APPENDIX A

APPENDIX A

DAILY ACTIVITY LOGS

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC – INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-2C
FIELD ACTIVITY SUBJECT TAILINGS REGRADING
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE TUES. 5/9/89
SHEET 1 of 2

0800 MJY ARRIVE ON-SITE. NIELSONS WORKING
MET WITH ED MORALES, GOT TLD BADGE, GAVE URINE SAMPLE.
(ED MORALES IS UNC'S R.S.O.)
MET W/ CHUCK JOHNSON, DROVE AROUND WORK AREA - OVERVIEW OF WORK.

NIELSONS ON-SITE SINCE LATE APRIL – GRADING ROADS TO WELLS. GETTING SET UP. SCRAPERS WORKING SINCE FRIDAY, 5/5/89. DOZER STARTED WORKING MONDAY, 5/8/89.

EQUIPMENT

2 ~~633~~ CAT 633 SCRAPERS (PADDLE WHEEL)
1 CAT D8H DOZER
1 CAT 12G GRADER
1 WATER TRUCK

UNC WILL DO SOME OF THE STRIPPING OF WINDBLOWN TAILINGS AND THE CLEARING & GRUBBING ASSOCIATED WITH IT. C. JOHNSON SAID THAT UNC DOES NOT HAVE ACCESS TO SECTION 1 (NAVAHO LAND) AND MAY NOT GET ACCESS

VEGETATIVE MATERIAL (HAY FROM OLD WIND BREAKS, GRUBBED TREES & SHRUBS) BEING PUT IN NORTH CELL. GRUBBED DEBRIS IS BEING BURNED.

MET WITH JIM FLETCHER, DROVE AROUND WORK AREA. LOOKED AT DETAILED ASPECTS WORK. (SURVEY GRADE STAKES, ETC). SM-8 (SETTLEMENT MONUMENT) HAS BEEN PLACED. LOOKED AT SPOT ON NORTHWEST TAILINGS DAM WHERE TAILINGS EXTEND UNDER THE ROAD.

NIELSONS WORKING IN NORTH CELL W/ SCRAPERS, DOZER, BLADE

Canonie Environmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME LINC INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT TAILINGS REGRADING
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE ~~METUES~~ TUES 5/9/89
SHEET 2 of 2

P.M. NIELSENS STARTING TO CLEAR WINDBLOWNS FROM AREA ~~EAST~~ TO WEST OF OLD NEUTRALIZATION ~~STATION~~. MJY ASKED J. FLETCHER AND C. JOHNSON IF THEY WOULDN'T PREFER TO KEEP THAT MATERIAL ("WINDBLOWN") UNTIL AFTER THE TAILINGS ARE COMPLETELY REGRADED. ON CLOSER EXAMINATION, UP TO 8 FT. ~~OF~~ DRIFTS OF WINDBLOWN COARSE TAILINGS EXIST IN THIS AREA AND SOUTH AND EAST OF THE DILCO KNOB. MUTUALLY AGREED THAT MOST IMPORTANT IS THE RADIOLOGIC CHARACTERISTICS OF THE SOIL. BECAUSE THESE DEPOSITS ARE SO LARGE AND CONSIST OF COARSE TAILINGS IT IS APPROPRIATE TO PUT THEM UNDER THE INTERIM COVER AS PART OF THE REGRADED TAILINGS MATERIAL.

3 SAMPLES OF THE MATERIAL PICKED UP AND PLACED IN THE NORTH CELL WERE TAKEN AND THERE LOCATIONS WERE SURVEYED. (WB-1, WB-2, WB-3).

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM RECLAMATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT TAILINGS REGRADING
LOCATION N. CELL TAILINGS DISPOSAL AREA EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 5/10/89
SHEET 1 of 2

07:30 MJY ARRIVE ON-SITE. NIELSONS STARTS WORK FOR THE DAY

SCRAPERS LOADING FROM THE LARGE DEPOSITS OF WINDBLOWN TAILINGS ADJACENT TO THE SOUTH SIDE OF THE DILCO KNOB, UP TO APPROX. 8' OF DEPOSITS HERE.

MJY, C. JOHNSON (UNITED NUCLEAR) AND J. FLETCHER (UNITED NUCLEAR) DISCUSSED THE SUBJECT OF PLACING WINDBLOWN TAILINGS DURING THE TAILINGS REGRADING PHASE DURING THE AFTERNOON OF 5/9/89. ALL WERE IN AGREEMENT THAT IN AREAS OF LARGE DEPOSITS OF WINBLOWN TAILINGS WHERE SIGNIFICANT QUANTITIES OF TAILINGS COULD BE PICKED UP WITHOUT ALSO PICKING UP NATIVE ALLUVIAL SOIL, THESE MATERIALS COULD AND SHOULD BE PLACED DURING THE TAILINGS REGRADING PHASE. SINCE THE RADIOLOGIC CHARACTERISTICS OF THE SOILS WERE MOST IMPORTANT IN DETERMINING ORDER OF PLACEMENT FOR MEETING RADON ATTENUATION CRITERIA IT IS APPROPRIATE TO PLACE THESE LARGE QUANTITIES OF WINDBLOWN TAILINGS WITH THE REGRADED COARSE TAILING SINCE THEY ARE ACTUALLY THE SAME.

AM. WEATHER — 60°F - 70°F, WIND 10 - 20 MPH FROM SOUTHWEST, SUNNY W/ VARIABLE HIGH CLOUDS

10:00 DOZER PUSHING NATIVE ALLUVIAL SOIL FROM BANK ON EAST SIDE OF THE NORTH TAILINGS CELL. MJY, JIM FLETCHER DISCUSSED THIS, MUTUALLY AGREED THAT NATIVE SOIL SHOULD BE USED ONLY FOR INTERIM COVER AFTER REGRADING OF TAILINGS IS COMPLETE. JIM SPOKE TO BRUCE BARRY (NIELSONS SUPERINTENDANT) AND DOZER ACTIVITY WAS CHANGED TO PUSHING ONLY COARSE TAILINGS.

Canonie Environmental **DAILY FIELD ACTIVITY LOG**

PROJECT NAME UNC - INTERIM RECLAMATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT TAILINGS REGRADING
LOCATION N. CELL TAILINGS DISPOSAL AREA EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 5/10/89
SHEET 2 of 2

MJY, JIM FLETCHER LOOK AT NEXT LOCATION FOR SCRAPER EXCAVATION — AREA IMMEDIATELY NORTH OF NORTH CROSS DIKE ROAD. LARGE QUANTITIES OF WINDBLOWN TAILINGS HAVE BEEN DROPPED IN THIS DEPRESSION. GRADER HAS ALREADY STOCKPILED WINDBLOWN MATERIAL

MJY ASKED JIM FLETCHER TO REQUEST DAILY EARTHWORK QUANTITIES FROM NIELSENS

M

AFTERNOON.

PM. WEATHER — 70° F WINDS TO 30 MPH FROM SOUTHWEST. PARTLY CLOUDY.

SCRAPERS PICKING UP STOCKPILED WINDBLOWN TAILINGS FROM NORTH SIDE OF NORTH CROSS-DIKE ROAD. UNLOADING ON NORTH SIDE OF NORTH CELL IN STOCKPILE.

DOZER PUSHING COARSE TAILINGS TOWARD CENTER OF NORTH CELL FROM SOUTH SIDE OF CELL JUST NORTHEAST OF THE DILCO KNOB. CONTINUES TO THE WEST AROUND THE KNOB TO THE LARGE PILES OF COARSE TAILINGS SWEST OF THE KNOB.

16:00 NIELSENS QUITS FOR THE DAY

UNITED NUCLEAR CLEARING & GRUBBING AREA FOR STRIPPING OF WINDBLOWNS IN SECTIONS 2 AND 36 ALL DAY. VEGETATIVE DEBRIS PLACED IN EAST SIDE OF NORTH TAILINGS CELL AND BURNED.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC – INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT TAILINGS REGRADING
LOCATION N. CELL TAILINGS DISPOSAL AREA EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 5/11/89
SHEET 1 of 1

07:30 MJY ARRIVE ON SITE. NIELSONS START WORK FOR THE DAY

DOZER CONTINUING TO KNOCK DOWN PILES OF COARSE TAILINGS WEST OF THE DILCO KNOB. LIFT THICKNESS IS APPROX. 3' TO 3.5'.

SCRAPERS WORKING IN AREA DIRECTLY SOUTH AND EAST OF DILCO KNOB WHERE THEY STARTED ~~MORNIN~~ 5/10/89. GRADER ASSISTING.

~09:30 SCRAPERS, BLADE, DOZER MOVE TO AREA OF 10:1 CUT IN NW CENTRAL CELL (SOUTHWEST PORTION OF PLANNED REGRADING ACTIVITY.)

DOZER CUTTING NATIVE SOIL FROM BANK. JIM FLETCHER SPOKE TO BRUCE BARRY ABOUT IT. DOZER ONLY MAKING ROAD FOR SCRAPERS TO ACCESS SOUTHWEST PORTION OF NORTH TAILINGS CELL BUT NO MORE NATIVE SOIL IS CUT.

MORNING WEATHER - 45°-65°F PARTLY CLOUDY WINDS 10-30 MPH UP THE VALLEY (FROM S.W.)

SCRAPERS BOGGING DOWN, GETTING STUCK IN SAND. DOZER HAS TO BABYSIT SCRAPERS – HELP THEM THROUGH SCRAPERS CREATING A STOCKPILE IN BOTTOM OF SW PORTION OF NORTH CELL. A COUPLE OF SLOPE STAKES KNOCKED OUT.

MJY SPOKE TO J. FLETCHER ABOUT REDUCING THE LIFT THICKNESS FOR THE WORK PUSHED DONE BY THE DOZER. JIM TALKED TO BRUCE ABOUT IT. DOZER BABYSITTING SCRAPERS SO NO IMMEDIATE RESULTS OR CORRECTIONS SEEN.

12:00 - 12:30 LUNCH

14:30 NIELSONS PARKS THE SCRAPERS, DOZER STARTS TO KNOCK DOWN STOCKPILE CREATED BY SCRAPERS.
GRADER WORKING ON OUTSIDE OF NORTHWEST PART OF TAILINGS DAM STOCKPILING WINDBLOWN TAILINGS. Lifts looking better (thinner)

P.M. WEATHER 70°F MOSTLY CLOUDY, WINDY 20-30 MPH FROM SOUTHWEST,

Scrapers not to work tomorrow. Nielsons will let dozer catch up.

MJY LEFT SITE AT ~~05:30~~ 17:30

Geotextile delivered for haul roads. Nielsons will put grader to work preparing roads tomorrow. Fibretex no longer available.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO 8-060-20
FIELD ACTIVITY SUBJECT TAILINGS REGRADING
LOCATION N. CELL TAILINGS DISPOSAL AREA EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE FRI, 5/12/89
SHEET 1 of 3

08:00 MJY ARRIVE ON-SITE
NIELSONS ALREADY WORKING.
DOZER CONTINUING TO SPREAD STOCKPILES PLACED BY SCRAPERS.
GRADER WORKING ON HAUL ROADS. SCRAPERS NOT WORKING TO ALLOW DOZER TO CATCH UP.
DOZER LIFTS GETTING THICKER AGAIN. J. FLETCHER TO SPEAK TO BRUCE BARRY ABOUT IT.

MORNING WEATHER — 40°-60°F MOSTLY SUNNY 10 MPH WIND FROM SOUTHWEST

WATER PROBLEMS. TANKS DRY. NO WATER TO MILL BUILDING OR CONSTRUCTION AREA. JIM FLETCHER WORKING ON SOLUTION

AFTERNOON MORE OF THE SAME.
DOZER SPREADING STOCKPILES, GRADER SMOOTHING SURFACE OF REGRADED TAILINGS.

JIM FLETCHER ASKED BRUCE BARRY TO REMOVE DEBRIS FROM FILL. DOZER WORKING ON THINNER LIFTS AGAIN.

WATER FIXED. JIM FLETCHER TO ORDER ANOTHER LARGER PUMP TO MEET DEMAND.

NIELSONS EXPECTING IN CAT D3 DOZER AND PNEUMATIC ROLLER.

AFTERNOON WEATHER 55°-60°F WINDY (10-20 MPH) AND PARTLY CLOUDY

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-960-20
FIELD ACTIVITY SUBJECT TAILINGS REGRADING
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE FRI 5/12/89
SHEET 2 of ~~3~~

WEEKLY EARTHWORK QUANTITY ESTIMATE SUMMARY *

DATE	QUANTITY (C.Y.)	CUMULATIVE (C.Y.)
5/5/89	54 loads @ 20 C.Y. = 1080	1,080
5/8/89	135 loads @ 20 C.Y. = 2700	3,780
5/9/89	195 loads @ 20 C.Y. = 3900	7,680
5/10/89	~~147~~ ~~155~~ loads @ 20 C.Y. = 2940	10,620
5/11/89	111 loads @ 20 C.Y. = 2220	12,840
5/12/89	NO DIRT MOVED, ONLY SPREAD W/ DOZER THAT ALREADY MOVED	12,840

* NOTE: QUANTITY ESTIMATES FROM LOAD COUNTS GIVEN TO UNC BY NIELSON'S CONTRACTORS.

Doze Tailings

5-5-	54 loads @ 20 C.Y.	1080	
5-8-	135 " @ "	2700	
5-9-	40 " @ 20 "	800	
	TOTAL TO DATE		4580 C.Y

Wind Blown Material

5-9-	155 @ 20	3100	
5-10	147 @ 20	2940	
	TOTAL TO DATE		6040 C.Y

Excavation to Fill Pond

5-11-89	111 @ 20	2200	
	TOTAL TO DATE		2200 C.Y

Gave this information to Jim Fletcher
U.N.C. 5-12-89

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-020-20
FIELD ACTIVITY SUBJECT TAILINGS REGRADING
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 5/15/89
SHEET 1 of 3

07:30 NIELSONS, INC. ON-SITE; START WORK
08:00 MJY ON-SITE

NIELSONS HAS CAT D3B AND PNEUMATIC ROLLER ON-SITE. D3B WORKING IN AREA DIRECTLY EAST OF DILCO KNOB IN CENTRAL TAILINGS CELL PUSHING TAILINGS SANDS TO FIRMER GROUND SO THAT SCRAPERS CAN PICK IT UP.

SCRAPERS NOT RUNNING. ONE HAS FLAT TIRE FROM HITTING SURVEY MONUMENT.

PNEUMATIC ROLLER, GRADER, AND WATER TRUCK WORKING ON ACCESS ROAD TO SW ALLUVIUM WELL LOCATIONS. GEOTEXTILE ROLLS PLACED NEAR ACCESS AT APPROX 300 FT INTERVALS.

GEOTEXTILE IS WELLMAN QULINE, NONWOVEN, Q-60, TYPE 4, 6 OZ, 90 MIL. ROLLS ARE 20 FT WIDE X 300 FT LONG

DBH WORKING IN AREA WEST/SOUTHWEST OF THE DILCO KNOB (SOUTH OF N. CROSS-DIKE ROAD) PUSHING TAILINGS SANDS TO FIRMER GROUND FOR LATER PICKUP BY SCRAPERS AND NORTH OF N. CROSS-DIKE ROAD PUSHING TAILINGS SANDS OFF OF THE NORTH SLOPE OF THE N. CROSS-DIKE ROAD.

MJY ASKED J. FLETCHER WHEN MATERIAL FROM WINDBLOWN AREA NORTH OF THE NORTH TAILINGS CELL WOULD BE STRIPPED. J.F. SAID PLAN WAS TO STRIP THE AREA JUST PRIOR TO TAKING THE 6" OF WINDBLOWN CONTAMINATED SOIL. MJY NOTED THAT VEG. MATERIAL SHOULD NOT BE PLACED JUST BELOW OR AS PART OF INTERIM COVER SOILS. J.F. TO CHECK WITH C. JOHNSON.

09:30-11:30 MJY HELPS GEORGE OF UNC RESET GRADE STAKES IN THE NORTH TAILINGS CELL

MORNING WEATHER — OVERCAST, 45°F TO 60°F, WINDS 0-10 MPH

11:30 D3 DOZER STUCK. TAILINGS SANDS WET, LOOSE. SMALL POCKETS OF SLIMES ALSO FOUND UNDER DOZER.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-900-20
FIELD ACTIVITY SUBJECT TAILINGS REGRADING
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 5/15/89
SHEET 2 of 3

12:00 12:30 NIELSONS BREAKS FOR LUNCH

12:30 → GRADER SMOOTHING AREAS OF NORTH TAILINGS CELL WHERE DOZER HAS PUSHED OUT LIFTS (SOUTHWEST PORTION OF NORTH CELL). WATER TRUCK WETTING TAILINGS SMOOTHED BY GRADER.

ONE SCRAPER STARTED. PICKING UP COARSE TAILINGS STOCKPILED BY D3 AND D8 DOZERS. ALTERNATING BETWEEN DOZER STOCKPILES. UNLOADING IN SOUTH PART OF NORTH TAILINGS CELL.

15:30 MJY, J. FLETCHER, C. JOHNSON DISCUSS PLACEMENT OF VEG. MATERIAL FROM WINDBLOWN AREA NORTH OF NORTH TAILINGS CELL. C.J. DOES NOT WANT TO STRIP MATERIAL NOW AND LET THE WIND BLOW THE UNVEGETATED SOIL FURTHER UP THE VALLEY. MJY NOTED THAT VEG. MATERIAL SHOULD NOT BE PLACED JUST BELOW OR AS PART OF INTERIM SOIL COVER. IT WAS DECIDED THAT SINCE THERE WAS NOT ENOUGH COARSE TAILINGS TO MEET THE REGRADED DESIGN CONTOURS, WINDBLOWN MATERIAL WOULD BE USED TO HELP BRING THE NORTH CELL TO DESIGN GRADES. EMBANKMENT SOILS WOULD BE USED TO TOP OFF IF NECESSARY. ADDITIONAL CLEAN SOIL BORROW WILL WOULD BE USED AS THE INTERIM COVER. THIS ALLOWS PLACEMENT OF MATERIAL SO THAT THE HIGHEST RADIUM CONTENT SOIL IS ON THE BOTTOM AND THE LOWEST IS ON TOP. UNDER NO CIRCUMSTANCES WILL VEG MATERIAL BE PLACED JUST BELOW OR AS PART OF THE COVER OR IN A MANNER THAT WOULD ADVERSELY EFFECT COMPACTION OF THE COVER. MJY CALLED O.P. WESLEY (CANONIE - DENVER) AND VERIFIED THIS PLAN.
MJY WILL CALCULATE MATERIAL QUANTITIES IN THE CENTRAL CELL TO SEE IF EXCESS MATERIALS ARE AVAILABLE FOR USE AS FILL IN THE NORTH CELL.

CanonieEnvironmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT TAILINGS REGRADING
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 5/15/89
SHEET 3 of 3

OPW SUGGESTED THAT UNITED NUCLEAR INSTALL TWO ADDITIONAL SETTLEMENT MONUMENTS TO HAVE A BETTER IDEA OF LOSS DUE TO SETTLEMENT, ~~OR SHRINK~~ AND ~~PREVENT~~ PROTECT AGAINST ~~CHECK JOHNSON~~ CLAIM BY NIELSONS, INC. C. JOHNSON & JIM FLETCHER WILL INSTALL THE TWO ADDITIONAL.

C. JOHNSON TOLD MSY THAT THE CONTRACT FOR REVEGETATION WILL BE GIVEN TO JAMES RANCHES

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC – INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT TAILINGS REGRADING
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 5/16/89
SHEET 1 of 2

08:00 MJY ARRIVE ON-SITE.

LIGHT RAIN OVERNIGHT (EARLY MORNING)

NIELSONS WORKING IN (EXCAVATING FROM) NORTHWEST PORTION OF CENTRAL CELL ONE SCRAPER HAS FLAT TIRE. DOZERS (D8 & D3) PUSHING TAILINGS SANDS ONTO N. CROSS-DIKE ROAD FOR PICKUP BY SCRAPERS. SCRAPERS DUMPING IN SW PORTION OF N. CELL.

WATER TRUCK WETTING REGRADED TAILINGS IN NORTH CELL

GRADER STRIPPING VEGETATION SOUTH OF MAIN ACCESS ROAD GATE. AND STOCKPILING FOR LATER PICKUP BY SCRAPERS.

MORNING WEATHER — 45-55° F, MOSTLY CLOUDY, POTENTIAL FOR RAIN.

UNC MEETING IN ADMINISTRATIVE BUILDING. C. JOHNSON, J. Velasquez, OTHERS INVOLVED.

SCRAPER TIRE FIXED
ROLLER NOT RUNNING. (NOT USING.)

NIELSONS TO BRING IN ANOTHER DOZER. IT WILL BE MOBILIZED WED., 5/17/89. EXPECTING A CAT D6 DOZER.

10:30 MJY BEGIN ON CROSS SECTIONS FOR CENTRAL CELL TAILINGS QUANTITIES. UNC HAS PLANIMETER FOR ~~AREA~~ END AREAS OF CROSS SECTIONS BUT IT WILL NOT DETERMINE AREAS IF THE VERTICAL SCALE IS EXAGGERATED. SECTIONS HAVE MAXIMUM ELEVATION ~~DISTANCES~~ DIFFERENCES OF 5-15 ft IN 1300 ft LENGTHS. THE ERROR IN TRACING THE SECTION END AREA WOULD BE LARGE, AND PROVIDE UNRELIABLE ESTIMATES. DOUG GRAVES TO SEND MJY A DIGITAL PLANIMETER FROM CANONIE'S DENVER OFFICE CAPABLE OF HANDLING AN EXAGGERATED VERTICAL SCALE. MJY WILL DRAW SECTIONS WITH 10 TO 1 VERTICAL EXAGGERATION.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT TAILINGS REGRADING
LOCATION ~~TAILINGS REGRADING~~ N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 5/16/89
SHEET 2 of 2

AFTERNOON

WEATHER THUNDERSTORMS BUILDING, WIND PICKING UP

DIRT WORK CONTINUES AS IN THE MORNING

J. FLETCHER HAVING WALLY ZENZ OF UNC MAKING TWO ADDITIONAL SETTLEMENT MONUMENTS. WILL BE READY WED, 5/17/89.

UNC CONTINUES ~~STRIPPING~~ CLEARING TREES FROM AREAS NORTH AND NORTHEAST OF NORTH TAILINGS CELL FOR LATER STRIPPING OF WINDBLOWN TAILINGS.

RAIN STARTS AT 16:00 AFTER ABOUT 1 HR OF LIGHTNING AND THUNDER AROUND SITE.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT TAILINGS REGRADING
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 5/17/89
SHEET 1 of 3

08:00 MJY ARRIVE ON-SITE

SOAKING RAIN OVERNIGHT, PARTLY TO MOSTLY CLOUDY, POSSIBILITY OF THUNDERSHOWERS, 40°-60°F, WIND 10-25 MPH FROM NORTH

NIELSONS CONTINUES WORKING IN AREA IN CENTRAL CELL AND THE SOUTH PORTION OF THE NORTH CELL.

BOTH SCRAPERS LOADING TAILINGS SANDS FROM NORTH SIDE OF SOUTHEAST SLOPE OF NORTH CELL AND FROM CENTRAL CELL SOUTH OF THE DILCO KNOB. SCRAPER LOADS RUNNING APPROX. 3/4 FULL.

D8 DOZER SPREADING STOCKPILED COARSE TAILINGS IN THE SOUTHWEST PORTION OF THE NORTH CELL.

GRADER STRIPPING GRASS, SAGE FROM AREA OF NORTH EXTENSION OF HAUL ROAD ON WEST/NORTHWEST SIDE OF NORTH CELL. JIM FLETCHER AND BRUCE IBERRY TO COORDINATE VERIFICATION SAMPLING FOR WINDBLOWN BEFORE ANY FILL IS PLACED.

JIM FLETCHER SHOT ELEVATION (LEVEL LOOP) ON SM-8. SM8 NOT COVERED YET WITH FILL.

10:15 FIRST LOAD OF GRAVEL FOR MAIN ACCESS ROAD ARRIVES.. START SPREADING AT CATTLE GUARD ADJACENT TO HIGHWAY 566 AND CONTINUE EAST. GRAVEL FROM GALLUP SAND & GRAVEL.

MJY RECEIVED DIGITAL PLANIMETER FROM DOUG GRAVES AT CANONIE/DENVER, STARTED WORKING ON CENTRAL CELL SOIL QUANTITY CALCULATIONS

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-2C
FIELD ACTIVITY SUBJECT TAILINGS REGRADING
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 5/17/89
SHEET 2 of 3

AFTERNOON — PARTLY CLOUDY, POSSIBLE THUNDER SHOWERS 66° F, WIND FROM NORTH.

SCRAPERS PICKING UP STRIPPED VEGETATION AND WINDBLOWN ~~TAILINGS~~ SANDS BETWEEN THE MAIN ACCESS ROAD AND THE DIKE NORTH OF THE NORTH EMBANKMENT OF THE NORTH TAILINGS CELL. EXCAVATION STARTING FROM THE ARROYO ON THE WEST AND CONTINUING EAST. DEPOSIT IN N. CELL.

GRADER WORKING TO STOCKPILE SOIL & VEG. FOR SCRAPERS

D8 DOZER PUSHING (SPREADING) TAILINGS SANDS STOCKPILED ON SOUTH SIDE OF THE NORTH CELL.

D3 DOZER CONTINUING TO WORK SOUTH OF DILLO KNOB STOCKPILING TAILINGS SANDS FROM THE CENTRAL CELL ON FIRMER GROUND

OLD WELL ENCOUNTERED IN AREA WHERE SCRAPERS ARE WORKING. WELL IS 3" Ø STEEL. JIM FLETCHER SAID NO ONE KNOWS ANYTHING ABOUT THE WELL. FLETCHER TOLD NIELSONS THAT THEY COULD LEAVE IT ALONE (IT IS CAPPED) AND COVER IT WITH FILL FOR THE HAUL ROAD OR CUT IT OFF AND RECAP IT BEFORE COVERING. MJV RECOMMENDED THAT THE WELL BE GROUTED CLOSED. J. FLETCHER TO CHECK WITH C. JOHNSON, BUT SURVEYED LOCATION IN ORDER TO COME BACK TO IT IN THE FUTURE, IF NECESSARY

CAT D6 DOZER DELIVERED TO NIELSONS

SURFACE COARSE PLACED ALONG LENGTH OF MAIN ACCESS ROAD TO BEND AT NE SYSTEM SURGE TANK. ROAD ALREADY HAS GEOTEXTILE UNDER IT.

J. FLETCHER HAD NIELSONS GRADE A HAUL ROAD ALONG THE BASE OF THE HILLS NORTH OF THE ~~SOUTH~~ NORTHEAST SYSTEM SURGE TANK SO THAT TREES AND BRUSH FROM SECTIONS 2 AND 36 COULD BE HAULED TO THE NORTH CELL AND BURIED.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT TAILINGS REGRADING
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 5/17/89
SHEET 3 of 3

MJY, C. JOHNSON, J. FLETCHER DISCUSS CONSTRUCTION ACTIVITIES. C.J. & J.F. TO START WINDBLOWN AREA VERIFICATION SAMPLES RIGHT AFTER WINDBLOWN AREAS HAVE BEEN STRIPPED. JIM WILL START LAYING OUT 50 METER SAMPLE GRIDS IN AREA EAST OF DILCO KNOB AND NORTH OF BORROW PIT NO. 1 TOMORROW. JIM WILL GET ED MORALES (UNC'S RADIATION SAFETY OFFICER) TO START THE SAMPLING RIGHT AWAY.

UNC AND NIELSONS TO COORDINATE STRIPPING OF WINDBLOWN SOILS SINCE BOTH ARE RESPONSIBLE FOR SOME STRIPPING. JIM WILL COORDINATE W/ BRUCE BERRY (NIELSONS SUPERINTENDANT) SO THAT SEQUENCING WORKS OUT. JIM WILL HAVE HIS CREW WORK THROUGH THE WEEKEND AND BRING IN ANOTHER DOZER TO CLEAR TREES AND SHRUBS IF NECESSARY.

~~MJY~~
JIM MENTIONED TO CHUCK THAT MJY RECOMMENDED GROUTING IN (ABANDONING) THE WELL FOUND EARLIER IN THE DAY. CHUCK SAID THAT IT COULDN'T BE ABANDONED BECAUSE UNC DIDN'T HAVE AUTHORIZATION TO DO SO. JIM SAID THAT THE HAUL ROAD EXTENSION THAT WILL COVER THE WELL WILL BE TAKEN OUT LATER AND THAT THE FATE OF THE WELL COULD BE DECIDED UPON ~~LATER~~ AT THAT TIME.

MJY TOLD CHUCK THAT PRELIMINARY CALCULATIONS SHOW THAT THERE WILL BE APPROX. 50,000 C.Y. OF EXCESS MATERIAL IN THE CENTRAL CELL FOR REGRADING. THIS FIGURE DOES NOT INCLUDE POTENTIAL SHRINKAGE OR SETTLEMENT. 20% LOSS DUE TO SHRINKAGE AND SETTLEMENT WOULD RESULT IN APPROX. 23,000 C.Y. EXTRA. CHUCK, ~~WITH~~ WITH THESE FIGURES, WILL NOT TAKE ADDITIONAL MATERIAL OUT OF THE CENTRAL CELL FOR THE NORTH CELL.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT TAILINGS REGRADING
LOCATION N. CELL TAILINGS DISPOSAL AREA EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 5/18/09
SHEET 1 of 1

08:00 MJY ARRIVE ON-SITE

08:30 - 10:00 MJY HELPS GEORGE O. OF UNC SURVEY 50 METER GRID LOCATIONS FOR WINDBLOWN VERIFICATION SAMPLES EAST OF DILCO KNOB AND NORTH OF BORROW PIT NO 2. SIGNIFICANT AMOUNT OF TAILINGS REMAIN IN THE SOUTH PORTION OF THIS AREA. NOT ALL OF THIS IS WINDBLOWN TAILINGS, SOME OF IT APPEARS TO BE PART OF THE CENTRAL CELL. THE CENTRAL CELL BOUNDARY MAY NEED TO BE DEFINED DIFFERENTLY THAN AS SHOWN ON REC. PLAN DRAWINGS.

D8 & D6 DOZERS PUSHING TAILINGS SE. OF DILCO KNOB IN THE CENTRAL CELL TO FIRMER GROUND SO THAT SCRAPERS CAN LOAD. SCRAPERS LOADING AND DEPOSITING IN SOUTH AND SOUTHWEST PORTION OF THE NORTH CELL

GEOTEXTILE PLACED ON ACCESS ROAD TO THE FUTURE SW ALLUVIUM WELLS. CRUSHED LIMESTONE BEING DELIVERED IN TRUCKS FROM GALLUP SAND AND GRAVEL. GRADER SPREADING

MJY TAKES PHOTOS

~~11:00~~ UNC CLEARING TREES ON HILLS NORTH OF N. CELL IN SECTION 36. PETTIBONE FORKLIFT EQUIPED WITH BUCK RAKE MOVING TREES AND SHRUBS TO EAST PART OF N. CELL AND BURNING.

BRUCE BERRY (NIELSONS' SUPERINTENDANT) ESTIMATES THAT HE WILL BE DONE WITH TAILINGS AND READY TO ~~START~~ START STRIPPING WINDBLOWN SOILS NORTH OF NORTH CELL BY THE MIDDLE OF NEXT WEEK. (THIS IS AN OPTIMISTIC ESTIMATE)

11:00 SCRAPERS PARKED. DOZERS CAN'T SUPPLY SOIL FAST ENOUGH TO SCRAPERS. ALL 3 DOZERS START PUSHING TAILINGS FROM CENTRAL CELL SOUTH AND SOUTHWEST OF DILCO KNOB.

AFTERNOON DOZERS CONTINUE TO WORK AS IN MORNING. ROAD SURFACING STILL BEING DELIVERED AND SPREAD WITH THE GRADER. APPROX. 3" OF GRAVEL PLACED OVER GEOTEXTILE.

