See WM-48 2/26/86
TO: Sollenberger

Transmittal Form
Misplaced

DEPARTMENT OF ENERGY
ALBUQUERQUE OPERATIONS OFFICE
CONTRACT NO. DE-AC04-83AL18796

Radiological and Engineering Assessment

CDH #20393

Vicinity Property No. DUR 003

Vicinity Property No. DUR 003

Remedial Actions
Contractor
for the
Uranium Mill Tailings
Remedial Actions
Project

MORRISON
KNUDSEN

URFO-6

FACSIMILE TRANSMITTAL FORM
URANIUM RECOVERY FIELD OFFICE
DENVER, CO

DATE: 4/21/86

TED Johnson
NAME

Willste
BLDG NAME OR REGION

FAX NUMBER

VERIFICATION NUMBER

20 Number of pages being sent (EXCL[illegible] S TRANSMITTAL FORM)

Howard Rose
NAME

U.S. Nuclear Regulatory Commission
Uranium Recovery Field Office
P.O. Box 25325
Denver, CO 80225

Main office Number FTS 776-2805
Commercial 303-236-2805

Fax Number FTS 776-2738
Commercial 303-236-2738

Fax Verification telephone number is the same as the main office numbers above.

ADDRESS: 12th Street - 13th Street
Durango, Colorado

OWNER'S NAME: D&S NG Railroad
OWNER'S ADDRESS: (IF DIFFERENT)
George S. Conner V. P.
479 Main Ave., Durango, CO

TENANTS NAME: N/A

TELEPHONE NUMBER N/A
(if available)

TELEPHONE NUMBER (303)259-0274
(if available)

PROPERTY DATA:

Structures and utilities are shown on Drawing DU-003-010.

Property Use: Single Residence _______; Commercial _______; School _________
Multiple Residence ______; Vacant Lot ______; Church ______; Open Land X

Age of structures: Less than 50 years old N/A;
Greater than 50 years old N/A (attach form _______).

Adjacent included/spillover vicinity properties:

North - V.P. # DU-803
South - V.P. # N/A
East - V.P. # N/A
West - V.P. # N/A

Interior Involvement: Yes _______; No X

Major Structural _______; Minor Structure ________; Dislocation _________

RADIOLOGICAL DATA:
Gamma Exposure Rate Survey

Survey Method

Outdoor and indoor gamma surveys were conducted in accordance with the RAC Procedure 011. These surveys were conducted over the entire property, with particular attention to the areas identified in the inclusion survey (Results of the Radiological Survey at DU-003, ORNL, November 13, 1984), and in other areas as described in this document.

Survey Results

Surface gamma readings on the property range from 10 to 120 micro R/hr (Table 3.1). This may be compared with the background for the Durango site of 15 to 21 micro R/hr.

Indoor surface gamma readings were not made, as no structures exist on DU-003.

Borehole Survey

Survey Method

A gasoline-powered hand auger was used to drill 4-inch diameter holes in and around the regions identified as contaminated during the gamma survey. The holes were surveyed in compliance with the RAC UMTRA Procedure 010.

Survey Results

Contamination was found in 27 of the 92 holes augered. The location and depth of the contamination is described in Table 3.1 and is shown in Figure 3.1.

Radon/Radon Daughter Survey

No radon/radon daughter surveys were performed, as no buildings exist on this property.

Soil Samples

Three soil samples were taken. None exceeded the 5 pCi/g limit. Results of these samples are:

0+70,18L, 0-6", 1.0 pCi/g
0+20,10L, 0-6", 1.8 pCi/g
0+41,40L, 0-6", 3.6 pCi/g

Estimated Extent of Contamination

The property is contaminated along the northwest side where it borders against Camino Del Rio. This area is shown in Figure 3.1 and the coordinates are given in Table 3.2. The depth of contamination is difficult to ascertain, as many of the boreholes were kept shallow due to rocks. The depth does extend to at least 36 inches.

Because the depth of contamination is so ill defined due to the rocky soil, it is necessary to consider using a larger contingency in the estimates of construction costs.

Our assessment of contamination agrees with the ORNL inclusion survey, although we have identified, through borehole surveys, that the extent of contamination is larger than their estimate.

Recommended Remedial Action

Excavate the area described in Table 3.2 and Figure 3.1 to a depth of 18 inches. Resurvey and remove contaminated soil in 6-inch increments.

Engineering Assessment

Work to be done is shown on Drawing DU-003-020. Estimated quantities are shown in Table 4.

Occupant relocation: Required ___________; Not Required ____X____.

Application of Supplemental Standards

The railroad tracks on the property are used several times daily by the Durango and Silverton Narrow Gauge Railroad. The railroad takes tourists into the mountains. The operation of this railroad has a substantial economic impact upon the community.

Because of the economic impact upon the community that shutting down the railroad would cause, coupled with the costs of removing contamination from under the tracks and the very low health hazards, Supplemental Standards shall apply as per 40 CFR 102.21 (c).

A cost estimate for removal of the material to remain under Supplemental Standards are shown in Table 5. No costs are available for shutting down the railroad for remedial action work under the tracks.

Remedial Action Options (Complex Properties Only)

N/A

Table 3.1
OUTDOOR BOREHOLE AND GAMMA SURVEY
Property DU-003

HOLE	LOCATION	MICRO R/hr	CONTAMINATION DEPTH
1	0+73,42L	32	0-12"
2	0+73,49L	14	0-24"+
3	0+68,42L	14	0-23"+
4	0+72,37L	14	--
5	0+73,55L	14	0-8"+
6	0+60,42L	13	--
7	0+70,20L	11	--
8	0+80,50L	13	0-18"+
9	1+00,50L	17	0-12"+
10	1+00,39L	18	0-36"
11	1+00,29L	11	--
12	1+20,40L	120	0-8"+
13	1+20,20L	12	--
14	1+20,10L	13	--
15	1+40,39L	16	0-12"+
16	1+40,29L	17	Surface
17	1+40,19L	13	--
18	1+40,10L	13	--
19	1+60,35L	17	0-16"+
20	1+60,20L	13	--
21	1+60,10L	12	--

+Depth of contamination not reached.

Table 3.1 - Cont'd.
OUTDOOR BOREHOLE AND GAMMA SURVEY
Property DU-003

HOLE	LOCATION	MICRO R/hr	CONTAMINATION DEPTH
22	1+50,20L	12	--
23	1+60,27L	14	--
24	1+80,20L	16	Surface
25	1+80,30L	14	0-15"+
26	1+80,10L	14	--
27	2+00,20L	41	0-12"+
28	2+00,28L	19	0-16"+
29	2+00,10L	14	--
30	2+20,10L	13	--
31	2+20,25L	15	0-12"+
32	2+20,20L	15	Surface
33	2+40,23L	14	0-14"+
34	2+40,10L	14	--
35	2+40,19L	12	--
36	2+30,20L	13	--
37	2+50,20L	13	--
38	2+50,10L	12	--
39	1+10,20L	13	0-18"+
40	0+80,30L	12	--
41	1+10,10L	10	--
42	1+00,20L	11	--
43	1+00,10L	12	--

+Depth of contamination not reached.

Table 3.1 - Cont'd.
OUTDOOR BOREHOLE AND GAMMA SURVEY
Property DU-003

HOLE	LOCATION	MICRO R/hr	CONTAMINATION DEPTH
44	0+50,65L	17	0-12"+
45	0+50,50L	11	0-18"+
46	0+50,40L	11	--
47	0+50,30L	11	0-21"+
48	0+60,30L	11	--
49	0+50,20L	11	--
50	0+30,50L	11	--
51	0+30,73L	14	0-16"+
52	0+33,20L	12	--
53	0+30,35L	12	--
54	0+20,50L	10	--
55	2+70,10L	14	--
56	2+70,17L	13	--
57	2+70,20L	12	--
58	2+60,21L	13	--
59	2+60,17L	14	Surface
60	2+90,10L	15	Surface
61	2+90,19L	12	--
62	2+90,16L	12	--
63	3+10,10L	15	--
64	3+10,18L	12	--

+Depth of contamination not reached.

Table 3.1 - Cont'd.
OUTDOOR BOREHOLE AND GAMMA SURVEY
Property DU-003

HOLE	LOCATION	MICRO R/hr	CONTAMINATION DEPTH
65	3+10,14L	13	--
66	3+30,10L	14	--
67	3+30,18L	14	0-12"+
68	3+30,14L	14	--
69	3+50,10L	14	--
70	3+50,17L	14	0-12"+
71	3+50,14L	13	--
72	3+70,10L	13	--
73	3+70,17L	14	Surface
74	3+70,14L	12	--
75	3+90,10L	12	--
76	3+90,14L	13	--
77	3+90,17L	12	--
78	4+10,13L	12	--
79	4+10,10L	14	0-17"+
80	4+00,10L	14	--
81	4+10,05L	14	--
82	0+22,10L	11	--
83	0+20,30L	11	--
84	0+20,70L	11	--
85	2+93,20L	12	--

+Depth of contamination not reached.

Table 3.1 - Cont'd.
OUTDOOR BOREHOLE AND GAMMA SURVEY
Property DU-003

HOLE	LOCATION	MICRO R/hr	CONTAMINATION DEPTH
86	2+93,16L	12	--
87	2+93,09L	15	--
88	2+30,25L	14	--
89	0+40,40L	11	--
90	0+40,50L	12	--
91	0+40,30L	12	--
92	0+35,60L	13	--

+Depth of contamination not reached.

Table 3.2
COORDINATES OF CONTAMINATED AREA
Property DU-003

4+00,00L	0+45,25L
4+00,10L	0+45,45L
1+08,12L	0+22,62L
0+90,40L	0+22,78L
0+60,25L	0+10,20L

Table 4
Remedial Action Option Cost Estimates

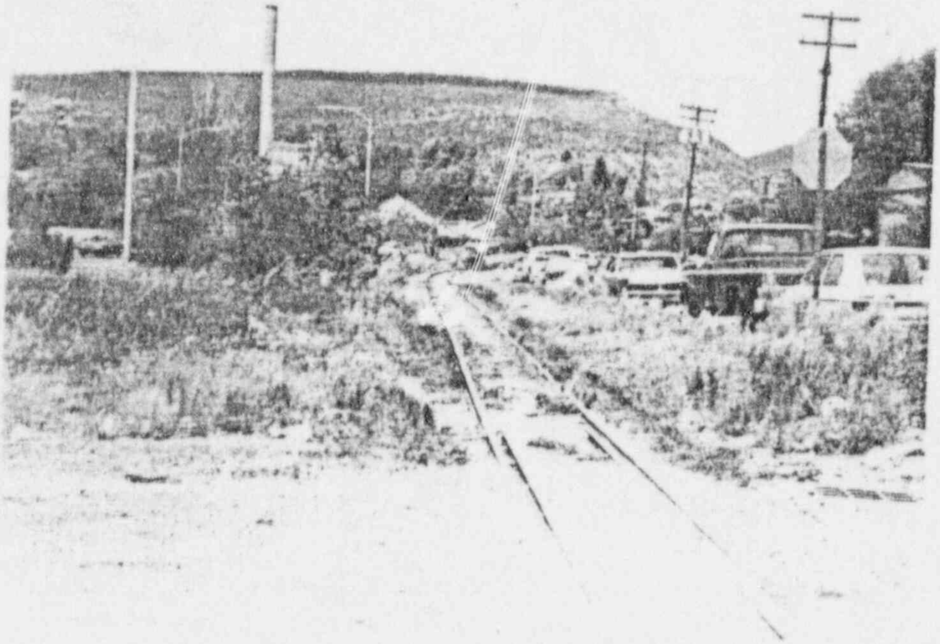
RECOMMENDED OPTION

Activity No.	Activity	Unit Price	Quantity	Estimated Cost
1.0	Excavation (Machine)	8.75	744 cy	6,510.00
2.0	Backfill (Machine)	7.25	592 cy	4,292.00
4.0	Top Soil (Machine)	11.25	148 cy	1,665.00
6.0	Seed & Mulch	1.14	887 sy	1011.00
20.0	Replace Medium Fir Trees	150.00	6 ea	900.00
21.0	Replace Large Bushes	55.00	5 ea	275.00
24.0	Temporary Support for Utility Poles	122.40	5 ea	612.00
25.0	Remove Road Signs	25.00	2 ea	50.00
26.0	Replace Road Signs	25.00	2 ea	50.00

