LTSM007961

DOE/OR/21548-923
CONTRACT NO. DE-AC05-86OR21548

CLOSEOUT REPORT FOR FINAL SITE WALKOVERS

WELDON SPRING SITE REMEDIAL ACTION PROJECT
WELDON SPRING, MISSOURI

OCTOBER 2002 **REV. 0**

RECORD

U.S. Department of Energy
Oak Ridge Operations Office
Weldon Spring Site Remedial Action Project

Prepared by MK-Ferguson Company and Jacobs Engineering Group

510.25
~~LWEL02.05~~

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MORRISON KNUDSEN CORPORATION MK-FERGUSON GROUP Weldon Spring Site Remedial Action Project Contract No. DE-AC05-86OR21548	
	Rev. No. 0
PLAN TITLE: Closeout Report for Final Site Walkovers	

APPROVALS

Environmental Safety and Health Manager	07/01/02 Date
Data Administration Coordinator	7/1/02 Date
Engineering Manager	7-2-02 Date
Project Quality Manager	7/2/02 Date
Project Director	7/3/02 Date

Walkover Survey Results
In Areas Coordinates
Designated W-1 through W-11

On March 23, 2002, a strip of land 40 feet wide was surveyed from west of coordinate W-1 to west of coordinate W-2. No areas greater than 1.5 times background were detected. Survey instrumentation and other pertinent information can be found on survey sheet: 050AZZ01, 5 of 16.

On March 14, 2002, a strip of land 60 feet wide was surveyed from west of coordinate W-2 to west of coordinate W-3. No areas greater than 1.5 times background were detected. Survey instrumentation and other pertinent information can be found on survey sheet: Polygon F, 1 of 15.

On March 14, 2002, a strip of land 80 feet wide was surveyed from west of coordinate W-3 to west of coordinate W-4. No areas greater than 1.5 times background were detected. Survey instrumentation and other pertinent information can be found on survey sheet: Polygon F, 1 of 15.

On March 14, 2002, a strip of land 20 feet wide was surveyed from west of coordinate W-4 to west of coordinate W-5. No areas greater than 1.5 times background were detected. Survey instrumentation and other pertinent information can be found on survey sheet: Polygon F, 1 of 15.

On March 14, 2002, a strip of land 20 feet wide was surveyed from west of coordinate W-5 to west of coordinate W-6. No areas greater than 1.5 times background were detected. Survey instrumentation and other pertinent information can be found on survey sheet: Polygon F, 1 of 15.

On March 14, 2002, a strip of land 20 feet wide was surveyed from west of coordinate W-6 to west of coordinate W-7. No areas greater than 1.5 times background were detected. Survey instrumentation and other pertinent information can be found on survey sheet: Polygon F, 1 of 15.

On March 14, 2002, a strip of land 20 feet wide was surveyed from west of coordinate W-7 to west of coordinate W-8. No areas greater than 1.5 times background were detected. Survey instrumentation and other pertinent information can be found on survey sheet: Polygon F, 1 of 15.

On March 23, 2002, a strip of land 20 feet wide was surveyed from west of coordinate W-8 to west of coordinate W-9. No areas greater than 1.5 times background were detected. Survey instrumentation and other pertinent information can be found on survey sheet: 050AZZ01, 5 of 16.

On March 23, 2002, a strip of land 20 feet wide was surveyed from west of coordinate W-9 to west of coordinate W-10. No areas greater than 1.5 times background were detected. Survey instrumentation and other pertinent information can be found on survey sheet: 050AZZ01, 5 of 16.

On March 23, 2002, a strip of land 20 feet wide was surveyed from west of coordinate W-10 to west of coordinate W-11. No areas greater than 1.5 times background were detected. Survey instrumentation and other pertinent information can be found on survey sheet: 050AZZ01, 5 of 16.

DOE/OR/21548-923

Weldon Spring Site Remedial Action Project

Closeout Report For Final Site Walkovers

Revision 0

October 2002

Prepared by

MK-FERGUSON COMPANY
and
JACOBS ENGINEERING GROUP
7295 Highway 94 South
St. Charles, Missouri 63304

for the

U.S. DEPARTMENT OF ENERGY
Oak Ridge Operations Office
Under Contract DE-AC05-86OR21548

ABSTRACT

This report summarizes the results of the final radiological walkovers conducted at selected areas within the chemical plant boundary to ensure that the potential for residual radiological soil contamination is As Low As Reasonably Achievable (ALARA). Areas to be surveyed, action levels, and details how to address areas that exceed these action levels are established in the *Final Site Walkover Plan*, Rev. 0 (Ref. 1). Final walkover survey data verify that the established goals were achieved.

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1. INTRODUCTION

1.1 Purpose

The purpose of this report is to present the results of the final walkover surveys.

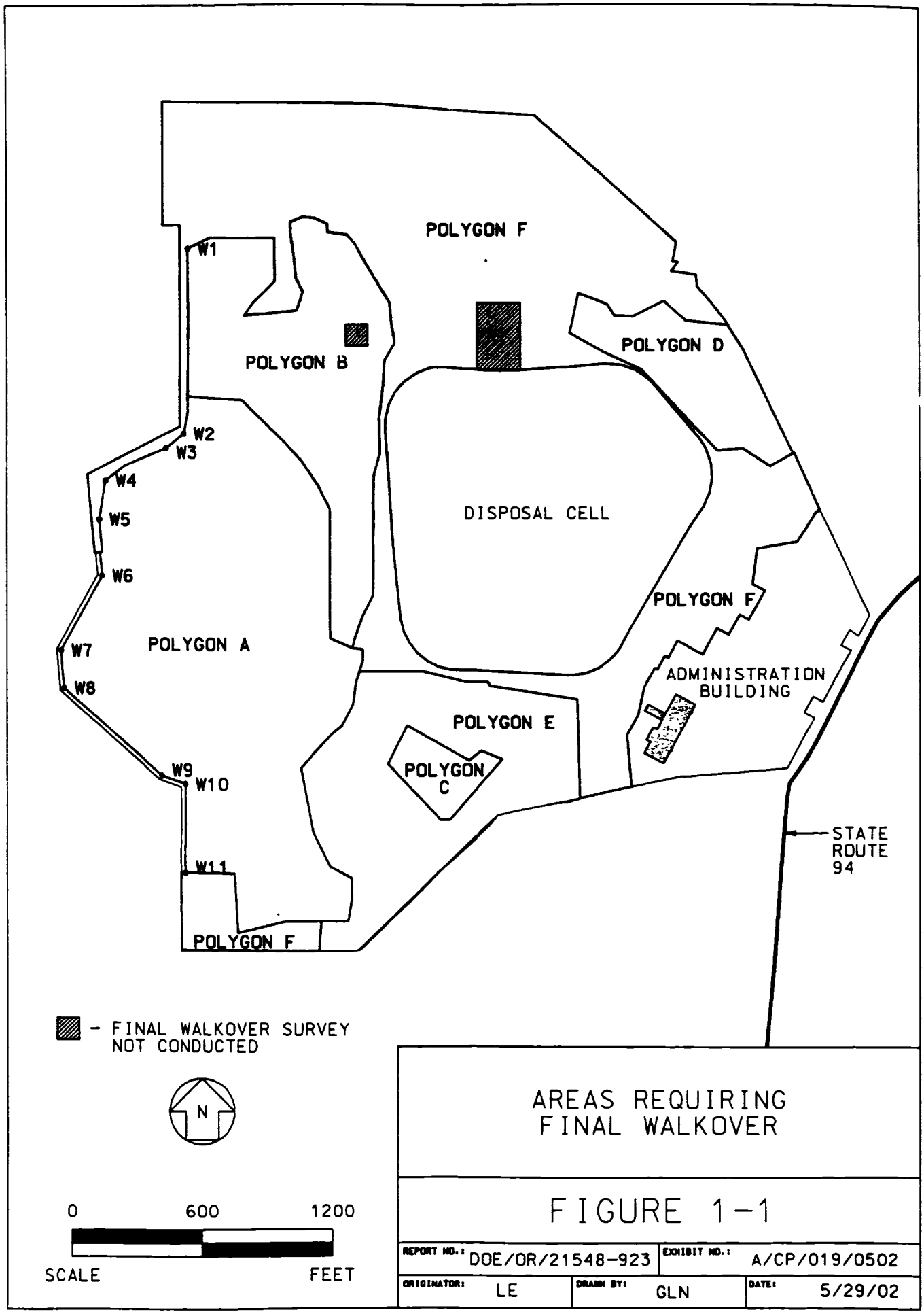
1.2 Scope

This report details the results of all final walkover surveys conducted upon completion of remediation within the chemical plant boundaries of the Weldon Spring Site Remedial Action Project (WSSRAP). The areas within the chemical plant boundaries of the WSSRAP that were subject to final walkover surveys are identified in Figure 1-1. To facilitate field implementation and documentation manageability, areas were designated as polygons as they became available. In addition, an area along the western edge of the site boundary was not designated as a polygon, but was subject to final walkover surveys. This area is bounded by the site boundary to the west and by eleven survey coordinates, labeled W-1 through W-11 to the east, and is also shown in Figure 1-1. Each polygon was further subdivided into 100-foot grid sections for ease of reference in the field.

1.3 Background

Final walkover surveys were conducted upon completion of remediation activities within the chemical plant boundaries of the WSSRAP. Remediation consisted of excavation of contaminated soils and removal of any remaining facilities, structures, and roads. Following remediation, confirmation activities took place in accordance with the *Record of Decision for Remedial Action at the Chemical Plant Area of the Weldon Spring Site* (ROD) (Ref. 2) and all areas were within established criteria.

Once all areas were confirmed, they were released back to the subcontractor for backfilling and/or regrading in order to achieve final design grades. Once final grades were achieved, walkover surveys were conducted where applicable using the Ludlum Model 44-10 (2X2) Sodium Iodide (NaI) Detector.



AREAS REQUIRING FINAL WALKOVER

FIGURE 1-1

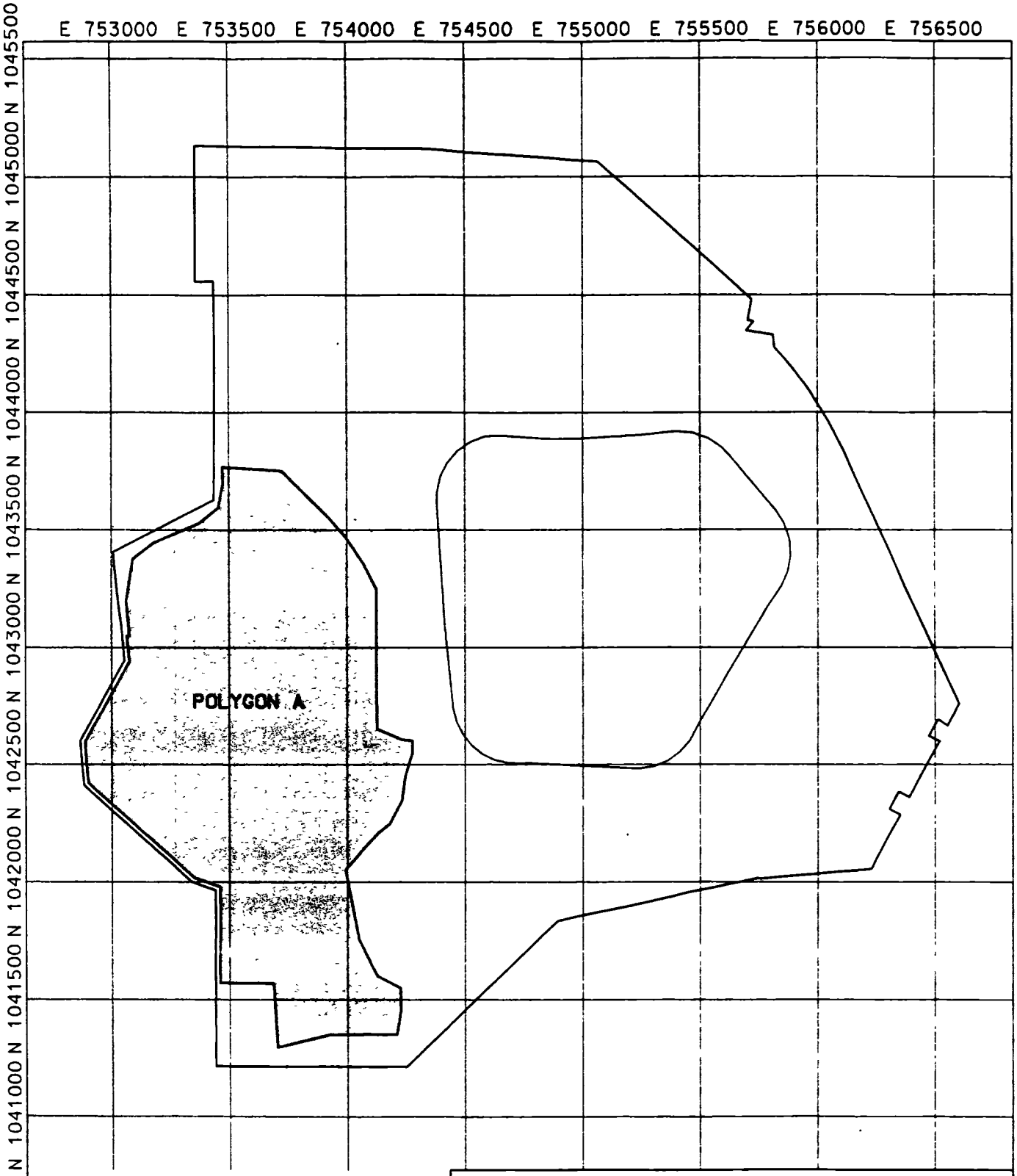
REPORT NO.: DOE/OR/21548-923		EXHIBIT NO.: A/CP/019/0502	
ORIGINATOR: LE	DRAWN BY: GLN	DATE: 5/29/02	

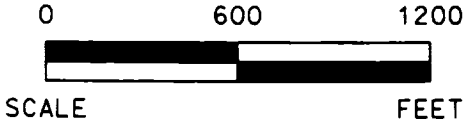
2. WALKOVER LOCATIONS

Areas within the chemical plant boundaries that would receive final walkover surveys were determined by the following criteria as detailed in the *Final Site Walkover Plan* (Ref. 1).

- Areas which are at final grade but have not undergone documented walkover surveys as part of soil characterization or confirmation efforts.
- Areas, remediated or not remediated, which have been subject to further excavation following characterization walkovers or final confirmation and where the cut surface is considered to be at final grade.
- Areas now considered to be at final grade which have received fill material (represented at surface) from on-site soil sources.
- On-site drainageways considered to be at final grade but in which significant erosion has exposed surfaces not previously walked over.
- Areas which may have been recontaminated since reaching final grade.

The actual areas that received final walkovers were subdivided into six polygons, labeled A through F, and one additional area along the western edge of the chemical plant site identified by points W-1 through W-11. All seven areas are identified in Figure 1-1. Individual areas are shown on Figures 2-1 through 2-7.





POLYGON A

FIGURE 2-1

REPORT NO.: DOE/OR/21548-923		EXHIBIT NO.: A/CP/020/0502	
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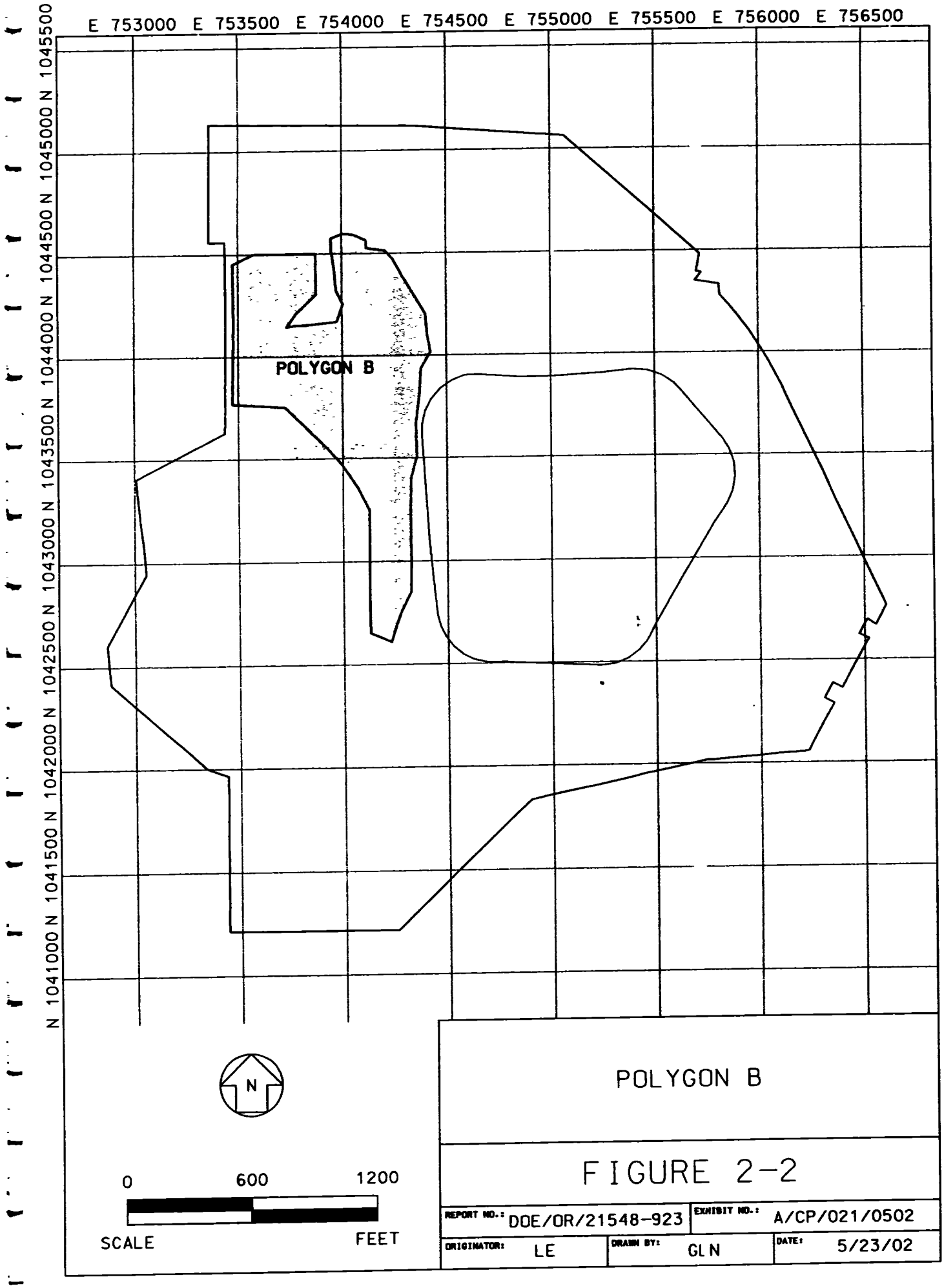
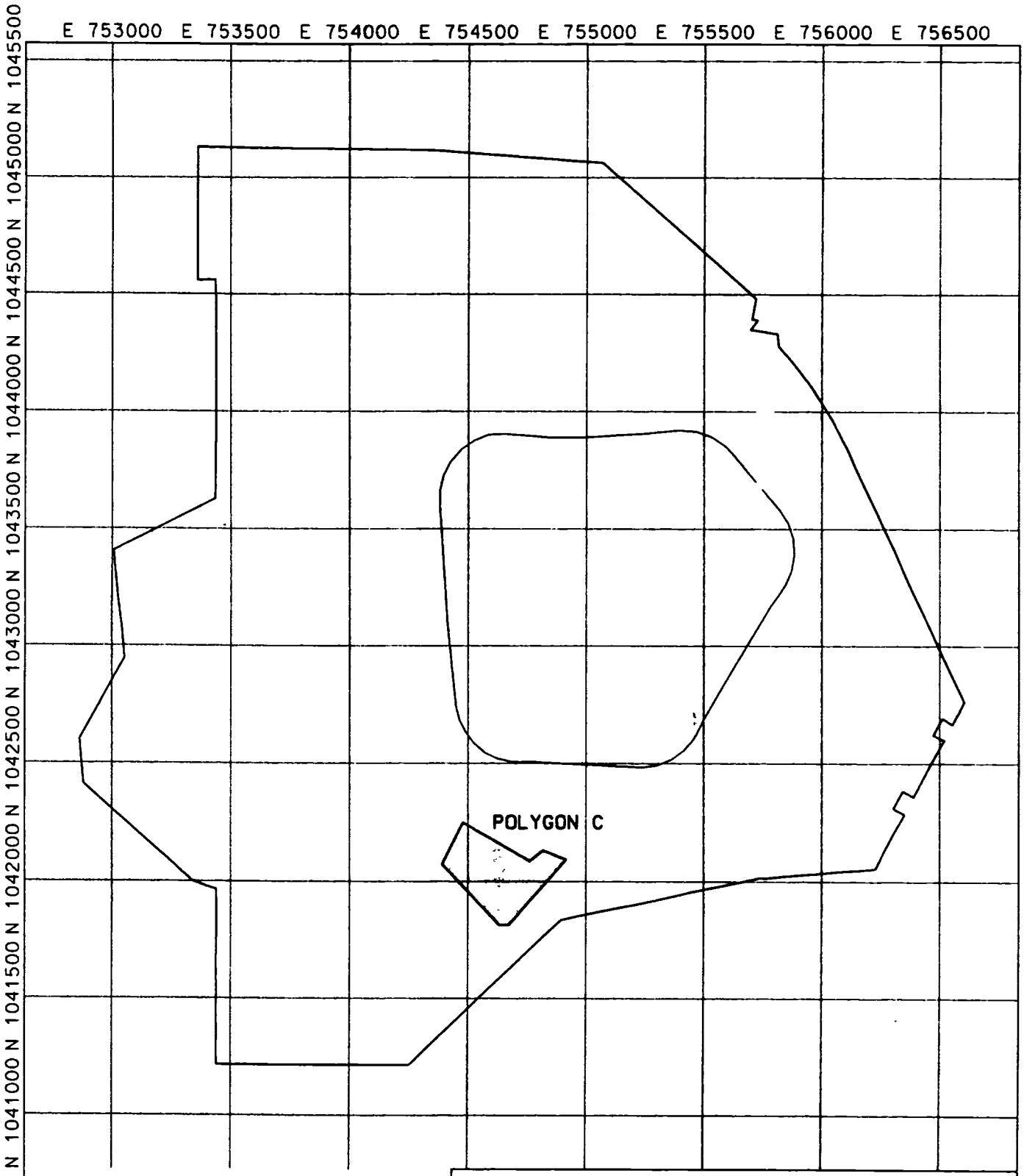

E 753000
E 753500
E 754000
E 754500
E 755000
E 755500
E 756000
E 756500
N 1045500
N 1045000
N 1044500
N 1044000
N 1043500
N 1043000
N 1042500
N 1042000
N 1041500
N 1041000
POLYGON B
N
0
600
1200
SCALE
FEET
POLYGON B
FIGURE 2-2
REPORT NO.: DOE/OR/21548-923
EXHIBIT NO.: A/CP/021/0502
ORIGINATOR: LE
DRAWN BY: GLN
DATE: 5/23/02



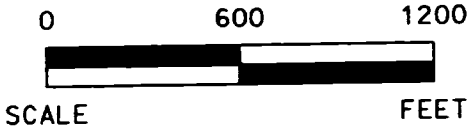
0 600 1200

SCALE FEET

POLYGON C

FIGURE 2-3

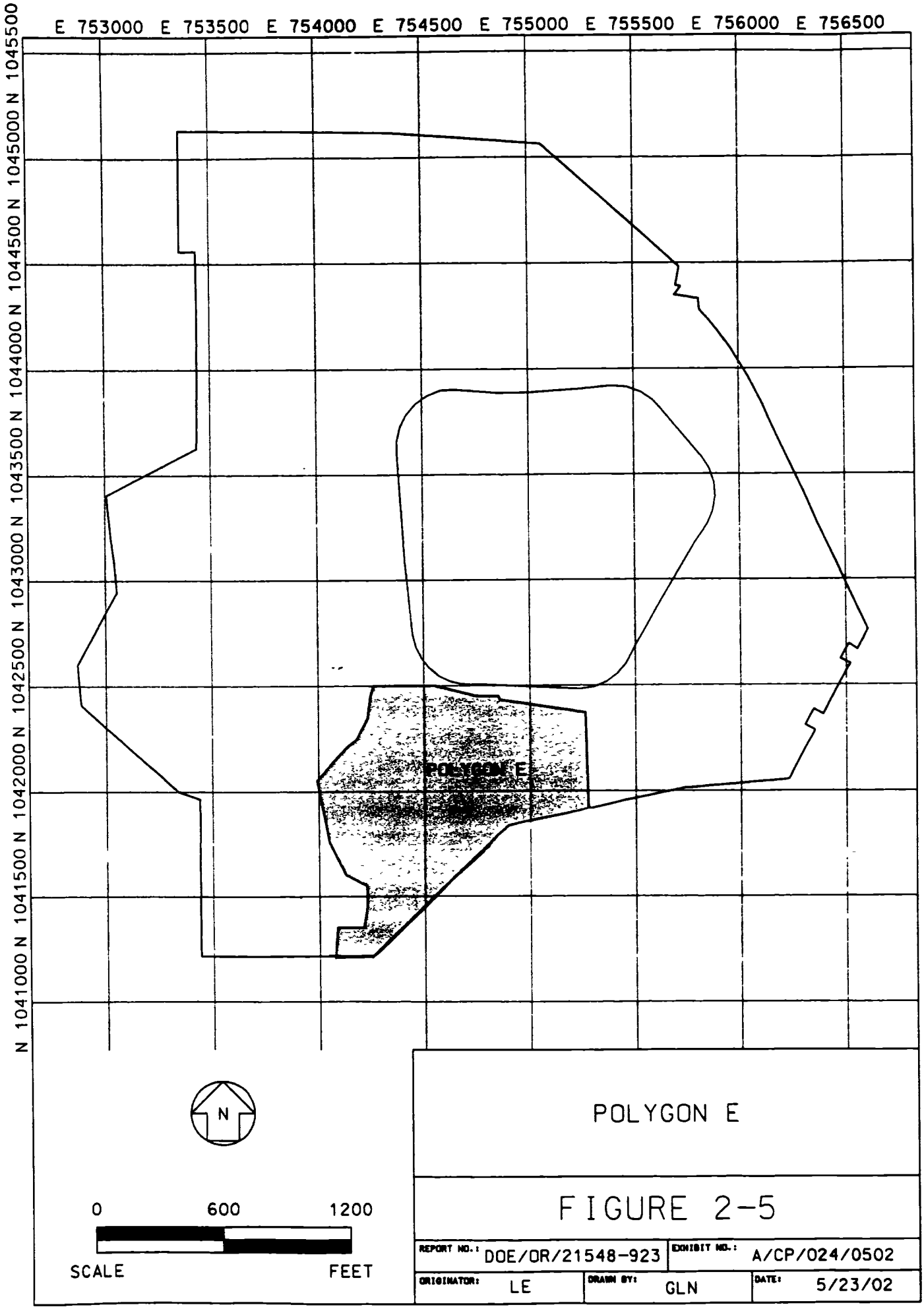
REPORT NO.: DOE/OR/21548-923		EXHIBIT NO.: A/CP/022/0502	
ORIGINATOR: LE	DRAWN BY: GLN	DATE: 5/23/02	



POLYGON D

FIGURE 2-4

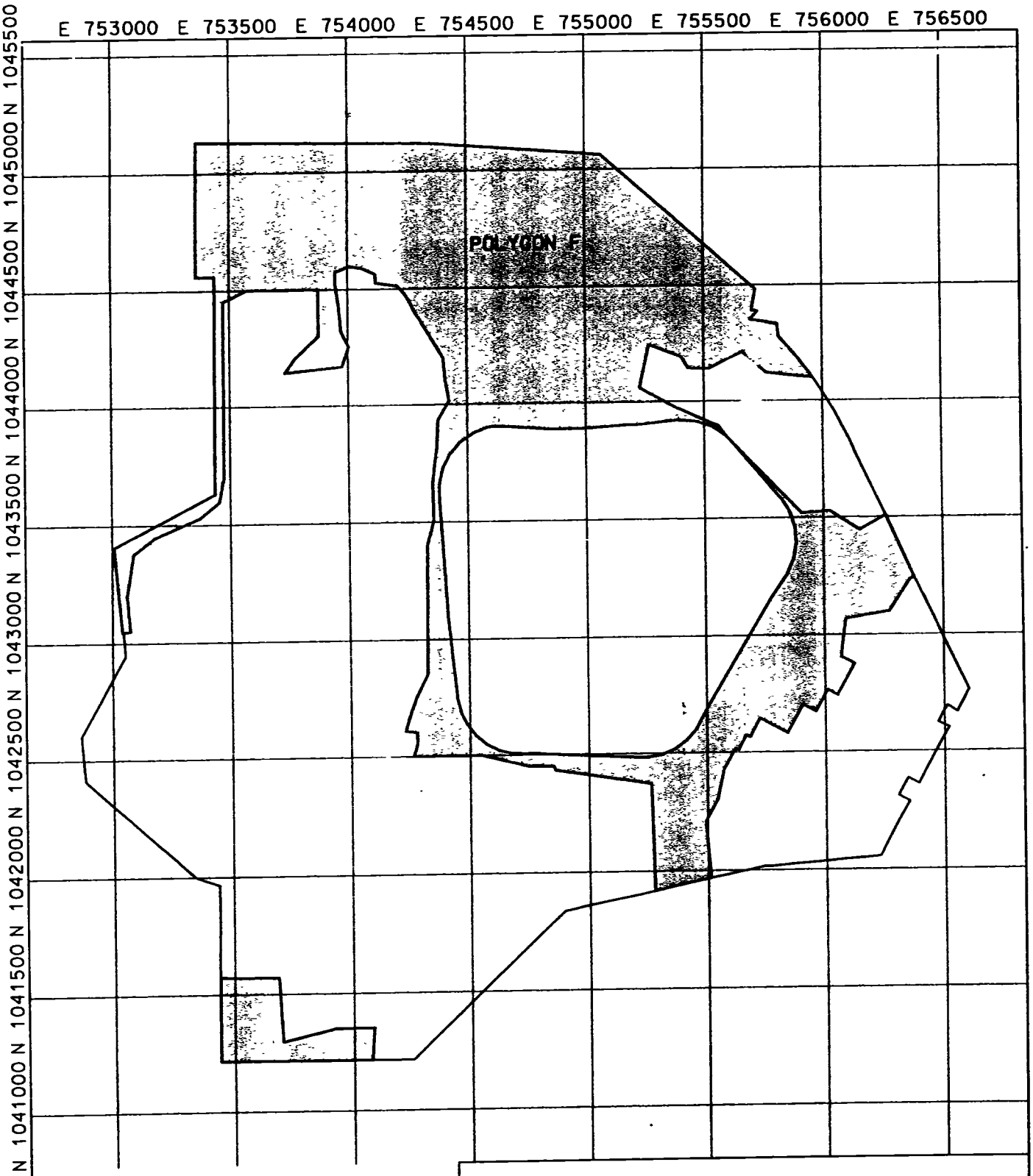
REPORT NO.: DOE/OR/21548-923		EXHIBIT NO.: A/CP/023/0502	
ORIGINATOR: LE	DRAWN BY: GLN	DATE: 5/23/02	



POLYGON E

FIGURE 2-5

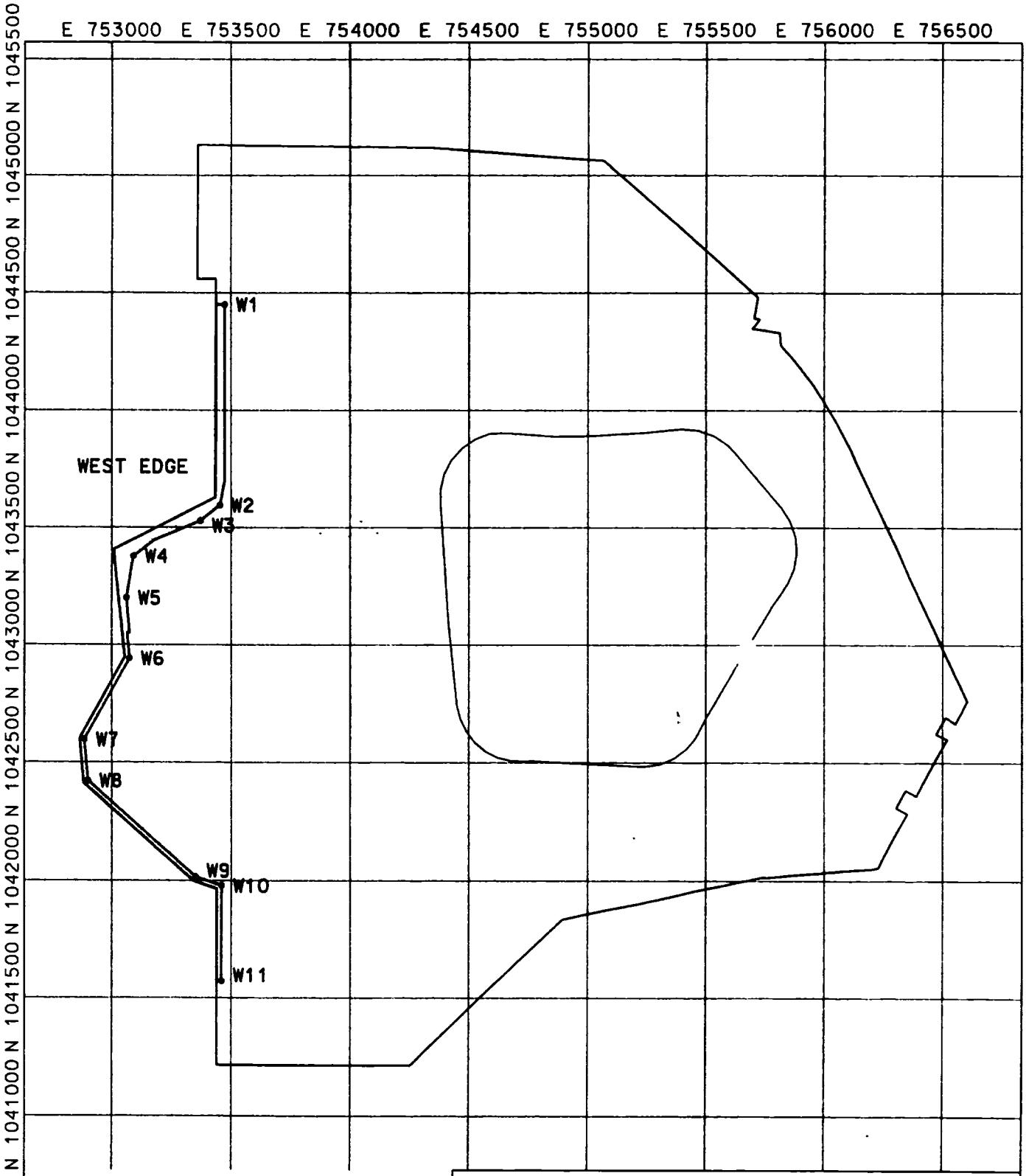
REPORT NO.: DOE/OR/21548-923		EXHIBIT NO.: A/CP/024/0502	
ORIGINATOR: LE	DRAWN BY: GLN	DATE: 5/23/02	

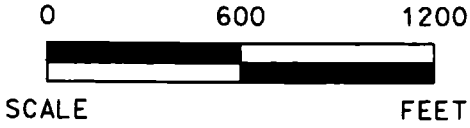


POLYGON F

FIGURE 2-6

REPORT NO.: DOE/OR/21548-923		EXHIBIT NO.: A/CP/025/0502	
ORIGINATOR: LE	DRAWN BY: GLN	DATE: 5/23/02	





WEST EDGE

FIGURE 2-7

REPORT NO.: DOE/OR/21548-923		EXHIBIT NO.: A/CP/026/0502	
ORIGINATOR: LE	DRAWN BY: GLN	DATE: 5/23/02	

3. WALKOVER FIELD SURVEYS

3.1 Walkover Surveys

Areas requiring final walkovers were delineated in the field by surveyed stakes to define their boundaries and provide reference points for the technicians. Walkover surveys were conducted using the Ludlum Model 44-10 (2X2) Sodium Iodide (NaI) Detector as directed in ES&HDI-150/0. Walkover results were documented on forms provided to the technicians and include meter and detector model numbers and serial numbers, calibration due date, survey date and time, name(s) of surveyors, instrument background, survey results, and other pertinent comments. These forms are presented in Appendix A.

An action level of 1.5 times background instrument reading was applied to identify areas requiring further evaluation. Areas exceeding this level were to be delineated in the field and marked with paint or flags so that soil samples could be collected as detailed in the *Final Site Walkover Plan* (Ref. 1). Samples would be analyzed for Ra-226, Ra-228, Th-230, Th-232, and U-238.

3.2 Soil Samples

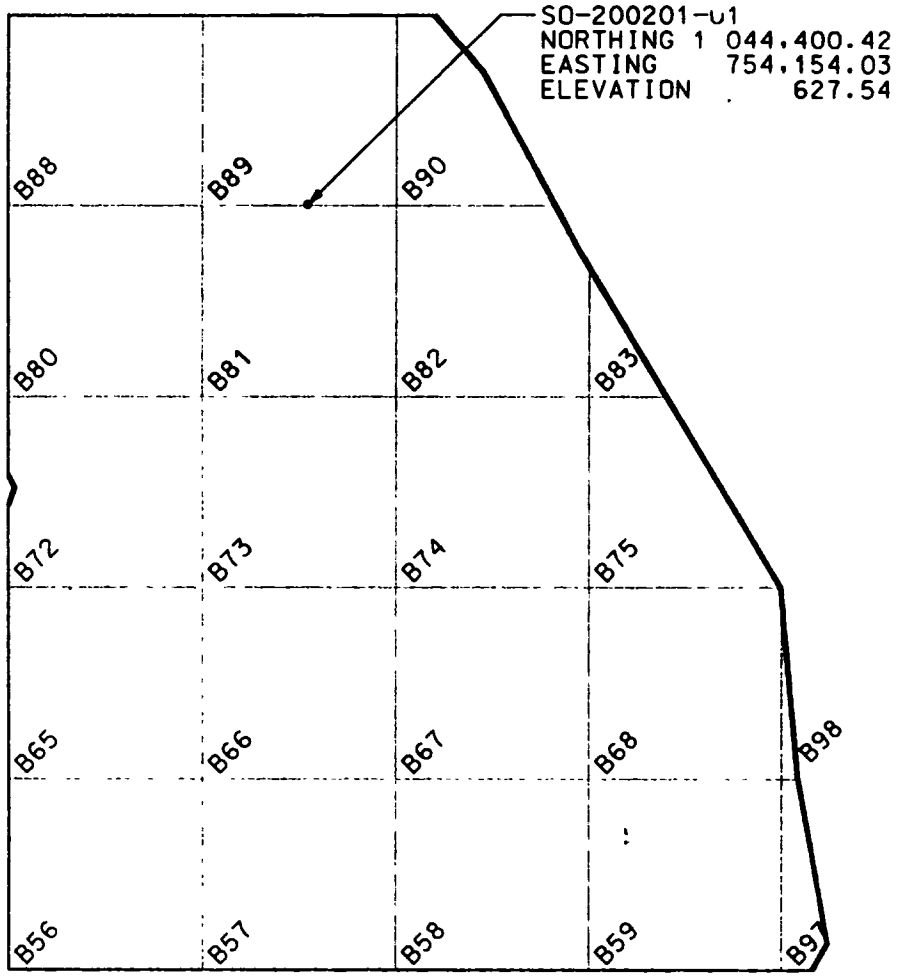
One area was identified as having activity greater than 1.5 times background and a soil sample was collected in that area. The area was located in Polygon B and the collected sample was identified as SO-200201-01. See Figure 3-1 for actual sample location. Sample results are below criteria, therefore the area was allowed to remain in place. Analytical results for sample SO-2000201-01 are presented in Table 3-1.

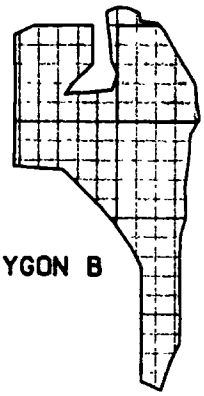
Table 3-1 Analytical Results for SO-200201-01

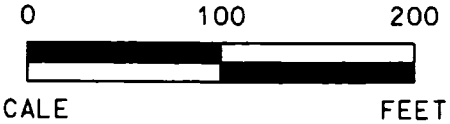
Parameter	ALARA[a] Standard *	Criteria Standard *	Actual Concentration
Ra-226	5.0 pCi/g	6.2 pCi/g	1.70 pCi/g
Ra-228	5.0 pCi/g	6.2 pCi/g	1.05 pCi/g
Th-230	5.0 pCi/g	6.2 pCi/g	1.63 pCi/g
Th-232	5.0 pCi/g	6.2 pCi/g	1.08 pCi/g
U-238	30.0 pCi/g	120.0 pCi/g	82.95 pCi/g

(a) ALARA = As Low As Reasonably Achievable
* Source: *Record of Decision for Remedial Action at the Chemical Plant Area of the Weldon Spring Site* (Ref. 2).

Radiological analyses for the soil sample were conducted at the on-site laboratory in accordance with the *Project Management Contractor Quality Assurance Program* (Ref. 3) and the *Environmental Quality Assurance Project Plan* (EQAPjP) (Ref. 4).







LOCATION OF SAMPLE
SO-200201-01

FIGURE 3-1

REPORT NO.: DOE/OR/21548-923		EXHIBIT NO.: A/CP/027/0502	
ORIGINATOR: LE	DRAWN BY: GLN	DATE: 5/23/02	

3.3 Non-Soil Debris

Any non-soil debris from the Weldon Spring Ordnance Works or Chemical Plant operations remaining on the ground surface was radiologically surveyed to determine whether it met DOE Order 5400.5 (Chapter IV.4) criteria for unrestricted use. Any debris which exceeded criteria for release for unrestricted use was considered contaminated and was properly disposed of in an off-site licensed facility operated by U.S. Ecology and located in Grand View, Idaho.

4. SUMMARY OF FINAL WALKOVER RESULTS

The final walkover surveys were conducted between 09/01/00 and 03/23/02. All areas surveyed yielded results less than 1.5 times background with the exception of one location in Polygon B which is discussed in Section 3.2. A summary of final walkover survey results is presented in Table 4-1.

Two small areas, one in Polygon B and one in Polygon F, were not surveyed due to inaccessibility. The area in Polygon B encompassed a swampy parcel of ground and the area in Polygon F was at the Train 3 water treatment facility, which was covered with a gravel pad. Both areas are identified in Figure 1-1 and on the appropriate walkover forms in Appendix A.

Additionally, final walkover surveys were not conducted at Polygon C. Between the time that Polygon C was developed and the time the polygon was ready for final walkover surveys, a larger area surrounding the polygon was determined to be at final grade. Rather than develop a new polygon to surround the original Polygon C, Polygon E was created to encompass both areas. Therefore, Polygon C was superceded by Polygon E.

Table 4-1 Final Walkover Summary

POLYGON	DATE(S) SURVEYED	FIELD BACKGROUND RANGE (CPM)	ALL AREAS < 1.5 TIMES BACKGROUND?	RESULTS > ALARA	RESULTS > CRITERIA
A	09/01/00 09/05/00 09/06/00 09/07/00 09/08/00 09/09/00 09/10/00 09/11/00 09/12/00 09/13/00 09/14/00 09/15/00 09/18/00 03/09/01 03/10/01 03/11/01 03/19/01 01/09/02 01/16/02 03/06/02 03/12/02 03/23/02	8,000 - 10,527	YES	0	0
B	09/21/00 09/22/00 09/28/00 09/29/00 09/30/00 10/01/00 10/03/00 03/09/01 03/10/01 03/11/01 08/24/01 03/08/02 03/10/02 03/11/02 03/12/02	8,000 - 10,956	NO	1	0
C	(Superceded by Polygon E)	---	---	---	---
D	03/06/01 03/07/01	7,200 - 7,800	YES	0	0
E	10/23/01 10/27/01 10/28/01 10/29/01 11/03/01 11/04/01 03/13/02 03/14/02	10,176 - 10,500	YES	0	0
F	02/07/02 02/08/02 02/11/02 02/12/02 02/13/02 02/14/02 02/15/02 02/23/02 02/24/02 02/25/02 03/06/02 03/07/02 03/10/02 03/11/02 03/12/02 03/13/02 03/14/02	9,000 - 10,500	YES	0	0
WEST AREA	3/14/02 3/23/02	9,221 - 10,500	YES	0	0

Final results generated from final walkover survey activities indicated that the potential for residual radiological soil contamination is as low as reasonably achievable (ALARA).

5. QUALITY ASSURANCE

Data verification, review, and validation were conducted in accordance with ES&H 4.9.1, *Environmental Monitoring Data Verification*, and ES&H 1.1.7, *Environmental Data Review and Above Normal Reporting*. No quality control samples were collected during final site walkover activities.

6. REFERENCES

1. MK-Ferguson and Jacobs Engineering Group. *Final Site Walkover Plan*, Rev 0. DOE/OR/21548-865. Prepared for the U.S. Department of Energy, Oak Ridge Field Office. St. Charles, MO. July 2000.

2. Department of Energy. *Record of Decision for Remedial Action at the Chemical Plant Area of the Weldon Spring Site.* DOE/OR/21548-376. Oak Ridge Field Office. St. Charles, MO. September 1993.

3. MK-Ferguson and Jacobs Engineering Group. *Project Management Contractor Quality Assurance Program,* Rev. 3. DOE/OR/21548-506. Prepared for the U.S. Department of Energy, Oak Ridge Field Office. St. Charles, MO. November 2000.

4. MK-Ferguson and Jacobs Engineering Group. *Environmental Quality Assurance Project Plan*, Rev. 5. DOE/OR/21548-352. Prepared for the U.S. Department of Energy, Oak Ridge Field Office. St. Charles, MO. November 2000.

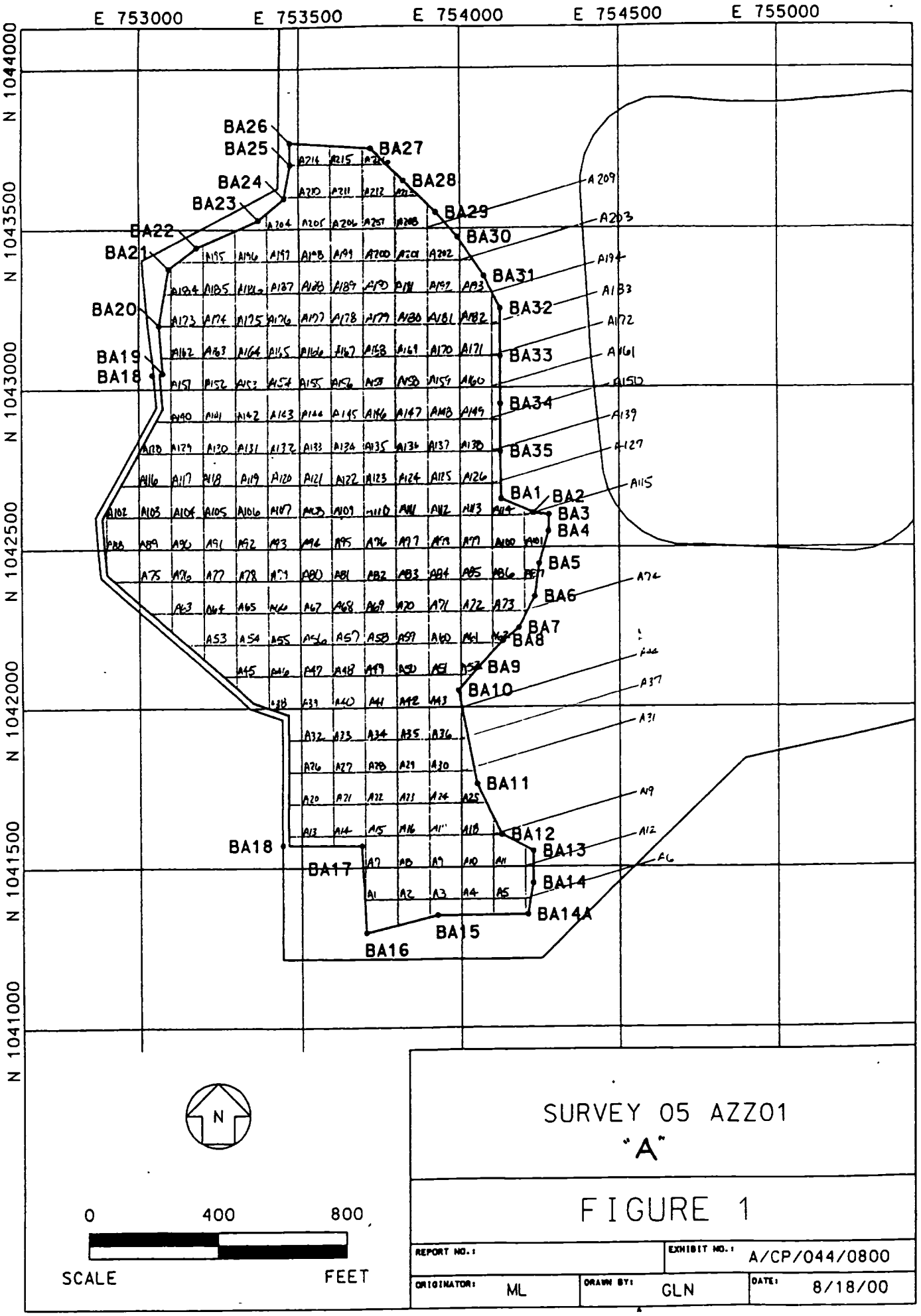
PROCEDURES

ES&HDI-150/0 *Use of Ludlum Model 44-10 (2x2) and 44-2 (1x1) NaI Detectors*
ES&H 1.1.7 *Environmental Data Review and Above Normal Reporting*
ES&H 4.9.2 *Environmental Monitoring Data Verification*

ACRONYMS

ALARA	as low as reasonably achievable
CPM	counts per minute
EQAPjP	Environmental Quality Assurance Project Plan
ES&H	Environmental Safety and Health
IOC	Interoffice Correspondence
NaI	sodium iodide
WSSRAP	Weldon Spring Site Remedial Action Project

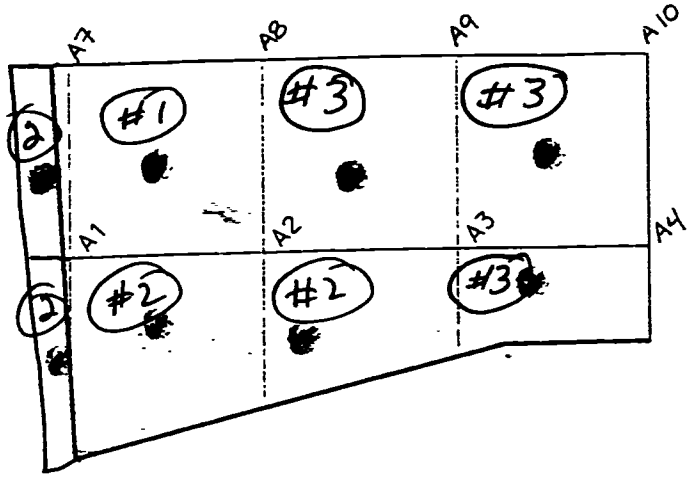
APPENDIX A
Final Site Walkover Survey Forms

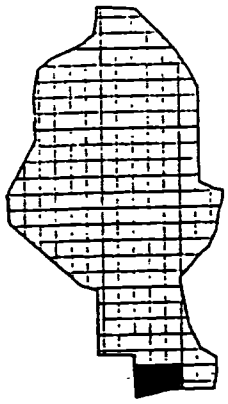


SURVEY 05 AZZ01
"A"

FIGURE 1

REPORT NO.:		EXHIBIT NO.:	A/CP/044/0800
ORIGINATOR: ML	DRAWN BY: GLN	DATE:	8/18/00





0 100 200

SCALE FEET

METER MODEL # : 2221

DETECTOR MODEL # : 2x2 5"

METER SERIAL # : #1910

DETECTOR SERIAL # : #5224

CALIBRATION DUE : 8-2-01

CALIBRATION DUE : 2-2-01

SURVEY DATE/TIME : 9-6-00

FIELD BKG. : 10241

SURVEYOR(S) : TONY LKEZIC, GEORGE HAMRA

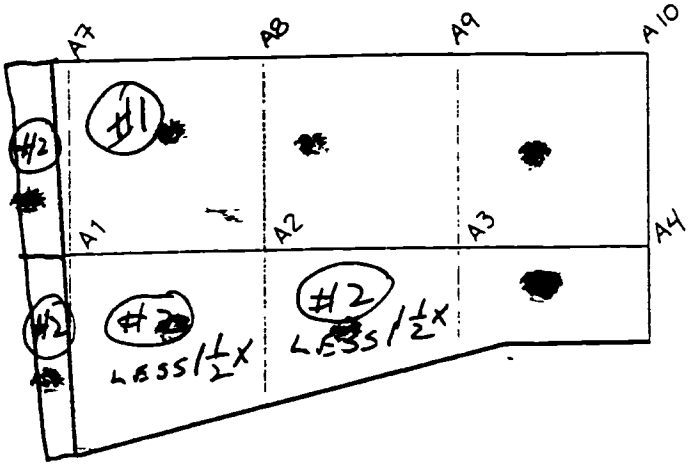
COMMENTS : Q-9697

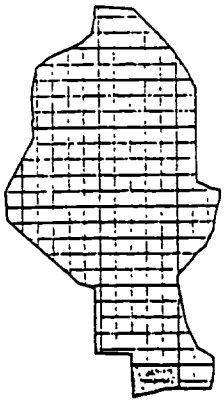
#3

FINAL SITE WALKOVER
SURVEY 050AZZ01

1 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/045/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	





