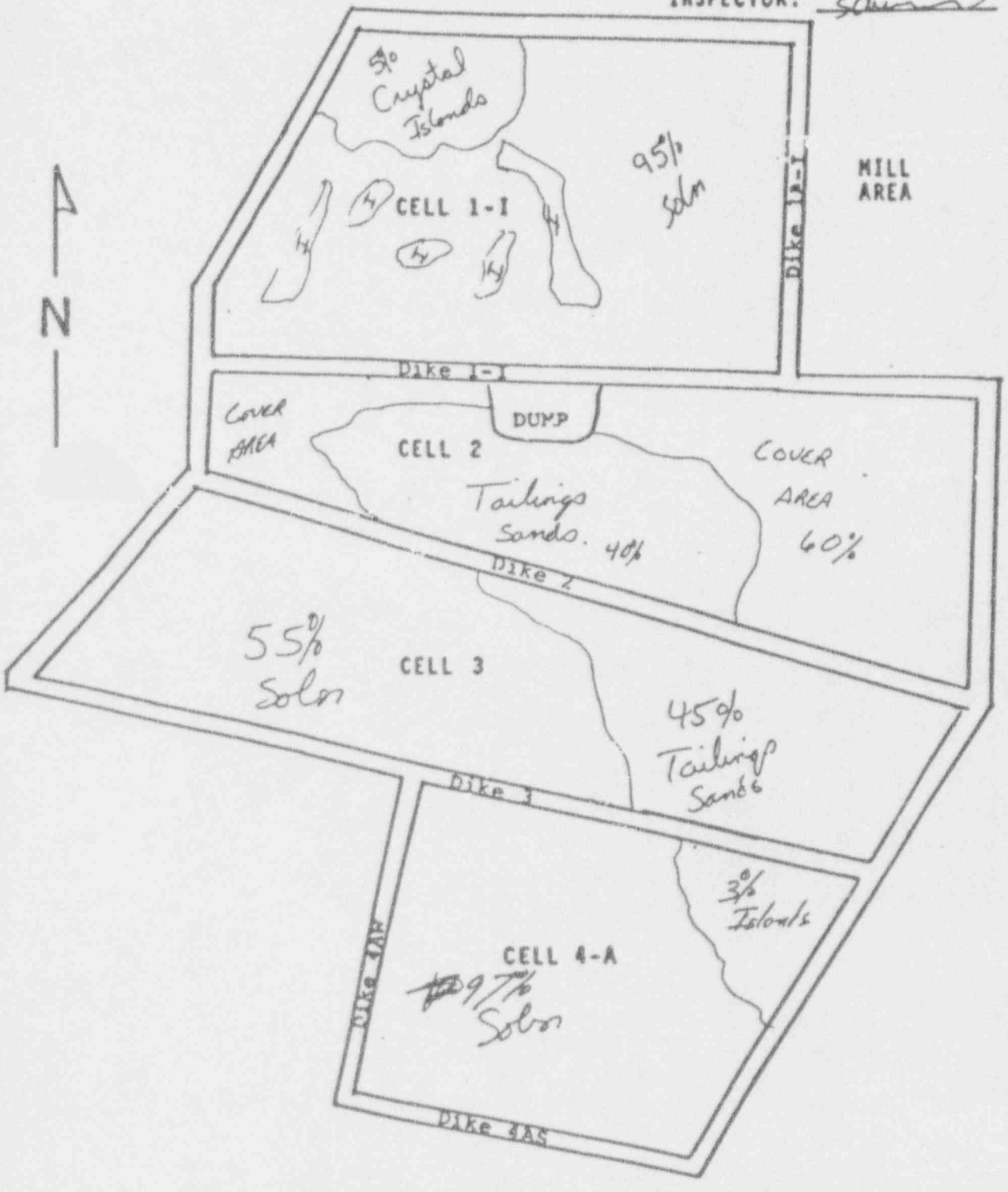
III. Observations of Potential Concern

Cell 3 sands surface is being allowed to dry to allow cover placement. Some dusting and evidence of dusting has been observed from cell 3. Cover placement has started at the east end of cell 3.

Action Required

DAILY INSPECTION REPORT
TAILINGS SLURRY DISCHARGE LOCATION

DATE: 11/30/92
INSPECTOR: Schumacher



Rev by LB

LC261292

C2 = Cell 2, etc.
FAP = Fly Ash Pond

Date	Report Frequency	Area	Carried Forward?	General Observations -- Observations of Potential Concern
12/01/92	Daily	C4a	yes	Liner repairs being planned
12/01/92	Daily	C3	yes	Cover placement continues on C3
12/02/92	Daily	C4a	no	Pumping C4a leak detection at time of inspection
12/17/92	Daily	C3	no	Sump pump in C2 is frozen no danger of solution levels getting to high
12/28/92	Daily	C2	no	No checks made due to snowy road conditions
12/03/92	Weekly	C4a	no	Pumped cell 4A leak detection. Placing cover on east end of C3
12/10/92	Weekly	C2	no	Pumped solution pool in C2. Slimes drain pumping good. Monitor wells finished
12/16/92	Weekly	C2	no	Slimes drain on C2 pumping. C2 sump pump frozen
12/21/92	Weekly	C2	no	Dump area and sign in good shape
12/31/92	Weekly	C2	no	Pumping C2 slimes drain. Cover placement on C3 continues
12/15/92	Monthly	C3	no	Cover placement continues on east end of C3. New monitor wells finished

Inspector D. J. Hehrman
Date 12-15-82

WHITE MESA PROCEDURES MANUAL

Quarterly Inspection Data

1. Embankment Inspection: Embankments look good. Prairie dog holes along cell 3 have been filled in as new holes observed. When exposed liners has been observed areas covered promptly.

2. Operations/Maintenance Review:
Maintenance finished cover placement on C2 and has started cover placement at east end of C3.
Continue to pump C2 sumps down
Pumped some solution from C1 into C3

3. Post-construction Changes:
Fly Ash pond filled

4. Summary:
Drillers and consultant in to direct pore and monitor wells.
C4a liner system being evaluated by Eng Dept.

Monthly Inspection Data

Date: 12/15/92

1. Slurry Pipeline

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

NO DISCHARGE

Monthly Inspection Data

Date: 12/15/92

Inspector: A. L. Atkinson

2. Surface Water Control Structures

Diversion Ditch 1: Looks good

Diversion Ditch 2: Looks good

Diversion Ditch 3: Looks good

Diversion Berm 2: Looks good

Mill and Facilities Area Sedimentation Pond:

-NA-

Remarks: Placement of cover finished on cell 2 and started at east end of cell 3

Pumping #2 slimes drain

Overspray Minimization Evaluation:

Not absorbed spraying was observed

WEEKLY TAILINGS INSPECTION

DATE: 31 Dec. 1992
INSPECTOR: S.R. Clark / J. Stack

1. Pond Elevations (msl, ft)

Cell 1-I: 5608.63
Cell 2: dry, puddle from snow melt
Cell 3: 5599.599
Cell 4A: not covering bottom

2. Underdrain liquid levels

Cell 1-I: dry
Cell 2: 35.4' to liq., 980 gal/hr, pumped
Cell 3: dry
Cell 4A: 118'6"

3. Settlement monitors

Cell 2 East: 5624.30
Cell 2 West: ① 5619.52 ② 5622.07 ③ 5618.35 ④ 5618.:
Cell 4A Toe: monthly, already done

4. Tailings Area Inspection (Note dispersal of blowing tailings) none exposed

5. Control Methods Implemented: none needed

6. Remarks: lots of snow cover still, lots of water running, cover on 3 advancing real well, #2 Slimes drain pumping, #2 Sump pump froze

7. Contaminated Waste Dump: dump area & sign in good shape

DAILY INSPECTION DATA

Inspector: W6 Burnett
Date: 12-31-92
Accompanied by:
Time: 0900 hrs

Any Item not "ok" must be documented. A check mark = OK, X = Action Required.

I. TAILINGS SLURRY TRANSPORT SYSTEM

Inspection Items	Condition of Potential Concern	Cell 1-I	Cell 2	Cell 3	Cell 4A
		ok	ok	ok	ok
* Slurry Pipeline	Leaks, Damage, Blockage, Sharp Bends	↓	↓	↓	↓
* Pipeline Joints	Leaks, Loose Connections				
* Pipeline Supports	Damage, Loss of Support	no slurry discharge			
* Valves	Leaks, Blocked, Closed				
* Point(s) of Discharge	Improper Location or Orientation				

II. OPERATIONAL SYSTEMS

Inspection Items	Conditions of Potential Concern	Cell 1-I	Cell 2	Cell 3	Cell 4A
* Water Level	Greater Than Operating Level, Large Change Since Previous Inspection	✓	✓	✓	✓
* Beach	Cracks, Severe Erosion, Subsidence	✓	✓	✓	✓
* Liner and Cover	Erosion of Cover, Exposure of Liner	✓	✓	✓	✓

III. DIKES AND EMBANKMENTS

Inspection Items	Conditions of Potential Concern	Dike 1-I	Dike 1-IA	Dike 2	Dike 3	Dike 4A-S	Dike 4A-W
* Slopes	Sloughs or Sliding Cracks, Bulges, Subsidence, Severe Erosion, Moist Areas, Areas of Seepage Outbreak	✓	✓	✓	✓	—	✓
* Crest	Cracks, Subsidence, Severe Erosion	✓	✓	✓	✓	—	✓

IV. FLOW RATES

	Slurry Line(s)	Pond Return	S-X Tails	Spray System
0 * GPM				

V. PHYSICAL INSPECTION OF SLURRY LINE(S)

* Walked to Discharge Point ____ Yes ✓ No
* Observed Entire Discharge Line ✓ Yes ____ No

Inspector: W G Bennett
Date: 12-31-92

VI. DUST CONTROL

	Cell 2	Cell 3	Cell 4A
* Dusting	✓	✓	✓
* Wind Movement of Tailings	✓	✓	✓

Precipitation: .0 trace inches liquid
General Meteorological Conditions: Partial Cloudy