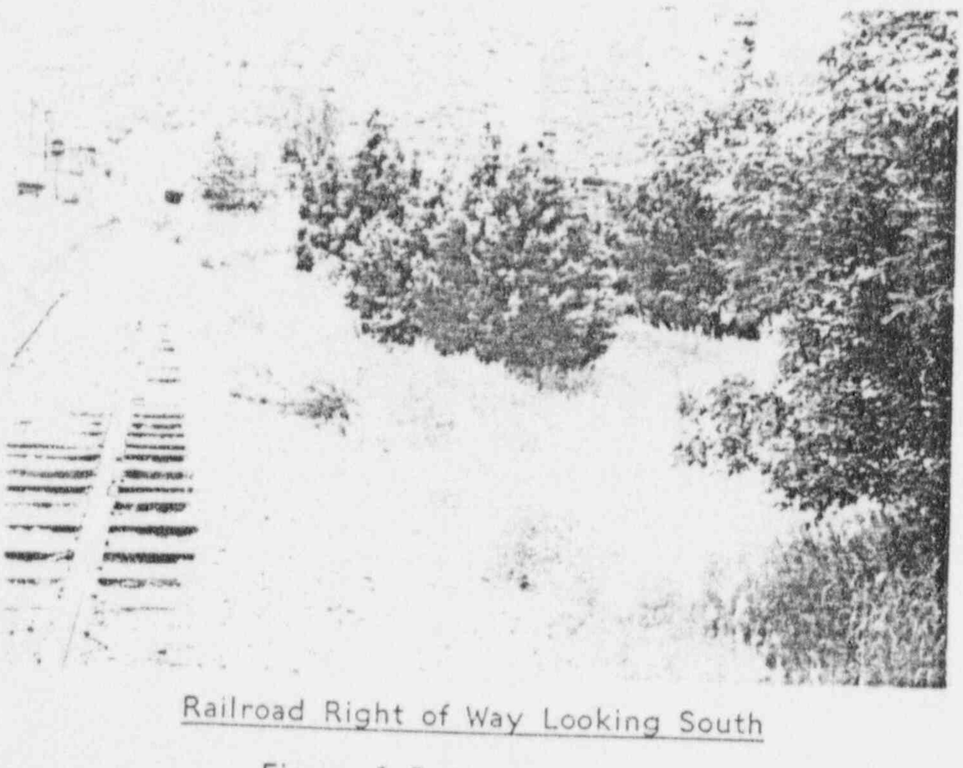
Subtotal	15,365.00
5% Contractor's Contingency	768.00
20% Overhead & Profit	3,073.00¢
Total (Rounded)	19,200.00

Table 5
Costs for Not Applying Supplemental Standards

Activity	Unit Price	Quantity	Estimated Cost
Remove Narrow Gauge Railroad Tracks	15 lf	35.59	534.00
Remove Ballast	3 cy	62.10	186.00
Remove Subballast	3 cy	62.10	186.00
Excavation (Machine)	4 cy	8.75	35.00
Common Fill (Machine)	3 cy	7.25	22.00
Topsoil	1 cy	27.00	27.00
Seed and Mulch	4 sy	1.14	5.00
Replace Subballast	3 cy	31.97	66.00
Replace Ballast	3 cy	21.97	66.00
Replace Narrow Gauge Railroad Tracks	15 lf	35.59	534.00
	Subtotal		1,660.00
	5% Contractor's Contingency		83.00
	20% Overhead & Profit		332.00
	Total (Rounded)		2,100.00



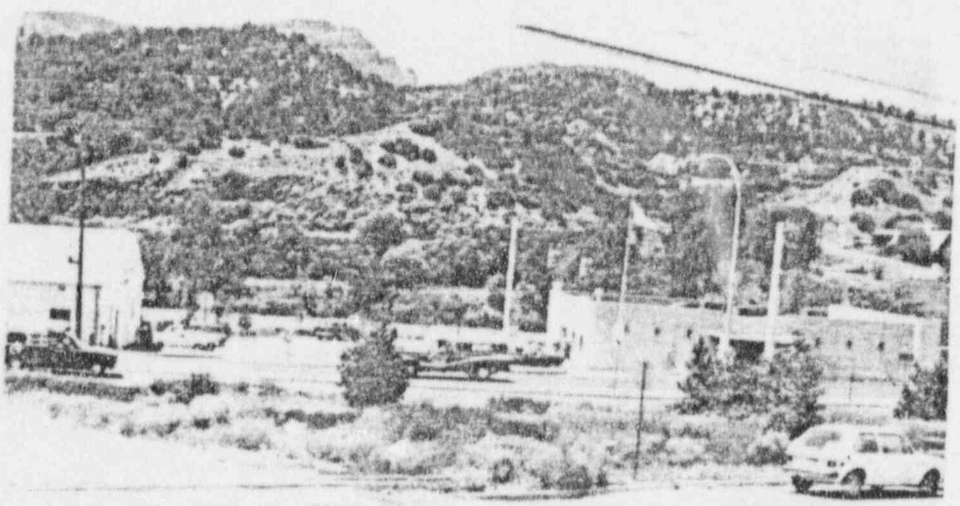
Railroad Right of Way Looking North



Railroad Right of Way Looking South

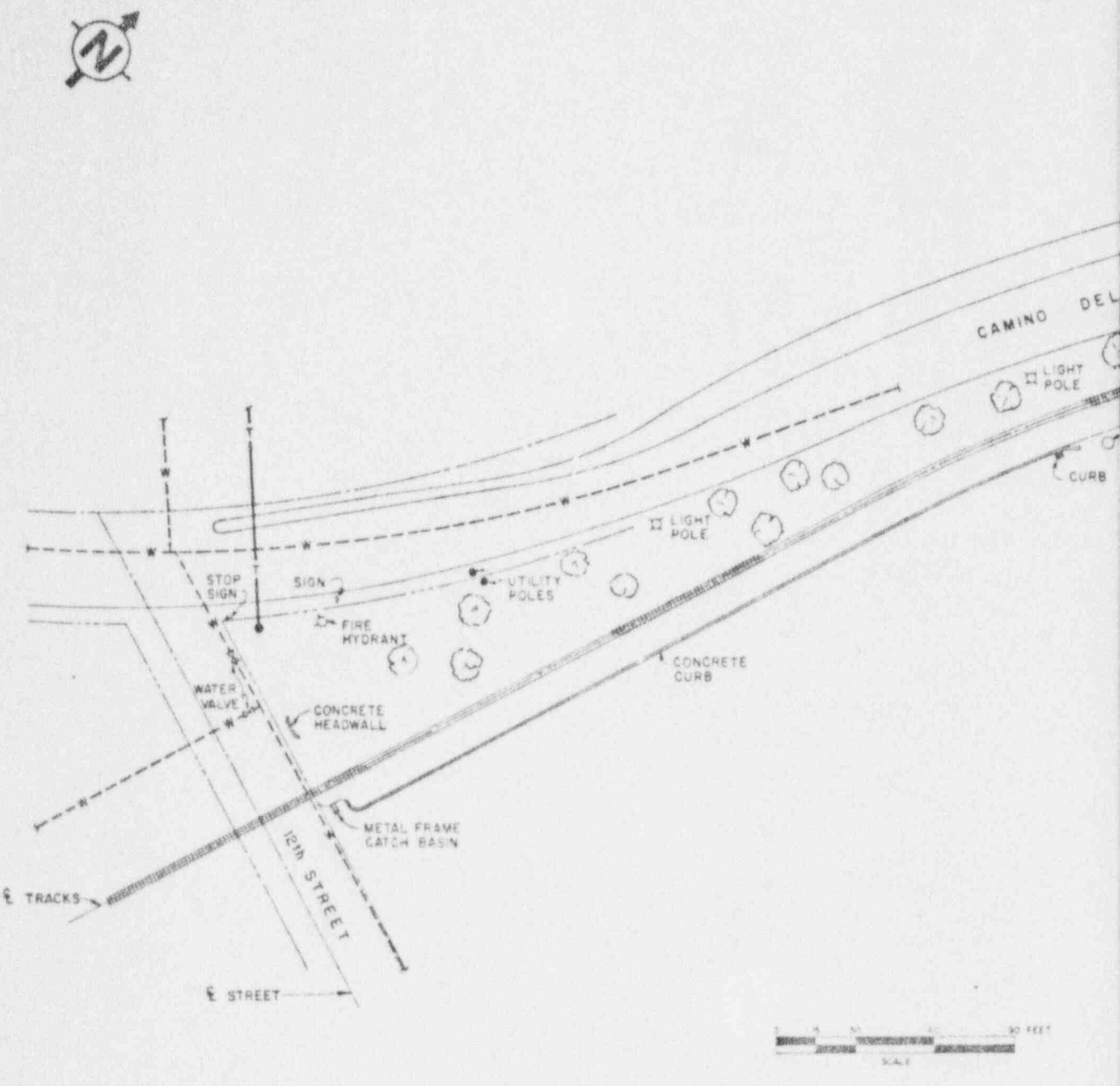
Figure 1 Property Photos

Railroad Right of Way Looking North



12th Street Crossing Looking West

Figure 2 Property Photos



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UTILITY POLES
FIRE HYDRANT
CONCRETE CURB
WATER VALVE
CONCRETE HEADWALL
METAL FRAME CATCH BASIN
℄ TRACKS
12th STREET
℄ STREET
SCALE

LEGEND

——W——	WATER LINE
——G——	GAS LINE
——GM——	GAS MAIN
——S——	SEWER LINE
——SM——	SEWER MAIN
——STM——	STORM SEWER
——E——	ELECTRICAL LINE
——T——	TELEPHONE LINE
——TV——	CABLE TV
—— — — ——	PROPERTY LINE
—x—x—x—	FENCE LINE
G, W or E	METER
G or W	VALVE
	PROPERTY PIN
	POWER POLE

NOTE: OVERHEAD SERVICE DENOTED BY SOLID LINE.
UNDERGROUND SERVICE DENOTED BY DASHED LINE.

ANSTEC APERTURE CARD

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NO.	DATE	REVISIONS	DRAWN BY	CHECKED BY	APPROVAL	APPROVAL	APPROVAL	APPROVAL
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U. S. DEPARTMENT OF ENERGY
ALBUQUERQUE, NEW MEXICO

DESIGNED: LAH | DRAWN: morson
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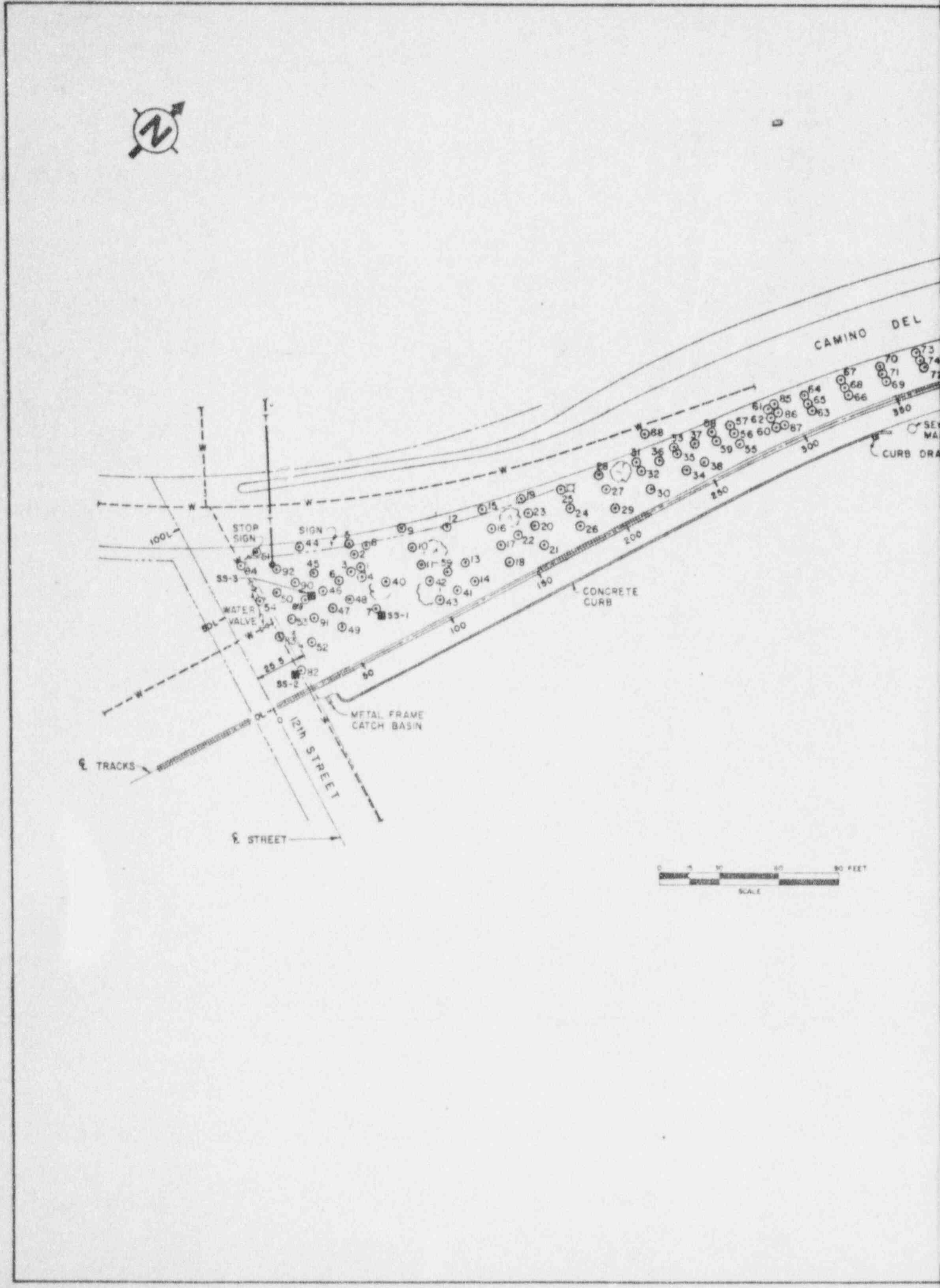
RELEASED: [illegible]
RECOMMENDED: [illegible]