0 100 200

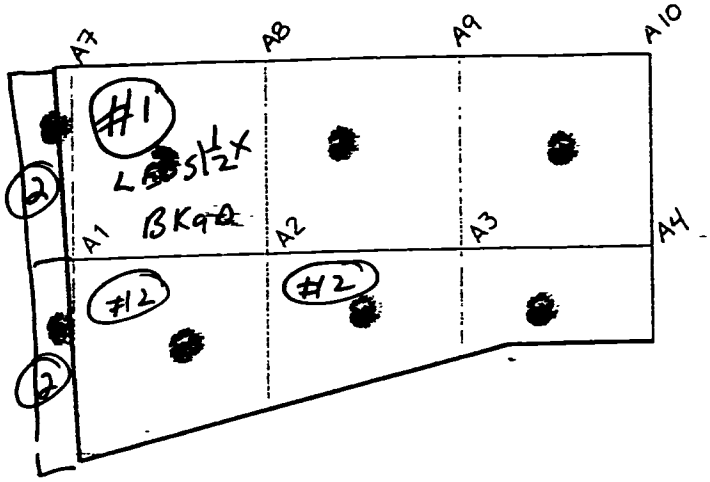
SCALE FEET

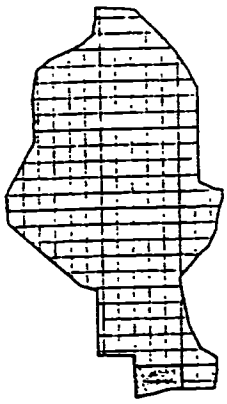
METER MODEL # :	2221	DETECTOR MODEL # :	2x2" 5"
METER SERIAL # :	#1910	DETECTOR SERIAL # :	#5774
CALIBRATION DUE :	8-2-01	CALIBRATION DUE :	2-2-01
SURVEY DATE/TIME :	9-5-00	FIELD BKG. :	10527
SURVEYOR(S) :	TONY LUKSEZIC, D. ROZNOVSKY		
COMMENTS :	Q-9560		

#2 FINAL SITE WALKOVER SURVEY 050AZZ01

1 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/045/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	





0 100 200

SCALE FEET

METER MODEL # : 2221 DETECTOR MODEL # : 2X2"5"

METER SERIAL # : #1910 DETECTOR SERIAL # : #5774

CALIBRATION DUE : 8-2-01 CALIBRATION DUE : 2-2-01

SURVEY DATE/TIME : 9-1-00 FIELD BKG. : 10,002

SURVEYOR(S) : TONY LUKGZIC, JAMIE BUSHMAN

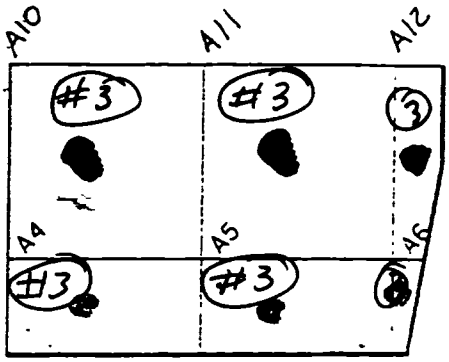
COMMENTS : "Q" - 9924

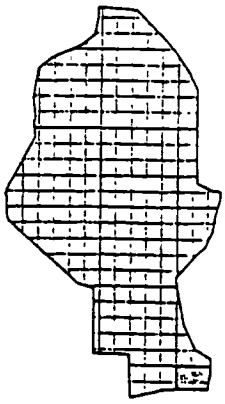
#1

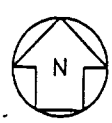
FINAL SITE WALKOVER
SURVEY 050AZZ01

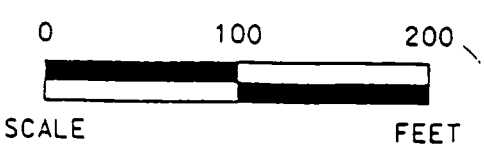
1 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/045/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	









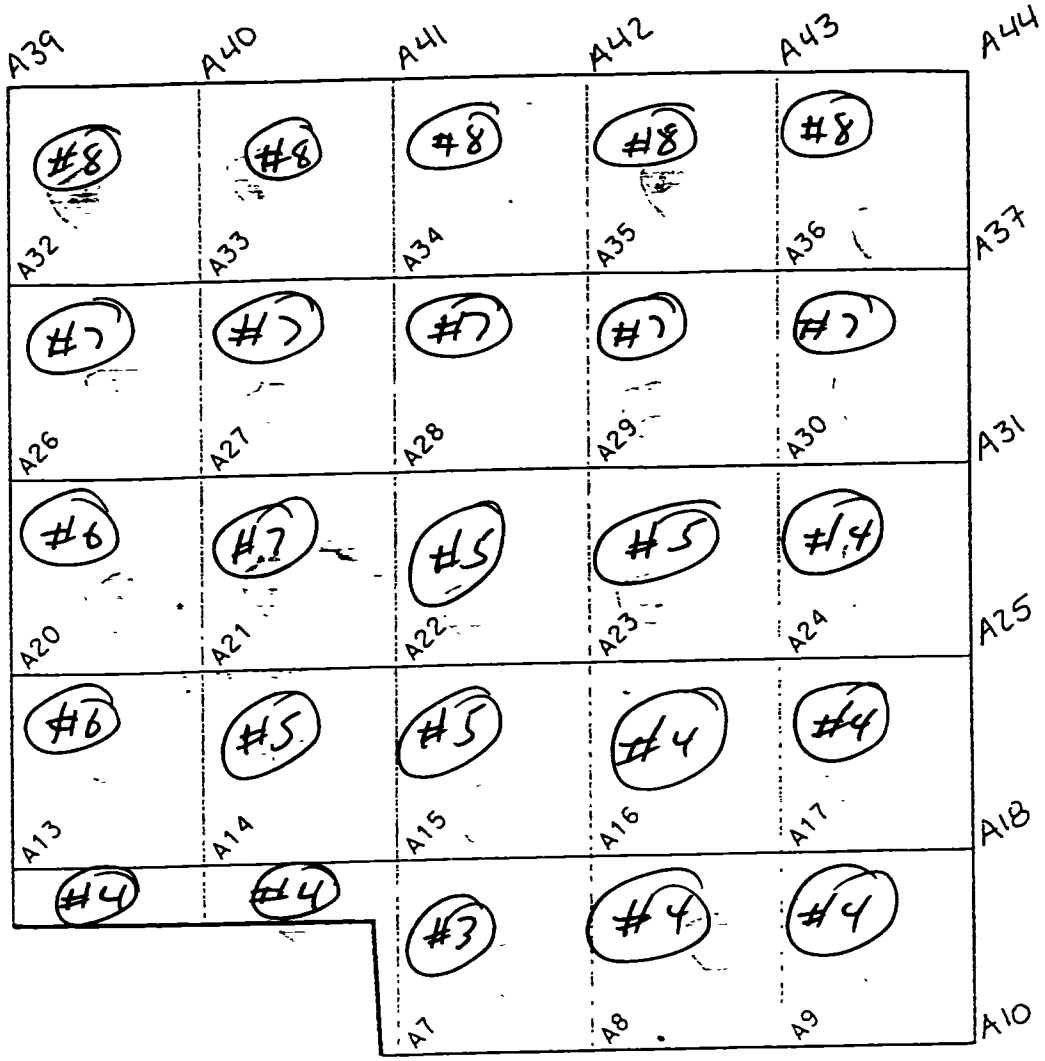
METER MODEL # :	2221	DETECTOR MODEL # :	2X2 5"
METER SERIAL # :	#1910	DETECTOR SERIAL # :	#5774
CALIBRATION DUE :	8-2-01	CALIBRATION DUE :	2-2-01
SURVEY DATE/TIME :	9-6-00	FIELD BKG. :	10241
SURVEYOR(S) :	Tony Lukezic, G. Hamra, D Roznovsky		
COMMENTS :			

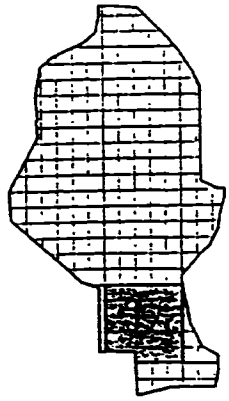
#3

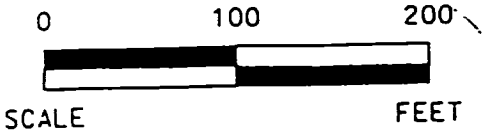
FINAL SITE WALKOVER
SURVEY 050AZZ01

2 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/046/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	





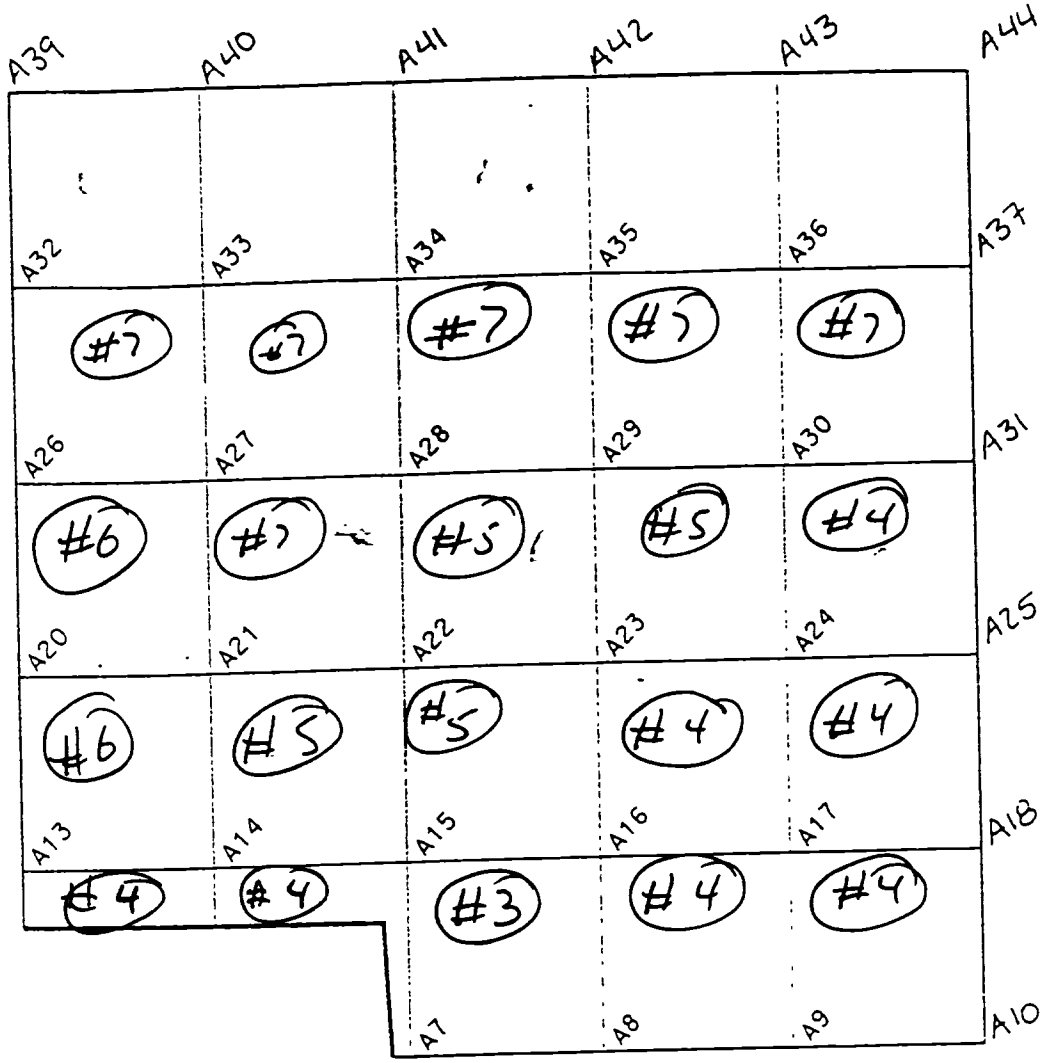


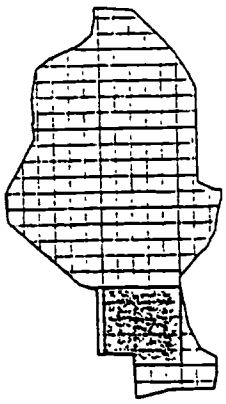
METER MODEL #: 2221	DETECTOR MODEL #: 2425
METER SERIAL #: #1910	DETECTOR SERIAL #: #5774
CALIBRATION DUE: 8-2-01	CALIBRATION DUE: 2-2-01
SURVEY DATE/TIME: 9-11-00	FIELD BKG.: 10,143
SURVEYOR(S): T. Lukszic, J. Roofe, D. Roznowski	
COMMENTS: J. Bushman	
Q 9900, V-10,200, T-10,500	

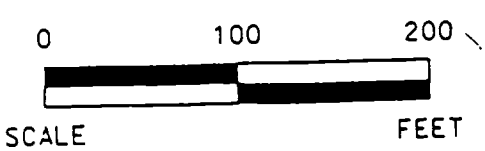
#8 FINAL SITE WALKOVER
SURVEY 050AZZ01

3 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/047/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	







METER MODEL # : 2221 DETECTOR MODEL # : 242 "Q"

METER SERIAL # : #6152 DETECTOR SERIAL # : #5773

CALIBRATION DUE : 5-1-01 CALIBRATION DUE : 2-2-01

SURVEY DATE/TIME : 9-10-00 FIELD BKG. : 9582

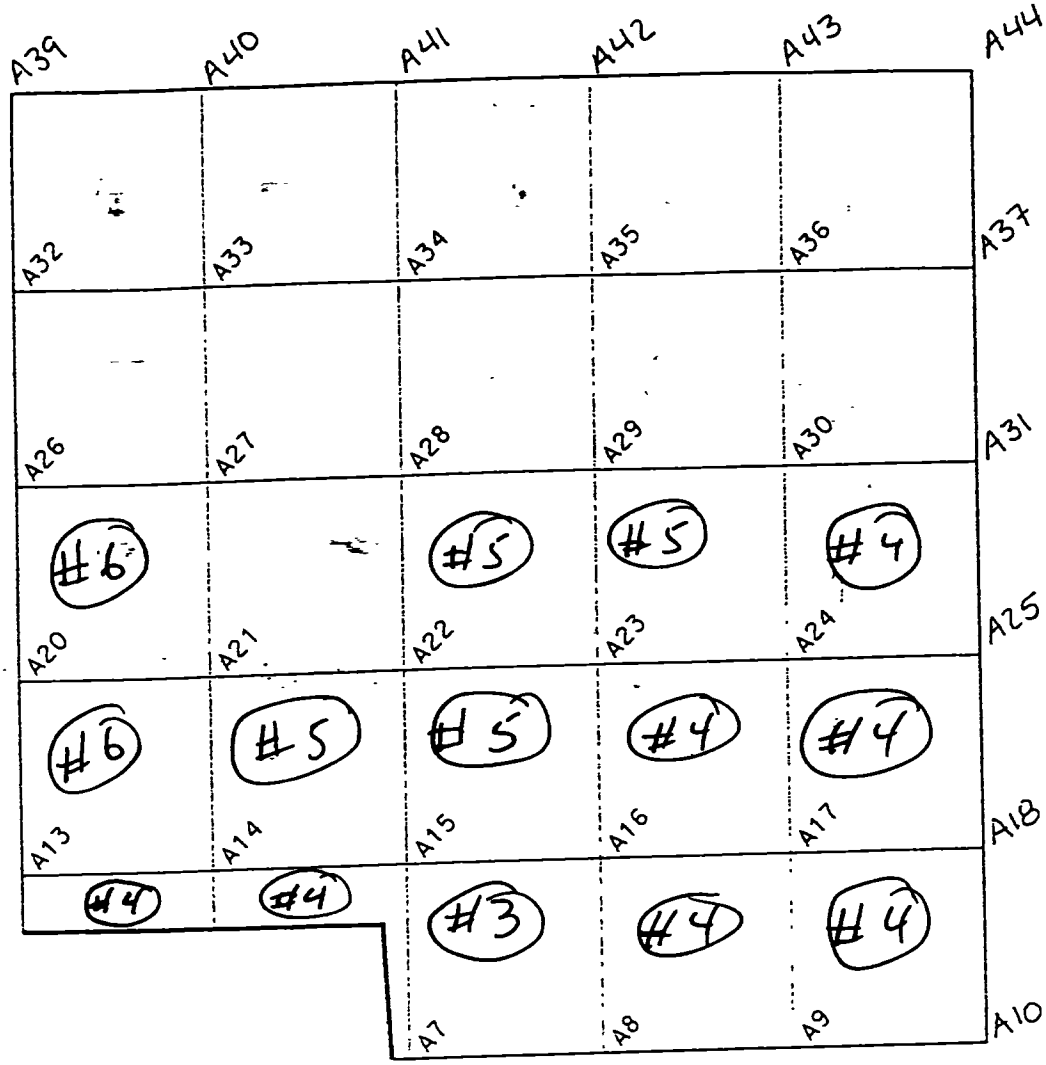
SURVEYOR(S) : DAVE ROZNOVSKY

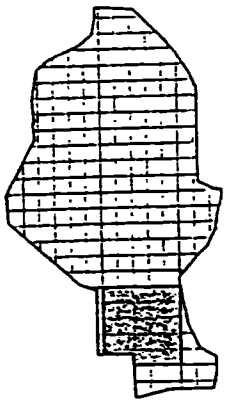
COMMENTS :

#7 FINAL SITE WALKOVER
SURVEY 050AZZ01

3 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/047/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	





0 100 200

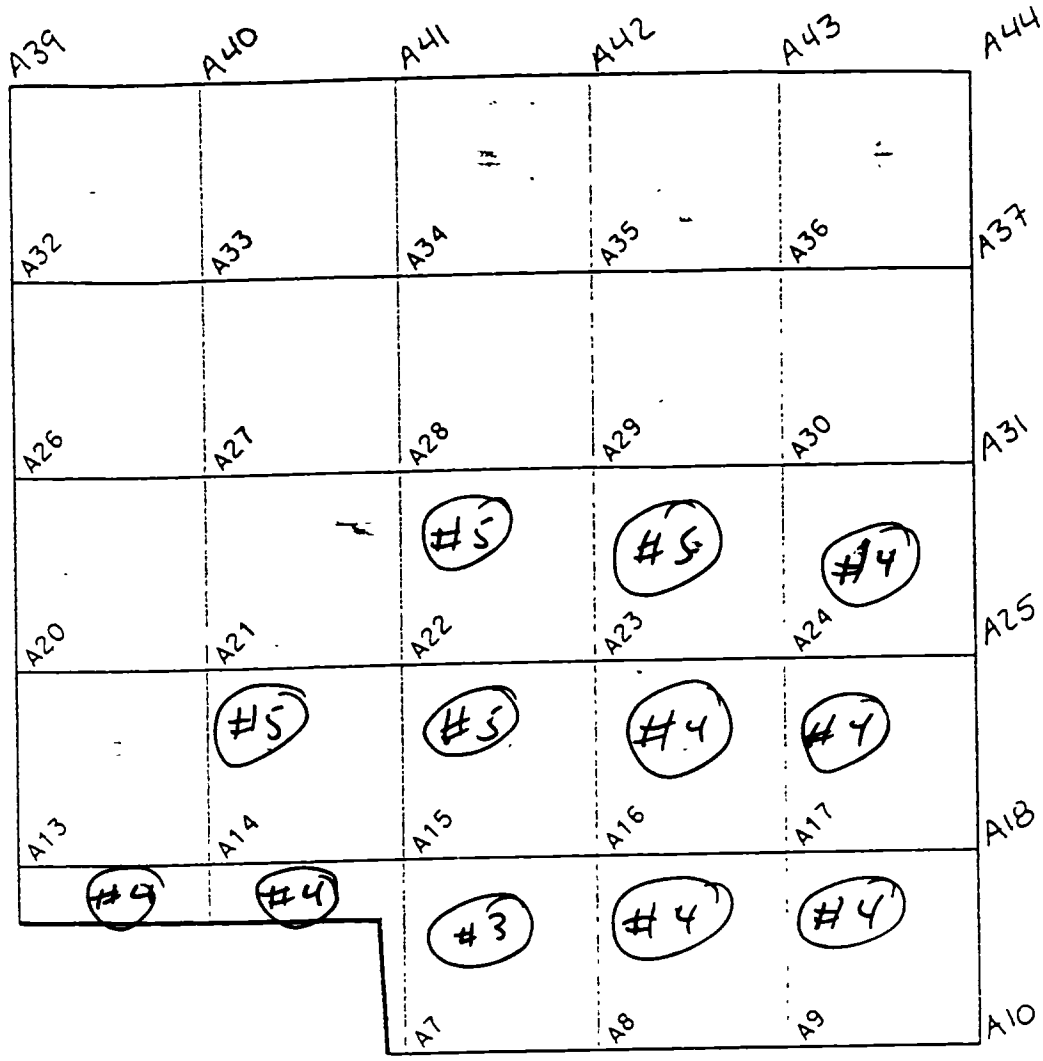
SCALE FEET

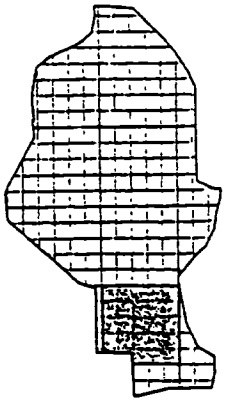
METER MODEL # : 2221	DETECTOR MODEL # : 2X2 Q
METER SERIAL # : 6152	DETECTOR SERIAL # : 5773
CALIBRATION DUE : 8-1-01	CALIBRATION DUE : 2-2-01
SURVEY DATE/TIME : 9-9-00	FIELD BKG. : 9570
SURVEYOR(S) : DAVE ROZNOUSKY	
COMMENTS :	

#6 FINAL SITE WALKOVER SURVEY 050AZZ01

3 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/047/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	





0 100 200

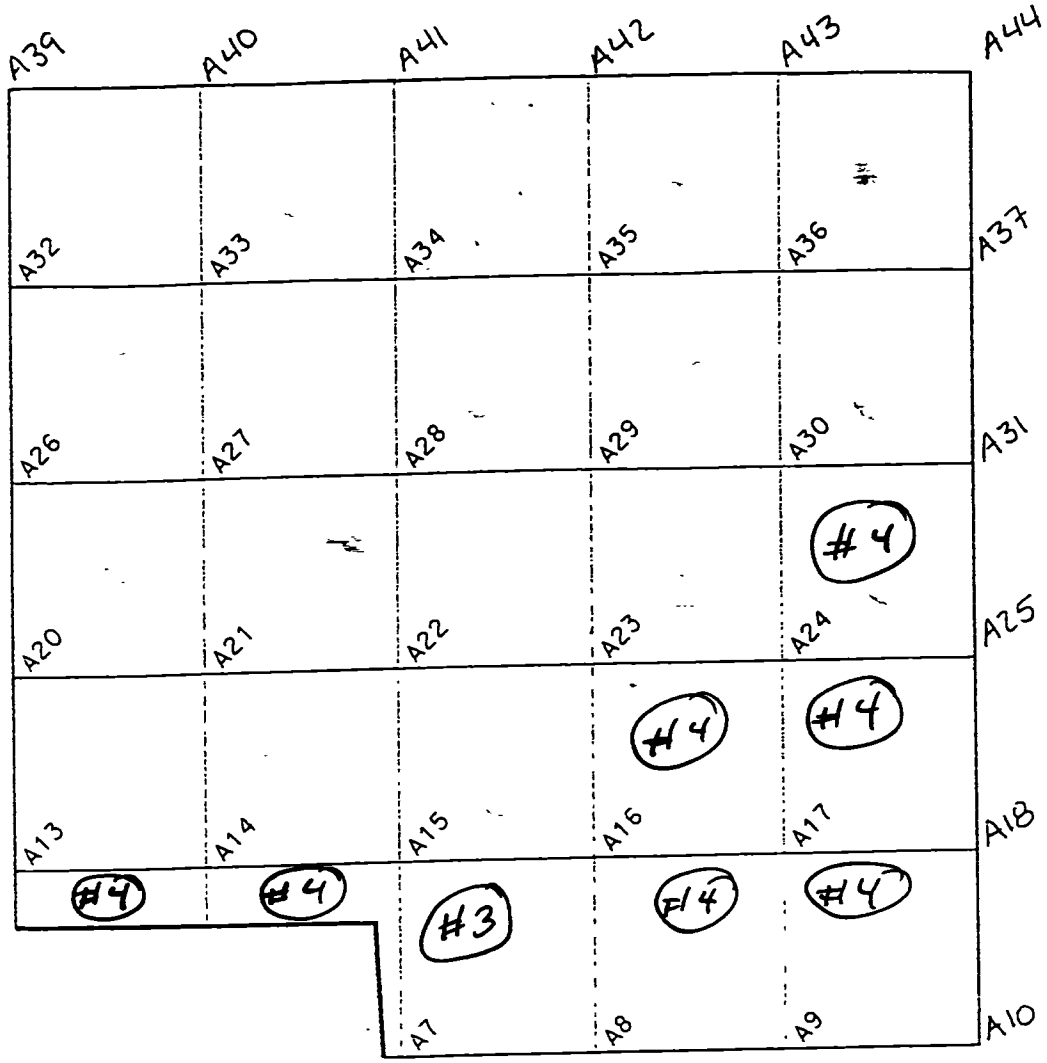
SCALE FEET

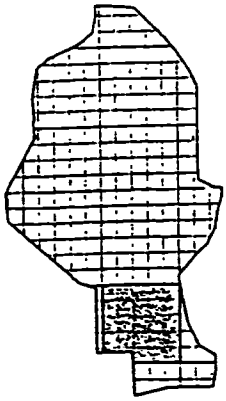
METER MODEL # :	2221	DETECTOR MODEL # :	2425
METER SERIAL # :	#1910	DETECTOR SERIAL # :	#5274
CALIBRATION DUE :	8-2-01	CALIBRATION DUE :	2-2-01
SURVEY DATE/TIME :	9-8-00	FIELD BKG. :	10,454
SURVEYOR(S) :	T. LKSZIC, D. ROZNOVSKY		
COMMENTS :	Q-9893		

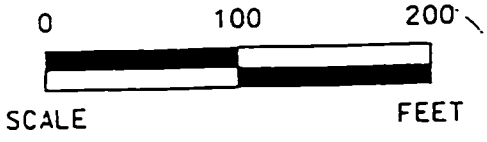
#5 FINAL SITE WALKOVER SURVEY 050AZZ01

3 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/047/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	





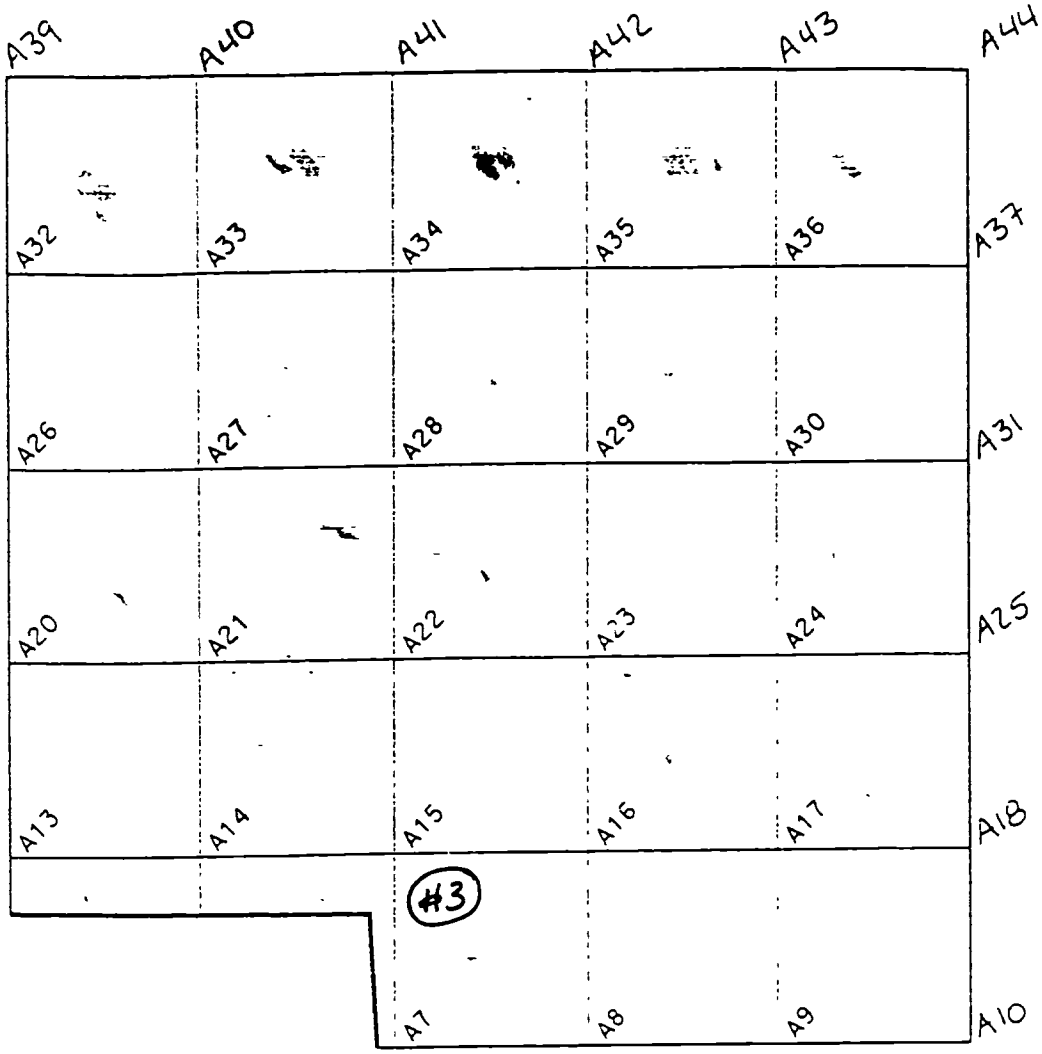


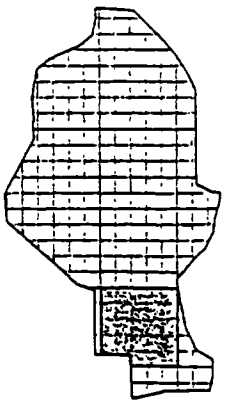
METER MODEL # :	2221	DETECTOR MODEL # :	2"x2"x5"
METER SERIAL # :	#1910	DETECTOR SERIAL # :	#5774
CALIBRATION DUE :	8-2-01	CALIBRATION DUE :	2-2-01
SURVEY DATE/TIME :	9-7-00	FIELD BKG. :	10241
SURVEYOR(S) :	D. Rozwousky, G. Hamra, T. Lukezic		
COMMENTS :	Q - 9697 T - 10,390		

#4 FINAL SITE WALKOVER SURVEY 050AZZ01

3 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/047/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	





0 100 200

SCALE FEET

METER MODEL #: 2221 DETECTOR MODEL #: 2X2-5

METER SERIAL #: #1910 DETECTOR SERIAL #: #5774

CALIBRATION DUE: 8-2-01 CALIBRATION DUE: 2-2-01

SURVEY DATE/TIME: 9-6-00 FIELD BKG.: 10,241

SURVEYOR(S): D. ROZNOUSKY, G. HAMRA

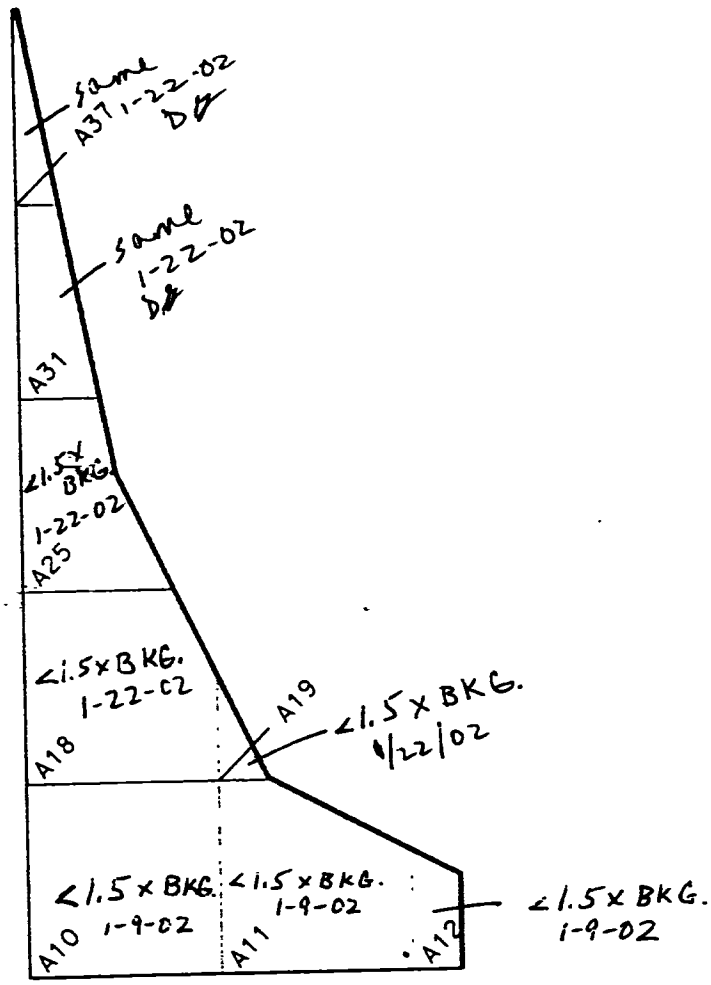
COMMENTS: Q-9697

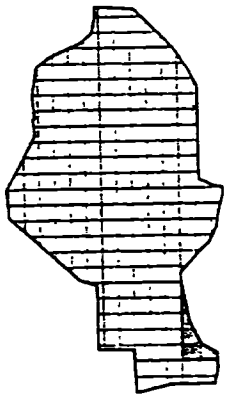
#3

FINAL SITE WALKOVER
SURVEY 050AZZ01

3 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/047/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	





0 100 200

SCALE FEET

	'P'	'V'
METER MODEL # :	2221	2221
DETECTOR MODEL # :	2X2 ~~44~~-10	2X2 ~~44~~-10
METER SERIAL # :	154228	127223
DETECTOR SERIAL # :	17606	23338
CALIBRATION DUE :	10-10-02	6-19-02
CALIBRATION DUE :	1-30-02	1-30-02
SURVEY DATE/TIME :	1-9-02	1400
FIELD BKG. :	10200	10500

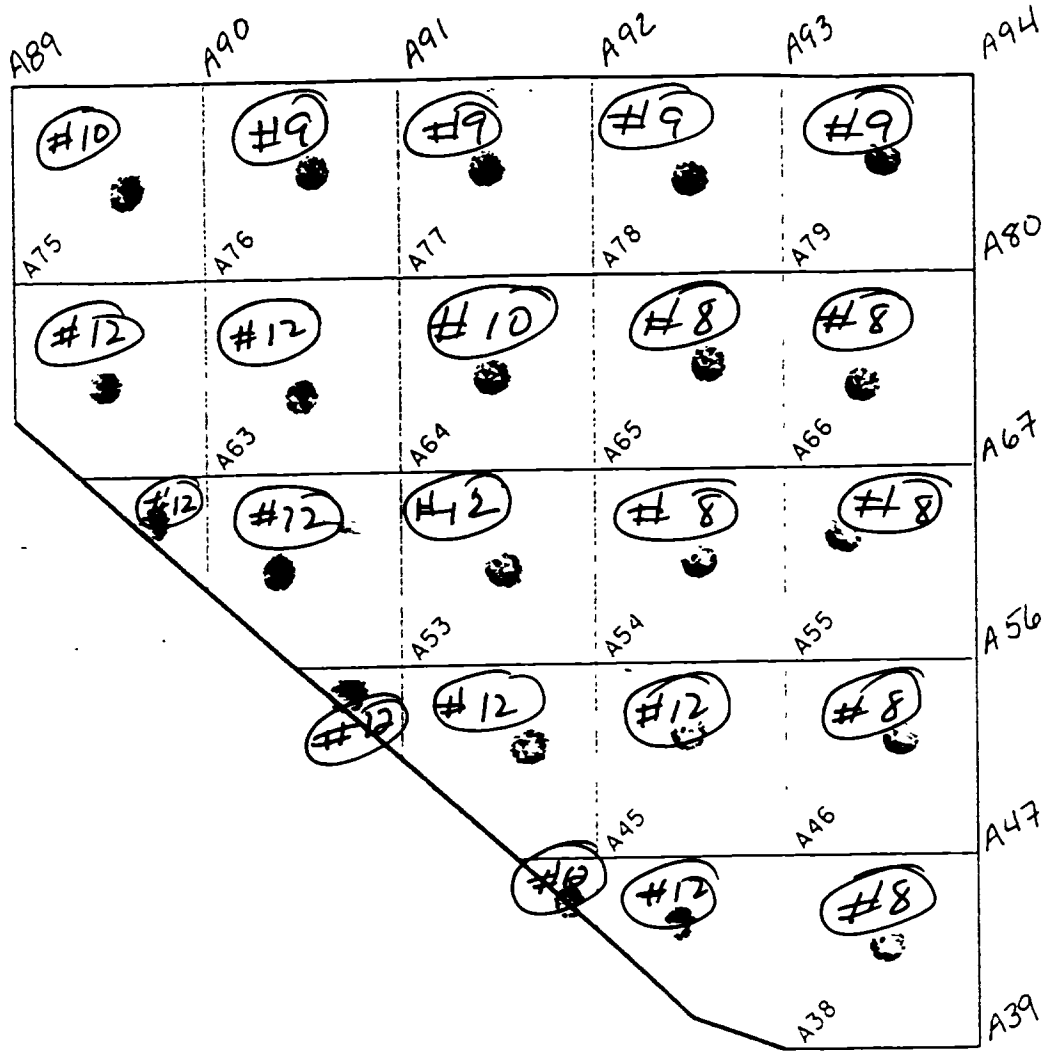
SURVEYOR(S) : D. Gill; D. Larson

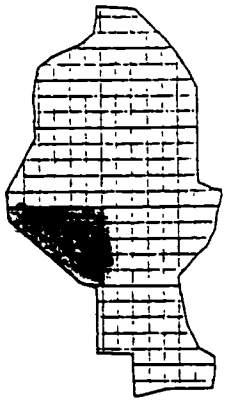
COMMENTS :

FINAL SITE WALKOVER
SURVEY 050AZZ01

4 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/048/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	





0 100 200

SCALE FEET

METER MODEL # : 2221 DETECTOR MODEL # : 2X2 5"

METER SERIAL # : #1910 DETECTOR SERIAL # : #5774

CALIBRATION DUE : 8-2-01 CALIBRATION DUE : 2-2-01

SURVEY DATE/TIME : 9-15-00 FIELD BKG. : 10,250

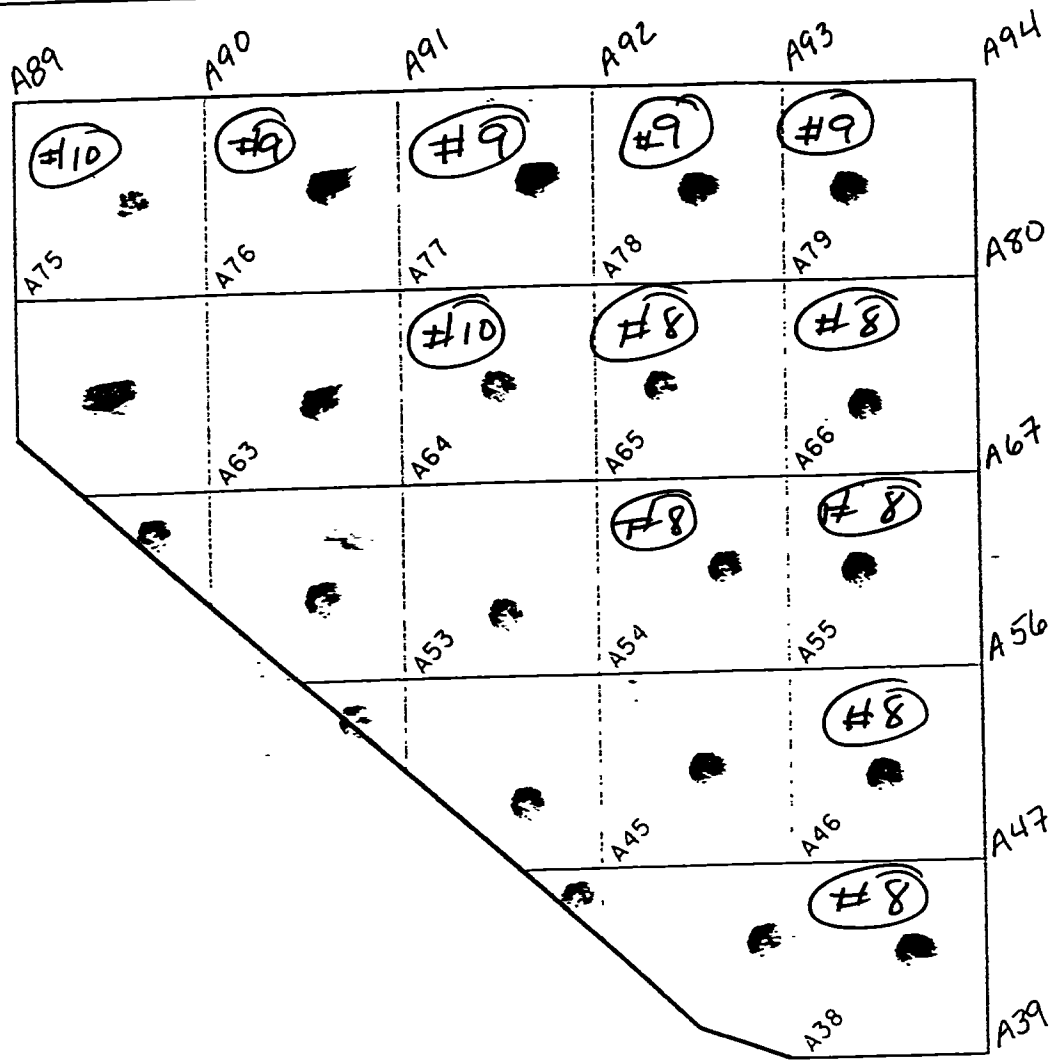
SURVEYOR(S) : D. Roznowsky, J Boofe, T. Lukezic

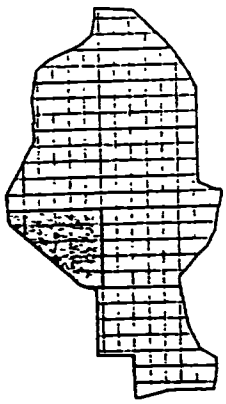
COMMENTS : Q-9599 N 10150

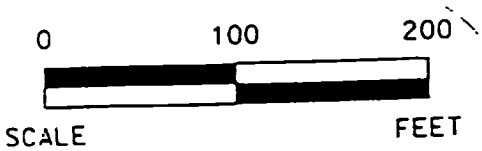
#12 FINAL SITE WALKOVER
SURVEY 050AZZ01

5 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/049/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	







METER MODEL # : 2221 DETECTOR MODEL # : 2x25"

METER SERIAL # : #1910 DETECTOR SERIAL # : #5774

CALIBRATION DUE : 8-2-01 CALIBRATION DUE : 2-2-01

SURVEY DATE/TIME : 9-13-00 FIELD BKG. : 10500

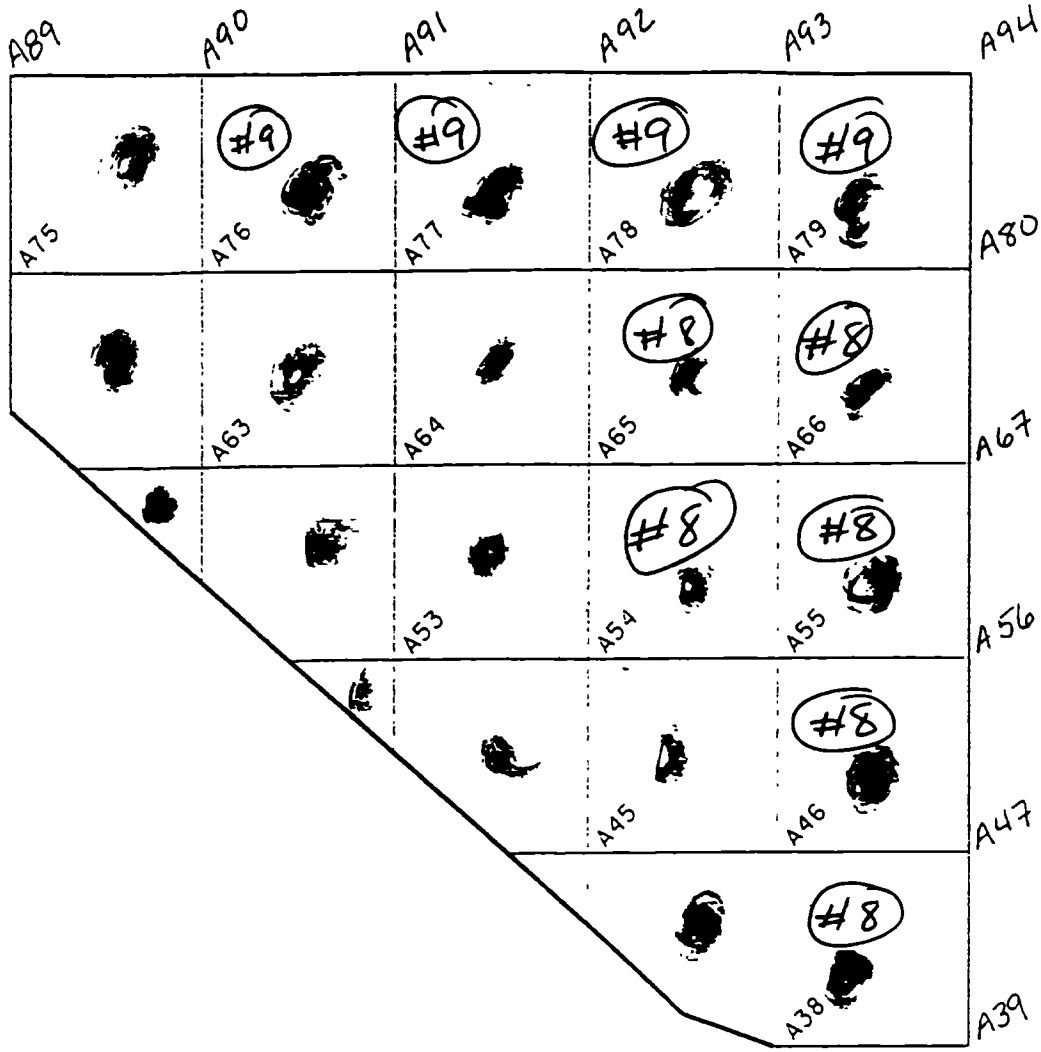
SURVEYOR(S) : C. HAMPA, D ROZNOUSKY, T. LUKEZIC

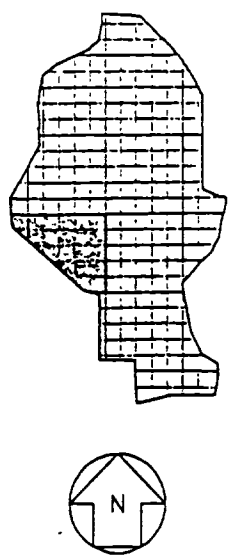
COMMENTS : J. BUSHMAN, RUMI, H HUFKER, D GILL S DORRELL, J. DEAN T-10369 U-9500 W. 9801 N-9455, O-10340, V-10250 Q 9599

#10 FINAL SITE WALKOVER SURVEY 050AZZ01

5 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/049/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	





METER MODEL # : 2221 DETECTOR MODEL # : 2X2 "S"

METER SERIAL # : #1910 DETECTOR SERIAL # : #5774

CALIBRATION DUE : 8-2-01 CALIBRATION DUE : 2-2-01

SURVEY DATE/TIME : 9-12-00 FIELD BKG. : 9221

SURVEYOR(S) : D. ROZNOVSKY, J BUSHMAN, J ROOFE

COMMENTS : J. DEAN, RUMI, G. HAMRA, H. HUFKER
T. LUKEZIC

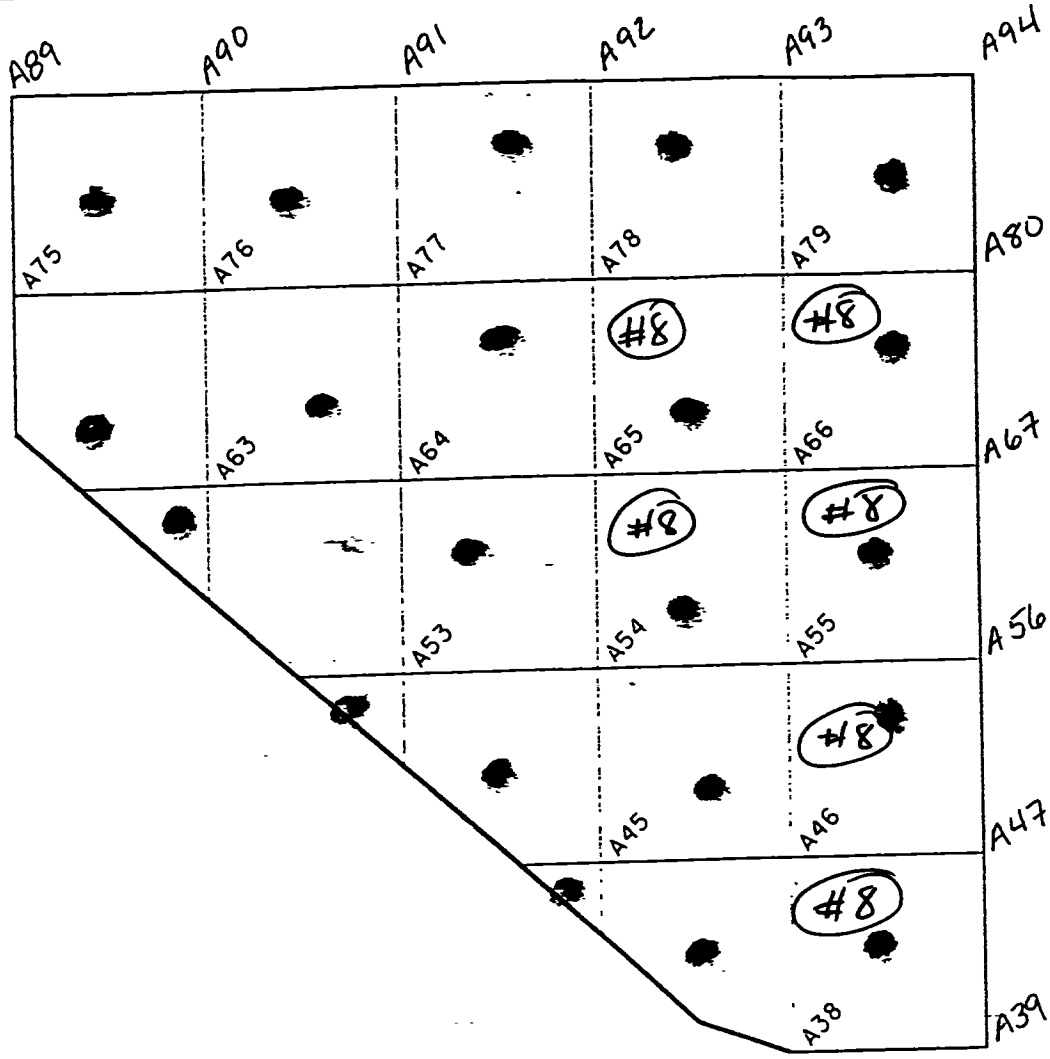
Q-9015 V-10381 N-8400, P-9800
K-9500 G-9432

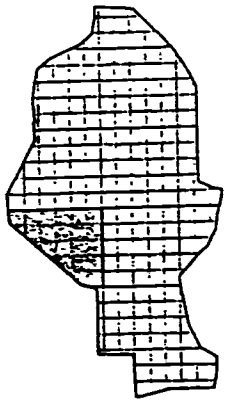
#9

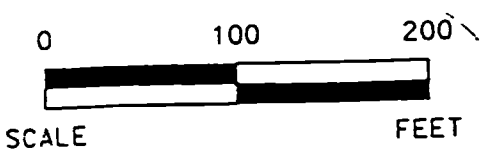
FINAL SITE WALKOVER
SURVEY 050AZZ01

5 OF 16

REPORT NO.: DOE/OR/21548-865	EXHIBIT NO.: A/CP/049/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00







METER MODEL # : 2221 DETECTOR MODEL # : 2425

METER SERIAL # : #1910 DETECTOR SERIAL # : #5774

CALIBRATION DUE : 8-2-01 CALIBRATION DUE : 2-2-01

SURVEY DATE/TIME : 9-11-00 FIELD BKG. : 10,143

SURVEYOR(S) : D. Roznovsky, J. Bushman, T. Lukez. c

COMMENTS : J. Roofe, D. 6.11

T-10500 P-10868

V-10200 Q-9906

#8

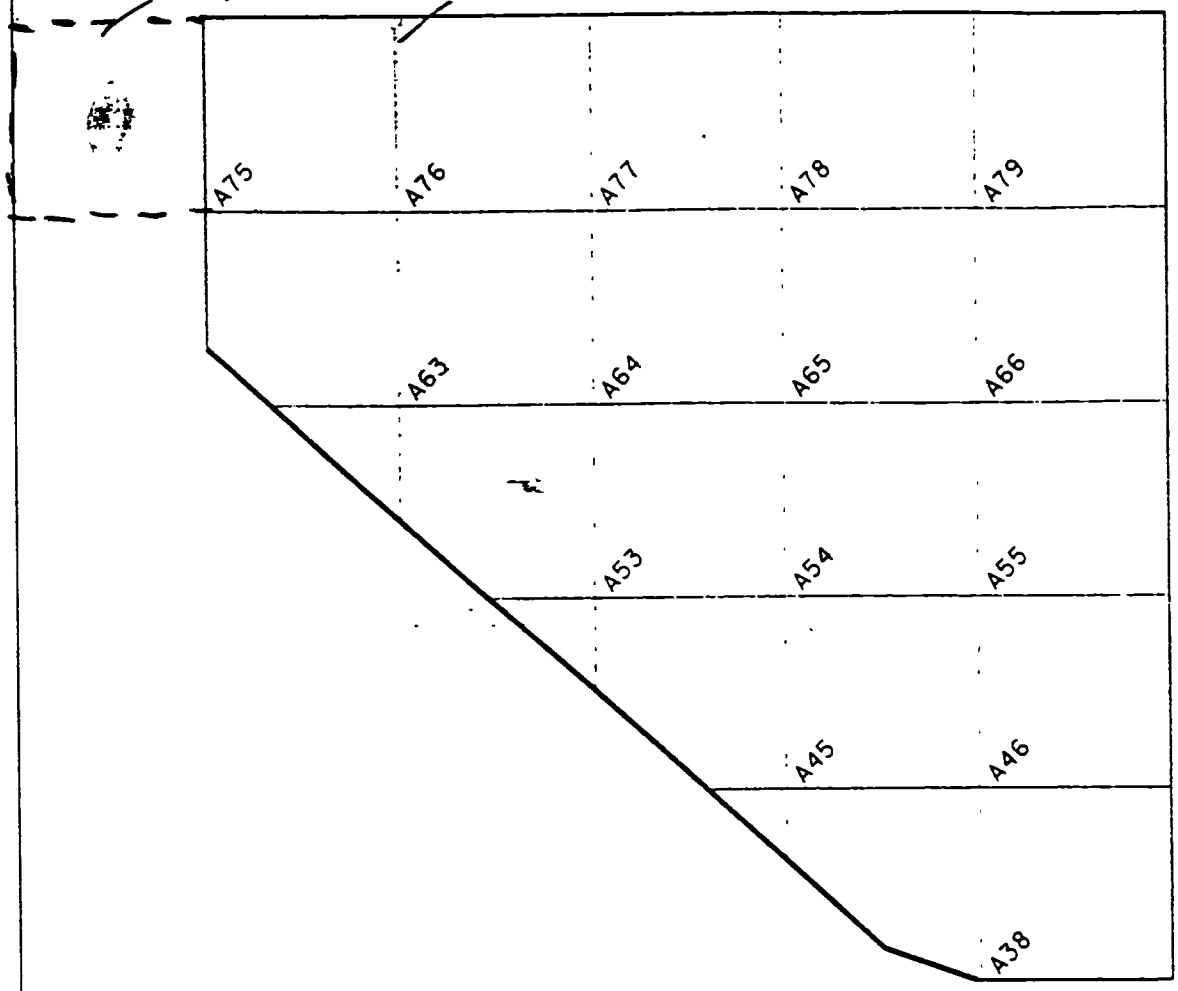
FINAL SITE WALKOVER
SURVEY 050AZZ01

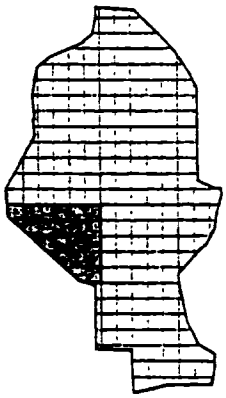
5 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/049/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	

DA/DL 3.23.02

disregard





0 100 200

SCALE FEET

	'L'	'V'		2x2	2x2
METER MODEL # :	2221	2221	DETECTOR MODEL # :	44-10	44-10
METER SERIAL # :	127223	154225	DETECTOR SERIAL # :	130763	023338
CALIBRATION DUE :	6/19-02	6-6-02	CALIBRATION DUE :	6-28-02	2-6-03
SURVEY DATE/TIME :	3.23.02	1100	FIELD BKG. :	10000	10500

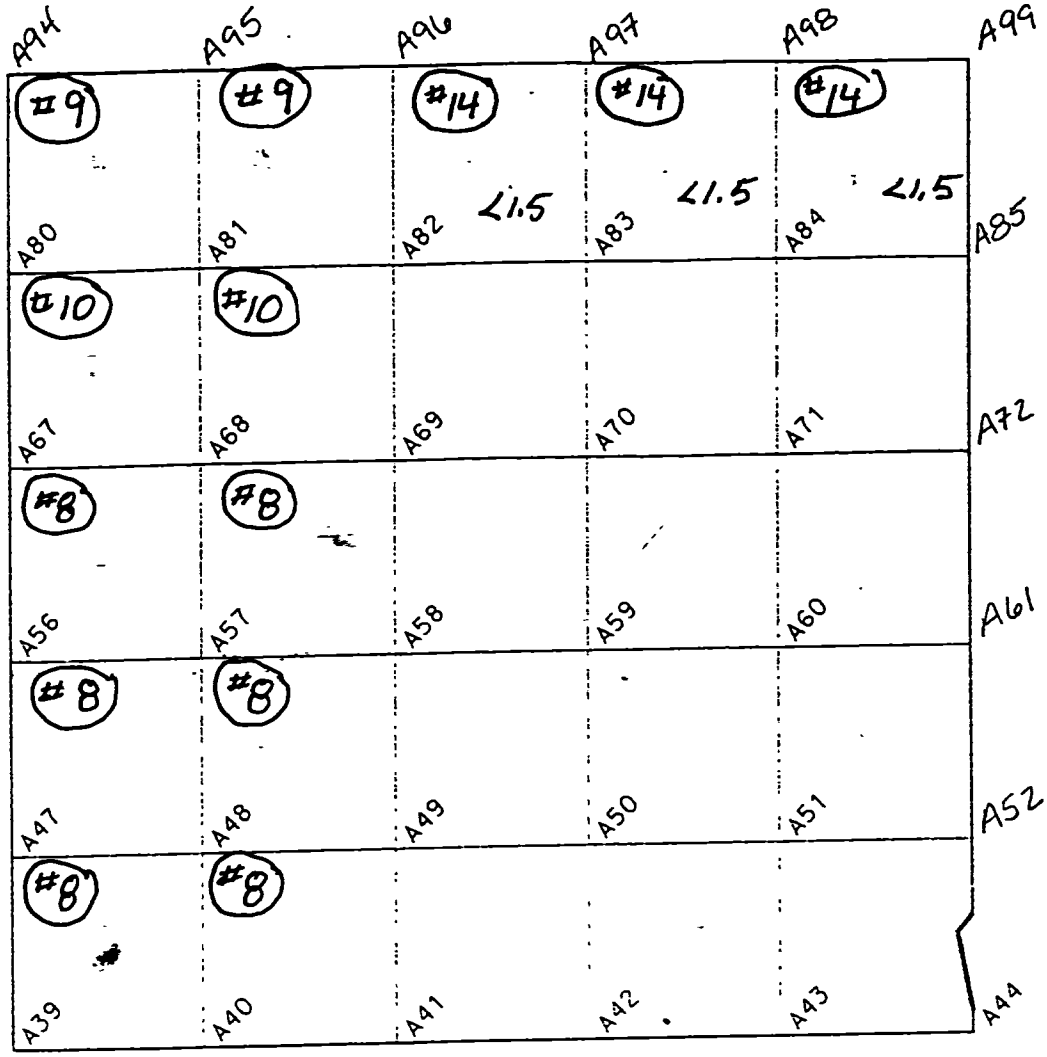
SURVEYOR(S) : D. ~~Lawbers~~ Larson, D. Gill

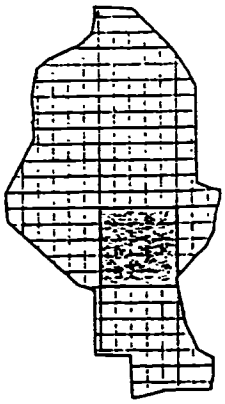
COMMENTS : all areas < 1.5 x bkg.