VII. DAILY LEAK DETECTION CHECK

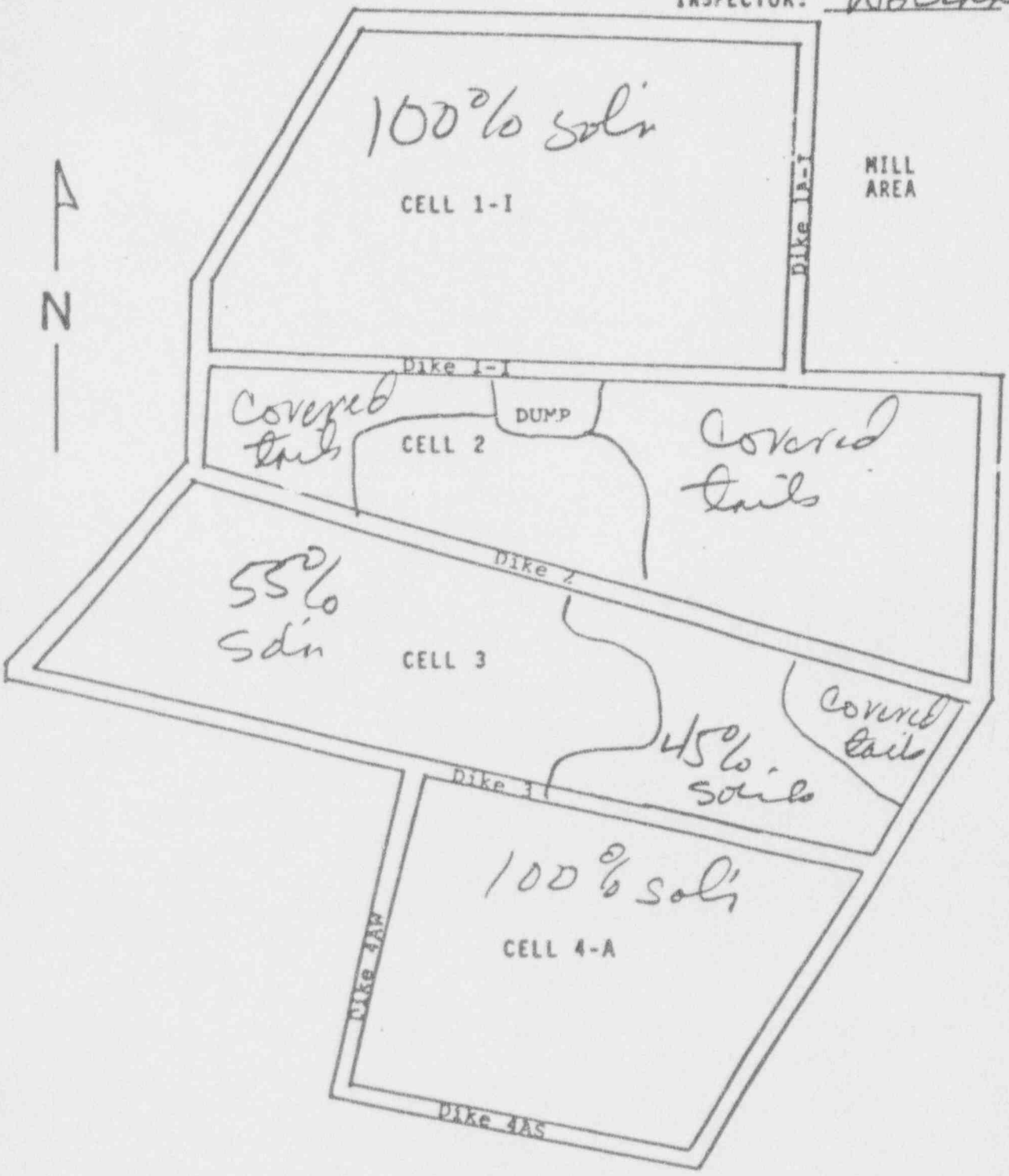
* Leak Detection System Under Cell 4A Checked. ✓ Wet ____ Dry

Initial level 118'9"
Final level _____
Gallons pumped _____

VIII. Observations of Potential Concern	Action Required

DAILY INSPECTION REPORT
TAILINGS SLURRY DISCHARGE LOCATION

DATE: 12-31-92
INSPECTOR: W.L. Bennett



LC261192

C2 = Cell 2, etc.
FAP = Fly Ash Pond

Date	Report Frequency	Area	Carried Forward?	General Observations – Observations of Potential Concern
01/01/93	Daily	C1a	yes	Liner repairs being planned
01/04/93	Daily	C3	yes	Cover placement continues on C3
01/04/93	Daily	C2	yes	Pumping C2 slimes drain into C3
01/07/93	Daily	C2	yes	Pumping solution from C2 into C3
01/08/93	Daily	C1l	yes	Liner damage noticed at C1l. Notified WWB on 1-8-93 [illegible]fied NR[illegible]on Monday
01/10/93	Daily	ALL	yes	Roadways bad no checks made. Received 1.80 inches of moisture [illegible]ast 3 days
01/11/93	Daily	ALL	yes	3 to 4 foot snow drifts no checks made. Cover placement stopped d[illegible]e to weather
01/11/93	Daily	ALL	yes	Water has been deverted around liner damaged area best as possible for now
01/12/93	Daily	ALL	no	Tailings roadways cleared so tailings inspections could be made
01/13/93	Daily	C2	no	Sump pump shut off solution pool is empty
01/16/93	Daily	ALL	yes	Roadways too muddy to make tailings inspection
01/20/93	Daily	C2	no	Able to make tailings checks. Pumping solution pool from C2 into C3
01/25/93	Daily	C3	no	Covered errosion channels at west end of C3
01/29/93	Daily	ALL	no	No checks made area too muddy
01/07/93	Weekly	C2	no	Pumping solution pool at C2 into C3. C2 Slimes drain pumping good.
01/14/93	Weekly	ALL	no	Too much snow and rain to make checks roads too bad
01/21/93	Weekly	ALL	no	Roadways not accessible due to deep snow and mud
01/26/93	Weekly	C2	no	C2 solution pool pump shut off due to lack of water to pump
01/28/93	Monthly	C3	no	Walked south dike of C3, C4 and diversion ditches no problem observed.

Rev. by W.B. 3/8/93

Monthly Inspection Data

Date: 1/28/93

1. Slurry Pipeline

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

NO CHANGE

Monthly Inspection Data

Date: 1/28/93

Inspector: Schuman

2. Surface Water Control Structures

Diversion Ditch 1: Looks good

Diversion Ditch 2: Water pooled in areas no water running through ditch. Looks good

Diversion Ditch 3: Looks good

Diversion Berm 2: Looks good

Mill and Facilities Area Sedimentation Pond: -NA- Solution pool where fly ash pond once was

Remarks: Extremely wet conditions. Walked into diversion ditches due to muddy and snow conditions

Overspray Minimization Evaluation: None observed

WEEKLY TAILINGS INSPECTION

DATE: 26 Jan. 1993
INSPECTORS: S.R. Clarke / J.R. Wilson

1. Pond Elevations (msl, ft)

Cell 1–I: 5609.95
Cell 2: ~~puddle pumped / pumped off to~~
Cell 3: 5596.85
Cell 4A: not covering bottom

2. Underdrain liquid levels

Cell 1–I: dry
Cell 2: 9992 μohms
35.11' Feet to liquid
∅ Gallons
Cell 3: dry
Cell 4A: Begin
119'2" End

3. Settlement monitors

Cell 2 East: 5624.28
Cell 2 W 1: 5619.45
Cell 2 W 2: 5621.83
Cell 2 W 3: 5618.27
Cell 2 W 4: 5618.11
Cell 4A Toe: 5577.00

4. Tailings Area Inspection (Note dispersal of blowing tailings): none possible

5. Control Methods Implemented: Snow cover with monster Crusting

6. Remarks: #2 Standpipe needs pumped, will try to go in on the crust early in the morning, #2 Slimes drain down, #2 Sump pump turned off due to lack of water to pump, VERY VERY Heavy Crusting during nights

7. Contaminated Waste Dump: sign at dump area in good shape, being used today as it is first day access has been possible

DAILY INSPECTION DATA

Inspector: W6. Bennett
Date: 1-31-93
Accompanied by:
Time: 0710

Any Item not "ok" must be documented. A check mark = OK, X = Action Required.

I. TAILINGS SLURRY TRANSPORT SYSTEM

Inspection Items	Condition of Potential Concern	Cell 1-I	Cell 2	Cell 3	Cell 4A
• Slurry Pipeline	Leaks, Damage, Blockage, Sharp Bends	ok	ok	ok	ok
• Pipeline Joints	Leaks, Loose Connections	no slurry discharge			
• Pipeline Supports	Damage, Loss of Support				
• Valves	Leaks, Blocked, Closed				
• Point(s) of Discharge	Improper Location or Orientation				

II. OPERATIONAL SYSTEMS

Inspection Items	Conditions of Potential Concern	Cell 1-I	Cell 2	Cell 3	Cell 4A
• Water Level	Greater Than Operating Level, Large Change Since Previous Inspection	✓	✓	✓	✓
• Beach	Cracks, Severe Erosion, Subsidence	✓	✓	✓	✓
• Liner and Cover	Erosion of Cover, Exposure of Liner	✓	✓	✓	✓

III. DIKES AND EMBANKMENTS

Inspection Items	Conditions of Potential Concern	Dike 1-I	Dike 1-IA	Dike 2	Dike 3	Dike 4A-S	Dike 4A-W
• Slopes	Sloughs or Sliding Cracks, Bulges, Subsidence, Severe Erosion, Moist Areas, Areas of Seepage Outbreak	✓	✓	✓	✓	✓	✓
• Crest	Cracks, Subsidence, Severe Erosion	✓	✓	✓	✓	✓	✓

IV. FLOW RATES

	Slurry Line(s)	Pond Return	S-X Tails	Spray System
• GPM	0			

V. PHYSICAL INSPECTION OF SLURRY LINE(S)

- Walked to Discharge Point — ___ Yes ✓ No
- Observed Entire Discharge Line — ✓ Yes ___ No

Inspector: WG Bennett
Date: 1-31-93

DUST CONTROL

	Cell 2	Cell 3	Cell 4A
• Dusting	✓	✓	✓
• Wind Movement of Tailings	✓	✓	✓

Precipitation: .01 inches liquid
...eral Meteorological Conditions:

. DAILY LEAK DETECTION CHECK

• Leak Detection System Under Cell 4A Checked. ✓ Wet ____ Dry

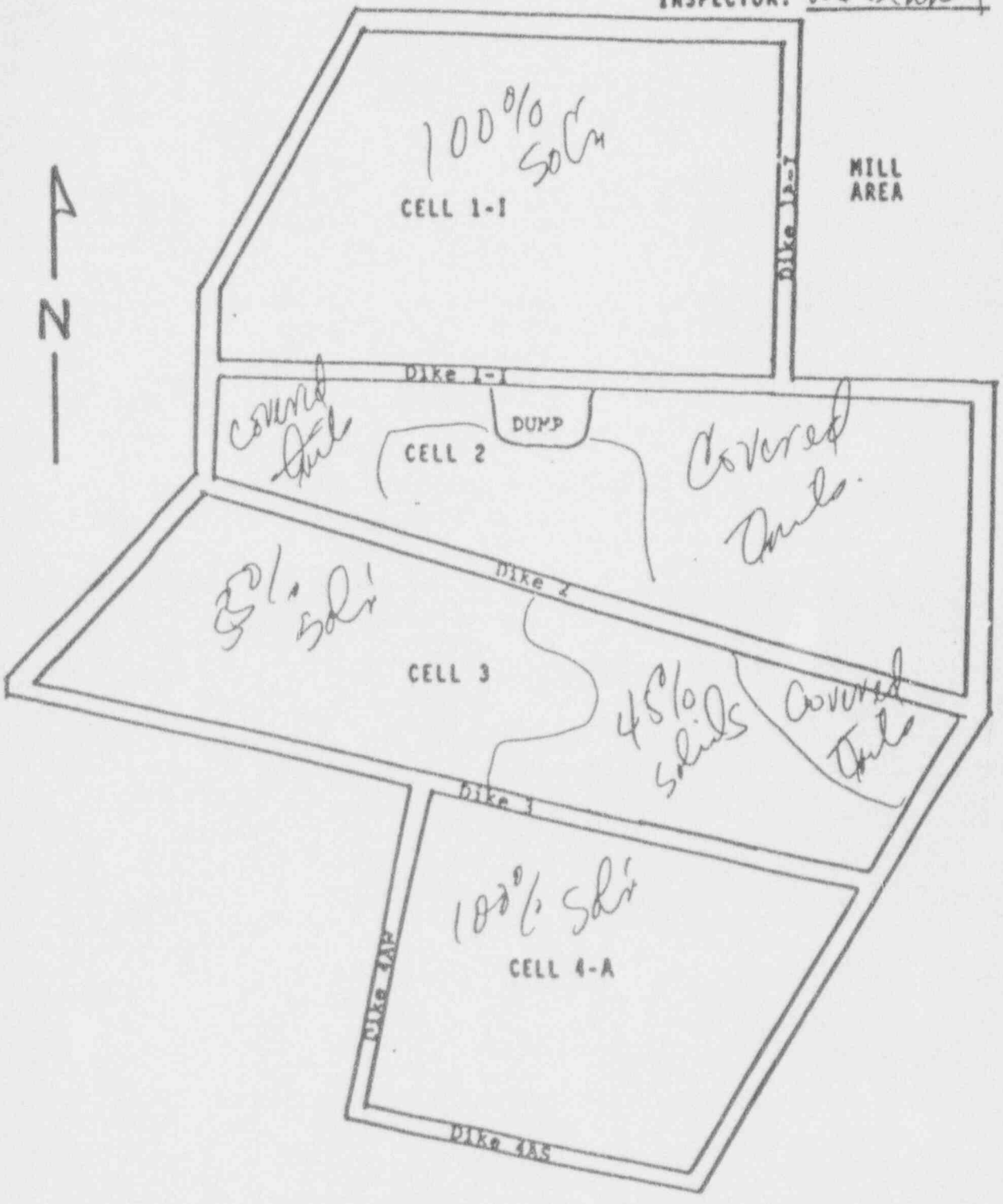
Initial level 119'3"
Final level ____
Gallons pumped ____

I. Observations of Potential Concern

Action Required

DAILY INSPECTION REPORT
TAILINGS SLURRY DISCHARGE LOCATION

DATE: 1-31-93
INSPECTOR: WG Bennett



White Mesa Mill

Date: 11-Mar-93

Rev by US
3/24/93

LC261192

C2 = Cell 2, etc.
FAP = Fly Ash Pond

Date	Report Frequency	Area	Carried Forward?	General Observations - Observations of Potential Concern
02/01/93	Daily	C4a	yes	Liner repairs being planned C4a
02/01/93	Daily	C1I	yes	Liner repairs planned to C1I when weather permits
02/01/93	Daily	C2	no	Walked C4A and C3 along south bank only small errosion chanels observed
02/07/93	Daily	C2	yes	Pumping solution from C2 into C3
02/08/93	Daily	C3	no	Covered small area of exposed liner along west bank
02/09/93	Daily	C1I	yes	Water from rain and melting snow washing liner cover off C1I
02/10/93	Daily	C1I	yes	Maintenance recovering and repairing the liner at east end of C1I
02/11/93	Daily	C3	no	Covered exposed liner areas at west end of C3
02/12/93	Daily	C3	no	Several areas of exposed liner along north side of C3 will palce cover ASAP
02/15/93	Daily	C1I	no	Liner repairs completed at C1I. Drain placed in area to minimize futher problems
02/15/93	Daily	C3	no	Covered the 5 errosion chanels on north bank of C3. No liner damage observed
02/16/93	Daily	C2	no	Shut solution pool pump off in C2
02/17/93	Daily	C2	no	Maintenance crew working on unsticking D-6 Cat stuck on C2 cover
02/19/93	Daily	ALL	no	No checks made area to muddy
02/20/93	Daily	ALL	no	No checks made area to muddy
02/22/93	Daily	C3	yes	Several large areas of exposed liner at C3 need covered when weather permits
02/24/93	Daily	ALL	no	No checks made area to muddy
02/20/93	Daily	ALL	no	Covered areas of exposed liner at C1I, C2 and C3. Cover will need hauled to C3
02/04/93	Weekly	C2	no	Pumping solution pool from C2 into C3
02/11/93	Weekly	C3	yes	Liner showing in several places on north sider of C3 due to runoff
02/18/93	Weekly	C2	no	Started solution pool pump in C2
02/26/93	Weekly	C2	no	Tailings area access lousy puddles all over
02/25/93	Monthly	C3	no	Walked south dike of C3, C4 and diversion ditches no problem observed.

Monthly Inspection Data

Date: 2-25-93

1. Slurry Pipeline

Equipment Used: __________
Equipment Operator: __________
Location Inspected: __________
General Pipeline Condition: __________
Results (thickness, etc.): __________
Action Required: __________
Location Inspected: __________
General Pipeline Condition: __________
Results (thickness, etc.): __________
Action Required: __________

Equipment Used: __________
Equipment Operator: __________
Location Inspected: __________
General Pipeline Condition: __________
Results (thickness, etc.): __________
Action Required: __________
Location Inspected: __________
General Pipeline Condition: __________
Results (thickness, etc.): __________
Action Required: __________

Equipment Used: __________
Equipment Operator: __________
Location Inspected: __________
General Pipeline Condition: __________
Results (thickness, etc.): __________
Action Required: __________
Location Inspected: __________
General Pipeline Condition: __________
Results (thickness, etc.): __________
Action Required: __________

Equipment Used: __________
Equipment Operator: __________
Location Inspected: __________
General Pipeline Condition: __________
Results (thickness, etc.): __________
Action Required: __________
Location Inspected: __________
General Pipeline Condition: __________
Results (thickness, etc.): __________
Action Required: __________

WEEKLY TAILINGS INSPECTION

DATE: 26 February 1992
INSPECTORS: J.R. Wilson / S. L. Sch

1. Pond Elevations (msl, ft)

Cell 1–I: 5610.51
Cell 2: puddle
Cell 3: 5601.31
Cell 4A: not covering bottom

2. Underdrain liquid levels

Cell 1–I: dry
Cell 2: ~~X~~ μohms / Feet to liquid / Gallons
Cell 3: dry
Cell 4A: 11.9 / 16" Begin / End

3. Settlement monitors

Cell 2 East:
Cell 2 W 1:
Cell 2 W 2:
Cell 2 W 3:
Cell 2 W 4:
Cell 4A Toe:

4. Tailings Area Inspection (Note dispersal of blowing tailings): none noted

5. Control Methods Implemented: none needed

6. Remarks: busy week Scott + John surveyed on Friday

7. Contaminated Waste Dump: dump area + sign ok, access lousy, puddles all over

DAILY INSPECTION DATA

Inspector: W. Bennett
Date: 2-28-93
Accompanied by:
Time: 0710

ny Item not "ok" must be documented. A check mark = OK, X = Action Required.

I. TAILINGS SLURRY TRANSPORT SYSTEM

Inspection Items	Condition of Potential Concern	Cell 1-I	Cell 2	Cell 3	Cell 4A
		ok	ok	ok	ok
• Slurry Pipeline	Leaks, Damage, Blockage, Sharp Bends	↓	↓	↓	↓
Pipeline Joints	Leaks, Loose Connections	no slurry			
• Pipeline Supports	Damage, Loss of Support	discharge			
• Valves	Leaks, Blocked, Closed				
• Point(s) of Discharge	Improper Location or Orientation				

. OPERATIONAL SYSTEMS

Inspection Items	Conditions of Potential Concern	Cell 1-I	Cell 2	Cell 3	Cell 4A
• Water Level	Greater Than Operating Level, Large Change Since Previous Inspection	✓	✓	✓	✓
• Beach	Cracks, Severe Erosion, Subsidence	✓	✓	✓	✓
• Liner and Cover	Erosion of Cover, Exposure of Liner	✓	✓	✓	✓

I. DIKES AND EMBANKMENTS

Inspection Items	Conditions of Potential Concern	Dike 1-I	Dike 1-IA	Dike 2	Dike 3	Dike 4A-S	Dike 4A-N
• Slopes	Sloughs or Sliding Cracks, Bulges, Subsidence, Severe Erosion, Moist Areas, Areas of Seepage Outbreak	✓	✓	✓	✓	✓	✓
• Crest	Cracks, Subsidence, Severe Erosion	✓	✓	✓	✓	✓	✓

/. FLOW RATES

	Slurry Line(s)	Pond Return	S-X Tails	Spray System
• GPM	0			

. PHYSICAL INSPECTION OF SLURRY LINE(S)