SITE PLAN DU-003
DURANGO, COLORADO
URANIUM MILL TAILINGS REMEDIAL ACTION PROJECT

APPROVED	DATE	DOE PROJECT MANAGER	DATE	DOE PROJECT ENGINEER	DATE
NR		NR		NR	

MORRISON KNUDSEN

PROJECT NO. DE-AC04-83AL18796
DRAWING NO. DU-003-010 REV A



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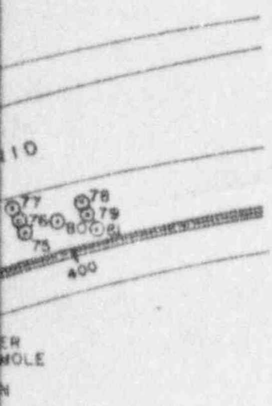

LEGEND

●75 ⊘ AUGER HOLE DESIGNATION
▩SS-3 SOIL SAMPLE

ANSTEC APERTURE CARD

Also Available on Aperture Card

9707080334 - 02

NOTES

1. THIS DRAWING SHOWS AUGER HOLE AND SOIL SAMPLE LOCATIONS ONLY.
2. FOR EXTENT AND DEPTH OF CONTAMINATION SEE DRAWING DU-003-016.

U. S. DEPARTMENT OF ENERGY
ALBUQUERQUE, NEW MEXICO

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RADIOLOGICAL SURVEY DATA DU-003
BOREHOLE AND SOIL SAMPLE LOCATIONS

DURANGO, COLORADO
URANIUM MILL TAILINGS REMEDIAL ACTION PROJECT

APPROVED	DATE	DOE PROJECT MANAGER	DATE	DOE PROJECT ENGINEER	DATE
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MORRISON KNUDSEN

PROJECT NO. DE-AC04-83AL18796

DRAWING NO. DU-003-015 REV A

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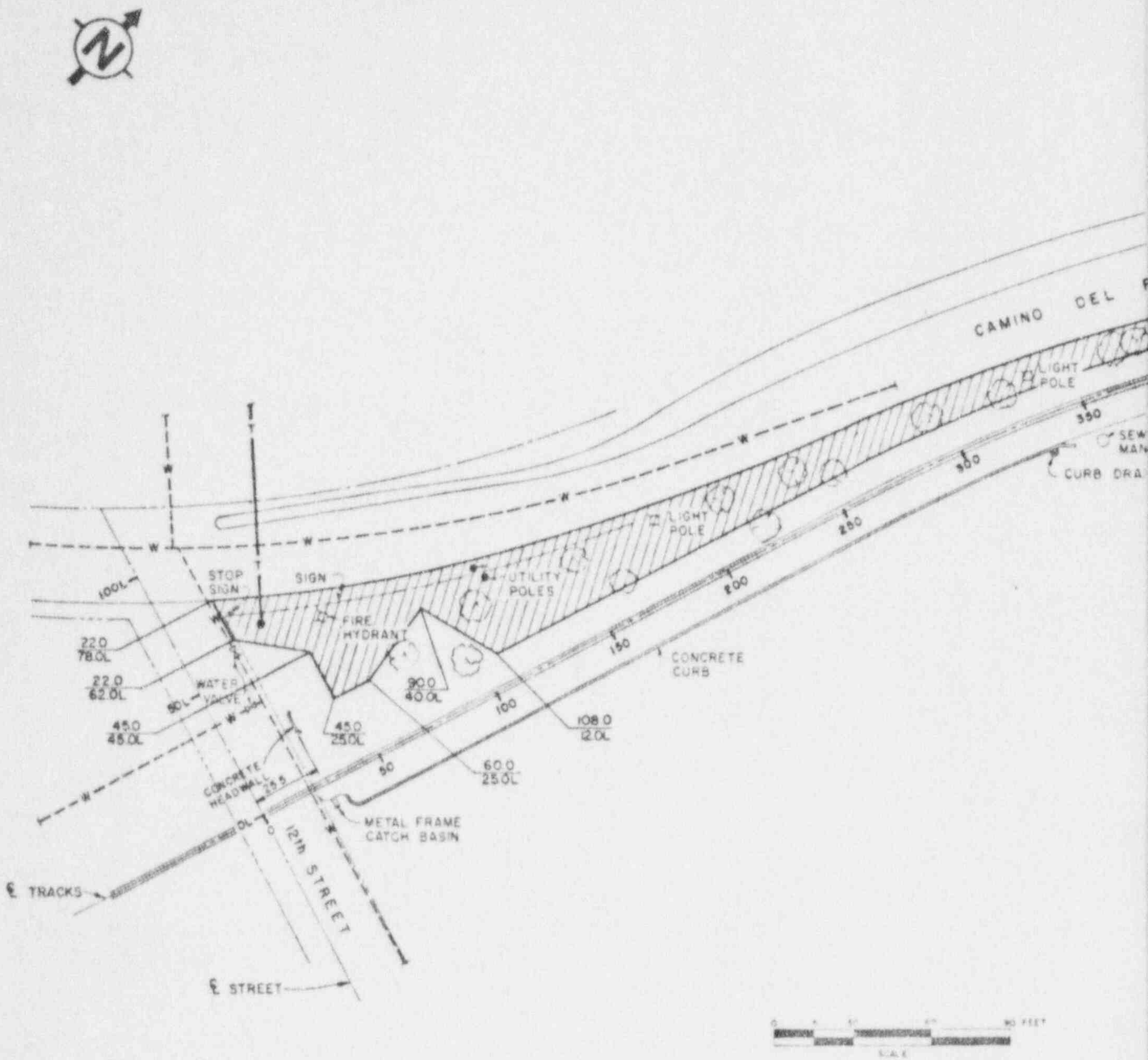
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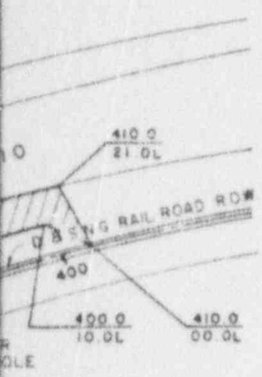
ESTIMATED DEPTH OF CONTAMINATION

1'-6"



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U. S. DEPARTMENT OF ENERGY
ALBUQUERQUE, NEW MEXICO

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RADIOLOGICAL SURVEY DATA DU-003
EXTENT OF CONTAMINATION
DURANGO, COLORADO
URANIUM MILL TAILINGS REMEDIAL ACTION PROJECT

APPROVED	DATE	DOE PROJECT MANAGER	DATE	DOE PROJECT ENGINEER	DATE
NR		NR		NR	

MORRISON KNUDSEN

PROJECT NO. DE-AC04-83AL18796

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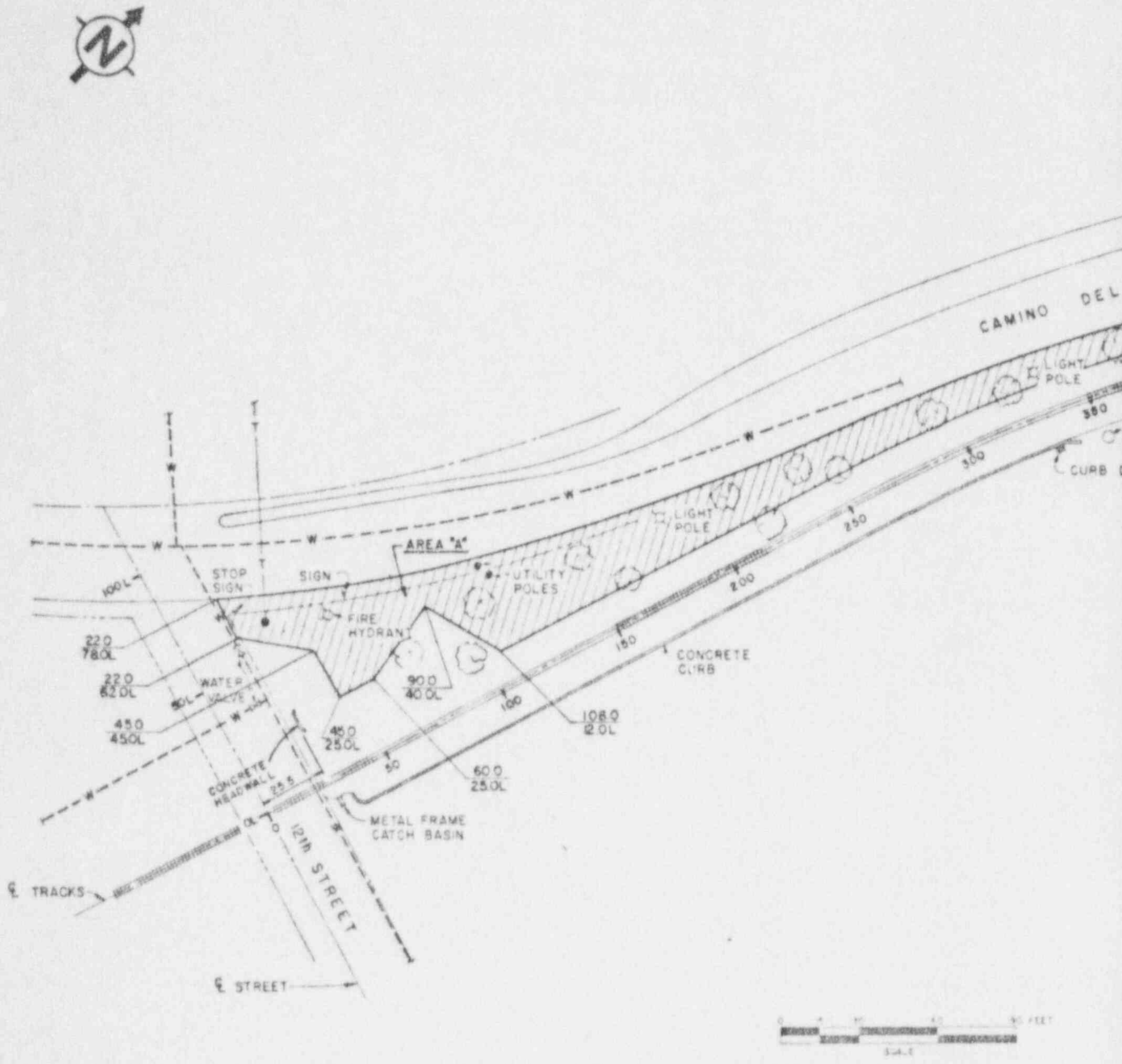

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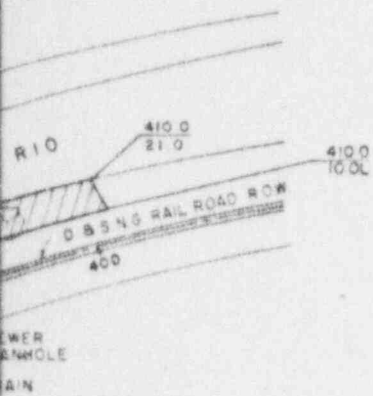

LEGEND

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——STM——	STORM SEWER
——E——	ELECTRICAL LINE
——T——	TELEPHONE LINE
——TV——	CABLE TV
— — —	PROPERTY LINE
—x—x—x—	FENCE LINE
G, W or E	METER
G or W	VALVE
	PROPERTY PIN
	POWER POLE
	REMEDIAL ACTION AREA

NOTE OVERHEAD SERVICE DENOTED BY SOLID LINE.
UNDERGROUND SERVICE DENOTED BY DASHED LINE.

NOTES:

1. THE LATEST REVISION OF THE FOLLOWING TECHNICAL SPECIFICATIONS APPLY TO THE REMEDIAL ACTION WORK REQUIRED FOR PROPERTY NO. DU-003.