CH 633 WATER WAGON DELIVERED TO SITE FOR NIELSONS.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, NORTH CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT TAILINGS REGRADING
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 5/19/89
SHEET 1 of 4

07:30 MJY ARRIVE ON-SITE, NIELSONS STARTS.

SCRAPERS PICKING UP STOCKPILES OF COARSE TAILINGS ON NORTH CROSS-DIKE ROAD, (STOCKPICED BY DOZERS YESTERDAY) DEPOSITING IN SOUTH PART OF NORTH CELL. D8 DOZER PUSHING SCRAPERS D6, D3 ~~DIE~~ CONTINUE WORKING IN CENTRAL CELL PUSHING COARSE TAILINGS.

GRAVEL (CRUSHED LIMESTONE) BEING PLACED ON ACCESS ROAD TO THE FUTURE S.W. ALLUVIUM WELLS. FIRST LIFT SHOULD BE COMPLETED TODAY.

UNC CONDUCTING WINDBLOWN VERIFICATION SAMPLING (3 SAMPLES) IN AREA BETWEEN THE NORTHWEST CORNER OF THE TAILINGS DAM AND TOE DAM WHERE THE HAUL ROAD WILL BE EXTENDED. NIELSONS HAS STRIPPED THIS AREA AND WILL WAIT FOR ~~TEST~~ POSITIVE TEST RESULTS BEFORE ~~CONSTRUCTING~~ CONSTRUCTING THE HAUL ROAD EXTENSION.

MJY TALKED TO C. JOHNSON, MJY, C.J. DISCUSSED THE POSSIBILITY OF REDEFINING THE NORTHEAST PORTION OF THE CENTRAL CELL. THIS AREA IS NOW DESIGNATED A WINDBLOWN TAILINGS AREA, HOWEVER TAILINGS SANDS APPEAR TO BE STILL GREATER THAN 1 FT DEEP. NIELSONS HAS ALREADY TAKEN 6+ INCHES (UP TO 2 FT) FROM THIS AREA. CHUCK WILL HAVE ED MERKLES LOOK AT IT AND DIG SOME TEST HOLES TO TRY TO HELP REDEFINE WHAT IS WINDBLOWN.

MJY SUGGESTED THAT UNC PUSH NIELSONS TO COVER AND LOAD THE SLIMES AREA OF THE NORTH CELL (ONLY THE FRINGES OF THE SLIMES HAVE BEEN COVERED) AS SOON AS POSSIBLE TO ALLOW CONSOLIDATION TO BEGIN. THIS WILL ALLOW MORE CONSOLIDATION TO OCCUR BEFORE NIELSONS LEAVES THE SITE. CHUCK LIKED THE IDEA, AGREED.

MJY WILL GET GRAVEL SPECIFICATIONS (GRADATIONS) FROM J. FLETCHER IN ORDER TO DOCUMENT IT IN THE AS-BUILT. UNC HAS REDEFINED THE AREA OF WINDBLOWN TAILINGS TO THE NORTH, NORTHEAST. MJY WILL GET THIS FROM UNC. (J FLETCHER)

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT TAILINGS REGRADING
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 5/19/89
SHEET 2 of 4

12.00 MJY LEFT SITE FOR WEEKEND. UNC TO WORK WEEKEND CLEARING AND BURNING TREES AND SHRUBS FROM SECTIONS 2 AND 36

UNC DUG 3 TEST PITS WITH BACKHOE EAST OF DILCO KNOB AND NORTH OF BORROW PIT NO. 1 TO HELP DELINEATE THE EDGE OF THE CENTRAL CELL. TAILINGS GREATER THAN 1.5 FEET IN ALL 3 TEST PITS. (1.5', 1.5', 1.9')

WEEKLY EARTHWORK QUANTITY SUMMARY *

DATE	QUANTITY (CY)	CUMMULATIVE (CY)
5/15/89	720	13,560 **
5/16/89	3840	17,400
5/17/89	Ø	17,400
5/18/89	1360	18,760
5/19/89	Ø (?)	

* NOTE: QUANTITY ESTIMATES FROM LOAD COUNTS GIVEN TO UNC BY NIELSONS

** ADD 12,840 CY TOTAL AT END OF PREVIOUS WEEK.

5-23-89 3/4

Doze Tailings

5-16-89 800 C.y TOTAL TO DATE 5380 C.y.

EXCAVATION to Fill Pond

Wk end

5-19-89 5120 cy.

256 loads @ 20 5,120 cy

gave to Jim Fletcher 5-23-89

5-15-89	36 @ 20	720 cy
5-16-89	152 @ 20	3040 cy
5-18-89	68 @ 20	1360 cy
		5120 cy.

grand TOTAL to DATE → 10,020 cy.

5-23-89 4/4

Doze Tailings

5-16-89 800 C.y TOTAL TO DATE 5380 C.y.

EXCAVATION to Fill Pond

WK end

5-19-89 5120 CY.

256 loads @ 20 5,120 CY

gave to Jim Fletcher 5-23-89

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION PROJECT NO 86-060-20
FIELD ACTIVITY SUBJECT TAILINGS REGRADING
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 5/22/89
SHEET 1 of 1

12:30 MJY ARRIVE ON-SITE AFTER FLYING TO ABQ AND DRIVING TO SITE.

HOT. 90°F, WIND 5-15 MPH FROM SW, HIGH CLOUDS

UNC WORKED WEEKEND CLEARING TREES AND BRUSH FROM SEC. 36. MAJORITY OF LARGE VEGETATION REMOVED AND BURNED, MOSTLY ~~ONLY~~ CLEANUP LEFT TO DO. ALSO, DOZER STRIPPING SOIL FROM THE SIDES OF THE ~~ARROYOS~~ ARROYOS. LEAVING STOCKPILE IN BOTTOM FOR SCRAPERS TO PICK UP.

NIELSONS SCRAPERS PICKING UP COARSE TAILINGS FROM NORTH PART OF CENTRAL CELL (SW OF DILCO KNOB) AND UNLOADING IN PILES ON THE SOUTH PART ON THE NORTH CELL. D6 BABYSITTING SCRAPERS.

D8, D8 PUSHING COARSE TAILINGS FROM CENTRAL CELL TO GROUND WHERE SCRAPERS CAN RUN ONTO LOAD.

Second lift of GRAVEL BEING PLACED ON ACCESS ROAD TO FUTURE SOUTHWEST ALLUVIUM WELLS. & GRADER SPREADING GRAVEL.

UNC DOMESTIC WATER SUPPLY PUMP BURNED OUT OVER THE WEEKEND. J. FLETCHER & CREW EXPECT NEW PUMP AND WILL FIX ASAP. WATER STILL IN TANK FOR USE.

~ 15:00 SCRAPER DOWN. MECHANIC WORKING ON IT

16:30 CAT 825B WITH SHEEPSFEET DELIVERED TO NIELSONS

DOZERS D6, D8 WORKING LATE TO SPREAD COARSE TAILINGS THAT HAVE BEEN STOCKPILED OVER THE NORTH CELL.

RICH FROM SH&B (Geotech testing firm) ON-SITE TO TAKE REPRESENTATIVE SAMPLES FOR ASTM D 698 (STANDARD PROCTOR) TESTS ON SOIL TO BE USED AS FILL IN HAUL ROAD EXTENSION. SAMPLES TAKEN FROM NW EMBANKMENT TOE DAM AND THE AREA BETWEEN WHERE THE FILL WILL BE PLACED. SAMPLE FROM NW EMB TAKEN FROM SURFACE - LOOSE SOIL LEFT AROUND GRADE STAKE - CONTAINING WINDBLOWN SOIL; NOT REPRESENTATIVE OF CLAYEY SOILS IN EMBANKMENT. J. FLETCHER WILL HAVE RICH RETURN TO TAKE ANOTHER SAMPLE.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-2C
FIELD ACTIVITY SUBJECT TAILINGS REGRADING
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 5/23/89
SHEET 1 of 1

08:00 MJY ARRIVE ON-SITE.

SCRAPERS LOADING IN CENTRAL CELL SOUTH AND SOUTHWEST OF DILCO KNOB, D6 DOZER BABYSITTING SCRAPERS - HELPING THEM LOAD.

D8, D3 DOZERS PUSHING TAILINGS IN CENTRAL CELL SO THAT SCRAPERS CAN PICK UP.

FINAL LIFT BEING PLACED ON THE PORTION OF THE SOUTHWEST ACCESS ROAD THAT DID NOT GET COMPLETED YESTERDAY AND MAIN ACCESS ROAD. END DUMP TRUCKS FROM GALLUP SAND AND GRAVEL DUMPING, GRADER SPREADING.

ROAD SURFACE TO BE WATERED AND "PROCESSED" - ROLLED OVER W/ GRADER - PRIOR TO FINAL GRADING ACCORDING TO B. BERRY OF NIELSONS.

NIELSONS HAS GRADE CHECKER WORKING IN SW AREA OF N. CELL AND NW AREA OF CENTRAL CELL. SOME GRADES SET ARE IRREGULAR OR INCORRECT. B. BERRY NOT TO USE THIS GRADE CHECKER AGAIN FOR THIS PURPOSE - WILL KEEP AS LABORER.

WEATHER MORNING 45°F CLEAR, BREEZY
AFTERNOON 80-85°F, PTLY CLOUDY, WIND 20MPH. FROM SW.

RESULTS OF 13 (TESTS) SOIL VERIFICATION SAMPLES TAKEN IN AREA OF MAIN HAUL ROAD EXTENSION - SOUTHERN MOST TEST FAILED. J FLETCHER NOTIFIED NIELSONS. THAT AREA (AROUND FAILING TEST) TO BE CLEANED FURTHER AND RESAMPLED.

NIELSONS HAS TWO LABORERS START REMOVING FENCE (BARBED WIRE STRANDS) NORTH OF THE MAIN ACCESS ROAD.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-660-22
FIELD ACTIVITY SUBJECT TAILINGS REGRADING
LOCATION N. CELL TAILINGS DISPOSAL AREA EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 5/24/89
SHEET 1 of 1

08:00 MJY ARRIVE ON-SITE. C. JOHNSON BACK ON SITE FROM EAST COAST TRIP

D8 DOWN - BEARINGS SHOT, MECHANIC WORKING ON IT.

GRADER CLEANING THE AREA BETWEEN THE NW EMBANKMENT AND THE TOE DAM WHERE RADIUM SOIL VERIFICATION SAMPLE FAILED.

D6 DOZER PUSHING TAILINGS IN THE CENTRAL CELL S & SW OF DILCO KNOB. ALSO BABYSITTING 1 SCRAPER AS IT PICKS UP TAILINGS SANDS FROM CENTRAL CELL IN THE AREA THE D6 IS WORKING. THE OTHER SCRAPER IS IDLE

LABORERS CONTINUE TAKING DOWN FENCE NORTH OF MAIN ACCESS ROAD ON SECTION BOUNDARY. D3 USED TO PULL FENCE POSTS.

11:15 BOTH SCRAPERS START PICKING UP MATERIAL SCRAPED UP BY THE GRADER FROM BETWEEN THE NW EMBANKMENT AND THE TOE DAM TO THE NORTH. D6 CONTINUING IN C. CELL

GRADER STARTS TO STRIP VEG & WINDBLOWN FROM N. SLOPE OF MAIN ACCESS ROAD AND FENCE ALIGNMENT. WILL STRIP 6" AND STOCKPILE FOR LATER PICKUP BY SCRAPERS. WHEN FINISHED, FENCE WILL BE REINSTALLED.

AFTERNOON

WEATHER 80°F, PARTLY CLOUDY, WINDS TO 40 MPH FROM SW (UP THE VALLEY).

BOTH SCRAPERS LOADING FROM CENTRAL CELL SOUTH OF DILCO KNOB. RUNNING ON ABOUT 5-6 min cycles w/ MOST LOADS 3/4 FULL.

AFTER TELECON WITH AGS & DHG (CANONIE, DENVER), MJY SPOKE AGAIN WITH C. JOHNSON ABOUT PLACEMENT OF STRIPPED VEGETATION. MJY REITERATED THAT IT MUST BE PLACED BELOW CAP SO THAT COMPACTION CRITERIA IS ATTAINED. C.J. — WINDBLOWNS (INCLUDING SMA VEG MATERIAL) WILL BE STRIPPED AFTER TAILINGS REGRADING. OTHER SOIL FROM EMBANKMENTS AND KNOB TO BE PLACED OVER IT BEFORE PRE-CAP GRADE IS ATTAINED.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT TAILINGS REGRADING
LOCATION
DAILY ACTIVITIES AND EVENTS:

DATE THURS 5/25/89
SHEET 1 of 1

08.00 MSV ARRIVED ON-SITE

D6 & D8 PUSHING STOCKPILED COARSE TAILINGS OVER SLIMES IN NORTH CELL. D3 PUSHING TO STOCKPILE COARSE TAILINGS IN THE CENTRAL CELL SO THAT SCRAPERS CAN PICK UP LATER.

GRADER CONTINUING TO ~~STRIP~~ CLEAR VEG. & STRIP WINDBLOWNS FROM FENCELINE NORTH OF MAIN ACCESS ROAD. LABORERS BEGIN REINSTALLING FENCE BEHIND GRADER.

1 SCRAPER PICKING UP MATERIAL STRIPPED FROM THE NORTH SIDE OF THE N. TAILINGS DAM EMBANKMENT WHERE THE GRADER STRIPPED AND STOCKPILED ADDITIONAL MATERIAL AFTER A SOIL RADIUM VERIFICATION SAMPLE FAILED. UNLOADING IN N. CELL. ALSO STRIPPING ADDITIONAL ~~ROOTS~~ VEGETATION (GRASS) BETWEEN NORTH EMBANKMENT AND N. TOE DAM. DUSTY WHILE STRIPPING SO WATER WAGON BROUGHT IN TO PREWET THE AREA BEFORE STRIPPING W/ SCRAPER.

09:45 BOTH SCRAPERS START LOADING IN ~~SOUTH~~ CENTRAL CELL SOUTH OF DILCO KNOB. D6 HELPING. STARTING TO GET TO THE BOTTOM OF TAILINGS IN THIS AREA. SCRAPERS RUNNING 4-6 MIN CYCLES.

D3 WORKING ON N. SLOPE OF NORTH CROSS DIKE ROAD NEAR THE DILCO KNOB SCRAPING COARSE TAILINGS FROM SLOPE TO BOTTOM OF CENTRAL CELL

GRADER ~~SMOOTHING~~ SMOOTHING BOTTOM OF N. CELL. D8 CONTINUING TO DOZE STOCKPILES OUT OVER SLIMES.

MORNING WEATHER

50°-70°F, CLEAR, BREEZY.

AFTERNOON — ACTIVITIES CONTINUED AS AT END OF MORNING, TEMP 80°F.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-25
FIELD ACTIVITY SUBJECT TAILINGS REGRADING
LOCATION N. CELL TAILINGS DISPOSAL AREA EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 5/26/09
SHEET 1 of 3

08.00 MJJ ARRIVED ON-SITE.

BOTH SCRAPERS PICKING UP COARSE TAILINGS FROM CENTER CELL. DEPOSITING IN SOUTH-CENTRAL PORTION OF NORTH CELL (SOUTH OF DILO LANDS) D6 HELPING SCRAPERS. D3 WORKING ON 10:1 SLOPE IN CENTRAL CELL - PUSHING TAILINGS FOR PICKUP BY SCRAPERS

D8 IN NORTH CELL PUSHING TAILING FROM SOUTH END OUT OVER THE MIDDLE OF THE CELL. ALSO PUSHING STOCKPILES CREATED BY SCRAPERS

GRADER CONTINUE CLEANING WINDBLOWN AND VEGETATION FROM FENCELINE NORTH OF MAIN ACCESS ROAD AND CONTINUING NORTH AT THE WEST FOOT OF THE HILLS IN SECTION 36.

LABORERS CONTINUE REINSTALLING FENCE ON SECTION BOUNDARY NORTH OF MAIN ACCESS ROAD.

10:00 RICK ROTH FROM SH&B ARRIVED TO TAKE MORE PROCTOR SAMPLES FOR MATERIAL REPRESENTATIVE OF FILL FOR HAUL ROAD. UNC CALLED HIM BACK BECAUSE IT WAS FELT THAT THE SAMPLES HE HAD TAKEN PREVIOUSLY WERE NOT REPRESENTATIVE. WILL DIG TEST PITS ALONG THE HAUL ROAD & CUT TREE TO OBTAIN SAMPLES.

11:00 - 14:30 UNC BACKHOE USED TO DIG TEST PITS. 3 PITS DUG AND SAMPLES TAKEN FROM EACH. MJJ OBSERVED PITS AND SAMPLING. PITS WERE DUG TO THE DEPTH OF EXCAVATION AT THE FOLLOWING LOCATIONS:

NORTHING	EASTING	DEPTH
75140	59,130	7.9'
74,890	59,130	4.2'
74,450	58,770	5.1'

THE PITS WERE ~~SAMPLES~~ ALL RELATIVELY HOMOGENEOUS SANDY CLAY/CLAYEY SAND EXCEPT FOR THE PIT AT N 74,450, E 58,770 WHERE A CRUSHED SANDSTONE DRAINAGE LAYER WAS ENCOUNTERED AT A 4.5' DEPTH. A SAMPLE OF THIS MATERIAL WAS OBTAINED FOR A PROCTOR TEST ALSO. THIS CRUSHED SANDSTONE IS ALSO ON THE WEST SLOPE OF THE WEST EMBANKMENT ALONG THE CENTRAL CELL; SOME OF IT WILL BE USED AS FILL FOR THE HAUL ROAD.

CanonieEnvironmental DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-664-26
FIELD ACTIVITY SUBJECT TAILINGS REGRADING
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 5/26/89
SHEET 2 of 3

SCRAPERS SPENT A COUPLE HOURS IN THE AFTERNOON PICKING UP WINDBLOWNS FROM SECTION 36 WHERE THE GRADER HAD STOCKPILED MATERIAL OVER THE LAST DAY OR TWO.

MATERIAL QUANTITIES FOR THE WEEK: *

DATE	QUANTITY (CY)	CUMMULATIVE QUANTITY (CY) **
5/22/89	2700	21,460
5/23/89	1600	23,060
5/24/89	2680	25,740
5/25/89	2600	28,340
5/26/89	3940	32,280
CORRECTION TO 5/11/89	+20	32,300

* QUANTITY ESTIMATES FROM LOAD COUNTS GIVEN TO UNC BY NIELSONS.

** ADD TO 8,760 FROM END OF PREVIOUS WEEK

Nielsons

3/3

5-30-89

Doze Tailings

5-26 620 C.Y Total to date 6,000 C.Y

Wind Blown Material

5-24 60 loads @ 20 C.Y 1200 C.Y.
5-25 20 loads @ 20 C.Y 400 C.Y
5-26 42 loads @ 20 C.Y 840 C.Y

This week 2440 C.Y.
Total to date 8,440 C.Y.

Excavation to Fill Pond

5-22 135 loads @ 20 C.Y 2700 C.Y
5-23 80 loads @ 20 C.Y 1600 C.Y
5-24 74 loads @ 20 C.Y 1480 C.Y
5-25 110 loads @ 20 C.Y 2200 C.Y
5-25 correction of 5-11-89 20 C.Y
5-26 124 loads @ 20 C.Y 2480 C.Y.

This week 10,480 C.Y.
Total to Date 17,800 C.Y.

Gave to Jim Hutchin 5-30-89

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC INTERIM STABILIZATION, N. CELL PROJECT NO. 86 060 20
FIELD ACTIVITY SUBJECT TAILING REGRADING
LOCATION N. CELL TAILINGS DISPOSAL AREA EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 5/30/89
SHEET 1 of 2

NO WORK MON., 5/29/89 — MEMORIAL DAY

08:00 MSY ARRIVE ON-SITE, ALREADY DUSTY.

SCRAPERS STRIPPING WINDBLOWNS (TOP 6") FROM BETWEEN THE NORTH EMBANKMENT AND THE TOE DAM

D8 DOZER SMOOTHING BOTTOM OF N. POND WHERE SLIMES HAVE BEEN COVERED. STILL SMALL AREA IN EAST PORTION LEFT UNCOVERED TO PLACE SMALL AMOUNTS OF COARSE TAILINGS AND SOME VEGETATION REMAINING.

D6 DOZING COARSE TAILINGS DOWN THE NORTH SLOPE OF THE NORTH CROSS DIKE ROAD WEST OF DILCO KNOB.

D3 DOZING WEST SLOPE OF THE MAIN ACCESS ROAD NEAR THE N.E. SYSTEM SURGE TANK (WHERE MAIN ACCESS ROAD TURNS SOUTH). LATER MOVED TO PIPELINE ARROYO TO START CLEANING IT OUT.

WATER TRUCK WET GRAVELLED ROADS THEN TAILINGS AND CUT AREAS.

GRADER "PROCESSING" SW ROAD AND MAIN ACCESS ROAD BY USING THE BLADE TO ROLL OVER THE WET GRAVEL AND SMOOTH OUT AGAIN.

09:30 D8 JOINED D6 DOZING COARSE TAILINGS DOWN N. SLOPE OF NORTH CROSS-DIKE ROAD WEST OF DILCO KNOB.

1 SCRAPER WORKED FOR APPROX. 1 HOUR EAST OF THE DILCO KNOB IN THE WINDBLOWN AREA PICKING UP RECENT WINDBLOWNS AND OTHER SOIL.

11:00 GRADER SMOOTHING BOTTOM OF NORTH CELL WHERE SCRAPER HAVE BEEN UNLOADING.

AFTERNOON

WEATHER 60-65°F, CLEAR, WINDY (GUSTS TO 40 MPH WIND FROM SW). WIND CAUSING DUSTY CONDITIONS.

Canonie Environmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME _____ PROJECT NO. 86-060-2

FIELD ACTIVITY SUBJECT _____

LOCATION _____

DAILY ACTIVITIES AND EVENTS:

DATE 5/30/89

SHEET 2 of 3

SCRAPERS PICKING UP SOIL FROM BETWEEN TOE DAM AND NORTH EMBANKMENT. UNLOADING IN STOCKPILE NORTH OF AREA OF SLIMES STILL UNCOVERED IN EAST PART OF NORTH CELL.

D8 DOZER CLEANING, SMOOTHING AROUND EDGES OF THE INTERIOR PORTION OF NORTH CELL

DHG, AGS (CANONIE, DENVER) ARRIVED, VIEWED PROGRESS AND CONSTRUCTION ACTIVITIES. THEY WILL WORK ON EVAPORATION POND THIS WEEK.

UNC CONTINUING TO STRIP HILL IN SECTION 36 OF WINDBLOWN SOILS (ALL DAY)

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC INTERIM STABILIZATION - N. CELL PROJECT NO. 96-U-22
FIELD ACTIVITY SUBJECT TAILINGS REGRADING
LOCATION N. CELL TAILINGS DISPOSAL AREA EAST OF HALLIBURTON NUCLEONICS MILL
DAILY ACTIVITIES AND EVENTS:

DATE 5/31/99
SHEET 1 of 2

08:00 MSY ARRIVE ON-SITE

BOTH SCRAPERS LOADING WINDBLOWNS FROM BETWEEN THE NORTH EMBANKMENT AND THE TOE DAM HAULING TO MIDDLE OF TEN NORTH CELL.

D3: D8 CLEANING WINDBLOWNS FROM HILL EAST OF THE NORTH CELL. PUSHING SOIL & ROCK DOWN TO STOCKPILE ON MAIN ACCESS ROAD FOR LATER PICKUP BY SCRAPERS.

D6 WORKING IN SOUTHWEST END OF THE NORTH CELL SPREADING COARSE TAILINGS AND CLEANING THE NORTH SLOPE OF THE NORTH CROSS DIKE RD-D.

GRADER, ~~D8~~ IDLE.

10:00 GRADER START SMOOTHING NORTH CELL WHERE SCRAPERS ARE PLACING WINDBLOWNS

AFTERNOON

SCRAPERS HAULING FROM DRAINAGE BETWEEN THE TOE DAM AND THE MAIN ACCESS ROAD NORTH OF THE NORTH CELL. STOCKPILING THIS MATERIAL IN THE NORTHEAST PORTION OF THE NORTH CELL.

D3 SMOOTHING CENTRAL CELL WHERE TAILINGS EXCAVATION OCCURRED BY DRAGGING A STEEL I-BEAM.

D6 CONTINUE IN NORTH CELL AS IN MORNING, WORKING TO THE EAST.

GRADER CLEANING UP SCRAPER SPILLAGE. WATER TRUCK WORKING THE SAME LOOP AS SCRAPERS WETTING BOTH CUT AND FILL

GRADER ALSO CLEANING TAILINGS FROM SOUTH EDGE OF NORTH EMBANKMENT.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION N. CELL PROJECT NO. 86-066 2
FIELD ACTIVITY SUBJECT TAILINGS REGRADING, STRIP WINDBLOWNS
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 5/31/89
SHEET 2 of 2

UNC EXCAVATION DIRECT CONTINUE STRIPPING HILL NORTH OF NORTH CELL STOCKPILING AT BOTTOM OF HILL.

WEATHER CLEAR, 75°F WIND 0-15 MPH FROM SOUTHWEST.

DHG, AGS, R. YAZZIE WORK ON SOUTH EMB. OF EVAP PONDS.

TRANSITION FROM TAILINGS REGRADING TO STRIPPING WINDBLOWN SOILS. MSSRS J. FLETCHER, C JOHNSON, AND BRUCE BERRY DISCUSS HOW TO PROCEED WITH WORK. BRUCE TO BE READY TO START WITH WINDBLOWN AREAS NORTH OF NORTH CELL NEXT WEEK. U.J. WILL HAVE SEARGENT, HAUSKINS AND BECKWITH (GEOTECH TESTING FIRM ON-SITE NEXT WEEK BEGINNING MONDAY.) BRUCE WILL START ON HAUL ROAD EXTENSION PROBABLY FRIDAY, COMPACTING AND WORKING BASE AREA.

UNC STARTED REPLACING ~~SETTING~~ GRADE STAKES IN BOTTOM OF ~~CELL~~ NORTH CELL AND IN CENTRAL CELL.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC – INTERIM STABILIZATION N. CELL PROJECT NO. 96-CCC-20
FIELD ACTIVITY SUBJECT TAILINGS REGRADING, STRIP WINDBLOWN TAILINGS
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNIVERSITY NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/.../89
SHEET 1 of 2

08:00 MSY ARRIVE ON-SITE.

MORNING WEATHER – SUNNY CLEAR, 5 MPH WIND FROM SW. 48-65 °F.

SCRAPERS LOADING BETWEEN TOE DAM AND MAIN ACCESS ROAD UNLOADING AT NORTH END OF NORTH CELL IN THIN (3") LIFTS.

GRADER CLEANING UP SOUTH EDGE OF NORTH EMBANKMENT - CLEANING TAILINGS OUT OF EMBANKMENT.

D6, D8 DOZERS PUSHING IN STOCKPILE MADE BY SCRAPERS IN THE NORTH CELL YESTERDAY.

D3 PREPARING THE PILES OF WINDBLOWN SOILS PUSHED OFF THE HILL EAST OF THE NORTH CELL FOR PICKUP BY SCRAPERS

09:00 D8 TO HILL EAST OF NORTH CELL TO CONTINUE STRIPPING WINDBLOWNS. DOZER TAKING MORE THAN 6" FROM HILLSIDE (APPROX. 1 FT AVG.)

UNC BEGINS REPLACING GRADE STAKES IN NORTH AND CENTRAL CELLS. GEORGE O. AND A LABORER SUPPLIED BY NIELSONS INVOLVED

SCRAPERS PICKING UP STOCKPILE CREATED BY GRADER ON NORTH PERIMETER OF THE NORTH CELL. PLACING IN THIN LIFTS IN MIDDLE OF NORTH CELL.

MSY TALK TO C.J., J.F.. UNC WANTS NIELSONS TO MOVE COARSE TAILINGS FROM SOUTHWEST PORTION OF N. CELL (PUSHED OFF NORTH SIDE OF NORTH CROSS DIKE ROAD TO EAST SIDE OF NORTH CELL WHERE THE BOTTOM HAS NOT BEEN COMPLETELY COVERED WITH FILL. UNTIL THOSE SOILS (TAILINGS) ARE MOVED C.J. ASKED NIELSONS TO QUIT PUSHING STOCKPILE OF WINDBLOWNS WHERE D6 & D8 STARTED WORK THIS MORNING INTO THE HOLE (AREA NOT COVERED W/ FILL).
MSY STID THAT NOT ALL OF THE TAILINGS HAD TO BE MOVED, RATHER THEY ALL JUST NEEDED TO END UP BELOW FINAL GRADE.

10:00 SCRAPERS NOW PICKING UP STOCKPILE OF WINDBLOWN SOILS AT BOTTOM OF THE HILL EAST OF NORTH CELL. UNLOADING ALONG SOUTH SIDE OF NORTH CELL.

CanonieEnvironmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION - N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT TAILINGS REGRADING, STRIP WINDBLOWN TAILINGS
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/1/89
SHEET 3 of 2

13.00 ANOTHER 633 SCRAPER DELIVERED TO NIELSONS. THIS IS THE THIRD SCRAPER.

TWO SCRAPERS HAULING COARSE TAILINGS FROM SOUTHWEST PORTION OF NORTH CELL (THOSE PUSHED OFF THE NORTH SLOPE OF THE NORTH CROSS DIKE ROAD) TO FILL IN HOLE IN EAST SIDE OF NORTH CELL. LEAVING IN A STOCKPILE ON SOUTH EAST PORTION. D6 DOZER PUSHING STOCKPILE OVER ORIGINAL TAILINGS SURFACE TO FILL IN HOLE.

GRADER TIGHT BLADING NORTH SLOPE OF NORTH CROSS-DIKE ROAD. (GRADING TO GET ALL TAILINGS DOWN THE SLOPE INTO THE N. CELL)

D8 & D3 DOZERS PUSHING WINDBLOWN SOILS DOWN THE HILL TO EAST OF THE NORTH CELL. STOCKPILING AT THE BOTTOM.

SCRAPERS LOOPING BETWEEN COARSE TAILINGS IN SW OF NORTH CELL AND WINDBLOWN STOCKPILE AT BOTTOM OF HILL EAST OF NORTH CELL. TAILINGS UNLOADED IN EAST PORTION OF N. CELL, WINDBLOWNS UNLOADED ALONG CENTER PORTION OF N. CELL FROM EAST TO WEST.

DHG, AGS, R. YAZZIE COMPLETE WORK ON SOUTH EMB. OF EVAP PONDS. BRUCE BERRY WILL PUT SOME DIRT ON EMB. TO BRING BACK TO GRADE. MSY WILL WORK W/ BRUCE.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT TAILINGS REGRADING, STRIP WINDBLOWN, CONSTRUCT HAUL ROAD
LOCATION N. CELL TAILINGS DISPOSAL AREA EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/2/89
SHEET 1 of 14

08:00 MJY ARRIVED ON-SITE

SCRAPERS PICKING UP WINDBLOWN SOILS STOCKPILED AT THE BOTTOM OF HILL EAST OF THE NORTH CELL AND UNLOADING FROM EAST TO WEST ACROSS THE MIDDLE OF THE NORTH CELL. D8 WORKING ON HILL CONTINUING PUSHING DOWN WINDBLOWNS. D3 HELPING SCRAPERS.

D6 PUSHING TAILINGS STOCKPILED YESTERDAY OVER BOTTOM OF THE EAST PORTION OF NORTH CELL. ENTIRE BOTTOM NOW HAS FILL OVER IT. D6 CONTINUED IN SAME AREA PUSHING STOCKPILE OF WINDBLOWNS OVER TAILINGS AFTER TAILINGS STOCKPILE WAS LEVELED. THE STOCKPILE OF WINDBLOWS IS THE SAME THAT C.J. HAD ASKED NOT BE PUSHED OUT UNTIL ALL TAILINGS HAD BEEN PLACED ON 6/1/89.

GRADER ON HILL TO NE OF N. CELL IN SEC 36, WINDROWING WINDBLOWN TO ON TOP OF THE HILL

11:30 SCRAPERS TO HILL N.E. OF N. CELL WHERE GRADER IS TO PICK UP WINDBLOWNS. & UNLOAD IN NORTH PORTION OF NORTH CELL

P.M. 825 & WATER TRUCK START PREPARING SUBGRADE FOR HAULROAD. 825 ROLLING AND MIXING IN WATER WITH BLADE.