• Walked to Discharge Point ____Yes ✓ No
• Observed Entire Discharge Line ✓ Yes ____No

Inspector: W6. Bennett
Date: 2-28-93

	Cell 2	Cell 3	Cell 4A
DUST CONTROL	✓	✓	✓
	✓	✓	✓

- Dusting
- Wind Movement of Tailings

Precipitation: 0 inches liquid

neral Meteorological Conditions:
Cloudy O'cast

I. DAILY LEAK DETECTION CHECK

- Leak Detection System Under Cell 4A Checked. ✓ Wet ____ Dry

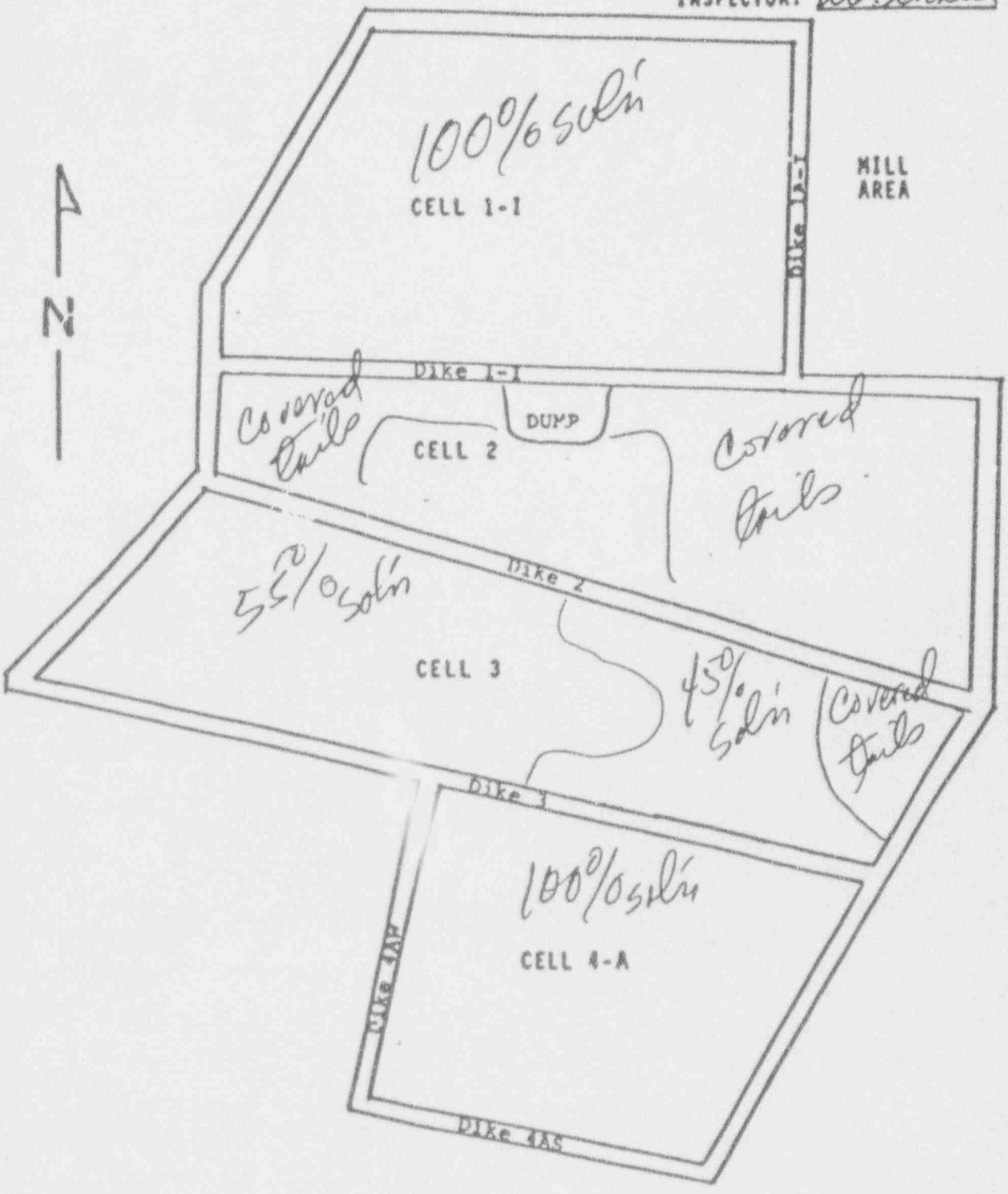
Initial level 1ft 6"
Final level ____
Gallons pumped ____

II. Observations of Potential Concern

Action Required

DAILY INSPECTION REPORT
TAILINGS SLURRY DISCHARGE LOCATION

DATE: 2-28-93
INSPECTOR: McConnell



4-2

LC261192

Rev. by UB 4/8/93

C2 = Cell 2, etc.
FAP = Fly Ash Pond

Date	Report Frequency	Area	Carried Forward?	General Observations – Observations of Potential Concern
03/01/93	Daily	C4a	yes	Liner repairs being planned C4a
03/01/93	Daily	C1I	no	Covered areas of exposed liner on north bank of C1I
03/01/93	Daily	C3	no	Hauled fill dirt to cover exposed liner at NW bank of C3
03/01/93	Daily	C2	no	Pumping solution from C2 into C3. Prairie dog observed south of C3
03/02/93	Daily	C3	no	Rad tech's observed covering prairie dog holes for control measures
03/03/93	Daily	C3	no	Prairie dogs observed on dike at south side of C3
03/04/93	Daily	ALL	no	Maintenance ha been grading roads on tailings to remove huge ruts
03/05/93	Daily	C2	yes	Pumping accumulated water from snow melt from solution pool in C2 into C3
03/08/93	Daily	C1I	no	Covered several small areas of exposed liner at west bank of C1I
03/08/93	Daily	C3	no	Covered exposed liner in area where fill has been placed
03/08/93	Daily	C2	yes	Slimes drain pump has quit working solution within 21" of top of pipe
03/11/93	Daily	C2	no	Slimes drain pump is repaired and pumping solutions into C3
03/12/93	Daily	C3	no	Wind movement of tailings observed from south side of C3
03/13/93	Daily	C3	no	Still pumping C2 solution pool. Prairie dogs observed south of C3 dike
03/14/93	Daily	C2	yes	C2 slimes drain pump quit work order turned in
03/15/93	Daily	C3	no	Electrican working on slime drain pump. Cover placement started SE corner C3
03/17/93	Daily	C1I	no	Maintenance working on solution transfer pump in C1I
03/21/93	Daily	C3	no	Some dusting observed from C3
03/22/93	Daily	C3	no	Cover placement stopped due to muddy conditions from rains last week
03/24/93	Daily	C4A	no	Maintenance installing water line from recapture line at 5 well into C4A
03/03/93	Weekly	C4A	no	Pumped C4A leak detection system. Pumping solution pool in C2
03/10/93	Weekly	C3	no	Covered prairie dog holes and inspected dikes
03/18/93	Weekly	C3	yes	Cover placement has resumed on C3 this week. Pump repaired in C2 slimes drain
03/25/93	Weekly	C2	no	Some blowing tailings observed in moderately high winds
03/31/93	Monthly	C3	no	Cover placement resumed at C3. Some tumble weeds removed from ditch 3

Inspector 3-31-93
Date Adkinsmann

WHITE MESA PROCEDURES MANUAL

Quarterly Inspection Data

1. Embankment Inspection: Looks good Some work has started on west of primary leg to south of Cell 3. Covered several areas of exposed liner on cells 1, 2 and 3. Made repairs to cell 1E liner problems.

2. Operations/Maintenance Review:
Maintenance placing cover at east end of cell 3
Continue to pump #2 dimes drain
Pumping fresh water into cell 4 for dilution of 1H

3. Post-construction Changes:
Fly Ash pond filled

4. Summary: Cell 4a liner repairs being evaluated by Engineering Department

Monthly Inspection Data

Date: 3-31-93 ~~4-5-93~~

1. Slurry Pipeline

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

NO DISCHARGE

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Monthly Inspection Data

Date: 3-31-93

Inspector: Schiman

2. Surface Water Control Structures

Diversion Ditch 1: Good

Diversion Ditch 2: Good

Diversion Ditch 3: Good small amount of trash needs cleaned.

Diversion Berm 2: Good

Mill and Facilities Area Sedimentation Pond:

Area dry no pooling

Remarks: Placing cover on east end of cell 3

Overspray Minimization Evaluation:

None No Sprays.

WEEKLY TAILINGS INSPECTION

DATE: 3/25/93
INSPECTORS: SRC/JRW ist

1. Pond Elevations (msl, ft)

Cell 1–I: 5609.65
Cell 2: puddle (pumped tod
Cell 3: 5597.45
Cell 4A: not covering bottom

2. Underdrain liquid levels

Cell 1–I: Dry
Cell 2: 1,390 µohms
35.68 Feet to liquid
29 Gallons
Cell 3: Dry
Cell 4A: Begin
119'1" End

3. Settlement monitors

Cell 2 East: 5624.27
Cell 2 W 1: 5618.75
Cell 2 W 2: 5620.99
Cell 2 W 3: 5617.49
Cell 2 W 4: 5617.26
Cell 4A Toe: 5577.00

4. Tailings Area Inspection (Note dispersal of blowing tailings): Dome noted 3-24-9
afternoon moderately high winds

5. Control Methods Implemented: Covering Cell 3 for control

6. Remarks: #2 slimes drain pumping, pumped puddle in Cell
Cover moving well on Cell 3, prairie dog patrol turned up
no serious holes on any dikes.

7. Contaminated Waste Dump: dump area & sign in good shape

DAILY INSPECTION DATA

Inspector: W.G. Bennett
Date: 3-31-93
Accompanied by:
Time: 0800 hrs

Item not "ok" must be documented. A check mark = OK, X = Action Required.