   SECTION 02110
   CLEARING AND GRUBBING

   SECTION 02130
   CONTAMINATED MATERIAL REMOVAL

   SECTION 02200
   EXCAVATION AND BACKFILL

   SECTION 02480
   LANDSCAPING

2. UTILITY LOCATIONS ARE FOR REFERENCE ONLY. SUBCONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE ACTUAL LOCATIONS OF UTILITIES PRIOR TO START OF CONSTRUCTION.

3. THE EXCAVATION LIMITS AND DEPTHS ARE BASED ON A LIMITED NUMBER OF BORINGS TAKEN DURING THE RADIOLOGICAL SURVEYS OF THIS PROPERTY. ADDITIONAL RADIOLOGICAL SURVEYS PERFORMED DURING REMEDIAL ACTION MAY REQUIRE MORE OR LESS EXCAVATION TO BE TAKEN FROM THE DESIGNATED AREAS. ALL CHANGES TO THE LIMITS AND DEPTHS OF EXCAVATION AS SHOWN ON THE DESIGN DRAWINGS SHALL BE AS DIRECTED BY THE CONTRACTOR'S REPRESENTATIVE.

4. CONTRACTOR'S REPRESENTATIVE TO VERIFY LOCATION OF CONTAMINATED AREAS PRIOR TO START OF EXCAVATION.

5. REMOVE BUSHES AND TREES IN REMEDIAL ACTION AREA. REPLACEMENT TREES AND BUSHES SHALL BE OF SAME TYPE AS THOSE REMOVED. THE SIZE OF REPLACEMENT STOCK SHALL BE DETERMINED BY THE CONTRACTOR'S REPRESENTATIVE.

6. REMOVE ROAD SIGNS IN REMEDIAL ACTION AREA. REPLACE IN ORIGINAL LOCATION AFTER REMEDIAL ACTION IS COMPLETE.

7. PROVIDE TEMPORARY SUPPORT FOR LIGHT POLES AND POWER POLES AS REQUIRED FOR REMEDIAL ACTION.

8. EXCAVATE AREA "A" TO THE LIMITS INDICATED ON THIS DRAWING TO A DEPTH OF 1'-6". IF FURTHER CONTAMINATION EXISTS EXCAVATE IN 6" INCH INCREMENTS AS DIRECTED BY CONTRACTOR'S REPRESENTATIVE.

9. BACKFILL WITH COMPACTED COMMON FILL AND 6 INCHES TOP SOIL. TOP WITH SEED AND MULCH.

9707080334-04

U. S. DEPARTMENT OF ENERGY
ALBUQUERQUE, NEW MEXICO

DESIGNED: LAH	DRAWN: morson
CHECKED:	
APPROVED: NR	DOE PROJECT MANAGER: NR / DOE PROJECT ENGINEER: NR

EXCAVATION & RESTORATION PLAN DU-003

DURANGO, COLORADO
URANIUM MILL TAILINGS REMEDIAL ACTION PROJECT

MORRISON KNUDSEN

PROJECT NO. DE-AC04-83AL18796

DRAWING NO. DU-003-020 REV A

NO.	DATE	REVISIONS						
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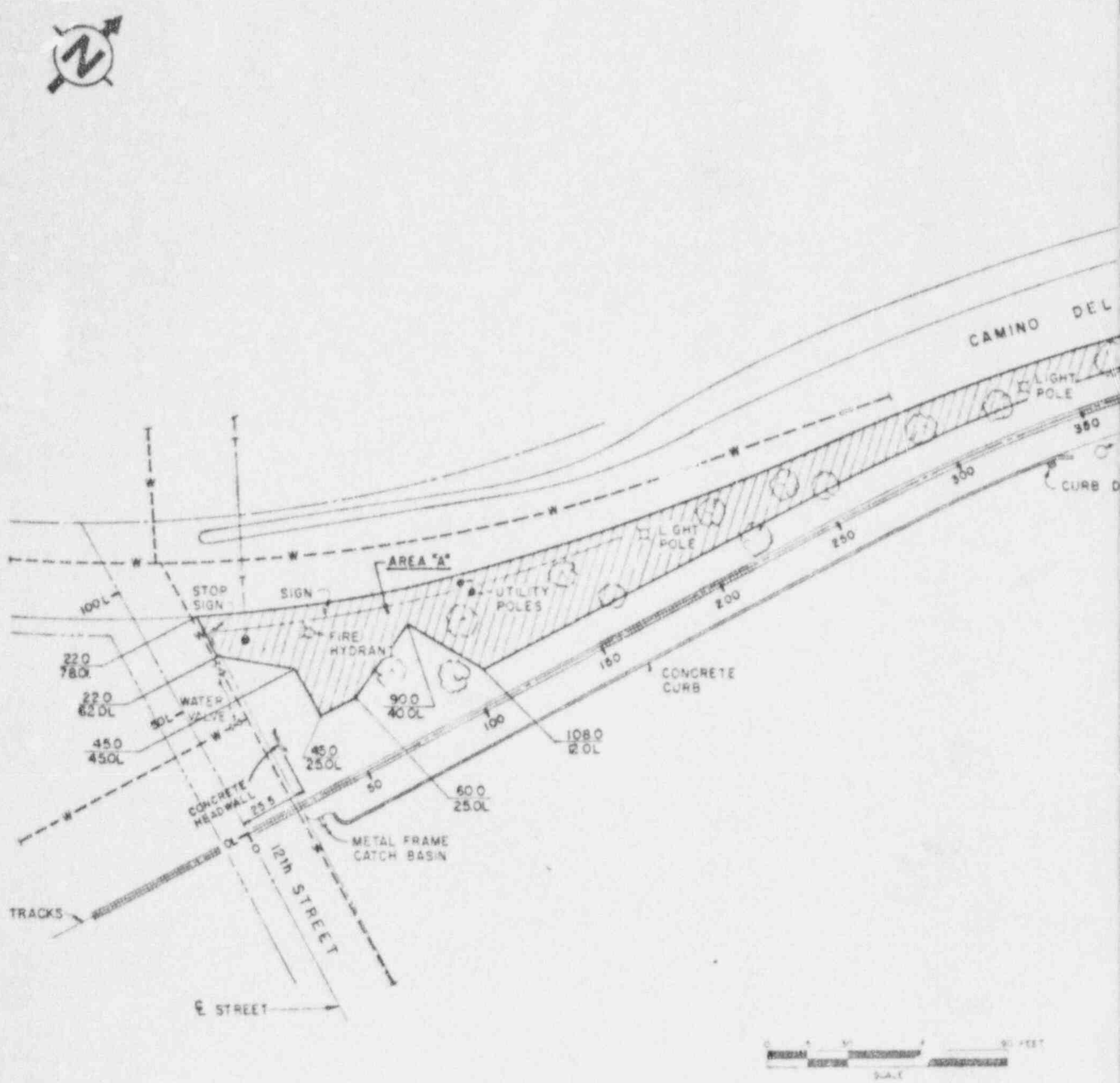
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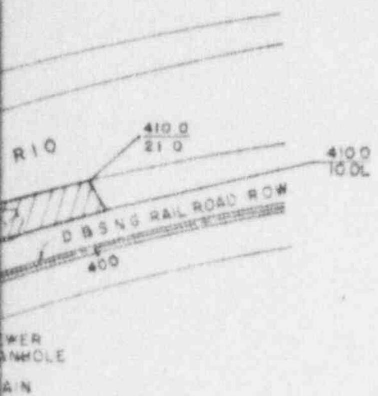

LEGEND

——W——	WATER LINE
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——GM——	GAS MAIN
——S——	SEWER LINE
——SM——	SEWER MAIN
——STM——	STORM SEWER
——E——	ELECTRICAL LINE
——T——	TELEPHONE LINE
——TV——	CABLE TV
— — —	PROPERTY LINE
—x—x—x—	FENCE LINE
G, W or E	METER
G or W	VALVE
	PROPERTY PIN
	POWER POLE
	REMEDIAL ACTION AREA

NOTE OVERHEAD SERVICE DENOTED BY SOLID LINE.
UNDERGROUND SERVICE DENOTED BY DASHED LINE.

NOTES:

1. THE LATEST REVISION OF THE FOLLOWING TECHNICAL SPECIFICATIONS APPLY TO THE REMEDIAL ACTION WORK REQUIRED FOR PROPERTY NO. DU-003.

   SECTION 02110
   CLEARING AND GRUBBING

   SECTION 02130
   CONTAMINATED MATERIAL REMOVAL

   SECTION 02200
   EXCAVATION AND BACKFILL

   SECTION 02480
   LANDSCAPING

2. UTILITY LOCATIONS ARE FOR REFERENCE ONLY. SUBCONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE ACTUAL LOCATIONS OF UTILITIES PRIOR TO START OF CONSTRUCTION.

3. THE EXCAVATION LIMITS AND DEPTHS ARE BASED ON A LIMITED NUMBER OF BORINGS TAKEN DURING THE RADIOLOGICAL SURVEYS OF THIS PROPERTY. ADDITIONAL RADIOLOGICAL SURVEYS PERFORMED DURING REMEDIAL ACTION MAY REQUIRE MORE OR LESS EXCAVATION TO BE TAKEN FROM THE DESIGNATED AREAS. ALL CHANGES TO THE LIMITS AND DEPTHS OF EXCAVATION AS SHOWN ON THE DESIGN DRAWINGS SHALL BE AS DIRECTED BY THE CONTRACTOR'S REPRESENTATIVE.

4. CONTRACTOR'S REPRESENTATIVE TO VERIFY LOCATION OF CONTAMINATED AREAS PRIOR TO START OF EXCAVATION.

5. REMOVE BUSHES AND TREES IN REMEDIAL ACTION AREA. REPLACEMENT TREES AND BUSHES SHALL BE OF SAME TYPE AS THOSE REMOVED. THE SIZE OF REPLACEMENT STOCK SHALL BE DETERMINED BY THE CONTRACTOR'S REPRESENTATIVE.

6. REMOVE ROAD SIGNS IN REMEDIAL ACTION AREA. REPLACE IN ORIGINAL LOCATION AFTER REMEDIAL ACTION IS COMPLETE.

7. PROVIDE TEMPORARY SUPPORT FOR LIGHT POLES AND POWER POLES AS REQUIRED FOR REMEDIAL ACTION.

8. EXCAVATE AREA "A" TO THE LIMITS INDICATED ON THIS DRAWING TO A DEPTH OF 1'-6". IF FURTHER CONTAMINATION EXISTS EXCAVATE IN 6" INCH INCREMENTS AS DIRECTED BY CONTRACTOR'S REPRESENTATIVE.

9. BACKFILL WITH COMPACTED COMMON FILL AND 6 INCHES TOP SOIL. TOP WITH SEED AND MULCH.

9707080334-04

U. S. DEPARTMENT OF ENERGY
ALBUQUERQUE, NEW MEXICO

DESIGNED LAH DRAWN morgan
CHECKED
REVIEWED
RECOMMENDED
APPROVED

EXCAVATION & RESTORATION PLAN DU-003

DURANGO, COLORADO
URANIUM MILL TAILINGS REMEDIAL ACTION PROJECT

APPROVED	DATE	DOE PROJECT MANAGER	DATE	DOE PROJECT ENGINEER	DATE
NR		NR		NR	

MORRISON KNUDSEN

PROJECT NO. DE-AC04-83AL18796

DRAWING NO. DU-003-020 REV A

NO	DATE	REVISIONS						
A	1/96	FINAL REA SUBMITTAL	LAH					—

SURVEY NOTES DU-003

EXTERIOR SURVEYS. A complete gamma scan was performed throughout the property. The scan was inhibited due to dense vegetation. The survey revealed 2 large areas of elevated gamma and several smaller areas encircling various shrubs. Gamma readings of 2200 cptm or greater were considered anomalous.

Subsurface surveys. Boreholes were done to further delineate the areal and vertical extent of contamination. The borehole data revealed little surficial comtomination. However, the data showed an extensive area of subsurface contamination. The subsurface contamination extended from the left side of the rail road track bed to the curb of Camino Del Rio street. Some of the data collected is inconclusive. This was caused by rock layers encountered. The rock layers vary in depth, from 6 to 48 inches. Though, attempts were made to penetrate these rock layers, in most cases, the attempts were unsuccessful. Soil samples confirmed the absence of surficial contamination.

Interior Surveys. Not applicable. This property is an open land area and is the right-of-way for the Durango-Silverton Narrow Gauge Rail Road.

Other Notes. Spillover contamination, subsurface exists on the property to the north.