D8 PUSHING PART OF TOE DAM THAT WAS KNOCKED DOWN TO ALLOW SCRAPERS TO CROSS FROM THE AREA BETWEEN THE MAIN ACCESS ROAD AND TOE DAM TO THE NORTH CELL BACK UP SO THAT SUBGRADE MAY BE PREPARED AND COMPACTED.

14:30 MJY LEFT SITE FOR WEEKEND

SCRAPERS PUT 48 LOADS OF SOIL ON PREPARED SUBGRADE TO TRY TO KEEP MOISTURE IN. THIS SOIL WILL BE CUT OFF IN THE AREAS OF DENSITY TESTS TO ASSURE PROPER DENSITY OF THE SUBGRADE. SERGENT, HAUSKINS & BERKWITZ TO BE ON SITE (RICK ROTH) MONDAY 6/5/89 TO START TESTING.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-2
FIELD ACTIVITY SUBJECT TAILINGS REGRADING, SURFACE VEGETATION, CONSTRUCT HAUL ROAD
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/2/89
SHEET 2 of 4

MATERIAL QUANTITIES FOR THE WEEK ENDING 6/2/89 *

DATE	QUANTITY (CY)	CUMMULATIVE QUANTITY (CY) **
5/30/89	4680	36,480
5/31/89	4960	41,940
6/1/89	4860	46,800
6/2/89	4260	51,060

* QUANTITY ESTIMATES FROM LOAD COUNTS GIVEN TO UNITED NUCLEAR BY NIELSONS

** ADD 32,300 C.Y. FROM END OF PREVIOUS WEEK

450,000 gals of water used this week.

gave to Jim Fletcher 6-2-89

6-2-89

3/4

Windblown Materials

5-30	169 loads @ 20 c.y.	3380 C.Y.
5-31	190 loads @ 20 C.Y.	3800 C.Y.
6-1	186 loads @ 20 C.Y.	3720 C.Y.
	This report	10,900 C.Y.
	To Date	19,300 C.Y.

Excavation to fill Pond

5-30	65 loads @ 20 C.Y.	1300 C.Y.
5-31	53 loads @ 20 C.Y.	1060 C.Y.
6-1	62 loads @ 20 C.Y.	1240 C.Y.
	This report	3,600 C.Y.
	To date	41,400 C.Y.

Water used

5-30 9 loads water per day @ 10,000 gals.
5-31 90,000 gals per day @ 4 days
6-1 360,000 gals this week

Monday. give to Jim Fletcher 6-5-89

6-2 213 @ 20 4260

9 loads water at 10,000 gals
90,000 gals.

72 LOADS	@ 20 CY	1440 CY	EXC. TO FILL POND (FROM WINDROW AT PUSHED OFF HILL TO DIC.
48 LOADS	@ 20 CY	960 CY	TO HAUL ROAD FILL
93 LOADS	@ 20 CY	1860 CY	WINDROWN FOR UNC
213		4260	

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT STRIP WINDBLOWNS, CONSTRUCT HAUL ROAD
LOCATION NORTH CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/5/89
SHEET 1 of 2

MJY ARRIVED ON SITE AT 12:30 AFTER WEEKEND HOME

GRADER STRIPPING WINDBLOWN AND WINDROWING FOR SCRAPERS DG WORKING IN DRAWS AND DRAINAGES PUSHING SOIL UP SO SCRAPERS CAN PICK IT UP. SCRAPERS (ALL 3) LOADING WINDBLOWNS AND HAULING TO THE NORTH PART OF NORTH CELL. UNLOADING FROM WEST TO EAST.

D8 RIPPING ROCK EAST OF DILCO KNOB. ROCK RIPPING INTO MOSTLY 4" TO 8" PIECES, SOME 12' AND LARGER.

D3 IDLE

VERY DUSTY. NO RAIN FOR LONG TIME. SOIL V. DRY, PADDLEWHEEL CREATING A LOT OF DUST.
UNC HAS BROUGHT IN TWO REAR DUMP TRUCKS (15 YD SIDES) FROM FUHS TRUCKING IN GALLUP. USING THEIR HOUGH 560 LOADER TO LOAD WINDBLOWNS FROM HILLS N.E. OF NORTH CELL THAT KOMATSU DOZER HAD STRIPPED. TRUCKS HAULING FROM N.E. TO SOUTH PORTION OF NORTH CELL ADJACENT TO DILCO KNOB.

J. FLETCHER ALSO CALLED FUHS AND GOT ADDITIONAL WATER TRUCK TO COME OUT IN AFTERNOON TO ASSIST NIELSONS WATER WAGON IN DUST/MOISTURE CONTROL. NIELSONS WATER WAGON TAKES 25 MINUTES TO FILL (10,000 GAL.) GETTING 9-10 LOADS / DAY.

~~14:00~~ DENSITY TESTS ON PREPARED SUBGRADE. SNOW DENSITY OKAY BUT WATER BELOW OPTIMUM BY APPROX 3 PERCENT. J. FLETCHER ASKED MJY IF THIS WAS ALRIGHT. MJY SAID THAT THERE WAS NO MOISTURE SPEC. FOR THE HAUL ROAD SO THAT AS LONG AS DENSITY WAS HIGH ENOUGH EVERYTHING WAS ALRIGHT. MJY NOTED THAT IT WOULD BE EASIER TO OBTAIN DENSITY IF MOISTURE WAS CLOSER TO OPTIMUM. 3 NUCLEAR TESTS & 1 CORRELATING SAND CONE TEST TAKEN.

WEATHER 80° F WINDY (20 MPH) FROM SW, DUSTY.

14:00 SCRAPERS START CUTTING SOIL FROM WEST EMBANKMENT AND PLACING IT DIRECTLY WEST OF WEST EMBANKMENT FOR HAUL ROAD FILL. WATER WAGON WETTING SOIL, DG RIPPING SOIL IN CUT AREAS, 825 ROLLING.

Canonie Environmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC – INTERIM STABILIZATION, N. CELL PROJECT NO. 86-06-20
FIELD ACTIVITY SUBJECT STRIP WINDROWS. CONSTRUCT HAUL ROAD
LOCATION N. CELL TAILINGS DISPOSAL AREA EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/5/89
SHEET 2 of 2

MJV SPOKE TO C. JOHNSON ABOUT THE IMPORTANCE OF KEEPING THE NORTH CELL FILL MOIST TO ATTENUATE RADON EMMISSIONS. C.J. UNDERSTANDS, IS LOOKING TO GET NIELSONS MORE WATER.

FUHS DUMP TRUCK HAULED 66 LOADS AT APPROX 15 YARDS (32 & 34 ELEV.) TODAY. KOMATSU DOZER CONTINUE WORKING ON STRIPPING HILLS

CanonieEnvironmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION N CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT STRIP WINDBLOWNS, CONSTR. OF HAUL ROAD
LOCATION NORTH CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/6/89
SHEET 1 of 3

08:00 MJY ARRIVED ON-SITE.

FOUR TRUCKING TRUCKS BEING USED TO HAUL WINDBLOWNS STRIPPED FROM HILLS AND ARROYOS NE OF NORTH CELL TO THE NORTH CELL BY UNC. UNC HOUGH WADER IS LOADING TRUCKS. UNC KOMATSU DOZER CONTINUES STRIPPING AND STOCKPILING WINDBLOWNS IN THE SAME AREA.

1 SCRAPER DOWN

D3 DOZER AND GRADER STOCKPILING WINDBLOWN SOILS IN SECTION 36 NORTH OF NORTH CELL. D3 IN ARROYOS AND WASHES STRIPPING AND STOCKPILING STRIPPAGE ON THE FLATS WHERE SCRAPERS CAN PICK UP

2 SCRAPERS CUTTING WEST EMBANKMENT AND FILLING ADJACENT TO WEST EMBANKMENT FOR HAUL ROAD. AFTER PLACING A COUPLE LIFT SCRAPERS LEAVE AND GO PICK UP WINDBLOWNS FROM SECTION 36 THAT D3 AND GRADER HAVE STOCKPILED SO 825 CAN ADEQUATELY COMPACT (HAULING TO N SIDE, N EMBANKMENT)

D6 DOZER RIPPING WEST EMBANKMENT SO THAT SCRAPERS CAN LOAD MORE EFFICIENTLY. CLAY SOILS IN WEST EMBANKMENT IS TIGHT.

WATER WAGON APPLYING WATER TO BOTH WEST EMB AFTER RIPPING AND TO FILL AREA WHILE BEING ROLLED

SAND CONE DENSITY TEST TAKEN YESTERDAY DOES NOT ADEQUATELY COMPARE WITH NUCLEAR DENSOMETER TEST TAKEN IN THE SAME LOCATION.

	SC#1 6/5/89	NUCLEAR DENSOMETER #1 6/5/89
γ_w	141.9	129.0 pcf
γ_1	130.6	115.7 pcf
%m	~~123.4 pcf~~ 8.7	11.5 pcf

MJY WATCHED FIELD PROCEDURES FOR TESTS TAKEN 6/6/89, SEEM ACCURATE POSSIBLY SAND AND CONE CALIBRATION IS WRONG. MJY HAD CANONIE'S NUCLEAR GAUGE STILL ON SITE FROM FIXING S EMB OF EVAP PONDS LAST WEEK. MJY RAN ONE TEST W/ CANONIE'S NUCLEAR DENSOMETER IN THE SAME LOCATION AS DHB NUCLEAR DENSOMETER TEST #5 (6/6/89)

CanonieEnvironmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME _____ PROJECT NO. [illegible]

FIELD ACTIVITY SUBJECT _____

LOCATION _____

DAILY ACTIVITIES AND EVENTS:

DATE 6/6/89

SHEET 2 of 3

WET AND DRY DENSITY DETERMINATIONS FROM THE PAIRED TESTS WERE WITHIN 2 PERCENT OF EACH OTHER. CANONIE'S GAUGE IS A TROXLER DIRECT TRANSMISSION-TYPE MACHINE. SH&B'S GAUGE IS A SEAMAN C-100 REFLECTIVE-TYPE DEVICE. THE WET DENSITY FROM THE SAND CONE TEST (SC#3), TAKEN IN THE SAME LOCATION AS #5 (6/6/8) SOIL ~~AND~~ DO NOT CORRELATE PROPERLY

	SC#3	NUKE #5 (6/6/8)	CANONIE'S NUKE DENSOMETER
γ_{wet}	143.5 pcf	128.0 pcf	126.4 pcf
γ_{dry}	129.4 pcf	114.8 pcf	112.8 pcf
%m	10.9 pcf	~~13.7~~ 11.5	12.1

SH&B'S FIELD PROCEDURES ARE OKAY FOR NUCLEAR DENSOMETER TESTS. THE 825 IS USED TO CUT A SPOT FOR THE TEST. THE TEST SPOT IS FLAT AND EVEN, AND NO OTHER OBJECTS ARE AROUND THAT COULD AFFECT THE TEST. SAND CONE PROCEDURES ARE ALRIGHT. THE PLATE IS PLACED DIRECTLY ON THE SURFACE WHERE THE CORRESPONDING NUCLEAR DENSOMETER TEST WAS TAKEN AND NAILS ARE DRIVEN THROUGH HOLES IN THE PLATE TO PREVENT MOVEMENT OF THE PLATE DURING THE TEST. THE SOIL REMOVED FOR THE TEST IS PLACED IN A COFFEE CAN AND THE LID IS KEPT ON WHEN SOIL IS NOT BEING PLACED IN IT. THE HOLE HAS VERTICAL SIDES AND IS CLEANED OUT WELL. THE CONE AND BOTTLE ARE PLACED ON THE PLATE IN THE SAME POSITION EVERY TIME THROUGH THE USE OF LOCATOR MARKINGS ON BOTH. THE SAND IS DEPOSITED WHEN NO LARGE EQUIPMENT IS AROUND SO THAT VIBRATION DOES NOT AFFECT THE TEST. SO THE POSSIBLE SOURCES OF ERROR ARE THE SCALES (EITHER READ WRONG OR NOT CALIBRATED PROPERLY), MISCALCULATION OF TEST NUMBERS, OR WRONG SAND/CONE/PLATE CALIBRATION.

MDY CHECKED R. ROTH'S CALCULATIONS. THEY ARE OKAY

MDY, R. ROTH CHECKED SCALE WITH A KNOWN WEIGHT. NO SIGNIFICANT ERROR IN SCALE READING.

CanonieEnvironmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME _____ PROJECT NO. [illegible]

FIELD ACTIVITY SUBJECT _____

LOCATION _____

DAILY ACTIVITIES AND EVENTS:

DATE 6/6/89

SHEET 3 of 3

MAY THEN QUICKLY CHECKED SAND DENSITY BY DROPPING SAND THROUGH THE CONE INTO A PROCTOR MOLD OF KNOWN VOLUME. R. ROTH HAD BEEN USING A SAND DENSITY OF 86 pcf. MAY'S QUICK CHECK SHOWED A ~~CA~~ SAND DENSITY OF 82.9 pcf. THIS WILL ACCOUNT FOR A LARGE PART OF THE ERROR IN THE CORRELATIONS

MAY SUGGESTED TO RICK ROTH THAT THE SAND BE PROPERLY CALIBRATED ACCORDING TO ASTM STANDARDS. RICK TO RE CALIBRATE TOMORROW

MAY EXPLAINED THE SITUATION W/ THE DENSITY TESTS AS DESCRIBED [illegible] TO C. JOHNSON. RECOMMENDED THAT BOTH SAND AND CONE/PLATE BE RE CALIBRATED

WEATHER

HIGH AROUND 80°F W/ STEADY SW WINDS BREATING A LOT OF DUST.

5 NUCLEAR DENSOMETER AND 2 SAND CONE TESTS TAKEN TODAY. R. ROTH PASSED ALL TESTS TODAY.

3rd SCRAPER REMAINED IDLE ALL DAY

CanonieEnvironmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC – INTERIM STABILIZATION, N. CELL PROJECT NO. 86 [illegible]
FIELD ACTIVITY SUBJECT CONSTRUCT HAUL ROAD, STRIP WINDBLOWN TAILINGS
LOCATION NORTH CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/7/89
SHEET 1 of 3

08:00 MJY ARRIVE ON-SITE

ALL 3 SCRAPERS ~~CUTTING~~ LOADING FROM THE EAST HALF OF THE WEST EMBANKMENT (AREA EAST OF EAST EDGE OF HAUL ROAD) AND DUMPING JUST WEST OF WEST EMB FOR HAUL ROAD FILL.

825 IS ROLLING FILL

D6 DOZER RIPPING ~~CUT~~ AREA WHERE SCRAPERS ARE LOADING

GRADER SMOOTHING WORK AREA AND FORMING THE BOTTOM OF THE 5:1 AND 10:1 SLOPES ON THE OUTSIDE (WEST) OF THE HAUL ROAD.

WATER IS BEING APPLIED TO BOTH CUT AND FILL. ALSO WATER WAGON IS WETTING THE WINDBLOWNS IN THE NORTH SIDE OF THE NORTH POND

UNC DOES NOT HAVE FUHS TRUCKING ON-SITE. ALL THE SOIL (W WINDBLOWN) UNC HAD STOCKPILED WAS MOVED TO THE NORTH CELL. KOMATSU DOZER CONTINUES TO STRIP AND STOCKPILE WINDBLOWN.

R ROTH (SH&B) CALIBRATED THE SAND FOR SAND CONE TESTS BY PLACING THE PLATE AND CONE ON A FLAT SURFACE IN THE LAB TRAILER, AND USING THE WEIGHT OF SAND REQ'D TO FILL THE CONE AND PLATE AND THE GIVEN VOLUME OF THE CONE AND PLATE TO CALCULATE THE SAND DENSITY. THE AVERAGE DENSITY WAS DETERMINED TO BE 82.9 pcf. HE RECALCULATED THE PREVIOUS SAND CONE TESTS W/ THIS SAND DENSITY THIS BROUGHT THE CORRELATIONS CLOSER BUT STILL A DIFFERENCE OF APPROX. 6 pcf EXISTS IN DRY DENSITIES.

MJY SUGGESTED CALIBRATING THE SAND BY ASTM STANDARD METHOD USING THE SAND JAR, DETERMINING ITS ~~WEIGHT~~ VOLUME W/ WATER, DROPPING SAND INTO THE JAR AND DETERMINING THE SAND DENSITY KNOWING THE JAR VOLUME AND THE WT OF SAND IN THE JAR. MJY EXPLAINED TO RICK THAT HE ASSUMED THE CONE AND PLATE VOLUME WAS CORRECT. RICK DID NOT RECALIBRATE FURTHER

Canonie Environmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME _____ PROJECT NO. [illegible]

FIELD ACTIVITY SUBJECT _____

LOCATION _____

DAILY ACTIVITIES AND EVENTS:

DATE 6/7/89

SHEET 2 of 3

UNC (J FLETCHER) RESETTING STAKES FOR RAD VERIFICATION SAMPLES IN AREAS WHERE WINDROWS HAVE ALREADY BEEN STRIPED ~~(TUESDAY THE~~ WILL J FLETCHER WILL GRAB SAMPLES AREAS WITH IT LEAN MIX OF BINDER (WENDON) TO SUPPRESS DUST.

THE SAND DRAIN IN THE WEST EMBANKMENT WAS UNCOVERED AND SAND FROM IT WAS STARTED TO BE USED FOR FILL. MJV SUGGESTED TO J FLETCHER THAT A SAMPLE OF THE MIXED CLAY AND SAND BE TAKEN AND A STANDARD PROCTOR DETERMINATION RUN ON IT SINCE THE SAND WAS BEING MIXED IN WITH THE CLAY SOILS IN THE FILL. R. REITH WANTS TO TAKE TESTS IN AREAS WHERE THERE IS A SUFFICIENT DEPTH (4-6') OF UNMIXED MATERIAL TO NOT EFFECT THE TEST. MJV EXPLAINED TO BOTH J.F. & R.R THAT THE POTENTIAL EXISTED FOR THE CLAY AND SAND TO MIX AND HAVE A SIGNIFICANTLY DIFFERENT PROCTOR VALUES THAN THE INDIVIDUAL MATERIALS ~~AND~~ ALONE AND THAT TAKING TESTS IN LOCATIONS WHERE THE MATERIAL WAS NOT MIXED RATHER THAN AT RANDOM LOCATIONS WOULD BE IMPROPER J.F. AGREED BUT NO PROCTOR SAMPLE WAS TAKEN.

TAILINGS SAND WAS UNCOVERED IN THE EAST ~~WEST~~ SIDE OF THE ~~EMBANKMENT~~ ADJACENT TO ~~NEAR~~ THE NORTH CELL. ~~NOR~~ NO TAILINGS WERE PLACED AS FILL IN THE HAUL ROAD TAILINGS WERE DOZED OUT INTO THE NORTH CELL.

NIELSONS IS BUILDING A SURGE POND ON THE WEST EMBANKMENT AT THE SOUTH END OF THE CENTRAL CELL TO INCREASE THE AMOUNT OF WATER THAT CAN BE SPRAYED IN A DAY. THE SURGE POND WILL LET WATER FLOW CONTINUOUSLY INTO THE POND A 400 GPM (MAX) PUMP WAS DELIVERED AT NOON TO PUMP WATER FROM THE SURGE POND TO THE WATER WAGON. THIS WILL ALLOW THE WATER WAGON TO LOAD IN 2.5 MINUTES RATHER THAN 25 MINUTES IT HAS BEEN TAKING

CanonieEnvironmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME _____ PROJECT NO. _____

FIELD ACTIVITY SUBJECT _____

LOCATION _____

DAILY ACTIVITIES AND EVENTS:

DATE 6/7/89

SHEET 3 of 3

BRUCE BERRY SAYS WITH THIS SET UP HE CAN SPRAY ONE CAN ONLY ~~THIS WELL~~ PROVIDE 700, 000 GALLONS IN A DAY

70,000 GALLONS PER DAY

MSV SPOKE TO C. JOHNSON. C.J. TO ORDER ANOTHER PUMP AND TAP THE OLD MINE SHAFTS FOR WATER. WILL TAKE APPROXIMATELY 1 WEEK FOR DELIVERY AND SET UP BUT WOULD MEET NIELSONS WATER NEEDS. MSV EXPLAINED TO C.J. THE SITUATION WITH THE DENSITY TESTS ON THE HAUL ROAD AND THE SUGGESTIONS MSV MADE TO JEFF AND RICK ROTH. MSV EXPLAINED FURTHER THAT ALL THE TESTS WERE SHOWING DENSITIES GREATER THAN 100% STANDARD PROCTOR DENSITY. MSV SAID THAT WHILE THIS MAY BE AN INACCURATE REPRESENTATION OF CONDITIONS THAT IT WILL RAISE QUESTIONS FROM A REGULATING AGENCY THUS THE CORRELATIONS FROM THE SAND CONES NEED TO MATCH FOR VERIFICATION PURPOSES. C.J. WILL CALL SMED (R. ROTH'S SUPERVISOR) AND DISCUSS THE SITUATION.

MSV ALSO TOLD C. JOHNSON OF THE POTENTIAL TO REDUCE THE FINAL COVER THICKNESS OVER THE NORTH CELL SINCE SO MUCH OF THE FILL IS TO BE "CLEAN" DIRT. EXPLAINED ALSO THAT THE MORE WATER ADDED TO THE FILL IN THE NORTH CELL THE BETTER ~~BECAUSE THAT~~ BECAUSE MOISTURE IS CRITICAL TO ATTENUATE RADON. CHUCK SAID HE UNDERSTOOD ABOUT THE MOISTURE BUT AT THE PRESENT JUST COULDN'T GET ENOUGH WATER TO NIELSON'S. HE SAID THE NEW TANK WILL HELP

Canonie Environmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC INTERIM STABILIZATION, N. CELL PROJECT NO. 86-700-25
FIELD ACTIVITY SUBJECT CONSTRUCT HAUL ROAD, STRIP WINDBLOWNS
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/6/89
SHEET 1 of 2

0800 MJY ARRIVE ON-SITE.

NIELSENS FINISHED ROAD LAST NIGHT, LINED IT WITH THICK PLASTIC. IT ~~DOES~~ HOLD APPROXIMATELY 50,000 GALLONS. LINER WATER SUPPLY CAN RUN INTO THE POND FULL TIME AND NIELSENS WILL BE ABLE TO LOAD FASTER. W/ NEW PUMP THEY PUT IN YESTERDAY. UNC ORDERED NEW PUMP FOR MINE SHAFT TO PROVIDE MORE WATER.

1 SCRAPER DOWN

1 SCRAPER HAULING WINDBLOWN SAND STOCKPILED IN SEC. 36 NORTH OF THE NORTH CELL TO THE NORTH SIDE OF THE NORTH CELL.

1 SCRAPER HAULING REMAINDER OF TAILINGS FROM IN WEST EMBANKMENT TO THE SW PART OF THE NORTH CELL AFTER THAT IT IS CUTTING FROM THE WEST EMBANKMENT FOR THE HAUL ROAD.

WATER WAGON FILLING FROM NEW POND AND PUMPMASTER GOOD PUMP. WETTING HAUL ROAD FILL AND WINDBLOWNS IN BOTH CUT AND FILL AREAS.

GRADER SMOOTHING EAST SIDE OF WEST EMBANKMENT AND HAUL ROAD FILL

825 COMPACTING AND WORKING HAUL ROAD FILL

D6 IDLE

D3 KNOCKING DOWN PILES OF WINDBLOWNS LEFT BY FHHS DUMPTRUCKS

0915 3rd SCRAPER UP. D3 OPERATOR TO SCRAPER SO D3 NOW IDLE
3rd SCRAPER TO WINDBLOWN AREA TO THE NORTH OF NORTH CELL WITH OTHER SCRAPER

1030 4 MOISTURE/DENSITY TESTS BY SHB ON THE TAILINGS AT THE REQUEST OF MJY. MJY PICKED 4 GRADE STAKES AT RANDOM AND J FLETCHER HAD B BERRY CUT DOWN TO COARSE TAILINGS WITH THE D3 DOZER. R ROTH TOOK TESTS TO CHECK IN SITU MOISTURE OF TAILINGS.

UNC KOMATSU DOZER RIPPING & STOCKPILING WINDBLOWN SOILS ON FILL AT THE FAR NORTH END OF THE DESIGNATED WINDBLOWN AREA

CanonieEnvironmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME _____ PROJECT NO. 86-0602

FIELD ACTIVITY SUBJECT _____

LOCATION _____

DAILY ACTIVITIES AND EVENTS:

DATE 6/5/91

SHEET 2 of 2

AFTERNOON

EARTHMOVING OPERATIONS ARE SAME AS IN MORNING

MSY HELP LINE (J FLETCHER & GERLACH) SET NEW GRADE STAKES IN THE ROAD. THE WEST EMBANKMENT IS CLOSE TO FINAL GRADE BUT WILL NEED MORE SOIL TO FINISH WEST SIDE OF HAUL ROAD

J FLETCHER ASKED MSY IF THERE WERE OBJECTIONS TO CUTTING THE WEST EMBANKMENT ADJACENT TO THE CENTRAL CELL MSY SAID NO PROBLEM EXCEPT WEAKENING THE TOE PART OF THE DAM WHERE TAILINGS ABUT BY CUTTING MORE THAN THE END THEN A 3:1 SLOPE IS MAINTAINED FROM EXISTING TO CUT GRADE WHERE TAILINGS ABUT. I WILL MAKE SURE

WEATHER

WIND STORMS W/ SPITTING RAIN MOVE THROUGH DURING AFTERNOON TO RAISE DUST.

CanonieEnvironmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT CONSTRUCT HAUL ROAD, STRIP WINDBLOWN TAILINGS
LOCATION N CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/9/87
SHEET 1 of 5

CEC & MSY ARRIVE ON-SITE

EBS, GRADER COMPACTING AND SMOOTHING HAUL ROAD.

3 SCRAPERS AND DC WORKING IN WINDBLOWN AREA IN SEC 30 NORTH OF NORTH CELL. SCRAPERS LOADING WINDBLOWNS AND DUMPING IN ~6" LIFTS IN NORTH PORTION OF N. CELL DC CLEANING OUT DRAWS AND ARROYOS

WATER TRUCK WETTING WINDBLOWN AREA WHERE SCRAPERS ARE LOADING AND UNLOADING BUT THERE IS STILL MUCH DUST

D8, [redacted] IDLE

C. JOHNSON, S FLETCHER SPOKE TO B BERRY (NIELSONS) ABT - T REDUCING DUST. CJ ASKED IF NIELSONS MIGHT BE ABLE TO BRING IN ANOTHER WATER WAGON. BRUCE TOLD CHUCK THAT UNC WASN'T SUPPLYING ENOUGH WATER FOR ONE WATER WAGON. CHUCK TOLD BRUCE THAT ANOTHER PUMP HAD BEEN ORDERED AND WILL BE ABLE TO SUPPLY MORE THAN ENOUGH WATER BY THE MIDDLE OF NEXT WEEK.

MOST OF EXCESS SOIL ON WEST EMBANKMENT NEAR THE NORTH CELL HAS BEEN CUT AND USED AS FILL STILL APPROX. 5 FT OF FILL TO GO TO BRING ROAD TO GRADE. C. JOHNSON ASKED MSY IF WIDTH OF ROAD COULD BE REDUCED FROM 75 FT TO 45 OR 60 FT TO REDUCE THE AMOUNT OF BORROW REQUIRED TO FINISH HAUL ROAD. MSY CALLED DHC IN DENVER TO SEE WHY ROAD WAS DESIGNED AT 75 FT AND IF IT COULD BE REDUCED DHC TALKED TO CEC. ROAD IS 75 FT BECAUSE IT WAS DESIGNED TO ACCOMODATE LARGER EARTHMOVING EQUIPMENT THAN IS BEING PRESENTLY UTILIZED (IE 777 SCRAPERS, OFF-ROAD HAUL TRUCKS). DHC SAID THAT THE ROAD COULD BE REDUCED IN WIDTH SINCE THIS LARGER EQUIPMENT WASN'T BEING UTILIZED MSY TOLD CJ THAT OF THE REASON FOR 75 FT DESIGN WIDTH AND THAT IT COULD BE REDUCED. C.J. DECIDED TO KEEP THE 75 FT WIDTH SINCE A SIGNIFICANT PORTION OF THE ROAD HAD BEEN COMPLETED AND THAT NIELSONS PROBABLY WOULDN'T GIVE ANYTHING

CanonieEnvironmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME _____ PROJECT NO. F6 000 2L

FIELD ACTIVITY SUBJECT _____

LOCATION _____

DAILY ACTIVITIES AND EVENTS:

DATE 6/9/89

SHEET 2 of 5

BACK TO UNC FOR REDUCING THE WORK ON A LUMP SUM ITEM.

UNC WATER SURGE TANK RAN DRY AT APPROX NOON. NIELSONS THEN SHUT DOWN EVERYTHING EXCEPT ONE OPERATOR AND B. BERRY THE TWO OF THEM USED THE GRADER, DC, DS, AND WATER WAGON TO PLACE TWO LIFTS OF FILL AT THE WEST TOE OF WEST EMBANKMENT AT THE SOUTH SIDE OF THE NORTH CELL. NIELS USED THE 825 TO COMPACT. R. ROTH TESTED THE SOIL FOR DENSITY.

NIELSONS SHUT DOWN FOR WEEK AT 15.00

15.00 J FLETCHER ASKED MSI TO LOOK AT HAUL ROAD ALIGNMENT WITH HIM. J.F. THOUGHT THE ALIGNMENT MAY BE WRONG UPON FURTHER VISUAL INSPECTION AND CHECKING PLANS IT WAS DETERMINED THAT THE ROAD WAS IN THE RIGHT LOCATION

J.F & G.C PUT IN GRADE STAKES ON WEST EMB ALONG THE CENTRAL CELL. THIS WILL BE USED FOR ADDITIONAL FILL FOR THE HAUL ROAD.

MATERIAL QUANTITIES FOR WEEK ENDING 6/9/89

DATE	QUANTITY (CY)	CUMMULATIVE QUANTITY (CY)
6/5/89	2120	53,180
6/6/89	3120	56,300
6/7/89	3320	59,620
6/8/89	3960	63,580
6/9/89	2320	65,900

* QUANTITY ESTIMATES FROM LOAD COUNTS PROVIDED TO UNC BY NIELSONS

** ADD TO 51,060 CY FROM PREVIOUS WEEK

Canonie Environmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME _____ PROJECT NO. _____

FIELD ACTIVITY SUBJECT _____

LOCATION _____

DAILY ACTIVITIES AND EVENTS:

DATE 6/9/89

SHEET 3 of 5

ATTENDANTS USED 400,000 GALLONS OF WATER FOR THE WEEK

A SUMMARY TABLE OF SOIL DENSITY TEST FOR THE WEEK ENDING 6/9/89 IS ATTACHED

wk - 6-5 thru 6-10- NIELSONS INC PRODUCTION

Wind Blown Material - Original Contract

6-5-89	45 loads	@ 20 C.Y.	900 C.Y.
6-6-89	73 loads	@ 20 C.Y.	1460 C.Y.
6-8-89	140 loads	@ 20 C.Y.	2800 C.Y.
6-9-89	116 loads	@ 20 C.Y.	2320 C.Y.
			Σ 7480

To Date is 26860 C.Y.

Build Haul Road

6-5-89	61 loads	@ 20 C.Y.	1220 C.Y.
6-6-89	80 loads	@ 20 C.Y.	1660 C.Y.
6-7-89	153 loads	@ 20 C.Y.	3060 C.Y.
6-8-89	58 loads	@ 20 C.Y.	1160 C.Y.
			7100

To Date is 8,000 C.Y.

Excavation to Fill Pond

6-7-89	12 loads	@ 20 C.Y.	240 C.Y.

To Date is 23,100 C.Y.