I. TAILINGS SLURRY TRANSPORT SYSTEM

Inspection Items	Condition of Potential Concern	Cell 1-I	Cell 2	Cell 3	Cell 4A
• Slurry Pipeline	Leaks, Damage, Blockage, Sharp Bends	ok	ok	ok	ok
• Pipeline Joints	Leaks, Loose Connections	no slurry discharge			
• Pipeline Supports	Damage, Loss of Support				
• Valves	Leaks, Blocked, Closed				
• Point(s) of Discharge	Improper Location or Orientation				

OPERATIONAL SYSTEMS Inspection Items	Conditions of Potential Concern	Cell 1-I	Cell 2	Cell 3	Cell 4A
• Water Level	Greater Than Operating Level, Large Change Since Previous Inspection	✓	✓	✓	✓
• Beach	Cracks, Severe Erosion, Subsidence	✓	✓	✓	✓
• Liner and Cover	Erosion of Cover, Exposure of Liner	✓	✓	✓	✓

DIKES AND EMBANKMENTS Inspection Items	Conditions of Potential Concern	Dike 1-I	Dike 1-IA	Dike 2	Dike 3	Dike 4A-S	Dike 4A-W
• Slopes	Sloughs or Sliding Cracks, Bulges, Subsidence, Severe Erosion, Moist Areas, Areas of Seepage Outbreak	✓	✓	✓	✓	✓	✓
• Crest	Cracks, Subsidence, Severe Erosion	✓	✓	✓	✓	✓	✓

FLOW RATES	Slurry Line(s)	Pond Return	S-X Tails	Spray System
0 • GPM				

PHYSICAL INSPECTION OF SLURRY LINE(S)

- Walked to Discharge Point — Yes ✓ No
- Observed Entire Discharge Line — Yes ✓ No

Inspector: W6 Bennett
Date: 5-31-93

Cell 2	Cell 3	Cell 4A
✓	✓	✓
✓	✓	✓

DUST CONTROL

- Dusting
- Wind Movement of Tailings

Precipitation: 0 inches liquid

- veral Meteorological Conditions:

Clear

DAILY LEAK DETECTION CHECK

- Leak Detection System Under Cell 2/4 Checked. ✓ Wet ____ Dry

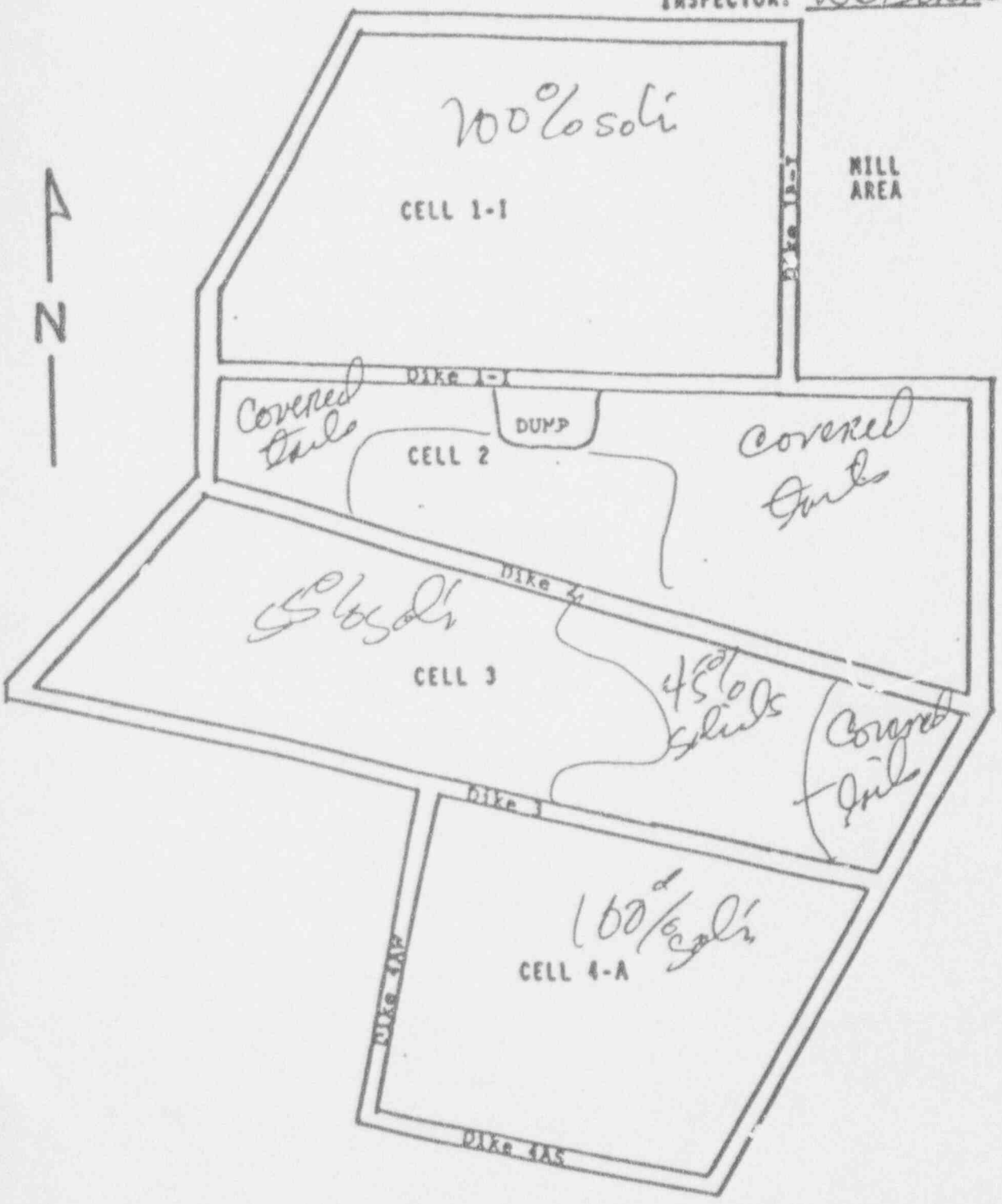
Initial level 119'2"
Final level ____
Gallons pumped ____

I. Observations of Potential Concern

Action Required

DAILY INSPECTION REPORT
TAILINGS SLURRY DISCHARGE LOCATION

DATE: 3-31-93
INSPECTOR: WG Bennett



Rev. by WS
5/18/93

LC26493

C2 = Cell 2, etc.
FAP = Fly Ash Pond

Date	Report Frequency	Area	Carried Forward?	General Observations – Observations of Potential Concern
04/01/93	Daily	C4a	yes	Liner repairs being planned C4a repairs are planned in early April
04/01/93	Daily	C2	no	Pumped solution pool from C2 into C3. Pumping recapture water into C4A
04/01/93	Daily	C3	yes	Maintenance placing cover on east end of C3
04/02/93	Daily	C3	no	Tailings sand observed blowing from C3 into C4A
04/05/93	Daily	C3	no	Prairie dog hole found inside dike at C3 no liner damage about 3' long
04/05/93	Daily	C3	no	Dusting observed from C3 in winds gusting at 40 mph
04/08/93	Daily	C2	no	Pumped solution pool from C2 into C3. solution levels being surveyed
04/08/93	Daily	C2	yes	Pumping solution from C1l into C3 line is checked every two hours
04/09/93	Daily	C4a	no	Pumping reacpture water into C4a
04/11/93	Daily	C3	no	Prairie dogs observed south of C3. Dogs were shot
04/12/93	Daily	C3	yes	Some dusting observed at SW and NW corners of C3 in winds at 40 mph
04/13/93	Daily	ALL	no	Environmental techs doing a tailings pond inspection
04/16/93	Daily	C2	no	Dump at C2 being covered area to wet will try latter
04/17/93	Daily	ALL	no	Maintenance working on cannons at tailings
04/25/93	Daily	C2	yes	Recapture water being pumped into C3
04/26/93	Daily	C1l	no	Pumping solutions from C1 into C3 continues
04/01/93	Weekly	C4A	no	Putting recapture water into C4A since Tuesday
04/08/93	Weekly	C4A	no	Pumping solutions from C1l into C3. Recapture water being added into C4A
04/15/93	Weekly	C3	no	Covering and raising liquor levels in C3 for dust minimization
04/22/93	Weekly	C3	yes	Solution levels in C3 are below the 1ft markers placed last week
04/29/93	Weekly	C2	no	Still pumping solutions from C1 into C3. Cover placement continues
04/29/93	Monthly	C3	no	Cover placement continues at C3. Tailings solution continue to be transfered

White Mesa Procedures Manual

Monthly Inspection Data

Date: 4-29-93

Inspector: Schierman

2. Surface Water Control Structures

Diversion Ditch 1: Good some tumble weeds

Diversion Ditch 2: Good

Diversion Ditch 3: Good

Diversion Berm 2: Good

Mill and Facilities Area Sedimentation Pond: Fly ash pond filled

as

Remarks: Cover placement continues at Cell 3, OU II has been pumped into cell 3

Overspray Minimization Evaluation: none

Monthly Inspection Data

Date: 4/29/93

1. Slurry Pipeline

Equipment Used: ______
Equipment Operator: ______
Location Inspected: ______
General Pipeline Condition: ______
Results (thickness, etc.): ______
Action Required: ______
Location Inspected: ______
General Pipeline Condition: ______
Results (thickness, etc.): ______
Action Required: ______

Equipment Used: ______
Equipment Operator: ______
Location Inspected: ______
General Pipeline Condition: ______
Results (thickness, etc.): ______
Action Required: ______
Location Inspected: ______
General Pipeline Condition: ______
Results (thickness, etc.): ______
Action Required: ______

Equipment Used: ______
Equipment Operator: ______
Location Inspected: ______
General Pipeline Condition: ______
Results (thickness, etc.): ______
Action Required: ______
Location Inspected: ______
General Pipeline Condition: ______
Results (thickness, etc.): ______
Action Required: ______

Equipment Used: ______
Equipment Operator: ______
Location Inspected: ______
General Pipeline Condition: ______
Results (thickness, etc.): ______
Action Required: ______
Location Inspected: ______
General Pipeline Condition: ______
Results (thickness, etc.): ______
Action Required: ______

DISCHARGE N/A

WEEKLY TAILINGS INSPECTION

DATE: 4-29-93
INSPECTORS: S.R. Clark / J.R. Wilson

1. Pond Elevations (msl, ft)

Cell 1–I: 5608.07 islands are
Cell 2: dry
Cell 3: 5609.23
Cell 4A: not covering bottom

2. Underdrain liquid levels

Cell 1–I: dry
Cell 2: 1,653 μohms
35.51 Feet to liquid
52 Gallons
Cell 3: dry
Cell 4A: 119' 1" Begin
End

3. Settlement monitors

Cell 2 East: 5624.27
Cell 2 W 1: 5619.47
Cell 2 W 2: 5621.67
Cell 2 W 3: 5618.21
Cell 2 W 4: 5618.01
Cell 4A Toe: 5576.60

4. Tailings Area Inspection (Note dispersal of blowing tailings): Dome noted mostly between 3 + 4

5. Control Methods Implemented: Covering to control & raising liquid levels as high as we can to help

6. Remarks: Still pumping 1 to 3 and adding Recapture water to 3, Cover is advancing nicely

7. Contaminated Waste Dump: dump area & sign in good shape pushed during weekend

DAILY INSPECTION DATA

Inspector: Gary Hlyzak
Date: 4-30-93
Accompanied by:
Time: 11:30 AM

Item not "ok" must be documented. A check mark = OK, X = Action Required.