9-15-85

MORRISON KNUDSEN

BOREHOLE LOG

LOGGING CREW: Nancy Wanner
Peter Trujillo
Brian O'Connor

SHEET 1 OF 26 PAGE 1

DATE: 7/25/85

PROPERTY ID: Du-003

AREA: ____

INSTRUMENT ID NO. DUR 06 L.2220+44-10 #35625 PR022519

NOTES: 1. ALL HOLES ARE 4"DIA. UNLESS OTHERWISE NOTED.
2. RECORD UNUSUAL CONDITIONS, SUCH AS THE PRESENCE OF WATER IN BOREHOLES AND DEPTH, CASING TYPE AND THICKNESS IF USED, CONCRETE CORES AND THICKNESS, OBSTRUCTIONS, UTILITIES, ETC., IN THE REMARKS SECTION.

1		2		3		4	
HOLE ID: 0+73, 42L		HOLE ID: 0+73, 49L		HOLE ID: 0+68, 42L		HOLE ID: 0+72, 37L	
TIME DRILLED:		TIME DRILLED:		TIME DRILLED:		TIME DRILLED:	
TIME LOGGED:		TIME LOGGED:		TIME LOGGED:		TIME LOGGED:	
SOIL TYPE:		SOIL TYPE:		SOIL TYPE:		SOIL TYPE:	
DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN
SURFACE	4060	SURFACE	1692	SURFACE	1710	SURFACE	1676
0"	4777	0"	1887	0"	1764	0"	1720
6"	5247	6"	2548	6"	2174	6"	2342
12"	3527	12"	3417	12"	2470	~~12~~ 9"	2298
~~18~~ 17"	3494	18"	6005	18"	556.4	18"	Rock
24"	Rock	24"	9548	~~24"~~ 23"	7074	24"	
30"		30"	Rock	30"		30"	
36"		36"		36"		36"	
42"		42"		42"		42"	
48"		48"		48"		48"	
54"		54"		54"		54"	
60"		60"		60"		60"	
66"		66"		66"		66"	
72"		72"		72"		72"	
78"		78"		78"		78"	
84"		84"		84"		84"	
90"		90"		90"		90"	
96"		96"		96"		96"	

REMARKS: AVERAGE BOREHOLE BACKGROUND = 2300 cptm.
see page 26 for borehole locations
~~Shallow~~ most boreholes were obstructed due to rock layers at bottom of boreholes

MORRISON KNUDSEN

BOREHOLE LOG

LOGGING CREW: Nancy Wanner
Peter Trujillo
Brian O'Connor

SHEET 2 OF 26 PAGE 2

DATE: 7/25/85

PROPERTY ID: D4-003

INSTRUMENT ID NO. DUR 06 L.2220+44-10 #35625 PR022519

AREA: —

NOTES: 1. ALL HOLES ARE 4"DIA. UNLESS OTHERWISE NOTED.
2. RECORD UNUSUAL CONDITIONS, SUCH AS THE PRESENCE OF WATER IN BOREHOLES AND DEPTH, CASING TYPE AND THICKNESS IF USED, CONCRETE CORES AND THICKNESS, OBSTRUCTIONS, UTILITIES, ETC., IN THE REMARKS SECTION.

5		6		7		8	
HOLE ID: 0+73,55L		HOLE ID: 0+60,42L		HOLE ID: 0+70,20L		HOLE ID: 0+80,50L	
TIME DRILLED:		TIME DRILLED:		TIME DRILLED:		TIME DRILLED:	
TIME LOGGED:		TIME LOGGED:		TIME LOGGED:		TIME LOGGED:	
SOIL TYPE:		SOIL TYPE:		SOIL TYPE:		SOIL TYPE:	
DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN
SURFACE	1740	SURFACE	1537	SURFACE	1320	SURFACE	1517
0"	1937	0"	1566	0"	1440	0"	1712
6"	3046	6"	1984	6"	1734	6"	2128
~~12"~~ 8"	4510	~~12"~~ 10"	2231	12"	1897	12"	2874
18"	Rock	18"	Rock	18"	2186	18"	4117
24"		24"		24"	2248	24"	Rock
30"		30"		30"	~~2488~~ 2438	30"	
36"		36"		~~36"~~ 35"	2372	36"	
42"		42"		42"		42"	
48"		48"		48"		48"	
54"		54"		54"		54"	
60"		60"		60"		60"	
66"		66"		66"		66"	
72"		72"		72"		72"	
78"		78"		78"		78"	
84"		84"		84"		84"	
90"		90"		90"		90"	
96"		96"		96"		96"	

REMARKS:

VP-04B

MORRISON KNUDSEN

BOREHOLE LOG

LOGGING CREW: Nancy Wanner
Peter Trujillo
Brian O'Connor

INSTRUMENT ID NO. DUR 06 L.2220+44-10
#35625 PR 022519

SHEET 3 OF 26 PAGE 3

DATE: 7/25/85

PROPERTY ID: D4-003

AREA:

NOTES: 1. ALL HOLES ARE 4"DIA. UNLESS OTHERWISE NOTED.
2. RECORD UNUSUAL CONDITIONS, SUCH AS THE PRESENCE OF WATER IN BOREHOLES AND DEPTH, CASING TYPE AND THICKNESS IF USED, CONCRETE CORES AND THICKNESS, OBSTRUCTIONS, UTILITIES, ETC., IN THE REMARKS SECTION.

9		10		11		12	
HOLE ID: 1+00,50L		HOLE ID: 1+00,39L		HOLE ID: 1+00,29L		HOLE ID: 1+20,40L	
TIME DRILLED:		TIME DRILLED:		TIME DRILLED:		TIME DRILLED:	
TIME LOGGED:		TIME LOGGED:		TIME LOGGED:		TIME LOGGED:	
SOIL TYPE:		SOIL TYPE:		SOIL TYPE:		SOIL TYPE:	
DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN
SURFACE	2223	SURFACE	2045	SURFACE	1338	SURFACE	18349
0"	2902	0"	2255	0"	1442	0"	15259
6"	4801	6"	3179	6"	1819	6"	18944
12"	6171	12"	3193	12"	2162	~~12"~~ 8	16679
18"	rock	18"	3923	18"	2287	18"	rock
24"		24"	7650	~~24"~~ 20	2254	24"	
30"		30"	6610	30"	Rock	30"	
36"		36"	3622	36"		36"	
42"		42"	~~28~~ 2680	42"		42"	
48"		~~48"~~ 47	2360	48"		48"	
54"		54"		54"		54"	
60"		60"		60"		60"	
66"		66"		66"		66"	
72"		72"		72"		72"	
78"		78"		78"		78"	
84"		84"		84"		84"	
90"		90"		90"		90"	
96"		96"		96"		96"	

REMARKS:

VP-04B

MORRISON KNUDSEN

BOREHOLE LOG

LOGGING CREW: Nancy Wanner
Peter Trujillo
Brian O'Connor

SHEET 4 OF 26 PAGE 4

DATE: 7/25/85

PROPERTY ID: D4-003

INSTRUMENT ID NO. DUR 06 L. 2220+44-10 #35625 PR 022519

AREA:

NOTES: 1. ALL HOLES ARE 4"DIA. UNLESS OTHERWISE NOTED.
2. RECORD UNUSUAL CONDITIONS, SUCH AS THE PRESENCE OF WATER IN BOREHOLES AND DEPTH, CASING TYPE AND THICKNESS IF USED, CONCRETE CORES AND THICKNESS, OBSTRUCTIONS, UTILITIES, ETC., IN THE REMARKS SECTION.

13		14		15		16	
HOLE ID: 1+20, 20L		HOLE ID: 1+20, 10L		HOLE ID: 1+40, 39L		HOLE ID: 1+40, 29L	
TIME DRILLED:		TIME DRILLED:		TIME DRILLED:		TIME DRILLED:	
TIME LOGGED:		TIME LOGGED:		TIME LOGGED:		TIME LOGGED:	
SOIL TYPE:		SOIL TYPE:		SOIL TYPE:		SOIL TYPE:	
DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN
SURFACE	1484	SURFACE	1589	SURFACE	1990	SURFACE	2052
0"	1652	0"	1677	0"	2402	0"	2373
6"	1930	6"	2125	6"	3414	6"	3793
12"	2277	12"	2437	12"	4753	12"	3449
18"	3420	18"	2227	18"	rock	~~18"~~ 17	3278
24"	rock	24"	2221	24"		24"	Rock
30"		30"	2059	30"		30"	
36"		36"	1934	36"		36"	
42"		42"		42"		42"	
48"		48"		48"		48"	
54"		54"		54"		54"	
60"		60"		60"		60"	
66"		66"		66"		66"	
72"		72"		72"		72"	
78"		78"		78"		78"	
84"		84"		84"		84"	
90"		90"		90"		90"	
96"		96"		96"		96"	

REMARKS:

MORRISON KNUDSEN

BOREHOLE LOG

LOGGING CREW: Nancy Wanner
Petei Trujillo
Brian O'Connor

INSTRUMENT ID NO. DLR 06 L. 2220+44-10
#35625 PR022519

SHEET 5 OF 26 PAGE 5

DATE: 7/25/85

PROPERTY ID: D4-003

AREA:

NOTES: 1. ALL HOLES ARE 4"DIA. UNLESS OTHERWISE NOTED.
2. RECORD UNUSUAL CONDITIONS, SUCH AS THE PRESENCE OF WATER IN BOREHOLES AND DEPTH, CASING TYPE AND THICKNESS IF USED, CONCRETE CORES AND THICKNESS, OBSTRUCTIONS, UTILITIES, ETC., IN THE REMARKS SECTION.

17		18		19		20	
HOLE ID: 1+40, 19L		HOLE ID: 1+40, 10L		HOLE ID: 1+60, 35L		HOLE ID: 1+60, 20L	
TIME DRILLED:		TIME DRILLED:		TIME DRILLED:		TIME DRILLED:	
TIME LOGGED:		TIME LOGGED:		TIME LOGGED:		TIME LOGGED:	
SOIL TYPE:		SOIL TYPE:		SOIL TYPE:		SOIL TYPE:	
DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN
SURFACE	1528	SURFACE	1528	SURFACE	2021	SURFACE	1523
0"	1677	0"	1585	0"	3047	0"	1524
6"	2163	6"	2107	6"	5352	6"	2125
12"	2339	12"	2408	12"	9508	12"	2290
18"		18"	2172	~~18"~~ 16"	10054	~~18"~~ 17"	2114
24"	Rock	~~24"~~ 21"	2049	24"	Rock	24"	Rock
30"		30"		30"		30"	
36"		36"		36"		36"	
42"		42"		42"		42"	
48"		48"		48"		48"	
54"		54"		54"		54"	
60"		60"		60"		60"	
66"		66"		66"		66"	
72"		72"		72"		72"	
78"		78"		78"		78"	
84"		84"		84"		84"	
90"		90"		90"		90"	
96"		96"		96"		96"	

REMARKS:

MORRISON KNUDSEN

BOREHOLE LOG

LOGGING CREW: Nancy Wanner
Petei Trujillo
Brian O'Connor

SHEET 6 OF 26 PAGE 6

DATE: 7/25/85

PROPERTY ID: D4-003

INSTRUMENT ID NO. DUR 06 L.2220+44.10
#35625 PR022519

AREA:

NOTES: 1. ALL HOLES ARE 4"DIA. UNLESS OTHERWISE NOTED.
2. RECORD UNUSUAL CONDITIONS, SUCH AS THE PRESENCE OF WATER IN BOREHOLES AND DEPTH, CASING TYPE AND THICKNESS IF USED, CONCRETE CORES AND THICKNESS, OBSTRUCTIONS, UTILITIES, ETC., IN THE REMARKS SECTION.

21		22		23		24	
HOLE ID: 1+60, 10L		HOLE ID: 1+50, 20L		HOLE ID: 1+60, 27L		HOLE ID: 1+80, 20L	
TIME DRILLED:		TIME DRILLED:		TIME DRILLED:		TIME DRILLED:	
TIME LOGGED:		TIME LOGGED:		TIME LOGGED:		TIME LOGGED:	
SOIL TYPE:		SOIL TYPE:		SOIL TYPE:		SOIL TYPE:	
DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN
SURFACE	1481	SURFACE	1502	SURFACE	1660	SURFACE	1894
0"	1502	0"	1552	0"	1854	0"	1943
6"	1808	6"	2208	6"	2862	6"	3050
12"	1991	12"	2394	12"	3083	12"	3316
18"	2100	~~18"~~ 15"	2078	~~18"~~ 15"	3177	~~18"~~ 13	2277
24"	2025	24"	Rock	24"	Rock	24"	Rock
30"		30"		30"		30"	
36"		36"		36"		36"	
42"		42"		42"		42"	
48"		48"		48"		48"	
54"		54"		54"		54"	
60"		60"		60"		60"	
66"		66"		66"		66"	
72"		72"		72"		72"	
78"		78"		78"		78"	
84"		84"		84"		84"	
90"		90"		90"		90"	
96"		96"		96"		96"	

REMARKS:

VB 048

MORRISON KNUDSEN

BOREHOLE LOG

LOGGING CREW: Nancy Wanner
Peter Trujillo
Brian O'Connor

INSTRUMENT ID NO. DUR 06 L. 2220+44-10
#35625 PR 022519

SHEET 7 OF 26 PAGE 7

DATE: 7/25/85

PROPERTY ID: D4-003

AREA:

NOTES: 1. ALL HOLES ARE 4" DIA. UNLESS OTHERWISE NOTED.
2. RECORD UNUSUAL CONDITIONS, SUCH AS THE PRESENCE OF WATER IN BOREHOLES AND DEPTH, CASING TYPE AND THICKNESS IF USED, CONCRETE CORES AND THICKNESS, OBSTRUCTIONS, UTILITIES, ETC., IN THE REMARKS SECTION.