Water used

6-5-89	10	loads @ 10,000 gals	100,000
6-6-89	10	loads @ 10,000 gals	100,000
6-7-89	9	loads @ 10,000 gals	90,000
6-8-89	9	loads @ 10,000 gals	90,000
6-9-89	8	loads @ 10,000 gals	80,000

Total for wk. 460,000 gals.

gave to Jim Tietsen 6-9-89

CanonieEnvironmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86 000-20
FIELD ACTIVITY SUBJECT STRIP WINDBLOWNS CONSTRUCT HAUL ROAD
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/12/89
SHEET 1 of 1

08:00 MJY ARRIVE ON-SITE
1 SCRAPER DOWN
2 SCRAPERS, D6 DOZER, GRADER WORKING IN WINDBLOWN AREA NORTH OF NORTH CELL IN SECTION 36. D6 PUSHING WINDBLOWN FROM WASHES AND SMALL ARROYOS UP ON FLATS WHERE SCRAPERS CAN LOAD IT. GRADER STOCKPILING FOR SCRAPER PICKUP SCRAPERS DUMPING IN NORTH PORTION OF NORTH CELL.

WATER WAGON WETTING BOTH CUT AND FILL AREAS OF SCRAPERS BUT THE PADDLEWHEELS STILL CREATING SOME DUST.

825 ROLLING HAUL ROAD FILL

09:30 SCRAPERS AND D6 MOVE FROM WINDBLOWNS TO HAUL ROAD. SCRAPERS FIRST COUPLE OF LOADS WERE DUMPED INTO THE NORTH CELL IN CASE ANY TAILINGS HAD BLOWN ON IT. D6 DOZER RIPPING SO SCRAPERS CAN LOAD CLAY. ~~[illegible]~~ CUTTING FROM NORTH PART OF CENTRAL CELL

W. EMB ALONG

GRADER REMAINS IN WINDBLOWN AREA AS BEFORE. CLEANING AND WINDROWING EXCESS SOIL AND SPILLAGE

11:30 J.F. & G.O. OF UNC SET GRADE (CUT) STAKES ON WEST EMBANKMENT ALONG CENTRAL ~~EMBANKMENT~~ TAILINGS CELL SO THAT ADDITIONAL SOIL CAN BE TAKEN FOR HAUL ROAD FILL

AFTERNOON WORK CONTINUED ON HAUL ROAD AS IN MORNING WATER WAGON WAS WETTING FILL AND ALSO SOAKING NORTH CELL.

J.F., G.O. & MJY SURVEYED IN AND MARKED WINDBLOWN AREA TO THE SOUTHWEST OF THE SOUTH CELL.

15:00 D8 DOZER W/ SINGLE RIPPER TINE DELIVERED TO NIEL [illegible].

MJY, G.O., J.F. DISCUSS N. END OF HAUL ROAD [illegible] WILL EXTEND IT ACROSS DRAINAGE BETWEEN N. TOE DAM AND MAIN ACCESS ROAD ALONG PRESENT ALIGNMENT AT A LATER DATE. CULVERT WILL BE INSTALLED FOR DRAINAGE THE EXTENSION MAY ONLY BE 30' TO 40 FEET WIDE HOWEVER.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. E6 CCC-20
FIELD ACTIVITY SUBJECT CONSTRUCT HAUL ROAD, SWEEP WINDBLOWNS
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/13/89
SHEET 1 of 2

08:00 MJY ARRIVE ON-SITE

2 SCRAPERS, 825, D6 DOZER AND WATER TRUCK WORKING ON HAUL ROAD. SCRAPERS HAULING FROM WEST EMBANKMENT ADJACENT TO THE NORTH PORTION OF CENTRAL CELL. D6 DOZER RIPPING CUT AREA, 825 ROLLING AND WATER TRUCK WETTING BOTH CUT & FILL.

GRADER IN WINDBLOWN AREA NORTH OF NORTH CELL CLEANING UP SPILLAGE AND EXCESS SOIL AND WINDROWING IT.

D3 PUSHING CRUSHED SANDSTONE MATERIAL ON OUTSIDE OF WEST EMBANKMENT TO FILL IN 5:1 SLOPE SOUTH OF NORTH CELL.

09:30 D3 IDLE, WATER WAGON WETTING HAUL ROAD, NORTH CELL SURFACE ~~PATCHES~~ AND WINDBLOWN AREA NORTH OF NORTH CELL.

UNC HAS WATER TRUCK FROM FUHS TRUCKING IN GALLUP, NM ON-SITE TO WET WINDBLOWN AREA NORTH OF NORTH CELL. UNC ROMATS STOCKPILING WINDBLOWNS FROM HILLS NORTHEAST OF NORTH CELL.

11:00 NIELSONS HAD SCRAPERS FILLING (PORTION OF) HAUL ROAD THAT HAD BEEN CONSTRUCTED AT SOUTH END OF NORTH CELL.

8 BERRY ON D6 DOZER, KNOCKING DOWN PILES OF WINDBLOWNS IN SOUTHEAST PORTION OF NORTH CELL PLACED BY FUHS TRUCKS.

12:00 - 12:30 MJY OBSERVED R ROTH TAKING DENSITY TESTS (BOTH NUCLEAR AND SANDCONE METHODS). FIELD PROCEDURES OKAY

12:30 - 14:30 MJY OBSERVED R ROTH IN LAB TRAILER. LAB PROCEDURES OKAY BUT ~~SIL~~ SANDCONE DENSITIES ARE STILL TOO HIGH. MJY HELPED RICK CALIBRATE SAND DENSITY AND CONE/PLATE VOLUME. SAND DENSITY DROPPED FROM 82 $\frac{lb}{ft^3}$ (WHICH WAS PREVIOUSLY REDUCED FROM 86 pcf) TO 82.0 pcf. CONE/PLATE VOLUME WAS DETERMINED TO BE 0.0414 ft^3 INSTEAD OF 0.0419 ft^3. THESE RESULTS BRING SANDCONE DENSITIES PREVIOUSLY CALCULATED TO WITHIN APPROX +2 TO +4 pcf ABOVE NUCLEAR GAUGE TEST DENSITIES.

MJY INFORMED C. JOHNSON OF THE ~~ET~~ RECALCULATION AND THE OUTCOME

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME _____ PROJECT NO. 86-066-20

FIELD ACTIVITY SUBJECT _____

LOCATION _____

DAILY ACTIVITIES AND EVENTS:

DATE 6/13/86

SHEET 2 of 2

SCRAPER, D6, 825 CONTINUE WORKING ON HAUL ROADS AS IN THE MORNING.

DOZER FORMING 5:1 SLOPE ON THE WEST SIDE OF THE WEST EMBANKMENT ADJACENT TO THE CENTRAL CELL. PUSHING SAND UP TO SCRAPERS.

GRADER SMOOTHING OUTSIDE SLOPES OF HAULROAD AND SMOOTHING CUT AND FILL AREAS.

D3 IDLE

CanonieEnvironmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT CONSTRUCT HAUL ROAD
LOCATION N. CELL TAILING DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/14/89
SHEET 1 of 2

08:00 MJY ARRIVE ON SITE

1 SCRAPER, D3 idle.

2 SCRAPERS, 825, D6 WORKING ON HAUL ROAD CONSTRUCTION
D6 RIPPING CUT AREA
SCRAPERS LOADING FROM CUT AREA SOUTH OF NORTH CELL ON WEST EMBANKMENT.
825 ROLLING FILL.

GRADER, D8 DOZER CLEANING NORTH SLOPE OF NORTH CROSS DIKE ROAD — PUSHING ~~CLEAN~~ SOILS ~~TO P~~ WITH WINDBLOWN TAILINGS TO BOTTOM OF SLOPE, LEAVING CLEAN CLAY.

09:30 J FLETCHER ASKED MJY FOR COORDINATES AND INVERTS OF NORTH DIVERSION CHANNEL SO THAT J.F. COULD START SURVEYING GRADE AND SLOPE STAKES. MJY TO GET AND VERIFY COORDINATES AND INVERTS FROM DENVER OFFICE. ORIGINAL LOCATION AND INVERTS MAY HAVE CHANGED DURING THE NRC COMMENT/RESPONSE SEQUENCE.

J.F. ALSO ASKED MJY IF SOILS ~~THAT~~ FROM AREAS WHERE THE INITIAL LAYER (6") OF WINDBLOWNS HAD BEEN REMOVED COULD BE USED FOR FILL ON THE HAUL ROAD WITHOUT FIRST HAVING A POSITIVE RAD VERIFICATION. MJY TOLD JIM THAT SOIL THAT HAS NOT BEEN VERIFIED CLEAN SHOULD NOT BE USED OUTSIDE THE FINAL COVER. THE HAUL ROAD WILL BE OUTSIDE THE FINAL COVER. J.F. ASKED MJY TO SPEAK TO C. JOHNSON ABOUT THIS

MJY CALLED DENVER, SPOKE TO DHG. ASKED FOR COORDINATES AND INVERTS IN RECLAMATION PLAN TO BE VERIFIED. ASKED DHG ALSO ABOUT SOIL FOR HAUL ROAD. DOUG AGREED THAT IT SHOULD NOT BE USED W/O VERIFICATION BUT NOTED THAT IT WOULD BE UNITED NUCLEAR'S RISK IF THEY CHOSE TO USE THE SOIL.

MJY SPOKE TO C. JOHNSON ABOUT BORROWING SOIL FROM WINDBLOWN AREAS W/O RAD VERIFICATION — TOLD CJ THAT THE SOIL SHOULD NOT BE USED W/O VERIFICATION OUTSIDE THE FINAL COVER. ALSO STATED THAT SHOULD UNITED NUCLEAR DECIDE TO USE THESE SOILS AS FILL FOR THE HAUL ROAD, IT WOULD BE AT THEIR RISK
CJ WILL NOT USE THESE SOILS

CanonieEnvironmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME _____ PROJECT NO. 86 060-20

FIELD ACTIVITY SUBJECT _____

LOCATION _____

DAILY ACTIVITIES AND EVENTS:

DATE 6/14/89

SHEET 2 of 2

C.J. ASKED ABOUT BORROWING SOIL FROM BETWEEN THE WEST TOE OF THE HAUL ROAD EMBANKMENT AND THE TOE DAM TO THE WEST. CHUCK IS USING TOPO MAP AND PLANS TO CALCULATE THE DEPTH OF THE RUNOFF CONTROL DITCH PLANNED TO RUN THROUGH THIS AREA. THE RUNOFF CONTROL DITCH WILL BE BUILT DURING FINAL RECLAMATION ACTIVITIES. MJY TOLD C.J. THAT ~~IF THEN~~ USING THE AREA FOR BORROW WAS UP TO UNITED NUCLEAR BUT MJY DIDN'T THINK THAT UNITED NUCLEAR WOULD WANT TO MOVE THE DIRT TWICE (IE, use it for fill and have to fill in borrow later). MJY SAID UNC SHOULD BE SURE THAT THERE WAS EXCESS MATERIAL THAN [illegible] USING IT. C.J. SAID HIS CALCULATIONS SHOULD EXCESS MATERIAL BUT THAT HE WOULD USE IT ONLY AS A LAST RESORT.

UNC INSTALLING NEW PUMP IN MINE SHAFT FOR ADDITIONAL WATER SUPPLY.

WEATHER – MOSTLY CLOUDY, HIGH CLOUDS, HOT, SLIGHT BREEZE.

AFTERNOON

GRADER STRIPPING VEG. & WINDBLOWN FROM AREA OF WINDBLOWNS SOUTHWEST OF THE OLD BREACH AREA.

3rd Scraper RUNNING (NIELSONS HADN'T HAD OPERATOR FOR IT, HIRED ONE THIS MORNING). IT IS WORKING ON HAUL ROAD WITH 2 OTHER SCRAPERS, D6, 825 AND WATER WAGON. SCRAPERS START LOADING FROM FURTHER SOUTH ON WEST EMBANKMENT. TOOK THE TOP APPROX. 6" TO NORTH CELL IN CASE IT HAD TAILINGS IN IT.

MJY RECEIVED FAX FROM DENVER VERIFYING COORDINATES AND INVERTS FOR NORTH DIVERSION CHANNEL IN TECH. SPECS IN RECLAMATION PLAN. GAVE TO J.F. & C.J.

15:00 D8 STARTS PUSHING DIRT DOWN DILCO KNOB.

R. ROTH TOOK SAMPLE OF MIXED CLAY, SAND FOR ONE POINT PROCTOR. ~~VA~~ RESULTS FIT W/ PREVIOUS PROCTOR CURVES.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT CONSTRUCT HAUL ROAD, STRIP WINDBLOWNS
LOCATION N CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/15/89
SHEET 1 of 2

08:00 MSY ARRIVED ON-SITE

1 SCRAPER, D3 IDLE
D8 KNOCKING DOWN DILCO KNOB, ROUNDING OFF SO SCRAPERS CAN RUN ON IT LATER

1 SCRAPER, GRADER, 825, D6, AND WATER WAGON WORKING ON HAUL ROAD.
D6 RIPPING CLAY FROM ~~W~~EST EMB. SOUTH OF FILL AREA. SCRAPERS LOADING ~~THERE~~ AND FILLING ON WEST SIDE OF HAUL ROAD. 825 ROLLING AND GRADER GRADING FILL.

1 SCRAPER ~~CLEANING~~ PICKING UP WINDBLOWNS IN AREA SW OF OLD BREACH AREA, CREATING A STOCKPILE IN THE MIDDLE OF THE DESIGNATED WINDBLOWN AREA, UNC WILL PICK THESE UP WITH THE LOADER AND MOVE THEM TO NORTH CELL IN DUMP TRUCKS BECAUSE THEY DID NOT WANT THE SCRAPERS TO SPILL DIRT ON THE HAUL ROADS AND ACCESS ROADS THAT HAVE BEEN COVERED W/ GEOTEXTILE AND BASE COARSE.

09:00 D8 MOVED TO WEST SIDE OF WEST EMBANKMENT ADJACENT TO THE CENTRAL CELL. IT IS PUSHING THE CRUSHED SANDSTONE ON THE SLOPE UP TO THE TOP SO THE SCRAPERS CAN LOAD IN DOING THIS, D8 IS CREATING THE 5:1 SLOPE.

ALL 3 SCRAPERS NOW RUNNING. 3rd SCRAPER TO WINDBLOWN AREA NORTH OF NORTH CELL TO CLEAN UP THE REMAINDER OF WINDBLOWN CONTAMINATED SOIL.

J. FLETCHER ASKED MSY WHERE MORE SOIL COULD BE BORROWED TO COMPLETE HAUL ROAD. MSY SUGGESTED THAT MATERIAL COULD BE BORROWED FROM PIPELINE ARROYO. J.F. OPTED TO EXTEND CUT ON WEST EMBANKMENT FURTHER SOUTH ALONG CENTRAL EMBANKMENT. HE PROCEEDED TO SET GRADE STAKES TO THE SOUTH SIDE OF THE CENTRAL CELL.

10:30 SCRAPER WORKING IN SW BREACH AREA JOINED OTHER SCRAPER IN NORTH WINDBLOWN AREA, D6 ALSO HELPING OUT. SCRAPERS HAULING TO NORTH END OF NORTH CELL.
REMAINING SCRAPER STARTS CUTTING FURTHER SOUTH ALONG WEST EMBANKMENT. TOOK TOP 6" OF EMB. TO ~~CE~~ NORTH CELL SINCE THE POTENTIAL OF CONTAINING SOME WINDBLOWN TAILINGS EXISTED

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-22
FIELD ACTIVITY SUBJECT CONSTRUCT HAUL ROAD; STRIP WINDBLOWNS
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/15/89
SHEET 2 of 2

11:00 D6 DOZER ON HILL EAST OF NORTH CELL, PUSHING WINDBLOWNS TO BASE OF HILL. WORKING IN DRAW ON WEST FACE OF HILL. THIS IS THE ONLY AREA LEFT ON THIS HILL LEFT TO BE CLEANED OFF.

AFTERNOON

85°F, CLEAR, SUNNY, WIND ~~SE~~ NORTH 5 TO ~~10~~ MPH

2 SCRAPERS START STRIPPING WINDBLOWNS FROM 2ND HILL N.E. OF NORTH CELL. THIS HAD BEEN DELAYED DUE TO WORK ON NORTHEAST ZONE 3 SANDSTONE WELLS BEING INSTALLED IN THAT LOCALE. WATER WAGON WETTING BOTH CUT AREA AND NORTH CELL WHERE SCRAPERS ARE DUMPING.

REMAINING SCRAPER WORKING ON HAUL ROAD AS IN MORNING. ROAD WITHIN ABOUT 1/4 FT OF FINISH GRADE. 825 ROLLING FILL.

D8 EAST OF DICO KNOB RIPPING ROCK. ALSO RIPPING ON KNOB. D6 STILL ON HILL EAST OF NORTH CELL AS IN MORNING.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-26
FIELD ACTIVITY SUBJECT FILL NORTH CELL, STRIP WINDBLOWNS, CONSTRUCT HAULROAD
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/16/89
SHEET 1 of 4

08:00 MJY ARRIVE ON-SITE

TWO SCRAPERS LOADING ON DILCO KNOB, UNLOADING IN SOUTHWEST PORTION OF NORTH CELL. D6 PUSHING SOIL/ROCK FROM KNOB TOWARD NORTH CELL, RIPPING WHERE NECESSARY. SCRAPERS HAVE TEETH FOR CUTTING

1 SCRAPER, GRADER CLEANING UP SPILLAGE FROM SCRAPERS IN WINDBLOWN AREA NORTH OF NORTH CELL

D6 DOZER CLEANING WINDBLOWNS (FINAL) FROM HILL EAST OF NORTH CELL, CREATING STOCKPILE FOR SCRAPERS TO PICK UP.

WATER WAGON SOAKING FILL IN NORTH CELL

MJY, J.F. & G.O. BLUETOP HAUL ROAD. FILL WELL COMPACTED, STAKES DRIVE HARD. STILL SOME FILL AND COMPACTION REQUIRED SO J.F. SENT RICK ROTH OF SW&B BACK TO ALBUQUERQUE. WILL BE AT LEAST NEXT WEEK BEFORE FINISH GRADE OF HAUL ROAD IS READY TO BE TESTED. J.F. WILL CALL RICK WHEN HE IS TO RETURN.

J. VELASQUEZ ON-SITE FOR A MEETING WITH REPRESENTATIVES OF THE NAVAHO NATION CONCERNING CLEANUP OF SECTION 1. UNITED NUCLEAR STILL DOESN'T KNOW WHEN OR IF THEY WILL GET ACCESS AND PERMISSION TO CLEAN SECTION 1.

90°F SUNNY, WIND TO 20 MPH FROM SW. J.F. ORDERED WATER TRUCK FROM RUES TRUCKING TO HELP KEEP DUST DOWN ONSITE

14:00 - 17:00

ADDITIONAL FILL PLACED ON HAUL ROAD IN AFTERNOON. SCRAPERS ALSO PICKED UP PILE OF WINDBLOWN SOIL THAT THE D6 HAD CLEANED FROM THE HILL EAST OF NORTH CELL. UNLOADED IN EAST, CENTRAL PORTION OF NORTH CELL.

14:00 MJY LEFT SITE FOR WEEKEND HOME.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-660-20
FIELD ACTIVITY SUBJECT FILL NORTH CELL, STRIP WINDROWS, CONSTRUCT HAUL ROAD
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/16/89
SHEET 2 of 4

MATERIAL QUANTITIES FOR W.E. 6/16/89 *

DATE	QUANTITY (CY)	CUMMULATIVE QUANTITY TO DATE (CY) **
6/12/89	3680	69,580
6/13/89	4080	73,660
6/14/89	5100	78,760
6/15/89	3600	82,360
6/16/89	6484	88,844

* QUANTITY ESTIMATES FROM LOAD COUNTS GIVEN TO UNITED NUCLEAR BY NIELSONS INC

** ADD TO 65,900 CY FROM PREVIOUS WEEK

NIELSONS USED A TOTAL OF 550,000 GALLONS OF WATER ON THIS WEEK.

NIELSON'S INC

~~2/3~~ 3/4

Production week End 6-17-89

6 acres of Clearing -
Total to date 36 acres

Windblown Material

6-12-89	33 @ 20 C.Y.	660 C.Y.
6-16-89	110 @ 20 C.Y.	2200 C.Y.
	To date	29720 C.Y.

Rock Haul Road

6-12	157 loads @ 20 C.Y.	3020 C.Y.
6-13	204 loads @ 20 C.Y.	4080 C.Y.
6-14	255 loads @ 20 C.Y.	5100 C.Y.
6-15	180 loads @ 20 C.Y.	3600 C.Y.
	To date	23,800 C.Y.

Water used.

6-12-89	12 loads @ 10,000 gals	120,000 gal
6-13-89	12 loads @ 10,000 gals	120,000 gal
6-14-89	14 loads @ 10,000 gals	140,000 gal
6-15-89	8 loads @ 10,000 gals	80,000 gal
6-16-89	9 loads @ 10,000 gals	90,000 gal
	This week	550,000 gals

Excavate to Pond

6/16/89	238 @ 18 CY	4284	C.Y
	To date	27,384	C.Y

CanonieEnvironmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT FILL NORTH POND STRIP WINDROWNS
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/19/89
SHEET 1 of 1

12:30 MSX ARRIVE ON-SITE AFTER WEEKEND HOME.

J. FLETCHER WORKED BOTH SATURDAY AND SUNDAY (6/17 & 6/18) SURVEYING AND INSTALLING GRADE STAKES.

ALL 3 SCRAPERS LOADING SHALE AND LIGNITE FROM DILCO KNOB. TWO SCRAPERS EQUIPPED WITH TEETH ON THE CUTTING EDGES. UNLOADING IN SOUTH AND SOUTHWEST PORTION OF NORTH CELL IN 8 TO 12 INCH LIFTS

GRADER AND WATER WAGON WORKING FILL.

D8 DOZER RIPPING SANDSTONE EAST OF DILCO KNOB AND PUSHING IT INTO THE NORTH CELL. D8 ALSO NEEDED PERIODICALLY TO RIP ON DILCO KNOB.

D6 RIPPING ON NORTH ~~CELL~~ SIDE OF DILCO KNOB AND PUSHING IT INTO THE NORTH CELL.

D8, 825 IDLE.

WEATHER: HOT, DRY 95°F, SUNNY, CLEAR. WIND 10-20 MPH SW.

UNC HAS TWO DUMP TRUCKS FROM FUHS TRUCKING BACK ON-SITE. ALSO HAS WATER TRUCK BACK. UNC'S HOUGH 360 LOADER LOADING TRUCKS WITH STOCKPILED WINDROWNS FROM HILLS N.E. OF NORTH CELL. TRUCKS DUMPING IN & EAST PORTION OF NORTH CELL WATER TRUCK WETTING BOTH FILL AND DUMP PILES AND HAUL ROAD.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC INTERIM STABILIZATION, NORTH CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT FILL NORTH CELL, STRIP WINDBLOWN
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/20/89
SHEET 1 of 1

08:00 MSV ARRIVE ON-SITE.

3 SCRAPERS LOADING FROM THE DILCO KNOB, UNLOADING IN SOUTHWEST PORTION OF THE NORTH CELL.

WATER WAGON WETTING BOTH CUT AND FILL

D8 DOZER RIPPING SANDSTONE AND PUSHING INTO NORTH CELL FROM EAST OF DILCO KNOB.

GRADER SMOOTHING CUT AND FILL AREAS AND HAUL PATH.

D6 DOZER IN SOUTHWEST WINDBLOWN AREA. TAILINGS ARE VISIBLE ~~BELOW~~ ON THE ~~S~~ SURFACE AFTER A SCRAPER CUT OFF APPROXIMATELY 6" LAST WEEK. D6 IS ~~CUTTING~~ DOZING OUT TAILINGS LEFT

UNC HAS 2 FUHS TRUCKING DUMP TRUCKS BEING LOADED WITH STRIPPED WINDBLOWN - ~~SOILS~~ CONTAMINATED SOILS FROM N.E. OF THE NORTH CELL. (FROM ARROYO IN SEC. 36 JUST NORTH OF SECTION 2 BOUNDARY). BY UNC LOADER. A FUHS WATER TRUCK ALSO ON SITE TO HELP KEEP DUST DOWN AND ADD MOISTURE TO SOILS WHERE LOADER AND TRUCKS ARE WORKING.

AM WEATHER: 60° TO 80° F, MOSTLY CLOUDY, LIGHT BREEZE.

11:30 SCRAPERS START LOADING DOWN NORTH FACE OF WHAT IS LEFT OF DILCO ~~KNOB~~ KNOB. UNLOADING IN SOUTH CENTRAL PORTION OF NORTH CELL IN 8- TO 12-INCH LIFTS.

D8 ON SOUTH SIDE OF DILCO AREA RIPPING AND PUSHING SOIL AND ROCK NORTH FOR SCRAPERS TO LOAD.

GRADER, WATER WAGON WORKING AS BEFORE.

12:30 1 SCRAPER DOWN, D8 RIPPING ROCK AND PUSHING SOIL AND ROCK INTO NORTH CELL FROM AREA EAST OF DILCO KNOB.

14:00 DOWN SCRAPER STARTED WORK CONTINUE AS BEFORE.

PM WEATHER: 80° - 90° F, HOT, MOSTLY CLOUDY, WIND 10-30 MPH FROM SW AND W. DUST COMING FROM SOUTH AND CENTRAL CELLS, BLOWING ACROSS NORTH CELL AND OTHER AREAS.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC-INTERIM STABILIZATION, NORTH CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT FILL NORTH CELL
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/21/89
SHEET 1 of 1

08.00 MSV ARRIVED ON-SITE

3 SCRAPERS LOADING FROM AREA OF THE DILCO KNOB, UNLOADING IN SOUTH CENTRAL AND SOUTHWEST PORTIONS OF NORTH CELL FILL AREA.

D8 RIPPING SANDSTONE & SHALE THAT SCRAPERS ARE LOADING

GRADER SMOOTHING BOTH CUT & FILL AND HAUL PATHS

WATER WAGON WETTING CUT & FILL — ALSO SOIL IN NORTH POND AND HAUL ROADS

D3, D6 DOZERS IDLE
825 IDLE

09.00 ONE SCRAPER DOWN

11.40 CAT 825 STARTED, USED TO CRUSH SANDSTONE AFTER D8 RIPPED SANDSTONE IS NOW LESS WEATHERED, THEREFORE RIPPING IN LARGER PIECES MAKING IT DIFFICULT FOR SCRAPERS (PADDLE-WHEELS) TO LOAD.

AM WEATHER 60°-80°F, MOSTLY SUNNY, LIGHT BREEZE

AFTERNOON:

D8, 825 WORKING ONE SIDE OF ROCK CUT UNTIL SCRAPERS CAN LOAD WHILE SCRAPERS LOAD ~~WORK~~ OTHER SIDE OF ROCK CUT PREVIOUSLY PREPARED BY D8, 825. THEN THEY SWITCH SIDES OTHERWISE CONTINUE AS IN A.M

14.15 3rd SCRAPER RUNNING

PM. WEATHER 85°F, HOT. PARTLY CLOUDY WIND 20-30 MPH FROM WEST & NORTHWEST

UNI KOMATSU DOZER DOWN

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, NORTH CELL PROJECT NO. 86-660-20
FIELD ACTIVITY SUBJECT FILL NORTH CELL
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/22/88
SHEET 1 of 2

08.00 MSY ARRIVE ON-SITE

3 SCRAPERS LOADING RIPPED & CRUSHED SANDSTONE & SHALE FROM AREA SOUTH OF NORTH CELL WHERE DILCO KNOB USED TO BE. UNLOADING IN THE CENTRAL PORTION OF THE NORTH CELL

DB RIPPING ROCK IN AREA WHERE SCRAPERS ARE LOADING

GRADER SMOOTHING FILL AREA

825 ROLLING FILL AREA, COMPACTING AND BREAKING UP ROCK

WATER WAGON WATERING FILL AND REMAINDER OF NORTH CELL

UNC HAS 2 FUHS TRUCKING DUMP TRUCKS ON-SITE. USING THEM TO CARRY WINDBLOWN SOILS STRIPPED FROM HILL NE OF NORTH CELL. UNC LOADER LOADING TRUCKS DUMPING IN THE EAST PORTION OF THE N. CELL.

09.10 SCRAPERS MOVING MORE MATERIAL THAN DB CAN RIP, SO SCRAPERS START LOADING CLAYEY SOILS FROM NORTH CROSS DIKE ROAD WEST OF THE DILCO KNOB. UNLOADING IN THE CENTRAL PORTION OF THE NORTH CELL WHERE FILL HAS BEEN PLACED TO APPROX. ONE FOOT OF REGRADED SURFACE ELEVATION. THIS ALLOWS DB TIME TO RIP ROCK.

825 ROLLS CLAY FILL

AFTERNOON:

WORK CONTINUED AS IN MORNING

14.30 UNC LOADER AND RENTED TRUCKS FINISH HAULING WINDBLOWNS FROM NORTH OF NORTH CELL AND MOVE TO SW WINDBLOWN AREA. STILL HAULING TO EAST OF NORTH CELL

NIELSENS SUPERINTENDANT ON D6 DOZER IN SOUTHWEST WINDBLOWN AREA. TAILINGS FOUND UNDER ~~CLAY~~ SURFACE SOILS SO DB CLEANING UP, STOCKPILING SOIL & TAILINGS FOR UNC LOADER

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT FILL NORTH CELL
LOCATION ~~UNC~~ N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/22/89
SHEET 2 of 2

MSY, J. FLETCHER START REPLACING MISSING GRADE STAKES IN THE NORTH CELL

15:30 825 TO ROCK CUT AREA TO CRUSH RIPPED ROCKS

16:00 2 SCRAPES START TO LOAD FROM ROCK CUT AREA AGAIN
1 SCRAPER DOWN

D6 DOZER MOVES TO NORTH CELL, KNOCKING DOWN PILES OF WINDBLOWNS DUMPED BY DUMP TRUCKS.

17:00 NIELSONS SHUTS DOWN

19:30 MSY & J FLETCHER QUIT SURVEYING REPLACED AND LEVELED IN MISSING GRADE STAKES IN WEST HALF OF THE NORTH CELL

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT FILL NORTH CELL
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/23/89
SHEET 1 of 3

08:00 MJV ARRIVE ON-SITE

2 SCRAPERS LOADING FROM DILCO KNOB AREA TO SW CORNER OF NORTH CELL.

D8 RIPPING SANDSTONE/SHALE IN CUT AREA, 825 ROLLER CRUSHING RIPPED ROCK.

GRADER SMOOTHING FILL

WATER WAGON WETTING NORTH CELL AND ROADS TO HOLD DOWN DUST.

D6 WORKING IN SEC 36 NORTH OF MAIN ACCESS ROAD CLEANING OUT ARROYOS - STOCKPILING SOIL SO THAT SCRAPERS CAN PICK IT UP LATER.

1 SCRAPER, D3 DOZER IDLE.

UNC HAS LOADER LOADING RENTED TRUCKS FROM WINDBLOWN SOIL STOCKPILE IN SOUTHWEST. J. FLETCHER HAS TRUCKS DUMPING IN SW CORNER OF NORTH CELL

08:30 1 SCRAPER DOWN; ONLY 1 WORKING NOW.

09:30 IDLE SCRAPER STARTED. IT WORKS IN DILCO AREA WITH OTHER RUNNING SCRAPER.
D6 DOZER TO DILCO (ROCK CUT) AREA. IT IS PUSHING RIPPED AND CRUSHED MATERIALS INTO A STOCKPILE SO THAT SCRAPERS CAN LOAD EASIER.

11:30 BOTH RUNNING SCRAPERS START CUTTING FROM NORTH CROSS DIKE ROAD TO GIVE D6, D8 TIME TO RIP ROCK.

12:00 NIELSONS SHUT DOWN FOR THE DAY.
WEATHER HOT, DRY WINDY.