I. TAILINGS SLURRY TRANSPORT SYSTEM

Inspection Items	Condition of Potential Concern	Cell 1-I	Cell 2	Cell 3	Cell 4A
Slurry Pipeline	Leaks, Damage, Blockage, Sharp Bends	ok	ok	ok	ok
peline Joints	Leaks, Loose Connections	NO SLURRY DISCHARGE			
Pipeline Supports	Damage, Loss of Support				
Valves	Leaks, Blocked, Closed				
Point(s) of Discharge	Improper Location or Orientation				

OPERATIONAL SYSTEMS

Inspection Items	Conditions of Potential Concern	Cell 1-I	Cell 2	Cell 3	Cell 4A
Water Level	Greater Than Operating Level, Large Change Since Previous Inspection	✓	✓	✓	✓
Beach	Cracks, Severe Erosion, Subsidence	✓	✓	✓	✓
Liner and Cover	Erosion of Cover, Exposure of Liner	✓	✓	✓	✓

DIKES AND EMBANKMENTS

Inspection Items	Conditions of Potential Concern	Dike 1-I	Dike 1-IA	Dike 2	Dike 3	Dike 4A-S	Dike 4A-W
Slopes	Sloughs or Sliding Cracks, Bulges, Subsidence, Severe Erosion, Moist Areas, Areas of Seepage Outbreak	✓	✓	✓	✓	✓	✓
Crest	Cracks, Subsidence, Severe Erosion	✓	✓	✓	✓	✓	✓

FLOW RATES	Slurry Line(s)	Pond Return	S-X Tails	Spray System
• GPM	0	0	0	0

PHYSICAL INSPECTION OF SLURRY LINE(S) NO DISCHARGE MILL DOWN.

- Walked to Discharge Point ✓ Yes ___ No
- Observed Entire Discharge Line ✓ Yes ___ No

Inspector: Guy Hobart
Date: 4-30-93

Cell 2	Cell 3	Cell 4B
✓	✓	✓
✓	✓	✓

I. DUST CONTROL

- Dusting NONE
- Wind Movement of Tailings NONE

Precipitation: .00 inches liquid

General Meteorological Conditions:
Partly Cloudy - Mild Warm.

VII. DAILY LEAK DETECTION CHECK

- Leak Detection System Under Cell 4-A Checked. ✓ Wet ___ Dry

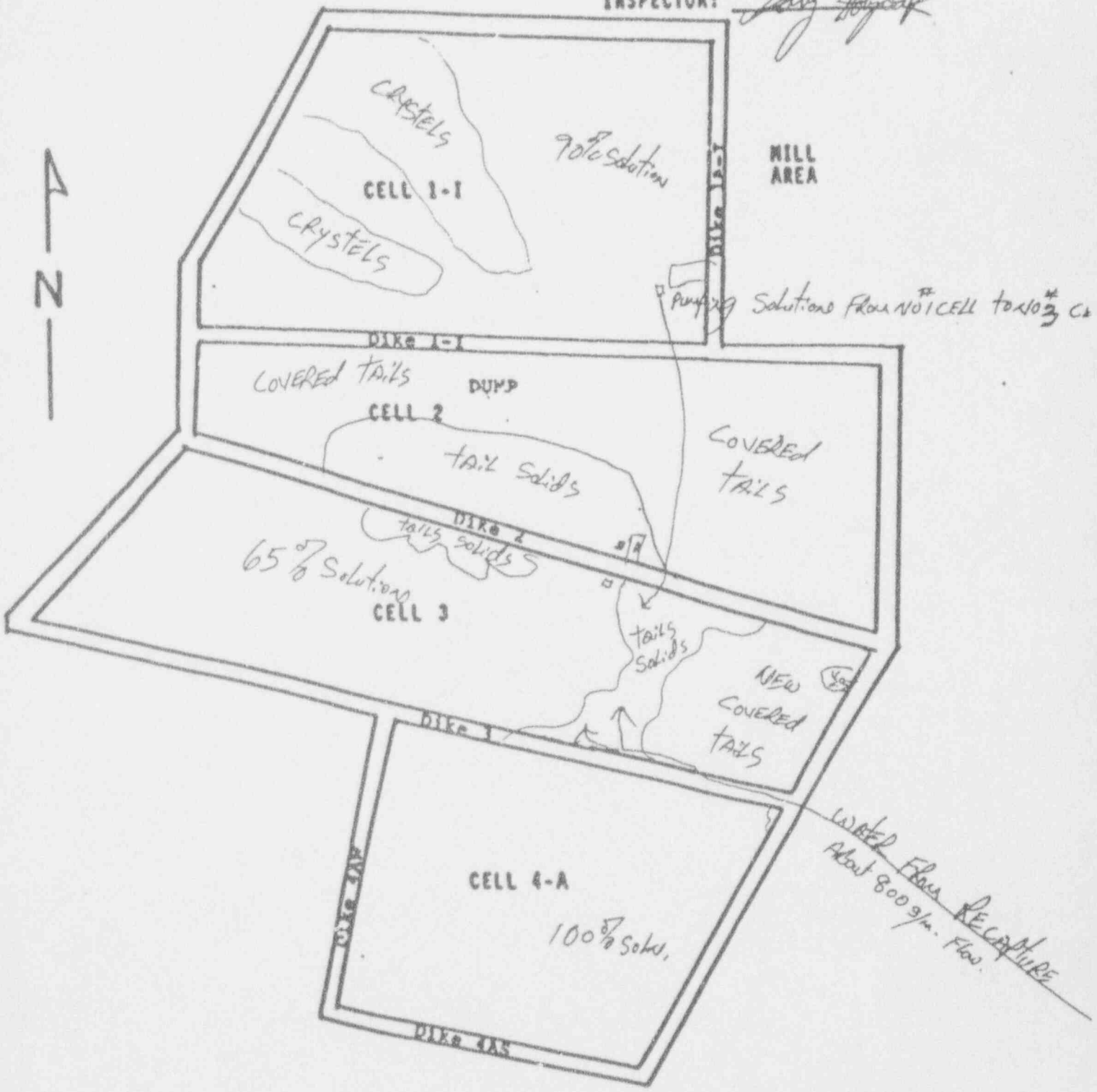
Initial level 19'2"
Final level ___
Gallons pumped ___

VIII. Observations of Potential Concern

Action Required

DAILY INSPECTION REPORT
TAILINGS SLURRY DISCHARGE LOCATION

DATE: 4-30-93
INSPECTOR: Jerry Holycroft



Rev. by UB
6/16/93
OK.

LC26593

C2 = Cell 2, etc.
FAP = Fly Ash Pond

Date	Report Frequency	Area	Carried Forward?	General Observations – Observations of Potential Concern
05/01/93	Daily	C3	yes	Pumping recapture water into C3. Pumping solutions from C1I into C3
05/01/33	Daily	C4A	yes	Liner repairs planned to C4A in early May. Cover continues at C3
05/03/93	Daily	C3	yes	Some evidence of dusting observed at C3. Covering dry sandy areas
05/04/93	Daily	C3	no	Watered haulage road to minimize dusting from equipment traffic
05/05/93	Daily	C2	no	Solution pool from C2 being pumped into C3
05/06/93	Daily	C4A	no	Inspected liner at C4A marking holes in liner for repairs
05/07/93	Daily	C4A	no	Crest liner crew making repairs to liner at C4A
05/09/93	Daily	C3	no	Some prairie dogs observed below C3
05/11/93	Daily	C2	no	Pumping slimes drain solution
05/13/93	Daily	C3	no	Solution level is at stake 1ft below freeboard stopped solution transfer
05/14/93	Daily	C4A	no	Maintenance wahing sands of liner at 4A
05/15/93	Daily	C3	no	Watered and bladed haulage roads at C3
05/17/93	Daily	C3	no	Covered small area of exposed liner at west corner of C3
05/18/93	Daily	C3	no	Cover placement stopped due to slick conditions
05/19/93	Daily	C3	no	Moving old tailings lines in C3
05/21/93	Daily	C3	no	Maintenance crew placing cover at C3 area has dried out
05/27/93	Daily	C4A	no	Pumped solution pool from C2 into C3
05/28/93	Daily	C3	no	Received 0.98 inches of rain in 20 minutes. Exposed several areas of liner
05/29/93	Daily	C3	no	Will cover areas of exposed liner when area drys out
05/30/93	Daily	C2	no	Shut pump at solution pool at C2 off
05/31/93	Daily	C3	no	Areas of exposed liner from recent storm were covered today
05/06/93	Weekly	C3	no	Movement monitors surveyed monthly. High water level in C3 6" below freeboard
05/13/93	Weekly	C4A	no	Crestliner making repairs to C4A. Solution transfer from C1I stopped
05/20/93	Weekly	C3	no	Cover placement continues at C3
05/24/93	Weekly	C3	no	Cover placement continues at C3
05/01/93	Weekly	C2	no	Still pumping solutions from C1 into C3. Cover placement continues
05/23/93	Monthly	C3	no	Placed flagging and brass tags on movement points at C3

Monthly Inspection Data

Date: 5/23/93

1. Slurry Pipeline

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

Equipment Used:
Equipment Operator:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:
Location Inspected:
General Pipeline Condition:
Results (thickness, etc.):
Action Required:

NO DISCHARGE

Monthly Inspection Data

Date: 5/27/93

Inspector: Adriaman

2. Surface Water Control Structures

Diversion Ditch 1: Good

Diversion Ditch 2: Ditch Good. Tumbleweeds need cleaned out in one area

Diversion Ditch 3: Ditch good. Tumble weeds need cleaned out in several areas.

Diversion Berm 2: Good.