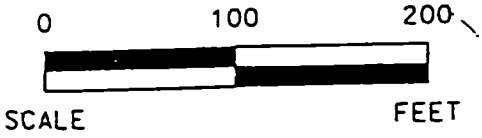
FINAL SITE WALKOVER
SURVEY 050AZZ01

5 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/049/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	







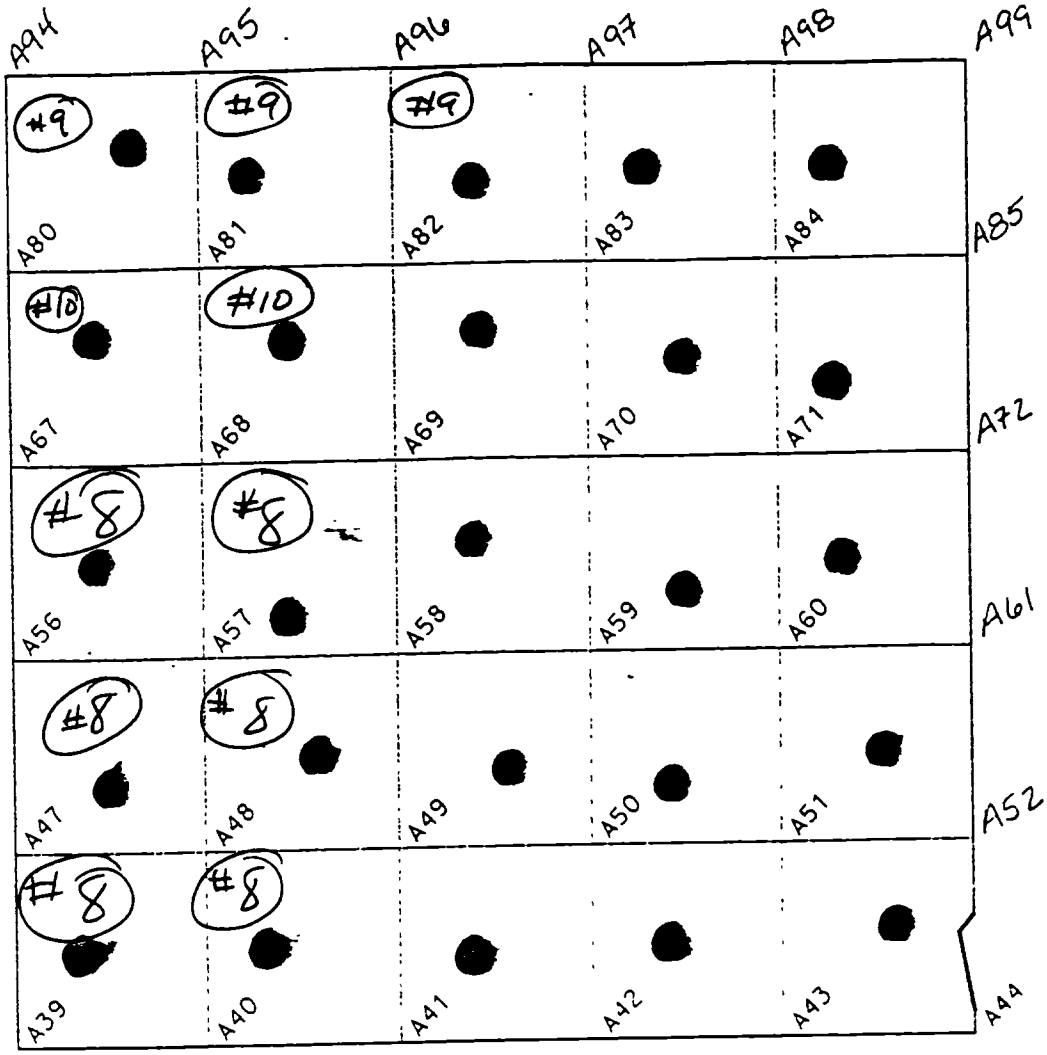
METER MODEL # :	2221	DETECTOR MODEL # :	2x2 "K"
METER SERIAL # :	#4325	DETECTOR SERIAL # :	#4532
CALIBRATION DUE :	8/24/01	CALIBRATION DUE :	6/23/01
SURVEY DATE/TIME :	3/9/01	FIELD BKG. :	10,000
SURVEYOR(S) :	D. Roznorsky, H. Hufker		
COMMENTS :	P-10,000		

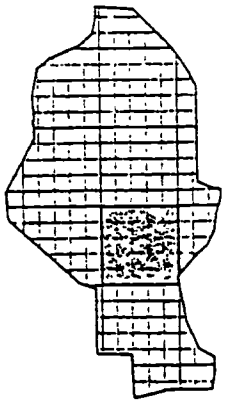
#14

FINAL SITE WALKOVER
SURVEY 050AZZ01

6 OF 16

REPORT NO.:	DOE/OR/21548-865	EXHIBIT NO.:	A/CP/050/0800-		
ORIGINATOR:	ML	DRAWN BY:	GLN	DATE:	8/22/00





0 100 200

SCALE FEET

METER MODEL # : 2221

DETECTOR MODEL # : 2x2 5"

METER SERIAL # : #1910

DETECTOR SERIAL # : #5774

CALIBRATION DUE : 8-2-01

CALIBRATION DUE : 2-2-01

SURVEY DATE/TIME : 9-13-00

FIELD BKG. : 10,500

SURVEYOR(S) : D ROZNOUSKY, J BUSHMAN, T. LKOZIC

COMMENTS : G. HAMRA, R BAUMAN, RUM; D 6.111

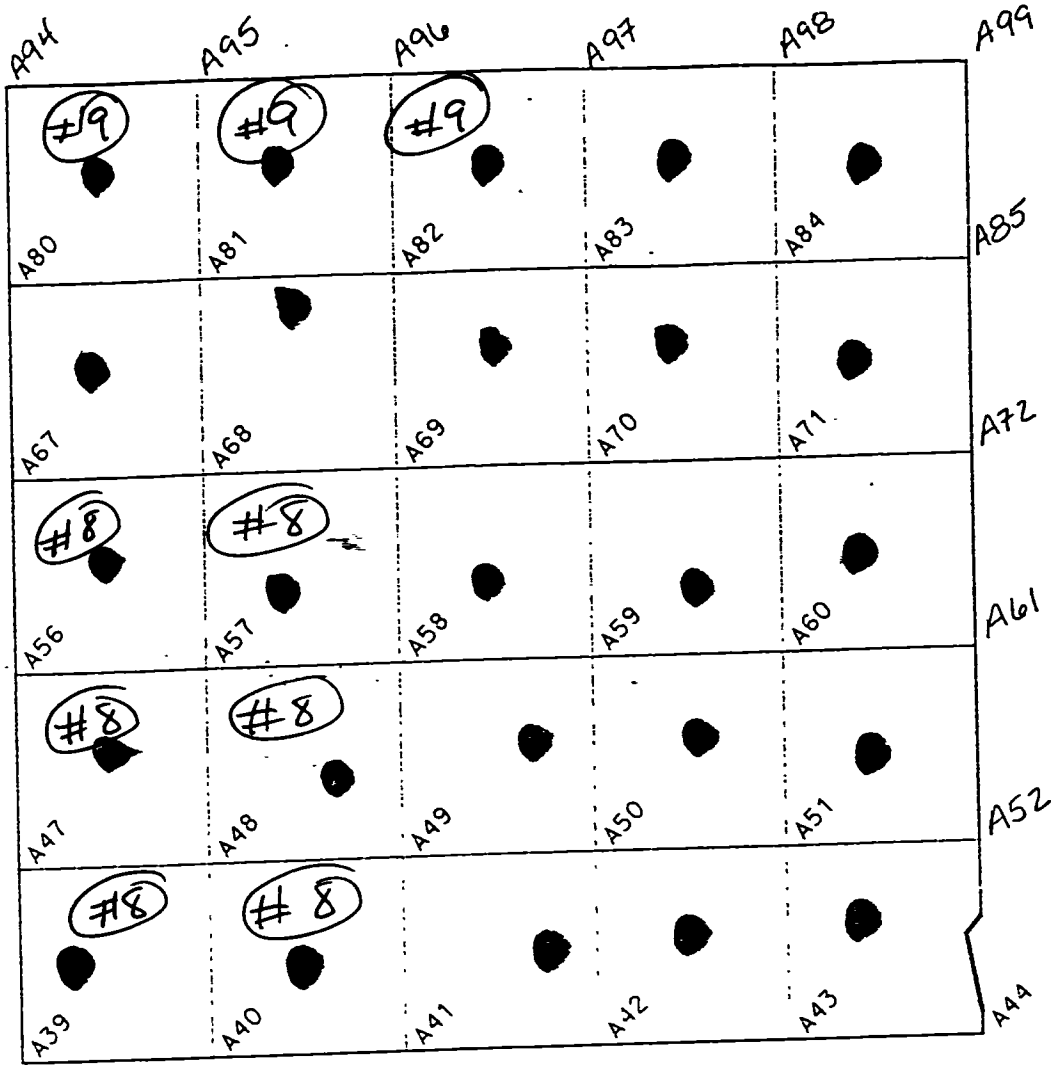
T-10369 Q-9599 W-9801

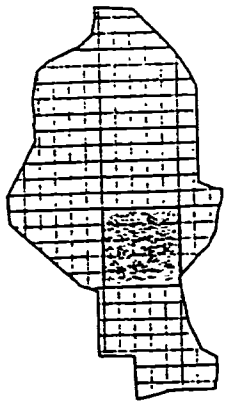
O-10340, V-10280 N-9455

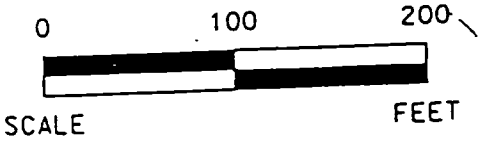
#10 FINAL SITE WALKOVER SURVEY 050AZZ01

6 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/050/0800-	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	







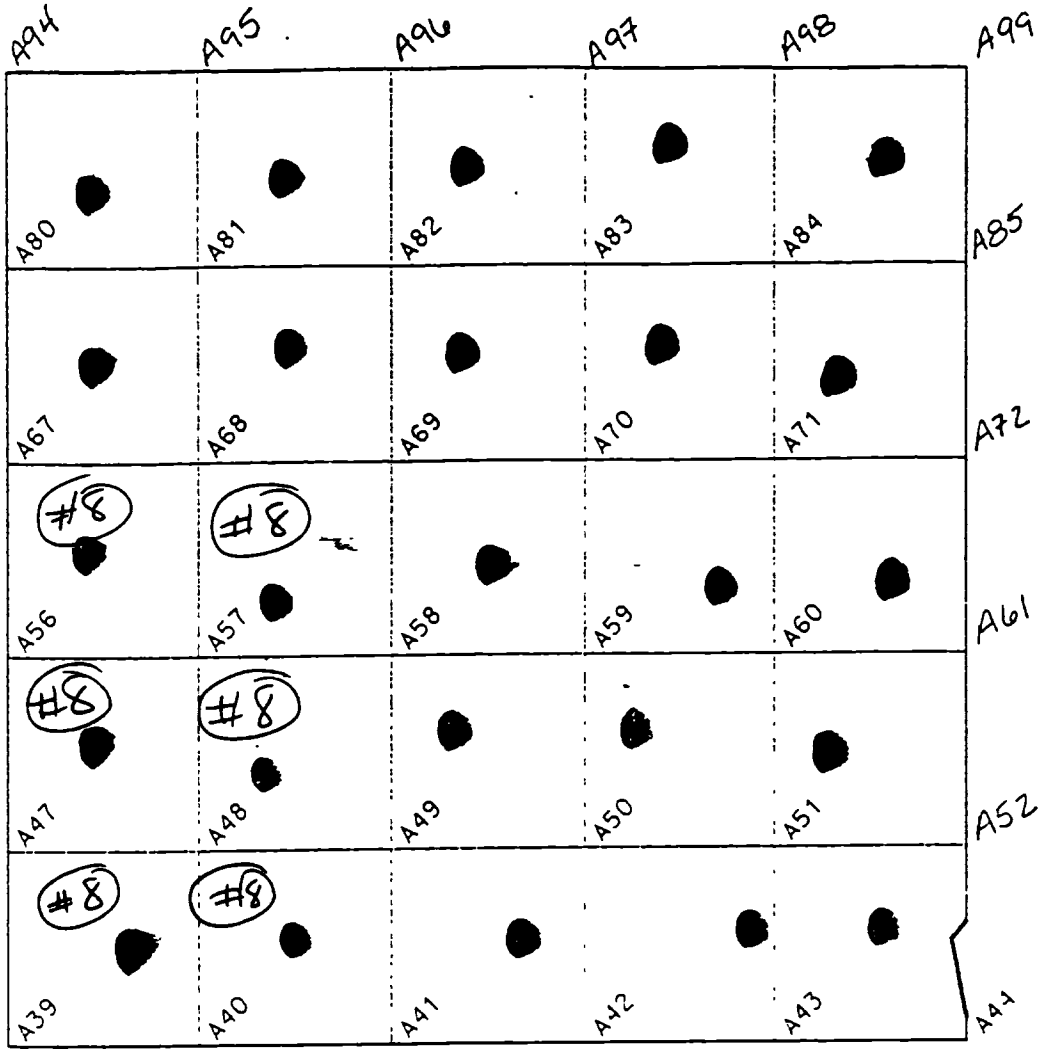
METER MODEL # :	2221	DETECTOR MODEL # :	2X2 5"
METER SERIAL # :	#1910	DETECTOR SERIAL # :	#5774
CALIBRATION DUE :	8-2-01	CALIBRATION DUE :	2-2-01
SURVEY DATE/TIME :	9-12-00	FIELD BKG. :	9221
SURVEYOR(S) :	ROZNOVSKY, J. BUSHMAN, J ROOFE		
COMMENTS :	G. HAMRA, RUMI, J. DEAN, H HUPKER V-10381, N-8400, Q.9015, P-9800 K-9500, G-9432		

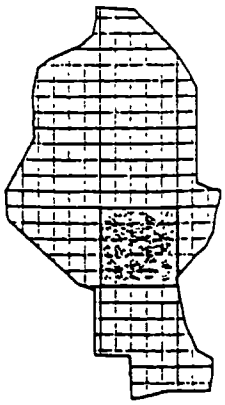
#9

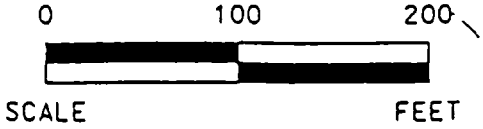
FINAL SITE WALKOVER
SURVEY 050AZZ01

6 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/050/0800-	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	





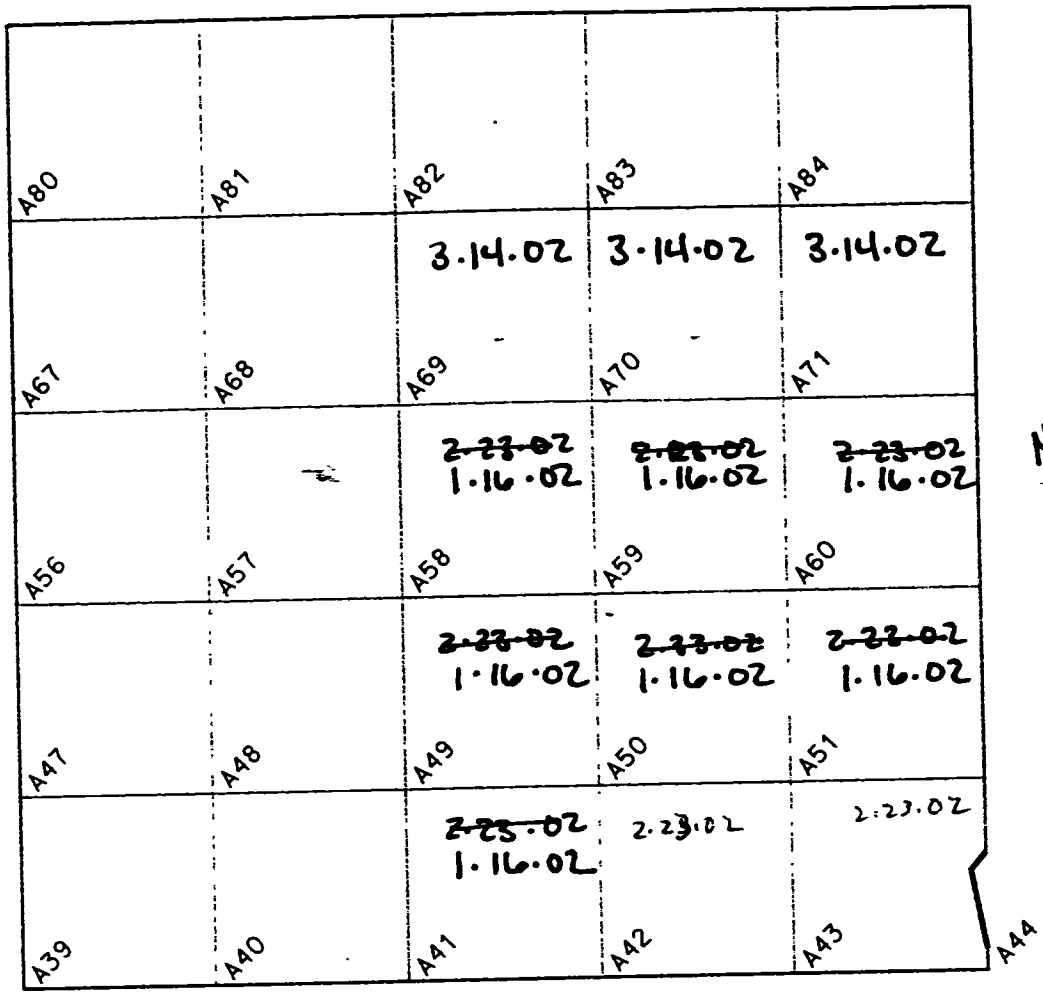


METER MODEL # :	2221	DETECTOR MODEL # :	2425"
METER SERIAL # :	#1910	DETECTOR SERIAL # :	#5774
CALIBRATION DUE :	8-2-01	CALIBRATION DUE :	2-2-01
SURVEY DATE/TIME :	9-11-00	FIELD BKG. :	10,143
SURVEYOR(S) :	D. ROZNOVSKY, J. BUSHMAN, T. LUKEZIC		
COMMENTS :	J. ROOFE		
T-10,500 Q-9906			
V-10,200			

#8 FINAL SITE WALKOVER
SURVEY 050AZZ01

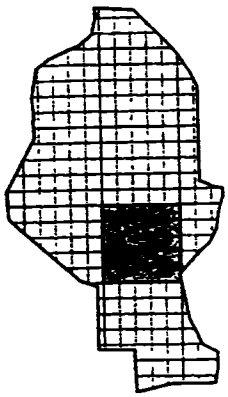
6 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/050/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	



MHK

3/14/02



0 100 200

SCALE FEET

'P' / 'V'

METER MODEL # : 2221 / 2221 DETECTOR MODEL # : 2X2 44-10 / 2X2 44-10

METER SERIAL # : 154228 / 127223 DETECTOR SERIAL # : 17606 / 23338

CALIBRATION DUE : 10-10-02 / 6-19-02 CALIBRATION DUE : 1-30-02 / 1-30-02

SURVEY DATE/TIME : 1-16-02 / 1430 FIELD BKG. : 10200 / 10500

SURVEYOR(S) : D. Gill; M. Quinonez; D. Larson

COMMENTS : DN 2-23-02 the following apply

V - detector cal. due 2/6/03 / New 2221 154225 due 6/6/02

L - 2221 127223 / 44-10 130263 / 2221 6-19-02 / 44-10 6-28-02

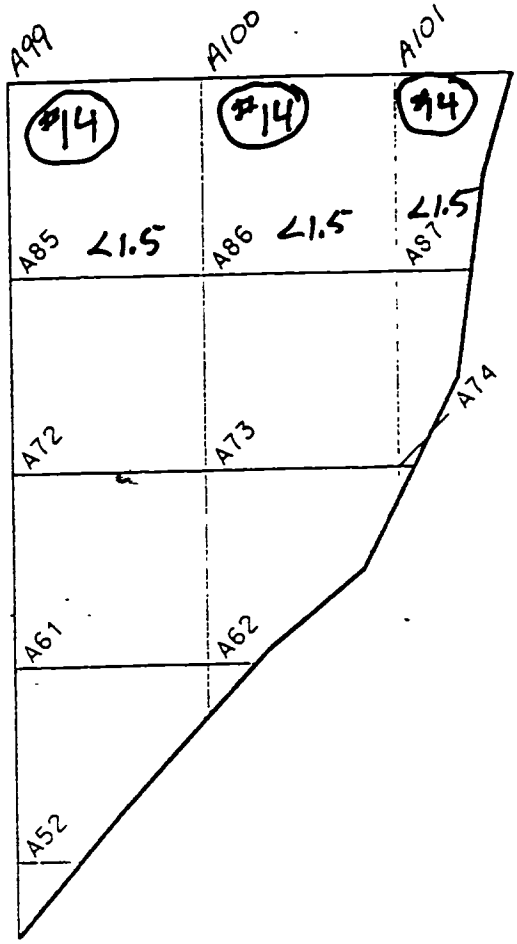
P - detector cal. due 2/6/03 #150, 3.14.02 Same info. as 2/23/02

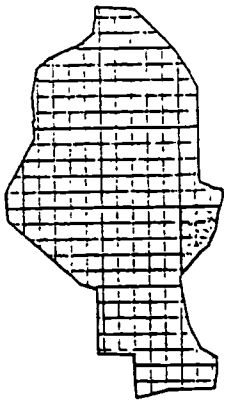
FINAL SITE WALKOVER
SURVEY 050AZZ01

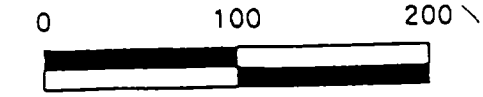
all area < 1.5 x BKG.

6 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/050/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	







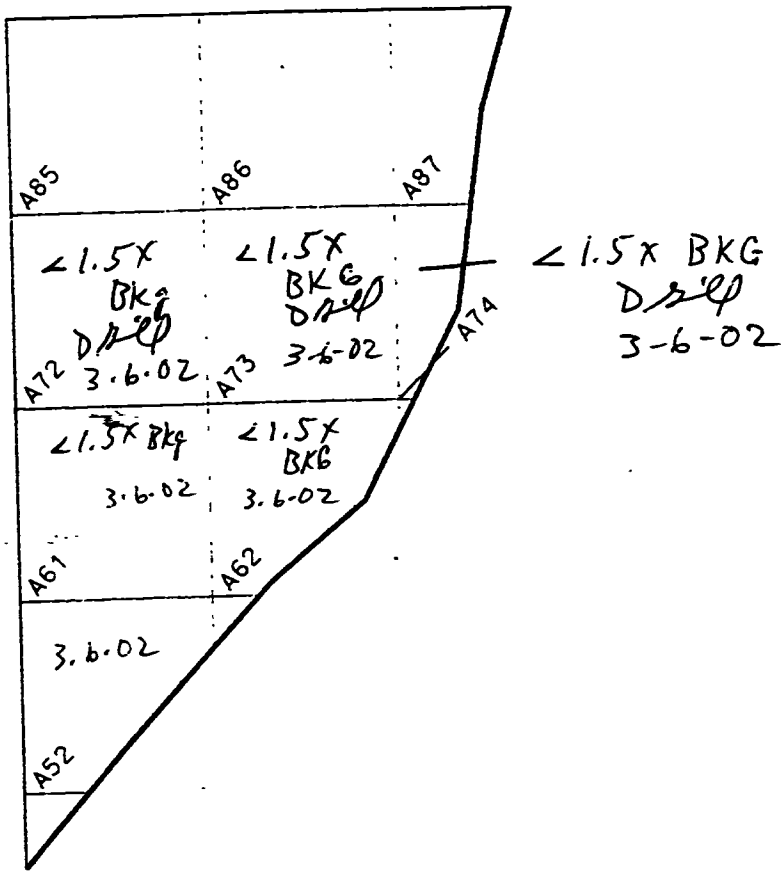
METER MODEL # :	2221	DETECTOR MODEL # :	2x2 "K"
METER SERIAL # :	#4325	DETECTOR SERIAL # :	#4532
CALIBRATION DUE :	8/24/01	CALIBRATION DUE :	6/23/01
SURVEY DATE/TIME :	3/9/01	FIELD BKG. :	10,000
SURVEYOR(S) :	D. Roznovsky, H Hufker		
COMMENTS :	P-10,000		

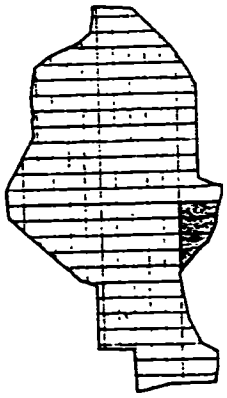
#14

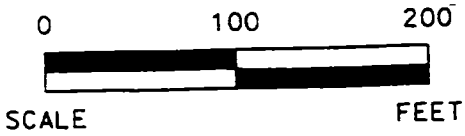
FINAL SITE WALKOVER
SURVEY 050AZZ01

7 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/051/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	







METER MODEL # : 2221 'V'
DETECTOR MODEL # : 44-10 (2x2)
METER SERIAL # : 154225
DETECTOR SERIAL # : 023338
CALIBRATION DUE : 6.6.02
CALIBRATION DUE : 2.6.03
SURVEY DATE/TIME : 3.6.02/1500
FIELD BKG. : 10000
SURVEYOR(S) : Drill
COMMENTS : all areas <1.5 X BKG.

FINAL SITE WALKOVER
SURVEY 050AZZ01

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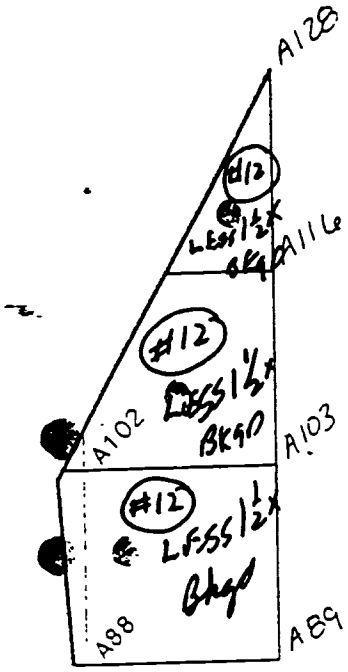
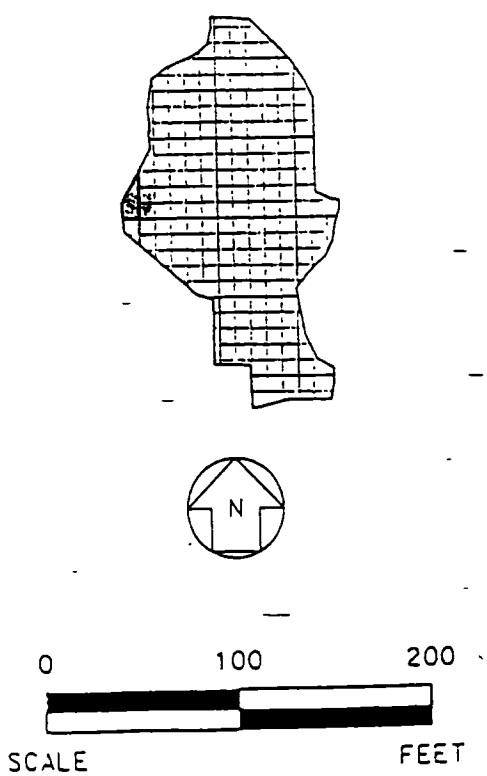
REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/051/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	





METER MODEL # :	2221	DETECTOR MODEL # :	2x2 #5"
METER SERIAL # :	DOE #1910	DETECTOR SERIAL # :	DOE #5774
CALIBRATION DUE :	8-2-01	CALIBRATION DUE :	2-2-01
SURVEY DATE/TIME :	9-15-00	FIELD BKG. :	"S" 10,150 "Q" 9599
SURVEYOR(S) :	D. Roznousky, J. M. Roof, T. Lukezic		
COMMENTS :			

N-10,150

#12 FINAL SITE WALKOVER SURVEY 050AZZ01

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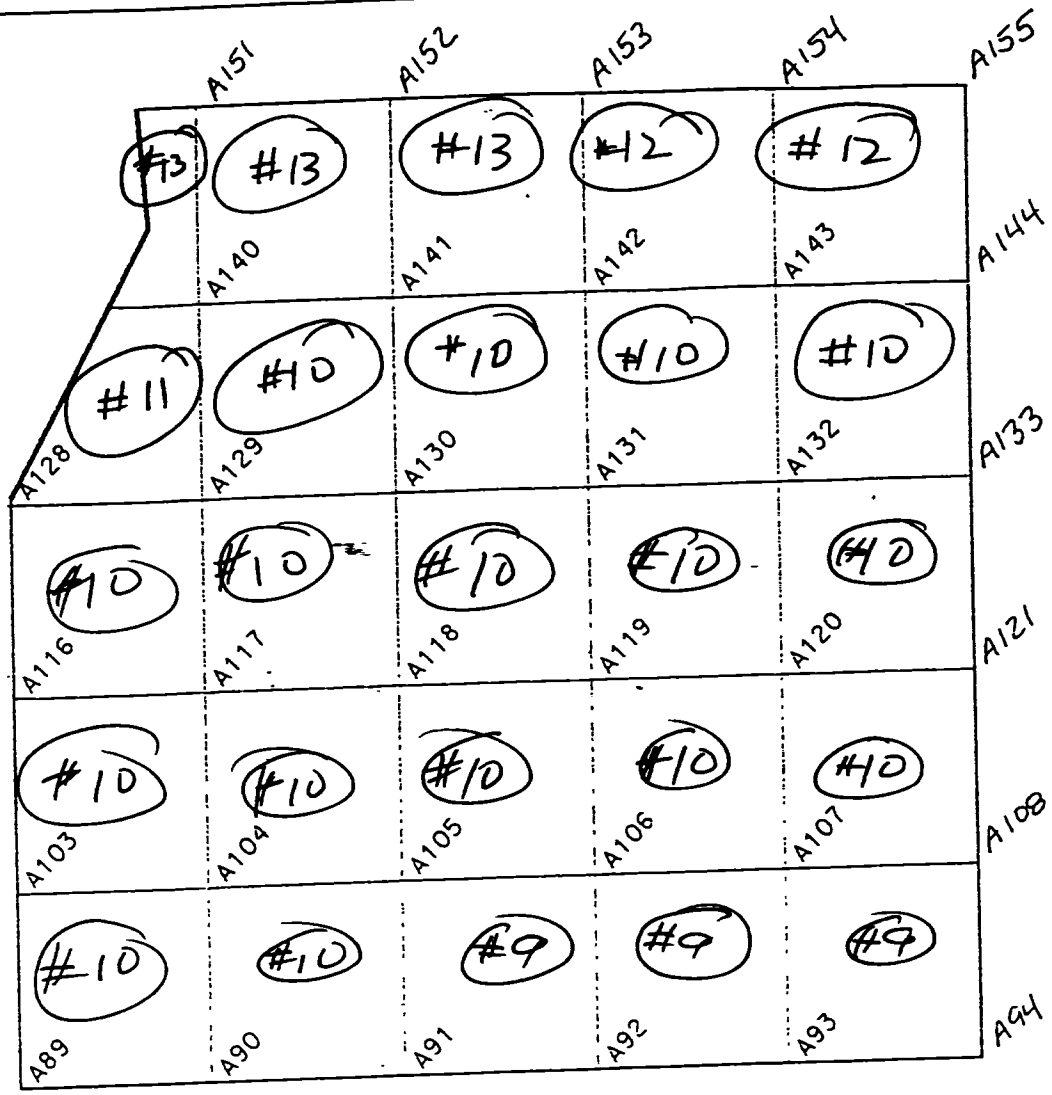
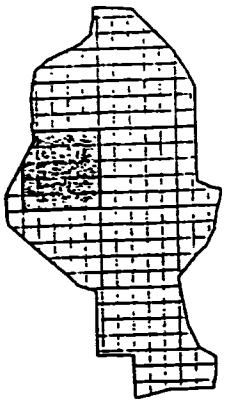
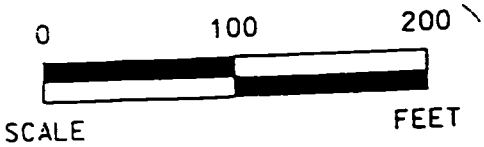
REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/052/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	







METER MODEL #: 2221 DETECTOR MODEL #: 2X2.5"

METER SERIAL #: #1910 DETECTOR SERIAL #: #5274

CALIBRATION DUE: 8-2-01 CALIBRATION DUE: 2-2-01

SURVEY DATE/TIME: 9-18-00 FIELD BKG.: 10250

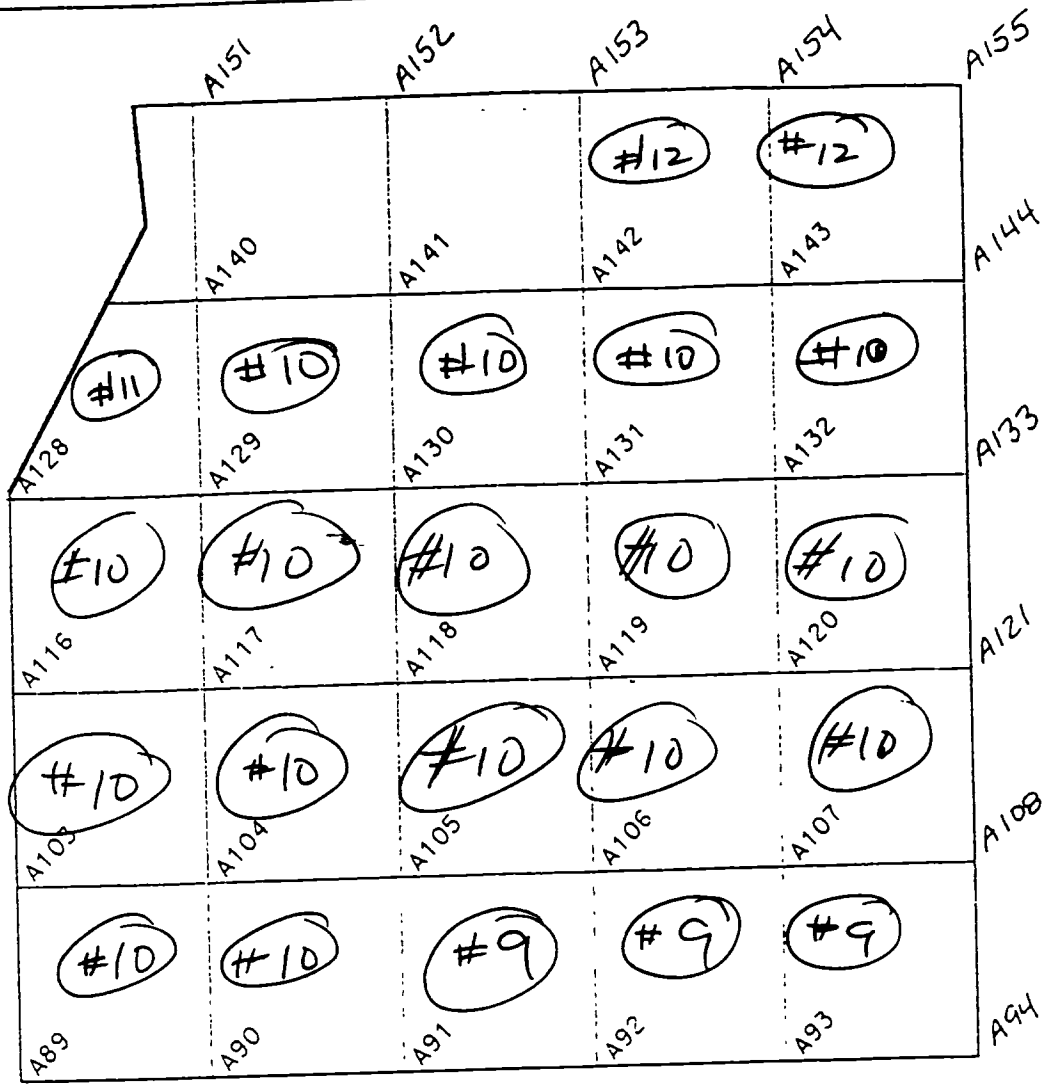
SURVEYOR(S): D. ROZNOVSKY, J. ROOFF

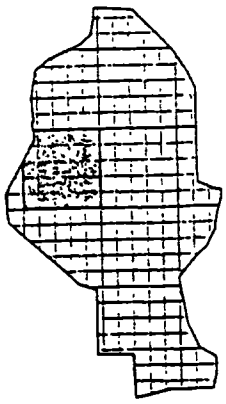
COMMENTS: T. LKRZIC

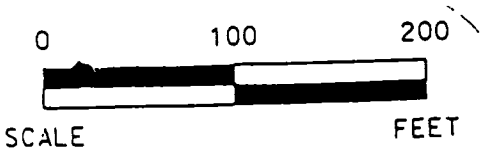
#13 FINAL SITE WALKOVER SURVEY 050AZZ01

9 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/053/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	







METER MODEL # : 2221 DETECTOR MODEL # : 242 5"

METER SERIAL # : #1910 DETECTOR SERIAL # : #5774

CALIBRATION DUE : 8-2-01 CALIBRATION DUE : 7-2-01

SURVEY DATE/TIME : 9-15-00 FIELD BKG. : 10251

SURVEYOR(S) : D. Roznousky, J Bushman, J Roofe

COMMENTS : J Dean, Rumi, T Collings, S Porrell

T Lukezic V-10949

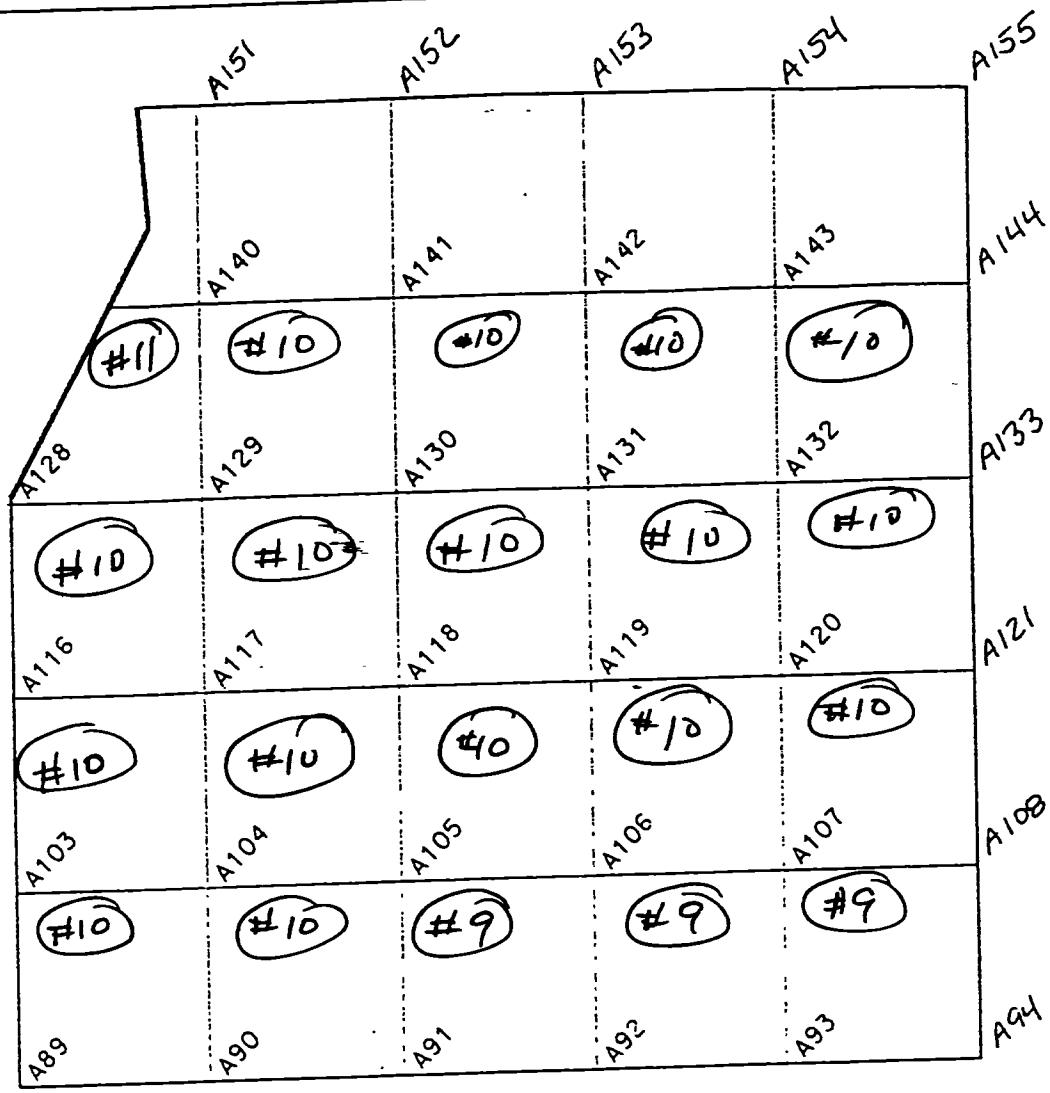
T-8500 Q 10526, P-10438 N, 10047

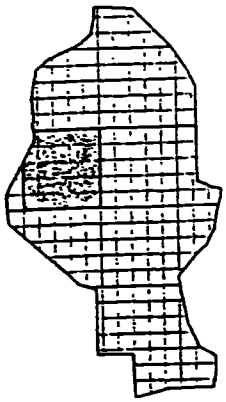
#12

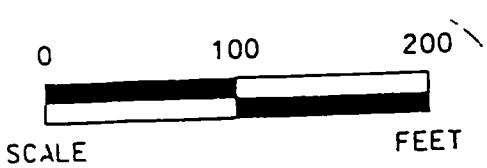
FINAL SITE WALKOVER
SURVEY 050AZZ01

9 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/053/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	







METER MODEL # : 2221 DETECTOR MODEL # : 2x2 5"

METER SERIAL # : #1910 DETECTOR SERIAL # : #5774

CALIBRATION DUE : 8-2-01 CALIBRATION DUE : 2-2-01

SURVEY DATE/TIME : 9-14-00 FIELD BKG. : 10008

SURVEYOR(S) : D Roznosky, J Bushman, J Roofe

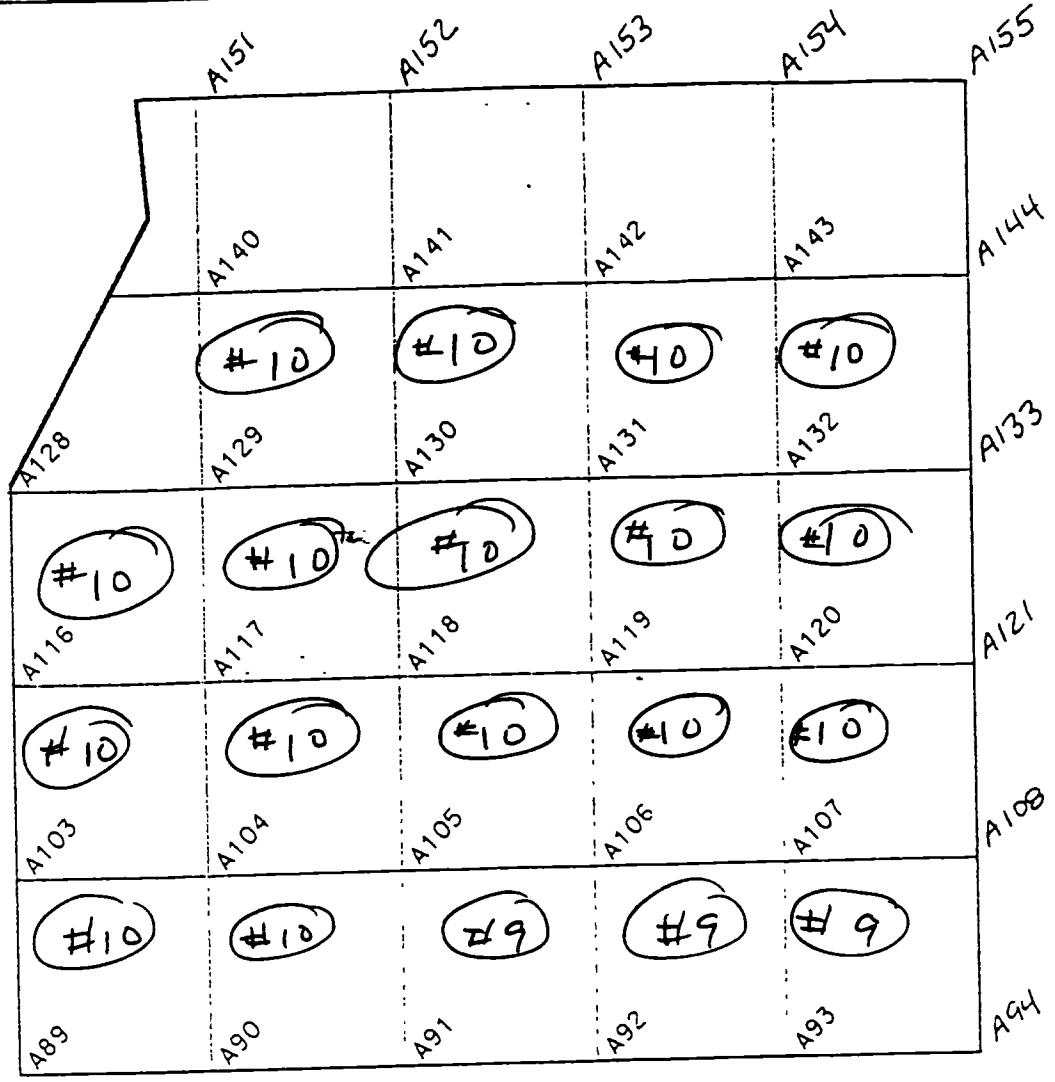
COMMENTS : G. Hamra, Rumi, J Dean, T. Lukezic D. Gill, T. Collings, R. Bauman, S Dorrell Q-9641, O-9863, T-9545, N-9854 K-9544

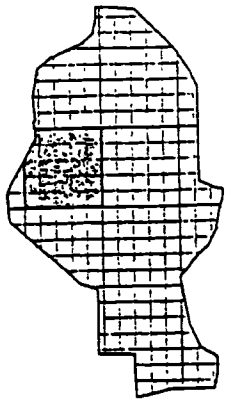
#11

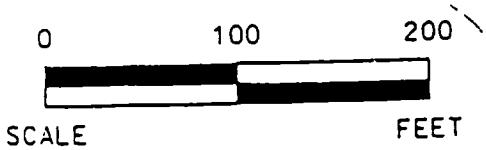
FINAL SITE WALKOVER
SURVEY 050AZZ01

9 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/053/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	







METER MODEL # :	2221	DETECTOR MODEL # :	2425"
METER SERIAL # :	#1910	DETECTOR SERIAL # :	#5774
CALIBRATION DUE :	8-2-01	CALIBRATION DUE :	2-2-01
SURVEY DATE/TIME :	9-13-00	FIELD BKG. :	10,500