AFTERNOON UNC CONTINUE RUNNING LOADER AND DUMP TRUCKS AS IN MORNING

CanonieEnvironmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION - N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT FILL NORTH CELL
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/23/89
SHEET 2 of 3

MJY AND J FLETCHER SURVEY LOCATION OF INSTALLED WELL 703. (PART OF ZONE 3 PUMPBACK SYSTEM)

MATERIAL QUANTITIES FOR WEEK ENDING 6/23/89 *

DATE	QUANTITY FILL PLACED (CY)	CUMMULATIVE FILL PLACED TO DATE (CY) **
6/19/89	8360	97,204
6/20/89	9580	106,784
6/21/89	7080	113,864
6/22/89	6780	120,644
6/23/89	2300	122,944

** ADD TO 88,844 CY CUMMULATIVE PLACED AT END OF PREVIOUS WEEK.

NIELSONS USED A TOTAL OF ~~500~~ 520,000 GALLONS OF WATER THIS WEEK.

NO SOIL DENSITY TESTS WERE CONDUCTED THIS WEEK

Weekly Nielsons Production thru 6-22-89

Excavate to fill pond

6-19-89	418 lds @ 20 C.Y.	8360 C.Y.
6-20-89	479 lds @ 20 C.Y.	9580 C.Y.
6-21-89	354 lds @ 20 C.Y.	7080 C.Y.
6-22-89	339 lds @ 20 C.Y.	6780 C.Y.
	To Date	59,184 C.Y.

6/23 115 lds @ 20 C.Y. 2300

Water Used

6-19-	10 loads @ 10,000 gals.	100,000 gals
6-20	11 loads @ 10,000 gals	110,000 gals
6-21	15 loads @ 10,000 gals	150,000 gals.
6-22	16 loads @ 10,000 gals	160,000 gals
6-23	none	
	This wk total	520,000 gals.

To Date additional windblown
4 Acres.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N CELL PROJECT NO. 86-0160-20
FIELD ACTIVITY SUBJECT FILL NORTH CELL, CONSTRUCT HAUL ROAD
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/26/89
SHEET 1 of 2

08.00 MJY ARRIVE ON-SITE.
1 SCRAPER, D3 IDLE
2 SCRAPERS HAULING FILL FROM STOCK POND DIKE NORTH OF NORTH CELL IN SECTION 32 TO HAUL ROAD. GRADER CLEANING UP SPILLAGE AND MAINTAINING HAUL PATHS.
WATER ~~TR~~ WAGON WETTING BOTH CUT & FILL AREAS AND THE NORTH CELL AND ACCESS ROAD.
D8 DOZER RIPPING ROCK ALONG SOUTHEAST SIDE OF NORTH CROSS DIKE ROAD

09.00 825 STARTED. IT IS USED TO CRUSH SANDSTONE THAT HAS BEEN RIPPED BY D8.

D6 DOZER STRIPPING WINDBLOWN SOILS FROM THE FAR NORTH EAST SIDE OF SECTION 2. (HILL EAST OF N. CELL ADJACENT TO NAVAJO RESERVATION.

09:45 GRADER STARTS BLADING HAUL ROAD
10:00 SCRAPERS LOADING LAST OF WINDBLOWN SOILS IN AREA NORTH OF N. CELL (SEC. 36)

UNC LOADER CLEANING UP AREAS WHERE WINDBLOWN SOILS WERE STOCKPILED AND PLACED IN DUMP TRUCKS. LOADER TAKING SOILS TO EAST SIDE OF NORTH CELL.

11:30 2 SCRAPERS STARTED HAULING FILL TO HAUL ROAD RAMP FROM ~~STOCK POND DIKE~~ CUT ON WEST EMBANKMENT AT THE SOUTH SIDE OF THE CENTRAL CELL.
825 MOVED TO ROLL FILL ON RAMP.
WATER WAGON USED TO WET SOIL FILL FOR RAMP

13:30 BOTH SCRAPERS (1 IDLE) MOVE TO NORTH CROSS DIKE ROAD TO CUT CLAYEY SOILS FOR USE AS FILL IN NORTH CELL. FILL PLACED IN THE N.E. PORTION OF NORTH CELL
D3 WORKING ON SLOPE OF HILL AT EXTREME N END AND EAST OF NORTH CELL. CLEANING OFF WINDBLOWN AND PREPARING PAD TO DRILL WELL FOR NE ZONE 3 PUMPBACK SYSTEM.

CanonieEnvironmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT FILL N. CELL, CONSTRUCT HAUL ROAD
LOCATION N CELL TAILINGS DISPOSAL AREA EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/26/89
SHEET 2 of 2

WEATHER 80°-85°F, CLEAR. WIND 20 MPH FROM SW.

14.40 SCRAPERS RETURN TO HAULING FILL TO HAUL ROAD RAMP.

D3 IDLE

15.30 1 SCRAPER RETURNS TO LOAD SOIL FROM NORTH CROSS-DIKE ROAD, 1 SCRAPER TO PILE CREATED BY D3 DOZER AND FILLING IN EAST END OF N. CELL.

GRADER, WATER WAGON WORKING FILL.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT FILL NORTH CELL
LOCATION N CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/27/89
SHEET 1 of 2

08:00 MSY ARRIVE ON-SITE

2 SCRAPERS DOWN.
1 SCRAPER LOADING FROM PILE OF RIPPED/CRUSHED ROCK ON THE SOUTHEAST SIDE OF THE N. CELL. THIS PILE WAS CREATED YESTERDAY BY D8 DOZER.

D8 CONTINUES RIPPING AND STOCKPILING MATERIAL ON SOUTH SIDE OF N CELL.

GRADER, WATER WAGON WORKING NORTH CELL FILL.

D6 DOZER CONTINUES ON HILL ADJACENT TO SECTION 1. STRIPPING WINDBLOWNS.

825 WORKING PART TIME ON ROCK CUT AREA WHERE D8 IS WORKING TO CRUSH ROCK.

09:30 D6 DOZER RETURNS TO N. CELL TO KNOCK DOWN PILES OF WINDBLOWN SOILS PLACED BY DUMP TRUCKS LAST WEEK IN THE SW PORTION OF THE N. CELL. D6 THEN MOVED TO ROCK CUT AREA TO RIP.

WATER WAGON SOAKED THE WINDBLOWN SOILS AFTER D6 LEVELED THEM.

10:00 - 12:30 MSY & J. FLETCHER REPLACE GRADE STAKES IN SOUTH PORTION OF THE NORTH CELL.

12:30 SECOND SCRAPER STARTED. BOTH SCRAPERS LOADING RIPPED/CRUSHED ROCK FOR FILL IN N. CELL.

D6 CREATING STOCKPILE OF SOIL & RIPPED/CRUSHED ROCK FOR PICKUP BY SCRAPERS ~~ALONG~~ S. SIDE OF N. CELL

D8 DOZING RIPPED/CRUSHED ROCK INTO N. CELL FROM SOUTH SIDE

825 CRUSHING RIPPED ROCK

D3 DOZER WORKING ALONG TOE OF NORTH SLOPE OF NORTH CROSS DIKE ROAD MAKING SURE TAILING ARE BELOW REGRADED SURFACE.

GRADER IS FINISH BLADING THE HAUL ROAD

CanonieEnvironmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT FILL NORTH CELL
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/27/89
SHEET 2 of 2

UNC PETTIBONE FORKLIFT MOVING LARGE ROCKS THAT WERE DISLODGED FROM HILLS EAST OF THE NORTH CELL DURING STRIPPING OF WINDBLOWN SOILS TO THE WEST SIDE OF PIPELINE ARROYO JUST NORTH OF THE MAIN ACCESS ROAD TO THE TAILINGS DISPOSAL AREA.

13:30 - 16:30 MJY AND J FLETCHER REPLACE GRADE STAKES IN EAST ONE-HALF OF NORTH CELL

NIELSONS CORK CONTINUES AS IN MORNING.

WEATHER: PARTLY CLOUDY TO MOSTLY CLOUDY
85°F W/ WIND 10MPH FROM SW

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT FILL NORTH CELL
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/28/89
SHEET 1 of 1

08:00 MJY ARRIVE ON-SITE

1 SCRAPER STILL DOWN

2 SCRAPERS CUTTING ROCK FROM SOUTH SIDE OF N. CELL TO CENTRAL PORTION OF NORTH CELL. PLACING FILL FROM WEST TO EAST.

D6, D8 RIPPING AND DOZING ROCK FROM CUT AREA SOUTH OF N. CELL

825 CRUSHING RIPPED ROCK

WATER WAGON, GRADER WORKING FILL

UNC HAS 3 RENTED DUMP TRUCKS ON-SITE. UNC LOADER IS LOADING DUMP TRUCKS FROM STOCKPILE OF WINDBLOWNS TO THE SOUTHWEST OF THE TAILINGS DISPOSAL AREA. TRUCK HAUL TO SW PORTION OF N. CELL.

10:30 D6 DOZER MOVED TO SOUTHWEST WINDBLOWN AREA. ~~TO EXCAVATE~~ TAILINGS DOWN TO A DEPTH OF 1.5 FT BELOW ORIGINAL GROUND ELEVATION. DOZER WORKED TO EXCAVATE TAILINGS & STOCKPILE FOR LOADER & DUMP TRUCKS.

13:00 MJY TALKED TO C. JOHNSON ON-SITE. MJY REITERATED NEED TO KEEP SOIL FILL IN NORTH CELL MOIST. SUGGESTED THAT DENSITY OF REGRADED SURFACE & SOIL COVER MIGHT BE DIFFICULT TO ACHIEVE IF ALL SOIL BELOW IS UNCOMPACTED. C.J. WORRIED THAT TOO MUCH SOIL MAY NEED TO BE PLACED IN THE NORTH CELL BECAUSE EXTRA SOIL WAS TAKEN DURING STRIPPING OF WINDBLOWNS (i.e. GREATER THAN 6") AND ADDITIONAL SOILS FOUND IN THE SOUTHEAST WINDBLOWN AREA. MJY TOLD C.J. THAT GRADE STAKES ON THE NORTH CELL COULD BE USED TO CALCULATE CUT/FILL VOLUMES REMAINING. MJY WILL CALCULATE GRADE STAKE LOCATIONS

13:00 - 14:30 MJY, J. FLETCHER SURVEY IN GRID ELEV. CONTOURS IN AREA SE OF N CELL JUST NORTH OF BORROW PIT NO. 1

14:00 SCRAPERS START LOADING CLAYEY SOILS FROM NORTH CROSS-DIKE FOR FILL IN NORTH POND; USED FOR LAST 1' OF FILL ON REGRADED SURFACE

16:00 - 19:30 MJY, J. FLETCHER NOTE ELEVATIONS FROM GRADE STAKES FOR QUANTITY ESTIMATE IN NORTH CELL.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT FILL NORTH CELL
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/29/89
SHEET 1 of 2

08:00 MSY ARRIVE ON-SITE.

1 SCRAPER DOWN
2 SCRAPERS ALTERNATING BETWEEN CUTTING CRUSHED ROCK ALONG S. SIDE OF N. CELL AND CLAYEY SOILS FROM THE NORTH CROSS-DIKE ROAD.

D8 RIPPING ROCK, 825 CRUSHING RIPPED ROCK, AND D6 STOCKPILING CRUSHED/RIPPED ROCK FOR PICKUP BY SCRAPERS.

WATER WAGON WETTING, CUT, FILL, AND HAUL ROAD.

UNC LOADER LOADING 3 RENTED DUMP TRUCKS FROM STOCKPILE OF WINDBLOWN SOILS SE OF SOUTH TAILINGS IMPOUNDMENT. TRUCKS DUMPING LOADS IN THE SOUTHWEST CORNER OF THE NORTH CELL.

B. BERRY (NIELSONS' SUPERINTENDANT) IS TO FINISH FINAL GRADING THE HAUL ROAD TODAY. C. JOHNSON WILL CALL SERGENT, HAUSKINS AND BECKWITH TO HAVE A TECHNICIAN ON-SITE AFTER THE INDEPENDENCE DAY HOLIDAY TO TEST THE FINAL LIFT OF HAUL ROAD FILL FOR SOIL DENSITY.

10:00 MSY, J. FLETCHER REPLACING GRADE STAKES IN SOUTH-CENTRAL PORTION OF NORTH CELL AND MARK GRADES ON 6980 ELEV CONTOUR STAKES PLACED YESTERDAY

AVERAGE END-AREA VOLUME CALCULATIONS MADE ON NORTH CELL. RESULTS FOR NORTH CELL ARE:

TOTAL REMAINING FILL: ~38,000 C.Y
TOTAL REMAINING CUT: ~18,000 C.Y

MSY INFORMED J. FLETCHER AND C. JOHNSON OF THESE FIGURES C.J NO LONGER CONCERNED THAT TOO MUCH CONTAMINATED DIRT EXISTS FOR FILL. J.F & C.J. WANT TO GET EXTRA SOIL FILL FROM SECTION 36 WHERE WINDBLOWNS WERE STRIPPED. THEY WANT TO TAKE 6" TO 1' EXTRA OFF THE ENTIRE AREA, IF NECESSARY, INSTEAD OF GOING TO THE BORROW PIT NO. 2 STOCKPILE

CanonieEnvironmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT FILL NORTH CELL
LOCATION N. CELL TAILINGS DISPOSAL AREA EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/29/89
SHEET 2 of 2

PM WEATHER
90°-95°F, BREEZY WINDS FROM SW, PTLY CLOUDY

15 30 NIELSONS STARTED EXCAVATING SOIL AND ROCK FROM CUT AREA AROUND 6980 CONTOUR AND PLACING WITH SCRAPERS INTO SE CORNER OF NORTH CELL.

3 DUMP TRUCKS AND LOADER MOVE TO HILL EAST OF N. CELL AND ADJACENT TO SEC. 1 TO MOVE WINDBLOWN SOILS STRIPPED AND STOCKPILED BY D6 DOZER INTO N. CELL. HAULING TO SW PORTION OF N. CELL.

MSY & J FLETCHER REPLACE GRADE STAKES IN N. PORTION OF N. CELL UNTIL 18:00.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-30
FIELD ACTIVITY SUBJECT FILL N. CELL
LOCATION N. CELL TAILINGS DISPOSAL AREA EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 6/30/89
SHEET 1 of 2

08:00 MSY ARRIVE ON-SITE

1 SCRAPER DOWN.
2 SCRAPERS CUTTING FROM AREA OF 6980 CONTOUR SE OF N CELL AND NORTH OF ~~N CELL~~ BORROW PIT NO. 1

D6 RIPPING ROCK AND HELPING SCRAPERS LOAD.

D8 RIPPING ROCK ALONG SOUTH EDGE OF N CELL.

825, D3 IDLE. WATER WAGON WORKING CUT AND FILL

10:00 MSY, J. FLETCHER CHECKED WATER IN DOMESTIC WATER TANKS ON MESA WEST OF MILL. USED OPPORTUNITY TO TAKE PHOTOS FROM HIGH VANTAGE POINT.

UNC LOADER AND TRUCKS CONTINUE TO MOVE WINDBLOWN SOILS FROM HILL EAST OF N CELL ADJACENT TO ~~NORTH~~ SEC. 1. TO NORTH CELL (E PORTION OF N. CELL)

12:30 MSY LEFT SITE FOR WEEKEND HOME.

14:00 NIELSONS QUIT FOR DAY

MATERIAL QUANTITIES FOR WEEK ENDING 6/30/89

DATE	QUANTITY FILL PLACED (CY)	CUMMULATIVE QUANTITY FILL PLACED TO DATE (CY)
6/26	2,500	125,444
6/27	3540	128,984
6/28	4180	133,164
6/29	5620	138,784
6/30	4040	142,824

* MATERIAL QUANTITY ESTIMATES FROM LOAD COUNTS GIVEN TO UNC BY NIELSONS
** CUMMULATIVE BY ADDING 2500 C.Y. TO 122,944 CUM. CY FROM LAST WEEK

A TOTAL OF 608,000 gals. OF WATER WAS USED THIS WEEK

Nilsons Production wk end 7-1-89

Build Haul Road.

6-26-	125 loads @ 20 C.Y	2,500 C.Y
	To date total	26,300 C.Y

Excavation to Till Pond

6-27	177 loads @ 20 C.Y	3540 C.Y
6-28	209 loads @ 20 C.Y	4180 C.Y
6-23-89	115 loads @ 20 C.Y	2300 C.Y
6-29-89	281 loads @ 20 C.Y	5620 C.Y
6-30-89	202 loads @ 20 C.Y	4040 C.Y
	wk total.	19,680 CY
	To date total	78864 C.Y

Water Used

6-26-89	11 loads @	10,000	gals	110,000 gals
6-27-89	12 loads @	10,000	gals	120,000 gals
6-28-89	15 loads @	10,000	gals	150,000 gals
6-29-89	14 loads @	10,000	gals	140,000 gals
6-30-89	6 loads Pinedale Pit @	3,000	gals	18,000 gals
6-30-89	13 loads @	10,000	gals	130,000 gals
	Total water used			668,000 gals

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - Interim Stabilization; N Cell PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT Fill North Cell
LOCATION N Cell Tailings Disposal Area
DAILY ACTIVITIES AND EVENTS:

DATE 7/5/89
SHEET 1 of 1

@ 12.30 MSY ARRIVED ON-SITE

3 SCRAPERS LOADING CLAYEY SOILS FROM NORTH CROSS DIKE ROAD AND PLACING IT IN SW CORNER OF THE N. CELL.

D8 RIPPING ROCK ALONG SOUTH SIDE OF N. CELL

D3, 825 IDLE

GRADER DOWN [redacted]

D6 WAS DEMOBILIZED EARLIER IN THE DAY

HAUL ROAD HAS YET TO BE COMPLETELY FINISH BLADED.

13.30 DAVID MACKENZIE FROM SERGENT, HAUSKINS & BECKWITH ON-SITE TO TAKE SOIL DENSITY TESTS ON HAUL ROAD

J. FLETCHER, MSY GAVE DAVE BACKGROUND INFO ON SITE AND TESTING REQUIREMENTS.

MSY SHOWED DAVE AROUND AND ANSWERED HIS QUESTIONS

15.30 DAVE MACKENZIE DID NOT HAVE KEY TO FIELD LAB TRAILER - UNABLE TO GET IN. C. JOHNSON HELPED DAVE ACCESS TRAILER BY CUTTING OF LOCK.

16.00 - 18.30 MSY, J. FLETCHER SURVEYED IN 3 STATIONS ALONG CENTERLINE OF NORTH DIVERSION DITCH FROM COORDINATES GIVEN IN RECLAMATION PLAN. ALSO ESTABLISHED STATIONS ALONG CENTERLINE AT 100 FT INTERVALS

SHOT ELEVATION, LOCATION OF WELL 702

DAVE MACKENZIE TOOK TWO (2) NUCLEAR DENSITY TESTS ON THE HAUL ROAD SURFACE. ONE PASSED, ONE FAILED AT 93% STD PROCTOR. FAILING TEST INDICATED DRY SOIL. DAVE SPOKE TO B. BERRY NIELSONS WILL WET AND WHEEL ROLL PRIOR TO FURTHER TESTING.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT FILL NORTH CELL
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MINE
DAILY ACTIVITIES AND EVENTS:

DATE ~~6~~ 7/6/89
SHEET 1 of 2

08:00 MSV ARRIVE ON-SITE

1 SCRAPER IDLE, GRADER DOWN.

D3 SCARIFYING TOP OF HAUL ROAD. WATER WAGON WETTING HAUL ROAD

2 SCRAPERS CUTTING FROM WEST PORTION OF NORTH CROSS-DIKE ROAD. HAULING TO SOUTHWEST SIDE OF NORTH CELL. NORTH CROSS-DIKE ROAD CLOSE TO GRADE.

D8 RIPPING ROCK IN ROCK CUT AREA SOUTH OF N. CELL.

825 ALTERNATING BETWEEN ROLLING CLAY FILL AND CRUSHING ROCK RIPPED BY THE D8 DOZER.

DAVID MACKENZIE OF SH&B TAKING TESTS ON TOP OF FINISH SUBGRADE IN NORTH END OF NORTH CELL. TOOK TWO TESTS. BOTH DENSITIES VERY HIGH (+100% STD. PROCTOR) TOOK A SANDCONE AT ~~SAME~~ LOCATION OF ONE NUCLEAR TEST FOR VERIFICATION.

10.30 J. FLETCHER AND M. MARQUEZ ESTABLISHING GRID FOR RADIOLOGIC VERIFICATION OF ~~BOTH~~ STRIPPED WIND BLOWN AREAS.

11.00 SCRAPERS MOVE TO CUT AREA AROUND 6980 CONTOUR SE OF N. CELL AND N OF BORROW PIT NO 1.

11.30 SCRAPERS MOVE BACK TO CUT ROCK CUT AREA SOUTH OF N. CELL. 825 ROLLING ROCK FILL FROM SCRAPERS IN EAST END OF N. CELL D3 RIPPING CLAYEY SOILS ON NORTH CROSS-DIKE ROAD SO THAT SCRAPERS CAN LATER LOAD EASIER ~~EARLIER~~

12:30 D. MACKENZIE TOOK 3RD NUCLEAR DENSITY TEST. DENSITY VERY HIGH. (99% STD. PROCTOR) SANDCONE FROM MORNING SHOWED ACTUALLY HIGHER DENSITY THAN NUKE GAUGE.

	NUKE	SANDCONE
γ_{dry} ~~% MOISTURE~~	110.5 PCF	112.7 PCF
% MOISTURE ~~γ_{dry}~~	13.6	14.0

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-22
FIELD ACTIVITY SUBJECT FILL NORTH CELL
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 7/6/89
SHEET 2 of 2

WEATHER: HOT, DRY. 95° to 100° F
MOSTLY SUNNY 5-10 MPH WIND FROM NORTH.

13:30 - 14:00 LOADED SCRAPER AND WATERWAGON ROLL HAUL ROAD SURFACE TO BRING UP DENSITY IN TOP LIFT.

14:00 12 G WORKING. B. BERRY FINAL GRADING HAUL ROAD, CARRYING A SUBSTANTIAL WINDROW.

D. MACKENZIE TESTED FAILING SPOT FROM YESTERDAY. TEST STILL FAILS. D. MACK. RECOMMENDED TO J. FLETCHER THAT BE COMPLETELY FINISH BLADED, WET AND ROLLED PRIOR TO TESTING AGAIN. J.F. PASSED RECOMMENDATION ALONG TO B. BERRY.

15:00 1 SCRAPER STOPPED. OPERATOR MOVED TO 12 G GRADER TO FINAL BLADE HAUL ROAD.

D3 RIPPING SOIL NORTH OF NORTH CELL IN SECTION 36 SO THAT WATER CAN BE ADDED. THIS AREA WILL BE A BORROW FOR ADDITIONAL SOIL.

16:00 MJY SPOKE TO C. JOHNSON. EXPRESSED CONCERN THAT SH & B's NUKE DENSITY TESTS CORRELATE PROPERLY WITH SANDCONE TESTS.

16:00 - 18:00 MJY & J.F. REPLACE MISSING OR DAMAGED GRADE STAKES ON NORTH CELL.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-22
FIELD ACTIVITY SUBJECT FILL NORTH CELL
LOCATION N. CELL TAILINGS DISPOSAL AREA EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 7/7/89 FRI
SHEET 1 of 3

08:00 MJY ARRIVE ON-SITE

2 SCRAPERS EXCAVATING RIPPED & CRUSHED SANDSTONE FROM SOUTH SIDE OF NORTH CELL IN OLD DILCO KNOB AREA AND FILLING THE SOUTHWEST PORTION OF THE NORTH CELL.

12G GRADER IS SMOOTHING HAUL PATHS.

D8 IS RIPPING SANDSTONE ALONG SOUTH AND SOUTHEAST EDGE OF NORTH CELL.

D3 USING RIPPERS TO OPEN UP SOIL IN SECTION 36 NORTH OF THE N.E. PORTION OF NORTH CELL. WATER WAGON IS ADDING WATER TO THE OPENED SOIL.

1 SCRAPER IDLE.

08130 1 SCRAPER PLACING FILL FROM AREA WHERE D3 IS WORKING TO RAMP OFF HAUL ROAD. 825 IS ROLLING FILL, WATER WAGON IS WETTING, AND 12G IS GRADING.

SCRAPER ALSO LOADS SAND (CRUSHED SANDSTONE) FROM OUTSIDE (WEST SIDE) OF WEST EMBANKMENT ALONG CENTRAL CELL TO FILL RAMP.

10:00 BOTH SCRAPERS BACK TO ROCK EXCAVATION. 825 USED TO CRUSH RIPPED SANDSTONE.

10:00 - 12:00 MJY HELP J. FLETCHER AND M. MARQUEZ LEVEL IN AND MARK GRADES ON STAKES REPLACED YESTERDAY. ALSO REPLACE MORE STAKES IN ROCK CUT AREA.

AFTERNOON

BOTH SCRAPERS CONTINUE CONTINUE MOVING RIPPED/CRUSHED SANDSTONE — FILLING IN SOUTH-CENTRAL PORTION OF THE NORTH CELL.

D8 RIPPING SANDSTONE ALONG SE. EDGE OF N. CELL.

MJY, J.F., M.M. SET AND LEVEL MORE GRADE STAKES.

16:00 NIELSONS SHUT DOWN FOR WEEK

CanonieEnvironmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION N. CELL PROJECT NO. 86-060-22
FIELD ACTIVITY SUBJECT FILL NORTH CELL
LOCATION N. CELL TAILINGS DISPOSAL AREA EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 7/7/89
SHEET 2 of 3

MATERIAL QUANTITIES FOR WEEK ENDING 7/7/89 *

DATE	QUANTITY OF FILL PLACED (CY)	CUMMULATIVE QUANTITY OF FILL PLACED TO DATE (CY)
7/5/89	5420	148,244 **
7/6/89	4160	152,404
7/7/89	4260	156,664

* MATERIAL QUANTITY ESTIMATES FROM LOAD COUNTS GIVEN TO UNC BY NIELSONS

** CUMMULATIVE C.Y. OBTAINED BY ADDING 5420 CY TO 122,944 CY TOTAL CUMMULATIVE FROM PREVIOUS WEEK.

A TOTAL OF 440,000 GALLONS OF WATER WAS USED THIS WEEK

Nilsond Production wk end 7-8-89

Excavation to fill Pond

7-5-89	271 loads @ 20 C.Y	5420	C.Y.
7-6-89	208 loads @ 20 C.Y	4160	C.Y.
7-7-89	213 loads @ 20 C.Y	4260	C.Y.
	Total this week	13,840	C.Y.
	Total to Date	92,704	C.Y

Water used this week

7-5	15 loads @ 10,000 gals	150,000	gals
7-6	13 loads @ 10,000 gals	130,000	gals.
7-7	16 loads @ 10,000 gals	160,000	gals

Total used this week 440,000 gals

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT FILL N. CELL
LOCATION N. CELL TAILINGS DISPOSAL AREA EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 7/10/89 (MON)
SHEET 1 of 2

08:00 MJY ARRIVED ON-SITE

MOSTLY CLOUDY, 60°F, STILL. CHANCE FOR P.M. THUNDERSHOWERS.
J. FLETCHER WORKED SATURDAY 7/8/89 – SURVEYING

3 SCRAPERS LOADING CRUSHED ROCK FROM THE SOUTH END OF NORTH CELL, AND FILLING IN THE SOUTH-CENTRAL PORTION OF THE NORTH CELL

D8 DOZER RIPPING SANDSTONE IN SOUTH END OF NORTH CELL. WATER WAGON WETTING BOTH CUT & FILL.
825 IS ROLLING RIPPED SANDSTONE TO CRUSH IT.
D3 IDLE, GRADER DOWN – STARTER FAULTY.

08:30 J.F. TOLD MJY THAT FIELD RADIATION SURVEYS SHOWED "HOT SPOTS" (>20 μR/hr) IN DRAINAGE BETWEEN THE NORTH EMBANKMENT AND THE TOE DAM. "HOT SPOTS" ALSO EXIST ON THE NORTH EMBANKMENT.

J.F. WILL HAVE NIELSONS BLADE OFF NORTH EMBANKMENT UNTIL "CLEAN" SOILS ARE REACHED PRIOR TO USE OF SOILS AS SOIL COVER (RADON BARRIER). J.F. WILL ALSO HAVE NIELSONS EXCAVATE FURTHER IN OTHER "HOT" AREAS AND SOILS WILL BE PLACED IN NORTH CELL BELOW COVER.

09:30 B. BERRY ASKED J.F. TO CHECK GRADE MARKED ON GRADE STAKE J9. BB THINKS IT IS WRONG. UPON CHECK, NO ERROR WAS FOUND.

10:00 SCRAPERS START LOADING "HOT" SOILS IN DRAINAGE BETWEEN N. EMBANKMENT AND TOE DAM, HAULING TO NORTH CELL. WATER WAGON HAS WET THIS AREA TO CONTROL ~~FROM~~ DUST AND TO ADD MOISTURE TO FILL.

B.B. IN D3 CLEANING OFF THE N. SIDE OF THE NORTH EMBANKMENT (SKINNING THIN LAYER OFF). THIS TOO IS LOADED BY THE SCRAPERS.

D8, 825 RIPPING & CRUSHING SANDSTONE ON S.E. SIDE OF N. CELL, THEN DOZING INTO LOW AREA IN EAST-CENTRAL PORTION OF N. CELL

CanonieEnvironmental DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-22
FIELD ACTIVITY SUBJECT FILL NORTH CELL.
LOCATION N. CELL TAILINGS DISPOSAL AREA EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 7/10/89
SHEET 2 of 2

MJY, M. MARQUEZ SURVEY ELEVATION OF PSM-2

AFTERNOON

WEATHER: 86°F - 90°F, WIND 10 MPH FROM SW.

NIELSONS WORKS AS IN LATE MORNING

MJY, J.F., M.M. RESTAKE AND & MARK GRADES IN EAST HALF OF NORTH CELL

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 96-060-22
FIELD ACTIVITY SUBJECT FILL NORTH CELL
LOCATION N. CELL TAILINGS DISPOSAL AREA EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 7/11/96
SHEET 1 of 1

08:00 MJV ARRIVE ON-SITE
RAIN OVERNIGHT. (0.33" ACCORDING TO UNC WEATHER STATION) RAIN HELPED SOIL MOISTURE.

2 SCRAPERS LOADING CRUSHED ROCK FROM THE SOUTH SIDE OF THE NORTH CELL AND FILLING IN THE CENTRAL PORTION OF THE NORTH CELL.
D8, 825 DOZE, CRUSHED ROCK INTO LOW AREA ALONG EAST SIDE OF NORTH CELL.

GRADER DOWN, D3 IDLE, 1 SCRAPER IDLE

WATER WAGON STARTED AT 11:00. WETTING ALL BECAUSE SURFACE HAS DRIED. SUNNY, HOT & HUMID (DUE TO RAIN).

