FINAL
QUARTERLY RESPIROMETER TEST 2 OF 5

BUILDING 986 POL LABORATORY

SOIL VAPOR EXTRACTION AND BIO-VENTING OPERATIONS AND MAINTENANCE

FORT RICHARDSON, ALASKA
CONTRACT NO. DACA85-01-P-0080

Prepared for:

U.S. Army Corps of Engineers, Alaska District
CEPOA-PM-M-A
P. O. Box 6898
Elmendorf AFB, Alaska 99506-6898

Prepared By:

AGVIQ
AGVIQ ENVIRONMENTAL SERVICES

AGVIQ, Inc.
2121 Abbott Road Suite 100
Anchorage, Alaska 99507

Project #200110

July 2002

OPERATIONAL MONITORING

AGVIQ, Inc. inspected the soil vapor extraction (VE) and bio-venting (BV) system for proper operational parameters. The system appeared to be operating normally, as designed and was tested as initially configured. Power indicators and alarms were operational. The system's airflow was free flowing, did not have excessive vacuum, the lower explosive limit (LEL) concentrations were low and the condensate tank was empty and unobstructed.

RESPIROMETER TESTING

Since the VE/BV system re-start on February 6, 2002, AGVIQ has performed three operational monitoring events at the Building 986 POL Lab. During each of these events, initial soil vapor readings were collected from three (3) monitoring points (MP-1, MP-2 and MP-3). Readings using a Combustible Gas Indicator (CGI) were collected from each of the monitoring points. The first two events took place on February 28 and March 28, 2002. The third monitoring event occurred on April 15, 2002 in conjunction with the quarterly respirometer testing. These monthly monitoring events consisted of soil vapor readings and airflow rates (CFM) and vacuum (inches of H2O) were measured from each vent well. The concentrations of volatiles (ppm) were measured with a calibrated photo-ionization detector (PID) from each vent well at the VE manifold. On April 15, 2002 the second respiration testing of this yearly sequence of O & M activities was performed for a period of eight (8) days. Prior to shutting off the blower for the respirometer test; the VE system was configured to extract air from VE wells 1 and 2, an initial effluent sample was collected, and initial soil vapor readings were collected from three (3) monitoring points. VE well 3 was left nearly closed (approx. 5% open). Soil vapor readings were also collected daily over the next seven (7) days and the blower was restarted on April 22, 2002.

ANALYTICAL SAMPLING PROGRAM

Effluent Sampling

Effluent samples were collected from the VE system exhaust stack, prior to shutdown, to estimate hydrocarbon-mass removal rates as configured. The samples were collected from the exhaust stack using laboratory-prepared 1-liter stainless steel canisters. The samples were sent to CT&E of Anchorage, Alaska. The effluent samples were analyzed for the following parameters:

- Benzene, Toluene, Ethylbenzene and Xylenes (BTEX) by EPA 8021B
- Gasoline Range Organics (GRO) by AK 101; and
- Methane, carbon dioxide, oxygen and nitrogen by ASTM D-1945

FINDINGS

Effluent Sampling

The reported analytical results for GRO and BTEX constituents in the exhaust air sample were undetectable (Table 1) at levels stated in the report. The air sample analytical results indicate that the percent levels of oxygen and nitrogen are similar to the concentrations found in the atmosphere. The methane and carbon dioxide results were similar to the previous respirometer test (Table 1). The concentrations of volatiles in the exhaust air at the time of sample collection were low (Table 2). All of the analytical results from the effluent air samples collected during the respirometer sampling event are presented in Appendix A.

Monitoring Events

The CGI results from the monitoring events are presented in Appendix B. The readings at MP-1 suggest biological activity due to the decrease in oxygen and the increase in carbon dioxide, during the extent of the monitoring period. This trend is greater at 20 ft bgs than at 10 ft bgs. This implies that biological activity may be occurring in the vicinity of MP-1 and a significantly higher amount of activity may be taking place at the greater depth. MP-1 is located in the vicinity of the former dry well (Appendix C).

The readings from MP-2 also exhibited evidence of biological activity. However, there was less evidence of biological activity seen at 10 ft bgs, than was exhibited at the same depth at MP-1. Evidence of a considerably higher amount of microbial activity is seen at the 20 ft bgs depth at this location.