SURVEYOR(S) : D. Roznovsky, J. Bushman, T. Lukezic

COMMENTS : G. Hamra, R Bauman, Rumi, D Gill, J Roofe

Q-9599 O-10340 U-950 N-9455

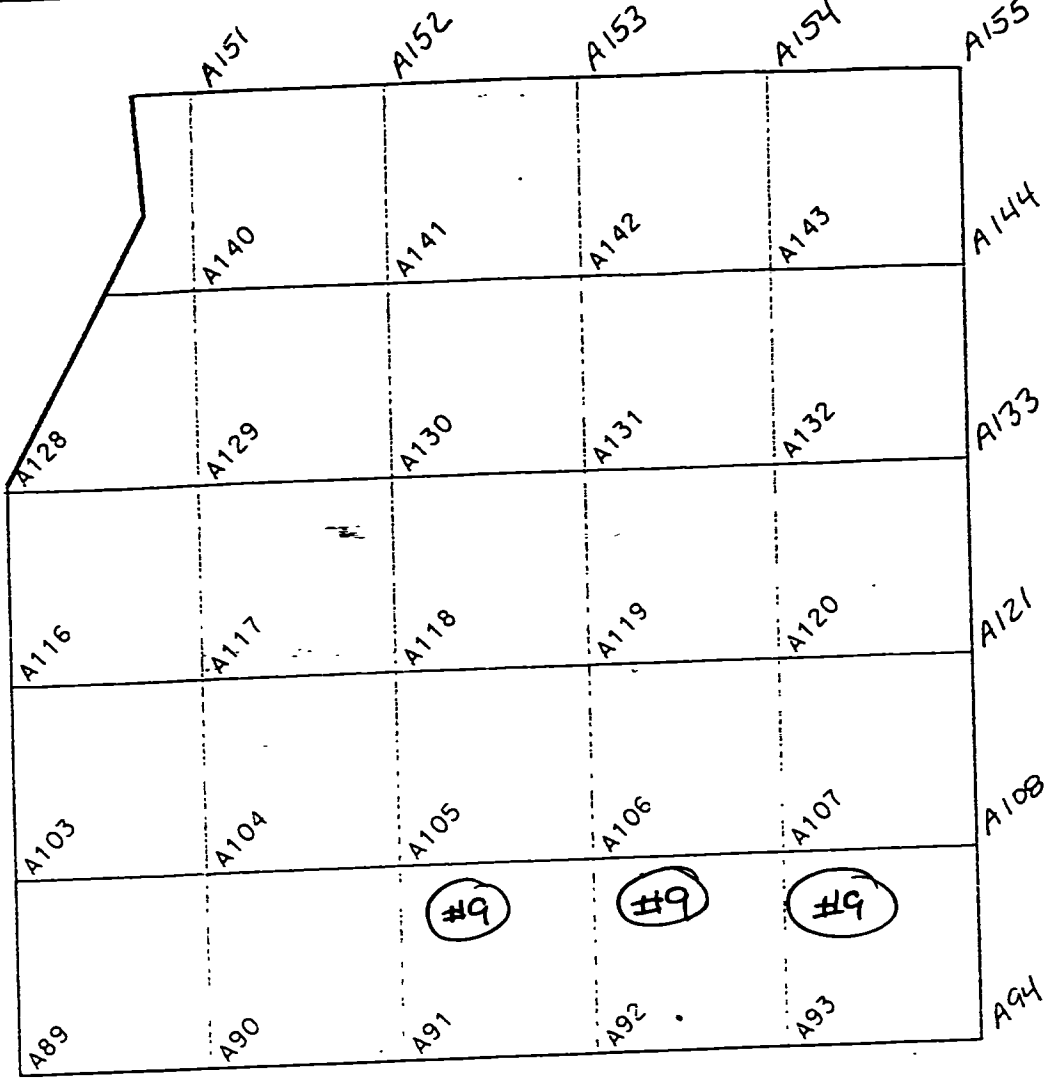
T-10369 V-10280 W-9801

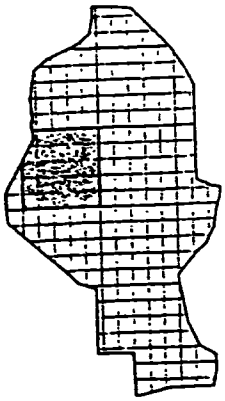
#10

FINAL SITE WALKOVER
SURVEY 050AZZ01

9 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/053/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	





METER MODEL #: 2221 DETECTOR MODEL #: 2x2 S

METER SERIAL #: #1910 DETECTOR SERIAL #: #5774

CALIBRATION DUE: 8-2-01 CALIBRATION DUE: 2-2-01

SURVEY DATE/TIME: 9-12-00 FIELD BKG.: 9221

SURVEYOR(S): D. ROZNOUSKY, J BUSHMAN, J ROOKE

COMMENTS: G. HAMRA, RUMI, J DEAN, H HUFKER

Q-9015 N-8400 K 9500

V-10381 P-9800 G 9432

#9

FINAL SITE WALKOVER
SURVEY 050AZZ01

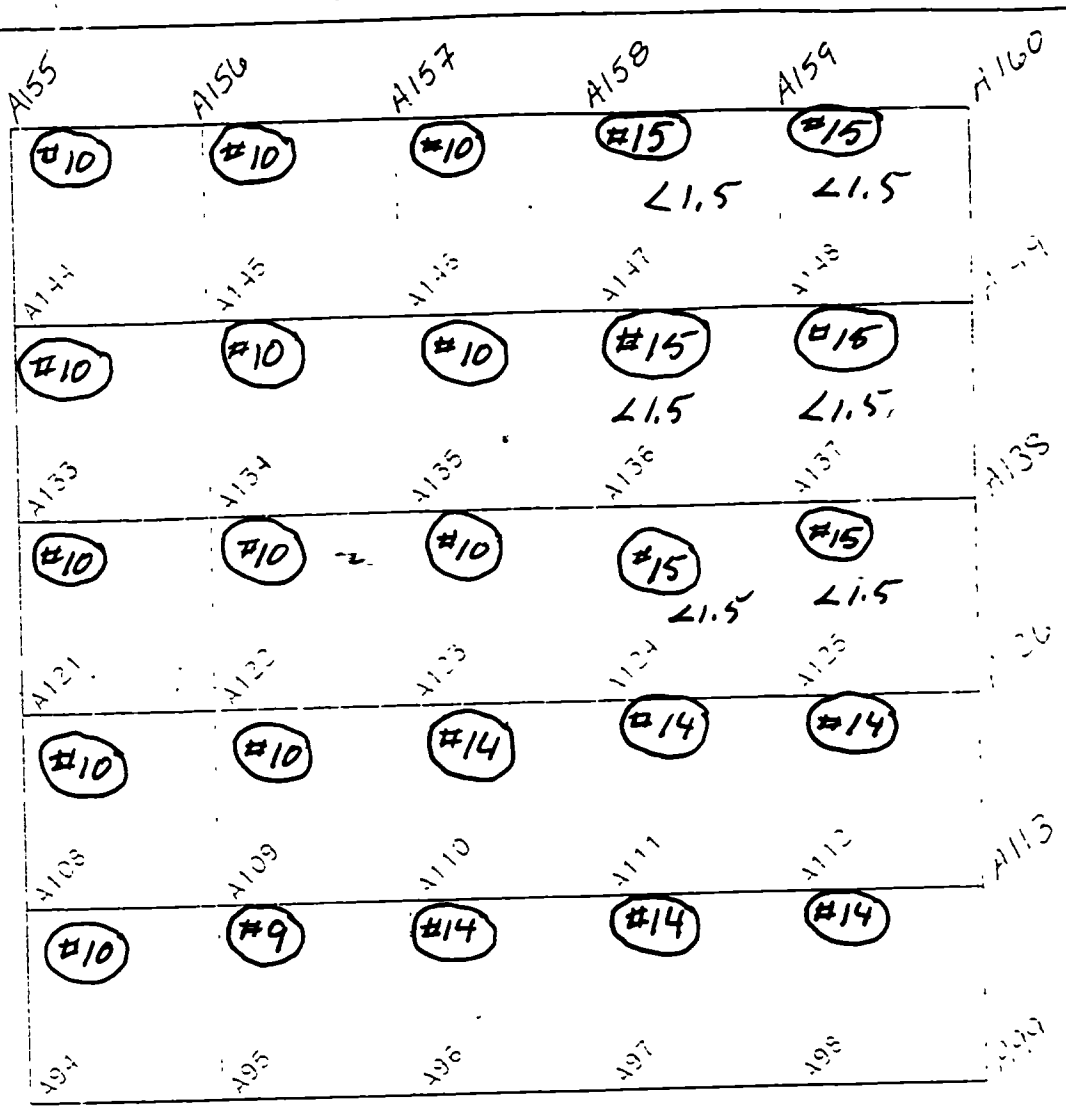
9 OF 16

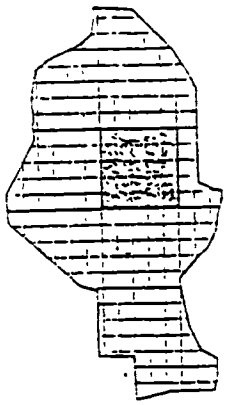
N

0 100 200

SCALE FEET

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/053/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	





0 100 200

SCALE FEET

METER MODEL # 2221 DETECTOR MODEL # 2x2"K"

METER SERIAL # : #4325 DETECTOR SERIAL # : #4532

CALIBRATION DUE : 8/24/01 CALIBRATION DUE : 6/23/01

SURVEY DATE/TIME : 3/10/01 FIELD BKG. : 8,000

SURVEYOR(S) : H. Hufker

COMMENTS :

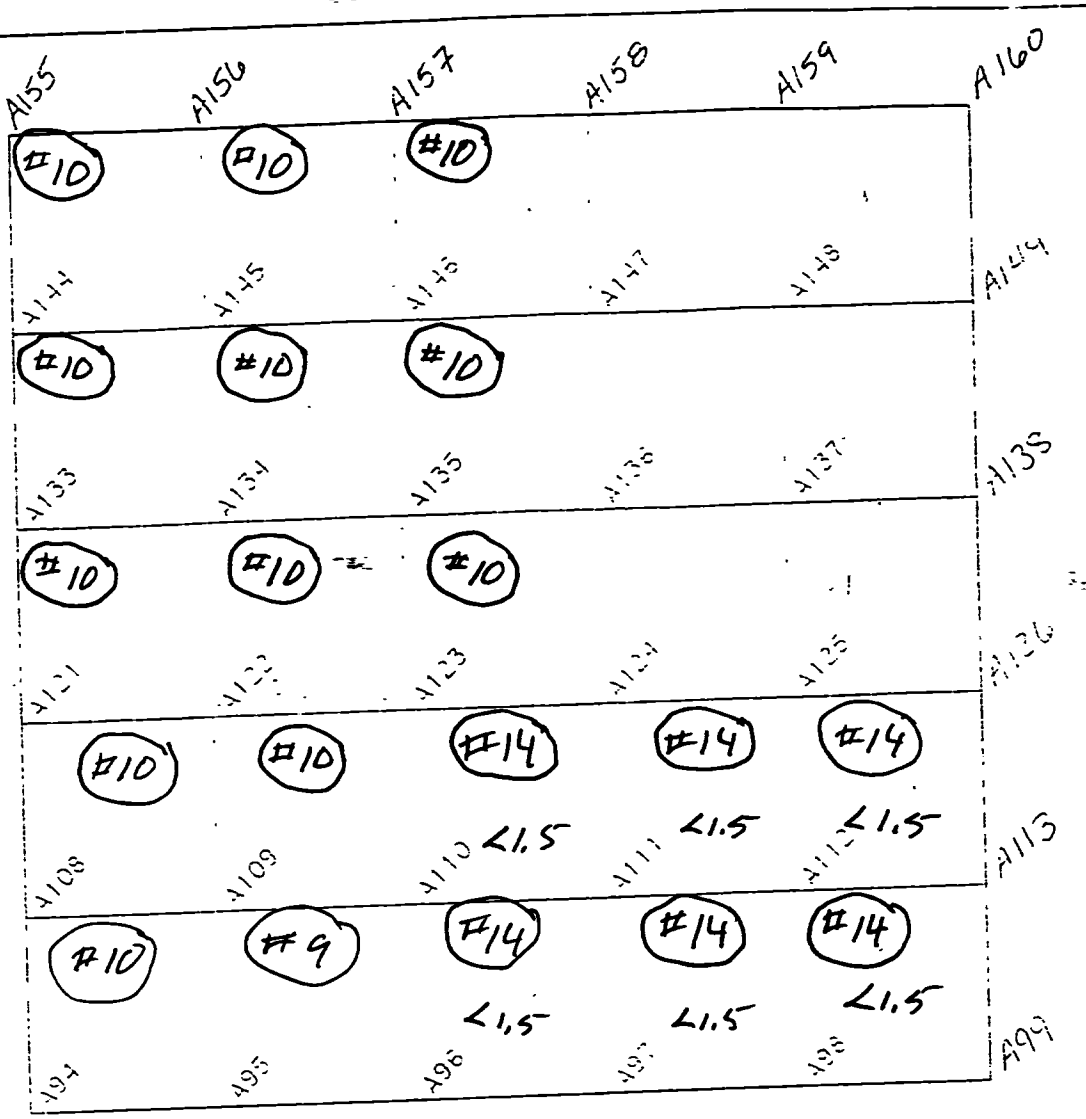
#45

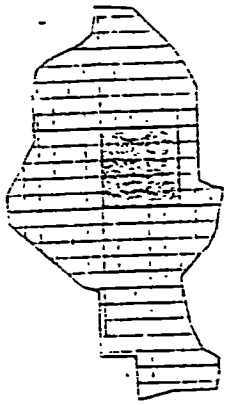
FINAL SITE WALKOVER
SURVEY 05OAZZ01

10 OF 16

REPORT NO.: DOE/OR/21548-865 EXHIBIT NO.: A/OR/054/0800

ORIGINATOR: ML DRAWN BY: CLN DATE: 8/22/00





0 100 200

SCALE FEET

METER MODEL # : 2221

DETECTOR MODEL # : 2x2"K"

METER SERIAL # : #4325

DETECTOR SERIAL # : #4532

CALIBRATION DUE : 8/24/01

CALIBRATION DUE : 6/23/01

SURVEY DATE/TIME : 3/9/01

FIELD BKG. : 10,000

SURVEYOR(S) : D.Roznovsky, H.Hufker

COMMENTS : P-10,000

#14

FINAL SITE WALKOVER SURVEY 05CAZZ01

10 OF 16

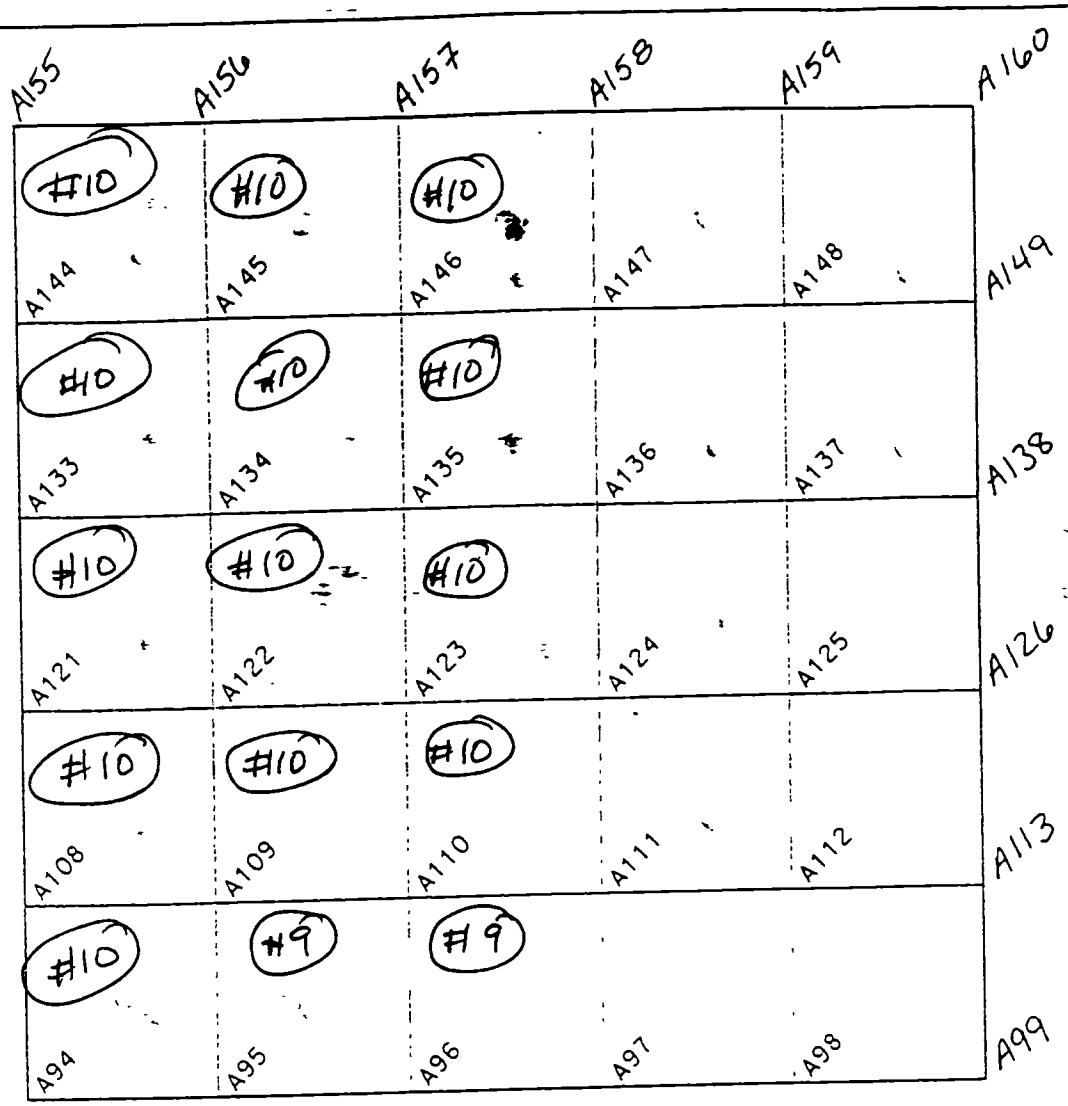
REPORT NO.: DOE/CP/21548-865

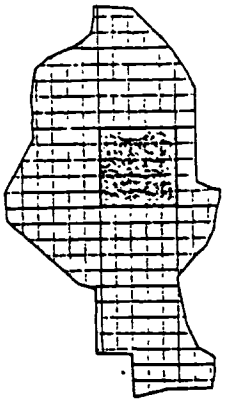
EXHIBIT NO.: A/CP/05-/05CC

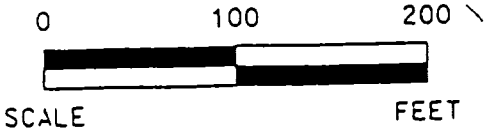
ORIGINATOR: ML

DRAWN BY: SLA

DATE: 8/22.00







METER MODEL # :	2221	DETECTOR MODEL # :	2X2 5"
METER SERIAL # :	#1910	DETECTOR SERIAL # :	#5774
CALIBRATION DUE :	8-2-01	CALIBRATION DUE :	2-2-01
SURVEY DATE/TIME :	9-13-00	FIELD BKG. :	10,500
SURVEYOR(S) :	D. ROZNOVSKY, J BUSHMAN, T. LUKEZIC		

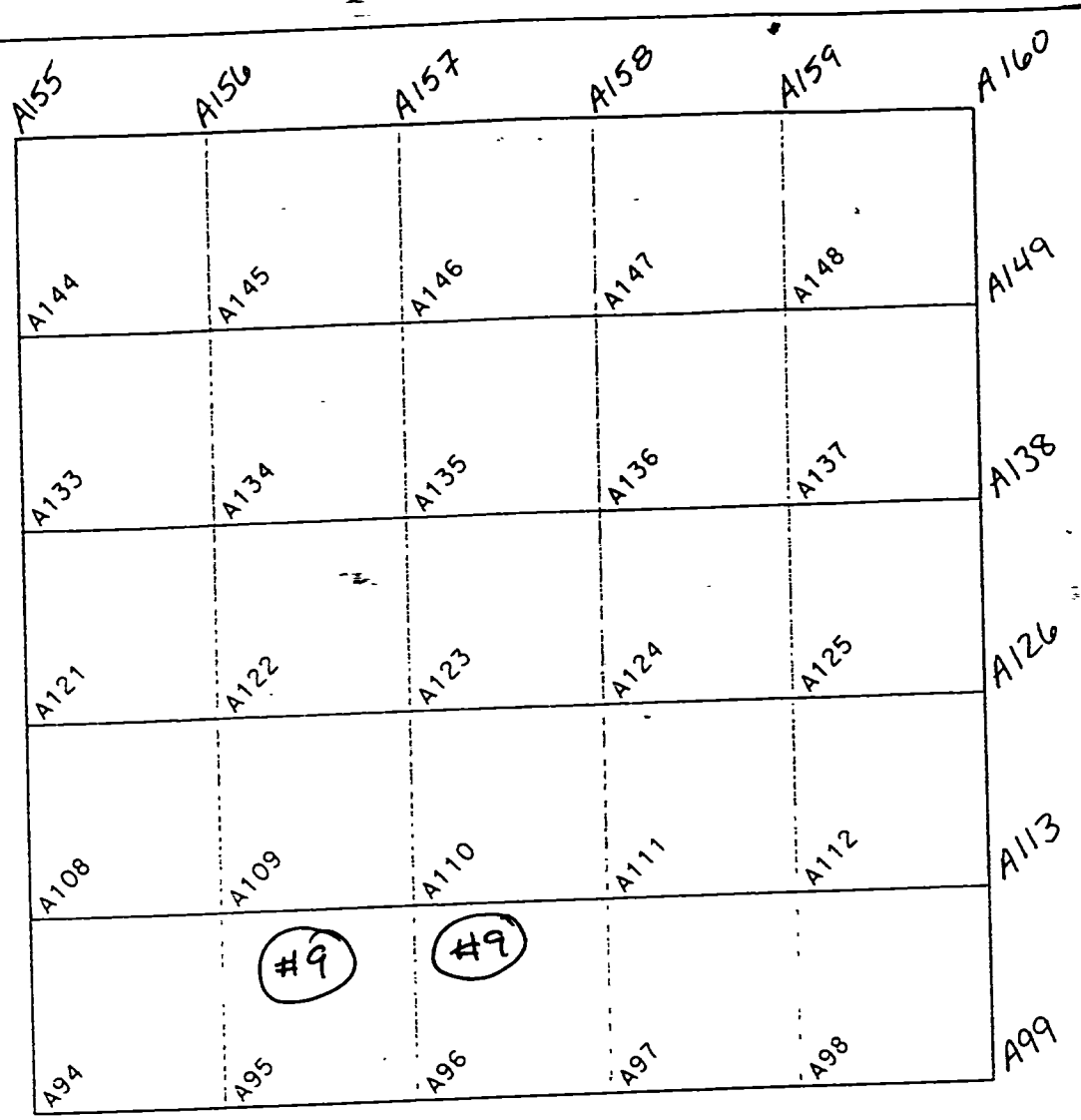
COMMENTS : G. HAMRA, R. BAUMAN, RUM., D GILL, J ROFF
Q-9599 U-9500, W-9801 V-10,280
T-10,369 N-9455 O-10,340

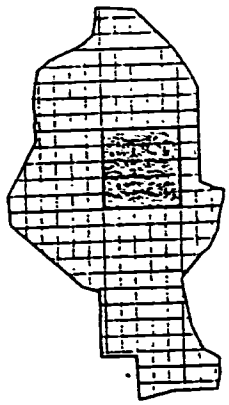
#10

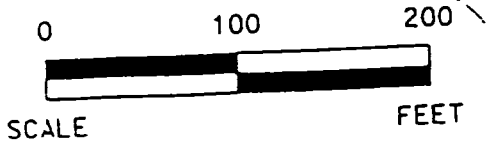
FINAL SITE WALKOVER
SURVEY 050AZZ01

10 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/054/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	







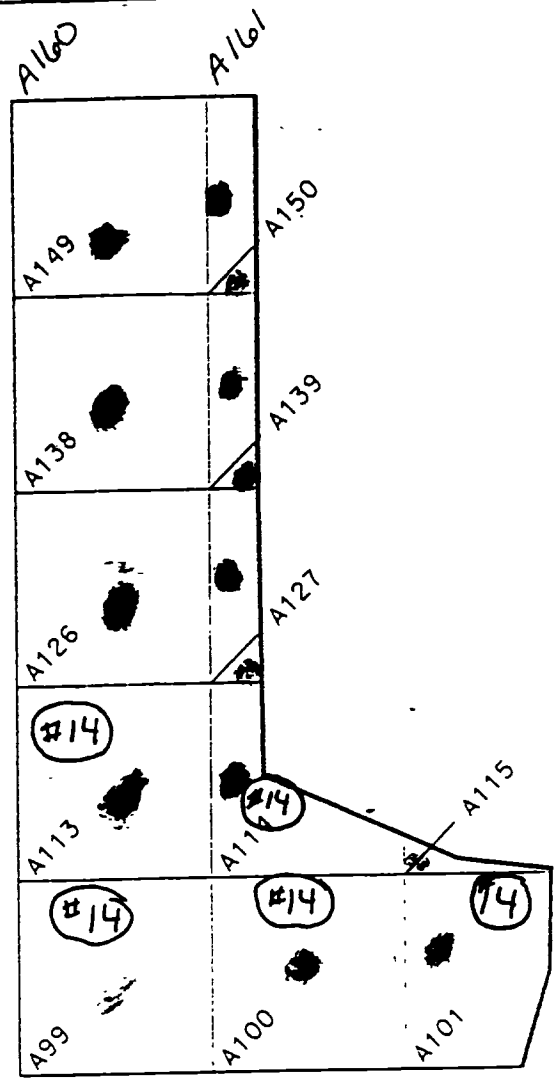
METER MODEL # :	2221	DETECTOR MODEL # :	2x2 S"
METER SERIAL # :	#1910	DETECTOR SERIAL # :	#5774
CALIBRATION DUE :	8-2-01	CALIBRATION DUE :	2-2-01
SURVEY DATE/TIME :	9-12-00	FIELD BKG. :	9221
SURVEYOR(S) :	D. ROZNOVSKY, J. BUSHMAN, J. ROOFE		

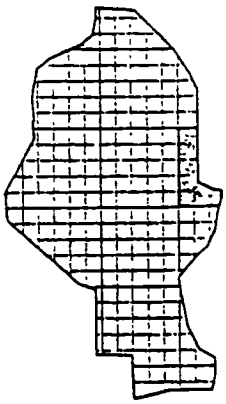
COMMENTS : G. HAMRA RUM., J. DEAN, H. HUFKER
Q-9015, V-10,380 N-8400, P-9800
K-9500, G-9432

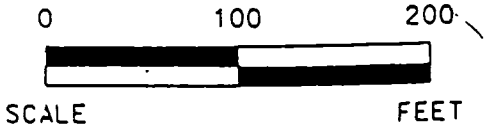
#9 FINAL SITE WALKOVER
SURVEY 050AZZ01

10 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/054/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	





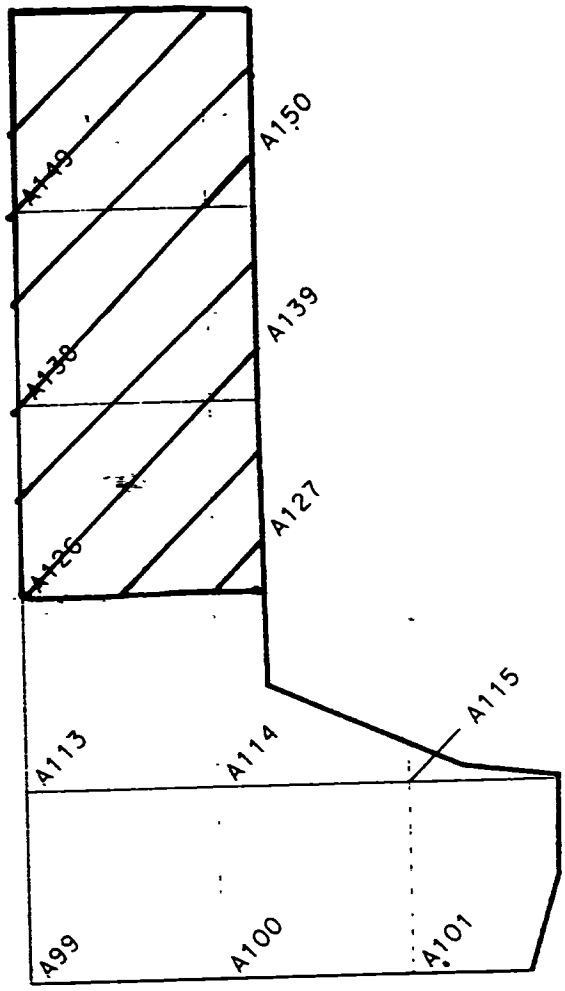


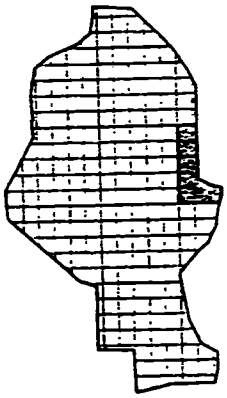
METER MODEL # :	2221	DETECTOR MODEL # :	2x2 "K"
METER SERIAL # :	#4325	DETECTOR SERIAL # :	#4532
CALIBRATION DUE :	8/24/01	CALIBRATION DUE :	6/23/01
SURVEY DATE/TIME :	3/9/01	FIELD BKG. :	10,000
SURVEYOR(S) :	D. Roznovsky, H. Hufker		
COMMENTS :	P-10,000		

FINAL SITE WALKOVER
SURVEY 050AZZ01

11 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/055/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	





0 100 200

SCALE FEET

METER MODEL # : 'L' 2221 / 'V' 2221 DETECTOR MODEL # : 2X2 44-10 / 2X2 44-10

METER SERIAL # : 127223 / 154225 DETECTOR SERIAL # : 138763 / 023338

CALIBRATION DUE : 6.19.02 / 6.6.02 CALIBRATION DUE : 6.28.02 / 2.6.03

SURVEY DATE/TIME : 3.12.02 / 1500 FIELD BKG. : 10000-10500

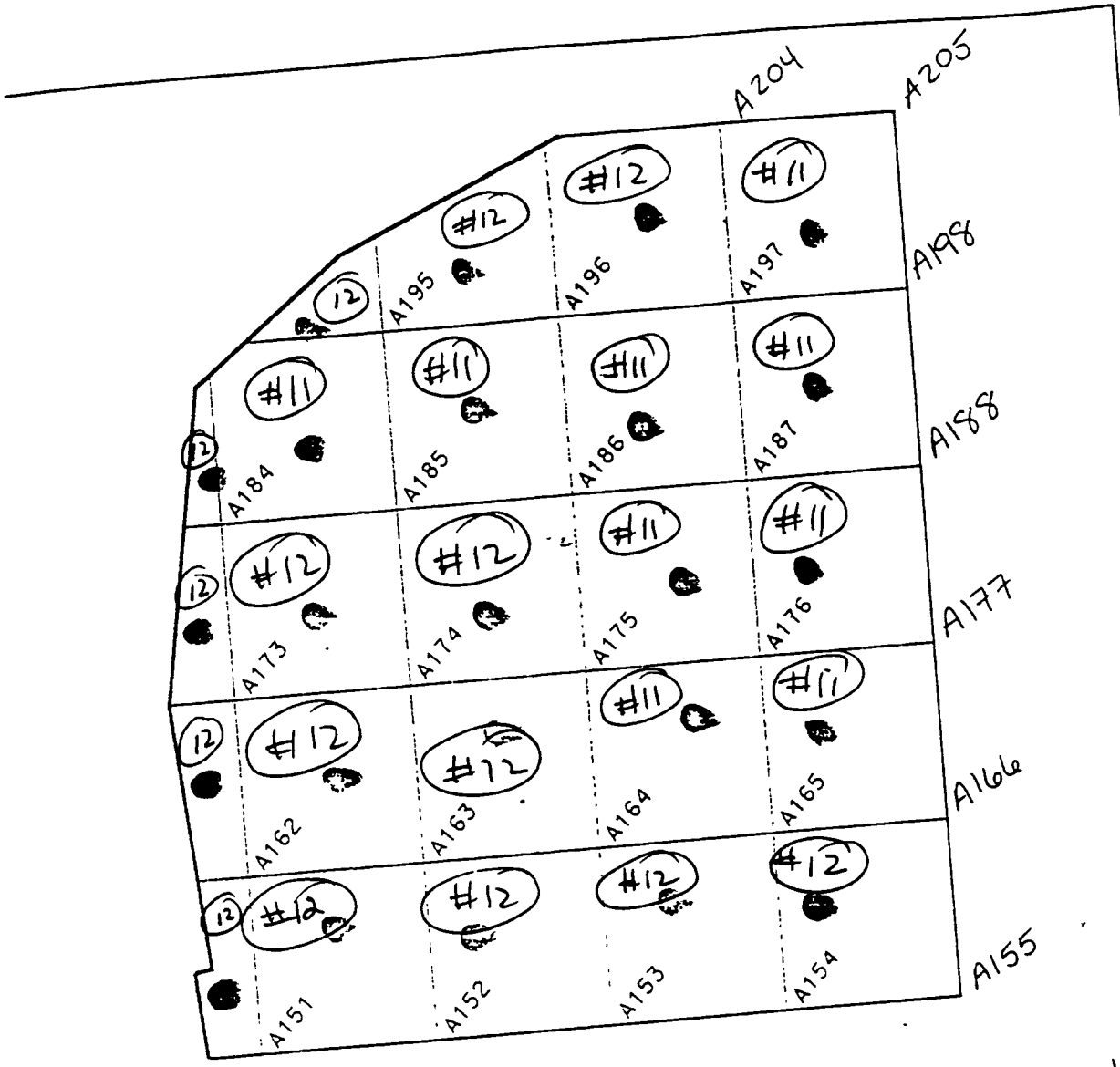
SURVEYOR(S) : ~~D. Lacost~~ D. Larson, D. Gill

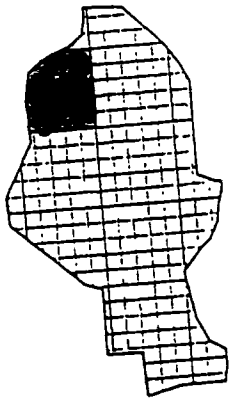
COMMENTS : All areas < 1.5 x BKG ☒

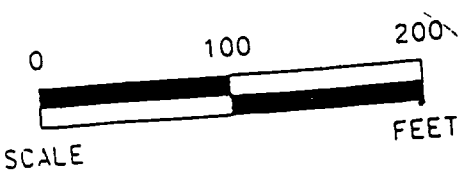
FINAL SITE WALKOVER
SURVEY 050AZZ01

11 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/055/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	







METER MODEL # : 2221 DETECTOR MODEL # : 2x2 5"

METER SERIAL # : #1910 DETECTOR SERIAL # : #5.774

CALIBRATION DUE : 8-2-01 CALIBRATION DUE : 2-2-01

SURVEY DATE/TIME : 9-15-00 FIELD BKG. : 10,251

SURVEYOR(S) : D. Roznowsky, J Bushman, J Rooff, Rvai

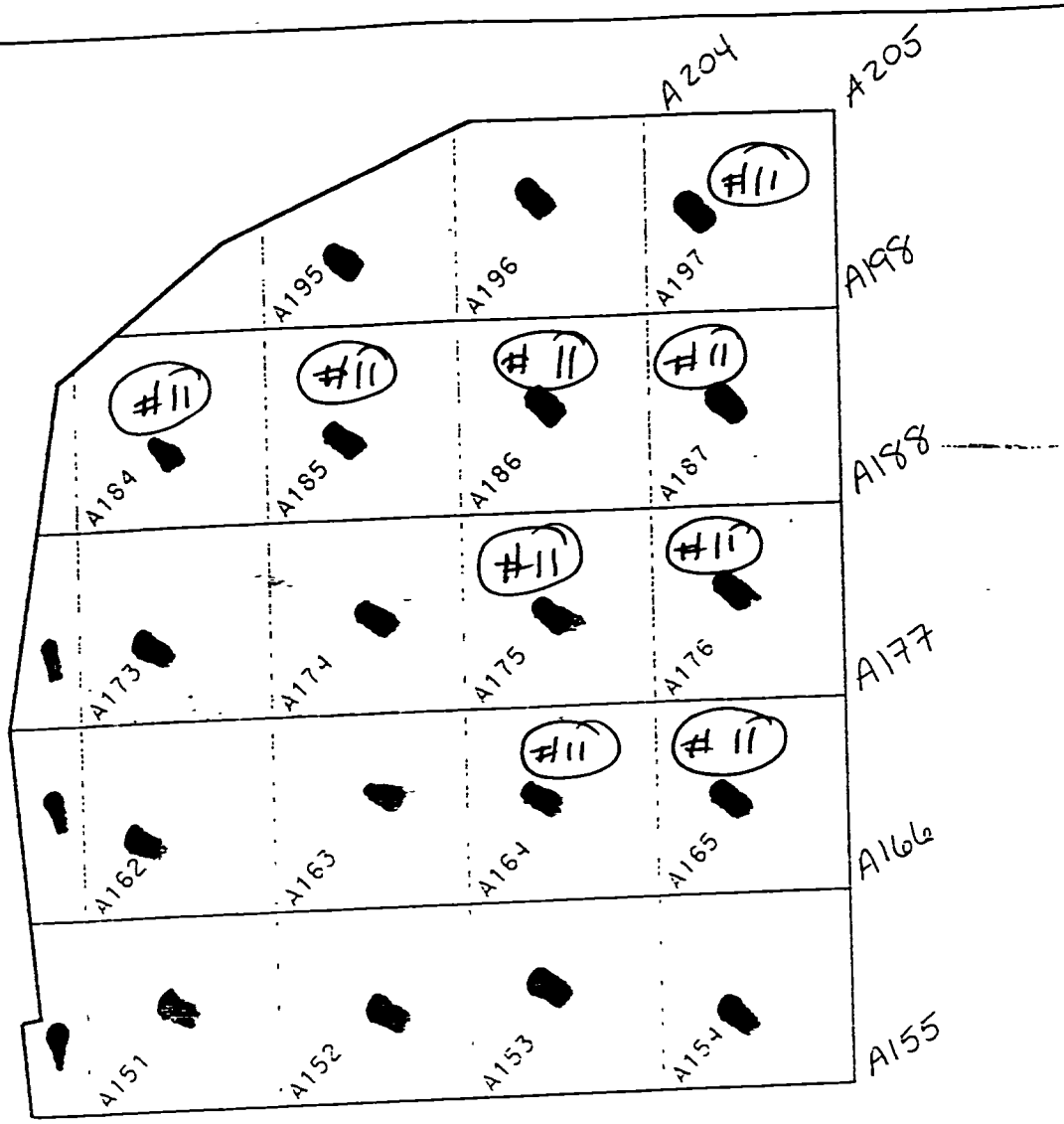
COMMENTS : J. Dean, T. Collings, S Dorrell, J Lukezic
Q-10,576, V-10949, P-10438, T-8500

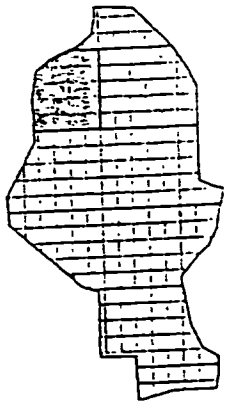
#12

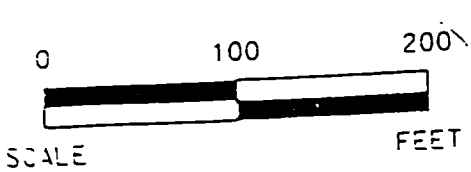
FINAL SITE WALKOVER
SURVEY 050AZZ01

12 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/056/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	







METER MODEL # : 2221 DETECTOR MODEL # : 2x2 5"

METER SERIAL # : #1910 DETECTOR SERIAL # : #5274

CALIBRATION DUE : 8-2-01 CALIBRATION DUE : 2-2-01

SURVEY DATE/TIME : 9-14-00 FIELD BKG. : 10,008

SURVEYOR(S) : D. Roznovsky, J. Bushman, J. Roofe

COMMENTS : D Gill, T. Collings, R. Bauman, Rum, J. Dean, S. Dorrell, T Lukezic

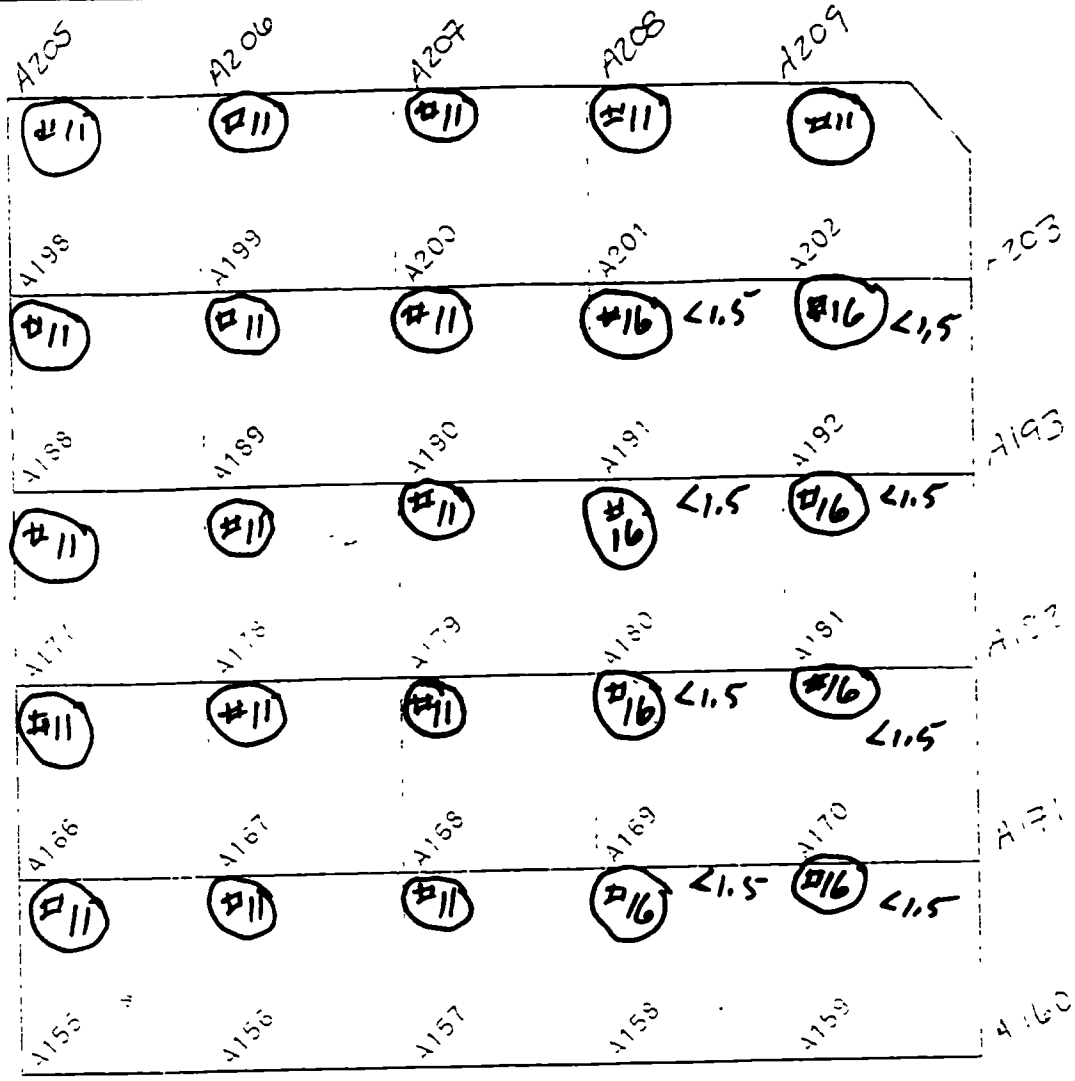
Q-9641, O-9863, T-9545, N-9854

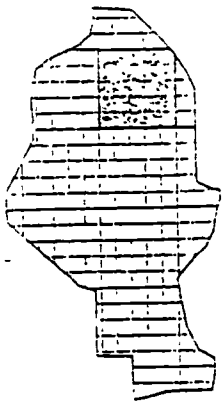
K-9544

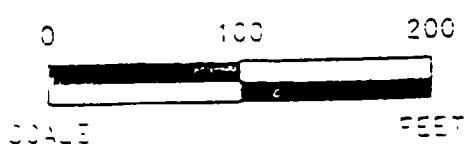
#11 FINAL SITE WALKOVER
SURVEY 050AZZ01

12 OF 16

REPORT NO.: DOE/CR/21548-865		EXHIBIT NO.: A/CP/056/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	







METER MODEL # : 2221 DETECTOR MODEL # : 2x2"K"

METER SERIAL # : #4325 DETECTOR SERIAL # : #4532

CALIBRATION DUE : 8/24/01 CALIBRATION DUE : 6/23/01

SURVEY DATE/TIME : 3/11/01 FIELD BKG. : 8,000

SURVEYOR(S) : D. Roznovsky, H. Hufker

COMMENTS : P-8000

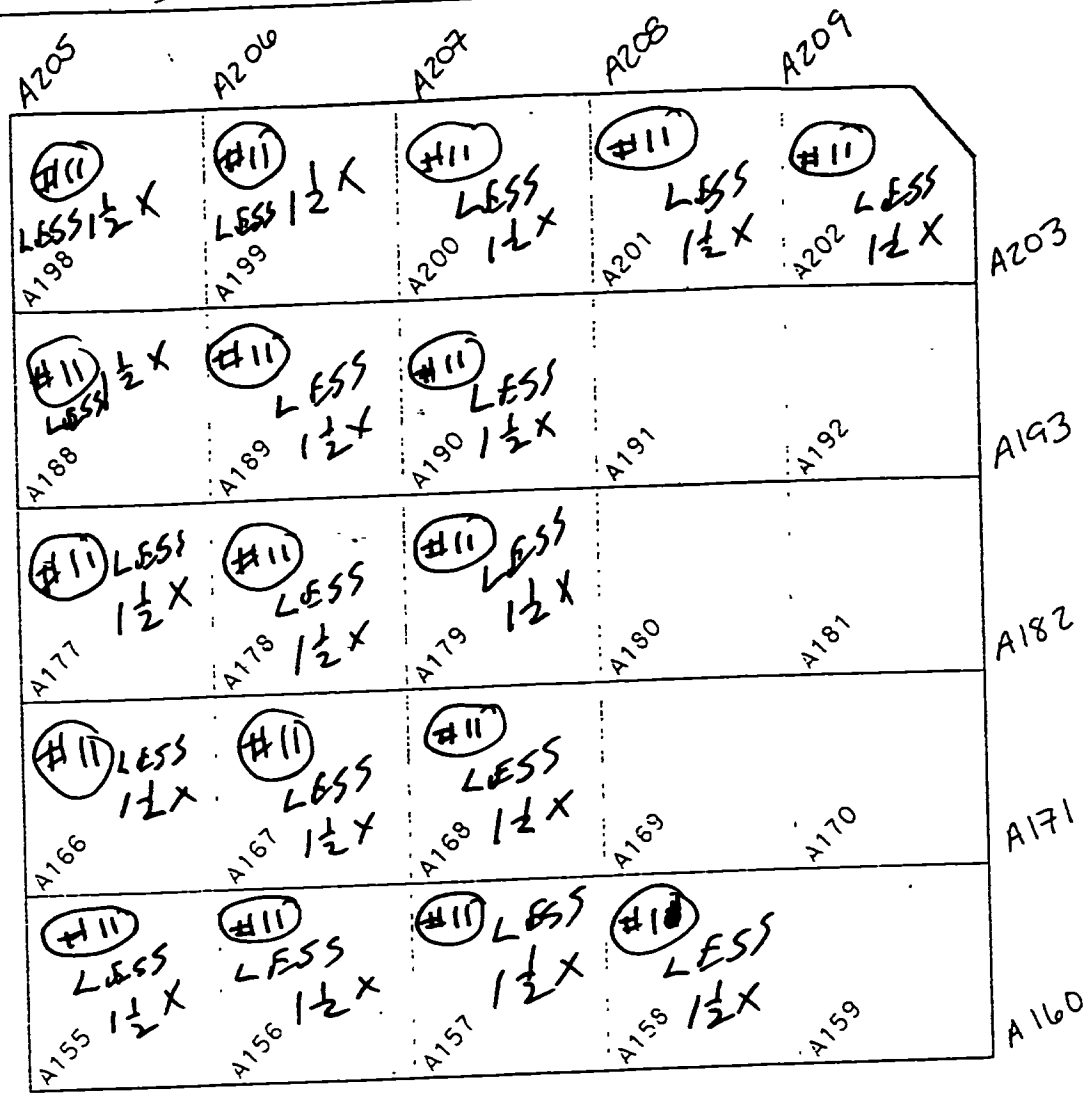
#16

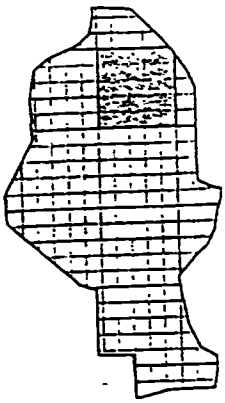
FINAL SITE [illegible]KOVER
SURVEY 050AZZ01

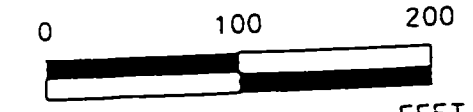
13 OF 16

REPORT NO. : DOE/OR 21548-865 EXHIBIT NO. : A/OR 057/0800

ORIGINATOR : ML DRAWN BY : [illegible] DATE : [illegible]







METER MODEL #: 2221 DETECTOR MODEL #: 2x2" S"

METER SERIAL #: DOE #1910 DETECTOR SERIAL #: DOE #5724

CALIBRATION DUE: 8-2-01 CALIBRATION DUE: 2-2-01

SURVEY DATE/TIME: 9-14-00 FIELD BKG.: "S" 10,008 "Q" 9641

SURVEYOR(S): D. ROZNOUSKY, J. BUSHMAN, J. ROOFE

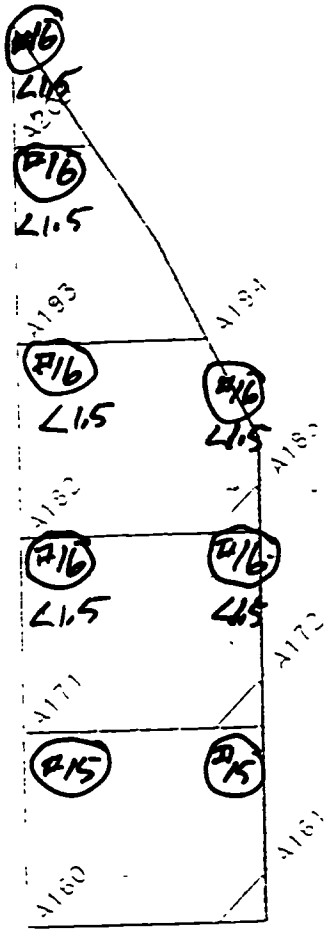
COMMENTS: D. GILL, TRACY COLLINGS, R. BAUMAN S. DARRELL, RUMI, J. DEAN. "O" - 9863 T-9545 N-9854 K-9544

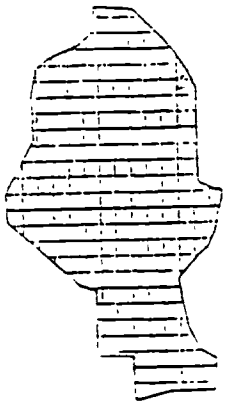
#11 FINAL SITE WALKOVER SURVEY 050AZZ01

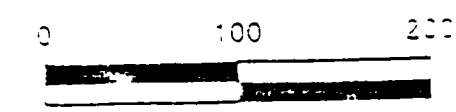
13 OF 16

REPORT NO.: DOE/OR/21548-865 EXHIBIT NO.: A/CP/057/0800

ORIGINATOR: ML DRAWN BY: GLN DATE: 8/22/00







METER MODEL #	2221	DETECTOR MODEL #	2x2"K"
METER SERIAL #	#4325	DETECTOR SERIAL #	#4532
CALIBRATION DUE	8/24/01	CALIBRATION DUE	6/23/01
SURVEY DATE/TIME	3/11/01	FIELD DXG	8,000
SURVEYOR(S)	H. Hufker, D. Roznorsky		
COMMENTS	P-8000		

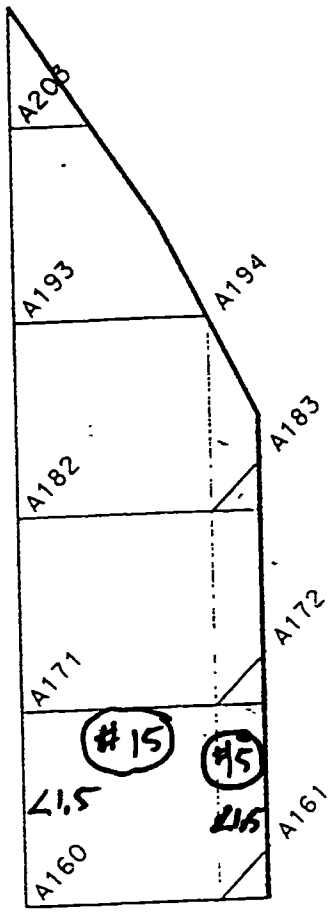
#16

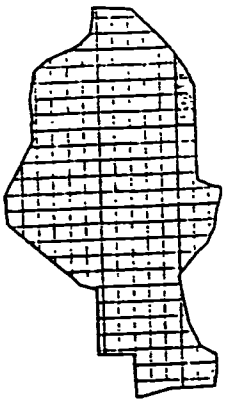
FINAL SITE [illegible]
SURVEY 050[illegible]

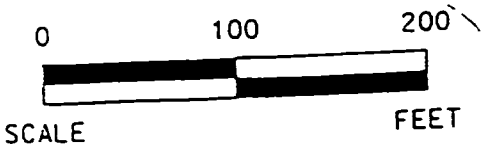
14 OF [illegible]

REPORT NO. [illegible] DP/058 [illegible]

ORIGINATOR [illegible] DRAWN [illegible] CLN DATE 8/22/00







METER MODEL # : 2221 DETECTOR MODEL # : 2x2 "K"

METER SERIAL # : #4325 DETECTOR SERIAL # : #4532

CALIBRATION DUE : 8/24/01 CALIBRATION DUE : 6/23/01

SURVEY DATE/TIME : 3/10/01 FIELD BKG. : 8,000

SURVEYOR(S) : H. Hufker

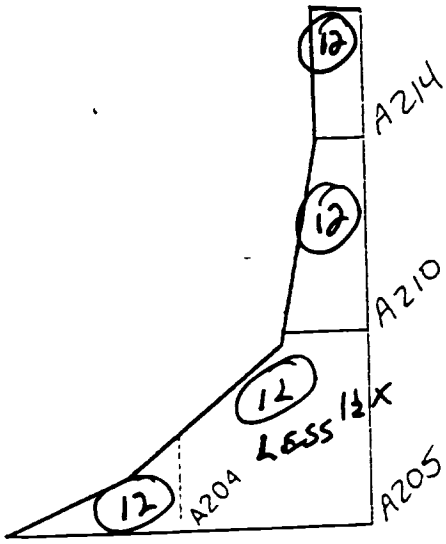
COMMENTS :