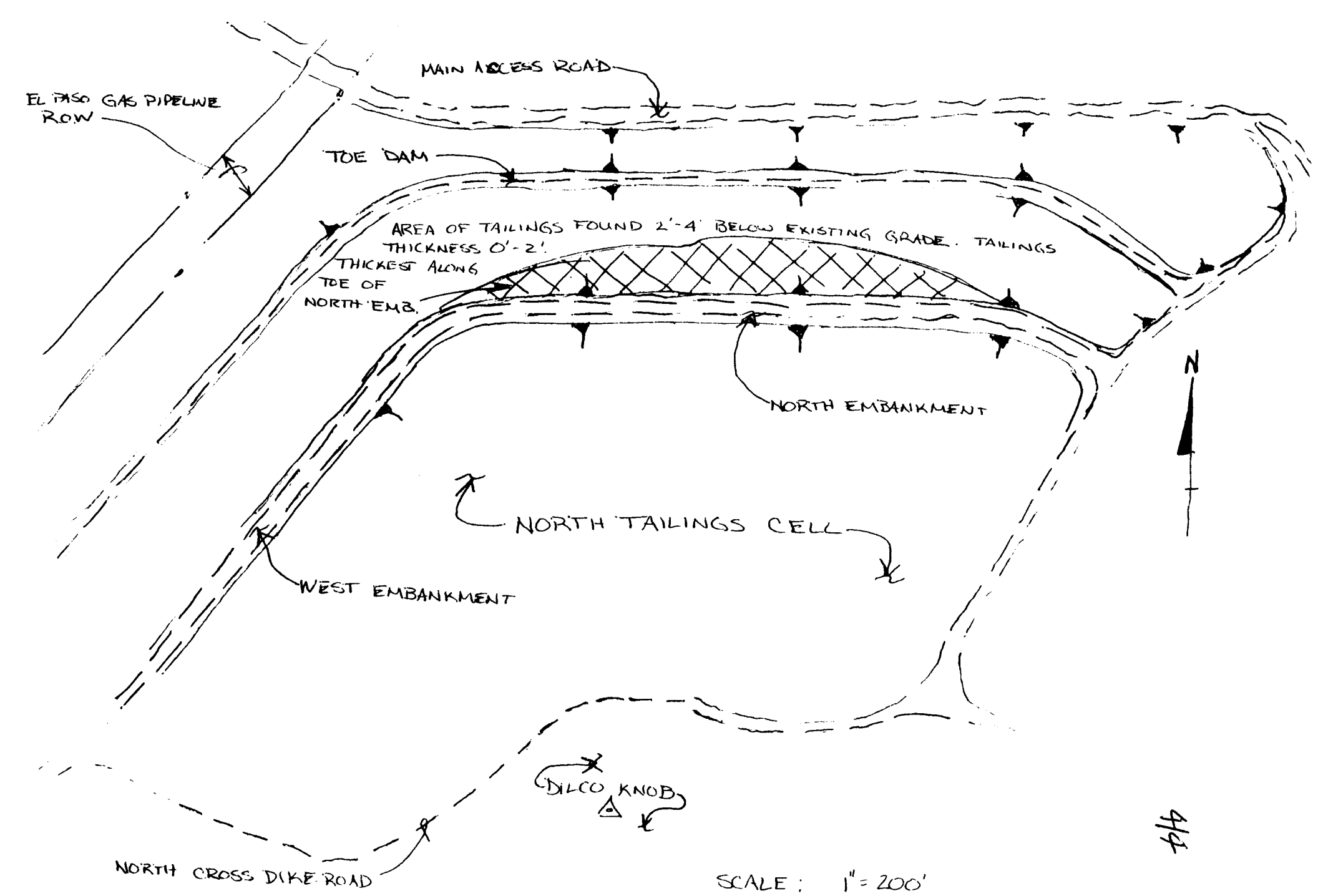
~~CONSTRUCTION ACTIVITIES CONTINUED AS ABOVE UNTIL 16:00.~~

13:00 MJV, J. FLETCHER, M. MARQUEZ RESTAKE WEST HALF OF NORTH CELL.

1 SCRAPER CUTTING TO FINISH GRADE IN ROCK CUT AREA.
2 SCRAPERS PEEL TOP OFF NORTH EMBANKMENT WHERE "HOT" SPOTS WERE IDENTIFIED. ALSO LOADING BETWEEN NORTH EMBANKMENT AND TOE DAM, AND TOE DAM AND MAIN ACCESS ROAD.

14:00 DAVE MACKENZIE OF SERGENT, HAUSKINS & BECKWITH ARRIVED ON-SITE. TOOK NUCLEAR DENSITY TESTS ON SURFACE OF HAUL ROAD AND RAMP, ALSO TOOK TEST ON REGRADED SURFACE OF NORTH CELL IN THE NORTHWEST CORNER. MJV HAD D.M. TAKE SAMPLE OF CRUSHED SANDSTONE & SHALE FROM THE SOUTH SIDE OF NORTH CELL FOR PROCTOR SINCE IT IS BEING USED AS FILL

16:00 RAIN STARTS.


MAIN ACCESS ROAD
EL PASO GAS PIPELINE ROW
TOE DAM
AREA OF TAILINGS FOUND 2'-4' BELOW EXISTING GRADE. TAILINGS THICKNESS 0'-2'
THICKEST ALONG TOE OF NORTH EMB.
NORTH EMBANKMENT
N
NORTH TAILINGS CELL
WEST EMBANKMENT
DILCO KNOB
NORTH CROSS DIKE ROAD
SCALE : 1" = 200'

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-22
FIELD ACTIVITY SUBJECT FILL NORTH CELL
LOCATION N. CELL TAILINGS DISPOSAL AREA EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 7/12/89
SHEET 1 of 4

08:00 MJY ARRIVED ON-SITE.

3 SCRAPERS LOADING IN AREA BETWEEN TOE DAM AND MAIN ACCESS ROAD AND FILLING IN THE NORTH PORTION OF THE NORTH CELL.

12 G GRADER WORKING NORTH CELL

D8 RIPPING AND ROUGH GRADING ROCK ~~A~~ ALONG SOUTH SIDE OF NORTH CELL

09:00 B. BERRY SHOWED J. FLETCHER, MJY TAILINGS FOUND ALONG THE NORTH TOE OF THE NORTH EMBANKMENT THIS IS WHAT CAUSE THE HIGH READINGS ON THE RAD. VERIFICATION. TAILINGS ARE APPROXIMATELY 2' TO 3' BELOW EXISTING SURFACE AND APPROXIMATELY 2' THICK.

J.F. BROUGHT OUT E. MORALES (UNC's RADIATION SAFETY OFFICER) WITH A MICRO R METER. C. JOHNSON ALSO PRESENT. READINGS FROM MICRO R METER VERIFIED THAT IT WAS TAILINGS. E.M. ALSO HAD HIGH READINGS ALONG THE CENTER OF THE TOP OF NORTH EMBANKMENT.

6 TEST PITS WERE DUG WITH UNC's BACKHOE TO DETERMINE THE EXTENT OF TAILINGS. TAILINGS APPEAR TO BE IN A LAYER 0' TO 2' THICK, 2' TO 6' BELOW THE EXISTING SURFACE ALL ALONG THE AREA BETWEEN THE N. EMBANKMENT AND TOE DAM. TAILINGS ARE THICKEST AND CLOSEST TO THE SURFACE NEAR THE N. TOE OF THE N. EMBANKMENT. NO ONE KNOWS WHY OR HOW TAILINGS GOT THERE. SPECULATION INCLUDES LARGE DEPOSIT OF WINDBLOWN MATERIALS WHICH HAVE BEEN COVERED OR A SAND DRAIN FOR THE DAM.

10:30 MJY, C. JOHNSON PHONED J. VELASQUEZ, INFORMED J.V. OF MORNING'S FINDING. IT WAS DECIDED THAT SINCE A FINAL COVER (>4') WILL EXTEND OVER THIS AREA AND THE AREA IS INSIDE THE RESTRICTED AREA (IT WILL NOT BE RELEASED FOR UNRESTRICTED USE), THE TAILINGS DO NOT NEED TO BE EXCAVATED AND PLACED INSIDE THE NORTH CELL.

Canonie Environmental DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT FILL NORTH CELL
LOCATION N. CELL TAILINGS DISPOSAL AREA EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 7/12/89
SHEET 3 of 4

J.V. ALSO SAID THAT THIS AREA NEED NOT BE VERIFIED AS CLEANED OF WINDBLOWN TAILINGS INFLUENCE SINCE IT WILL RECEIVE SOIL COVER AND BE IN THE RESTRICTED ZONE. MJV FAXED O. WESLEY (-CANONIE PROJECT MANAGER-), A DIAGRAM OF THE SITUATION (SEE ATTACHED). O. WESLEY CONCURRED W/ DECISION TO LEAVE UNDER COVER BUT EXTENT OF TAILINGS SHOULD BE VERIFIED. MJV EXPLAINED THAT 6 TEST PITS HAD BEEN DUG TO DETERMINE EXTENT.

C. JOHNSON & MJV ALSO DISCUSSED USE OF SOILS FROM THE NORTH EMBANKMENT IF THEY CONTINUED TO SHOW [redacted] LEVELS OF RADIATION ABOVE BACKGROUND LEVELS. THESE SOILS ARE TO BE USED FOR INTERIM COVER. MJV SAID THAT "HOT" SOILS FROM THE NORTH EMBANKMENT SHOULD BE PLACED BELOW THE INTERIM SOIL COVER IF SPACE WAS AVAILABLE OR ALTERNATIVELY PLACED IN A VERY THIN LIFT AT THE BOTTOM OF THE INTERIM SOIL COVER. O. WESLEY AGREED SINCE DESIGN OF INTERIM COVER ALLOWED FOR THE FIRST 3"-4" OF COVER TO BE WINDBLOWN-INFLUENCED SOILS.

C. JOHNSON COMMENTED THAT NOT ALL OF THE NORTH EMBANKMENT SOILS COULD BE HOT SINCE THE EMBANKMENT WAS CONSTRUCTED PRIOR TO PLACEMENT OF TAILINGS. C.J. WILL HAVE CONTRACTOR REMOVE "HOT" SOILS FROM N. EMB. - TO BE PLACED IN NORTH CELL PRIOR TO COVER. UNC WILL THEN VERIFY WITH BOTH μR METER AND RADIUM ANALYSIS ON SOIL SAMPLE THAT SOIL IS ACCEPTABLE FOR COVER.

12:30 - 14:00 J. FLETCHER, M. MARQUEZ, AND MJV LEVEL GRADE STAKES IN WEST 1/3 OF THE NORTH CELL. NORTH END OF NORTH CELL UP TO 1.4 FEET BELOW GRADE. IT WAS THOUGHT TO BE CLOSER TO GRADE. MJV TOLD J.F.

CanonieEnvironmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 7/12/89
SHEET 3 of 4

THAT SOIL DENSITY TESTS (ON THE SUBGRADE), IN THE LOW AREA WOULD HAVE TO BE REDONE WHEN SURFACE WAS BROUGHT TO GRADE.

P.M. NIELSONS SCRAPERS EXCAVATE "HOT" SOILS FROM NORTH EMBANKMENT AND FILL IN N.W. CORNER OF NORTH CELL WHERE LOW SPOTS ARE.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT FILL NORTH CELL
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 7/13/89
SHEET 1 of 2

08:00 MSY ARRIVES ON-SITE.

3 SCRAPERS HAULING FROM SECTION 36 WHERE WINDBLOWN SOILS HAD BEEN PREVIOUSLY STRIPPED (AREA THAT D3 HAD RIPPED UP AND WATER WAGON HAD WET LAST WEEK) TO THE NORTH SIDE OF THE NORTH CELL TO BRING REGRADED SURFACE TO GRADE. WATER WAGON WETTING CUT & FILL.

GRADER SMOOTHING N. CELL.

D8 BEING USED TO ROUGH GRADE ROCK CUT AREA.

D3, 825 IDLE.

09:00 - 12:30 MSY & M. MARQUEZ LEVEL REMAINDER OF MIDDLE 1/3 OF NORTH CELL. J. FLETCHER LINING UP CREW TO START INSTALLING DISTRIBUTION LINE FOR ZONE 3 PUMPBACK SYSTEM.

AVERAGE GRADE IN MIDDLE 1/3 OF N. CELL IS APPROX. 0.4' - 0.5' BELOW REGRADE ELEVATION. SOME SPOTS ARE 1.4' & 2.1' BELOW. LOW SPOTS ARE IN THE CENTRAL PORTION OF THE NORTH CELL.

10:00 - 11:30 WATER WAGON DOWN.

AFTERNOON

WORK CONTINUES AS IN MORNING EXCEPT D8 IDLE.

UNC SURVEYED NORTH EMBANKMENT. ALL READINGS INDICATE ACCEPTABLE LEVELS OF RADIATION. (SEE ATTACHED FIGURE)

MSY, M. MARQUEZ, J. FLETCHER RESET 3 GRADE STAKES IN EAST SIDE OF NORTH CELL. STAKES APPEAR TO BE SLIGHTLY OF LINE. WILL CHECK TOMORROW.

UNC MINING AND M. ING

CHURCHROCK MINE
P.O. BOX QQ
GALLUP, NEWMEXICO
(505) 722-6651

P.O. BOX 3951
ALBUQUERQUE, NEW MEXICO 87190
(505) 265-4421

UNC

North Embankment - North Pond

COMPUTATIONS

2/2

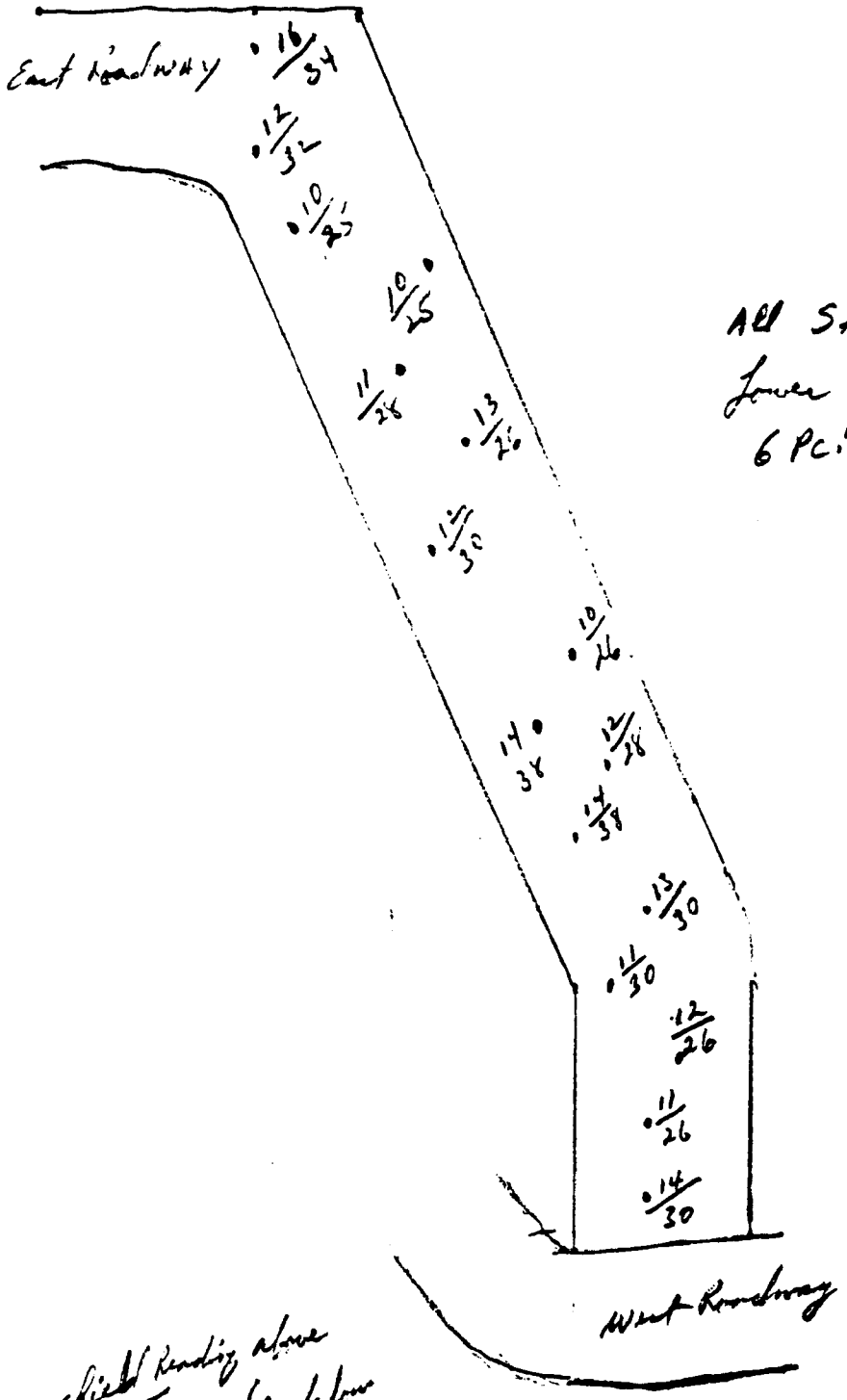
SUBJECT North Dike Gamma Surveys

Sheet No. _____ of _____

Made By Max Date 7/13/89

Readings at 20 meters apart graph not to scale

Chkd. By E.S. Morales Date 7/13/89



All Shielded Readings
Lower Gen 204R = less than
6 PCi/gm Ra 226

Shield Reading above
unshield Reading below

Copy to
C Johnson
✓ Mat Yovich

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT FILL NORTH CELL
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 7/14/89
SHEET 1 of 2

08:00 MJY ARRIVE ON-SITE.

3 SCRAPERS HAULING FROM SECTION 36 WHERE WINDBLOWN - INFLUENCED SOILS HAD PREVIOUSLY BEEN STRIPPED TO NORTH AND CENTRAL PORTIONS OF NORTH CELL TO BRING NORTH CELL TO DESIGN REGRADE ELEVATION.

GRADER WORKING NORTH CELL
WATER WAGON WETTING BOTH CUT & FILL.
ALL ELSE IDLE.

08:30 - 12:00 MJY HELPS J. FLETCHER AND M. MARQUEZ SET THE "I" ROW OF GRADE STAKES. THIS WAS SET YESTERDAY BUT APPEARED TO BE OFF SLIGHTLY. CHECKED BASELINE DISTANCE AND ALIGNMENT PRIOR TO LINING "I" LINE IN WITH TRANSIT AND CLOTH TAPE. TURNED ANGLE FOR "J" LINE WITH TRANSIT AND MEASURED DISTANCES TO INDIVIDUAL STAKES WITH DISTANCE METER TO ASSURE ACCURACY.

LEVELED IN APPROXIMATELY ONE-HALF OF ROWS H, I, J. M.M & J.F. WILL FINISH IN AFTERNOON

AFTERNOON

CONSTRUCTION EQUIPMENT CONTINUED AS IN MORNING. J.F. & M.M. LEVELED REMAINDER OF GRADE STAKES IN E 1/3 OF NORTH CELL.

DAVE MacKENZIE OF SHB ON-SITE. TOOK 4 SOIL DENSITY TESTS ON FINISHED SUBGRADE (4 NUKE TESTS W/ 2 CORRELATING SANDCONE TESTS). TWO TESTS PASSED TWO TESTS FAILED.

MJY LEFT SITE FOR WEEKEND HOME

CanonieEnvironmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-22
FIELD ACTIVITY SUBJECT FILL NORTH CELL
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 7/14/89
SHEET 2 of 2

MATERIAL QUANTITIES FOR WEEK ENDING 7/14/89 *

DATE	QUANTITY OF FILL PLACED (C.Y.)	CUMMULATIVE QUANTITY OF FILL PLACED TO DATE (C.Y.)
7/10/89	5080	161,744 **
7/11/89	5040	166,784
7/12/89	4120	170,904
7/13/89	4480	175,384
7/14/89	3135	178,519

* MATERIAL QUANTITY ESTIMATES FROM LOAD COUNTS GIVEN TO UNC BY NIELSONS

** CUMMULATIVE C.Y. OBTAINED BY ADDING 5080 C.Y. TO 156,664 C.Y. TOTAL CUMMULATIVE FROM PREVIOUS WEEK.

A TOTAL OF 530,000 GALLONS OF WATER WAS USED THIS WEEK.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-22
FIELD ACTIVITY SUBJECT FILL NORTH CELL
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 7/17/89
SHEET 1 of 2

12:30 MSY ARRIVE ON-SITE AFTER WEEKEND HOME.

3 SCRAPERS HAULING FROM SECTION 36 TO NORTH CELL. HAULING TO SPOTS THAT ARE BELOW GRADE.
GRADER WORKING NORTH CELL.
WATER WAGON WETTING CUT & FILL.

825, D3, D8 IDLE.

REGRADED
^SURFACE OF NORTH CELL ALMOST AT GRADE.

14:30 NIELSONS DEMOBILIZES D8 DOZER

14:45 J. FLETCHER SHOWED B. BERRY WHERE FAILING SOIL DENSITY TESTS WERE LOCATED SO THAT THOSE AREAS COULD BE REWORKED AND MORE THOROUGHLY COMPACTED AND RETESTED.

16:30 825 STARTED. ROLLING ROCK (SANDSTONE) IN THE SOUTHEAST PORTION OF THE NORTH CELL WHERE 0.4' TO 0.6' CUTS EXIST.

16:00 WORK STOPPED FOR THE DAY.

DAVE MacKENZIE OF SHB TO BE ON-SITE TOMORROW APPROX 10:00 TO TEST SUBGRADE COMPACTION.

2/2

Nielsons Production wk end 7-15-89

Excavation to fill Cond

7-10-89	254	loads @ 20 C.Y	5,080 C.Y
7-11-89	252	loads @ 20 C.Y	5,040 C.Y
7-12-89	206	loads @ 20 C.Y	4,120 C.Y
7-13-89	234	loads @ 20 C.Y	4,680 C.Y
7-14-89	209	loads @ 15 C.Y	3,135 C.Y
		This wk	21,855 C.Y
		Total to Date	114,559 C.Y.

Water Used

7-11-89	15 Loads @	10,000 gals	150,000 gals
7-12-89	7 loads @	10,000 gals	70,000 gals
7-13-89	15 loads @	10,000 gals	150,000 gals
7-14-89	11 loads @	10,000 gals.	110,000 gals
		This week.	530,000 gals

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT FILL NORTH CELL, PLACE INTERIM COVER
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 7/18/89
SHEET 1 of 2

08:00 MJY ARRIVE ON-SITE.

3 SCRAPERS LOADING FROM SEC. 36 WHERE WINDBLOWN SOILS HAVE PREVIOUSLY BEEN STRIPPED AND FILLING IN THE CENTRAL PORTION OF THE NORTH CELL FROM WEST TO EAST.

WATER WAGON WETTING ~~FROM~~ BOTH CUT AND FILL AREAS.

BLADE GRADING NORTH CELL.

825 RE ROLLING AREA (100' + 150') AROUND FAILING DENSITY TESTS FROM FRIDAY, #7-14-89.

09:30 B. BERRY INFORMED MJY (J. FLETCHER IN ADMIN BLDG. AT MILL - NOT ON SITE YET THIS MORNING) THAT NORTH CELL WAS UP TO GRADE AND WANTED DENSITY TESTS SO THAT SCRAPERS COULD START PLACING INTERIM SOIL COVER.

09:45 J. FLETCHER ON-SITE TO START SURVEYING LOCATION & SLOPE STAKES FOR NORTH DIVERSION DITCH. SOIL EXCAVATED FROM NORTH DIV. DITCH WILL BE USED FOR INTERIM COVER. MJY TOLD J.F. OF B.B's COMMENTS.

10:00 MJY HELPS J.F. MARK GRADE OF INTERIM COVER ON GRADE STAKES. IN THE NORTH PORTION OF NORTH CELL. THIS IS WHERE INTERIM COVER WILL BE PLACED FIRST.

10:30 DAVE MACKENZIE OF SHB ON-SITE. RETESTS BOTH AREAS THAT FAILED ON FRIDAY 6/14 AND WERE RE-ROLLED ~~AT~~ THIS MORNING. BOTH TESTS PASSED AT 92% STANDARD PROCTOR.

MJY SUGGESTED TO J.F. THAT ALL GRADE STAKES BE CHECKED TO VERIFY THAT DESIGN ELEVATIONS ARE BEING MET FOR THE REGRADED SURFACE.

CanonieEnvironmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT FILL NORTH CELL, PLACE INTERIM COVER
LOCATION N. CELL TAILINGS DISPOSAL AREA EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 7/18/89
SHEET 2 of 2

11:30-13:00 MJV, J.F., M. MARQUEZ ~~2 SCRAPERS~~ WALK LINES OF GRADE STAKES MARKING GRADE FOR INTERIM SOIL COVER AND NOTING ELEVATIONS OF REGRADED SURFACE. GRADING AND COMPACTING WORK REQUIRED STILL ~~ON~~ IN SOUTH HALF OF NORTH CELL.

13:30 2 SCRAPERS START TO MOVE SOIL FROM NORTH EMBANKMENT TO EXTREME NORTH SIDE OF NORTH CELL FOR INTERIM COVER. B. BERRY WANTS TO PUT SOIL COVER DOWN IN THIN (4"-6") LIFTS SO THAT MOISTURE MAY BE MORE READILY ADDED TO MEET SPECIFICATIONS.

14:00 WATER WAGON WETTING SOIL COVER FILL. 825 ROLLING FILL FOR SOIL COVER.

MJV OBSERVED D. MACKENZIE TAKE A NUCLEAR DENSITY TEST ON SUBGRADE AT N 74,865 AND E 59,105. TEST PASSED AT 92% OF 114.9 PCF PROCTOR VALUE. MJV SUGGESTED ONE-PT. PROCTORS ON A PERIODIC BASIS TO VERIFY THAT APPROPRIATE PROCTOR VALUES ARE BEING USED. DAVE LOOKED TO TAKE MORE TESTS BUT A LOT OF THE SUBGRADE IS LOOSE - NEEDS COMPACTION. DAVE TOLD J.F. THAT NOTHING ELSE IS READY TO TEST.

15:00 DAVE TOOK NUKE AND SANDCONE TEST AT N 74,790, E 59,190. PASSED AT 92% STD. PROCTOR. BOTH NUKE AND SANDCONE ~~RE~~ SHOWED

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-22
FIELD ACTIVITY SUBJECT FILL NORTH CELL, PLACE INTERIM COVER
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 7/19/89
SHEET 1 of 2

08:00 MSY ON-SITE.

NIELSONS STARTED EARLY (06:00 - 06:30) 3 SCRAPERS WERE SPREADING SOIL COVER OVER AREAS OF SUBGRADE THAT HAD NOT BEEN TESTED TO MEET DENSITY REQUIREMENTS. J. FLETCHER SPOKE TO HERB (NIELSONS FOREMAN) TO STOP SCRAPERS FROM HAULING TO AREAS NOT MEETING DENSITY REQUIREMENTS. BRUCE BERRY NOT ON SITE. J. FLETCHER WENT TO TALK TO BRUCE BERRY.

09:00 BRUCE SHUT DOWN ALL BUT ONE SCRAPER, SENT OPERATORS HOME. DAVE MACKENZIE WAS TO ARRIVE AT 09:00 BUT DID NOT SHOW UP. BRUCE ASKED WHERE DAVE WAS, BRUCE WANTED DENSITY TESTS SO SCRAPERS COULD START HAULING AGAIN.

REMAINING SCRAPER HAULING FROM SECTION 36 TO LOW SPOT IN SUBGRADE IN THE NORTHEAST AREA OF THE NORTH CELL. 825 COMPACTING SUBGRADE, GRADER SMOOTHING SUBGRADE FROM NORTH TO SOUTH.

10:00 DAVE MACKENZIE ON-SITE. DAVE TOOK NUCLEAR DENSITY TESTS AT N 74,895, E 59760 AND N 74860, E 60100 FOR SUBGRADE. FIRST TEST WAS 89% OF 113.7 (W_{opt} = 14.0%), SECOND TEST WAS 88% OF MAX DRY DENSITY. BRUCE THOUGHT TEST SHOULD HAVE PASSED - THAT SOIL WAS OVER 90% OF MAX. DENSITY. HE DID NOT REROLL OR REWORK THE AREAS.

MSY ADVISED J. FLETCHER THAT A ONE-POINT PROCTOR SHOULD BE RUN TO VERIFY PROCTOR DENSITY VALUE. DAVE MACKENZIE OBTAINED A SAMPLE FROM THE AREA IN QUESTION AND PERFORMED A ONE-POINT WITH FIELD MOISTURE.

Canonie Environmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-22
FIELD ACTIVITY SUBJECT FILL NORTH CELL, PLACE INTERIM COVER
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 7/19/89
SHEET 2 of 2

UNC LOADER EXCAVATING TAILINGS SAND FROM OLD ELECTRICAL CABLE TRENCH JUST NORTH OF THE NORTH CELL BETWEEN THE ~~TOE~~ NORTH EMBANKMENT AND THE TOE DAM. TAILINGS HAD EVIDENTLY BEEN USED AS TRENCH FILL.

12:30 RESULTS OF ONE-POINT PROCTOR 106 PCF @ 12% MOISTURE. NEITHER MJY OR DAVE MACKENZIE THOUGHT MOISTURE WAS 12% - MORE LIKE 6% TO 8%.

RETURNED TO NORTH CELL. AREAS THAT WERE TESTED AND FAILED THIS MORNING HAD NOT BEEN REROLLED. MJY SPOKE TO J. FLETCHER, TOLD HIM THAT ANOTHER TEST IN THESE AREAS WAS FUTILE UNTIL THEY WERE REWORKED. J. FLETCHER SPOKE WITH BRUCE BERRY. BRUCE HAD BZS REWORK AREAS.

14:00 DAVE MACKENZIE RETESTED AREAS THAT FAILED IN THE A.M. BOTH FAILED AGAIN. DAVE TOLD BRUCE THAT THE BZS WAS NOT COMPACTING THE SANDY SOIL. BRUCE QUESTIONED THE PROCTOR VALUE DAVE TOLD BRUCE THAT MORE MOISTURE, WITH PNUEMATIC OR VIBRATORY ROLLER WAS NEEDED.

MJY TOLD J. FLETCHER THAT A COMPLETE PROCTOR TEST SHOULD BE RUN ON THE SOIL TO VERIFY THE VALUE BEING USED. J. FLETCHER AGREED. DAVE TOOK A SAMPLE AND PERFORMED PROCTOR. OLD VALUE WAS 118.7 PCF @ 14% MOISTURE.

16:00 - 17:30 DAVE MACKENZIE PERFORMED PROCTOR

UNC LOADER FINISHED EXCAVATING TRENCH NORTH OF NORTH EMBANKMENT, STARTED EXCAVATING A SIMILAR TRENCH WEST OF THE HAUL ROAD (BETWEEN HAUL ROAD AND WEST TOE DAM).

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC – INTERIM STABILIZATION, N. CELL PROJECT NO. 86-0060-20
FIELD ACTIVITY SUBJECT FILL NORTH CELL
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 7/20/89
SHEET 1 of 3

07:15 MJY ARRIVE ON-SITE TO HELP DAVE MACKENZIE FINISH NEW PROCTOR CURVE FROM AREA OF REGRADED SUBGRADE THAT REPEATEDLY HASN'T PASSED DENSITY TESTS. MOISTURE CONTENT SAMPLES OVEN-DRIED OVERNIGHT.

DAVE ARRIVED AT 07:45

CALCULATED MOISTURES AND PLOTTED CURVE. OBTAINED $\gamma_{d\,max} = 114.2$ and $w_{opt} = 13.4$. PREVIOUSLY USING 113.7 PCF AND 14% OPTIMUM MOISTURE. TOLD BOTH J. FLETCHER AND B. BERRY OF RESULTS. BRUCE ASKED FOR HELP IN OBTAINING DENSITY. SPECULATION BY DAVE, MJY THAT LAYERING OF THE SOILS (CLAYEY SOILS BELOW ABOUT 8" OF SANDIER SOILS) WAS PART OF THE PROBLEM. MAYBE THE SHEEPSFOOT WAS RESTING ON THE CLAYEY SOILS AND JUST DIGGING UP THE SANDIER SOILS. DAVE SUGGESTED MORE WATER AND WHEEL ROLLING WITH SCRAPERS. BRUCE HAD D8 DOZER AND GRADER RIPPING UP THE TOP OF THE REGRADED SURFACE ALONG THE SOUTH 1/3 OF THE NORTH CELL. WATER WAGON USED TO ADD MOISTURE ONCE THE GROUND WAS OPENED UP.

ONE, SOMETIMES TWO SCRAPERS, HAULING FROM SECTION 36 TO FILL IN AREA IN NE SECTION OF N. CELL THAT IS NOT UP TO REGRADED CONTOUR.

NIELSONS USED GRADER AND D8 TO OPEN UP MIDDLE 1/3 OF NORTH CELL SO THAT WATER COULD BE ADDED. (AREA RIPPED UP WAS ~200 FT NORTH TO SOUTH AND ~700 FT EAST TO WEST)

11:00 MJY PHONED DHG IN DENVER. DISCUSSED RUNNING A TEST SECTION WHERE AN AREA WILL BE ROLLED & TESTED; ROLLED & TESTED; ROLLED & TESTED TO SEE WHAT KIND OF COMPACTIVE EFFORT WAS NEEDED TO OBTAIN COMPACTION. DECIDED TO TRY TEST SECTION. MJY SUGGESTED TEST

Canonie Environmental DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION / N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT
LOCATION N. CELL TAILINGS DISPOSAL AREA
DAILY ACTIVITIES AND EVENTS:

DATE 7/20/89
SHEET 2 of 3

SECTION TO B. BERRY. BRUCE AGREED TO TRY.