25		26		27		28	
HOLE ID: 1+80, 30L		HOLE ID: 1+80, 10L		HOLE ID: 2+00, 20L		HOLE ID: 2+00, 28L	
TIME DRILLED:		TIME DRILLED:		TIME DRILLED:		TIME DRILLED:	
TIME LOGGED:		TIME LOGGED:		TIME LOGGED:		TIME LOGGED:	
SOIL TYPE:		SOIL TYPE:		SOIL TYPE:		SOIL TYPE:	
DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN
SURFACE	1663	SURFACE	1725	SURFACE	5714	SURFACE	2342
0"	1807	0"	1730	0"	6243	0"	3758
6"	2875	6"	2296	6"	12768	6"	7742
12"	4043	12"	2829	12"	11345	12"	13452
~~18"~~ 15	4274	18"	2463	18"	ROCK	~~18"~~ 16	14943
24"	Rock	24"	2206	24"		24"	Rock
30"		30"		30"		30"	
36"		36"		36"		36"	
42"		42"		42"		42"	
48"		48"		48"		48"	
54"		54"		54"		54"	
60"		60"		60"		60"	
66"		66"		66"		66"	
72"		72"		72"		72"	
78"		78"		78"		78"	
84"		84"		84"		84"	
90"		90"		90"		90"	
96"		96"		96"		96"	

REMARKS:

VP-04B

MORRISON KNUDSEN

BOREHOLE LOG

LOGGING CREW: Nancy Wanner
Petei Trujillo
Brian O'Connor

SHEET 8 OF 26 PAGE 8

DATE: 7/25/85

PROPERTY ID: D4-003

INSTRUMENT ID NO. DUR 06 L. 2220+44-10 #35625 PR 022519

AREA:

NOTES: 1. ALL HOLES ARE 4" DIA. UNLESS OTHERWISE NOTED.
2. RECORD UNUSUAL CONDITIONS, SUCH AS THE PRESENCE OF WATER IN BOREHOLES AND DEPTH, CASING TYPE AND THICKNESS IF USED, CONCRETE CORES AND THICKNESS, OBSTRUCTIONS, UTILITIES, ETC., IN THE REMARKS SECTION.

29		30		31		32	
HOLE ID: 2+00, 10L		HOLE ID: 2+20, 10L		HOLE ID: 2+20, 25L		HOLE ID: 2+20, 70L	
TIME DRILLED:		TIME DRILLED:		TIME DRILLED:		TIME DRILLED:	
TIME LOGGED:		TIME LOGGED:		TIME LOGGED:		TIME LOGGED:	
SOIL TYPE:		SOIL TYPE:		SOIL TYPE:		SOIL TYPE:	
DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN
SURFACE	1728	SURFACE	1574	SURFACE	1800	SURFACE	1863
0"	1806	0"	1568	0"	2527	0"	1998
6"	2373	6"	2276	6"	4669	6"	3231
12"	2606	~~12"~~ 9"	1913	12"	7540	~~12"~~ 7"	3306
18"	2474	18"		18"		18"	
~~24"~~ 22	2527	24"	Rock	24"	Rock	24"	Rock
30"		30"		30"		30"	
36"		36"		36"		36"	
42"		42"		42"		42"	
48"		48"		48"		48"	
54"		54"		54"		54"	
60"		60"		60"		60"	
66"		66"		66"		66"	
72"		72"		72"		72"	
78"		78"		78"		78"	
84"		84"		84"		84"	
90"		90"		90"		90"	
96"		96"		96"		96"	

REMARKS:

VP-048

MORRISON KNUDSEN

BOREHOLE LOG

LOGGING CREW: Nancy Wanner
Peter Trujillo
Brian O'Connor

SHEET 9 OF 26 PAGE 9

DATE: 7/25/85

PROPERTY ID: D4-003

INSTRUMENT ID NO. DUR 06 L.2220+44-10 #35625 PR 022519

AREA:

NOTES: 1. ALL HOLES ARE 4"DIA. UNLESS OTHERWISE NOTED.
2. RECORD UNUSUAL CONDITIONS, SUCH AS THE PRESENCE OF WATER IN BOREHOLES AND DEPTH, CASING TYPE AND THICKNESS IF USED, CONCRETE CORES AND THICKNESS, OBSTRUCTIONS, UTILITIES, ETC., IN THE REMARKS SECTION.

33		34		35		36	
HOLE ID: 2+40, 23L		HOLE ID: 2+40, 10L		HOLE ID: 2+40, 19L		HOLE ID: 2+30, 20L	
TIME DRILLED:		TIME DRILLED:		TIME DRILLED:		TIME DRILLED:	
TIME LOGGED:		TIME LOGGED:		TIME LOGGED:		TIME LOGGED:	
SOIL TYPE:		SOIL TYPE:		SOIL TYPE:		SOIL TYPE:	
DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN
SURFACE	1671	SURFACE	1718	SURFACE	1499	SURFACE	1568
0"	1864	0"	1599	0"	1607	0"	1626
6"	2942	6"	2548	6"	1981	6"	2637
12"	3858	~~12"~~ 8	2478	12"	1910	12"	
~~18"~~ 14	4068	18"		~~18"~~ 17	1815	18"	Rock
24"	Rock	24"	Rock	24"	Rock	24"	
30"		30"		30"		30"	
36"		36"		36"		36"	
42"		42"		42"		42"	
48"		48"		48"		48"	
54"		54"		54"		54"	
60"		60"		60"		60"	
66"		66"		66"		66"	
72"		72"		72"		72"	
78"		78"		78"		78"	
84"		84"		84"		84"	
90"		90"		90"		90"	
96"		96"		96"		96"	

REMARKS:

VP-04B

MORRISON KNUDSEN

BOREHOLE LOG

LOGGING CREW: Nancy Wanner
Peter Trujillo
Brian O'Connor

INSTRUMENT ID NO. DUR 06 L. 2220+44-10
#35625 PR022519

SHEET 10 OF 26 PAGE 10

DATE: 7/25/85

PROPERTY ID: DU-003

AREA:

NOTES: 1. ALL HOLES ARE 4"DIA. UNLESS OTHERWISE NOTED.
2. RECORD UNUSUAL CONDITIONS, SUCH AS THE PRESENCE OF WATER IN BOREHOLES AND DEPTH, CASING TYPE AND THICKNESS IF USED, CONCRETE CORES AND THICKNESS, OBSTRUCTIONS, UTILITIES, ETC., IN THE REMARKS SECTION.

37		38		39		40	
HOLE ID: 2+50, 20L		HOLE ID: 2+50, 10L		HOLE ID: 1+10, 20L		HOLE ID: 0+80, 30L	
TIME DRILLED:		TIME DRILLED:		TIME DRILLED:		TIME DRILLED:	
TIME LOGGED:		TIME LOGGED:		TIME LOGGED:		TIME LOGGED:	
SOIL TYPE:		SOIL TYPE:		SOIL TYPE:		SOIL TYPE:	
DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN
SURFACE	1608	SURFACE	1509	SURFACE	1571	SURFACE	1399
0"	1845	0"	1596	0"	1988	0"	1446
6"	2758	6"	2608	6"	3483	6"	1683
12"	3537	12"		12"	4802	12"	1842
~~18"~~ 17	3536	18"	Rock	18"	9406	~~18"~~ 17"	1853
24"	Rock	24"		24"	Rock	24"	Rock
30"		30"		30"		30"	
36"		36"		36"		36"	
42"		42"		42"		42"	
48"		48"		48"		48"	
54"		54"		54"		54"	
60"		60"		60"		60"	
66"		66"		66"		66"	
72"		72"		72"		72"	
78"		78"		78"		78"	
84"		84"		84"		84"	
90"		90"		90"		90"	
96"		96"		96"		96"	

REMARKS:

VR-04B

MORRISON KNUDSEN

BOREHOLE LOG

LOGGING CREW: Nancy Wanner
Petei Trujillo
Brian O'Connor

SHEET 11 OF 26 PAGE 11
DATE: 7/25/85
PROPERTY ID: Du-003
AREA:

INSTRUMENT ID NO. DUR 06 L.2220+44-10
#35625 PR022519

NOTES: 1. ALL HOLES ARE 4"DIA. UNLESS OTHERWISE NOTED.
2. RECORD UNUSUAL CONDITIONS, SUCH AS THE PRESENCE OF WATER IN BOREHOLES AND DEPTH, CASING TYPE AND THICKNESS IF USED, CONCRETE CORES AND THICKNESS, OBSTRUCTIONS, UTILITIES, ETC., IN THE REMARKS SECTION.

41		42		43		44	
HOLE ID: 1+10, 10L		HOLE ID: 1+00, 20L		HOLE ID: 1+00, 10L		HOLE ID: 0+50, 65L	
TIME DRILLED:		TIME DRILLED:		TIME DRILLED:		TIME DRILLED:	
TIME LOGGED:		TIME LOGGED:		TIME LOGGED:		TIME LOGGED:	
SOIL TYPE:		SOIL TYPE:		SOIL TYPE:		SOIL TYPE:	
DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN
SURFACE	1214	SURFACE	1329	SURFACE	1416	SURFACE	2076
0"	1512	0"	1378	0"	1326	0"	2687
6"	1812	6"	1695	6"	1581	6"	4587
12"	2324	12"	2007	12"	1999	12"	6705
18"	2521	~~18"~~ 15"	2058	~~18"~~ 15"	1997	18"	Rock
24"	2267	24"	Rock	24"	Rock	24"	
30"	2119	30"		30"		30"	
36"		36"		36"		36"	
42"		42"		42"		42"	
48"		48"		48"		48"	
54"		54"		54"		54"	
60"		60"		60"		60"	
66"		66"		66"		66"	
72"		72"		72"		72"	
78"		78"		78"		78"	
84"		84"		84"		84"	
90"		90"		90"		90"	
96"		96"		96"		96"	

REMARKS:

VP-04B

MORRISON KNUDSEN

BOREHOLE LOG

LOGGING CREW: Nancy Wanner
Petei Trujillo
BriAN O'CONNOr

SHEET 12 OF 26 PAGE 12

DATE: 7/25/85

INSTRUMENT ID NO. DUR 06 L. 2220+44-10
t-35625 PR022519

PROPERTY ID: D4-003

AREA:

NOTES: 1. ALL HOLES ARE 4"DIA. UNLESS OTHERWISE NOTED.
2. RECORD UNUSUAL CONDITIONS, SUCH AS THE PRESENCE OF WATER IN BOREHOLES AND DEPTH, CASING TYPE AND THICKNESS IF USED, CONCRETE CORES AND THICKNESS, OBSTRUCTIONS, UTILITIES, ETC., IN THE REMARKS SECTION.

45		46		47		48	
HOLE ID: 0+50, 50L		HOLE ID: 0+50, 40L		HOLE ID: 0+50, 30L		HOLE ID: 0+60, 30L	
TIME DRILLED:		TIME DRILLED:		TIME DRILLED:		TIME DRILLED:	
TIME LOGGED:		TIME LOGGED:		TIME LOGGED:		TIME LOGGED:	
SOIL TYPE:		SOIL TYPE:		SOIL TYPE:		SOIL TYPE:	
DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN
SURFACE	1290	SURFACE	1328	SURFACE	1387	SURFACE	1323
0"	1442	0"	1314	0"	1539	0"	1366
6"	1943	6"	1634	6"	1994	6"	1657
12"	2607	~~12~~ 10"	1812	12"	2639	12"	1921
18"	5169	18"	Rock	18"	3628	18"	2026
24"	Rock	24"		~~24~~ 21"	4949	~~24~~ 22"	2079
30"		30"		30"		30"	
36"		36"		36"		36"	
42"		42"		42"		42"	
48"		48"		48"		48"	
54"		54"		54"		54"	
60"		60"		60"		60"	
66"		66"		66"		66"	
72"		72"		72"		72"	
78"		78"		78"		78"	
84"		84"		84"		84"	
90"		90"		90"		90"	
96"		96"		96"		96"	

REMARKS:

MORRISON KNUDSEN

BOREHOLE LOG

LOGGING CREW: Nancy Wanner
Petei Trujillo
Brian O'Connor

SHEET 13 OF 26 PAGE 13
DATE: 7/25/85
PROPERTY ID: D4-003
AREA:

INSTRUMENT ID NO. DUR 06 L.2220+44-10 #35625 PR022519

NOTES: 1. ALL HOLES ARE 4"DIA. UNLESS OTHERWISE NOTED.
2. RECORD UNUSUAL CONDITIONS, SUCH AS THE PRESENCE OF WATER IN BOREHOLES AND DEPTH, CASING TYPE AND THICKNESS IF USED, CONCRETE CORES AND THICKNESS, OBSTRUCTIONS, UTILITIES, ETC., IN THE REMARKS SECTION.