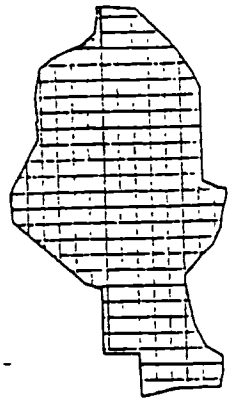
#15

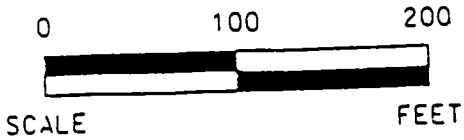
FINAL SITE WALKOVER
SURVEY 050AZZ01

14 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/058/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	







METER MODEL #:	2221	DETECTOR MODEL #:	2x2"5"
METER SERIAL #:	DOE #1910	DETECTOR SERIAL #:	DOE #5774
CALIBRATION DUE:	8-2-01	CALIBRATION DUE:	2-2-01
SURVEY DATE/TIME:	9-15-00	FIELD BKG.:	"5" 10251 10574
SURVEYOR(S):	D. ROZNOVSKY, J. BUSHMAN, J. ROSFE		

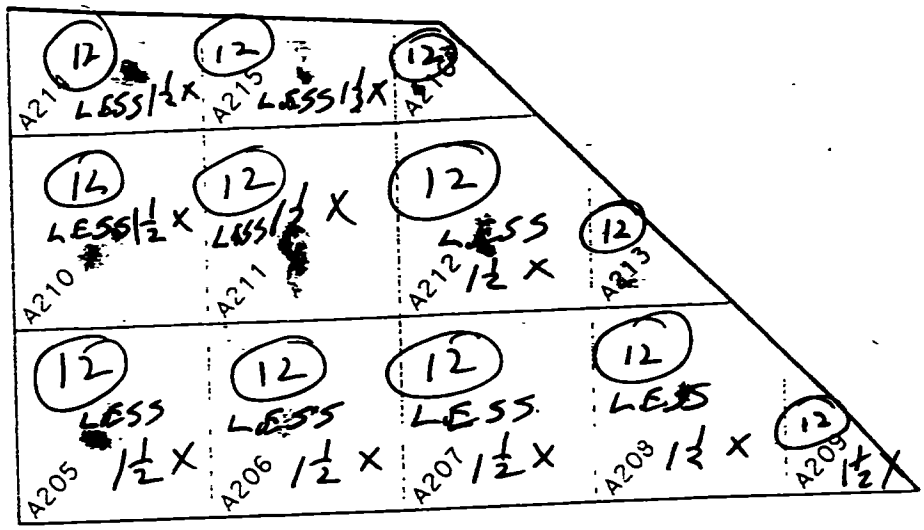
COMMENTS: J. DEAN, RUMI, TRACY COLLINGS S. DORRELL, T. LUKEZIC N-10,047 V-10,949 P-10438 T-8500

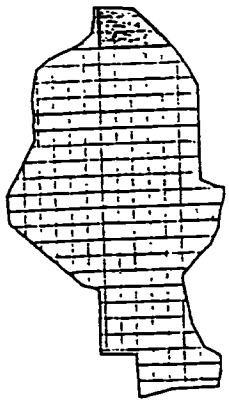
#12

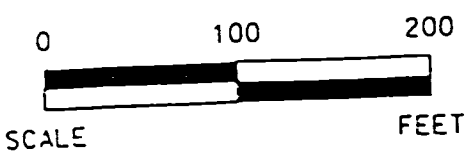
FINAL SITE WALKOVER SURVEY 050AZZ01

15 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.:	A/CP/059/0800
ORIGINATOR: MIL	DRAWN BY: GLN	DATE	8/22/00







METER MODEL #: 2221 DETECTOR MODEL #: 2x2 "S"

METER SERIAL #: DOE #1910 DETECTOR SERIAL #: DOE # 5774

CALIBRATION DUE: 8-2-01 CALIBRATION DUE: 2-2-01

SURVEY DATE/TIME: 9-15-00 FIELD BKG.: "S" 10251 "Ø" 10,526

SURVEYOR(S): D. ROZNOVSKY, J BUSHMAN, J. ROOFE

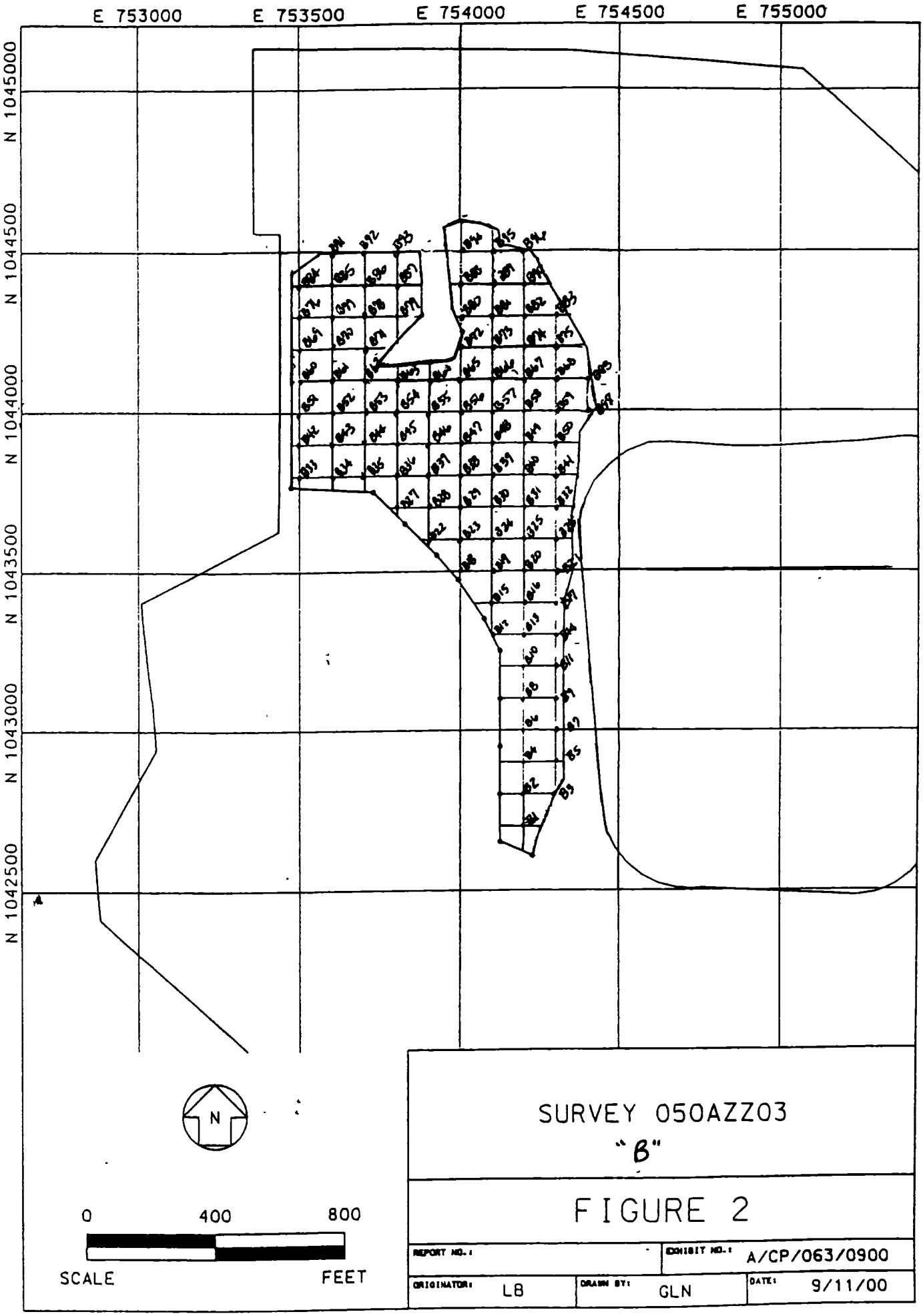
COMMENTS: J. DEAN, RUMI, TRACY COLLINGS S. DORRELL, T. L. KEZIC N-10,047 V-10949 P-10438 T-8500

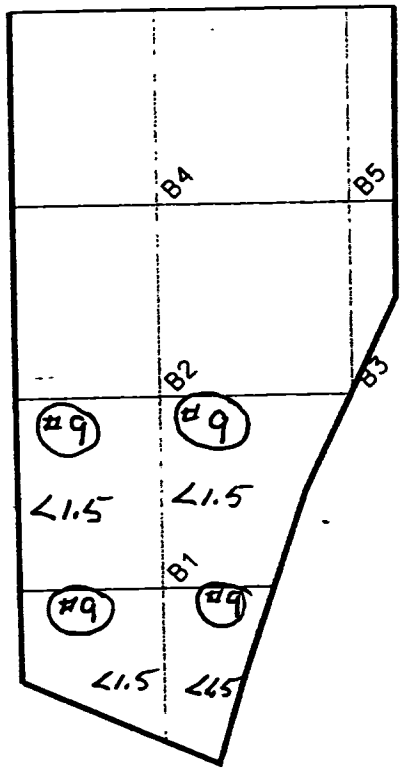
#12

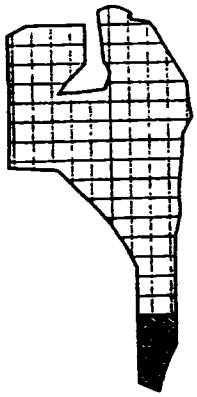
FINAL SITE WALKOVER
SURVEY 050AZZ01

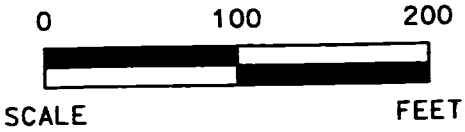
16 OF 16

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/060/0800	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 8/22/00	


E 753000
E 753500
E 754000
E 754500
E 755000
N 1045000
N 1044500
N 1044000
N 1043500
N 1043000
N 1042500
N
0
400
800
SCALE
FEET
SURVEY 050AZZ03
"B"
FIGURE 2
REPORT NO.:
EXHIBIT NO.: A/CP/063/0900
ORIGINATOR: LB
DRAWN BY: GLN
DATE: 9/11/00







METER MODEL # : 2221 DETECTOR MODEL # : 2x2"K"

METER SERIAL # : #4325 DETECTOR SERIAL # : #453

CALIBRATION DUE : 8/24/01 CALIBRATION DUE : 6/23/01

SURVEY DATE/TIME : 3/9/01 FIELD BKG. : 10,000

SURVEYOR(S) : D. Roznovsky, H. Hufker

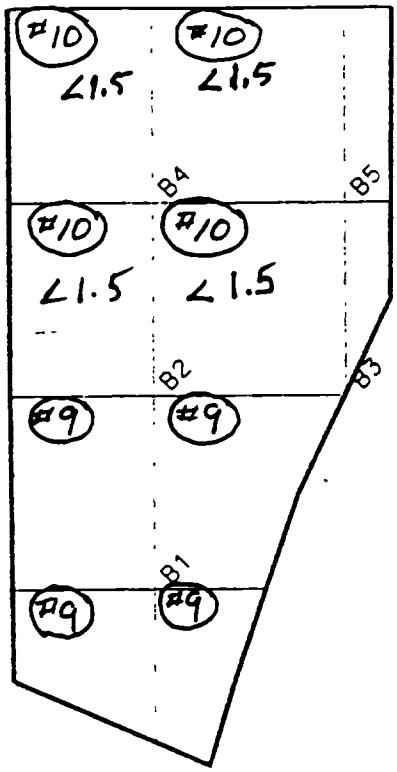
COMMENTS : P-10,000

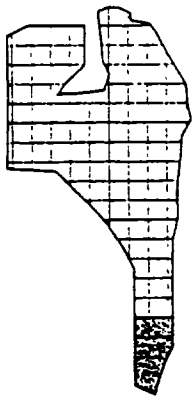
#9

FINAL SITE WALKOVER
SURVEY 050AZZ03

1 OF 7

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/064/0900	
ORIGINATOR: LB	DRAWN BY: GLN	DATE: 9/11/00	





0 100 200

SCALE FEET

METER MODEL # : 2221 DETECTOR MODEL # : 2X2"K"

METER SERIAL # : #4325 DETECTOR SERIAL # : #4532

CALIBRATION DUE : 8/24/01 CALIBRATION DUE : 6/23/01

SURVEY DATE/TIME : 3/10/01 FIELD BKG. : 8,000

SURVEYOR(S) : H Hufker

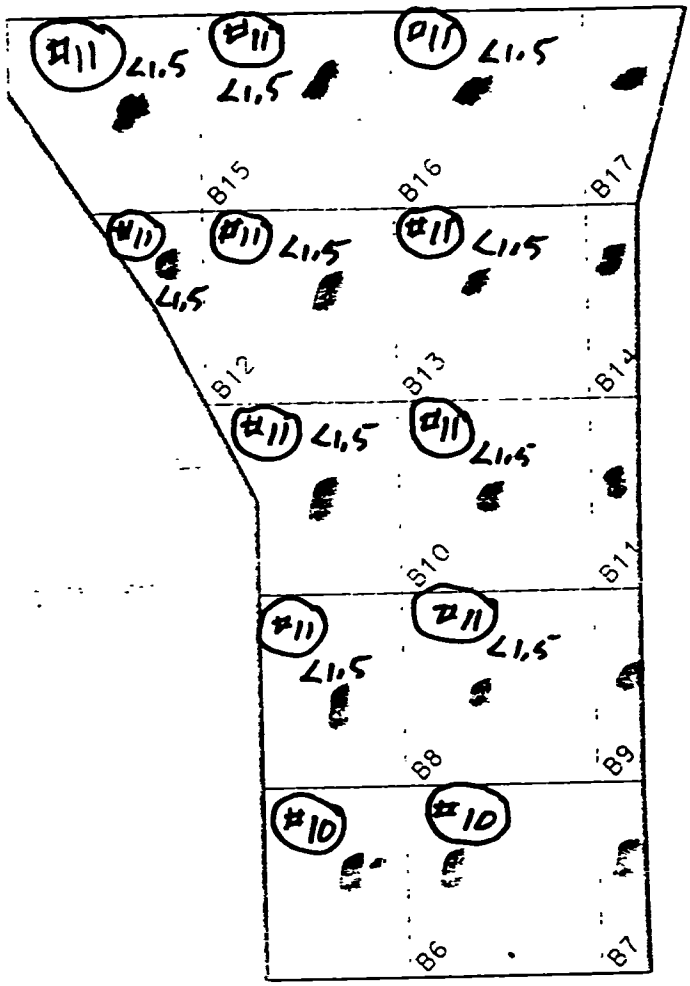
COMMENTS :

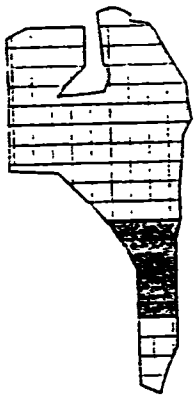
#10

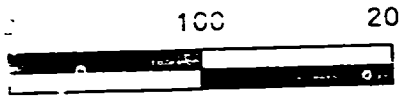
FINAL SITE WALKOVER
SURVEY 050AZZ03

1 OF 7

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/064/0900	
ORIGINATOR: LB	DRAWN BY: GLN	DATE: 9/11/00	







METER MODEL # : 2221 DETECTOR MODEL # : 2X2 "K"

METER SERIAL # : #4325 DETECTOR SERIAL # : #4531

CALIBRATION DUE : 8/24/01 CALIBRATION DUE : 6/23/01

SURVEY DATE/TIME : 3/11/01 FIELD BKG. : 8,000

SURVEYOR(S) : D Roznovsky, H. Hüfker

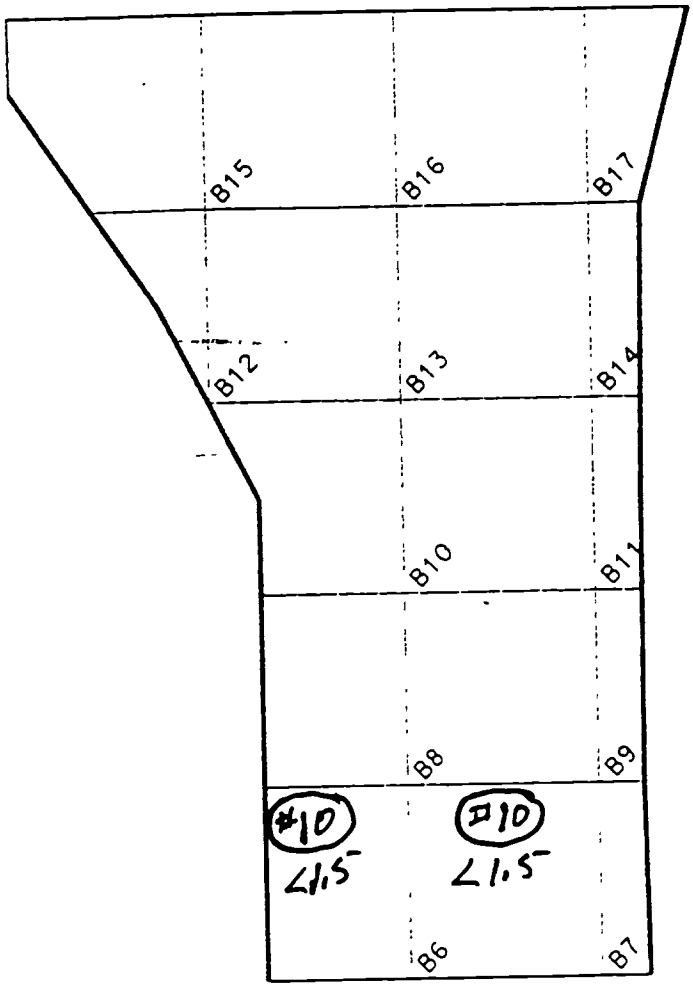
COMMENTS :

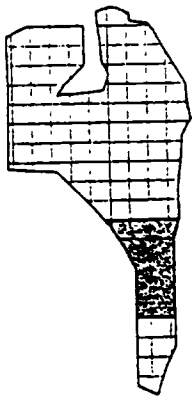
#11

FINAL SITE WALKOVER
SURVEY 050AZZ03

2 OF 7

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/065/0900	
ORIGINATOR: LB	DRAWN BY: CLN	DATE: 3/11/00	





METER MODEL # : 2221

DETECTOR MODEL # : 2x2"K"

METER SERIAL # : #4325

DETECTOR SERIAL # : #4532

CALIBRATION DUE : 8/24/01

CALIBRATION DUE : 6/23/01

SURVEY DATE/TIME : 3/10/01

FIELD BKG. : 8,000

SURVEYOR(S) : H. Hufker

COMMENTS :

#10

FINAL SITE WALKOVER
SURVEY 050AZZ03

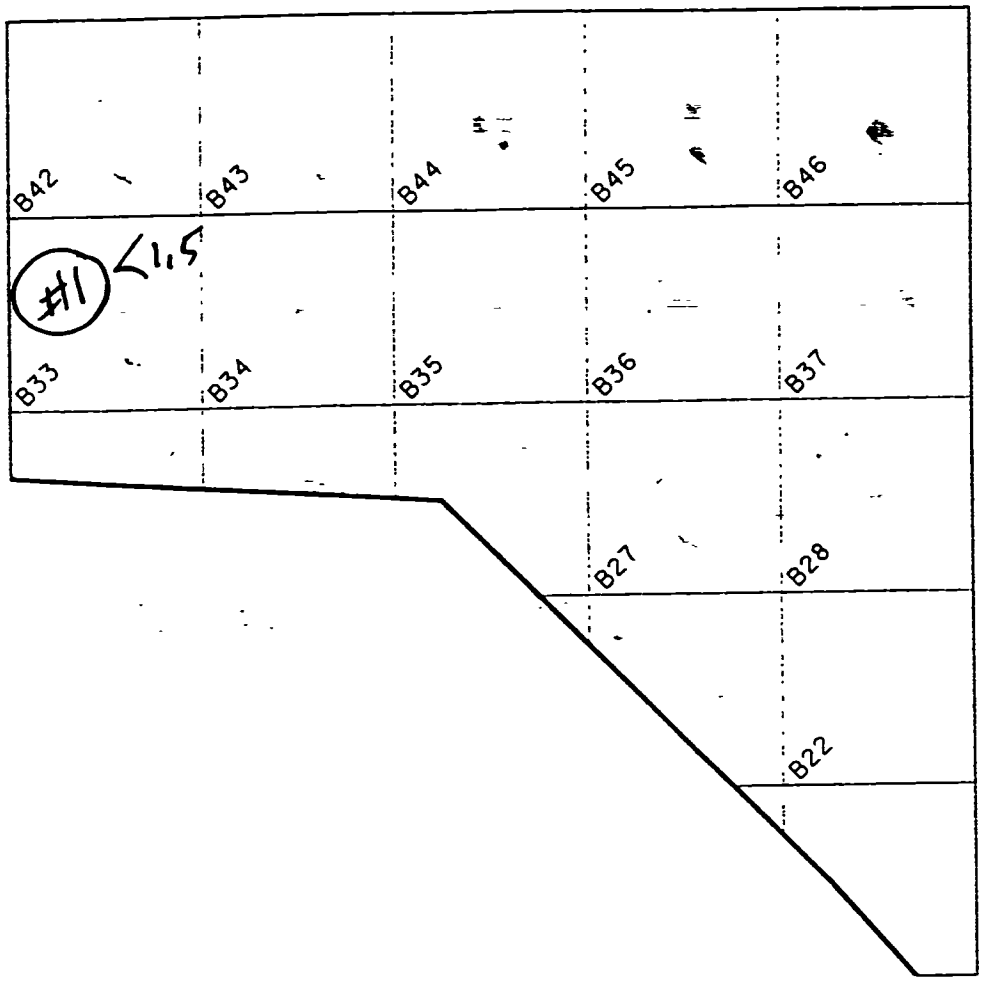
2 OF 7

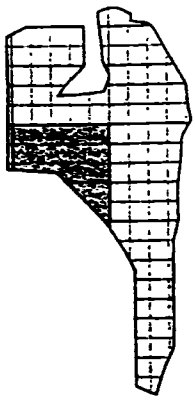
N

0 100 200

SCALE FEET

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/065/0900	
ORIGINATOR: LB	DRAWN BY: GLN	DATE: 9/11/00	





0 100 200

SCALE FEET

METER MODEL # : 2221 DETECTOR MODEL # : 2x2"-5"

METER SERIAL # : #1910 DETECTOR SERIAL # : 5774

CALIBRATION DUE : 8-2-01 CALIBRATION DUE : 2-2-01

SURVEY DATE/TIME : 9-21-00 FIELD BKG. : 9575

SURVEYOR(S) : D. Roznovsky, J. Rooff

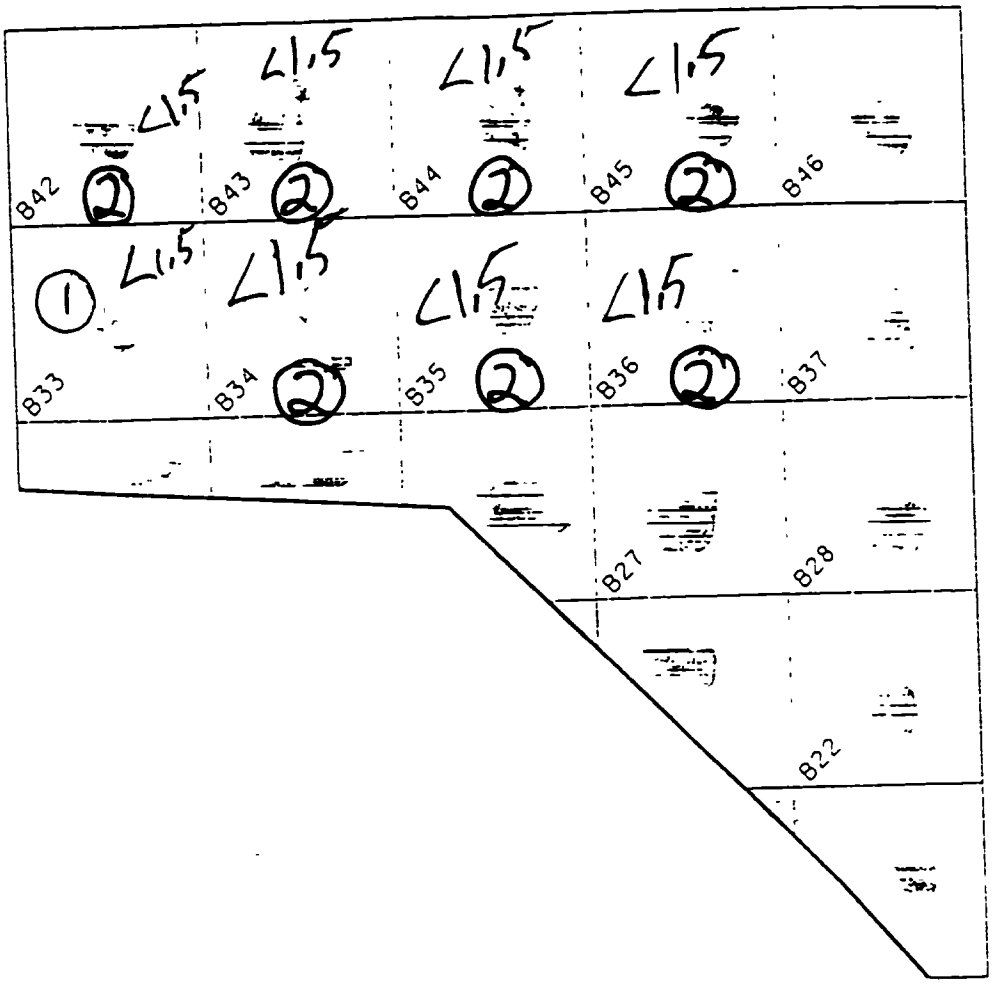
COMMENTS : "Q"-9384

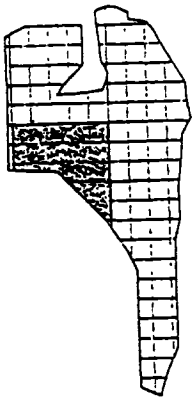
#1

FINAL SITE WALKOVER
SURVEY 050AZZ03

3 OF 7

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/066/0900	
ORIGINATOR: LB	DRAWN BY: GLN	DATE: 9/11/00	





METER MODEL #: 2221 DETECTOR MODEL #: 2x2"S"

METER SERIAL #: #1910 DETECTOR SERIAL #: #5774

CALIBRATION DUE: 8-2-01 CALIBRATION DUE: 2-2-01

SURVEY DATE/TIME: 9/22/00 FIELD BKG.: 9500

SURVEYOR(S): J. Roofe, D. Roznovsky, T. Lukezic

COMMENTS: R. Mahmood, J. Dean, G. Hamra

P-10800, O-10593, T-9860, Q-9445

2

FINAL SITE WALKOVER
SURVEY 050AZZ03

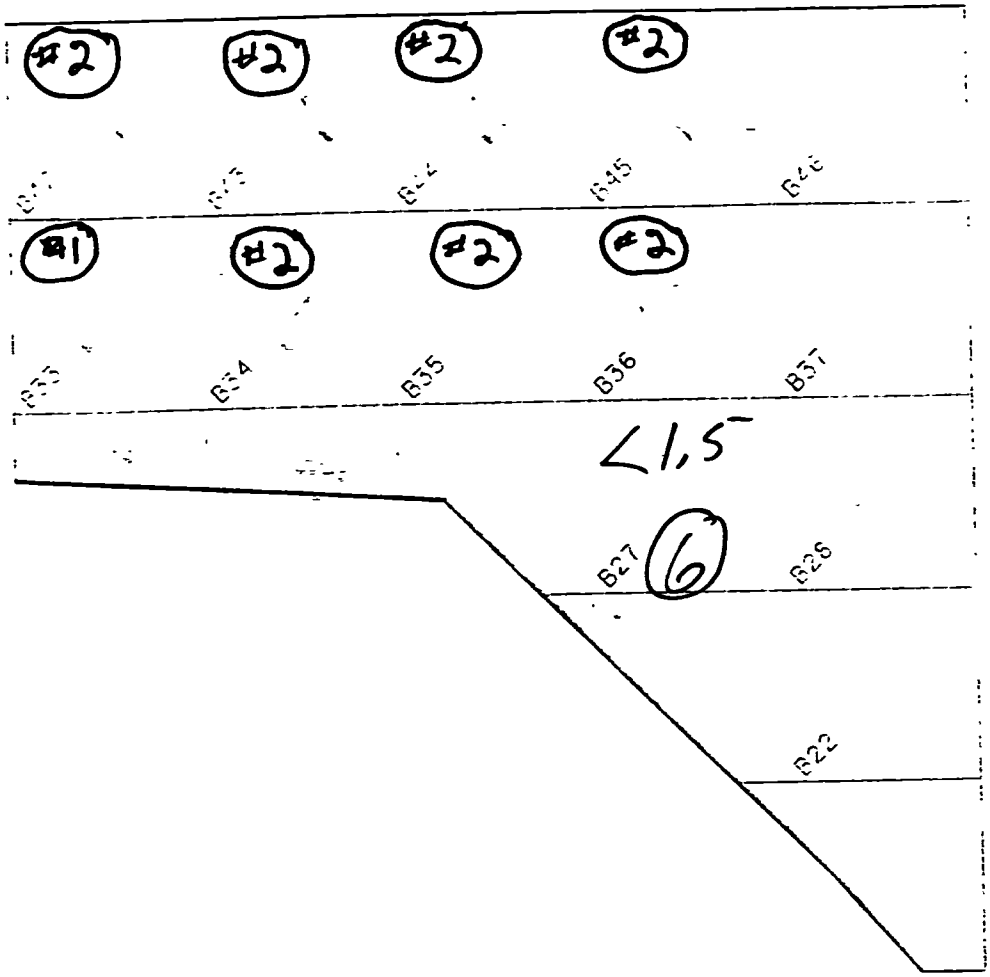
N

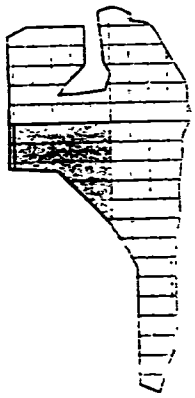
0 100 200

SCALE FEET

3 OF 7

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/066/0900	
ORIGINATOR: LB	DRAWN BY: GLN	DATE: 9/11/00	





0 100 200

SCALE FEET

METER MODEL #: 2221 DETECTOR MODEL #: 2x2 #5"

METER SERIAL #: #1910 DETECTOR SERIAL #: #5774

CALIBRATION DUE: 8-2-01 CALIBRATION DUE: 2-2-01

SURVEY DATE/TIME: 10-1-00 FIELD BKG.: 10956

SURVEYOR(S): J Roofe, D. Roznovsky

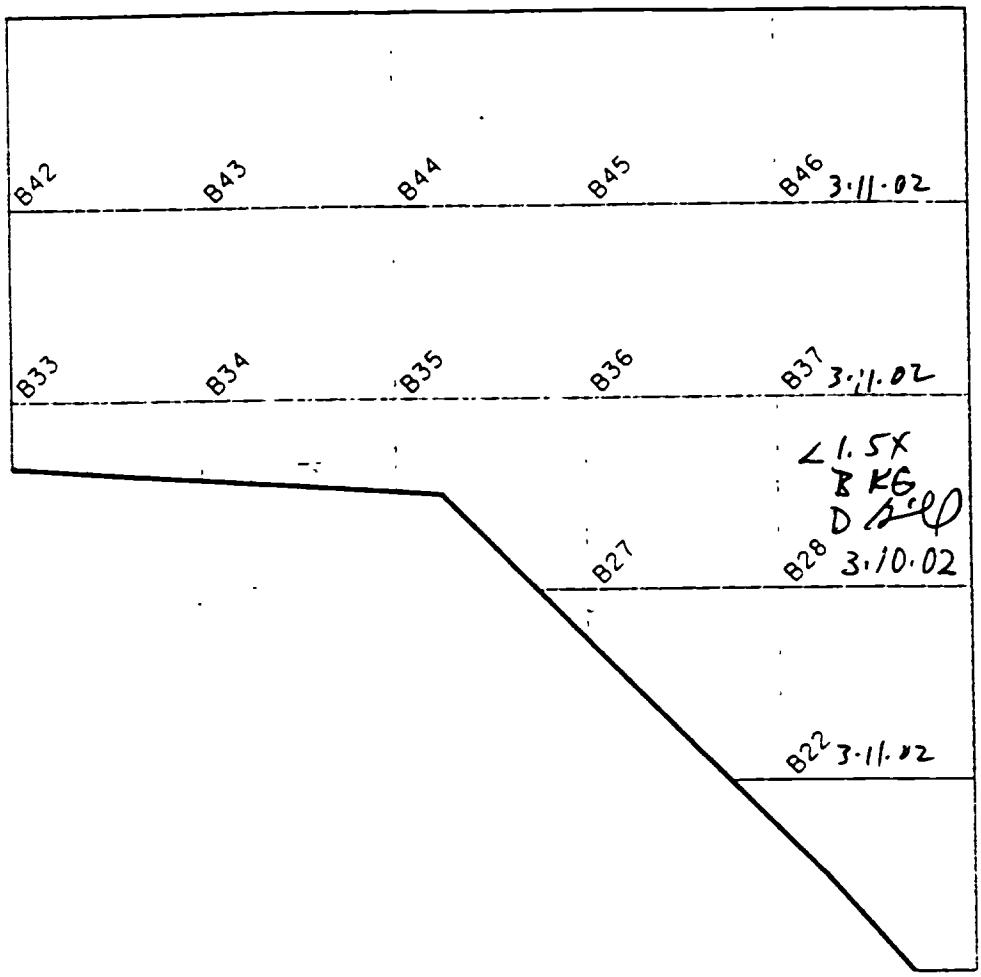
COMMENTS: Q-10926

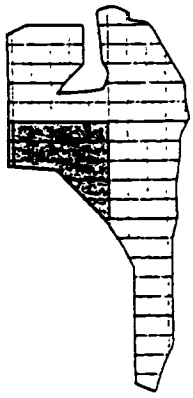
6

FINAL SITE WALKOVER
SURVEY 050AZZ03

3 OF 7

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/066/0900	
ORIGINATOR: LB	DRAWN BY: GLN	DATE: 9/11/00	





'U' 'V' 'L'

METER MODEL # : 2221/2221/2221 DETECTOR MODEL # : 2X2 44-10/2X2 44-10/2X2 44-10

METER SERIAL # : 154228/154225/127223 DETECTOR SERIAL # : 54966/~~02338~~ 023338/130763

CALIBRATION DUE : 10.10.02/6.6.02/6.19.02 CALIBRATION DUE : 2.8.03/2.6.03/6.28.02

SURVEY DATE/TIME : 3.10.02/1500 3.11.02/1500 FIELD BKG. : 10000-10500

SURVEYOR(S) : D. Gill, M. Quinonez, D. Larson

COMMENTS : all areas <1.5 x bkg.

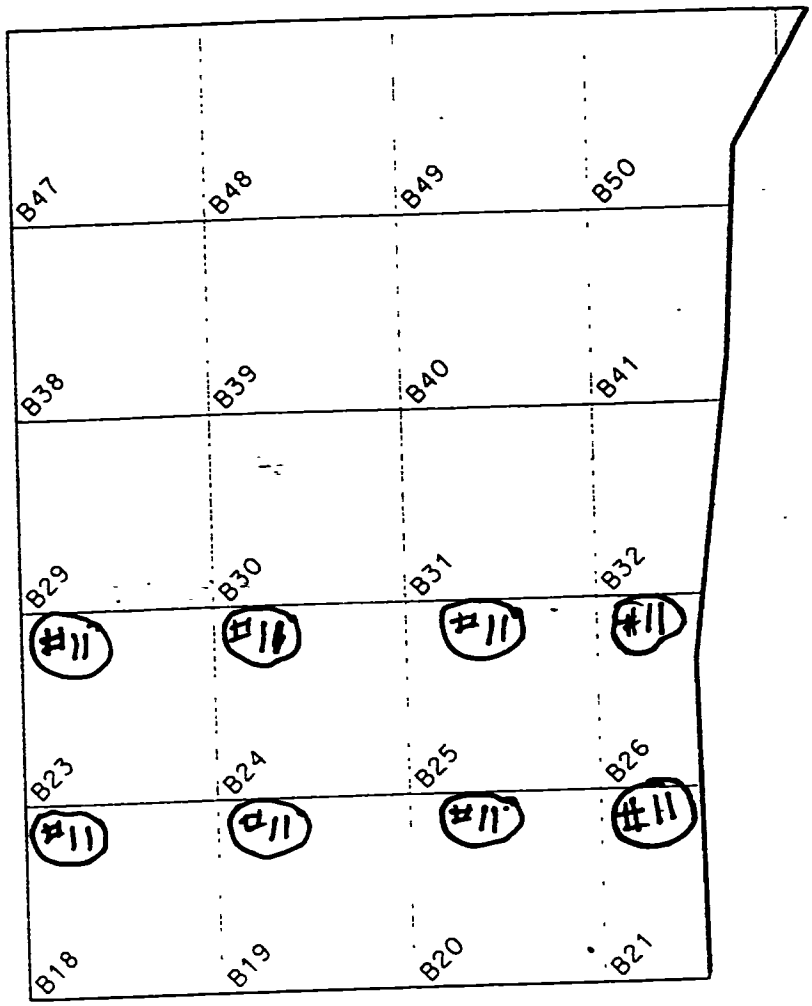
0 100 200

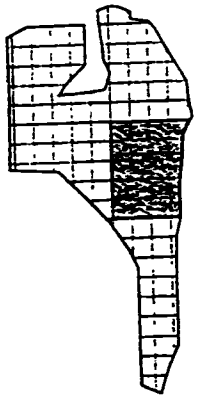
SCALE FEET

FINAL SITE WALKOVER
SURVEY 050AZZ03

3 OF 7

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/066/0900	
ORIGINATOR: LB	DRAWN BY: GLN	DATE: 9/11/00	





METER MODEL # : 2221

DETECTOR MODEL # : 2x2 "K"

METER SERIAL # : #4325

DETECTOR SERIAL # : 4532

CALIBRATION DUE : 8/24/01

CALIBRATION DUE : 6/23/01

SURVEY DATE/TIME : 3/11/01

FIELD BKG. : 8,000

SURVEYOR(S) : D. Roznovsky, H. Hufker

COMMENTS :

#11

FINAL SITE WALKOVER
SURVEY 050AZZ03

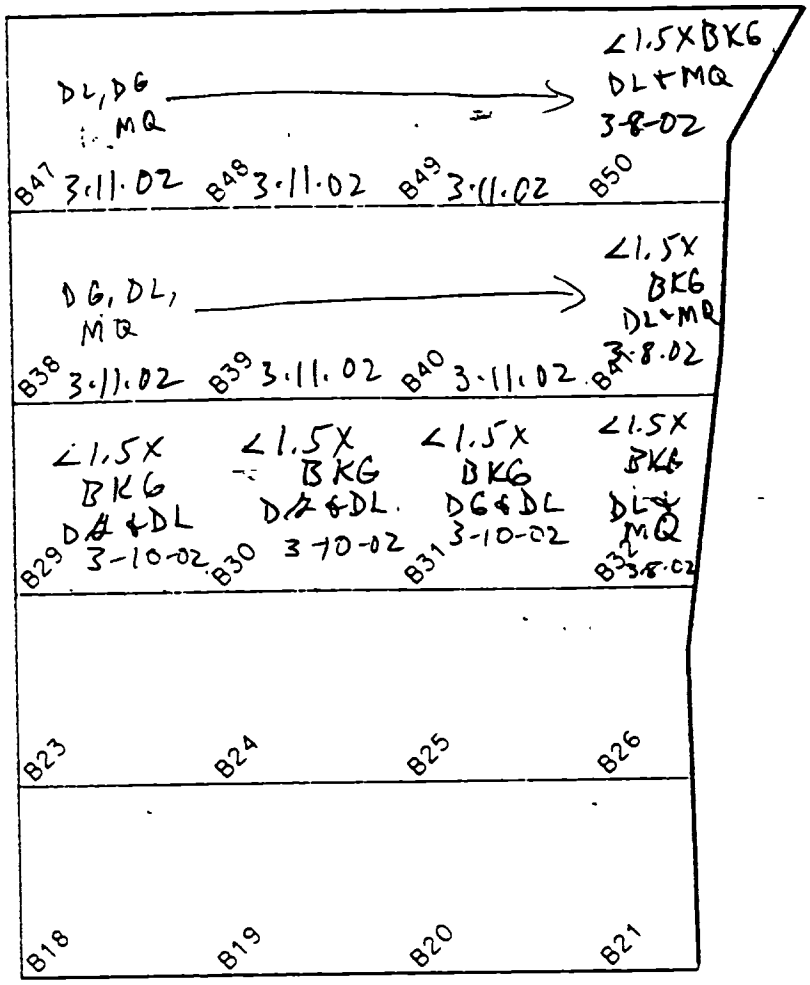
4 OF 7

N

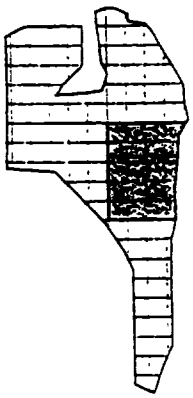
0 100 200

SCALE FEET

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/067/0900	
ORIGINATOR: LB	DRAWN BY: GLN	DATE: 9/11/00	



'U' 'V' 'L'



METER MODEL # : 2221/2221/2221 DETECTOR MODEL # : 2X2 44-10/2X2 44-10/2X2 44-10

METER SERIAL # : 154228/154225/127223 DETECTOR SERIAL # : 54966/023338/130763

CALIBRATION DUE : 10.10.02/6.6.02/6.19.02 CALIBRATION DUE : 2.8.03/2.6.03/6.28.02

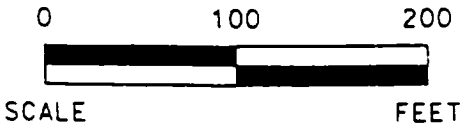
SURVEY DATE/TIME : 3.8.02/1500 3.11.02/1500 FIELD BKG. : 10000-10500

SURVEYOR(S) : D.Larson, M. Quinonez D. Gill

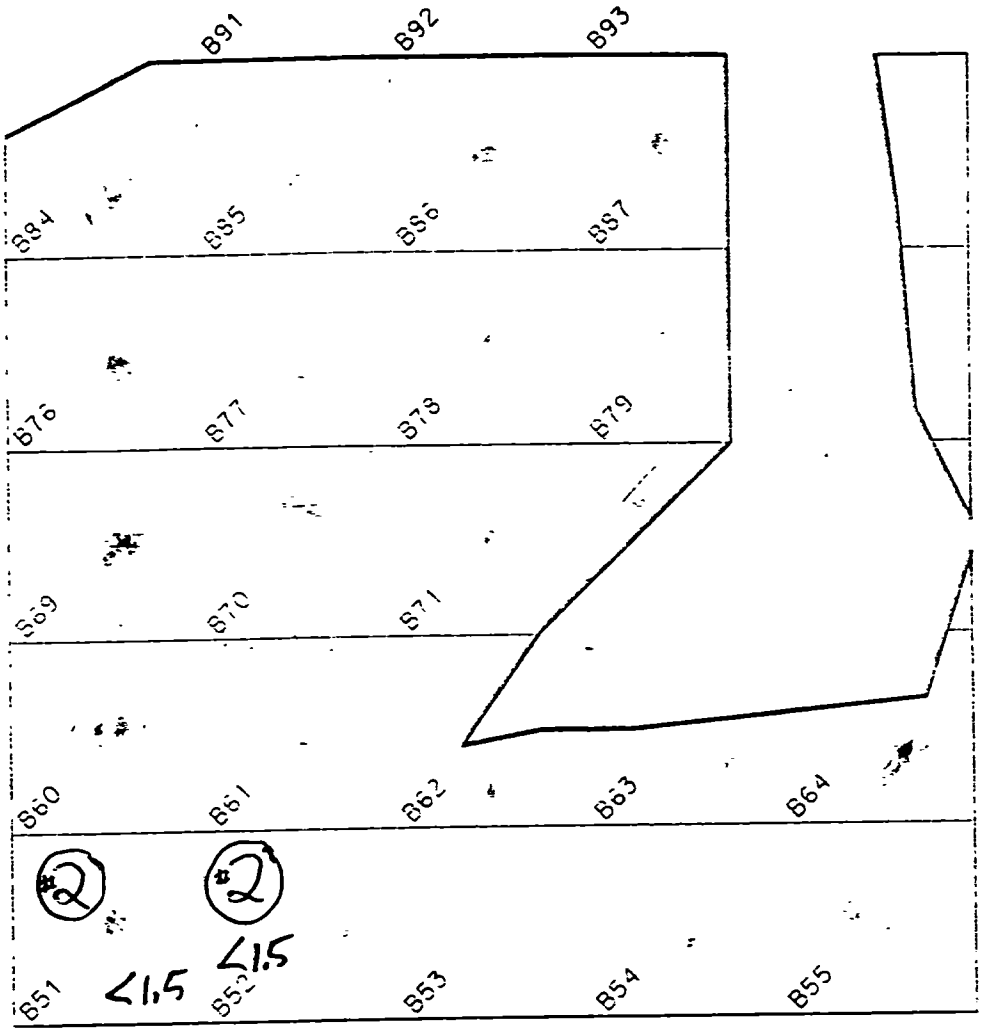
COMMENTS : all areas <1.5 x bkg.

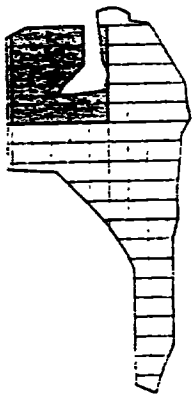
FINAL SITE WALKOVER
SURVEY 050AZZ03

4 OF 7



REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/067/0900	
ORIGINATOR: LB	DRAWN BY: GLN	DATE: 9/11/00	





METER MODEL #: 2221 DETECTOR MODEL #: 2x2"S"

METER SERIAL #: #1910 DETECTOR SERIAL #: #5774

CALIBRATION DUE: 8-2-01 CALIBRATION DUE: 2-2-01

SURVEY DATE/TIME: 9-22-00 FIELD BKG.: 9500

SURVEYOR(S): J. Roofe, D. Roznovsky

COMMENTS: T. Lukezic, R. Mahmood, J. Dean G. Hamra

P-10800, O-10593, T-9860, Q-9445

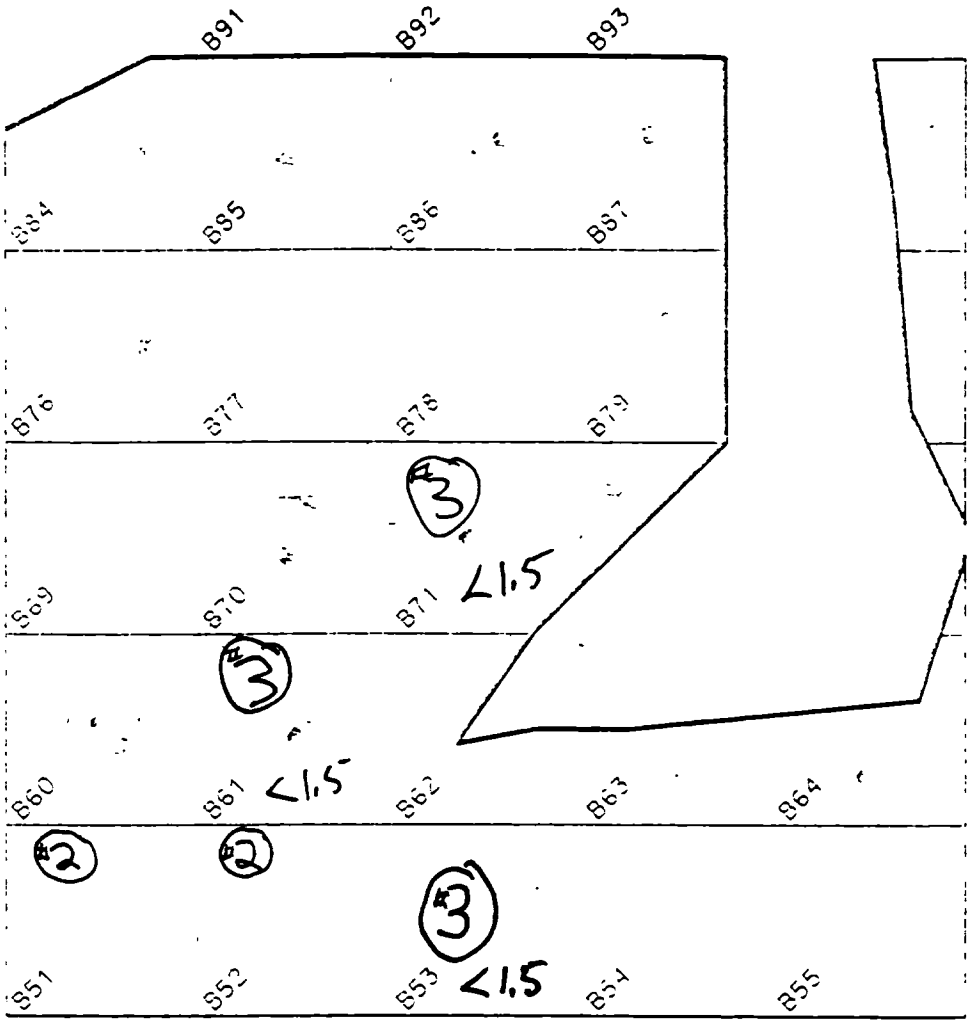
(2) FINAL SITE WALKOVER SURVEY 050AZZ03

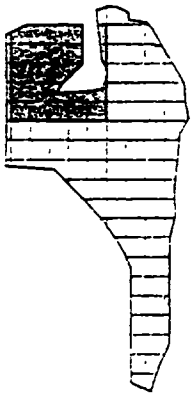
5 OF 7

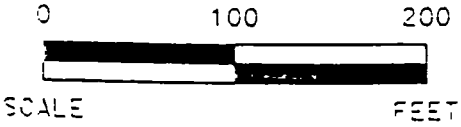
0 100 200

SCALE FEET

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/068/0900	
ORIGINATOR LS	DRAWN BY: GLN	DATE: 10/5/00	





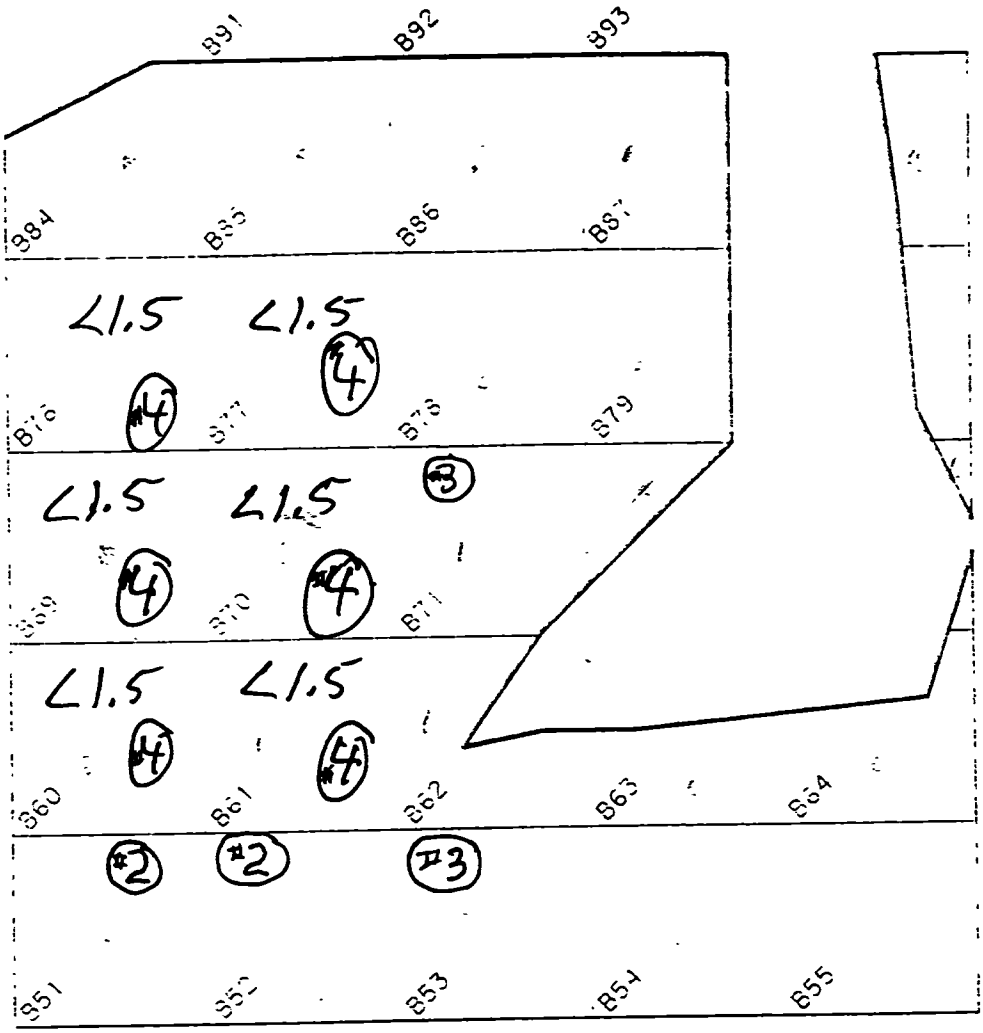


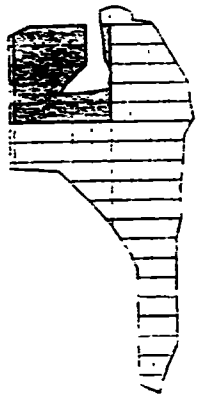
METER MODEL #:	2221	DETECTOR MODEL #:	2x2 "S"
METER SERIAL #:	#1910	DETECTOR SERIAL #:	#5774
CALIBRATION DUE:	8-2-01	CALIBRATION DUE:	2-2-01
SURVEY DATE/TIME:	9-28-00	FIELD BKG.	9492
SURVEYOR(S):	J. Roofe, D. Roznovsky		
COMMENTS:	Q-9364		