Mill and Facilities Area Sedimentation Pond: Fly Ash pond filled

Remarks: Maintenance advancing cover at cell 3

Placed flagging and brass tags on movement points at cell 3

Overspray Minimization Evaluation: - NA -

WEEKLY TAILINGS INSPECTION

DATE: 24 May 1993
INSPECTORS: S.R.C/ /.R.W.

1. Pond Elevations (msl, ft)

Cell 1-I: 5606.27
Cell 2: dry (pumping puddl
Cell 3: 5602.55
Cell 4A: not covering bottom

2. Underdrain liquid levels

Cell 1-I: dry
Cell 2: 1,230 µohms
35.87 Feet to liquid
0 Gallons
Cell 3: dry
Cell 4A: 0 Begin
119'5" End

3. Settlement monitors

Cell 2 East: 5624.28
Cell 2 W 1: 5618.46
Cell 2 W 2: ~~5620.55~~ 5621.55
Cell 2 W 3: 5618.17
Cell 2 W 4: 5618.09
Cell 4A Toe: 5516.99

4. Tailings Area Inspection (Note dispersal of blowing tailings): none noted

5. Control Methods Implemented: none needed - Covering on Cell 3

6. Remarks: Pretty windy today,

7. Contaminated Waste Dump: Dump area + sign in good shape

DAILY INSPECTION DATA

Inspector: Gary Holyoak
Date: 5/23/93
Accompanied by:
Time: 9:30 A.M.

Any Item not "ok" must be documented. A check mark = OK, X = Action Required.

I. TAILINGS SLURRY TRANSPORT SYSTEM

Inspection Items	Condition of Potential Concern	Cell 1-I	Cell 2	Cell 3	Cell 4A
* Slurry Pipeline	Leaks, Damage, Blockage, Sharp Bends	ok	ok	ok	ok
* Pipeline Joints	Leaks, Loose Connections	↓	↓	↓	↓
* Pipeline Supports	Damage, Loss of Support	↓	↓	↓	↓
* Valves	Leaks, Blocked, Closed	↓	↓	↓	↓
* Point(s) of Discharge	Improper Location or Orientation	↓	↓	↓	↓

NO SLURRY DISCHARGE

I. OPERATIONAL SYSTEMS

Inspection Items	Conditions of Potential Concern	Cell 1-I	Cell 2	Cell 3	Cell 4A
* Water Level	Greater Than Operating Level, Large Change Since Previous Inspection	✓	✓	✓	✓
* Beach	Cracks, Severe Erosion, Subsidence	X ✓	✓	X ✓	✓
* Liner and Cover	Erosion of Cover, Exposure of Liner	X ✓	✓	X ✓	✓

III. DIKES AND EMBANKMENTS

Inspection Items	Conditions of Potential Concern	Dike 1-I	Dike 1-IA	Dike 2	Dike 3	Dike 4A-S	Dike 4A-W
* Slopes	Sloughs or Sliding Cracks, Bulges, Subsidence, Severe Erosion, Moist Areas, Areas of Seepage Outbreak	✓	✓	✓	✓	✓	✓
* Crest	Cracks, Subsidence, Severe Erosion	✓	✓	✓	✓	✓	✓

IV. FLOW RATES

	Slurry Line(s)	Pond Return	S-X Tails	Spray System
* GPM	0	0	0	0

X – ✓ LINNER SPOTS THAT WERE EXPOSED WERE COVERED THIS A.M.

V. PHYSICAL INSPECTION OF SLURRY LINE(S) NO DISCHARGE MILL DOWN.

* Walked to Discharge Point ____ Yes ✓ No
* Observed Entire Discharge Line ✓ Yes ____ No

Inspector: [signature]
Date: 9/3/93

Cell 2	Cell 3	Cell 4A
✓	✓	✓
✓	✓	✓

I. DUST CONTROL

- Dusting NONE
- Wind Movement of Tailings NONE

Precipitation: .00 inches liquid
General Meteorological Conditions:
CLEAR & HOT.

II. DAILY LEAK DETECTION CHECK

- Leak Detection System Under Cell 4A Checked. ✓ Wet ___ Dry

Initial level 119'6"
Final level ___
Gallons pumped ___

VIII. Observations of Potential Concern

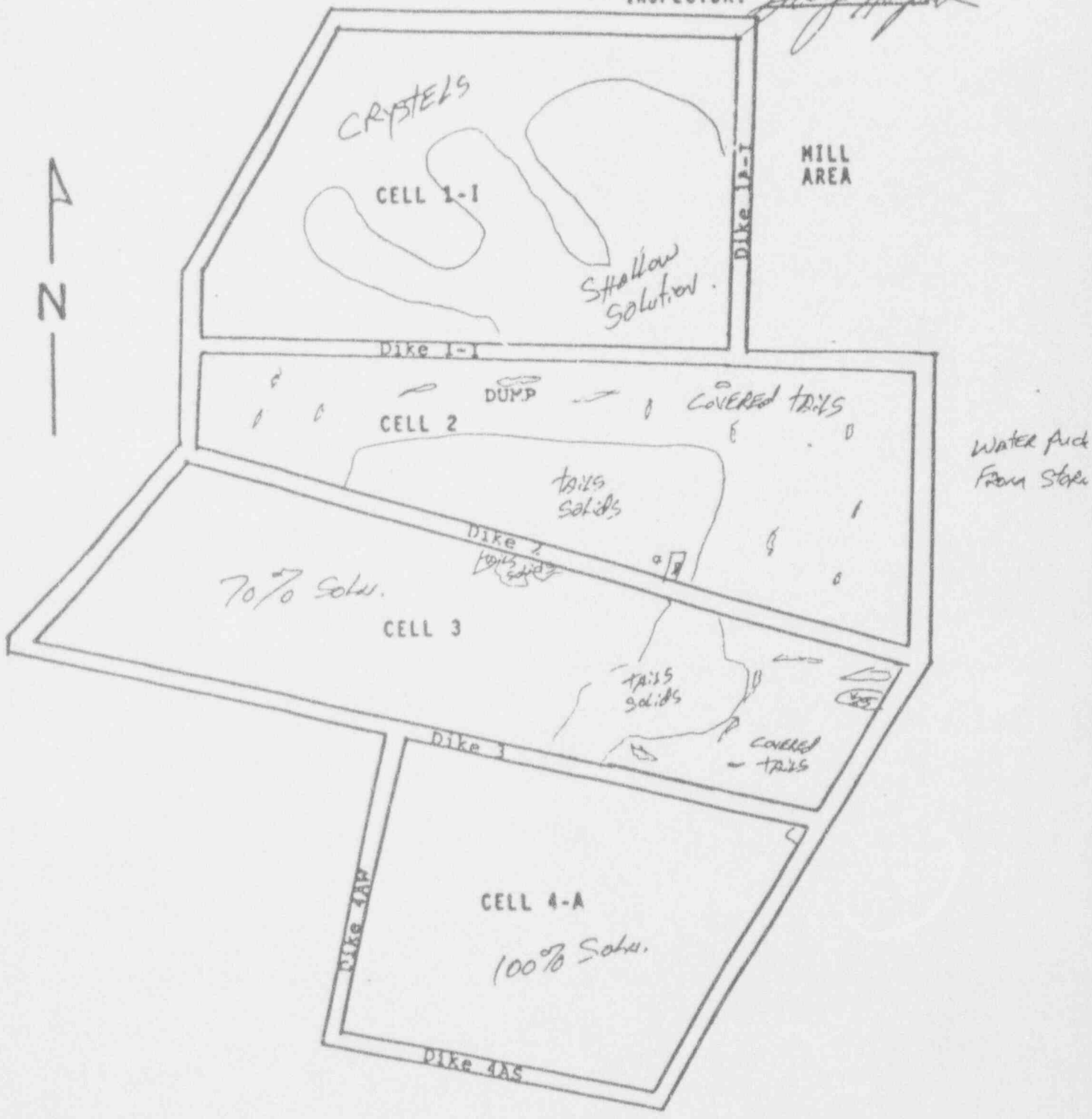
1- EXPOSED LINER SPOTS CELL #1 & #3

Action Required

1- WERE ALL COVERED BY 9:30 A.M. TODAY.

DAILY SECTION REPORT
TAILINGS SLURRY DISCHARGE LOCATION

DATE: 5-31-93
INSPECTOR: [illegible]



Rev by
W.B. 7/2/93

LC26693

C2 = Cell 2, etc.
FAP = Fly Ash Pond

Date	Report Frequency	Area	Carried Forward?	General Observations -- Observations of Potential Concern
06/01/93	Daily	C4A	yes	Liner repairs rescheduled for later date
06/02/93	Daily	C4A	no	Pumped solution pools into C3
06/03/93	Daily	C3	no	Covered small area of exposed liner on South side of C3
06/03/93	Daily	C3	no	Liner crew scheduled to resume repairs on C4A 6/14/93
06/03/93	Daily	C3	no	Maintenance repaired liner area exposed during rain of .98" in 20 minutes
06/04/93	Daily	C4A	no	Environmental crew working on C4A leak detection system
06/05/93	Daily	C4A	yes	Solution level in leak detection pipe not checked. HS/EA crew repairing tube
06/06/93	Daily	C3	no	Some tailings sands observed to be dusting from dry areas of C3
06/07/93	Daily	C1I	no	Covered areas of exposed liner in Cell 1I along N bank about 3' by 12' section
06/07/93	Daily	C3	no	Leak detection tube repaired
06/07/93	Daily	C4A	no	Found prairie dog hole on S side of C3. Dug out no liner damage found
06/08/93	Daily	C1I	no	Covered 5 areas of exposed liner along North bank of C1I
06/09/93	Daily	C2	no	Slimes sump pump in C2 is down. Pump is in process of being repaired
06/14/93	Daily	C3	no	Some wind movement of tailings observed on C3. Installation of snow fence
06/14/93	Daily	C3	no	Increased control methods on prairie dogs at C3 dug holes found no liner damage
06/17/93	Daily	C3	yes	Pumping solution from C1I into C3
06/20/93	Daily	C3	no	Finished pumping solutions from C1I into C3
06/21/93	Daily	C4A	no	Liner repairs scheduled for June 28th will delay until after 4th of July
06/28/93	Daily	C3	no	Poisoned several reoccuring prairie dog holes around and on C3
06/04/93	Weekly	C3	no	Pumped small solution pool into C3. Pump in C4A leak detection down
06/10/93	Weekly	C3	no	Cover placement on C3 finished for the year
06/17/93	Weekly	C4A	no	Pumped C4A leak detection system. Pumping C1I solutions into C3
06/24/93	Weekly	C3	no	Small amount of tailings sands observed to be dusting at C3
06/30/93	Weekly	C2	no	Dump area and signage in good shape
06/29/93	Monthly	DIV	no	Tumble weeds cleaned out of diversion ditches
06/29/93	Quarterly	C3	no	Covered several areas of exposed liner. Pumped solutons from C1I into C3