49		50		51		52	
HOLE ID: 0+50, 20L TIME DRILLED: TIME LOGGED: SOIL TYPE:		HOLE ID: 0+30, 50L TIME DRILLED: TIME LOGGED: SOIL TYPE:		HOLE ID: 0+30, 73L TIME DRILLED: TIME LOGGED: SOIL TYPE:		HOLE ID: 0+33, 20L TIME DRILLED: TIME LOGGED: SOIL TYPE:	
DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN
SURFACE	1282	SURFACE	1326	SURFACE	1704	SURFACE	1397
0"	1351	0"	1360	0"	2479	0"	1461
6"	1607	6"	1895	6"	4380	6"	1668
12"	1918	12"	1814	12"	8542	12"	2092
18"	2228	18"	Rock	~~18"~~ 16	12,325	18"	2187
~~24"~~ 21"	2239	24"		24"	Rock	24"	Rock
30"		30"		30"		30"	
36"		36"		36"		36"	
42"		42"		42"		42"	
48"		48"		48"		48"	
54"		54"		54"		54"	
60"		60"		60"		60"	
66"		66"		66"		66"	
72"		72"		72"		72"	
78"		78"		78"		78"	
84"		84"		84"		84"	
90"		90"		90"		90"	
96"		96"		96"		96"	

REMARKS:

VP-04B

MORRISON KNUDSEN

BOREHOLE LOG

LOGGING CREW: Nancy Wanner
Petei Trujillo
Brian O'Connor

SHEET 14 OF 26 PAGE 14
DATE: 7/25/85
PROPERTY ID: D4-003
AREA:

INSTRUMENT ID NO. DUR 06 L.2220+44-10 #35625 PR022519

NOTES: 1. ALL HOLES ARE 4"DIA. UNLESS OTHERWISE NOTED.
2. RECORD UNUSUAL CONDITIONS, SUCH AS THE PRESENCE OF WATER IN BOREHOLES AND DEPTH, CASING TYPE AND THICKNESS IF USED, CONCRETE CORES AND THICKNESS, OBSTRUCTIONS, UTILITIES, ETC., IN THE REMARKS SECTION.

53		54					
HOLE ID: 0+30, 35L		HOLE ID: 0+20, 50L		HOLE ID:		HOLE ID:	
TIME DRILLED:		TIME DRILLED:		TIME DRILLED:		TIME DRILLED:	
TIME LOGGED:		TIME LOGGED:		TIME LOGGED:		TIME LOGGED:	
SOIL TYPE:		SOIL TYPE:		SOIL TYPE:		SOIL TYPE:	
DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN
SURFACE	1436	SURFACE	1263	SURFACE		SURFACE	
0"	1547	0"	1322	0"		0"	
6"	2044	6"	1688	6"		6"	
12"	2387	12"	2126	12"		12"	
~~18"~~ 14"	2616	18"	Rock	18"		18"	
24"	Rock	24"		24"		24"	
30"		30"		30"		30"	
36"		36"		36"		36"	
42"		42"		42"		42"	
48"		48"		48"		48"	
54"		54"		54"		54"	
60"		60"		60"		60"	
66"		66"		66"		66"	
72"		72"		72"		72"	
78"		78"		78"		78"	
84"		84"		84"		84"	
90"		90"		90"		90"	
96"		96"		96"		96"	

REMARKS:

VP-04B

MORRISON KNUDSEN

BOREHOLE LOG

LOGGING CREW: N. Wanner
P. Trujillo
B. O'CONNOR

INSTRUMENT ID NO. DUR 06; #35625
PR022519

SHEET 15 OF 26 PAGE 15

DATE: 7/29/85

PROPERTY ID: Du - 003

AREA:

NOTES: 1. ALL HOLES ARE 4"DIA. UNLESS OTHERWISE NOTED.
2. RECORD UNUSUAL CONDITIONS, SUCH AS THE PRESENCE OF WATER IN BOREHOLES AND DEPTH, CASING TYPE AND THICKNESS IF USED, CONCRETE CORES AND THICKNESS, OBSTRUCTIONS, UTILITIES, ETC., IN THE REMARKS SECTION.

55		56		57		58	
HOLE ID: 2+70, 10L		HOLE ID: 2+70, 17L		HOLE ID: 2+70, 20L		HOLE ID: 2+60, 21L	
TIME DRILLED:		TIME DRILLED:		TIME DRILLED:		TIME DRILLED:	
TIME LOGGED:		TIME LOGGED:		TIME LOGGED:		TIME LOGGED:	
SOIL TYPE:		SOIL TYPE:		SOIL TYPE:		SOIL TYPE:	
DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN
SURFACE	1709	SURFACE	1570	SURFACE	1423	SURFACE	1534
0"	1879	0"	1637	0"	1692	0"	1712
6"	2666	6"	2061	6"	2319	6"	2579
12"	3100	12"	2732	12"	3031	~~12"~~ 9	3051
~~18"~~ 14	3125	~~18"~~ 17	3372	~~18"~~ 17	2946	18"	Rock
24"	Rock	24"	Rock	24"	Rock	24"	
30"		30"		30"		30"	
36"		36"		36"		36"	
42"		42"		42"		42"	
48"		48"		48"		48"	
54"		54"		54"		54"	
60"		60"		60"		60"	
66"		66"		66"		66"	
72"		72"		72"		72"	
78"		78"		78"		78"	
84"		84"		84"		84"	
90"		90"		90"		90"	
96"		96"		96"		96"	

REMARKS:

MORRISON KNUDSEN

BOREHOLE LOG

LOGGING CREW: N. Wanner
P. Trujillo
B. O'CONNOR

INSTRUMENT ID NO. DUR 06; #35625
PR022519

SHEET 16 OF 26 PAGE 16

DATE: 7/29/85

PROPERTY ID: Du-003

AREA:

NOTES: 1. ALL HOLES ARE 4"DIA. UNLESS OTHERWISE NOTED.
2. RECORD UNUSUAL CONDITIONS, SUCH AS THE PRESENCE OF WATER IN BOREHOLES AND DEPTH, CASING TYPE AND THICKNESS IF USED, CONCRETE CORES AND THICKNESS, OBSTRUCTIONS, UTILITIES, ETC., IN THE REMARKS SECTION.

59

HOLE ID: 2+60, 17L
TIME DRILLED:
TIME LOGGED:
SOIL TYPE:

DEPTH	COUNTS/.1MIN
SURFACE	1734
0"	1998
6"	3377
12"	3757
18"	Rock
24"	
30"	
36"	
42"	
48"	
54"	
60"	
66"	
72"	
78"	
84"	
90"	
96"	

60

HOLE ID: 2+90, 10L
TIME DRILLED:
TIME LOGGED:
SOIL TYPE:

DEPTH	COUNTS/.1MIN
SURFACE	1777
0"	1993
6"	3223
12"	3115
~~18"~~ 14	2818
24"	Rock
30"	
36"	
42"	
48"	
54"	
60"	
66"	
72"	
78"	
84"	
90"	
96"	

61

HOLE ID: 2+90, 17L
TIME DRILLED:
TIME LOGGED:
SOIL TYPE:

DEPTH	COUNTS/.1MIN
SURFACE	1439
0"	1614
6"	2158
12"	2953
18"	
24"	Rock
30"	
36"	
42"	
48"	
54"	
60"	
66"	
72"	
78"	
84"	
90"	
96"	

62

HOLE ID: 2+90, 16L
TIME DRILLED:
TIME LOGGED:
SOIL TYPE:

DEPTH	COUNTS/.1MIN
SURFACE	1427
0"	1703
6"	2220
12"	3065
~~18"~~ 14	3135
24"	
30"	Rock.
36"	
42"	
48"	
54"	
60"	
66"	
72"	
78"	
84"	
90"	
96"	

REMARKS:

VR 04B

MORRISON KNUDSEN

BOREHOLE LOG

LOGGING CREW: N. Wanner
P. Trujillo
B. O'CONNOR

SHEET 17 OF 26 PAGE 17

DATE: 7/29/85

PROPERTY ID: Du-003

AREA:

INSTRUMENT ID NO. DUR 06, #35625
PR 022519

NOTES: 1. ALL HOLES ARE 4"DIA. UNLESS OTHERWISE NOTED.
2. RECORD UNUSUAL CONDITIONS, SUCH AS THE PRESENCE OF WATER IN BOREHOLES AND DEPTH, CASING TYPE AND THICKNESS IF USED. CONCRETE CORES AND THICKNESS, OBSTRUCTIONS, UTILITIES, ETC., IN THE REMARKS SECTION.

63		64		65		66	
HOLE ID: 3+10, 10L		HOLE ID: 3+10, 18L		HOLE ID: 3+10, 14L		HOLE ID: 3+30, 10L	
TIME DRILLED:		TIME DRILLED:		TIME DRILLED:		TIME DRILLED:	
TIME LOGGED:		TIME LOGGED:		TIME LOGGED:		TIME LOGGED:	
SOIL TYPE:		SOIL TYPE:		SOIL TYPE:		SOIL TYPE:	
DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN
SURFACE	1794	SURFACE	1497	SURFACE	1616	SURFACE	1664
0"	2056	0"	1724	0"	1833	0"	1704
6"	2849	6"	2646	6"	2730	6"	2545
~~12"~~ 8"	2765	12"	3606	12"	3278	12"	2647
~~18"~~ 12"	2654	~~18"~~ 14"	3967	18"	Rock	18"	2335
24"		24"	Rock	24"		24"	2342
30"	Rock	30"		30"		30"	Rock
36"		36"		36"		36"	
42"		42"		42"		42"	
48"		48"		48"		48"	
54"		54"		54"		54"	
60"		60"		60"		60"	
66"		66"		66"		66"	
72"		72"		72"		72"	
78"		78"		78"		78"	
84"		84"		84"		84"	
90"		90"		90"		90"	
96"		96"		96"		96"	

REMARKS:

VR 048

MORRISON KNUDSEN

BOREHOLE LOG

LOGGING CREW: N. Wanner
P. Trujillo
B. O'CONNOR

INSTRUMENT ID NO. Dur 06; #35625
PR022519

SHEET 18 OF 26 PAGE 18

DATE: 7/29/85

PROPERTY ID: Du-003

AREA:

NOTES: 1. ALL HOLES ARE 4" DIA. UNLESS OTHERWISE NOTED.
2. RECORD UNUSUAL CONDITIONS, SUCH AS THE PRESENCE OF WATER IN BOREHOLES AND DEPTH, CASING TYPE AND THICKNESS IF USED, CONCRETE CORES AND THICKNESS, OBSTRUCTIONS, UTILITIES, ETC., IN THE REMARKS SECTION.

67		68		69		70	
HOLE ID: 3+30, 18L		HOLE ID: 3+30, 14L		HOLE ID: 3+50, 10L		HOLE ID: 3+50, 17L	
TIME DRILLED:		TIME DRILLED:		TIME DRILLED:		TIME DRILLED:	
TIME LOGGED:		TIME LOGGED:		TIME LOGGED:		TIME LOGGED:	
SOIL TYPE:		SOIL TYPE:		SOIL TYPE:		SOIL TYPE:	
DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN
SURFACE	1718	SURFACE	1653	SURFACE	1746	SURFACE	1663
0"	2022	0"	1948	0"	1865	0"	2112
6"	3327	6"	2863	6"	2716	6"	3603
12"	4115	12"	3527	12"	2727	12"	4330
18"	Rock	~~18"~~ 15	3246	18"	2576	18"	Rock
24"		24"	Rock	24"	Rock	24"	
30"		30"		30"		30"	
36"		36"		36"		36"	
42"		42"		42"		42"	
48"		48"		48"		48"	
54"		54"		54"		54"	
60"		60"		60"		60"	
66"		66"		66"		66"	
72"		72"		72"		72"	
78"		78"		78"		78"	
84"		84"		84"		84"	
90"		90"		90"		90"	
96"		96"		96"		96"	

REMARKS:

VP.C.8

MORRISON KNUDSEN

BOREHOLE LOG

LOGGING CREW: N. Wanner
P. Trujillo
B. O'CONNOR

INSTRUMENT ID NO. Dur 06; #35625
PR022519

SHEET 19 OF 26 PAGE 19

DATE: 7/29/85

PROPERTY ID: Du - 003

AREA:

NOTES: 1. ALL HOLES ARE 4" DIA. UNLESS OTHERWISE NOTED.
2. RECORD UNUSUAL CONDITIONS, SUCH AS THE PRESENCE OF WATER IN BOREHOLES AND DEPTH, CASING TYPE AND THICKNESS IF USED, CONCRETE CORES AND THICKNESS, OBSTRUCTIONS, UTILITIES, ETC., IN THE REMARKS SECTION.