(3) FINAL SITE WALKOVER SURVEY 05CA2203

5 OF 7

REPORT NO.:	DOE/OR/21548-865	EXHIBIT NO.:	A/OR/068/0900
ORIGINATOR: LB	DRAWN BY: GLN	DATE:	10/5/00





METER MODEL # : 2221 DETECTOR MODEL # : 2x2"5"

METER SERIAL # : #1910 DETECTOR SERIAL # : #5774

CALIBRATION DUE : 8-2-01 CALIBRATION DUE : 2-2-01

SURVEY DATE/TIME : 9-~~28~~-00 9/29/00 FIELD BKG. : 9492

SURVEYOR(S) : J. Roofe, D. Roznovsky

COMMENTS : G. Hamra

Q-9525, T-9573

(4)

FINAL SITE WALKOVER SURVEY 05CA2203

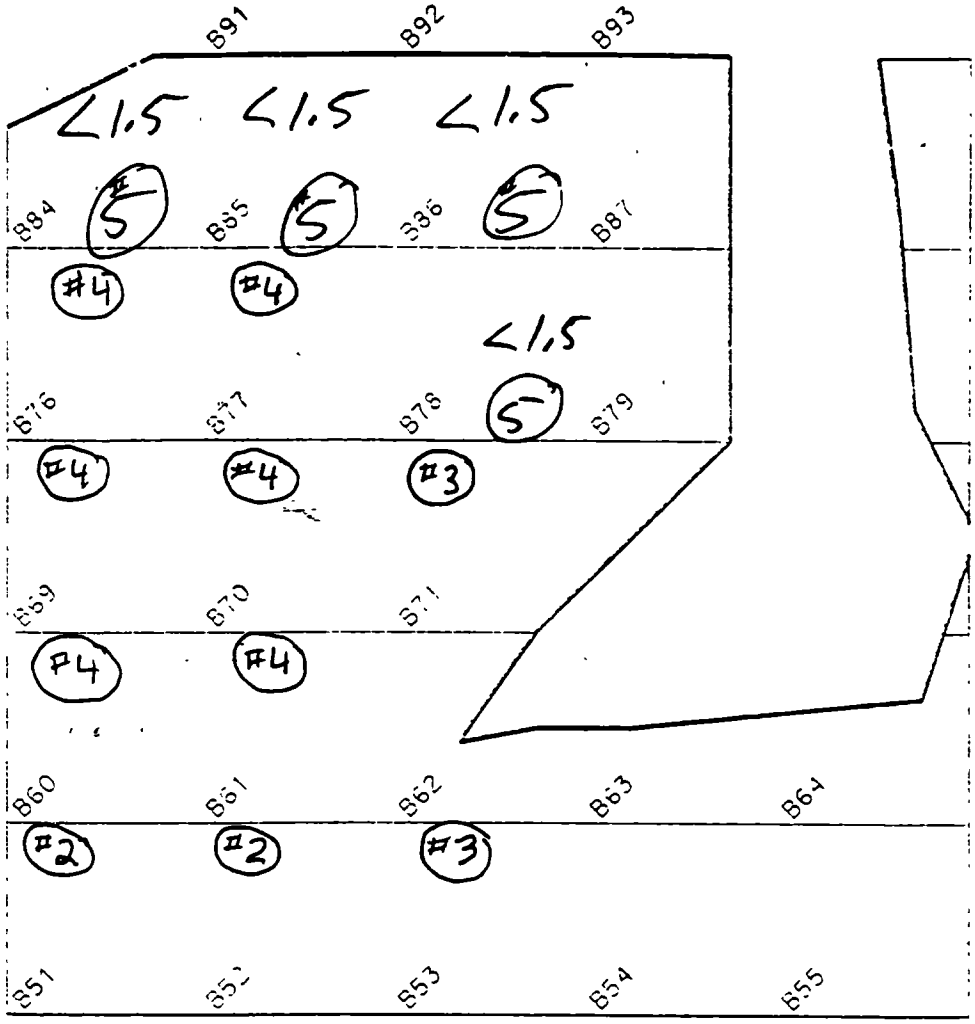
0 100 200

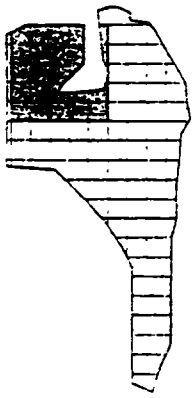
SCALE FEET

5 OF 7

REPORT NO.: DOE/OR/21548-865 EXHIBIT NO.: A/CP 068/0900

ORIGINATOR: LB DRAWN BY: GLN DATE: 10 5 00





METER MODEL # : 2221 DETECTOR MODEL # : 2X2"S"

METER SERIAL # : #1910 DETECTOR SERIAL # : #5774

CALIBRATION DUE : 8-2-01 CALIBRATION DUE : 2-2-01

SURVEY DATE/TIME : 9-30-00 FIELD BKG. : 9908

SURVEYOR(S) : J. Roofe, D. Roznovsky, G. Hamra

COMMENTS : Q-9908, T-9095

5

FINAL SITE WALKOVER SURVEY 050AZZ05

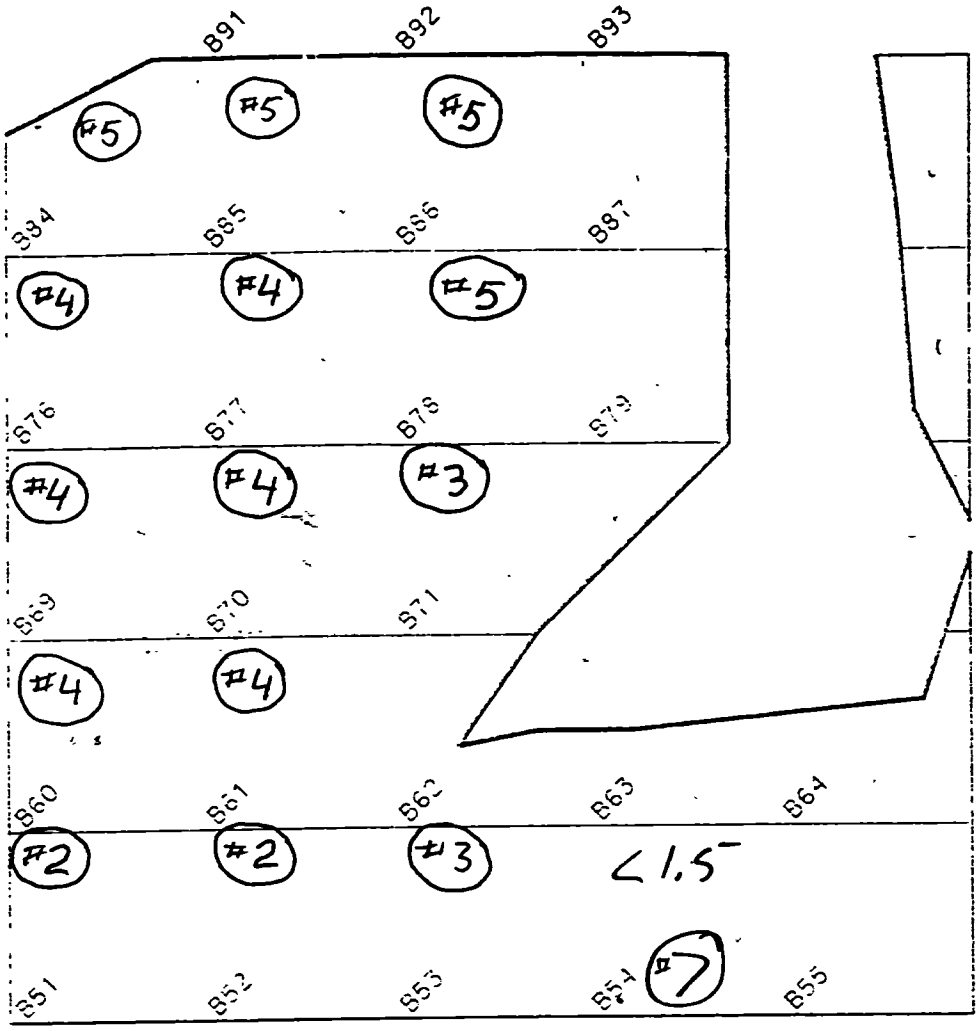
5 OF 7

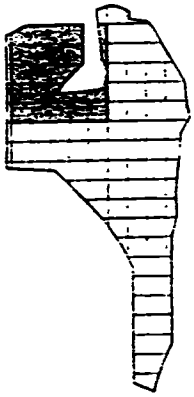
0 100 200

SCALE FEET

REPORT NO.: DOE/OR/21548-665 EXHIBIT NO.: A/CP 1068/0900

ORIGINATOR: LB DRAWN BY: GLN DATE: 10/5/00





0 100 200

SCALE FEET

METER MODEL # : 2221 DETECTOR MODEL # : 2X2"S"

METER SERIAL # : #1910 DETECTOR SERIAL # : #5774

CALIBRATION DUE : 8-2-01 CALIBRATION DUE : 2-2-01

SURVEY DATE/TIME : 9-30-00 FIELD BKG. : 9040

SURVEYOR(S) : J. Roofe, S Rehmer

COMMENTS : Q - 9144

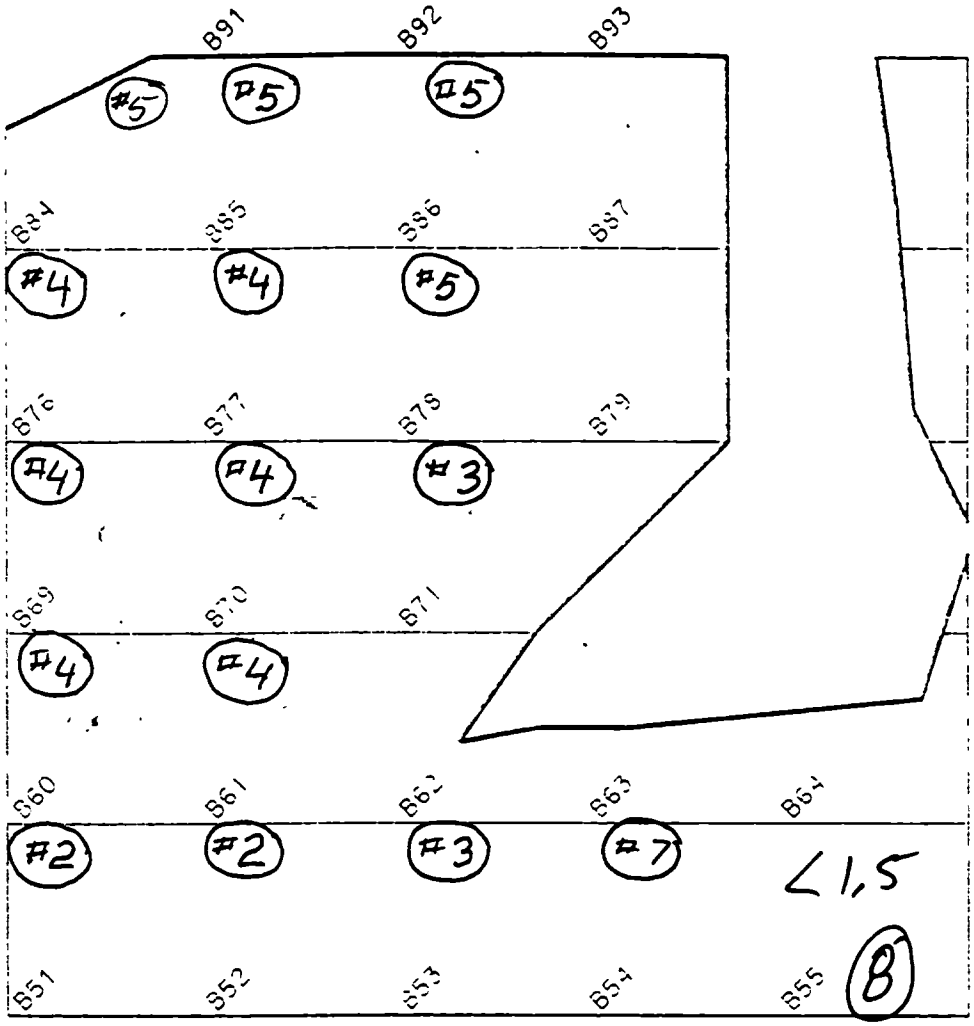
#7

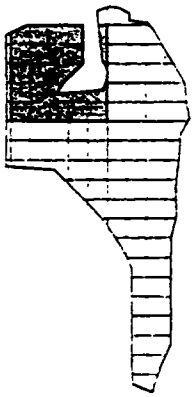
FINAL SITE WALKOVER SURVEY OSCAZZOS

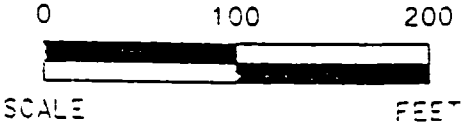
5 OF 7

REPORT NO.: DOE/OR/21548-865 EXHIBIT NO.: A/CP/068/0900

ORIGINATOR: LB DRAWN BY: SLN DATE: 10/5/00







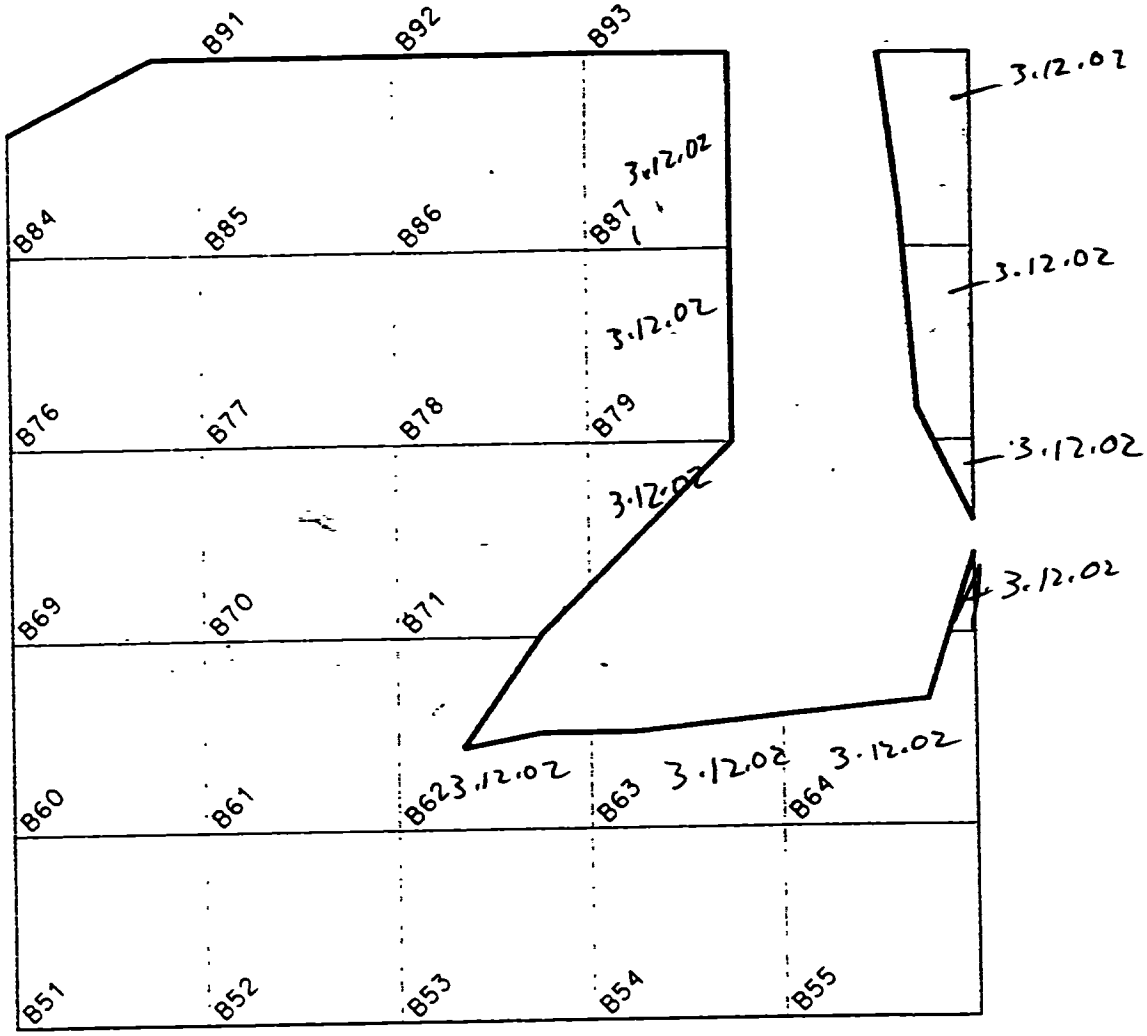
METER MODEL # :	2221	DETECTOR MODEL # :	2x2"S"
METER SERIAL # :	#1910	DETECTOR SERIAL # :	#5774
CALIBRATION DUE	8-2-01	CALIBRATION DUE :	2-2-01
SURVEY DATE/TIME :	9-30-00	FIELD BKG. :	10500
SURVEYOR(S) :	J. Roofe, D Rozhovsky		
COMMENTS :	Q-10000		

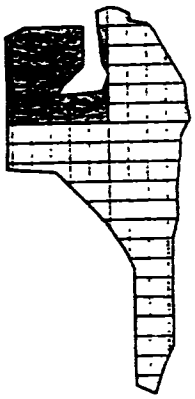
B

FINAL SITE WALKOVER SURVEY 050AZZ03

5 OF 7

REPORT NO.:	DOE/CR/21548-865	EXHIBIT NO.:	A/CP/068/0900
ORIGINATOR: LB	DRAWN BY: GLN	DATE	10/5/00





0 100 200

SCALE FEET

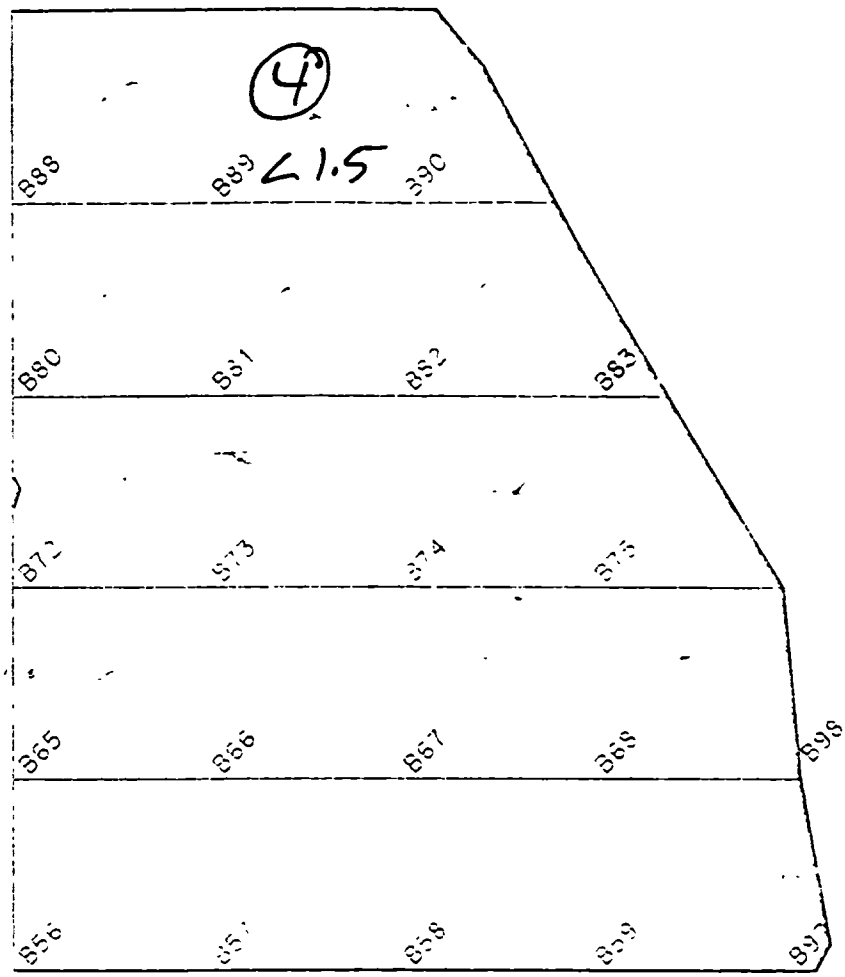
'V' 'L'

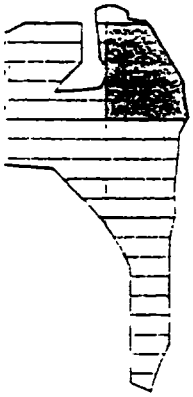
METER MODEL # :	2221/2221	DETECTOR MODEL # :	2x2 = 2x2 44-10/44-10
METER SERIAL # :	154225/127223	DETECTOR SERIAL # :	023338/130763
CALIBRATION DUE :	6.6.02/6.19.02	CALIBRATION DUE :	2.6.03/6.28.02
SURVEY DATE/TIME :	3.12.02/1500	FIELD BKG. :	10000-10500
SURVEYOR(S) :	D. Larson, D. Gill		
COMMENTS :	all areas < 1.5x bkg.		

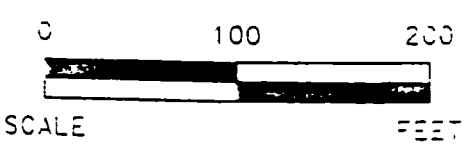
FINAL SITE WALKOVER
SURVEY 050AZZ03

5 OF 7

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/068/0900	
ORIGINATOR: LB	DRAWN BY: GLN	DATE: 10/5/00	







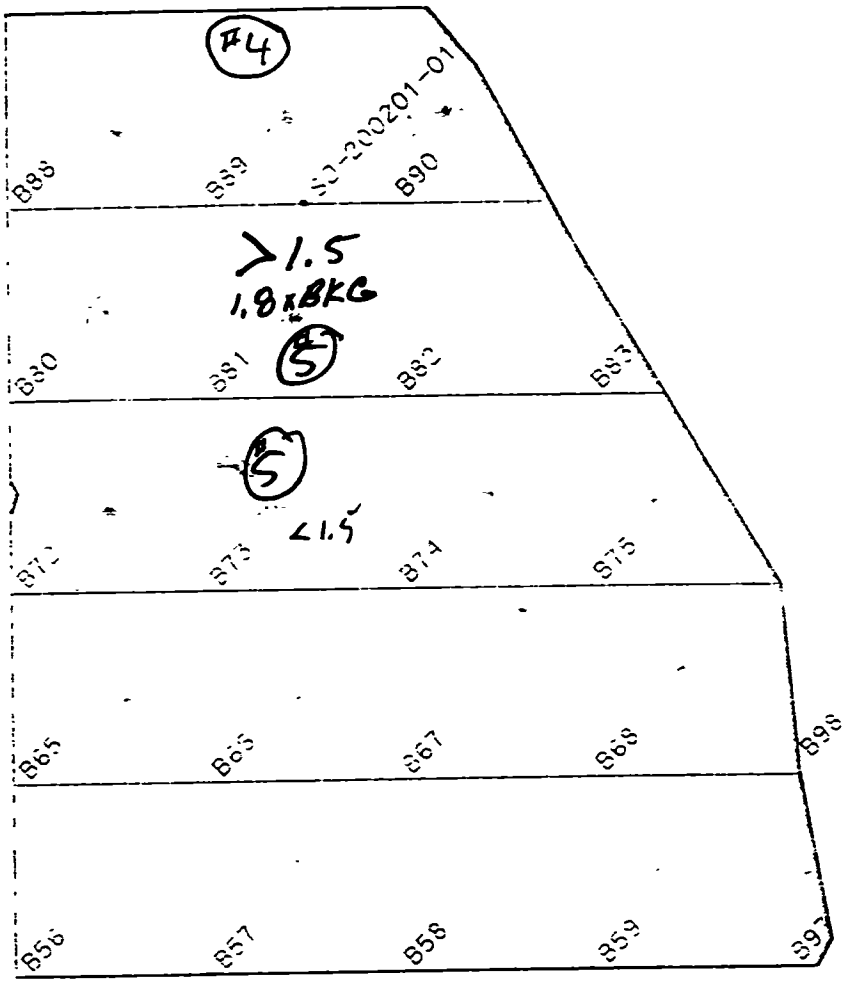
METER MODEL # :	2221	DETECTOR MODEL #	2x2 "S"
METER SERIAL # :	#1910	DETECTOR SERIAL # :	#5774
CALIBRATION DUE :	8-2-01	CALIBRATION DUE :	2-2-01
SURVEY DATE/TIME :	9-~~28~~ 29-00 4-29-00	FIELD BKG.	9492
SURVEYOR(S) :	J. Roofe, D Roznovsky		
COMMENTS :	G Hamra		
	Q-9525, T-9573		

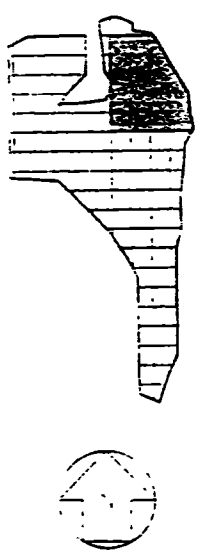
4

FINAL SITE WALKOVER
SURVEY 050AZZ03

6 OF 7

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.	A. CP 069/0900
ORIGINATOR: LB	DRAWN BY: GLN	DATE	10/5/00





METER MODEL # : 2221 DETECTOR MODEL # : 2x2 "S"

METER SERIAL # : #1910 DETECTOR SERIAL # : #5774

CALIBRATION DUE : 8-2-01 CALIBRATION DUE : 2-2-01

SURVEY DATE/TIME : 9-30-00 FIELD BKG. : 9908

SURVEYOR(S) : J. Roofe, D Roznovsky, G. Hamma

COMMENTS : Q-9908, T-9095

5

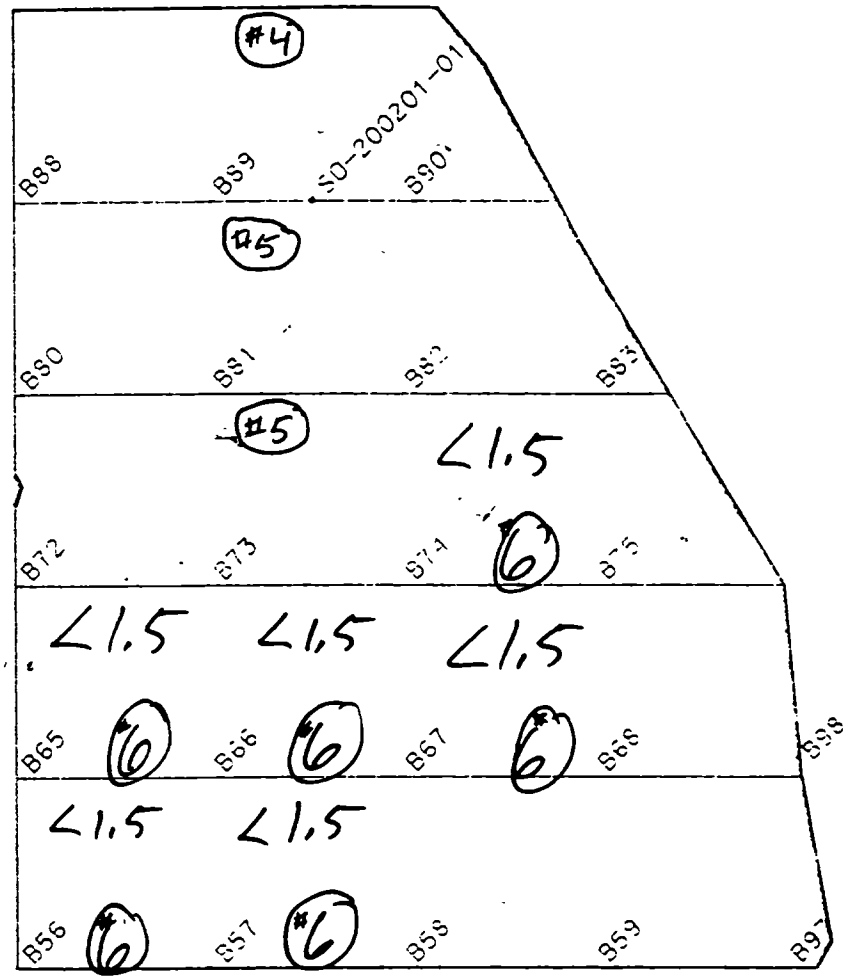
FINAL SITE WALKOVER
SURVEY 050AZZ03

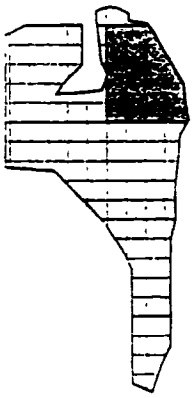
6B OF 7

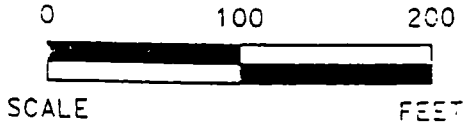
0 100 200

SCALE FEET

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: [illegible]	
ORIGINATOR: LS	DRAWN BY: GLN	DATE: [illegible] 5/00	







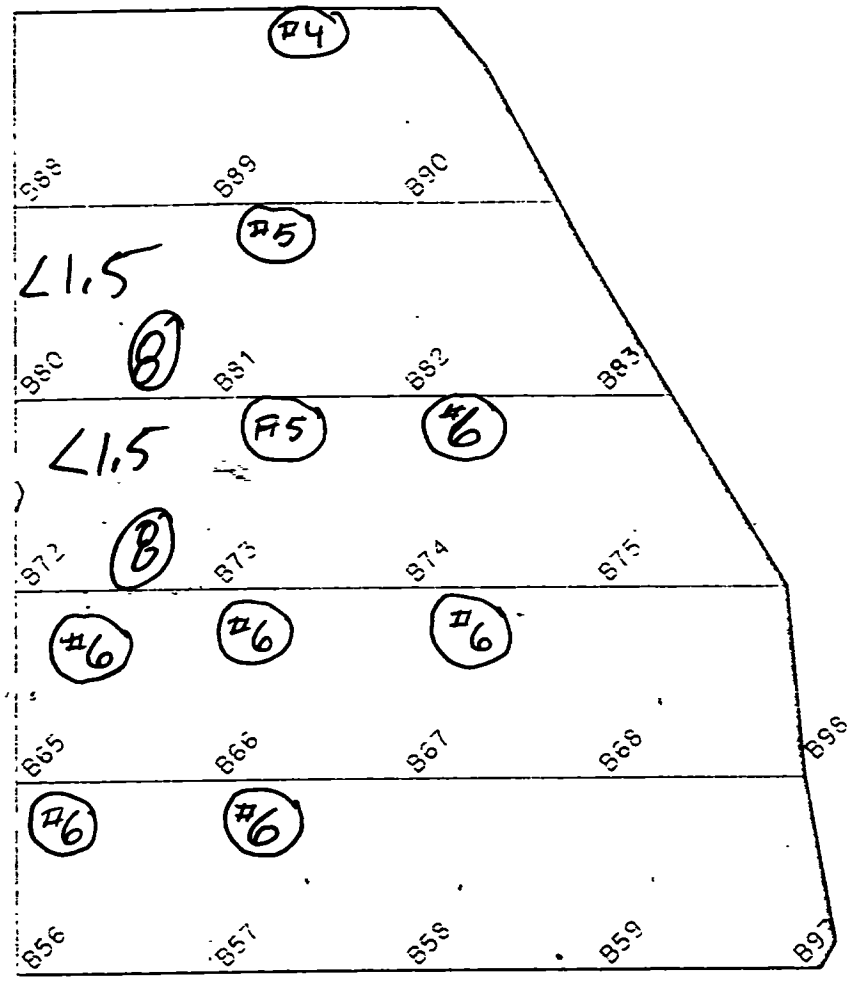
METER MODEL # :	2221	DETECTOR MODEL # :	2x2 "S"
METER SERIAL # :	#1910	DETECTOR SERIAL # :	#5774
CALIBRATION DUE :	8-2-01	CALIBRATION DUE :	2-2-01
SURVEY DATE/TIME :	10-1-00	FIELD BKG.	10956
SURVEYOR(S) :	J Roofe, D. Roznovsky		
COMMENTS :	Q-10926		

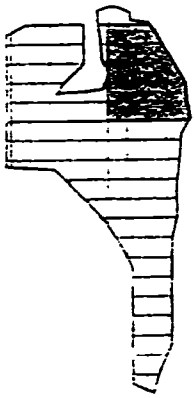
6

FINAL SITE WALKOVER
SURVEY 050AZZ03

6B OF 7

REPORT NO.:	DOE/OR/21548-865	EXHIBIT NO.:	A-OP-075/1000
ORIGINATOR: LB	DRAWN BY: GLN	DATE:	10/5/00





METER MODEL # : 2221 DETECTOR MODEL # : 2x2"5"

METER SERIAL # : #1910 DETECTOR SERIAL # : #5774

CALIBRATION DUE : 8-2-01 CALIBRATION DUE : 2-2-01

SURVEY DATE/TIME : 10-3-00 FIELD BKG. : 10500

SURVEYOR(S) : J. Roofe, D. Roznovsky

COMMENTS : Q-10000

(8)

FINAL SITE WALKOVER
SURVEY 050AZZ03

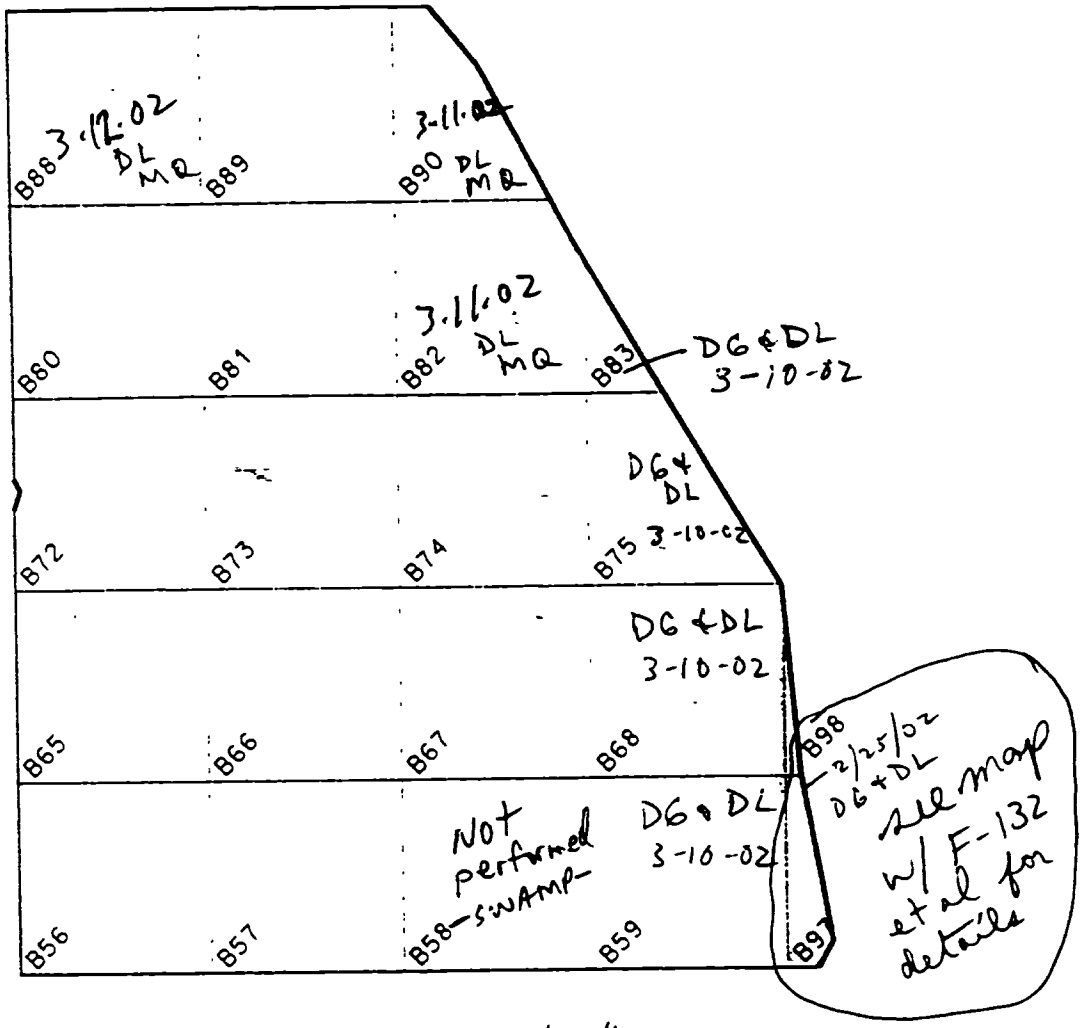
N

0 100 200

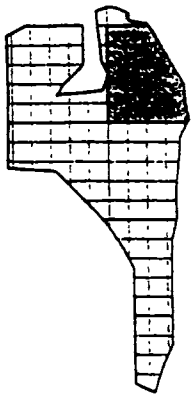
SCALE FEET

6 OF 7

REPORT NO.: DCE/CR/21548-865		EXHIBIT NO.: A/CP/069/0900	
ORIGINATOR: LS	DRAWN BY: GLN	DATE: 10/5/00	



'U'/'V'/'L'



METER MODEL #: 2221/2221/2221 DETECTOR MODEL #: 2x2 44-10/2x2 44-10/2x2 44-10

METER SERIAL #: 154228/154225/127223 DETECTOR SERIAL #: 54966/023338/130763

CALIBRATION DUE: 10.10.02/8.6.02/6.19.02 CALIBRATION DUE: 2.8.03/2.6.03/6.28.02

SURVEY DATE/TIME: 3.8.02/1500 3.11.02/1500 3.10.02/1500 FIELD BKG.: 10000-10500

SURVEYOR(S): M. Quinonez, D. Larson, D. Gill

COMMENTS: ① All areas <1.5 x bkg.
② Grid B-58 not surveyed. Area ~~soaked~~ dry
soaked. Drainage from cell cap.

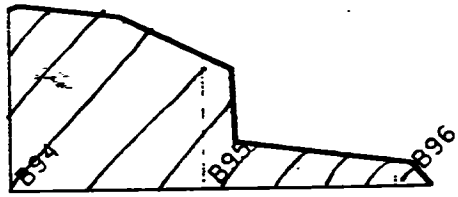
FINAL SITE WALKOVER
SURVEY 050AZZ03

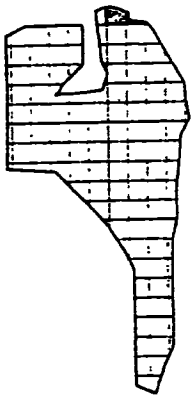
N

0 100 200
SCALE FEET

6 OF 7

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/069/0900	
ORIGINATOR: LB	DRAWN BY: GLN	DATE: 10/5/00	





0 100 200

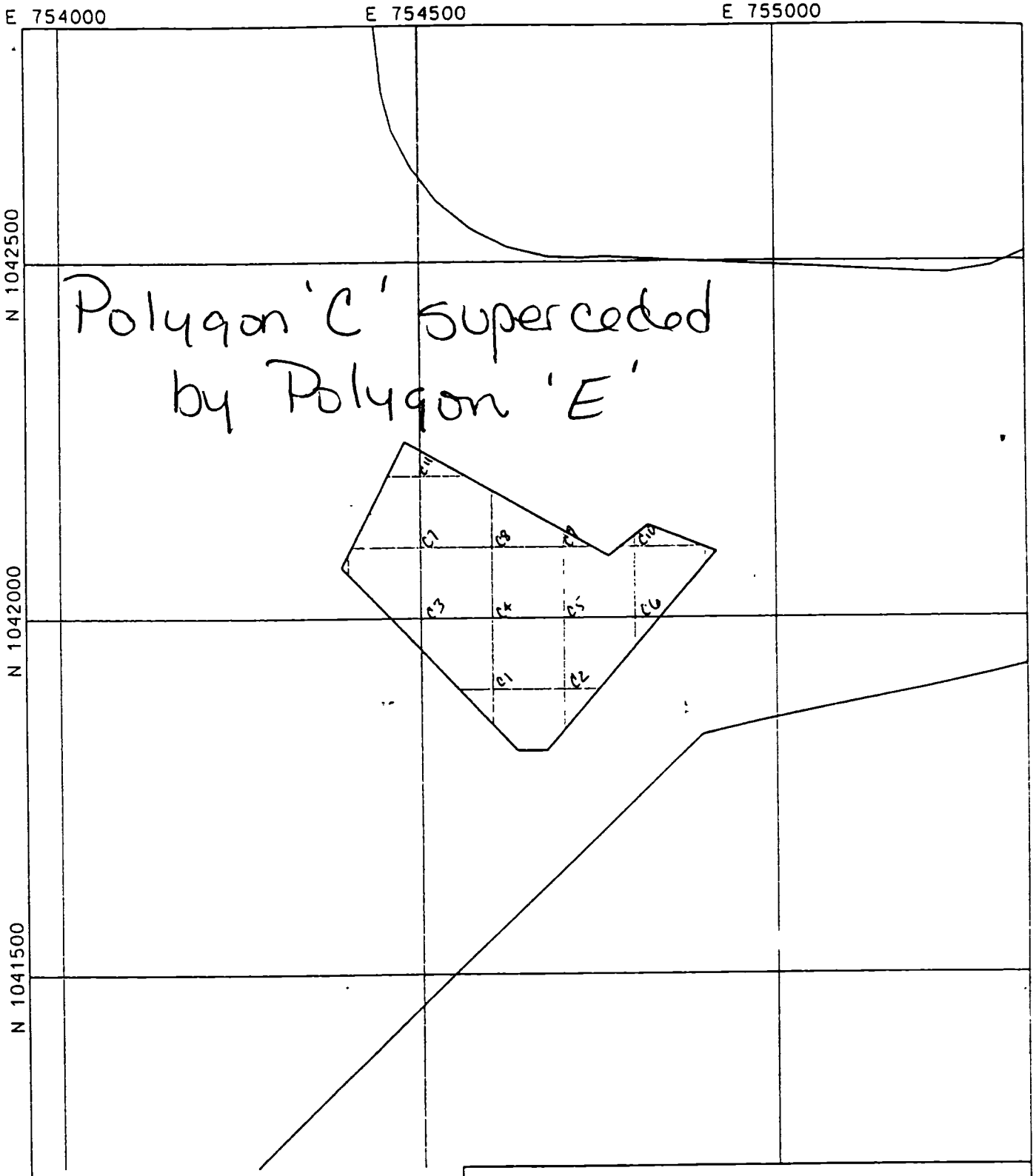
SCALE FEET

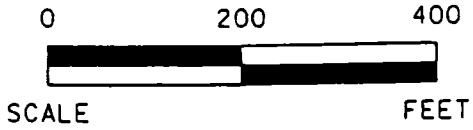
	'V'	'L'		2X2	2X2
METER MODEL # :	2221	2221	DETECTOR MODEL # :	44-10	44-10
METER SERIAL # :	154225	127223	DETECTOR SERIAL # :	023338	130763
CALIBRATION DUE :	6·6·02	6·19·02	CALIBRATION DUE :	2·6·03	6·28·02
SURVEY DATE/TIME :	3·12·02	1500	FIELD BKG. :	10000-10500	
SURVEYOR(S) :	D. Gill, D. Larson				
COMMENTS :	all area < 1.5x bkg.				

FINAL SITE WALKOVER
SURVEY 050AZZ03

7 OF 7

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/070/0900	
ORIGINATOR: LB	DRAWN BY: GLN	DATE: 10/5/00	

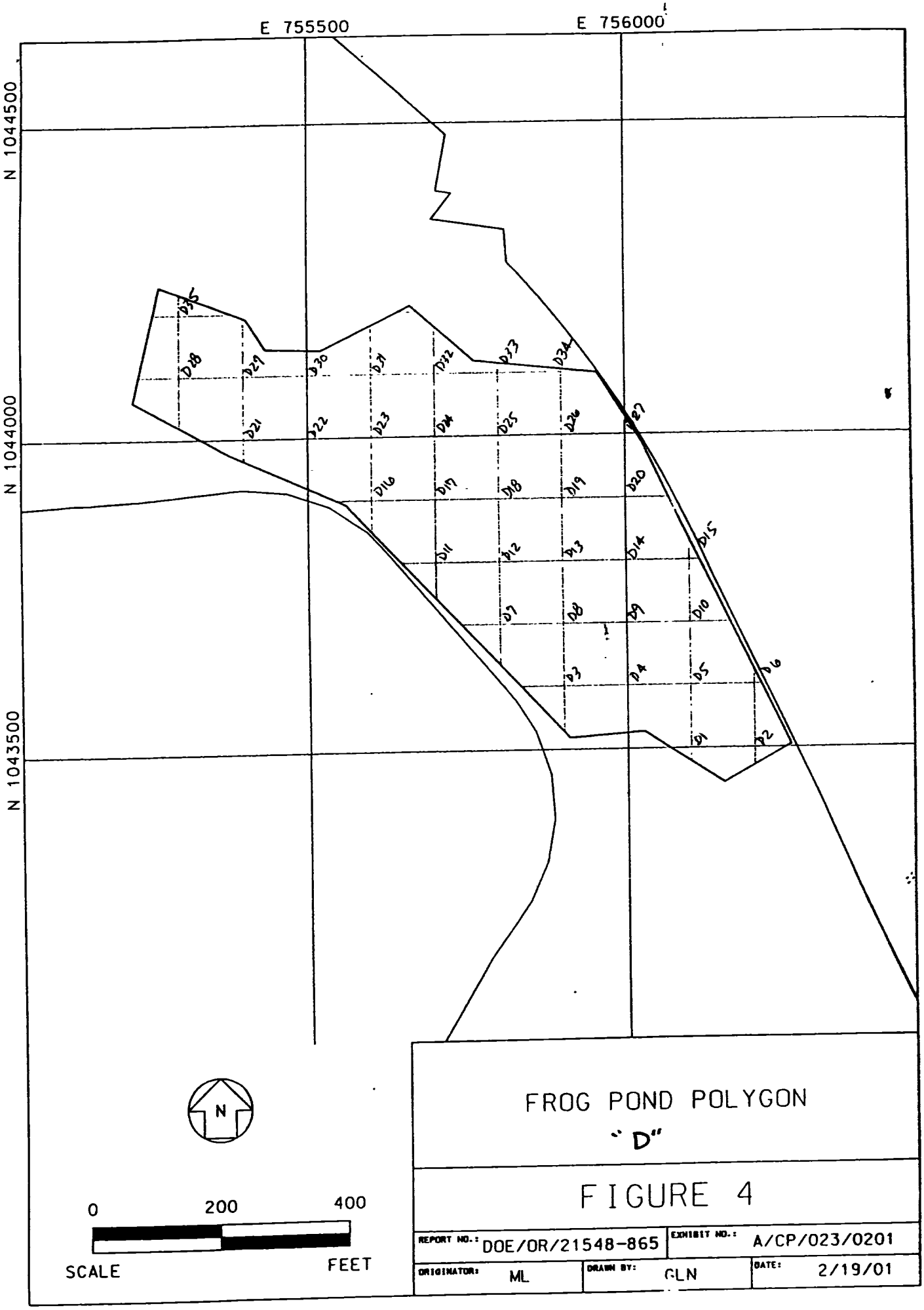




SWTP POLYGON
"C"

FIGURE 3

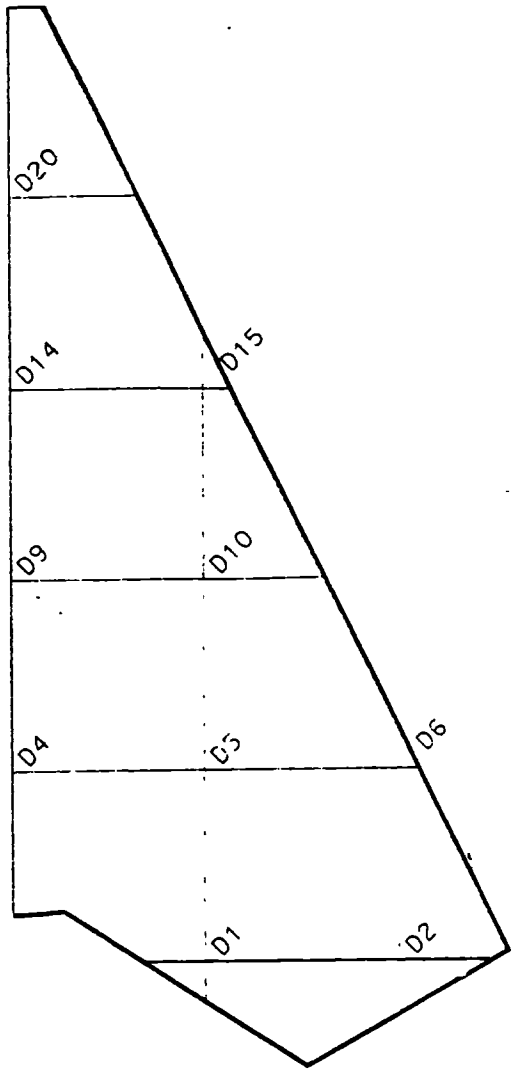
REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/028/0201	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 2/19/01	

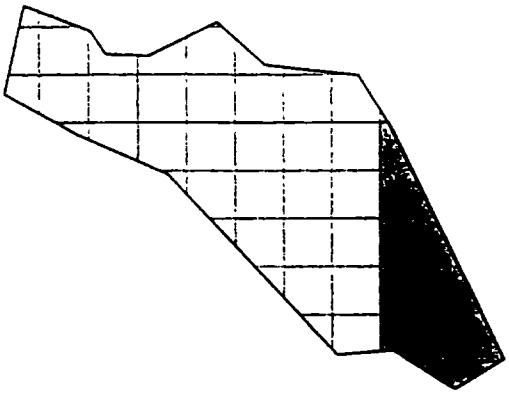


FROG POND POLYGON
"D"

FIGURE 4

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/023/0201	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 2/19/01	





0 100 200

SCALE FEET

METER MODEL # : 2221 DETECTOR MODEL # : 2x2 "L"

METER SERIAL # : 125434 DETECTOR SERIAL # : 130763

CALIBRATION DUE : 8-16-01 CALIBRATION DUE : 8-30-01

SURVEY DATE/TIME : 3-7-01 / 1245 FIELD BKG. : 7200 cpm

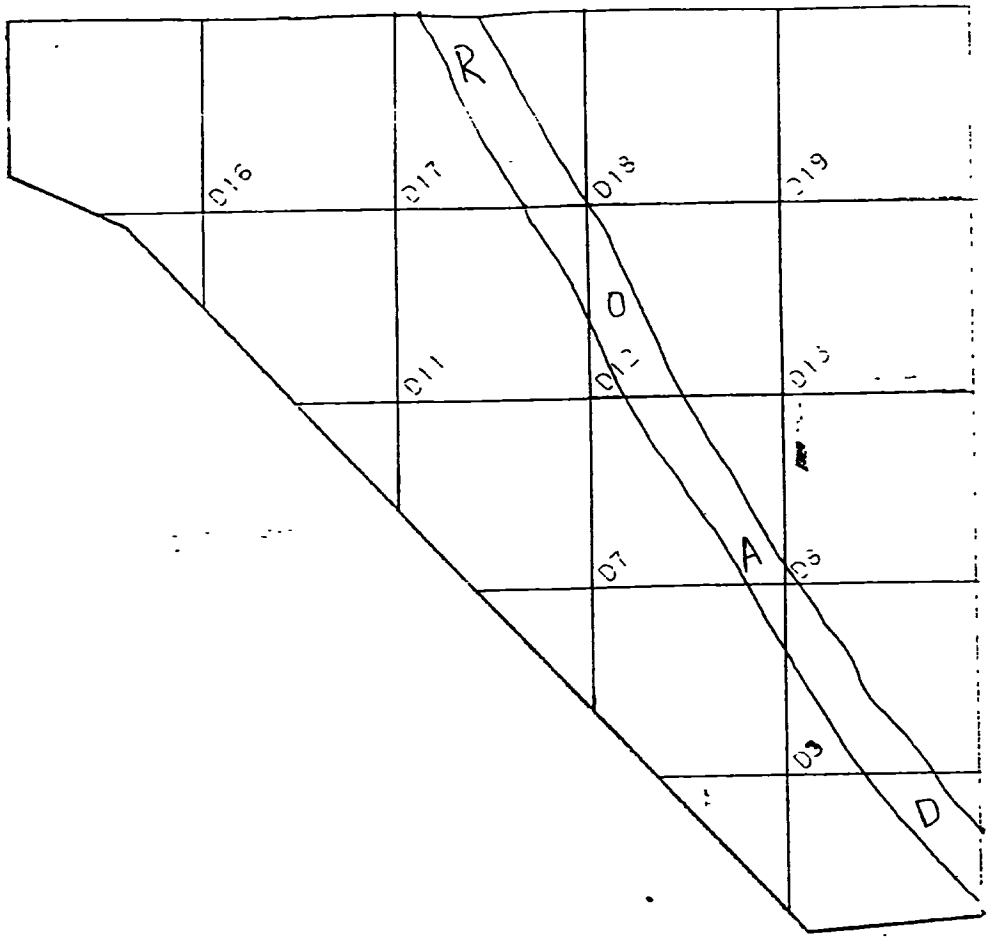
SURVEYOR(S) : Eric Hurtt

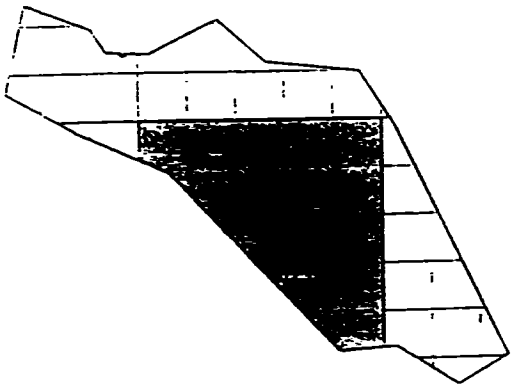
COMMENTS : AREA WALKOVER WAS found to be less than 1.5x background

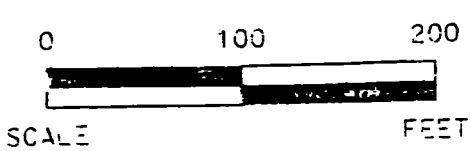
FINAL SITE WALKOVER
FROG POND

1 OF 4

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/024/0201	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 2/19/01	







METER MODEL # : 2221 DETECTOR MODEL # : 2x2 "L"