12:00-12:30 RAN TEST SECTION IN AREA OF MIDDLE 1/3 OF NORTH CELL THAT HAD BEEN OPENED UP IN A.M. AREA IS ADJACENT TO PSM-B

EMPTY SCRAPER MADE 4 PASSES OVER A 80' x 100' AREA NUCLEAR DENSITY TESTS ON THE PAD SURFACE SHOWED DENSITIES FROM 92% TO 96% OF MAX. DRY DENSITY (ie: 114.2 PCF). TOLD BRUCE THAT 4 PASSES OF SCRAPER OVER SOIL W/ GOOD MOISTURE SHOULD BRING DENSITY UP. BRUCE WILL WHEEL ROLL.

13:00-14:00 3 SCRAPERS MAKE ONE PASS (COMBINED) OVER MIDDLE 1/3 OF NORTH CELL. (100' EITHER SIDE (N & S) OF PSM-B AND ENTIRE LENGTH FROM EAST TO WEST.) BRUCE ASKED DAVE TO TEST. DAVE TOLD BRUCE THAT ONLY ONE PASS HAD BEEN MADE AND THAT TESTS WOULD NOT PASS, ALSO MENTIONED THAT SOIL WAS STARTING TO DRY. BRUCE AGREED TO ADD WATER AND ROLL MORE.

14:00 ONE SCRAPER MAKING 3 MORE PASSES OVER AREA FOR COMPACTION.
TWO OTHER SCRAPERS HAULING TO LOW AREA OF SUBGRADE IN N.E CORNER OF NORTH CELL FROM SECTION 36. WHILE DOING SO SCRAPERS ARE ALSO WHEEL-ROLLING AREA NEEDING COMPACTION.

15:00-16:00 DAVE RETESTS AREAS OF FAILING DENSITY TESTS. TEST AT N 74895, E 89760 PASSED AT 96% (γ_{wet} = 125.1 pcf, γ_{dry} = 109.3, w% = 12.8%) Compared to 114.2 pcf and 14.0% MOISTURE. SAND CONE ALSO TAKEN AT THIS LOCATION. SANDCONE PASSED AT 96% (γ_{wet} = 126.0 pcf, γ_{dry} = 111.1, w% = 13.4%)
ALSO TESTED AT N 74780, E 89790. TEST PASSED AT 96%. E

Canonie Environmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-600-22
FIELD ACTIVITY SUBJECT INTERIM FILL
LOCATION N. CELL TAILINGS DISPOSAL AREA
DAILY ACTIVITIES AND EVENTS:

DATE 7/20/89
SHEET 3 of 3

ALSO RETESTED A PREVIOUSLY PASSING TEST AREA (#3 ON 7/18/89) BECAUSE AREA HAD BEEN RIPPED UP AND RECOMPACTED IN NIELSONS ATTEMPT TO GET WATER INTO THE SOIL. IT PASSED AT 9.1% and 13.8% MOISTURE.

THESE TESTS CLEARED THE AREA BOUNDED BY THE EAST-WEST LINE THROUGH SM-9 AS FAR EAST AS GRADE STAKE ROW G FOR INTERIM SOIL COVER. MJV NOTIFIED J. FLETCHER AND B. BERRY OF THIS.

17:00 MJV, J. FLETCHER SPOKE ABOUT DAYS EVENTS. MJV TOLD J.F. THAT AN EFFORT SHOULD BE MADE TO FINISH COMPACTING THE ENTIRE NORTH CELL SUBGRADE SOON SO THAT FINAL COVER PLACEMENT IS NOT HELD UP AGAIN IN THE FUTURE. J.F. AGREED. HE WILL SPEAK TO B. BERRY IN THE MORNING

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC – INTERIM STABILIZATION, N. CELL PROJECT NO. 86-900-20
FIELD ACTIVITY SUBJECT
LOCATION North Cell Tailings Disposal Area, East of United Nuclear Mill
DAILY ACTIVITIES AND EVENTS:

DATE 7/21/89
SHEET 1 of 4

08:00 MSY ARRIVED ON-SITE.

INGERSOLL-RAND SP-60DD SMOOTH DRUM VIBRATORY ROLLER DELIVERED TO SITE OVERNIGHT

TWO SCRAPERS EXCAVATING NORTH EMBANKMENT SOILS AND PLACING THIN (~ 4") LIFTS ON NORTH PORTION OF NORTH CELL OVER AREA OF SUBGRADE TESTED AND PASSED FOR DENSITY. 1 SCRAPER HAULING FROM SECTION 36 TO AREA IN NORTHEAST CORNER OF NORTH CELL THAT IS BELOW RECONTOUR GRADE ELEV.

D3 RIPPING SOIL (OPENING UP) IN NORTHEAST (SECTION 36) TO GET WATER MIXED WET AND GET MOISTURE UP PRIOR TO EXCAVATION FOR FILL. LATER D3 MOVED TO NORTH CELL TO SCARIFY INTERIM COVER SOILS WHICH HAD ALREADY BEEN PLACED TO ALLOW MOISTURE TO BE ADDED

09:00 BRUCE BERRY OF NIELSONS MENTIONED TO J. FLETCHER THAT TAILINGS HAD BEEN ENCOUNTERED IN NORTH EMBANKMENT. J. FLETCHER HAD BRUCE EXCAVATE AND PLACE THESE SOILS IN N.E. CORNER OF N. CELL WHICH IS STILL BELOW RECONTOUR GRADE ELEVATION. MSY AND J FLETCHER USE EYE LEVEL TO DETERMINE THAT TAILINGS WERE AT APPROX. ELEVATION 6463 OR 5 FEET BELOW CREST OF ORIGINAL EMBANKMENT. SCRAPER THAT WAS HAULING FROM SECTION 36 ASSIGNED TO EXCAVATE TAILINGS. OTHER SCRAPERS AVOID THIS AREA.

10:00 - 10:30 J. FLETCHER HAD UNC BLICKNER DIG 3 TEST PITS ALONG CENTERLINE OF NORTH DIVERSION DITCH TO OBSERVE THE TYPES OF SOIL THAT WOULD BE EXCAVATED FROM THERE. SILTY SANDS AND SILTS W/ SOME CLAYS PRESENT IN ALL 3 PITS.

MSY SUGGESTED TO J. FLETCHER THAT AREA OF NORTH DIVERSION DITCH BE VERIFIED BELOW STANDARDS FOR WINDBLOWN AREA PRIOR TO EXCAVATION FOR INTERIM COVER.

CanonieEnvironmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20

FIELD ACTIVITY SUBJECT

LOCATION

DAILY ACTIVITIES AND EVENTS:

DATE 7/21

SHEET 2 of 4

10:30 RALPH WAGNER OF NIELSONS ON-SITE. RALPH SAID HE THOUGHT COVER SOILS WOULD RUN SHORT; ASKED J. FLETCHER IF ALL POSSIBLE SOIL COULD BE TAKEN FROM AS NEAR AS POSSIBLE TO THE NORTH CELL. RALPH DOES NOT WANT TO HAVE TO GET BORROW FROM SOUTHEAST STOCKPILE.

RALPH ASKED IF MORE MATERIAL FROM SECTION 36 COULD BE TAKEN.

MJY TOLD J. FLETCHER THAT CHANNEL SHOULD BE MAINTAINED SO THAT IT CAN PASS THE PMF AS IT WAS DESIGNED TO DO.

12:00 - 12:30 VIBRATORY ROLLER USED TO CONDUCT COMPACTION TEST STRIP ON REGRADED SURFACE IN THE NORTHEAST PORTION OF NORTH CELL. THIS AREA IS NOW UP TO GRADE.

4 PASSES OF VIBRATORY ROLLER REQUIRED TO OBTAIN 90% standard PROCTOR DENSITY.

12:30 825 IDLE

2 SCRAPERS CONTINUED TO LOAD FROM NORTH EMBANKMENT AND FILL NORTHWEST PART OF NORTH CELL INTERIM COVER.

GRADER SMOOTHING SOUTH SIDE OF NORTH CELL

D3 OPENING UP INTERIM COVER SOILS ALREADY PLACED SO THAT MOISTURE CAN BE ADDED.

13:00 NIELSONS ~~HAS~~ STARTED VIBRATORY ROLLER COMPACTING NORTHEAST PORTION OF NORTH CELL (REGRADED SURFACE). ROLLER WORKING RIGHT BEHIND GRADER, MADE TWO PASSES OVER AREA BY 15:00.

D3 MOVED TO DIVERSION DITCH AREA IN SEC 36 TO CLEAR REMAINING VEGETATION.

MJY HELP J. FLETCHER AND M. MARQUEZ REPLACE GRADE STAKES IN NORTHEAST PORTION OF N. CELL, AS NEEDED.

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N CELL PROJECT NO. 96-160-22
FIELD ACTIVITY SUBJECT
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 7/21/89
SHEET 3 of 4

15.00 NIELSONS QUIT FOR WEEK. J. FLETCHER AND BRUCE BERRY LOOKED AT SOUTHEAST STOCKPILE. SIM WANTS TO KNOW WHAT PORTION TO SURVEY (CROSS-SECTION) TO DETERMINE QUANTITIES THAT WILL BE USED FOR SOIL COVER.

16.00 MSV. J. FLETCHER SURVEY PSM-2 SETTLEMENT MONUMENT ON SOUTH EMBANKMENT OF EVAPORATION PONDS. ALSO RUN OUT LIVESTOCK.

18.00 C JOHNSON ON-SITE. BACK FROM TRIP. MSV & J. FLETCHER EXPLAINED WEEKS EVENTS.

19.00 MSV LEFT SITE

MATERIAL QUANTITIES FOR WEEK ENDING 7/21/89 *

DATE	QUANTITY OF FILL PLACED (C.Y.)	CUMMULATIVE QUANTITY OF FILL PLACED TO DATE (C.Y.)	
7/17/89	3135	181,654	**
7/18/89	2175	183,829	
7/19/89	1116	184,945	
7/20/89	1524	186,469	
7/21/89	3456	189,925	

* MATERIAL QUANTITIES ESTIMATED FROM LOAD COUNTS GIVEN TO UNC BY NIELSONS

** CUMMULATIVE C.Y. OBTAINED BY ADDING 3135 TO 178,519 C.Y. TOTAL CUMMULATIVE FROM PREVIOUS WEEK

A TOTAL OF 840,000 gallons OF WATER WAS USED THIS WEEK.

Nilsens Production wk 7-21-89

Excavation to Fill Pond

7-17-	209 loads @ 15 c.y	3135 c.y
7-18-	67 loads @ 15 c.y	1005 c.y
7-19	48 loads @ 15 c.y	720 c.y
7-20	56 loads @ 15 c.y	840 c.y
	This wk.	5,700 c.y
	Total used to date	120,259 c.y

Cover Dike - North Berm

7-18-	65 loads @ 18 c.y.	1170 c.y
7-19	22 loads @ 18 c.y	396 c.y
7-20	38 loads @ 18 c.y	684 c.y
7-21	192 loads @ 18 c.y	3456 c.y.
	This wk	5,706 c.y
	Total to date	5,706 c.y.

Water used this wk.

7-17-89	12 loads @ 10,000 gals		120,000 gals
7-18-89	17 loads @ 10,000 gals		170,000 gals
7-19-89	16 loads @ 10,000 gals		160,000 gals.
7-20-89	21 loads @ 10,000 gals		210,000 gals.
7-21-89	18 loads @ 10,000 gals		180,000 gals
		this week.	840,000 gals

CanonieEnvironmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION N. CELL PROJECT NO. 886-060-20
FIELD ACTIVITY SUBJECT
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 7/24/89
SHEET 1 of 2

08:00 MJY ARRIVE ON-SITE
RAIN OVERNIGHT, SATURDAY ALSO.

2 SCRAPERS LOADING FROM NORTH EMBANKMENT TO NORTHWEST PORTION OF NORTH CELL FOR INTERIM COVER.

D3 STRIPPING VEGETATION FROM NORTH DIVERSION DITCH AREA.
GRADER GRADING SOUTH SIDE OF NORTH CELL.
825 ROLLING CLAY COVER SOILS. SOIL MOISTURE GOOD AFTER RAIN, EXCEPT A FEW WET SPOTS.

SMOOTH DRUM ROLLER, WATER WAGON IDLE.

08:30 RICK ROTH FROM SHB ON-SITE

09:00 SCRAPERS UNCOVER THIN LAYER OF TAILINGS IN WEST END OF NORTH EMBANKMENT. C. JOHNSON, J. FLETCHER AND MJY LOOK AT THIS. IT WAS DECIDED TO EXCAVATE TAILINGS AND HAUL THEM TO LOW SPOT IN SUBGRADE NEAR HAUL ROAD ON EAST SIDE OF NORTH CELL.

WEATHER - 75° HUMID. NO AIR MOVEMENT. PARTLY CLOUDY

11:00-12:00 MJY DESCRIBED TO RICK ROTH EVENTS OF LAST COUPLE OF WEEKS, REORIENTED RICK TO JOB.

13.00 SCRAPERS CONTINUE EXCAVATING NORTH EMBANKMENT FOR INTERIM COVER SOIL - GETTING CLOSE TO GRADE.

GRADER, 825 WORKING SOIL COVER FILL AREA.
WATER WAGON ADDING MOISTURE

B. BERRY STARTED SMOOTH DRUM VIBRATORY ROLLER TO SEE IF SURFACE OF REGRADED SUBGRADE IN N.E. PORTION OF NORTH CELL IS TOO WET TO ROLL. ROLLING PERPENDICULAR ~~TO~~ (EAST-WEST) TO DIRECTION OF ROLLING LAST FRIDAY

Canonie Environmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, NORTH CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT
LOCATION
DAILY ACTIVITIES AND EVENTS:

DATE 7/24/89
SHEET 2 of 2

RICK ROTH TESTING SUBGRADE DENSITY. ALL READINGS HIGH. MSY TRIED TO FIND LOOSE SPOTS THAT WOULD FAIL BUT ALL TESTS PASS (I DO NOT BELIEVE ALL ARE PASSING), POSSIBLY PROBLEMS WITH GAUGE.

MSY WATCHING TEST PROCEDURE, RESULTS FOR ABNORMALITIES. NOTHING OBVIOUS

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-12
FIELD ACTIVITY SUBJECT INTERIM COVER, NORTH CELL
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 7/25/89
SHEET 1 of 3

08:00 MJY ARRIVE ON-SITE. LIGHT RAIN OVERNIGHT

2-SCRAPERS WHEEL-ROLLING S.W PORTION OF N. CELL WHERE SUBGRADE DENSITY IS LOW.

MJY CALLED DHG IN DENVER. DISCUSSED VARIATIONS IN DENSITY TESTING. DHG SAID TO WATCH EVERYTHING AND DOCUMENT AS MUCH AS POSSIBLE TO VERIFY RESULTS.

08.30 2 SCRAPERS HAULING FROM N EMBANKMENT TO N.W PORTION OF NORTH CELL. GRADER WORKING SOIL COVER FILL. D3 DOZER WORKING IN AREA OF N. DIVERSION DITCH. WATER IS PONDED IN THIS AREA FROM STORM RUNOFF AND D3 PREPARING FOR SCRAPER EXCAVATION IN THIS AREA.
8.25 ROLLING SOIL COVER FILL, WATER WAGON IDLE.

J. FLETCHER AND B. BERRY DISCUSSING DENSITY TEST RESULTS. MJY OBSERVED R. ROTH TAKE TESTS ON SUBGRADE AT N 74,580 & E 59,100 (RETEST OF #1 ON 7/20/89). TEST RESULTS SHOWED BORDERLINE DENSITIES (88% and 89% of STD. PROCTOR @ 16% MOISTURE) TOOK SANDCONE TEST HERE ALSO. RICK TESTED SUBGRADE W/ GAUGE AT N 74,460 & E 60,300. IT FAILED AT 80% STD. PROCTOR (DRY). TESTED SUBGRADE AT N 74,600 E 60,250. IT PASSED AT 94% STD PROCTOR AFTER BEING ROLLED. RICK WENT IN TO COMPUTE SANDCONE DENSITY. WET DENSITY SHOWS DENSITY WILL BE CLOSE, POSSIBLY MORE DENSE, THAN GAUGE RESULT AT THAT LOCATION. MJY OBSERVED PROCEDURES.

09.00 J FLETCHER REPLACING GRADE STAKES.

09.30 SMOOTH DRUM ROLLER COMPLETE ROLLING IN SW CORNER OF N. CELL. SCRAPERS START SOIL COVER EXCAVATION IN N. DIVERSION DITCH AREA.

B BERRY ADDING DRY FILL TO WET AREAS OF NORTH CELL AND PROCEEDING WITH THE GRADER.

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N CELL PROJECT NO. 96-400-20
FIELD ACTIVITY SUBJECT
LOCATION
DAILY ACTIVITIES AND EVENTS:

DATE 7/25/89
SHEET 2 of 23

10:30 RICK RETURNED TO FIELD, TOOK TEST AT N 75,800, E60,250 (SAME LOCATION AS A PASSING TEST ON 7/24 BUT AREA WAS PREVIOUSLY BELOW GRADE, HAD MORE FILL ADDED). TEST PASSED AT 98%

11:00 ~~AT~~ B. BERRY ASKED MSY ABOUT MORNING TEST RESULTS, SAID HE NEEDED TO KNOW RESULTS RIGHT AWAY. MSY TOLD BRUCE THAT MSY COULDN'T PASS OR FAIL TESTS BUT WOULD KEEP BRUCE INFORMED. J. FLETCHER AGREED THAT THIS WAS A GOOD PROCEDURE.

RICK COLLECTED A SAMPLE OF COVER SOILS FOR PERMEABILITY TESTING AT N 74,980 E 59,495. THIS COVER SOIL WAS BORROWED FROM THE NORTH EMBANKMENT. RICK ALSO COLLECTED SAMPLE FOR ONE-PT PROCTOR AT STAKE E-11 TO VERIFY MATERIAL PROPERTIES.

RICK TRIED TO RUN ONE-PT BUT USED LARGE MOLD, WRONG NUMBER OF LIFTS AND BLOWS. MSY TOLD RICK THAT ONE-PT WOULD NEED TO BE RERUN.

11:20 MSY & J. FLETCHER PHONE BOB GRANDIN AT SHB ALBUQUERQUE OFFICE. BOB IS OFFICE MANAGER. DISCUSSED W/ BOB THE VARIATIONS IN DENSITY TEST RESULTS. BOB ASKED ABOUT SANDCONE / NUKE GAUGE CORRELATION. BOB SAID THAT THEY WERE PRETTY CLOSE SO THERE MUST BE MATERIAL DIFFERENCES IN THE SOIL. HE SUGGESTED MORE ONE-PTS AND CHECKS TO ~~DETERMINE~~ VERIFY. MSY EXPRESSED THE NEED TO DOCUMENT EVERYTHING TO BOB.

P.M. SCRAPERS EXCAVATED IN BOTH NORTH DIVERSION DITCH AND N EMBANKMENT FOR SOIL COVER. BOB WORKING INTERMITTENTLY. GRADER WORKING FILL.

J FLETCHER AND ALAN OF UNC START CROSS-SECTION SURVEY OF S.E. STOCKPILE.

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION N CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT
LOCATION
DAILY ACTIVITIES AND EVENTS:

DATE 7/25/89
SHEET 3 of 3

RICK ROTH TESTED SUBGRADE AT N 74,600 E 59,580. TEST FAILED AT 86% STD. PROCTOR. SOIL IS DRY. MJY REQUESTED THAT RICK TAKE A SAMPLE AND RUN FULL PROCTOR TEST. RICK ASKED MJY'S HELP IN RUNNING PROCTOR. MJY EXPLAINED PROCEDURE. WET DENSITIES INDICATE THAT PROCTOR WILL BE IN SAME RANGE (112-115 PCF) AS REST OF TESTS.

GRADER TRYING TO GRADE N. END OF N CELL. MANY HIGH AND LOW SPOTS ~~THAT~~ NEED TO BE GRADED ~~TO~~ PRIOR TO DENSITY TESTING. NO COVER SOIL DENSITY TESTS TAKEN.

15:30 PUMP OUT ON WATER WAGON

16:00 NIELSONS SHUT DOWN EXCEPT FOR GRADER

MJY HELP J FLETCHER CROSS SECTION PILE UNTIL 17:00.

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION N. CELL PROJECT NO. 86-000-26
FIELD ACTIVITY SUBJECT INTERIM COVER PLACEMENT
LOCATION N CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 7/26/89
SHEET 1 of 1

0830 MSY ARRIVED ON-SITE
HEAVY RAIN OVERNIGHT

SCRAPERS JUST STARTING D3 & GRADER WORKING IN SECTION 36 DRAINING PONDED WATER AND PREPARING FOR SCRAPERS.

825 ROLLING SW 1/4 OF N. CELL SUBGRADE EXTENSIVE RUTTING IN BOTH N. CELL AND SECTION 36.

NEW PROCEDURES FOR DENSITY TEST REPORTING TO NIELSONS TO BE INSTITUTED SHB TO PROVIDE B BERRY WITH A XEROX COPY OF TEST RESULTS WHEN AVAILABLE.

RICK ROTH TESTING SUBGRADE IN SOUTH 1/2 OF N CELL. NORTH 1/2 PASSED AND OKAYED FOR SOIL COVER YESTERDAY EXCEPT NE CORNER.

SCRAPERS HAUL FROM SEC 36 (N DIV. DITCH AREA) TO NORTH CENTRAL PORTION OF N. CELL W/ SOIL COVER.

4 DENSITY TESTS TAKEN (1 SAND CONE). ALL PASSED. THIS CLEARED ENTIRE N. CELL FOR SOIL COVER. ALL TESTS EITHER PASS OR WERE RETESTED AND PASSED

- B. ROTH TOOK ANOTHER SAMPLE FROM N. CELL FOR ONE P- PROCTOR THAT WAS INCORRECTLY RUN YESTERDAY THE TOOK IT FROM A VERY WET AREA. SO PROCTOR VALUE NO GOOD - MOISTURE TOO HIGH

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT INTERIM COVER
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 7/28/89
SHEET 1 of 1

08:00 MJY ARRIVE ON-SITE

SCRAPERS HAULING FROM N. DIVERSION DITCH TO N. CELL

10:00 B. BERRY LEFT SITE FOR WEEKEND. RAIN THREATENING.

10:30 RAIN STARTS. HERB OF NIELSONS SHUT DOWN OPERATIONS AT APPROX 11:00. TOO SLICK TO MOVE SCRAPERS.
PRIOR TO NIELSONS SHUT DOWN, J. FLETCHER AND MJY HAD GRADER CUT SPOTS FOR TWO DENSITY TESTS ~~IN~~ ALONG NORTH SIDE OF N. CELL.
MJY ~~&~~ AND J. FLETCHER WITH C. JOHNSON HAD PREVIOUSLY PHONED SHB's ALBUQUERQUE OFFICE AND HAD REQUESTED THAT RICK ROTH NOT COME BACK TO THE JOB. INSTEAD WE ASKED FOR DAVE MACKENZIE. DAVE IS MORE CONSCIENTIOUS ABOUT THE WORK, AND THE WORK IS CRITICAL.

MJY & J.F. HAD ~~DAVE~~ RICK ROTH TAKE TESTS AT THE TWO LOCATIONS CUT. THE INTENT IS TO COMPARE, AS NEAR POSSIBLE, WITH A WEEKEND IN BETWEEN, THE RESULTS FROM RICKS MACHINE AND THE RESULTS FROM DAVE'S MACHINE.

THESE TWO TESTS WERE THE FIRST TESTS ON THE INTERIM CLAY COVER.
1ST TEST - GOOD DENSITY, INSUFFICIENT MOISTURE.
2ND TEST - GOOD MOISTURE, LOW DENSITY.

ACCORDING TO NIELSONS' LOAD COUNTS THEY MOVED 11,986 CY OF SOIL FOR INTERIM COVER THIS WEEK THIS GIVES A TOTAL OF 201,911 CY MOVED TO DATE INCLUDING TAILINGS, WIND-BLOWNS, FILL AND COVER SOILS

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT INTERIM COVER
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 7/31/89
SHEET 1 of 1

08:00 MJY ARRIVED ON-SITE

RAIN OVER WEEKEND, SECTION 36 HAS NUMEROUS SMALL PONDS. NORTH CELL IS WET.

NIELSONS HAS ONLY GRADER AND D3 DOZER WORKING. NO EARTHWORK TODAY. GRADER & D3 CLEANING UP, DRYING OUT AREA AFTER RAIN.

10:00 DANE MACKENZIE OF SHB ARRIVED

HAD DANE TAKE TESTS IN SAME LOCATIONS AS RICK ROTH DID LAST FRIDAY. ALSO HAD HIM TAKE A SANDCONE. DANE'S MACHINE HAD LOWER DENSITIES THAN RICK'S. SANDCONE TEST GAVE HIGHER TEST DENSITIES THAN DANE'S MACHINE BY 3 PCF. THE DIFFERENCE SEEMS TO BE IN THE MOISTURE CONTENT.

MJY EXPLAINED TO DANE THE NEW PROCEDURES TO BE FOLLOWED.

- SAND FOR SANDCONES WILL BE RECALIBRATED AT BEGINNING OF EACH WEEK OR MORE OFTEN IF NECESSARY
- MOISTURE CONTENT SAMPLES WILL BE TAKEN FROM EACH TEST LOCATION AND DRIED IN THE OVEN. THE OVEN-DRIED MOISTURE CONTENT WILL BE USED WITH THE WET DENSITY OF THE NUKE GAUGE TO DETERMINE THE DRY DENSITY. MOISTURE CONTENTS OF THE GAUGE ARE OFF.
- SAND FROM SANDCONES WILL NOT BE REUSED ON THIS JOB. DANE WILL SAVE SAND FOR USE ON OTHER SHB JOBS
- STANDARD COUNTS ARE TO BE TAKEN ON THE NUKE GAUGE PRIOR TO EVERY TEST AT THE TEST LOCATION
- XEROX COPIES OF TEST RESULTS WILL BE GIVEN TO BRUCE OF NIELSONS AFTER THEY ARE COMPLETE.

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC-INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT INTERIM COVER
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 8/1/89
SHEET 1 of 1

08:00 MJY ARRIVED ON-SITE

GRADER, D3 PLATING ROADS FOR SCRAPERS IN SECTION 36 (N DIV. DITCH AREA)

08:30 SCRAPERS LOADING FROM WEST END OF N. DIVERSION DITCH AND HAULING COVER SOIL TO EAST SIDE OF NORTH CELL. EXCAVATING IN W. END OF DITCH TO TRY TO PROVIDE DRAINAGE (MAKE WEST END THE LOWEST PORTION OF THE DITCH) SO DITCH WILL DRAIN RATHER THAN POND WATER. SCRAPERS NOT CARRYING FULL LOADS.

SCRAPER HIT WELL SOGD IN SEC. 36, BROKE OF CASING & PROTECTIVE CASING
825 ROLLING FILL FOR COMPACTION (MADE APPROX. 1 PASS)

13:00 DHG ARRIVE ON SITE

MJY HELP J. FLETCHER SURVEY POND SETTLEMENT MONUMENT PSM-2. MJY, DHG DISCUSS PROGRESS IN N. CELL WHILE SURVEYING.

MJY, DHG, J. FLETCHER, B. BERRY OBSERVE DAVE MACKENZIE TAKE NUKE DENSITY TEST ON EAST SIDE OF N. CELL. TEST RESULTS VARIED ON WHETHER GAUGE WAS PLACED OVER AREA WHERE SHEEPSFOOT HAD PASSED OR NOT. DENSITY HIGHER OVER AREA WHERE FOOT HAD PASSED THAN AREA BETWEEN FEET. INDICATIVE OF INADEQUATE COMPACTION. EXPLAINED THIS TO B. BERRY MJY ASKED D MACKENZIE TAKE SANDCONE TO VERIFY NUKE TEST

17:00 MJY, DHG LEFT SITE

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 80-060-20
FIELD ACTIVITY SUBJECT INTERIM DIKE OF N. CELL, EXCAVATION OF NW DIVERSION
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR
DAILY ACTIVITIES AND EVENTS:

DATE 8-2-89 WED
SHEET 1 of 2

07:30 THB ARRIVES ON SITE MEETS ED MORALES & JIM FLETCHER OF UNC.

- PREVIOUS NIGHT'S RAIN HAS WETTED (FLOODED) THE PIPELINE APPROACH & NORTHWEST DIVERSION DITCH ALIGNMENT
- NIELSON'S BEGINS SERVICING & MOBILIZING

2 SCRAPERS ARE UP & RUNNING

08:30 MET & THB TOUR SITE TO ORIENT THB TO THE SITE & INTRODUCE THB TO BIG PLAYERS

- NIELSON'S IS LOADING SCRAPERS WITH DOZER'S PUSHING & PULLING ACROSS THE WET MATERIAL. ALL LOADING IS TRANSVERSE TO THE ALIGNMENT OF THE NW DIVERSION DITCH. ALL LOADS GO TO EAST SIDE OF THE NORTH CELL

09:00 NIELSON'S OPERATES VIBRATORY SMOOTH ROLLER OVER EAST SIDE OF THE NORTH CELL FINAL COVER.

09:45 VIBRATORY ROLLER IS DOWN

10:30 SCRAPERS ARE STOPPED DUE TO POOR LOADING CONDITIONS

- GRADER GOES TO WORK ON HAUL ROAD
- 825 MOVES TO EAST SIDE OF NORTH CELL

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT
LOCATION
DAILY ACTIVITIES AND EVENTS:

DATE 8-2-89
SHEET 2 of 2

13:30 HIELSON'S IS WATERROLLING OVER THE EAST SIDE OF THE NORTH CELL WITH THE WATER TRUCK

14:00 HIELSEN'S IS COMPACTING MAIN HAUL ROAD WITH THE WATER TRUCK

- GRADER IS MAINTAINING A SCRAPER PATH OVER THE NW DIVERSION DITCH.

16:00 HIELSEN'S LEAVES SITE.

TH3 DISCUSSES TODAY'S ACTIVITIES WITH JIM FLETCHER

- CONCERNS ABOUT LACK OF COMPACTIVE EFFORT OVER CENTRAL AND WEST AREA OF THE NORTH CELL

- OBSERVED PRESENCE OF PONDED WATER IN CENTRAL PORTION OF THE NORTH CELL.

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC-INTERIM STABILIZATION PROJECT NO. 86-000-20
FIELD ACTIVITY SUBJECT INTERIM COVER OF N. CELL, EXCAVATION OF NW DIVERSION
LOCATION N CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 8-3-89, THU
SHEET 1 of 2

0800 THB ARRIVES ON SITE

NIELSENS' OPERATIONS ARE IN FULL SWING

- 2 SCRAPERS P/U MATERIAL IN NW DIVERSION & CARRY FOR INTERIM COVER
- 825 ROLLS EACH INCOMING LOAD DUKE
- WATER TRUCK IN OPERATION

09:15 GRADER WORKS WITH THE 825 IN THE NORTH CELL

TIM & THB DISCUSS:

1) BRUCE WANTS MORE DENSITY TESTS THAN WITNESS SPOT CHECKS

2) THB SUGGESTS TO JF FOR D MACKENZIE TO INCREASE DURATION OF NUKE TEST

10:00 LIGHT RAIN

RALPH WAGNER & BRUCE OF NIELSENS WANT DETERMINATIONS OF NUKE TESTING

D MACKENZIE BELIEVES WHERE NEEDED: INSTRUMENT DOES NOT SHOW CONSISTENCY OVER SAME SPOT

VIBRATORY ROLLER TAKES A COUPLE PASSES & READINGS ARE MORE CONSISTENT & HIGHER

RM IS STILL UNCERTAIN.