71		72		73		74	
HOLE ID: 3+50, 14L		HOLE ID: 3+70, 10L		HOLE ID: 3+70, 17L		HOLE ID: 3+70, 14L	
TIME DRILLED:		TIME DRILLED:		TIME DRILLED:		TIME DRILLED:	
TIME LOGGED:		TIME LOGGED:		TIME LOGGED:		TIME LOGGED:	
SOIL TYPE:		SOIL TYPE:		SOIL TYPE:		SOIL TYPE:	
DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN
SURFACE	1558	SURFACE	1627	SURFACE	1682	SURFACE	1452
0"	1747	0"	1700	0"	2112	0"	1574
6"	2393	6"	2372	6"	3533	6"	2224
12"	3330	~~12"~~ 8	2472	12"	3966	12"	2854
18"	Rock	18"	Rock	18"	2339	~~18"~~ 15	2977
24"		24"		24"	Rock	24"	Rock
30"		30"		30"		30"	
36"		36"		36"		36"	
42"		42"		42"		42"	
48"		48"		48"		48"	
54"		54"		54"		54"	
60"		60"		60"		60"	
66"		66"		66"		66"	
72"		72"		72"		72"	
78"		78"		78"		78"	
84"		84"		84"		84"	
90"		90"		90"		90"	
96"		96"		96"		96"	

REMARKS:

VR-04B

MORRISON KNUDSEN

BOREHOLE LOG

LOGGING CREW: N. Wanner
P. Trujillo
B. O'CONNOR

SHEET 20 OF 26 PAGE 20

DATE: 7/29/85

PROPERTY ID: DU - 003

INSTRUMENT ID NO. DUR 06; #35625
PR022519

AREA:

NOTES: 1. ALL HOLES ARE 4" DIA. UNLESS OTHERWISE NOTED.
2. RECORD UNUSUAL CONDITIONS, SUCH AS THE PRESENCE OF WATER IN BOREHOLES AND DEPTH, CASING TYPE AND THICKNESS IF USED, CONCRETE CORES AND THICKNESS, OBSTRUCTIONS, UTILITIES, ETC., IN THE REMARKS SECTION.

75		76		77		78	
HOLE ID: 3+90, 10L		HOLE ID: 3+90, 14L		HOLE ID: 3+90, 17L		HOLE ID: 4+10, 13L	
TIME DRILLED:		TIME DRILLED:		TIME DRILLED:		TIME DRILLED:	
TIME LOGGED:		TIME LOGGED:		TIME LOGGED:		TIME LOGGED:	
SOIL TYPE:		SOIL TYPE:		SOIL TYPE:		SOIL TYPE:	
DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN
SURFACE	1452	SURFACE	1527	SURFACE	1490	SURFACE	1466
0"	1452	0"	1675	0"	1769	0"	1578
6"	1920	6"	2265	6"	2420	6"	2163
12"	2327	12"	2694	12"	3176	12"	3063
18"	Rock	18"	3923	~~18"~~ 17	3796	18"	Rock
24"		~~24"~~ 22	3817	24"	Rock	24"	
30"		30"	Rock	30"		30"	
36"		36"		36"		36"	
42"		42"		42"		42"	
48"		48"		48"		48"	
54"		54"		54"		54"	
60"		60"		60"		60"	
66"		66"		66"		66"	
72"		72"		72"		72"	
78"		78"		78"		78"	
84"		84"		84"		84"	
90"		90"		90"		90"	
96"		96"		96"		96"	

REMARKS: Borehole #78 on common Boundary with DU-303

VP-048

MORRISON KNUDSEN

BOREHOLE LOG

LOGGING CREW: N. Wanner
P. Trujillo
B. O'CONNOR

INSTRUMENT ID NO. DUR 06; #35625
PR 022519

SHEET 21 OF 26 PAGE 21

DATE: 7/29/85

PROPERTY ID: Du - 003

AREA:

NOTES: 1. ALL HOLES ARE 4"DIA. UNLESS OTHERWISE NOTED.
2. RECORD UNUSUAL CONDITIONS, SUCH AS THE PRESENCE OF WATER IN BOREHOLES AND DEPTH, CASING TYPE AND THICKNESS IF USED, CONCRETE CORES AND THICKNESS, OBSTRUCTIONS, UTILITIES, ETC., IN THE REMARKS SECTION.

79		80		81			
HOLE ID: 4+10, 10L		HOLE ID: 4+00, 10L		HOLE ID: 4+10, 5L		HOLE ID:	
TIME DRILLED:		TIME DRILLED:		TIME DRILLED:		TIME DRILLED:	
TIME LOGGED:		TIME LOGGED:		TIME LOGGED:		TIME LOGGED:	
SOIL TYPE:		SOIL TYPE:		SOIL TYPE:		SOIL TYPE:	
DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN
SURFACE	1673	SURFACE	1642	SURFACE	1641	SURFACE	
0"	2034	0"	1604	0"	1780	0"	
6"	3531	6"	1965	6"	2295	6"	
12"	5527	12"	2550	12"	2608	12"	
~~18"~~ 17	5333	18"	2205	18"	2451	18"	
24"	Rock	24"	Rock	24"	Rock	24"	
30"		30"		30"		30"	
36"		36"		36"		36"	
42"		42"		42"		42"	
48"		48"		48"		48"	
54"		54"		54"		54"	
60"		60"		60"		60"	
66"		66"		66"		66"	
72"		72"		72"		72"	
78"		78"		78"		78"	
84"		84"		84"		84"	
90"		90"		90"		90"	
96"		96"		96"		96"	

REMARKS: Boreholes 79 + 81 on common boundary with Du - 303

VR-048

MORRISON KNUDSEN

BOREHOLE LOG

LOGGING CREW: Peter Twyllott
Brian O'Connor
Nancy Wanner

INSTRUMENT ID NO. DUR-06 #35625 PR 02251G
L2220 W/44-10

SHEET 22 OF 26 PAGE 22
DATE: 7-29-85
PROPERTY ID: DU-003
AREA:

NOTES: 1. ALL HOLES ARE 4"DIA. UNLESS OTHERWISE NOTED.
2. RECORD UNUSUAL CONDITIONS, SUCH AS THE PRESENCE OF WATER IN BOREHOLES AND DEPTH, CASING TYPE AND THICKNESS IF USED, CONCRETE CORES AND THICKNESS, OBSTRUCTIONS, UTILITIES, ETC., IN THE REMARKS SECTION.

82 HOLE ID: 0+22,10L		83 HOLE ID: 0+20,30L		84 HOLE ID: 0+20,70L		HOLE ID:	
TIME DRILLED:		TIME DRILLED:		TIME DRILLED:		TIME DRILLED:	
TIME LOGGED:		TIME LOGGED:		TIME LOGGED:		TIME LOGGED:	
SOIL TYPE:		SOIL TYPE:		SOIL TYPE:		SOIL TYPE:	
DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN
SURFACE	1286	SURFACE	1356	SURFACE	1343	SURFACE	
0"	1363	0"	1337	0"	1470	0"	
6"	1807	6"	1553	6"	2139	6"	
12"	2109	12"	2080	12"	2351	12"	
18"	Rock	~~18"~~ 17	2272	18"	Rock	18"	
24"		24"	Rock	24"		24"	
30"		30"		30"		30"	
36"		36"		36"		36"	
42"		42"		42"		42"	
48"		48"		48"		48"	
54"		54"		54"		54"	
60"		60"		60"		60"	
66"		66"		66"		66"	
72"		72"		72"		72"	
78"		78"		78"		78"	
84"		84"		84"		84"	
90"		90"		90"		90"	
96"		96"		96"		96"	

REMARKS:

MORRISON KNUDSEN

BOREHOLE LOG

LOGGING CREW: Peter Trujillo
Brian O'Connor
Nancy Wanner

SHEET 23 OF 26 PAGE ~~24~~ 23
DATE: 8-15-85
PROPERTY ID: DU-003
AREA:

INSTRUMENT ID NO. DUR-06 #35625 PR 022519
L2220 w/44-10

NOTES: 1. ALL HOLES ARE 4"DIA. UNLESS OTHERWISE NOTED.
2. RECORD UNUSUAL CONDITIONS, SUCH AS THE PRESENCE OF WATER IN BOREHOLES AND DEPTH, CASING TYPE AND THICKNESS IF USED, CONCRETE CORES AND THICKNESS, OBSTRUCTIONS, UTILITIES, ETC., IN THE REMARKS SECTION.

85		86		87		88	
HOLE ID: 2+93,20L		HOLE ID: 2+93,16L		HOLE ID: 2+93,09L		HOLE ID: 2+30,25L	
TIME DRILLED:		TIME DRILLED:		TIME DRILLED:		TIME DRILLED:	
TIME LOGGED:		TIME LOGGED:		TIME LOGGED:		TIME LOGGED:	
SOIL TYPE:		SOIL TYPE:		SOIL TYPE:		SOIL TYPE:	
DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN
SURFACE	1436	SURFACE	1410	SURFACE	1756	SURFACE	1654
0"	1588	0"	1568	0"	2049	0"	1868
6"	1988	6"	2164	6"	2765	6"	~~3060~~ 3030 nw
~~12"~~ 8	2255	12"	3165	12"	2933	12"	3646
18"	Rock	~~18"~~ 15	3524	18"	Rock	18"	Rock
24"		24"	Rock	24"		24"	
30"		30"		30"		30"	
36"		36"		36"		36"	
42"		42"		42"		42"	
48"		48"		48"		48"	
54"		54"		54"		54"	
60"		60"		60"		60"	
66"		66"		66"		66"	
72"		72"		72"		72"	
78"		78"		78"		78"	
84"		84"		84"		84"	
90"		90"		90"		90"	
96"		96"		96"		96"	

REMARKS:

MORRISON KNUDSEN

BOREHOLE LOG

LOGGING CREW: Peter Trujillo
Brian O'Connor
Nancy Wanner

SHEET ~~25~~ 24 OF 26 PAGE ~~25~~ 24

DATE: 8-15-85

PROPERTY ID: DU-003

INSTRUMENT ID NO. DUR-06 #35625 PR 022519
L2220 w/44-10

AREA:

NOTES: 1. ALL HOLES ARE 4"DIA. UNLESS OTHERWISE NOTED.
2. RECORD UNUSUAL CONDITIONS, SUCH AS THE PRESENCE OF WATER IN BOREHOLES AND DEPTH, CASING TYPE AND THICKNESS IF USED, CONCRETE CORES AND THICKNESS, OBSTRUCTIONS, UTILITIES, ETC., IN THE REMARKS SECTION.

89		90		91		92	
HOLE ID: 0+40,40L		HOLE ID: 0+40, 50L		HOLE ID: 0+40,35L		HOLE ID: 0+35,60L	
TIME DRILLED:		TIME DRILLED:		TIME DRILLED:		TIME DRILLED:	
TIME LOGGED:		TIME LOGGED:		TIME LOGGED:		TIME LOGGED:	
SOIL TYPE:		SOIL TYPE:		SOIL TYPE:		SOIL TYPE:	
DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN	DEPTH	COUNTS/.1MIN
SURFACE	1385	SURFACE	1391	SURFACE	1411	SURFACE	1549
0"	1436	0"	1452	0"	1490	0"	1615
6"	1561	6"	1777	6"	1467	6"	2620
12"	1699	12"	Rock	12"	2546	~~12"~~ 7"	2109
18"	Rock	18"		18"	3148	18"	Rock
24"		24"		24"	3758	24"	
30"		30"		30"		30"	
36"		36"		36"		36"	
42"		42"		42"		42"	
48"		48"		48"		48"	
54"		54"		54"		54"	
60"		60"		60"		60"	
66"		66"		66"		66"	
72"		72"		72"		72"	
78"		78"		78"		78"	
84"		84"		84"		84"	
90"		90"		90"		90"	
96"		96"		96"		96"	

REMARKS:

Soil Sample Analysis Du- 003

Purpose: REA

Sample #	Area	Coordinates	Depth	pCi/g (First Count)	pCi/g (Estimated Final)
-SA- 504.		0+70, 18L	0-6"	0.5	1.0
505		1+20, 10L	0-6"	0.9	1.8
506		1+41, 40L	0-6"	1.8	3.6

MORRISON-KNUDSEN COMPANY, INC.

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