METER SERIAL # : 125434 DETECTOR SERIAL # : 130763

CALIBRATION DUE : 8-16-01 CALIBRATION DUE : 8-30-01

SURVEY DATE/TIME : 3-6-01/0910 FIELD BKG. : 7800 cpm

SURVEYOR(S) : Eric Hurtt

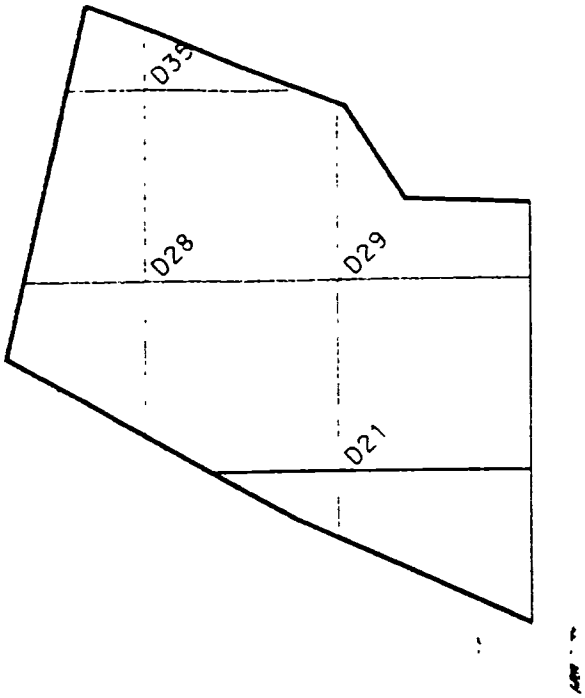
COMMENTS : AREA walkover was found to be less than 1.5x background

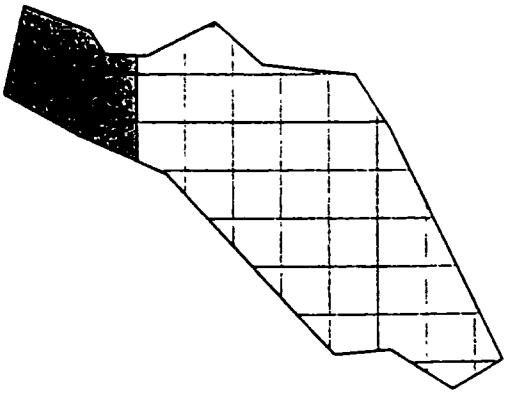
FINAL SITE WALKOVER
FROG POND

2 OF 4

DOCUMENT NO.: DOE/OR/21548-865 EXHIBIT NO.: A OR 025/0201

ORIGINATOR: DRAWN BY: GLN DATE: 2/19/01





0 100 200

SCALE FEET

METER MODEL # : 2221 DETECTOR MODEL # : 2x2 "L"

METER SERIAL # : 125434 DETECTOR SERIAL # : 130763

CALIBRATION DUE : 8-16-01 CALIBRATION DUE : 8-30-01

SURVEY DATE/TIME : 3-6-01/0910 FIELD BKG. : 7800 cpm

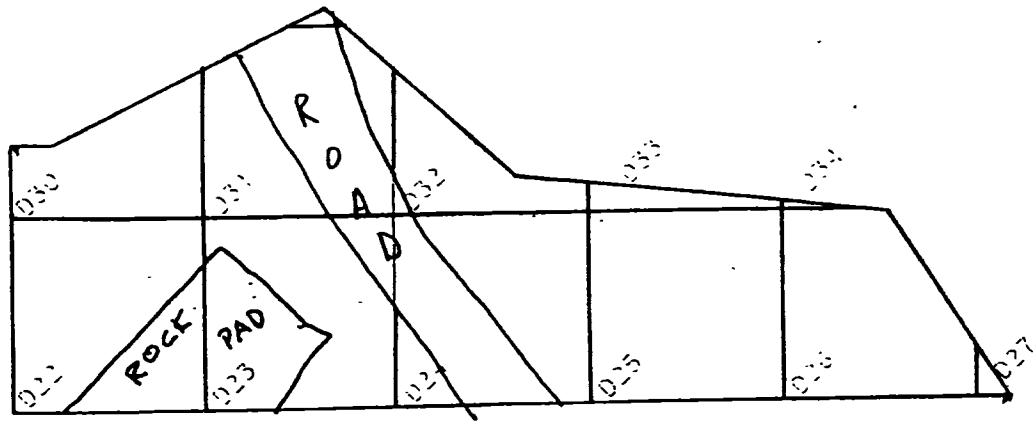
SURVEYOR(S) : Eric Hurtt

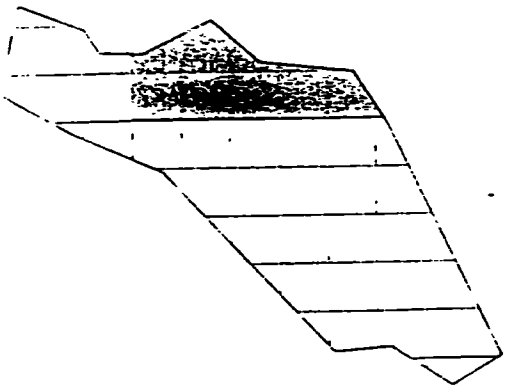
COMMENTS : AREA WALKOVER WAS found to BE less than 1.5x background

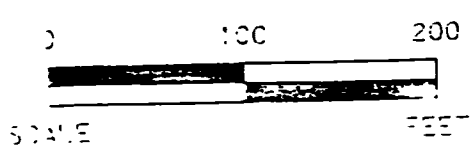
FINAL SITE WALKOVER
FROG POND

3 OF 4

REPORT NO.: DOE/OR/21548-865		EXHIBIT NO.: A/CP/026/0201	
ORIGINATOR: ML	DRAWN BY: GLN	DATE: 2/19/01	







METER MODEL #: 2221 DETECTOR MODEL #: 2x2 "L"

METER SERIAL #: 125434 DETECTOR SERIAL #: 130763

CALIBRATION DUE: 8-16-01 CALIBRATION DUE: 8-30-01

SURVEY DATE/TIME: 3-7-01/1245 FIELD BKG: 7200 cpm

SURVEYOR(S): Eric Hurtt

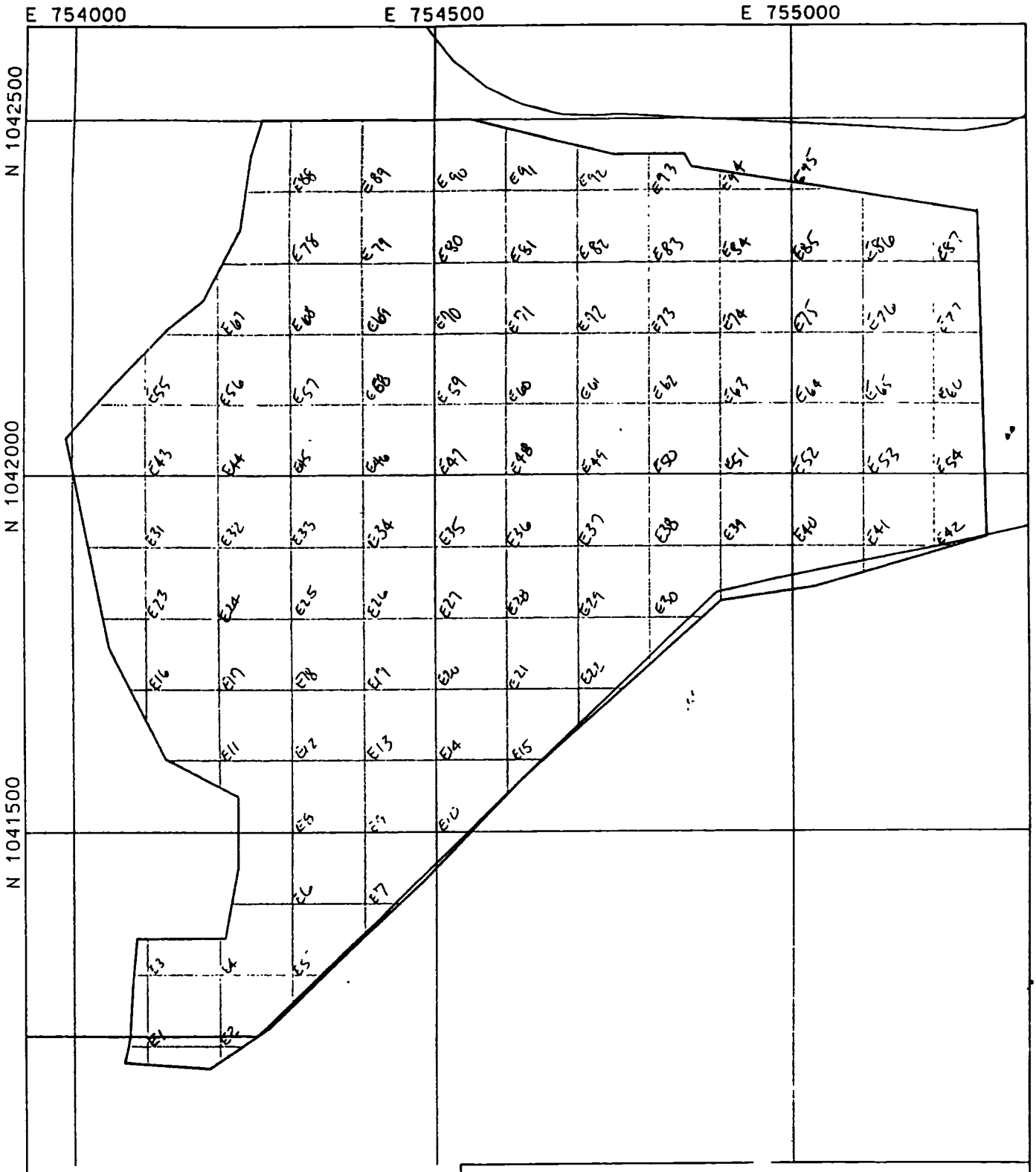
COMMENTS: AREA WALKOVER WAS found to be less than 1.5x background

FINAL SITE WALKOVER
FROG POND

4 OF 4

REPORT NO.: DUE/OR 21548-365 [illegible]

ORIGINATOR: [illegible] DRAWN BY: [illegible] DATE: [illegible]



0 200 400

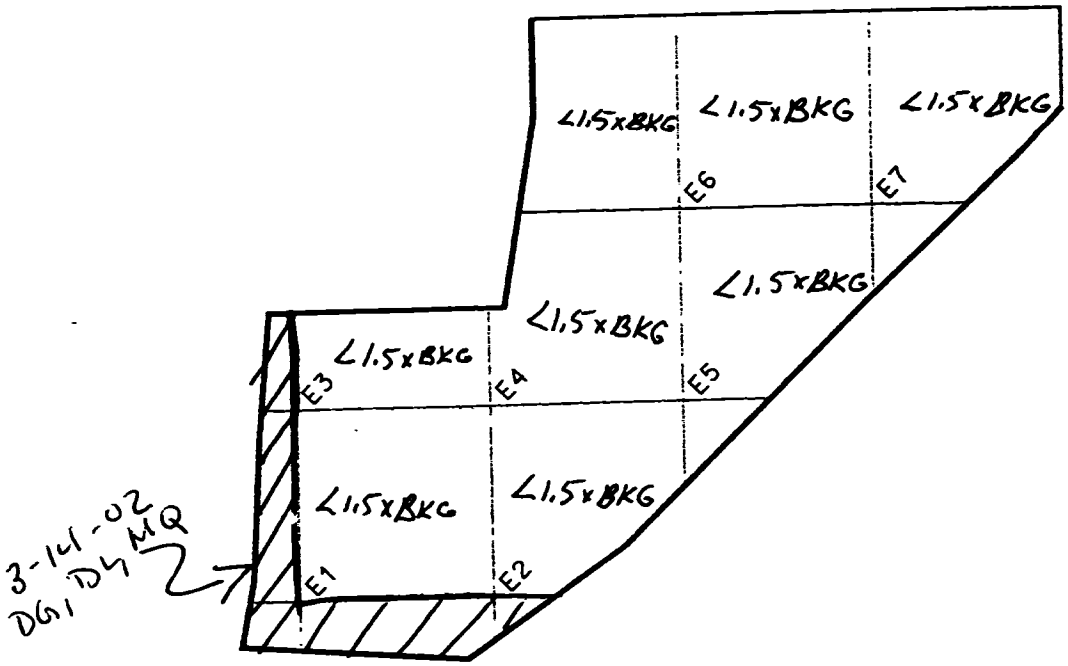
SCALE FEET

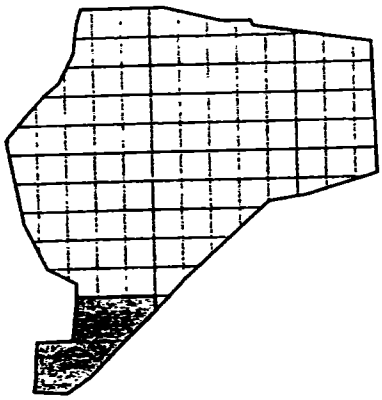
CSS/SWTP POLYGON

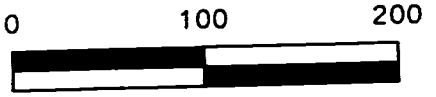
"E"

FIGURE 4

REPORT NO.:		EXHIBIT NO.:	A/CP/073/1001
ORIGINATOR: ML	DRAWN BY: GLN	DATE:	10/8/01







METER MODEL # : 2221 DETECTOR MODEL # : 2x2"P"

METER SERIAL # : 154228 DETECTOR SERIAL # : 17606

CALIBRATION DUE : 10/10/02 CALIBRATION DUE : 1/30/02

SURVEY DATE/TIME : 10/23/01 FIELD BKG. : 10248

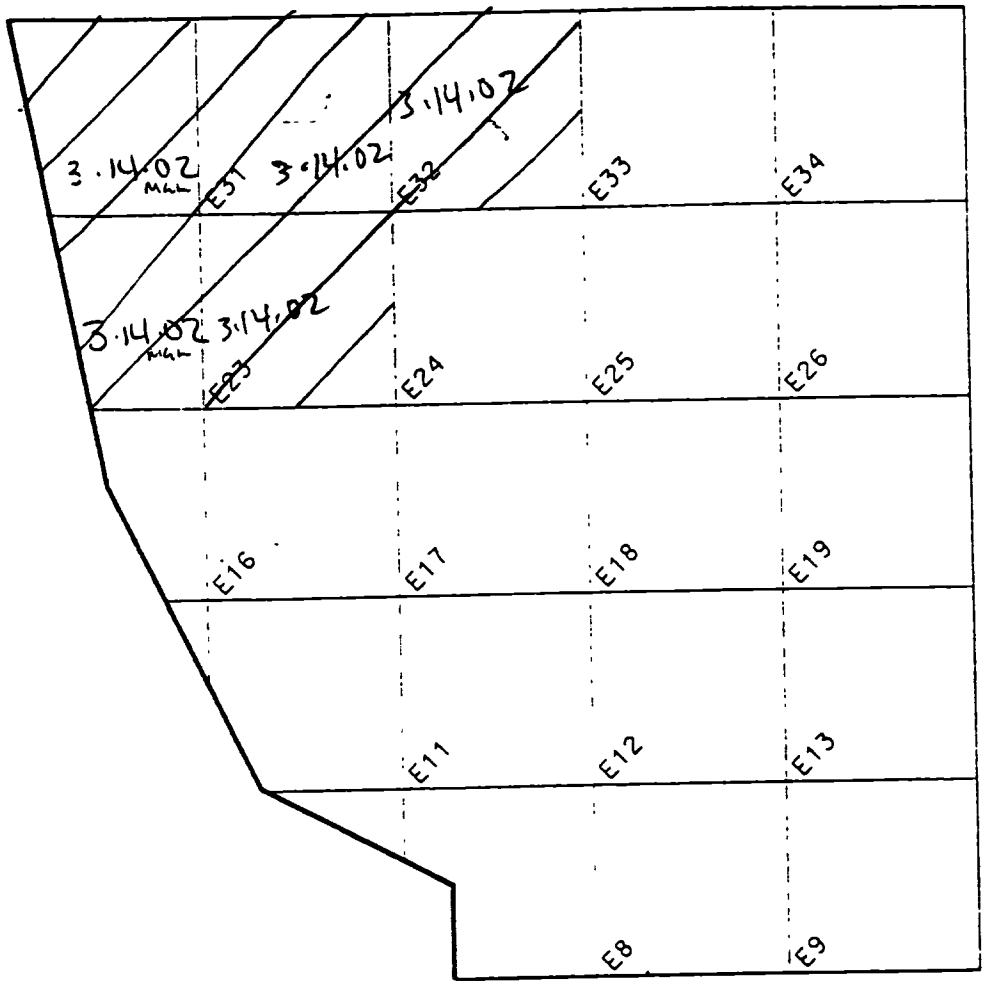
SURVEYOR(S) : D. Roznovsky, B. Orr

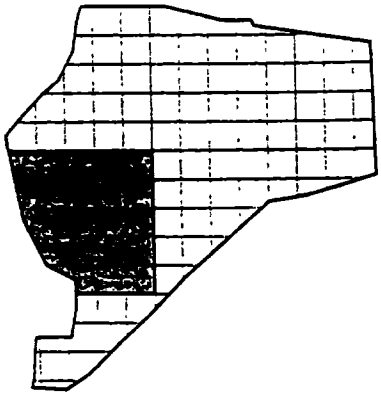
COMMENTS : V-10009

FINAL SITE WALKOVER
CSS/SWTP

1 OF 7

REPORT NO.:		EXHIBIT NO.:	A/CP/074/1001
ORIGINATOR: ML	DRAWN BY: GLN	DATE:	10/8/01





	'V'	'L'		2X2	2X2
METER MODEL # :	2221	2221	DETECTOR MODEL # :	44-10	44-10
METER SERIAL # :	154225	127223	DETECTOR SERIAL # :	023338	130763
CALIBRATION DUE :	6.6.02	6.19.02	CALIBRATION DUE :	2.6.03	6.28.02
SURVEY DATE/TIME :	3.14.02/1500		FIELD BKG. :	10000-10500	
SURVEYOR(S) :	M. Quinonez, D. Larson				
COMMENTS :	all areas < 1.5 x bkg.				

N

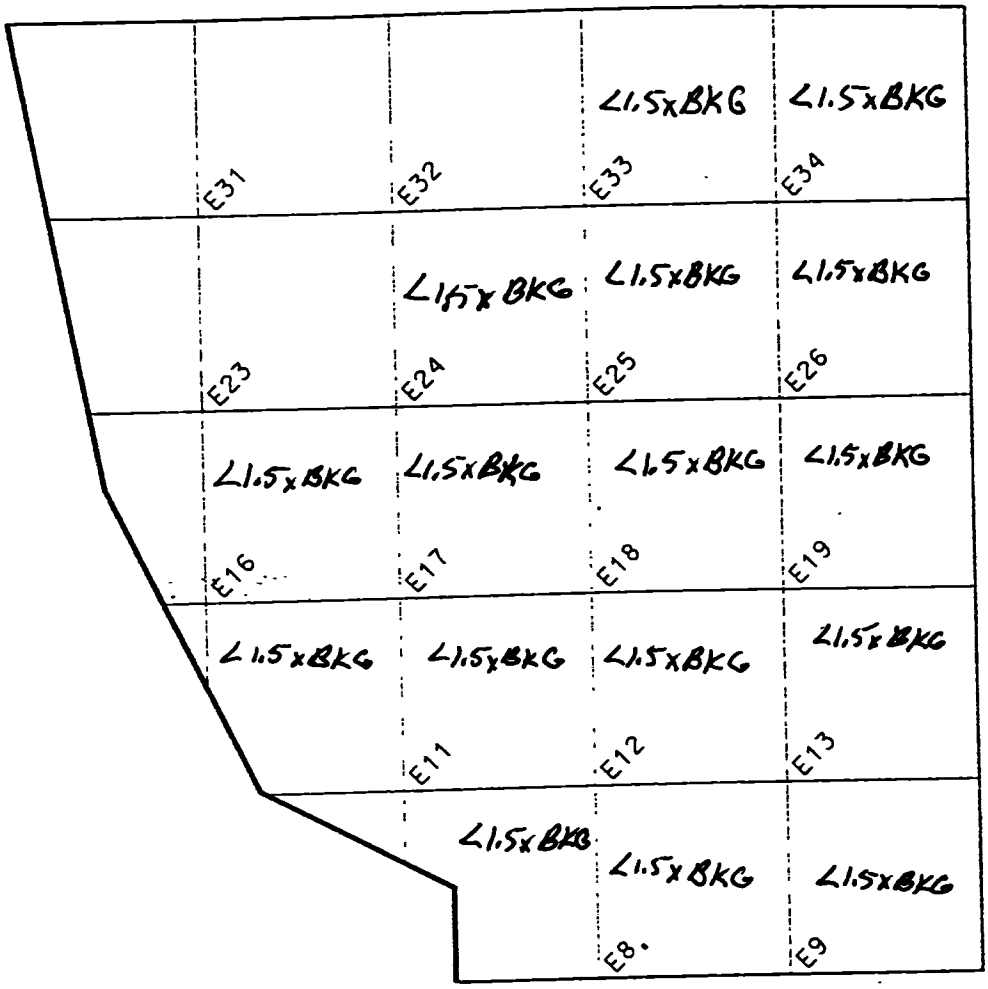
0 100 200

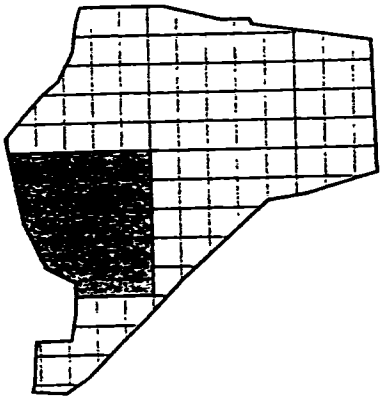
SCALE FEET

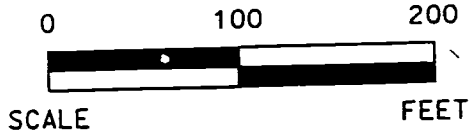
FINAL SITE WALKOVER
CSS/SWTP

2 OF 7

REPORT NO.:		EXHIBIT NO.:	A/CP/075/1001
ORIGINATOR: ML	DRAWN BY: GLN	DATE:	10/8/01







METER MODEL # : 2221 DETECTOR MODEL # : 2x2"P"

METER SERIAL # : 154228 DETECTOR SERIAL # : 17606

CALIBRATION DUE : 10/10/02 CALIBRATION DUE : 1/30/02

SURVEY DATE/TIME : 10/27/01 FIELD BKG. : 10310

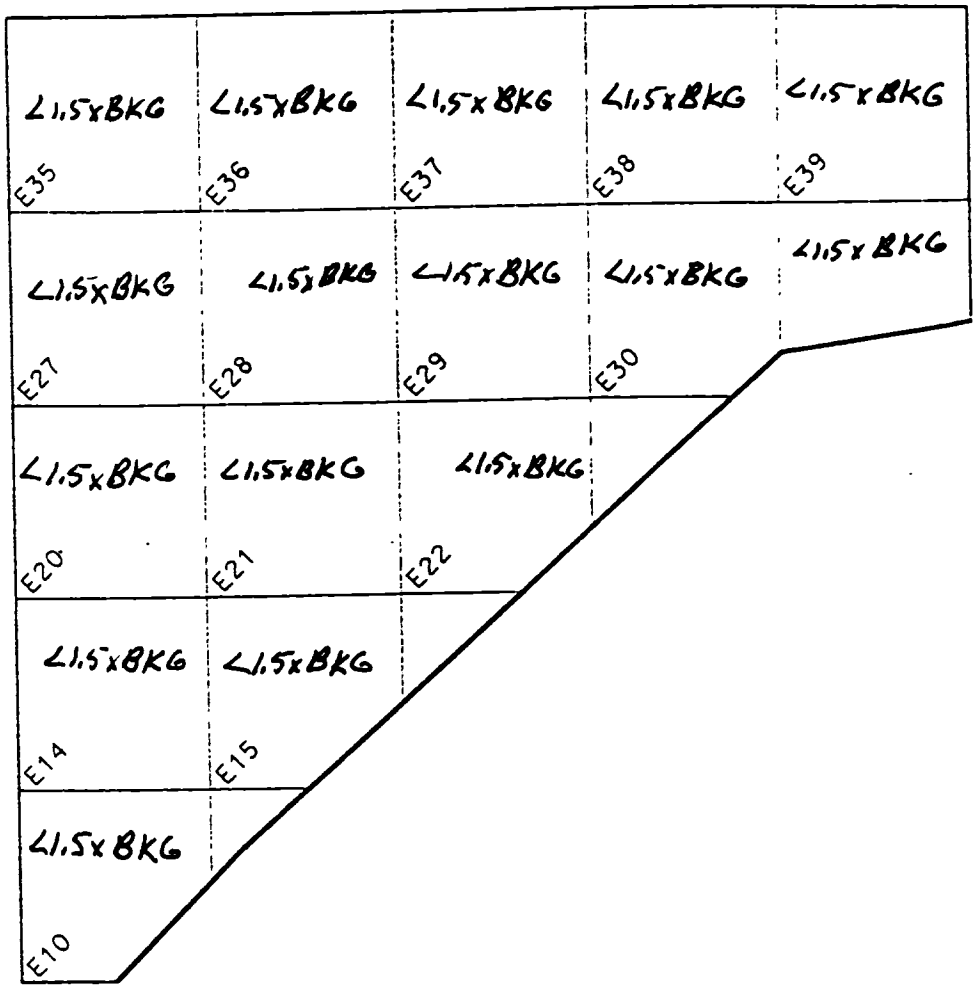
SURVEYOR(S) : DRoznovsky

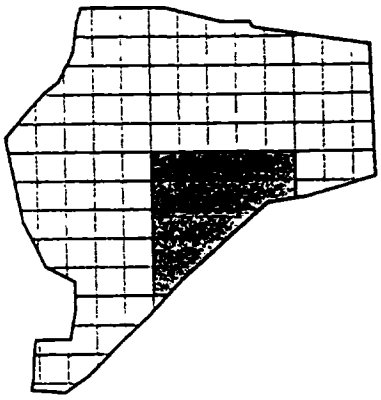
COMMENTS :

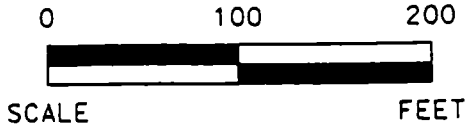
FINAL SITE WALKOVER
CSS/SWTP

2 OF 7

REPORT NO.:		EXHIBIT NO.:	A/CP/075/1001
ORIGINATOR: ML	DRAWN BY: GLN	DATE:	10/8/01







METER MODEL # : 2221 DETECTOR MODEL # : 2x2 "P"

METER SERIAL # : 154228 DETECTOR SERIAL # : 17606

CALIBRATION DUE : 10/10/02 CALIBRATION DUE : 1/30/02

SURVEY DATE/TIME : 10/29/01 FIELD BKG. : 10176

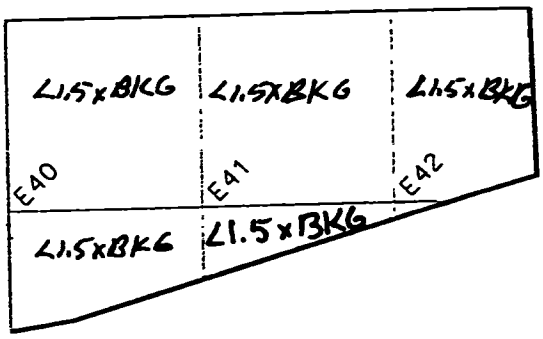
SURVEYOR(S) : D. Roznovsky

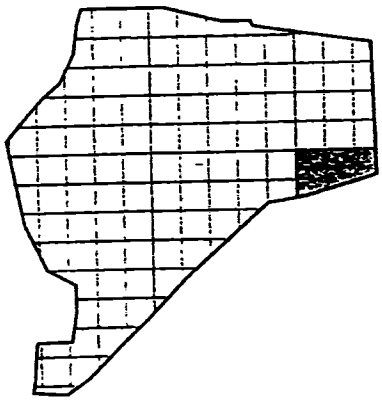
COMMENTS :

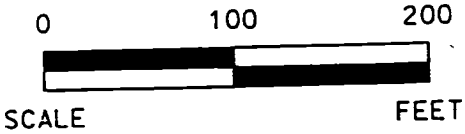
FINAL SITE WALKOVER
CSS/SWTP

3 OF 7

REPORT NO.:		EXHIBIT NO.:	A/CP/076/1001
ORIGINATOR: ML	DRAWN BY: GLN	DATE:	10/8/01







METER MODEL # : 2221 DETECTOR MODEL # : 2x2"P"

METER SERIAL # : 154228 DETECTOR SERIAL # : 17606

CALIBRATION DUE : 10/10/02 CALIBRATION DUE : 1/30/02

SURVEY DATE/TIME : 11/3/01 FIELD BKG. : 10205

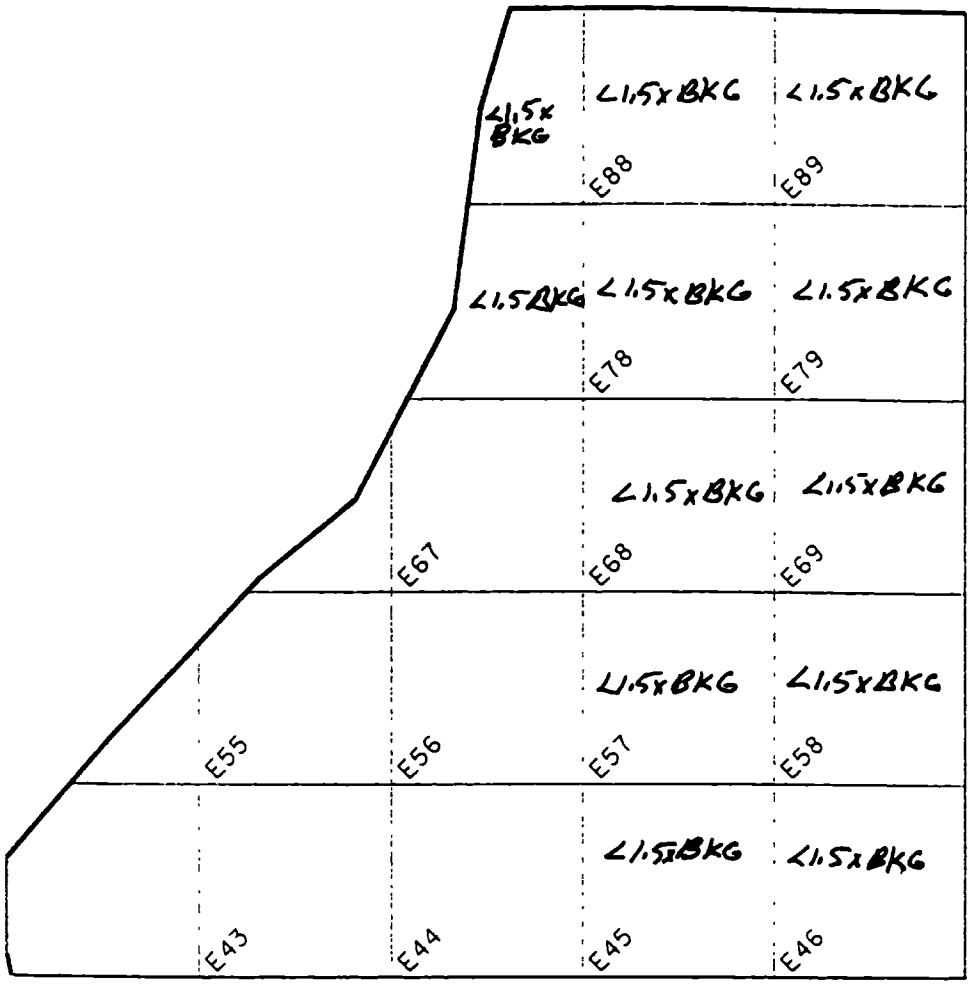
SURVEYOR(S) : D. Reznorsky

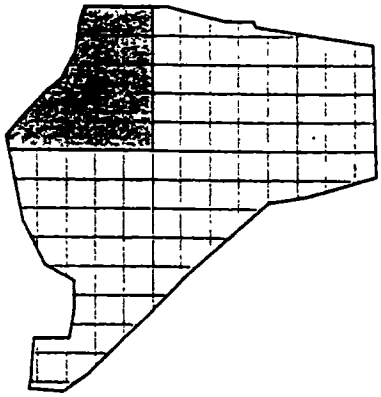
COMMENTS :

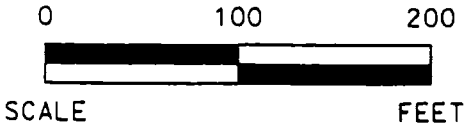
FINAL SITE WALKOVER
CSS/SWTP

4 OF 7

REPORT NO.:		EXHIBIT NO.:	A/CP/077/1001
ORIGINATOR: ML	DRAWN BY: GLN	DATE:	10/8/01





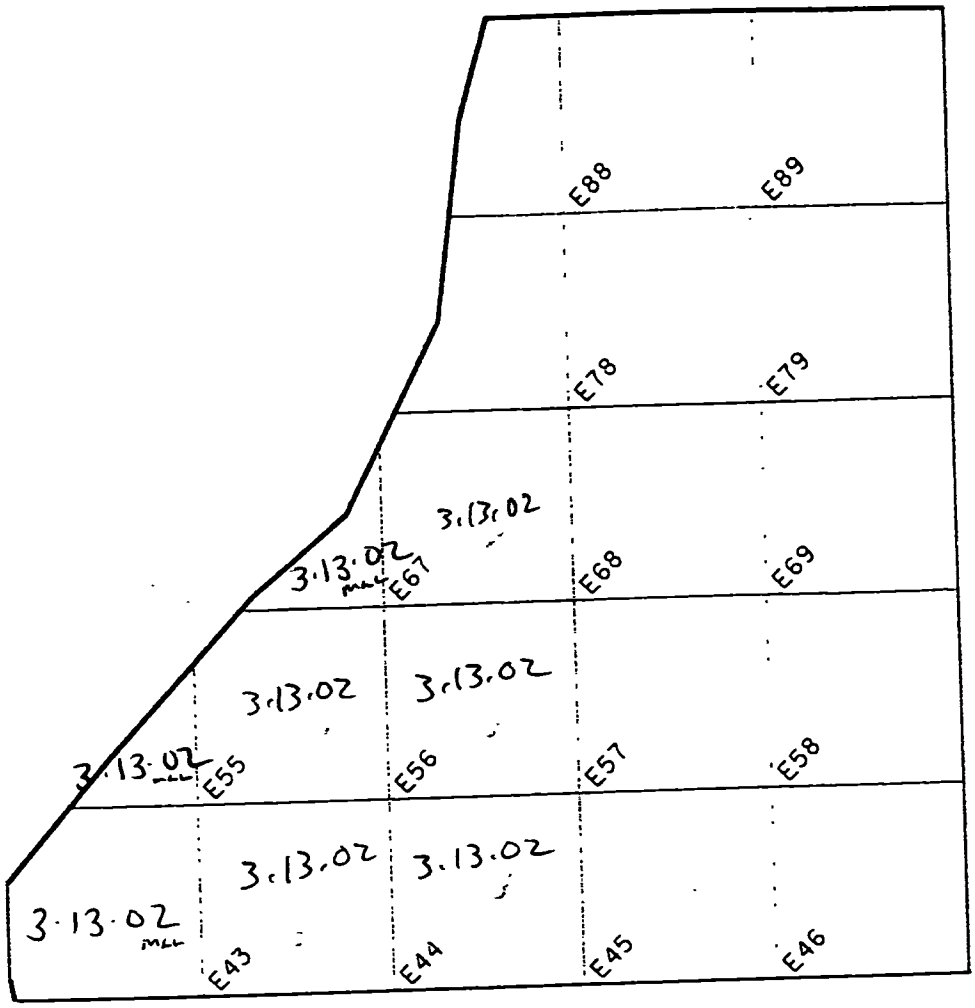


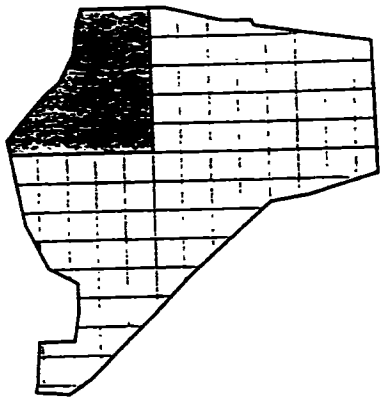
METER MODEL # : 2221	DETECTOR MODEL # : 2x2 "p"
METER SERIAL # : 154228	DETECTOR SERIAL # : 17606
CALIBRATION DUE : 10/10/02	CALIBRATION DUE : 1/30/02
SURVEY DATE/TIME : 10/28/01	FIELD BKG. : 10091
SURVEYOR(S) : D. Roznovsky	
COMMENTS :	

FINAL SITE WALKOVER
CSS/SWTP

5 OF 7

REPORT NO.:		EXHIBIT NO.:	A/CP/078/1001
ORIGINATOR: ML	DRAWN BY: GLN	DATE:	10/8/01





METER MODEL # : 2221 'L'
DETECTOR MODEL # : 44.10/2x2
METER SERIAL # : 127223
DETECTOR SERIAL # : 130763
CALIBRATION DUE : 6.19.02
CALIBRATION DUE : 6.28.02
SURVEY DATE/TIME : 3.13.02/1200
FIELD BKG. : 10000
SURVEYOR(S) : D. Larson
COMMENTS : all areas <1.5 x bkg.

FINAL SITE WALKOVER
CSS/SWTP

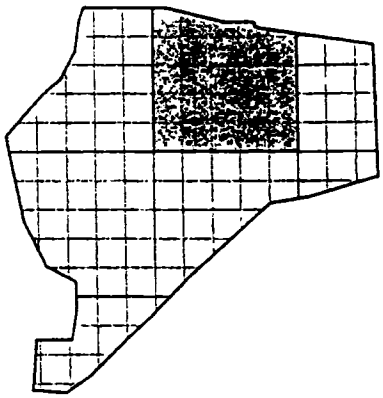
5 OF 7

N

0 100 200
SCALE FEET

REPORT NO.:		EXHIBIT NO.:	A/CP/078/1001
ORIGINATOR: ML	DRAWN BY: GLN	DATE:	10/8/01

<1.5xBKG E90	<1.5xBKG E91	<1.5xBKG E92	<1.5xBKG E93	<1.5xBKG E94
<1.5xBKG E80	<1.5xBKG E81	<1.5xBKG E82	<1.5xBKG E83	<1.5xBKG E84
<1.5xBKG E70	<1.5xBKG E71	<1.5xBKG E72	<1.5xBKG E73	<1.5xBKG E74
<1.5xBKG E59	<1.5xBKG E60	<1.5xBKG E61	<1.5xBKG E62	<1.5xBKG E63
<1.5xBKG E47	<1.5xBKG E48	<1.5xBKG E49	<1.5xBKG E50	<1.5xBKG E51



N

0 100 200

SCALE FEET

METER MODEL # : 2221 DETECTOR MODEL # : 2x2"P"

METER SERIAL # : 154228 DETECTOR SERIAL # : 17606

CALIBRATION DUE : 10/10/02 CALIBRATION DUE : 1/30/02

SURVEY DATE/TIME : 11/4/01 FIELD BKG. : 10303

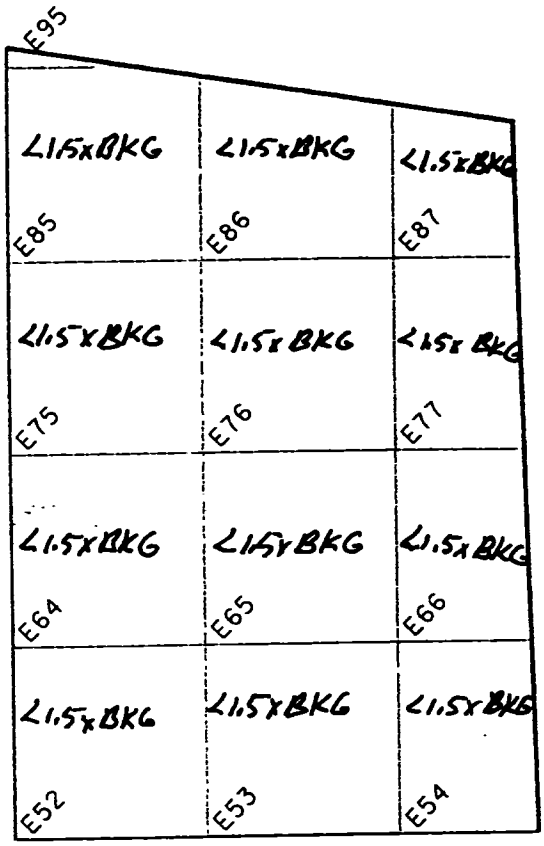
SURVEYOR(S) : O. Roznovsky

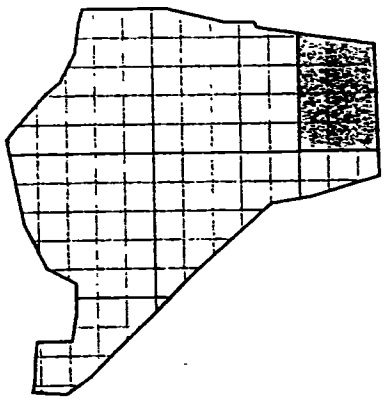
COMMENTS :

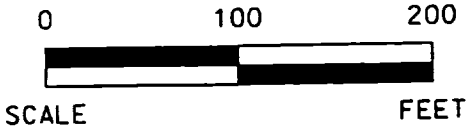
FINAL SITE WALKOVER
CSS/SWTP

6 OF 7

REPORT NO.:		EXHIBIT NO.:	A/CP/079/1001
ORIGINATOR: ML	DRAWN BY: GLN	DATE:	10/8/01







METER MODEL # : 2221 DETECTOR MODEL # : 2x2 "P"

METER SERIAL # : 154228 DETECTOR SERIAL # : 17606

CALIBRATION DUE : 10/10/02 CALIBRATION DUE : 1/30/02

SURVEY DATE/TIME : 11/3/01 FIELD BKG. : 10205

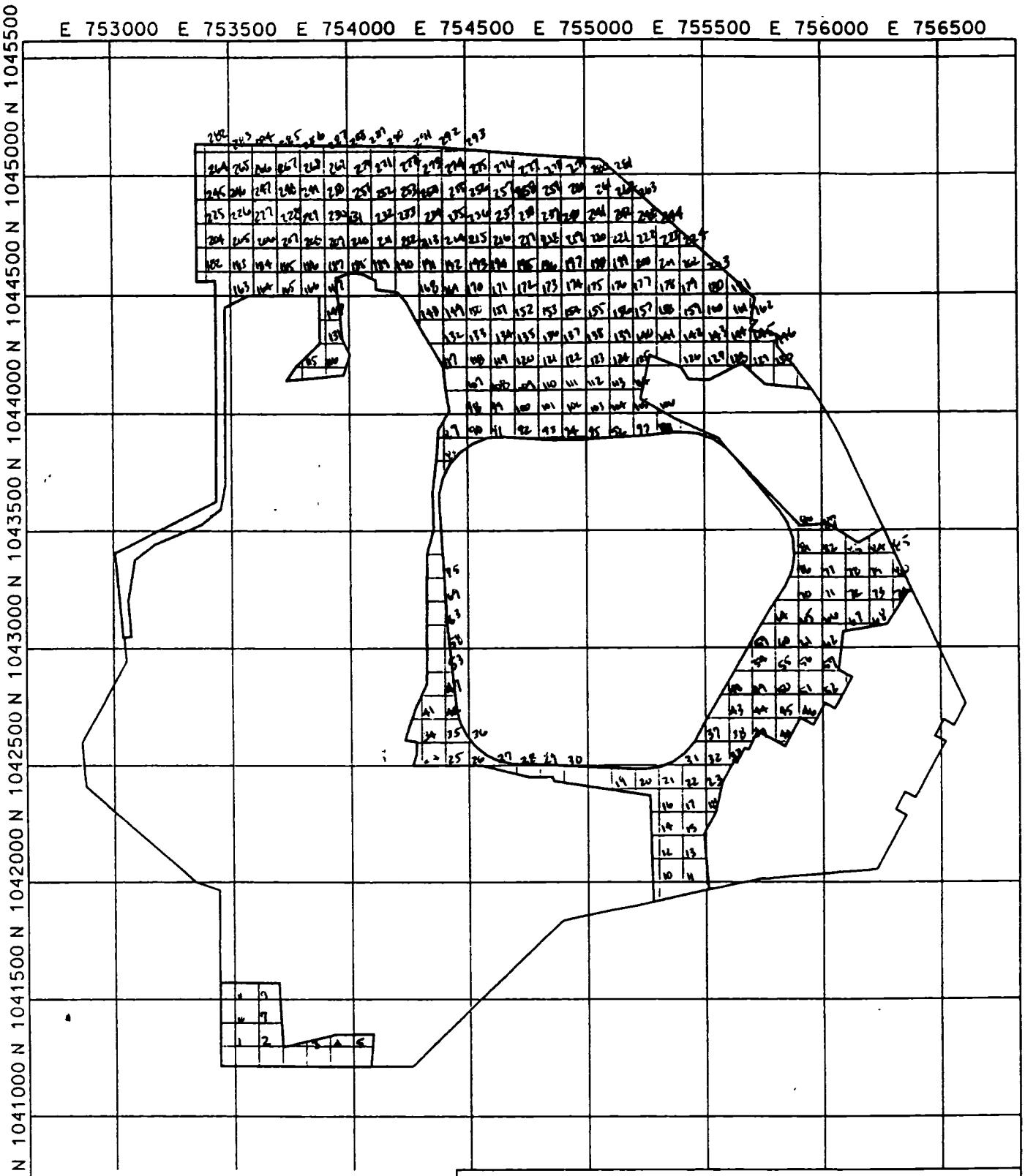
SURVEYOR(S) : D. Reznansky

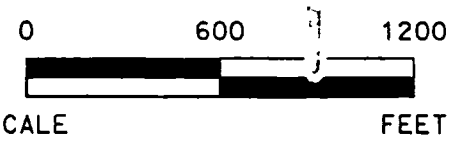
COMMENTS :

FINAL SITE WALKOVER
CSS/SWTP

7 OF 7

REPORT NO.:		EXHIBIT NO.:	A/CP/080/1001
ORIGINATOR: ML	DRAWN BY: GLN	DATE:	10/8/01

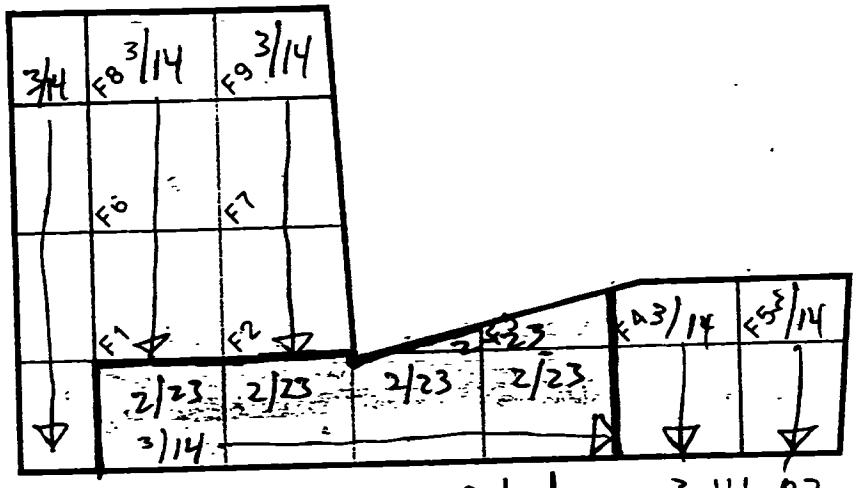




POLYGON F

FIGURE 1

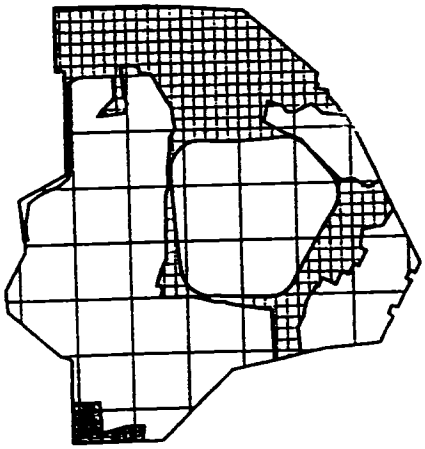
REPORT NO.:		EXHIBIT NO.:	A/CP/002/0102
ORIGINATOR: LE	DRAWN BY: GLN	DATE:	1/2/02



Surveys completed on 3-14-02 @ 1500
D. Larson, D. Gill, M. Quinonez
Used 'L' and 'V' meters. Also, 'U' meter.

meter	ser. #	cal. due
U-2221,	154228,	10.10.02

detector	ser. #	cal. due
2X2 44-10,	54966,	2-8-03

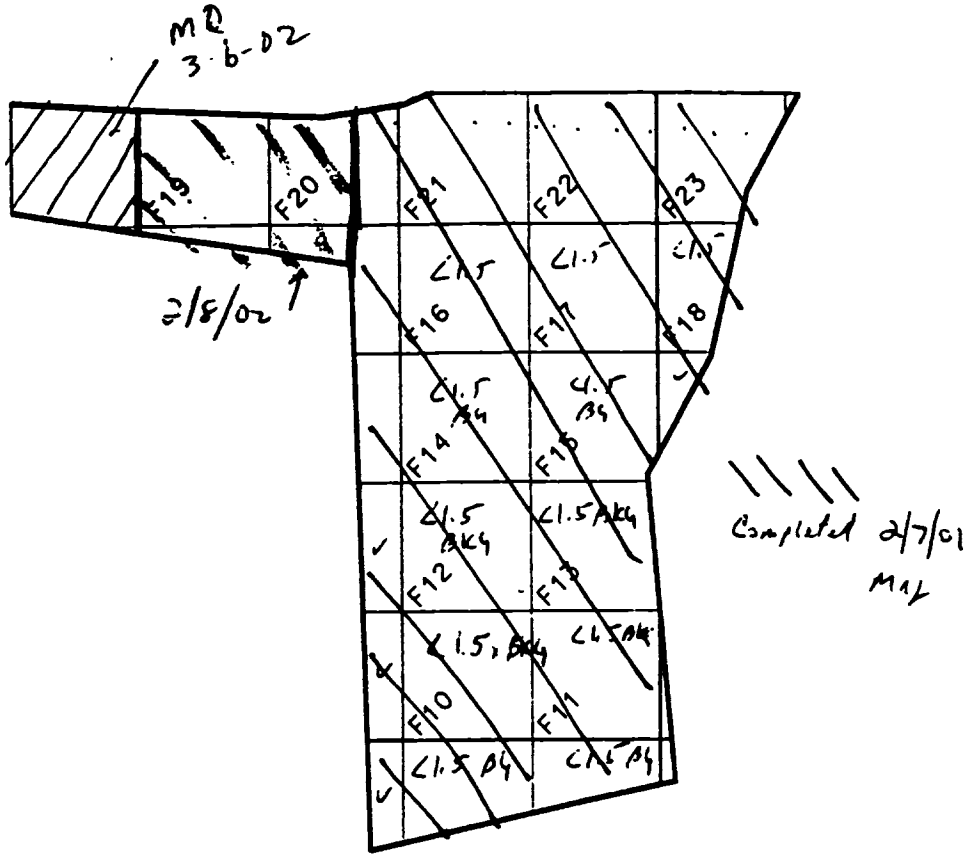


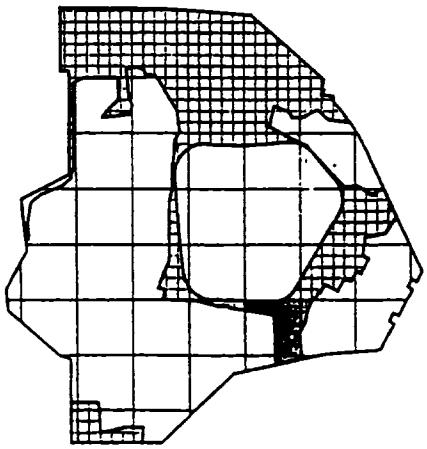
METER MODEL # :	L 2221 / V 2221	DETECTOR MODEL # :	2X2 44-10 / 2X2 44-10
METER SERIAL # :	127223/154225	DETECTOR SERIAL # :	130763/23336
CALIBRATION DUE :	6-19-02/6-6-02	CALIBRATION DUE :	6-28-02/2-6-03
SURVEY DATE/TIME :	2-23-02 /1200	FIELD BKG. :	10,500/10,000
SURVEYOR(S) :	D. Larson, D. Gill		
COMMENTS :	All areas < 1.5 x bkg.		