DM RECORDS NUKE RESULTS, DOES A SAND CONE, AND DOES A PROCTOR (FROM THE NOTEBOOK)

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT
LOCATION
DAILY ACTIVITIES AND EVENTS:

DATE 8-3-89
SHEET 1 of 2

11:30 RIG IS OFF SITE
EARTHWORK CONTINUES

14:00 SCRAPER IS DOWN FINAL ROAD WORK CONTINUES

17:00 CHUCK JOHNSON, JIM FLETCHER, THB, AND DM
DISCUSS CREDIBILITY OF NUKE-
PENDING THE SAND CONE & DENSITY RESULTS
CJ WOULD LIKE TO USE SAND CONE TESTS

CanonieEnvironmental

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT INTERIM COVER ON NORTH CELL, EXCAVATION OF HW DIVER
LOCATION N. CELL TAILINGS DIVERSION AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 8-4-89, FRI
SHEET 1 of 3

07:30 NIELSONS' IS UNDER WAY.

FIVE ANOTHER OPERATOR - NOW THEY'RE ONE SHORT LUCILLE (?), THE NIELSONS OFFICE SECRETARY, IS RUNNING THE 825 IN SUBSTITUTION.

08:00 THB ARRIVES ON SITE

DM IS FINAL PLOTTING THE RESULTS OF THE 4-POINT PROCTOR TAKEN YESTERDAY. $\gamma_{D\ max}$ IS $\approx$ 115.6 PCF @ 13.9% MOISTURE.

09:00 NIELSONS IS RUNNING ONE SCRAPER FOR HAULING & OPERATING THE D3 & D8 IN THE HW DIVERSION AREA.

10:00 BOTH SCRAPERS ARE HAULING

DM HAS RESULTS FOR THE SANDCONE / NUKE COMPARISON
SANDCONE INDICATED 98% COMPACTION
NUKE " 92% "
MOISTURE RESULTS WERE ALSO DIFFERENT.

JIM FLETCHER SPEAKS WITH BOTH RALPH WAGNER OF NIELSON AND BOB GRIFFIN (?) OF SHB TO INFORM ALL PARTIES OF THE EXCLUSIVE USE OF THE SAND CONE FROM THIS TIME ON. RW IS SATISFIED, BG ISN'T CONVINCED

Canonie Environmental — DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-22
FIELD ACTIVITY SUBJECT
LOCATION N. CELL TAILINGS DISPOSAL AREA EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 8-4-89
SHEET 2 of 3

THE NUCLEAR DENSEOMETER IS IN ERROR BUT ACCEPTS THE DECISION.

12:00 COPIES OF THE LATEST PROCTOR RESULTS ARE GIVEN TO THB, JF'S FORWARDED TO RW OF NIELSONS. ORIGINAL IS WITH DM.
RESULTS OF THE INTERCOMPARISON ARE ALSO FORWARDED AS COPIES TO RW OF NIELSONS.

14:30 THB LEAVES SITE.

MATERIAL QUANTITIES FOR WEEK ENDING 8-4-89 *

DATE	QUANTITY OF FILL PLACED (C.Y.)	CUMMULATIVE QUANTITY OF FILL PLACED TO DATE (C.Y.)
7/31	0	201,911 **
8/1	1520	203,431
8/2	700	204,131
8/3	1720	205,851
	~~2110~~ 2200	208,051

* Material Quantities estimated from load counts given to UNC by Nielsons

** Cummulative C.Y. OBTAINED BY ADDING ZERO (0) TO 201,911 a TOTAL CUMMULATIVE FROM PREVIOUS WEEK.

Nilsons Production wk 8-5-89

Cover South Borrow

8-4-89	92 loads @ 20 C.Y.	1840 C.Y.
	To date	1840 C.Y.

Additional cover

Cover North Borrow

8-1-89	76 loads @ 20, C.Y.	1520 C.Y.
8-2-89	35 loads @ 20 C.Y.	700 C.Y.
8-3-89	86 loads @ 21 C.Y.	1720 C.Y.
8-4-89	18 loads @ 20 C.Y.	360 C.Y.
	This week	4300 C.Y.
	To Date	21,992 C.Y.

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT INTERIM COVER
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 8/7/89
SHEET 1 of 1

8:00 MJY ARRIVE-ON-SITE. D8 DOZER DELIVERED TO SITE LAST WEEK (THURS)

SCRAPERS LOADING FROM NORTH DIVERSION DITCH AND HAULING TO CENTRAL PORTION OF NORTH CELL

D. MACKENZIE TOLD MJY OF LAST WED, THURS, FRI'S EVENTS. TOLD MJY THAT IT HAD BEEN DECIDED TO USE SANDCONES EXCLUSIVELY.

MJY TALKED TO J. FLETCHER. JIM ALSO EXPLAINED LAST WEEK'S EVENTS.

MJY, J.F., DAVE SPEAK TO B. BERRY. ASK BRUCE WHAT AREAS HE HAS READY TO TEST. MOST OF AREA LOOKS LOOSE, DRY. DAVE TOOK SANDCONE TEST IN THE AREA IDENTIFIED BY BRUCE AT N 74710 E 60080. ~~RECEIVED~~ DAVE TOOK ~~TEST~~ BACK TO LAB AND PERFORMED ANALYSIS. ALSO CHECKED SAND CALIBRATION AND CONE CALIBRATION.

TEST RESULTS ~~WAS~~ INDICATED GOOD MOISTURE AND DENSITY JUST BELOW SPECIFICATION.

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT INTERIM COVER
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 8/8/89
SHEET 1 of 1

07:15 MJY ON-SITE

SCRAPERS HAULING FROM NORTH DIVERSION DITCH TO NORTH CELL.
GRADER WORKING FILL AND SMOOTHING HAUL ROADS IN SECTION 36.
WATER WAGON USED PART-TIME FOR MOISTURE.
825 ROLLING/COMPACTING FILL IN EAST PORTION OF NORTH CELL
D8 DOZER HELPING SCRAPERS LOAD

09:00 DAVE MACKENZIE ARRIVE ON-SITE WITH NEW BAG OF SAND FOR SANDCONES.

09:00 - 12:00 MJY OBSERVE DM. CALIBRATE NEW SAND, CONE AND SCALES.

PM. D. MACKENZIE TOOK 3 SANDCONE TESTS ON NORTH CELL FILL.

NIELSONS WORKING AS IN MORNING
MJY, J. FLETCHER SPOKE ABOUT FILL NOT BEING ON GRADE.
AREA IN MIDDLE OF N. CELL WET FROM RAIN, OTHER AREAS DRY. JIM SPOKE TO BRUCE. BRUCE WILL IMPROVE SITUATION

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT INTERIM COVER
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 8/9/09
SHEET 1 of 1

07:45 MJY ARRIVE ON-SITE

2 SCRAPERS, (DB HELPING) LOADING IN SEC. 36 (DIVERSION DITCH) AND PLACING FILL ON NORTH CELL.

825 & GRADER WORKING FILL. WATER WAGON WETTING, WHEEL-ROLLING.
FILL IS MORE UNIFORM, COMPACTION LOOKS GOOD. MOISTURE IS UP BUT IS IT ABOVE OPTIMUM?

10:00 DAVE MACKENZIE ON-SITE.

D.M. FINISHED WORKING UP RESULTS OF YESTERDAY'S SANDCONE TESTS

2 PASS, 1 HAD GOOD DENSITY BUT WAS DRY (FAILED)
TOLD BRUCE OF RESULTS
MJY HAD D.M. RUN ONE PT PROCTOR ON SOIL FROM SAME LOCATION AS S.C. #27.
SMOOTH DRUM ROLLER IDLE
D3 DOZER WORKING PART-TIME ON ROAD TO NEW WELLS N.E. OF N. CELL.

11:00 RALPH WAGNER OF NIELSONS ON-SITE.

11:30-12:00 MJY SPOKE WITH RALPH, BRUCE BERRY. NO PROBLEMS.

13:00-14:15 MJY TOOK EJB OF CANONIE, WHO WAS ON-SITE FOR WELL INSTALLATION, TO TOWN TO AIRPORT.

WEATHER — 85° F, PTLY CLOUDY TO MOSTLY CLOUDY, STILL MILD.

DAVE MACKENZIE TOOK 2 SANDCONE TESTS. MJY OBSERVED D.M. ~~CHECKED~~ CHECK SCALES AND CONE CALIBRATION.

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT INTERIM COVER
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 8/10/89
SHEET 1 of 1

0815 MJY ARRIVE ON-SITE.

SCRAPERS HAULING TO N. CELL FROM N. DIVERSION DITCH. DB AIDING SCRAPERS LOAD. GRADER PART TIME WORKING FILL. 825 ROLLING FILL IN N. CELL. WATER WAGON WETTING FILL.

SANDCONES FROM YESTERDAY → 1 PASSED, ONE FAILED (TOO DRY) DAVE MACKENZIE TOOK ONE-PT. PROCTOR AT LOCATION OF SANDCONE #28 FROM YESTERDAY. VERIFIED PROCTOR VALUE

THREE MORE SANDCONES PERFORMED. SANDCONE #s 30-32

MJY, D.M. J. FLETCHER DISCUSSED THE NEED FOR MORE WATER TO BE ADDED TO THE FILL. SPOKE TO BRUCE BEIRRY OF NIELSONS ABOUT SAME. BRUCE STARTED ADDING MORE WATER.

RAIN THREATENING BY THE AFTERNOON, NO RAIN HOWEVER.

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT INTERIM COVER
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 8/11/89
SHEET 1 of 3

08:00 MJY ARRIVE ON-SITE.

2 SCRAPERS HAULING FROM N. DIVERSION DITCH TO NORTH CELL. GRADER SMOOTHING NORTH CELL FILL. OTHER GRADER SMOOTHING N. DIVERSION DITCH ALONG W/ D3 DOZER.

D8 HELPING SCRAPERS LOAD.

08:30 DAVE MACKENZIE ARRIVED ON-SITE W/ NEW SAND. DAVE CALIBRATED SAND AND COMPLETED SANDCONE DENSITY DETERMINATIONS FROM 8/10/89. ALL 3 FAILED.

SOILS DRY.

MJY INFORMED J. FLETCHER, B. BERRY OF RESULTS. BRUCE WILL ADD MORE MOISTURE.

11:00-12:30 MJY HELP M. MARQUEZ RESTAKE N. CELL

J. FLETCHER TALKED TO D. MACKENZIE ABOUT THE NEED TO TAKE A COUPLE TESTS EVERY DAY.

P.M. D. MACKENZIE TOOK 2 SANDCONE TESTS (1 NEW, 1 RETEST). MJY, M. MARQUEZ LEVEL IN GRADES ON STAKES SET IN A.M. FOUND DISCREPANCIES OF 0.1' TO 0.2' ON A COUPLE OF STAKES CHECKED LATEST SURVEY ON SM-8 TO SEE IF DISCREPANCY EXISTED. (LEVELED TO SM-8 TO CHECK ELEVATION) NO REAL DISCREPANCY; IT APPEARS THE COUPLE OF STAKES THAT WERE WRONG WERE DISTURBED. MJY, M.M. RESET THOSE STAKES.

16:00 MJY LEFT SITE.

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC-INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT
LOCATION N. CELL TAILINGS DISPOSAL AREA
DAILY ACTIVITIES AND EVENTS:

DATE 8/11/89
SHEET 2 of 3

MATERIAL QUANTITIES FOR WEEK ENDING 8/11/89

DATE	QUANTITY OF FILL PLACED (C.Y.)	CUMMULATIVE QUANTITY OF FILL PLACED TO DATE (C.Y.) *
8/7/89	2500	210,551 **
8/8/89	2320	212,871
8/9/89	2760	215,631
8/10/89	2200	217,831
8/11/89	2560	220,391

* MATERIAL QUANTITIES ESTIMATED FROM LOAD COUNTS GIVEN TO UNC BY NIELSONS

** CUMMULATIVE C.Y. OBTAINED BY ADDING 2500 C.Y. TO 208,051 C.Y. TOTAL CUMMULATIVE AT END OF PREVIOUS WEEK.

A TOTAL OF 410,000 gal WAS USED THIS WEEK

Nelsons Production wk end 8-12-89

Conn South Barrow

8-7-89	125 loads	@ 20 c.y.	2,500	c.y
8-8-89	116 loads	@ 20 c.y	2,320	c.y
8-9-89	138 loads	@ 20 c.y	2,760	c.y
8-10-89	110 loads	@ 20 c.y	2,200	c.y
8-11-89	128 loads	@ 20 c.y	2,560	c.y
		This week	12,340	c.y
		To date	14,180	c.y

Water Used.

8-7-89	6 loads	@ 10,000 gals	60,000 gals
8-8-89	9 loads	@ 10,000 gals.	90,000 gals
8-9-89	6 loads	@ 10,000 gals	60,000 gals
8-10-89	7 loads	@ 10,000 gals	70,000 gals
8-11-89	13 loads	@ 10,000 gals	130,000 gals
		used this week	410,000 gals

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT INTERIM COVER
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 8/14/89
SHEET 1 of 1

08:00 MSV ARRIVE ON-SITE

NIELSONS HAS ONLY 3 OPERATORS, USED THEM ON THE 2 SCRAPERS AND THE WATERWAGON. NIELSONS SUPERINTENDANT & FOREMAN PERIODICALLY OPERATE GRADERS AND THE EQ'S. ALL ELSE IS IDLE.

SCRAPERS HAULING FROM SECTION 36 TO NORTH CELL.

10:30 DAVE MACKENZIE ARRIVED ON-SITE.
CALCULATED DRY DENSITIES FOR SANDCONES TAKEN YESTERDAY. ONE PASSED, ONE FAILED MOISTURE CRITERIA.

MSV HELPED J. FLETCHER & M. MARQUEZ SURVEY BLUETOPS ON NORTH CELL.
WESTSIDE OF

WEATHER — 96°F, STILL AIR, PARTLY CLOUDY
THUNDERHEADS BUILDING TO THE WEST.

D. MACKENZIE CHECKED CALIBRATION OF SAND, TOOK 2 MORE SANDCONES.

WATERWAGON & 14G GRADER WORK ON ROADS TO NORTHEAST WELLS FOR PART OF AFTERNOON.

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT INTERIM COVER
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 8/15/89
SHEET 1 of 1

08:00 MSY ARRIVE ON-SITE

2 SCRAPERS HAULING FROM SECTION 36 (DIVERSION DITCH) TO NORTH CELL. 825 APPROXIMATELY HALF TIME ON NORTH CELL FILL. WATER WAGON SPLITTING TIME BETWEEN NORTH CELL FILL AND ACCESS ROADS TO N.E. WELLS. 14G WORKING ON NE ACCESS ROADS. ALL ELSE IDLE.

MSY HELPED J. FLETCHER AND M. MARQUEZ BLUETOP NORTH PORTION OF NORTH CELL.

10:30 DAVE MACKENZIE ARRIVED ON-SITE. RECALIBRATED SAND FOR SANDCONES; WORKED UP RESULTS OF TWO TESTS FROM YESTERDAY. ONE PASSED, ONE FAILED MOISTURE SPECIFICATION.

P.M. MOST OF WORK BY NIELSONS IS ON ACCESS ROADS TO N.E. WELLS. SCRAPERS SPLIT TIME BETWEEN N. CELL AND N.E. ROADS.

UNC RADIOLOGIC SURVEY LOCATED A "HOT SPOT" BETWEEN THE MAIN ACCESS ROAD AND THE TOE DAM. UNC HAD THEIR KOMATSU DOZER EXCAVATE THIS "HOT" SOIL.

DAVE MACKENZIE SPOKE TO MSY & J. FLETCHER ABOUT CONCERN THAT N. CELL WATER/COMPACTION EFFORTS WEREN'T MOVING ALONG QUICK ENOUGH. J. F. TO SPEAK TO B. BERRY. BUT DECIDED TO HAVE DAVE PUT TOGETHER A MAP OF TEST LOCATIONS AND RESULTS.

NO DENSITY TESTS TODAY.

MSY MENTIONED TO J. F. THAT TAILINGS IN THE ~~NORTH~~ CENTRAL CELL THAT ARE TO BE COVERED HAVE NOT BEEN COMPACTED. J. F. WILL INFORM BRUCE BERRY OF NEED TO COMPACT, D.M. WILL TAKE SAMPLE FOR PROCTOR.

MSY, D.M. WORK ON TEST MAP TILL 19:00

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT INTERIM COVER
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 8/16/89
SHEET 1 of 1

08:00 MSY ARRIVE ON-SITE.

GALLUP SAND & GRAVEL IS HAULING GRAVEL TO SITE FOR SURFACING OF ACCESS ROADS TO N.E. WELLS. D3 & BOTH GRADERS ARE WORKING ON ROADS, SPREADING GRAVEL. GEOTEXTILE BEING PLACED BELOW GRAVEL

2 SCRAPERS HAULING FROM SECTION 36 TO SOUTH SIDE OF NORTH CELL. WATER WAGON WETTING BOTH THE NORTH CELL AND THE ACCESS ROADS.

MSY & J.F. PRESENT DENSITY TEST MAP TO B. BERRY. ALSO DISCUSSED THE NEED TO COMPACT TAILINGS IN NORTH PORTION OF CENTRAL CELL.

11:30 RALPH WAGNER AND NIELSONS SAFETY OFFICER ON-SITE. MSY GAVE THEM A RIDE FROM ADMIN. BUILDING TO TAILINGS (NORTH CELL). THEIR CAR IS BROKEN DOWN.

DISCUSSED MOISTURE/DENSITY PROBLEMS, MAP OF TESTS/RESULTS. RALPH WOULD LIKE TO FINISH THE JOB BY 9/1/89. HE SAID IT MAY TAKE 1 WEEK OF CONCENTRATED EFFORT TO GET MOISTURE/DENSITY THAT IS REQUIRED

P.M. NIELSONS HAS 825, WATER WAGON WORKING FILL IN THE SOUTH SIDE OF THE NORTH CELL. MOISTURE AND COMPACTION LOOKING GOOD.

SMOOTH DRUM ROLLER IS COMPACTING TAILINGS. THERE ARE TWO SOFT SPOTS THAT ARE PRESENTING PROBLEMS. B. BERRY DOES NOT KNOW WHAT TO DO WITH THESE AREAS, ASKS FOR HELP.

C. JOHNSON SUGGESTED GEOTEXTILE. MSY SUGGESTED OVEREXCAVATION AND REPLACEMENT OF OVEREXCAVATED MATERIAL WITH GOOD SOIL OR WORKING GOOD SOIL INTO SOFT SPOTS.

B. BERRY WILL OVEREXCAVATE, PLACE GEOTEXTILE AND FILL W/ GOOD SOIL.

D. MACKENZIE TOOK 2 TESTS ON SOIL COVER, 1 ON TAILINGS. ALSO POUNDED A PROCTOR ON THE TAILINGS AND SAMPLED GRAVEL ON ROADS FOR GRADATION ANALYSIS.

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT INTERIM COVER
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 8/17/89
SHEET 1 of 1

08:00 MSY ARRIVE ON-SITE

2 SCRAPERS HAULING FROM SECTION 36 TO NORTH CELL, SOUTH END.

D8 USED TO OVEREXCAVATE 2 SOFT AREAS IN N. CENTRAL CELL. OVEREXCAVATED 3 TO 4 FEET OF TAILINGS, PLACED GEOTEXTILE IN BOTTOM OF HOLE AND D8 PUSHED CLAYEY SOIL FROM SECTION 36 BACK OVER GEOTEXTILE.

825 THEN ROLLED BACKFILL OVER SOFT SPOTS

1 GRADER SPREADING GRAVEL FOR NE ACCESS ROADS. GRAVEL BEING DELIVERED BY GALLUP SAND AND GRAVEL.

D. MACKENZIE COMPLETED TESTS FROM 8/16. THE TWO TESTS ON COVER SOILS FAILED MOISTURE SPECS. THE TAILINGS DENSITY IN N. CENTRAL CELL PASS, DAVE TOOK ANOTHER SANDCONE TEST.

P.M. SCRAPERS HAUL FROM SECTION 36 TO FILL IN NORTH SIDE OF NORTH EMBANKMENT; ALSO PERIODICALLY HAUL TO S. END OF NORTH CELL.

MSY, J. FLETCHER & M. MARQUEZ REPLACE AND LEVEL IN GRADE STAKES IN SW 1/4 OF NORTH CELL. ALSO REPLACE BLUE TOP HUBS.

GRAVEL TRUCKS STILL ARRIVING.

D. MACKENZIE TOOK 2 MORE SANDCONES ON SOUTH END OF N. CELL COVER FILL.

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT INTERIM COVER
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 8/18/89
SHEET 1 of 2

08:00 MJY ARRIVED ON-SITE

R HEAVY RAIN IN TOWN, RAINING ON-SITE
NIELSONS DID NOT ~~START~~ UP, SENT EVERYONE HOME.

MJY & J. FLETCHER TALKED ABOUT CONDITIONS BEING IDEAL FOR WORKING SOIL TO GET MOISTURE. J. F. TALKED TO B. BERRY ABOUT SAME, NIELSONS DID NO WORK.

DAVE MACKENZIE WORKED UP TEST RESULTS FROM YESTERDAY. 2 TESTS PASSED, ONE FAILED MOISTURE REQUIREMENT.

J.F. SENT DAVE HOME AFTER HE COMPLETED TESTS FROM YESTERDAY.

14:30 MJY LEFT SITE.

MATERIAL QUANTITIES FOR W.E. 8/18/89

DATE	QUANTITY OF FILL PLACED ~~TODAY~~ (C.Y.)	CUMMULATIVE QUANTITY OF FILL PLACED TO DATE (C.Y.) *
8/14/89	2300	222,691 **
8/15/89	2580	225,271
8/16/89	2420	227,691
8/17/89	2180	229,871
8/18/89	0	229,871

* MATERIAL QUANTITIES ESTIMATED FROM LOAD COUNTS GIVEN TO UNC BY NIELSONS

** CUMMULATIVE C.Y. OBTAINED BY ADDING 2300 C.Y. TO 220,391 C.Y. TOTAL CUMMULATIVE AT END OF PREVIOUS WEEK.

A TOTAL OF 259 000 gals water, 142,840 square feet of geotextile and 4450.6 TONS OF GRAVEL WERE USED THIS WEEK

2/2

Nielson Production wkend 8-19-89

Grade & Prep

8-17 3632 L.F.
To Date 7,142 L.F

Access Rd 6" gravel

8-16 953.85 Tons
8-17 1,309.55 Tons
To Date 4450.65 Tons

Tutu Fabric

8-17-89 72,640 S.F
To date 142,840 SF

Cover South Borrow

8-14	115 loads @ 20 c.y.	2300	c.y
8-15	129 loads @ 20 c.y	2580	c.y
8-16	121 loads @ 20. c.y	2420	c.y
8-17	109 loads @ 20. c.y	2180	c.y
8-18	Rained out. This wk	9480	c.y
	To date	23660	c.y

Water Used

8-14	2 loads @ 10,000	gals	20,000 gal
8-15	7 loads @ 10,000	gals	70,000 gal
8-16	8 loads @ 10,000	gals	80,000 gal
8-17	8 loads @ 10,000	gals	80,000 gal

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC-INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT INTERIM COVER
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 8/21/89
SHEET 1 of 1

13:15 MSY ARRIVE ON-SITE

SCRAPERS HAULING FROM SECTION 36 TO S. END NORTH CELL AND TO N SIDE OF NORTH EMBANKMENT.
825 ROLLING FILL
WATER WAGON WETTING
GRADERS BOTH WORKING NORTH CELL.

DAVE MACKENZIE TOOK 3 NEW SANDCONE TESTS (SANDCONE #s 43-45)

2 PASSED, 1 FAILED MOISTURE REQUIREMENT.

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT INTERIM COVER
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 8/22/89
SHEET 1 of 1

08:00 MJY ARRIVED ON-SITE

NIELSONS HAS SCRAPERS FILLING LOW SPOTS IN NORTH CELL.

GRADER & D3 USING RIPPER-SHANKS TO OPEN UP SOIL THAT LACKS MOISTURE, ALSO PROCESSING SOIL. BZS ROLLING THOSE AREAS AND OTHERS.
OTHER GRADER SMOOTHING NORTH CELL.

DB HELPING SCRAPERS LOAD IN SECTION 36.
M. MARQUEZ SURVEY N. CELL SETTLEMENT MONUMENTS.
MJY HELP M. MARQUEZ SURVEY POND SETTLEMENT MONUMENT.

11:00 SP-60 DD SMOOTH-DRUM ROLLER REMOVED FROM SITE.

UNC HAS RENTED DUMP TRUCKS HAULING "HOT" SOILS IDENTIFIED BY THE RADIOLOGIC VERIFICATION TO BORROW PIT NO. 2.

DAVE MACKENZIE TOOK 5 SANDCONE TESTS (2 NEW, 3 RETESTS)

MJY & M. MARQUEZ SET STAKES AND GRADES IN NORTH CELL TO VERIFY REQUIRED FILL DEPTH. FINISHED ALL BUT LAST 200 FEET OF EAST SIDE OF NORTH CELL. ALSO CHASE CATTLE OUT OF SITE.

17:30 MJY LEFT SITE.

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT INTERIM COVER
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 8/23/89
SHEET 1 of 1

08:00 MJY ARRIVE ON-SITE

DAVE MACKENZIE WORKS UP SANDCONE TEST RESULTS FROM YESTERDAY (8/22/89). ALL PASSED EXCEPT 1. MOISTURE & DENSITY OF COVER LOOKS MUCH BETTER, THIS IS REFLECTED IN TEST RESULTS.

B. BERRY & RALPH WAGNER OF NIELSONS INQUIRED IF SANDCONE TEST RESULTS COULD BE OBTAINED SOONER. MJY AGREED TO HELP DAVE MACKENZIE TO EXPEDITE RESULTS. DAVE WILL USE MICROWAVE TO DRY SAMPLES FASTER.

11:00 1 SCRAPER REMOVED FROM THE SITE. OTHER SCRAPER WORKING ONLY TO SPOT FILL LOW AREAS.

BOTH BLADES WORKING IN TANDEM TO GRADE NORTH CELL. DRY AREAS OF SOIL COVER BEING OPENED UP, WET, PROCESSED AND RECOMPACTED. NIELSONS WORKED TO MOISTEN DRY SOIL ALL DAY.

AFTER ROLLING/COMPACTING REPROCESSED SOIL AREAS, BZS STARTED ON WEST SIDE OF NORTH CELL AND MADE 1 PASS OVER ENTIRE LENGTH OF NORTH CELL FROM NORTH TO SOUTH PROCEEDING TO THE WEST. FINISHED 3/4 OF NORTH CELL.

DAVE MACKENZIE TOOK 9 SANDCONE DENSITY TESTS. ALL WERE RETESTS OF PREVIOUSLY FAILING TESTS.
MJY AND M. MARQUER RESET DAMAGED & MISSING GRADE STAKES AND HUBS.
DAVE ~~TOOK~~ FINISHED LAST 3 OF 9 TESTS AT 18:30. THESE THREE WERE PUT IN OVEN OVERNIGHT.

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT INTERIM COVER
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 8/24/89
SHEET 1 of 1

08:00 MJV ARRIVED ON-SITE. DAVE MACKENZIE WORKED UP TEST RESULTS FROM YESTERDAY. OF THE 9 TESTS, ALL BUT ONE PASSED.

NIELSONS HAS REMAINING SCRAPER FILLING SLOPE ON NORTH SIDE OF N. EMBANKMENT.

D3 DRESSING UP 10:1 SLOPE ON S SIDE OF N. CELL.

GRADER WORKING NORTH CELL.

OTHER GRADER IS PROCESSING THE REMAINING DRY SOILS OF THE COVER. WATER WAGON WETTING THESE TWO AREAS

825 COMPLETED ROLLING ENTIRE N. CELL STARTED YESTERDAY.

J. FLETCHER & M. MARQUEZ RESTAKE AND MARK GRADES ON NORTH CELL THEN WALK LINES OF STAKES TO IDENTIFY ANY HIGH OR LOW AREAS. 3 SPOTS LOW. SCRAPER FILLED THESE IN, WATER WAGON WET AND 825 COMPACTED THESE AREAS.

DAVE MACKENZIE TOOK 7 SANDCONE DENSITY TESTS. (6 RETESTS AND 1 NEW TEST)

ONE TEST FAILED THE MOISTURE REQUIREMENT. THIS AREA WAS REWORKED/REPROCESSED AND WILL BE AGAIN TOMORROW AND RETESTED.

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC - INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT INTERIM COVER
LOCATION N. CELL TAILINGS DISPOSAL AREA, EAST OF UNITED NUCLEAR MILL
DAILY ACTIVITIES AND EVENTS:

DATE 8/25/89
SHEET 1 of 4

08:00 MJY ARRIVE ON-SITE

REMAINING AREA OF LOW MOISTURE COVER SOILS REWORKED.

09:00 DAVE MACKENZIE TOOK SANDCONE TEST NO-A (LAST REMAINING FAILING TEST).

LAST SCRAPER REMOVED FROM SITE.

GRADERS, D3 DOING SITE CLEANUP WORK, GRADING ROADS ETC.

825 ROLLING ENTIRE NORTH CELL AFTER ROLLING REWORKED AREA.

SANDCONE
TEST RESULTS INDICATE MOISTURE AND DENSITY MEET SPECIFICATIONS.

GRADER STARTS SCARIFYING TOP 3' OF SOIL COVER TO PREPARE FOR REVEGETATION. SCARIFYING FROM EAST TO WEST ACROSS THE SLOPE OF THE REGRADED NORTH CELL.

MJY, J.F. LOOK AT EVAPORATION PONDS TO MAKE SURE THAT LIVESTOCK HAD NOT DAMAGED LINER. NOTICED MANY SMALL BUSTERS IN LINER. NO LIVESTOCK DAMAGE. J.F. WILL HAVE INSTALLER LOOK AT LINER WHEN INSTALLER COMES TO FIX SMALL SCUFFS IN LINER AT CREST OF CENTRAL EMBANKMENT.

14:00 MJY LEFT SITE.

Canonie

DAILY FIELD ACTIVITY LOG

PROJECT NAME UNC-INTERIM STABILIZATION, N. CELL PROJECT NO. 86-060-20
FIELD ACTIVITY SUBJECT
LOCATION N. CELL
DAILY ACTIVITIES AND EVENTS:

DATE 8/25/89
SHEET 2 of 4

FINAL SOIL MATERIAL QUANTITIES

DATE	QUANTITY OF FILL PLACED (C.Y.)	CUMMULATIVE QUANTITY OF FILL PLACED TO DATE (C.Y.) *
8/21/89	2300	232,171 **
8/22/89	2500	234,671
8/23/89	0	234,671
8/24/89	1760	236,431

* MATERIAL QUANTITIES ESTIMATED FROM LOAD COUNTS GIVEN TO UNC BY NIELSONS

** CUMMULATIVE C.Y. OBTAINED BY ADDING 2300 C.Y. TO 229,871 C.Y. TOTAL CUMMULATIVE FROM PREVIOUS WEEK

A TOTAL OF 320,000 gallons OF WATER, 452.4 TONS OF GRAVEL, AND 15,360 SQUARE FEET OF GEOTEXTILE WERE PLACED THIS WEEK.

3/4

Nelsons Production wk end 8-26-89

Grade & Prep - Access Road

8-21 468 LF

8-24 66 LF

This wk total 534 LF.

Total to date 7,676 LF.

Access Road - install gravel

8-21 339.10 Tons

8-22 113.30 Tons

This wk total 452.4 Tons

Total to date 4903.035 Tons.

Access Road - Install Fabric

8-21 41 x 20 SF 820 S.F.

427 x 20 SF 8540 SF

(300 ft) x 20 1 Roll (filled hole) 6000 SF.

This wk total 15,360 S.F.

To date total 158,200 S.F.

Entrance Road - install gravel

8-24 measured Road 2160 L.F.

To date 2,160 L.F.

Nelson Production 8-25-89 cont.

Cover South Barrow

8-21-89	115 loads @ 20 c.y	2300	c.y
8-22-89	125 loads @ 20 c.y.	2500	c.y.
8-24-89	88 loads @ 20. c.y	1760	c.y.
	This week total	6560	c.y.
	Total to date	30,220	c.y.

Water Used

8-22	9 loads @ 10,000 gals	90,000	gals
8-23	17 loads @ 10,000 gals	170,000	gals
8-24	6 loads @ 10,000 gals	60,000	gals.
	This wk.	320,000	gals.