WEEKLY TAILINGS INSPECTION

DATE: 30 June 93
INSPECTORS: S.R. Clark / J.R. Wo

1. Pond Elevations (msl, ft)

Cell 1–I: Dry
Cell 2: Dry
Cell 3: 5682.37
Cell 4A: Not cakeing Bottom

2. Underdrain liquid levels

Cell 1–I: dry
Cell 2: 2,298 µohms
35.91 Feet to liquid
Q Gallons
Cell 3: dry
Cell 4A: 119'9" Begin
End

3. Settlement monitors

Cell 2 East: 5629.29
Cell 2 W 1: 5619.47
Cell 2 W 2: 5621.60
Cell 2 W 3: 5618.18
Cell 2 W 4: 5618.04
Cell 4A Toe: 5576.99

4. Tailings Area Inspection (Note dispersal of blowing tailings): none noted

5. Control Methods Implemented: none needed this week, cover fine

6. Remarks:

7. Contaminated Waste Dump: dump area + sign in good shape

DAILY INSPECTION DATA

Inspector: Carroll
Date: 30 Sept 93
Accompanied by:
Time: 11:00 A.M.

Any Item not "ok" must be documented. A check mark = OK, X = Action Required.

I. TAILINGS SLURRY TRANSPORT SYSTEM

Inspection Items	Condition of Potential Concern	Cell 1-I	Cell 2	Cell 3	Cell 4A
		OK	OK	OK	OK
• Slurry Pipeline	Leaks, Damage, Blockage, Sharp Bends				
• Pipeline Joints	Leaks, Loose Connections				
• Pipeline Supports	Damage, Loss of Support				
• Valves	Leaks, Blocked, Closed				
• Point(s) of Discharge	Improper Location or Orientation				

II. OPERATIONAL SYSTEMS

Inspection Items	Conditions of Potential Concern	Cell 1-I	Cell 2	Cell 3	Cell 4A
		OK	OK	OK	OK
• Water Level	Greater Than Operating Level, Large Change Since Previous Inspection				
• Beach	Cracks, Severe Erosion, Subsidence				
• Liner and Cover	Erosion of Cover, Exposure of Liner				

III. DIKES AND EMBANKMENTS

Inspection Items	Conditions of Potential Concern	Dike 1-I	Dike 1-IA	Dike 2	Dike 3	Dike 4A-S	Dike 4A-N
		OK	OK	OK	OK	OK	OK
• Slopes	Sloughs or Sliding Cracks, Bulges, Subsidence, Severe Erosion, Moist Areas, Areas of Seepage Outbreak						
• Crest	Cracks, Subsidence, Severe Erosion						

IV. FLOW RATES

	Slurry Line(s)	Pond Return	S-X Tails	Spray System
• GPM	-0-	-0-	-0-	-0-

11:11 Shut down no discharge?

V. PHYSICAL INSPECTION OF SLURRY LINE(S)

- Walked to Discharge Point ✓ Yes ____ No
- Observed Entire Discharge Line ✓ Yes ____ No

Inspector: Carroll
Date: 30 June 93

VI. DUST CONTROL

Cell 2	Cell 3	Cell 4A
None	None	None
None	None	Some

- Dusting
- Wind Movement of Tailings

Precipitation: — 0 — inches liquid
General Meteorological Conditions:

VII. DAILY LEAK DETECTION CHECK

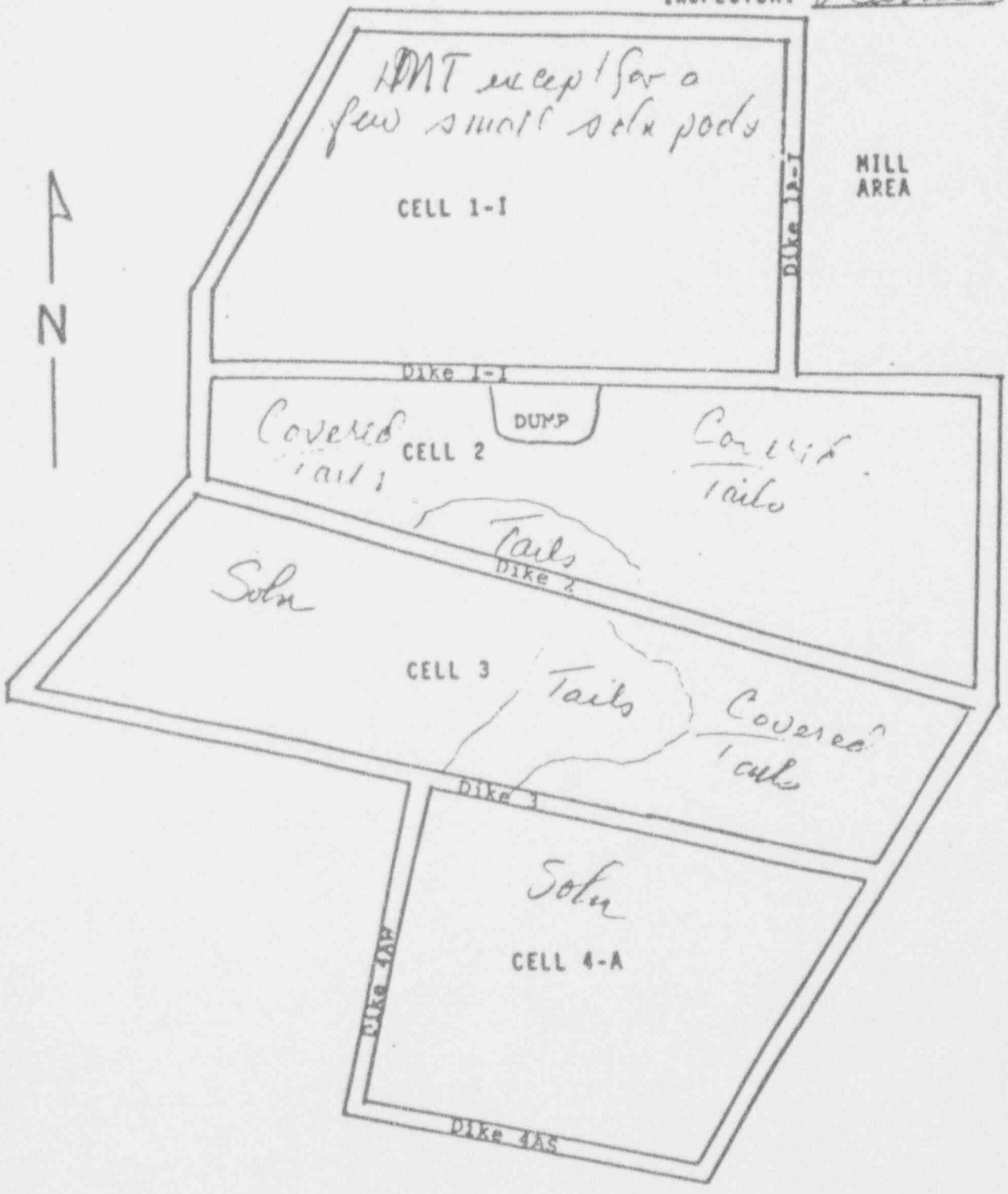
- Leak Detection System Under Cell 4A Checked. ✓ Wet ____ Dry

Initial level 119'6"
Final level N/A
Gallons pumped — 0 —

VIII. Observations of Potential Concern	Action Required

DAILY INSPECTION REPORT
TAILINGS SLURRY DISCHARGE LOCATION

DATE: 30 June 93
INSPECTOR: J Carrod



Inspector Scott Schierman
Date 6/29/93

WHITE MESA PROCEDURES MANUAL

Quarterly Inspection Data

1. Embankment Inspection: Bank looks good minimal exposure changes. Having some increased problems with prairie dogs burrowing into dikes on Cell 3 have poisoned on several occasions seems to be helping. Covered several areas of exposed liner on Cell 3 and Cell 1I

2. Operations/Maintenance Review:
Placed cover on Cell 3 for NESHAPS and dust minimization purposes. Pumped solutions from Cell 1I into Cell 3.

3. Post-construction Changes: Fly ash pond closed.

4. Summary: To further minimize dusting of tailings sands snow fencing will be installed on Cell 3.

Monthly Inspection Data

Date: 6/29/93

1. Slurry Pipeline

Equipment Used: ______
Equipment Operator: ______
Location Inspected: ______
General Pipeline Condition: ______
Results (thickness, etc.): ______
Action Required: ______
Location Inspected: ______
General Pipeline Condition: ______
Results (thickness, etc.): ______
Action Required: ______

Equipment Used: ______
Equipment Operator: ______
Location Inspected: ______
General Pipeline Condition: ______
Results (thickness, etc.): ______
Action Required: ______
Location Inspected: ______
General Pipeline Condition: ______
Results (thickness, etc.): ______
Action Required: ______

Equipment Used: ______
Equipment Operator: ______
Location Inspected: ______
General Pipeline Condition: ______
Results (thickness, etc.): ______
Action Required: ______
Location Inspected: ______
General Pipeline Condition: ______
Results (thickness, etc.): ______
Action Required: ______

Equipment Used: ______
Equipment Operator: ______
Location Inspected: ______
General Pipeline Condition: ______
Results (thickness, etc.): ______
Action Required: ______
Location Inspected: ______
General Pipeline Condition: ______
Results (thickness, etc.): ______
Action Required: ______

NOT OPERATIVE

Monthly Inspection Data

Date: 6/29/93

Inspector: Schierman

2. Surface Water Control Structures

Diversion Ditch 1: Good Tumble weeds have been cleaned out

Diversion Ditch 2: Good

Diversion Ditch 3: Good

Diversion Berm 2: Good

Mill and Facilities Area Sedimentation Pond:

Remarks: Cover advancement looks good has helped with minimizing potential for blowing tailings sands

Overspray Minimization Evaluation: No spraying at present time.