FINAL SITE WALKOVER
POLYGON F

1 OF 15

REPORT NO.:		EXHIBIT NO.:	A/CP/003/0102
ORIGINATOR: LE	DRAWN BY: GLN	DATE:	1/2/02





0 300 600

SCALE FEET

METER MODEL = : 2221 / 2221 DETECTOR MODEL = : 44.10 / 44.10

METER SERIAL = : 127223 / 154225 DETECTOR SERIAL = : 130763 / 23338

CALIBRATION DUE : 6/19/02 / 6/6/02 CALIBRATION DUE : 6-24-02 / 2-6-03

SURVEY DATE/TIME : 2/7/02 ; 2/8/02 ; 3/6/02 FIELD BKG. : 10200 / 10300

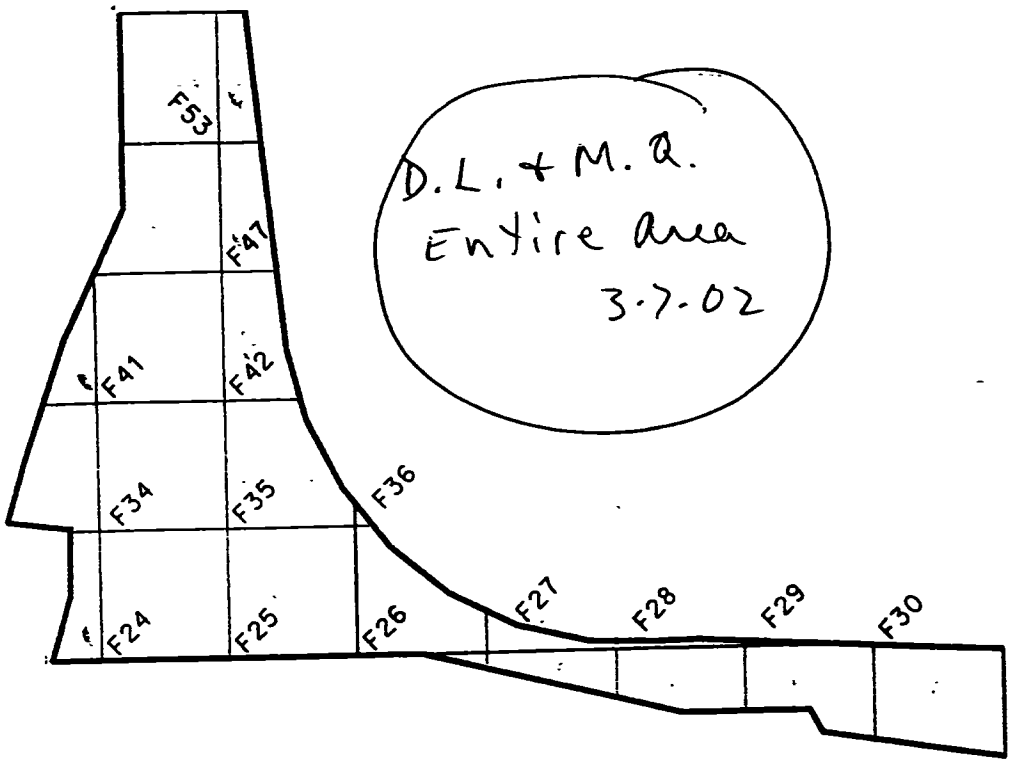
SURVEYOR(S) : M. Quinonez D Larson

COMMENTS : All areas <1.5x bkg.

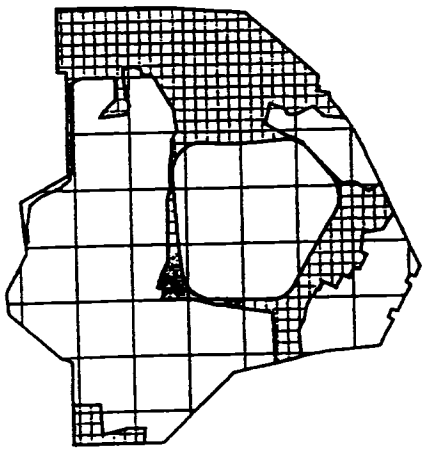
FINAL SITE WALKOVER
POLYGON F

2 OF 15

REPORT NO.:		EXHIBIT NO.: A/CP/004/0102	
ORIGINATOR: LE	DRAWN BY: GLN	DATE: 1/2/02	



D.L. + M.Q.
Entire area
3.7.02



N

0 300 600

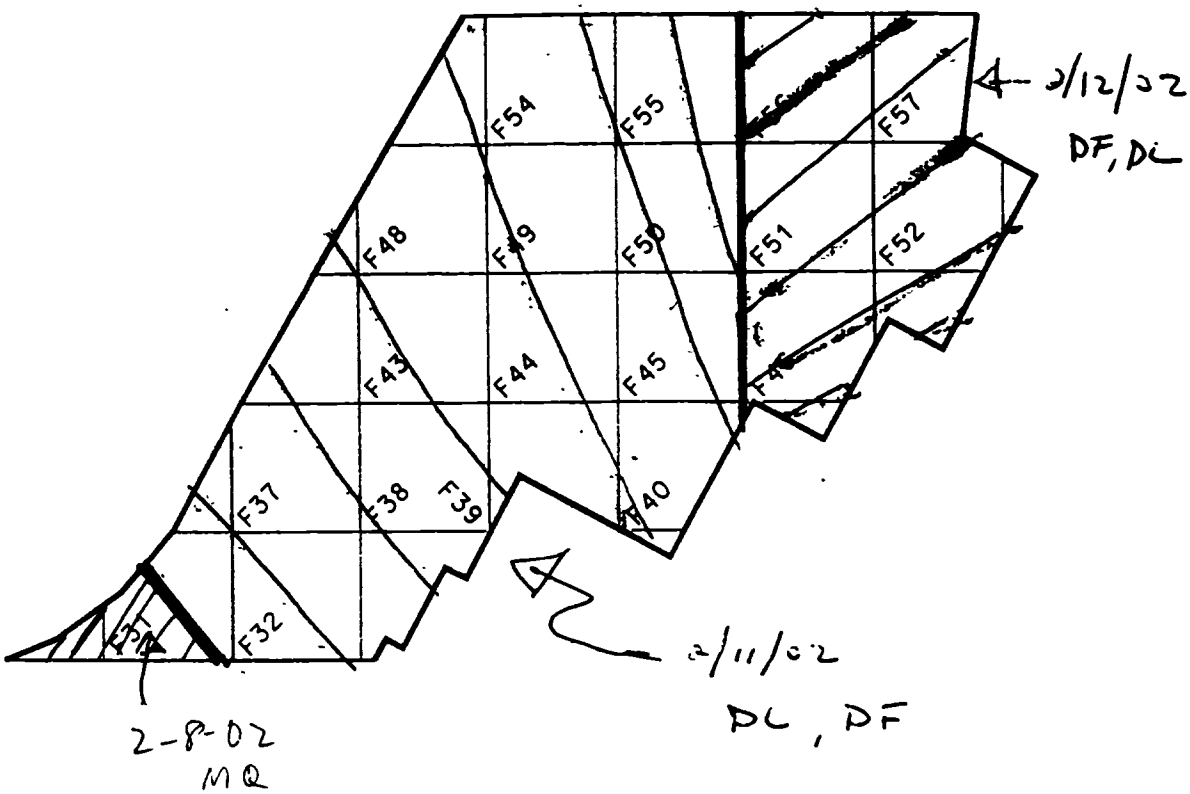
SCALE FEET

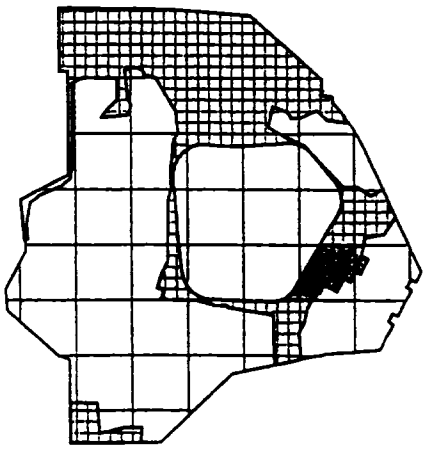
	'V'	'L'		2X2	2X2
METER MODEL # :	2221	2221	DETECTOR MODEL # :	44-10	44-10
METER SERIAL # :	154225	127223	DETECTOR SERIAL # :	023338	130763
CALIBRATION DUE :	6.6.02	6.19.02	CALIBRATION DUE :	2.6.03	6.28.02
SURVEY DATE/TIME :	3.7.02	1500	FIELD BKG. :	10000-10500	
SURVEYOR(S) :	D. Larson, M. Quinonez				
COMMENTS :	all areas < 1.5 x bkg.				

FINAL SITE WALKOVER
POLYGON F

3 OF 15

REPORT NO.:		EXHIBIT NO.:	A/CP/005/0102
ORIGINATOR: LE	DRAWN BY: GLN	DATE:	1/2/02





0 300 600

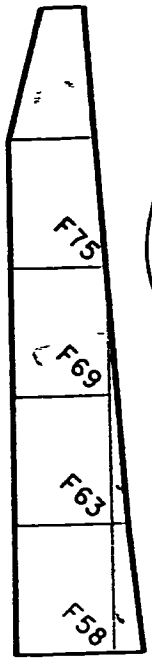
SCALE FEET

METER MODEL # :	L 2221 / V 2221	DETECTOR MODEL # :	0X2 44.10 / LX2 44.10
METER SERIAL # :	127233/154225	DETECTOR SERIAL # :	
CALIBRATION DUE :	6-19-02/6-6-02	CALIBRATION DUE :	6/28/02/2-6-02
SURVEY DATE/TIME :	930- 2-11-02	FIELD BKG. :	9500 / 10000
SURVEYOR(S) :	~~930~~ see below		
COMMENTS :	D. Largon D. Fleming M. Quinonez		
	all areas < 1.5 X bkg.		

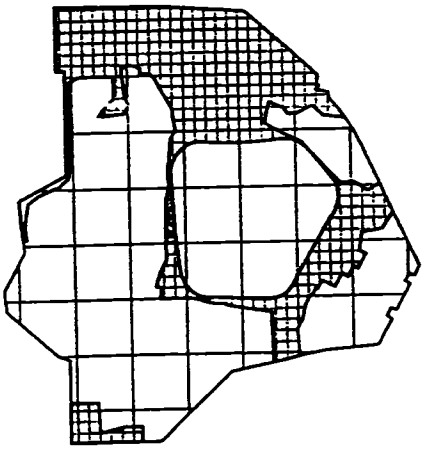
FINAL SITE WALKOVER
POLYGON F

4 OF 15

REPORT NO.:		EXHIBIT NO.:	A/CP/006/0102
ORIGINATOR: LE	DRAWN BY: GLN	DATE:	1/2/02



DL & MQ
Entire area
3-7-02



0 300 600

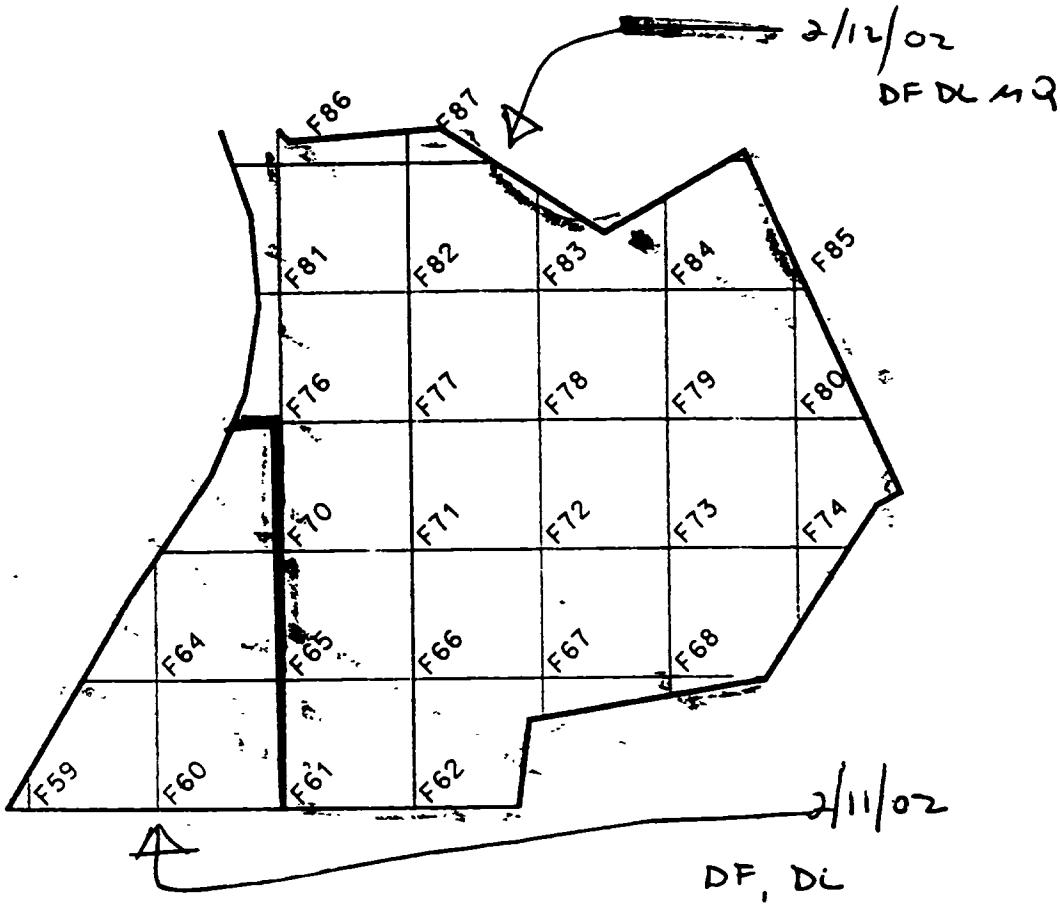
SCALE FEET

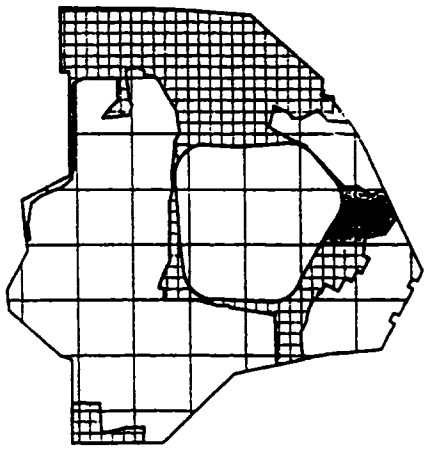
	'V'	'L'		2X2	2X2
METER MODEL # :	2221	2221	DETECTOR MODEL # :	44-10	44-10
METER SERIAL # :	154225	127223	DETECTOR SERIAL # :	023338	130763
CALIBRATION DUE :	6·6·02	6·19·02	CALIBRATION DUE :	2·6·03	6·28·02
SURVEY DATE/TIME :	3·7·02/1300		FIELD BKG. :	10000-10500	
SURVEYOR(S) :	M. Quinonez D. Larson				
COMMENTS :	all areas < 1.5 Xbkg				

FINAL SITE WALKOVER
POLYGON F

5 OF 15

REPORT NO.:		EXHIBIT NO.:	A/CP/007/0102
ORIGINATOR: LE	DRAWN BY: GLN	DATE:	1/2/02





0 300 600

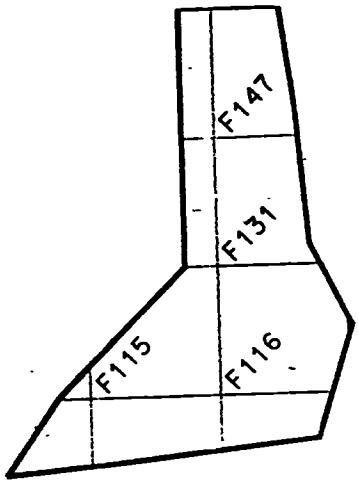
SCALE FEET

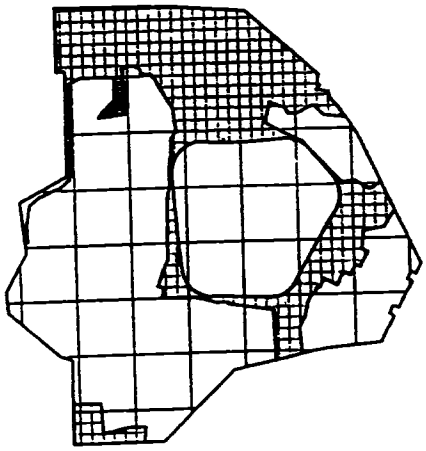
METER MODEL # :	V 2221 / L 2221 / P 2221	DETECTOR MODEL # :	(2x2)(2x2) 6x21 44.10 44.12 44.12
METER SERIAL # :	154225/127223/154209	DETECTOR SERIAL # :	23338/132763/17606
CALIBRATION DUE :	6-6-02/6-19-02/4-15-02	CALIBRATION DUE :	2-6-03/6-19-02/2-11-03
SURVEY DATE/TIME :	832 Am	FIELD BKG. :	9500/9000/9600
SURVEYOR(S) :	D. Larson, D. Fleming, M. Quinonez		
COMMENTS :	all areas <1.5 X bkg.		

FINAL SITE WALKOVER
POLYGON F

6 OF 15

REPORT NO.:		EXHIBIT NO.:	A/CP/008/0102
ORIGINATOR: LE	DRAWN BY: GLN	DATE:	1/2/02





0 300 600

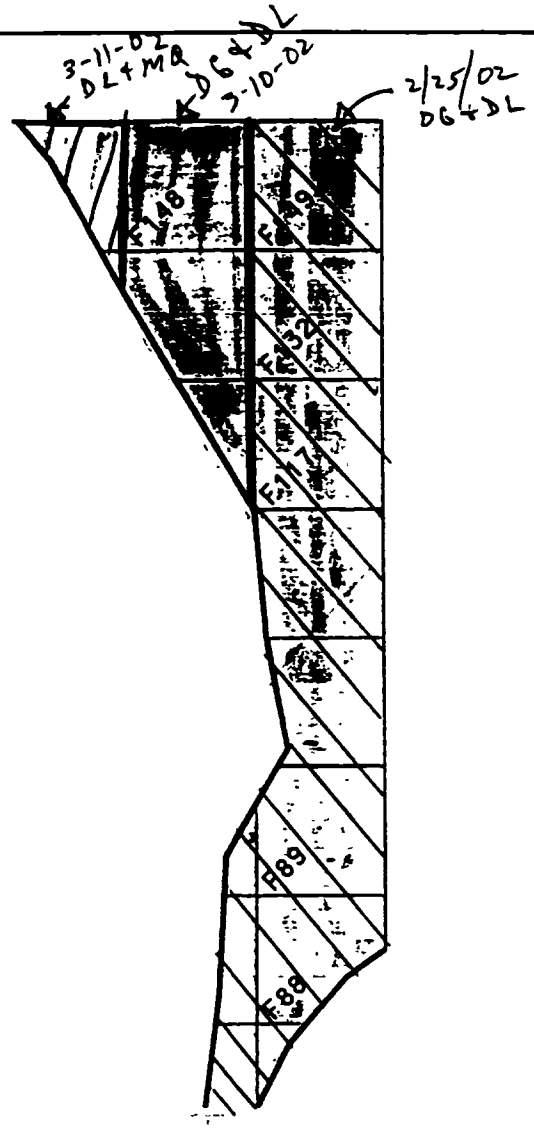
SCALE FEET

	'V'	'L'		'V'	'L'
METER MODEL # :	2221	2221	DETECTOR MODEL # :	2X2 44-10	2X2 44-10
METER SERIAL # :	154225	127223	DETECTOR SERIAL # :	023338	130763
CALIBRATION DUE :	6.6.02	6.19.02	CALIBRATION DUE :	2.6.03	6.28.02
SURVEY DATE/TIME :	3.12.02	1500	FIELD BKG. :	10000-10500	
SURVEYOR(S) :	D. Gill, D. Larson				
COMMENTS :	all areas < 1.5 x bkg.				

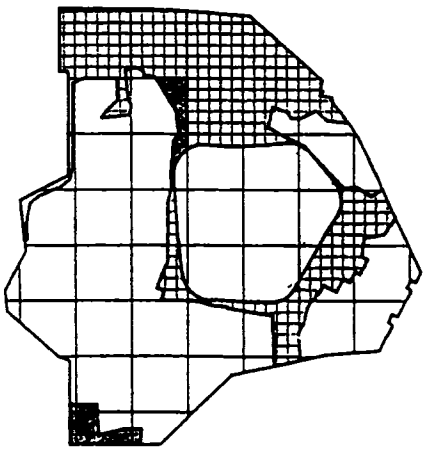
FINAL SITE WALKOVER
POLYGON F

7 OF 15

REPORT NO.:		EXHIBIT NO.:	A/CP/009/0102
ORIGINATOR: LE	DRAWN BY: GLN	DATE:	1/2/02



D. Larson, M. Quinonez on 3-11-02



0 300 600

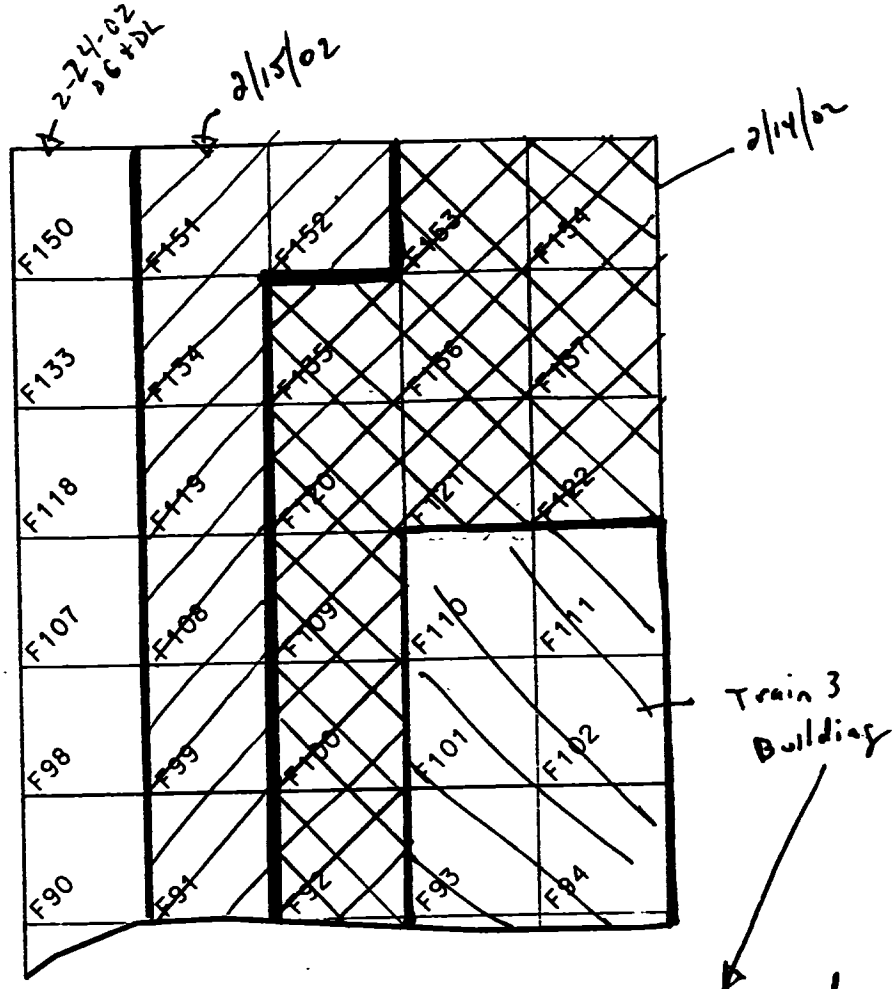
SCALE FEET

METER MODEL # :	L 2221 / V 2221	DETECTOR MODEL # :	2X2 44-10 / 2X2 44-10
METER SERIAL # :	127223/154225	DETECTOR SERIAL # :	130763/23338
CALIBRATION DUE :	6.19.02/6.6.02	CALIBRATION DUE :	6.28.02/2.6.03
SURVEY DATE/TIME :	2/25/02/1100	FIELD BKG. :	10,500 / 10,000
SURVEYOR(S) :	D. Larson, D. Gill on 2-25-02 and 3-10-02 @ 1500		
COMMENTS :	① Same instrumentation used on all 3 days ② all area < 1.5 x 6 kg.		

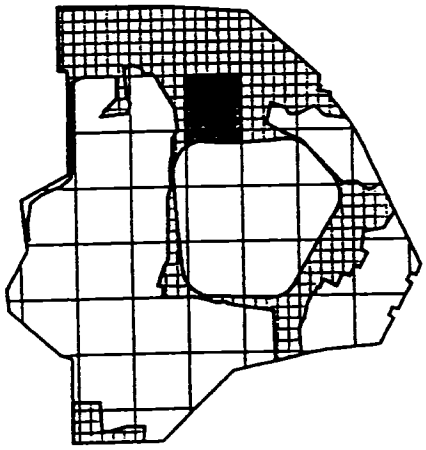
FINAL SITE WALKOVER
POLYGON F

8 OF 15

REPORT NO.:		EXHIBIT NO.:	A/CP/010/0102
ORIGINATOR: LE	DRAWN BY: GLN	DATE:	1/2/02



Note: Train 3 Bldg. area covered w/ gravel pad (not surveyed).



0 300 600

SCALE FEET

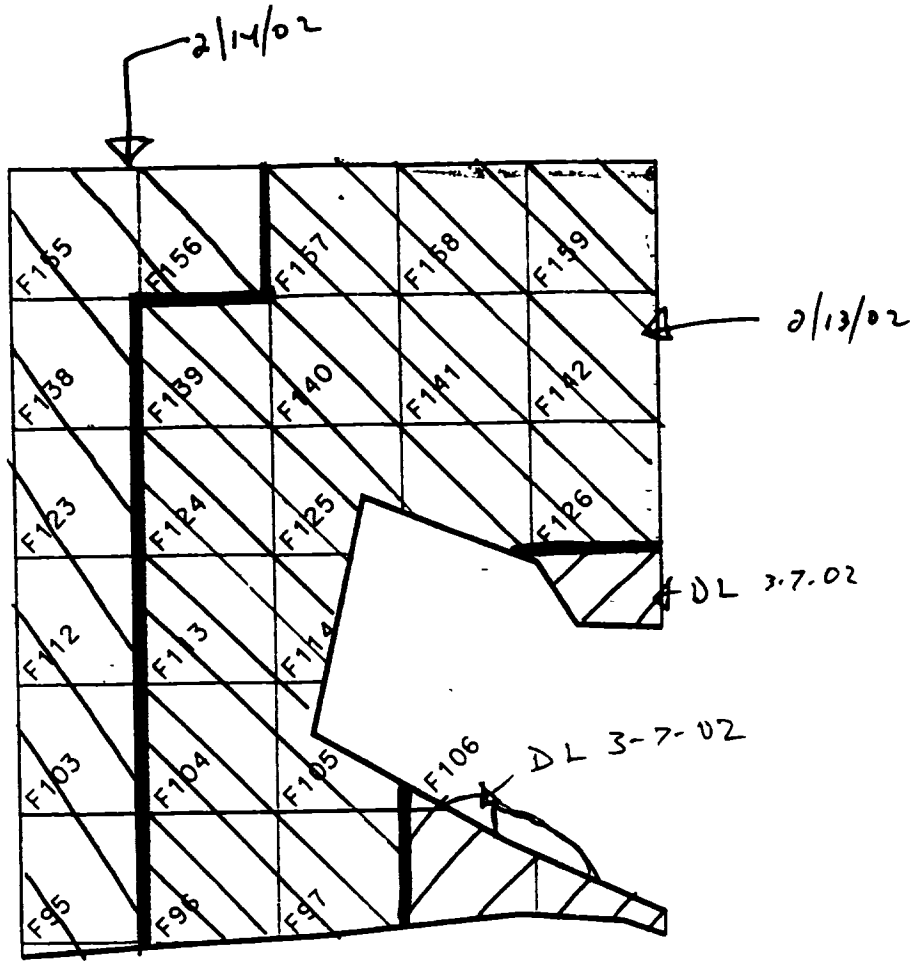
METER MODEL #:	L 2221 / V 2221	DETECTOR MODEL #:	2x2 44.10 / 2x2 44.10
METER SERIAL #:	127223 / 154225	DETECTOR SERIAL #:	130763 / 23338
CALIBRATION DUE:	6-19-02 / 6-6-02	CALIBRATION DUE:	6-28-02 / 2-6-03
SURVEY DATE/TIME:	900	FIELD BKG.:	10500 / 10000
SURVEYOR(S):	M Quinones, D. Larson, D. Gill		

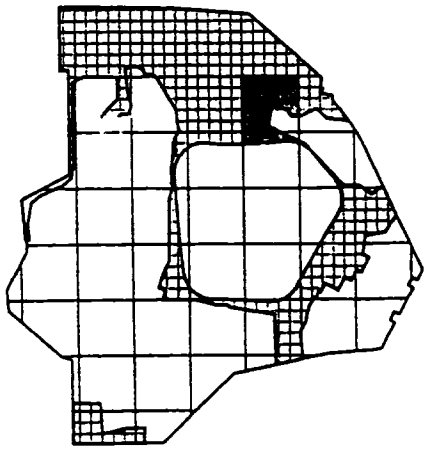
COMMENTS: ① Surveys performed on 2-14-02, 2-15-02, and 2-24-02 ② Same instruments used all 3 days. All areas < 1.5 x bkg

FINAL SITE WALKOVER
POLYGON F

9 OF 15

REPORT NO.:		EXHIBIT NO.:	A/CP/011/0102
ORIGINATOR: LE	DRAWN BY: GLN	DATE:	1/2/02





N

0 300 600

SCALE FEET

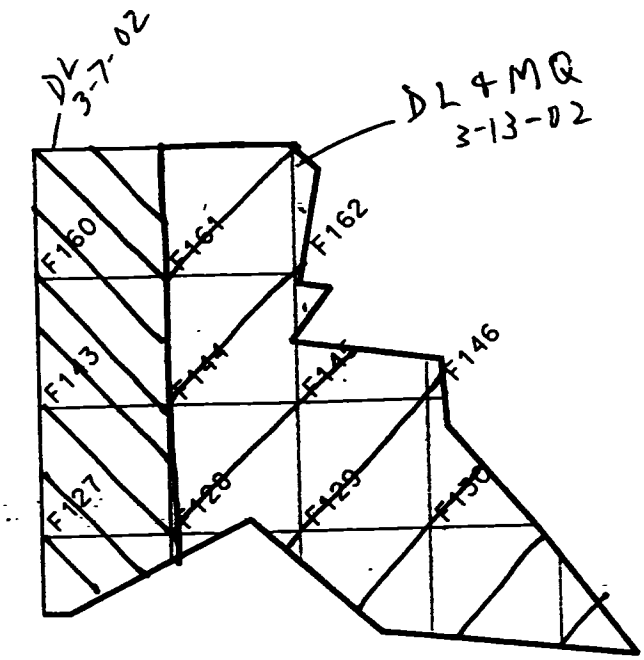
METER MODEL # :	2221 / 2221 (L V)	DETECTOR MODEL # :	44.12 (282) / 44.10 (282)
METER SERIAL # :	127223 / 154225	DETECTOR SERIAL # :	180763 / 23338
CALIBRATION DUE :	6-19.02 / 6-6.02	CALIBRATION DUE :	6-28.02 / 2.6.03
SURVEY DATE/TIME :	830	FIELD BKG. :	9800 / 9000
SURVEYOR(S) :	D. Fleming P. Carson		

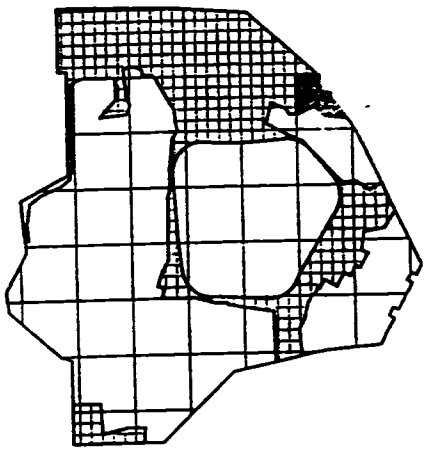
COMMENTS : ① D. Larson on 3-7-02 using meter 'V' ② all areas < 1.5 x bkg.

FINAL SITE WALKOVER
POLYGON F

10 OF 15

REPORT NO.:		EXHIBIT NO.:	A/CP/012/0102
ORIGINATOR: LE	DRAWN BY: GLN	DATE:	1/2/02





N

0 300 600

SCALE FEET

	'V'	'L'
METER MODEL # :	2221	2221
DETECTOR MODEL # :	2X2 44-10	2X2 44-10
METER SERIAL # :	154225	127223
DETECTOR SERIAL # :	D23338	130763
CALIBRATION DUE :	6.6.02	6.19.02
CALIBRATION DUE :	2.6.03	6.28.02
SURVEY DATE/TIME :	3.7.02/1600 3.13.02/1300	
FIELD BKG. :	10000-10500	
SURVEYOR(S) :	D. Larson (3-7-02), Larson, Quinonez (3-13-02)	
COMMENTS :	all areas < 1.5 X bkg.	

FINAL SITE WALKOVER
POLYGON F

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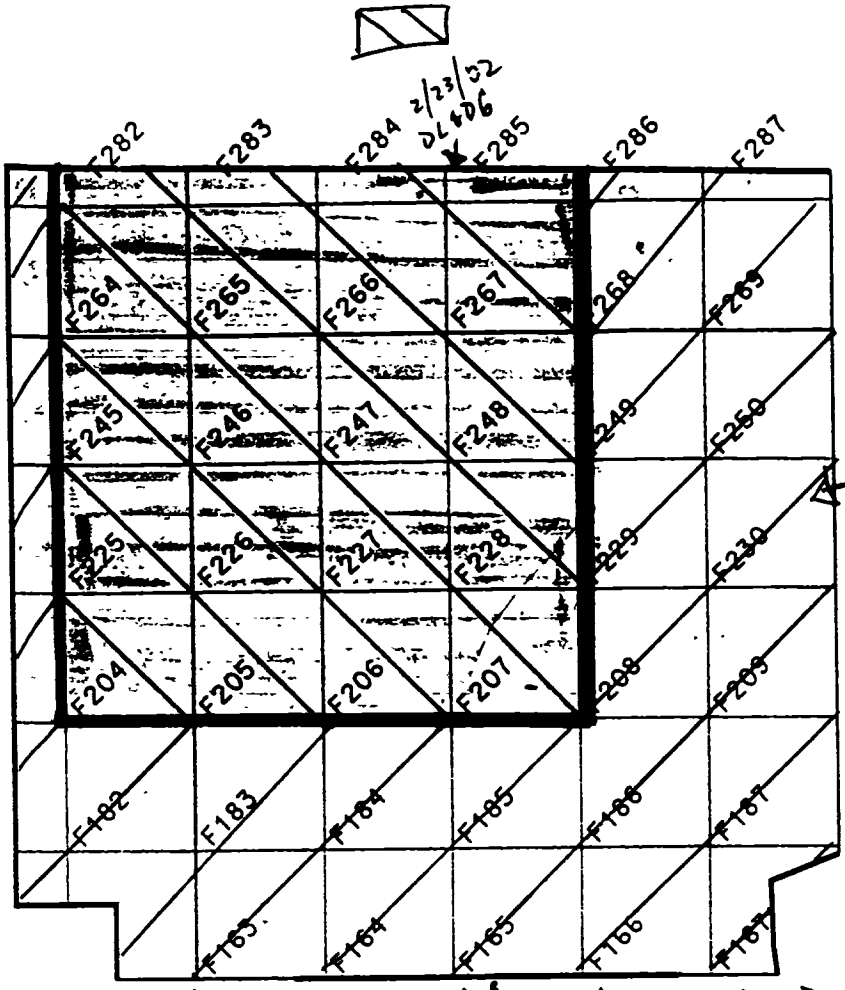
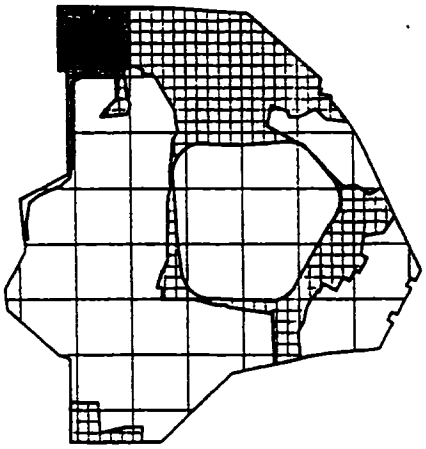
REPORT NO.:		EXHIBIT NO.:	A/CP/013/0102
ORIGINATOR: LE	DRAWN BY: GLN	DATE: 1/2/02	



'W' meter used on 3.11.02 w/ 'L' and 'V'

meter - 2221
ser. # - 154228
cal. due - 10.18.02

detector - 2X2/44-10
ser. # - 54996
cal. due - 2/8/03



N

0 300 600

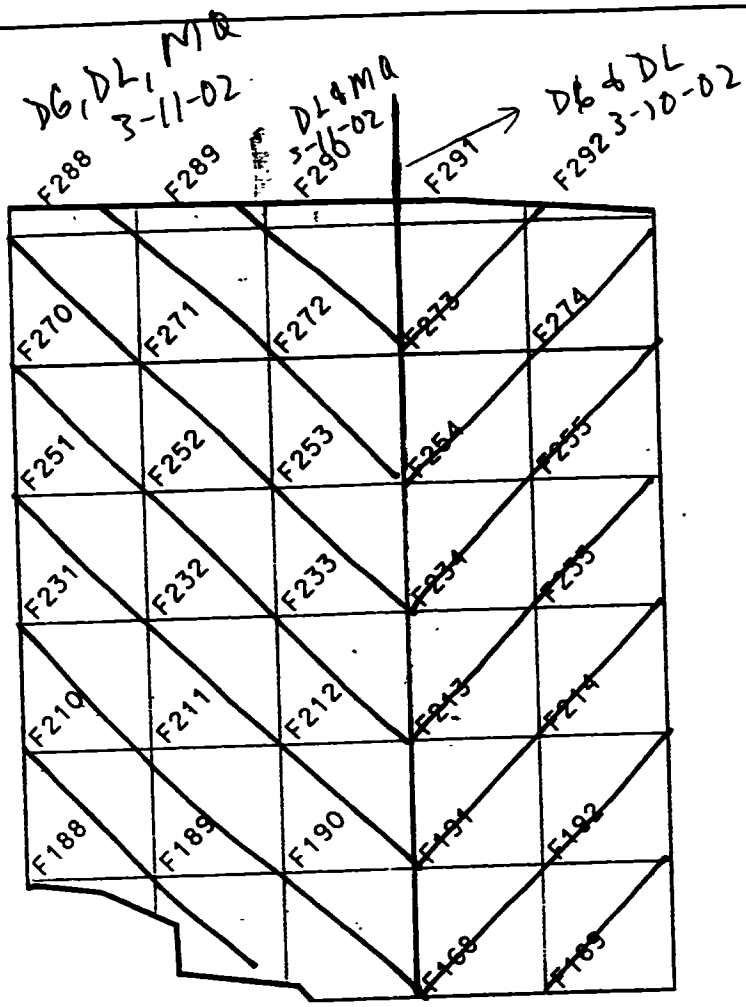
SCALE FEET

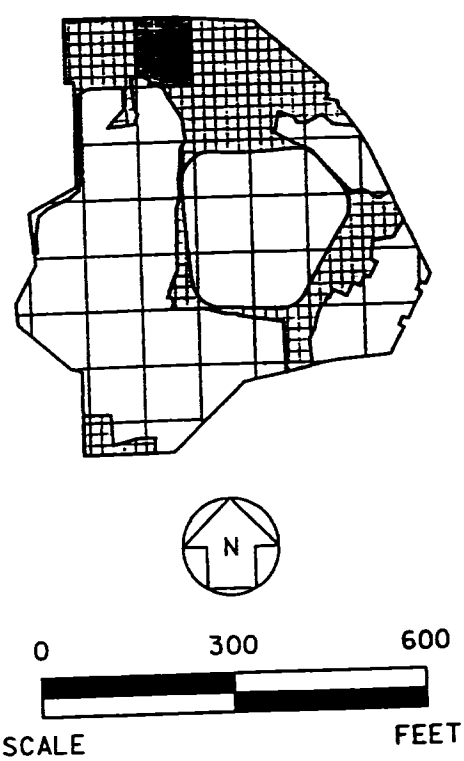
METER MODEL # :	L 2221 / V 2221	DETECTOR MODEL # :	2X2 44-10 / 2X2 44-10
METER SERIAL # :	127223 / 154225	DETECTOR SERIAL # :	130763 / 2333 A
CALIBRATION DUE :	6-19-02 / 6-6-02	CALIBRATION DUE :	6-28-02 / 2-6-03
SURVEY DATE/TIME :	2/23/02 @ 1100	FIELD BKG. :	10,500 / 10,000
SURVEYOR(S) :	D. Larsen / D. Gill on 2.23.02		
COMMENTS :	Larson, Gill, Quinonez 3-11-02 all areas < 1.5 x bkg.		

FINAL SITE WALKOVER
POLYGON F

12 OF 15

REPORT NO.:		EXHIBIT NO.:	A/CP/014/0102
ORIGINATOR: LE	DRAWN BY: GLN	DATE:	1/2/02





'V' 'L' 'U'

METER MODEL # : 2221 / 2221 / 2221 DETECTOR MODEL # : 44-10 (2x2 (all 3))

METER SERIAL # : 154225 / 127223 / 154228 DETECTOR SERIAL # : 023338 / 130763 / 54996

CALIBRATION DUE : 6.6.02 / 6.19.02 / 10.10.02 CALIBRATION DUE : 2.6.03 / 6.28.02 / 2.8.03

SURVEY DATE/TIME : 3-10-02 / 1500 / 3-11-02 / 1500 FIELD BKG. : 10000-10500

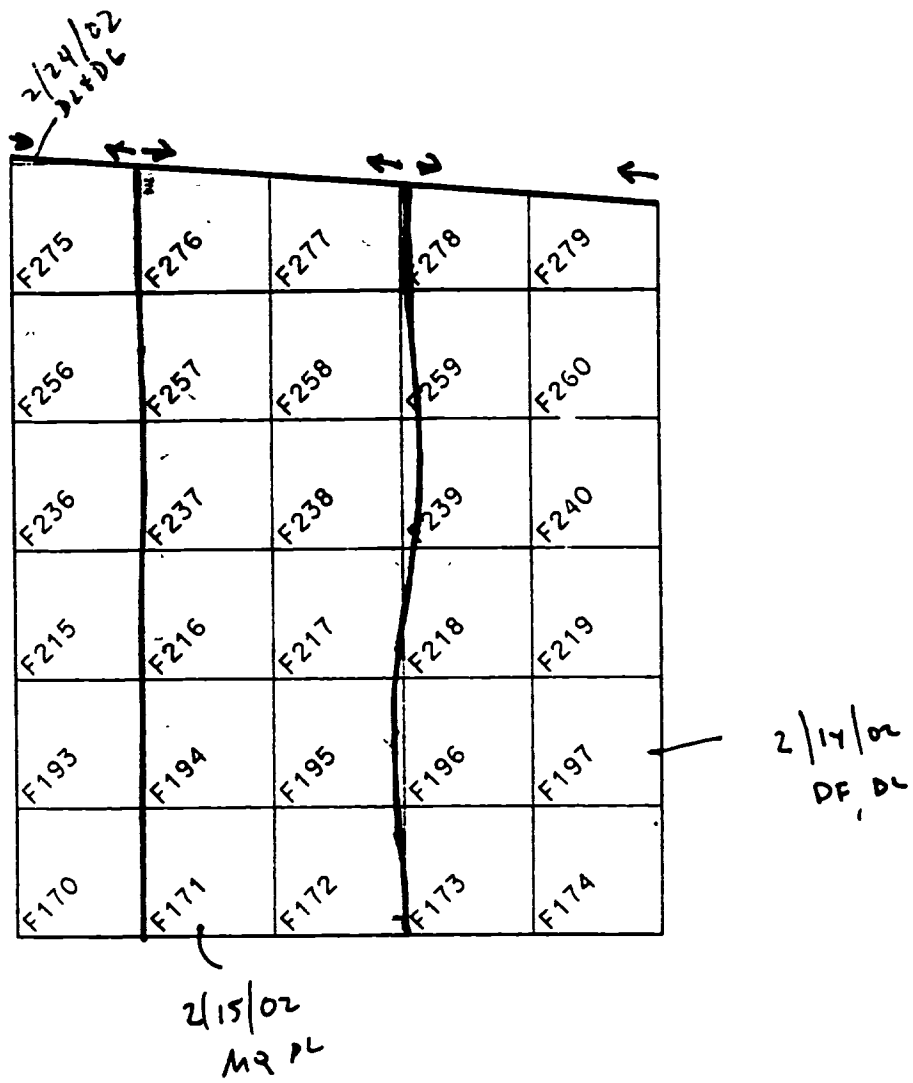
SURVEYOR(S) : D. Gill, D. Larson, M. Quinonez

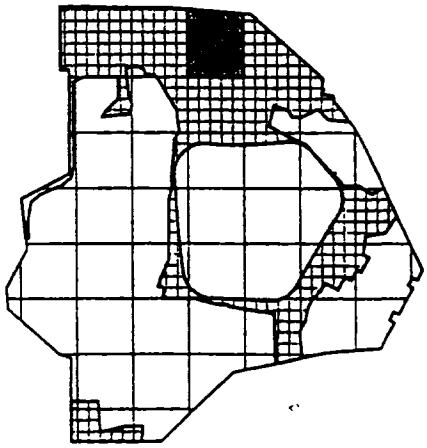
COMMENTS : all areas < 1.5 X bkg.

FINAL SITE WALKOVER
POLYGON F

13 OF 15

REPORT NO.:		EXHIBIT NO.:	A/CP/015/0102
ORIGINATOR: LE	DRAWN BY: GLN	DATE:	1/2/02





N

0 300 600

SCALE FEET

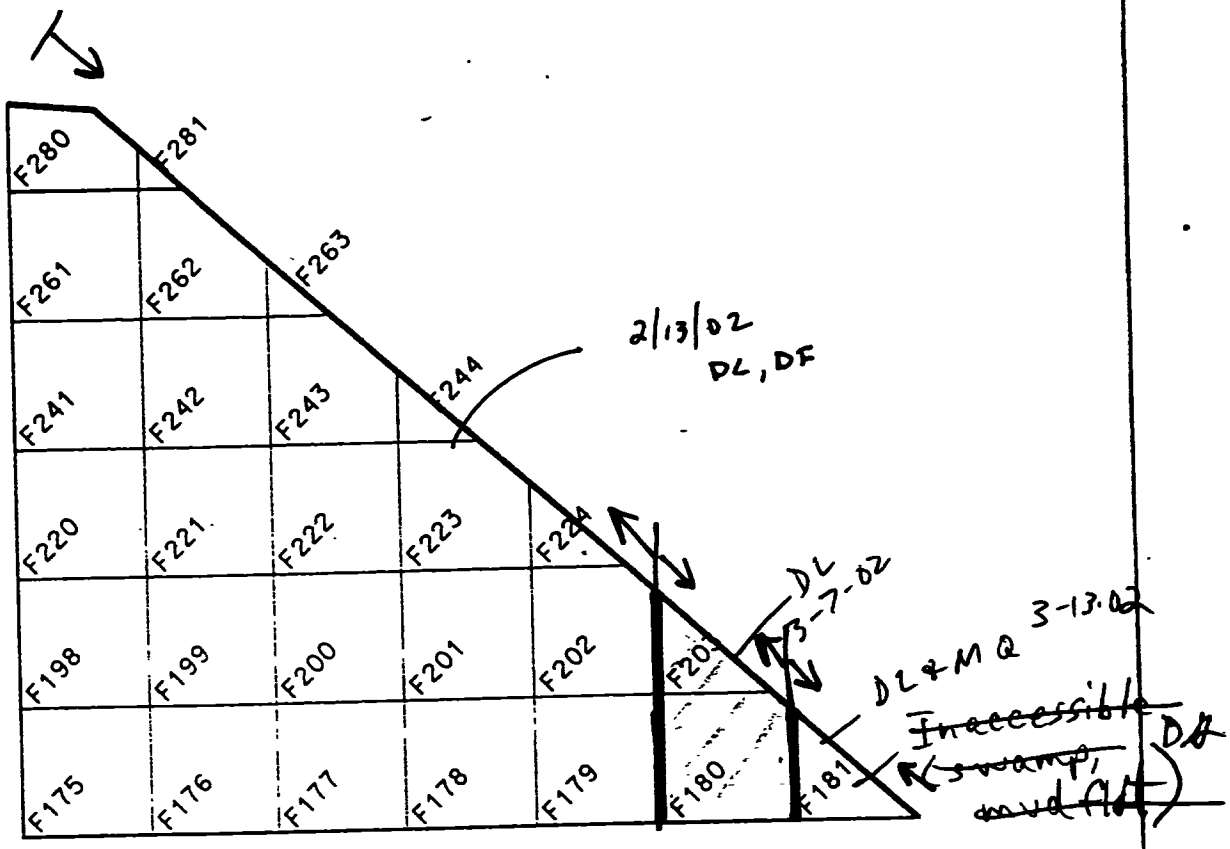
METER MODEL # :	2221 / 2221	DETECTOR MODEL # :	44.10 / 44.10
METER SERIAL # :	127223 / 154225	DETECTOR SERIAL # :	130763 / 23238
CALIBRATION DUE :	6.19.02 / 6-6.02	CALIBRATION DUE :	6-28-02 / 2.6.03
SURVEY DATE/TIME :	900 2/15/02	FIELD BKG. :	10500 / 10000
SURVEYOR(S) :	M Quirarte D. Lerma, D. Gill		

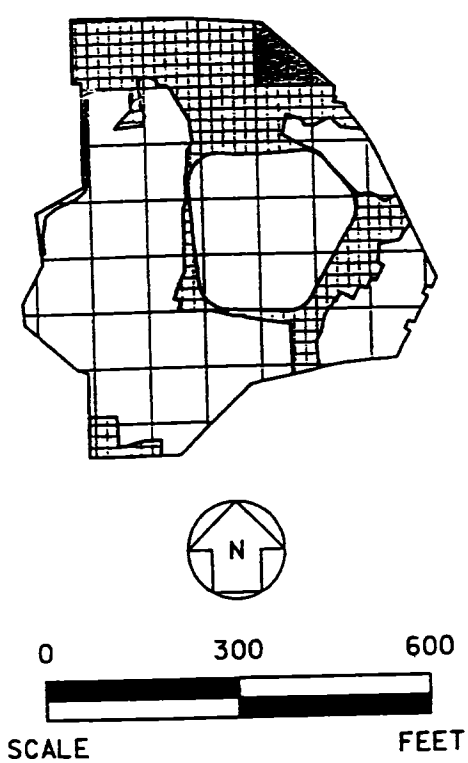
COMMENTS : (1) Surveys performed on 2-14-02, 2-15-02 and 2-24-02 (2) Same meters used all 3 days (3) all areas < 1.5 X bkg.

FINAL SITE WALKOVER
POLYGON F

14 OF 15

REPORT NO.:		EXHIBIT NO.:	A/CP/016/0102
ORIGINATOR: LE	DRAWN BY: GLN	DATE: 1/2/02	





	L	V		2x2	2x2
METER MODEL # :	2221	2221	DETECTOR MODEL # :	44.10	44.10
METER SERIAL # :	127223	154225	DETECTOR SERIAL # :	130763	23338
CALIBRATION DUE :	6-19-02	6-6-02	CALIBRATION DUE :	6-28-02	2-6-03
SURVEY DATE/TIME :	830		FIELD BKG. :	9800	9000

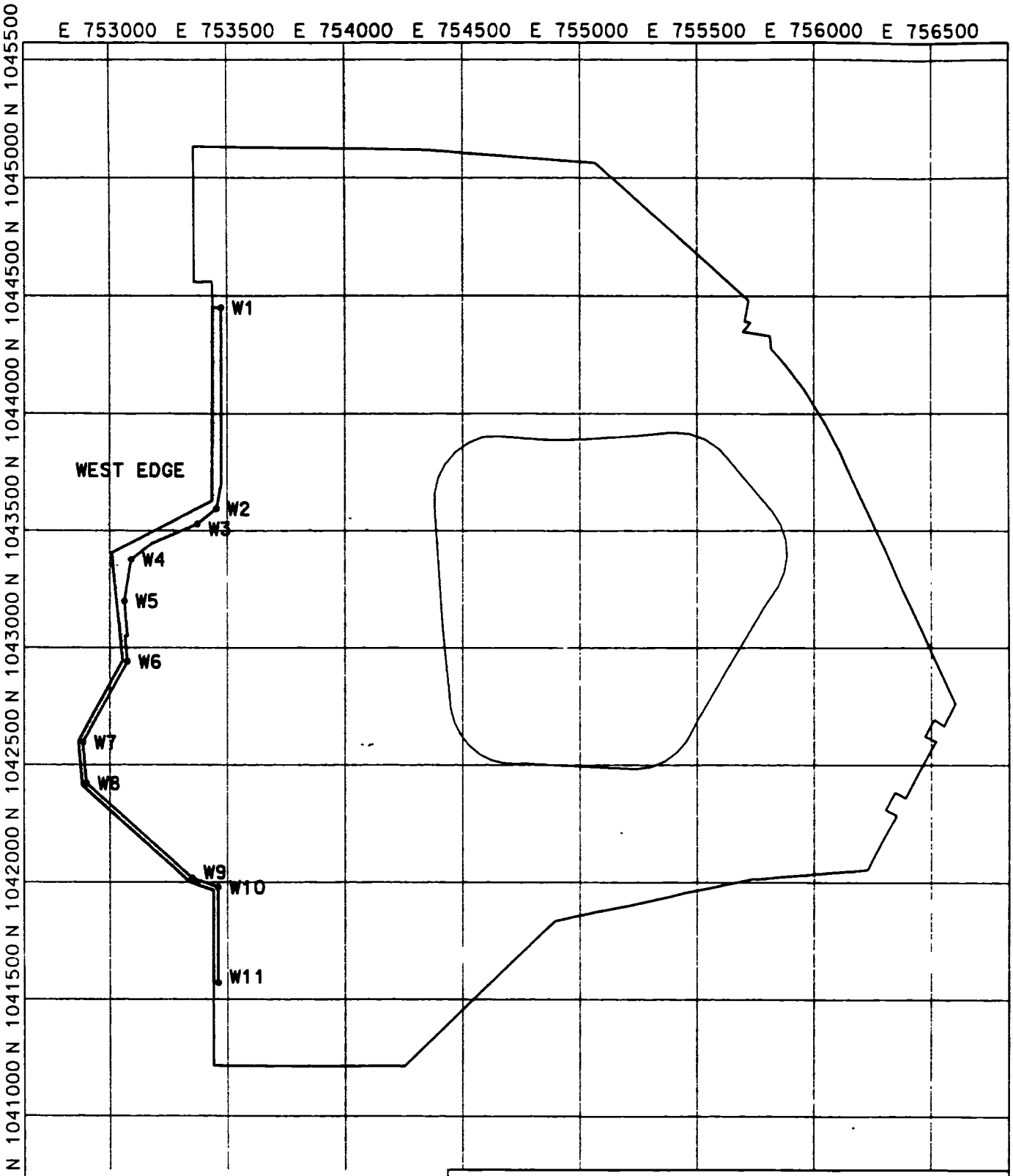
SURVEYOR(S) : D. Fleming D. Carson, Quinonez

COMMENTS : ① L' & 'V' meters used all 3 days
② all areas < 1.5 x bkg.

FINAL SITE WALKOVER
POLYGON F

15 OF 15

REPORT NO.:		EXHIBIT NO.:	A/CP/017/0102
ORIGINATOR: LE	DRAWN BY: GLN	DATE:	1/2/02



WEST EDGE

FIGURE 2-7

REPORT NO.: DOE/OR/21548-923		EXHIBIT NO.: A/CP/026/0502	
ORIGINATOR: LE	DRAWN BY: GLN	DATE: 5/23/02	