MP-3 is located outside of the main contaminated area at the former dry well area. Very little activity was observed at both depths in this location.

To assist in assessing the VE/BV system performance, the airflow rates (CFM) and vacuum (inches of H_2O) were measured from each vent well and concentrations of volatiles (ppm) were measured from each vent well at the exhaust manifold. The airflow rates measured at the VE blower during the second respirometer test ranged between 2 and 51 CFM and the applied vacuum levels at the VE blower ranged between 11 and 21 inches of H_2O. The concentration of volatiles ranged between 0.6 and 7.1 ppm. The airflow, vacuum and concentration of volatiles results for all three monitoring events are listed in Tables 2-4.

CONCLUSION

Review of the monitoring and analytical data indicates that the VE/BV system is actively remediating the subsurface soils in the vicinity of the former dry well located at Building 986. The observations indicate that the remediation is progressing by two processes: bioremediation through the utilization of oxygen in the soil gas and, to a lesser degree,

physical removal of hydrocarbon vapors. The physical removal is diminished due to the age of the system and remedial process.

Evidence of bioremediation and physical removal is obtained through sampling and analysis of the extracted soil gas. Analysis of the VE system effluent for petroleum hydrocarbons indicates that the VE system is successfully extracting contaminants. The presence of elevated CO2 concentrations in the soil gas analyzed from the VE system exhaust stack may be an indication of hydrocarbon biodegradation in the site soils. In addition, oxygen concentrations in the soil gas indicate that the oxygen is not currently limiting hydrocarbon biodegradation. Similarly, the data collected from the three soil gas monitoring points also indicate by the increase in CO2 concentrations and significant decrease in O2 concentrations that biodegradation is occurring in the soils at the site where contamination was found.

Based on the monthly monitoring, respirometer, and analytical test data, the system operational configuration was not changed. The system was configured Table 4 - Soil Vapor Extraction & Bio-Venting System Operational Data – April 2002

TABLE 1

AIR SAMPLE ANALYTICAL RESULTS

	---------- PARAMETERS ----------										
SAMPLE ID	**GRO** ppm	**BTEX** ppm	**Benzene** ppm	**Toluene** ppm	**Ethylbenzene** ppm	**P & M-Xylene** ppm	**O-Xylene** ppm	**Oxygen** %	**Nitrogen** %	**Methane** %	**Carbon Dioxide** %
Exhaust 02FRA003AG	U	U	U	U	U	U	U	N/A	N/A	N/A	N/A
Exhaust 02FRA004AG	N/A	N/A	N/A	N/A	N/A	N/A	N/A	17	82	U	0.50

Note:
GRO = Gasoline Range Organics
BTEX = Benzene, Toluene, Ethylbenzene and Total Xylenes
U = Undetectable as listed in the analytical report
N/A = Not Applicable as listed in the analytical report
ppm = parts per million by volume
% = percent by volume

TABLE 2

SOIL VAPOR EXTRACTION & BIO-VENTING SYSTEM OPERATIONAL DATA – FEBRUARY 2002

---------- PARAMETERS ----------

LOCATION	AIR FLOW (CFM)	VACUUM (inches of H_2O)	CONCENTRATION OF VOLATILES (ppm)	% WELLS OPEN
VE - 1	9	29	1.7	100 %
VE - 2	53	29	1.3	100 %
VE – 3	39	16	7.3	< 25 %
EXHAUST STACK	33	11	3.1	N/A

Note:
CFM = Cubic Feet per Minute
ppm = Parts Per Million
N/A = Not applicable

TABLE 3

SOIL VAPOR EXTRACTION & BIO-VENTING SYSTEM OPERATIONAL DATA – MARCH 2002

---------- PARAMETERS ----------

LOCATION	AIR FLOW (CFM)	VACUUM (inches of H_2O)	CONCENTRATION OF VOLATILES (ppm)	% WELLS OPEN
VE - 1	6	18	0.6	100 %
VE - 2	28	16	1.1	100 %
VE – 3	49	11	7.1	< 5 %
EXHAUST STACK	25	4	2.5	N/A

Note:
CFM = Cubic Feet per Minute
ppm = Parts Per Million
N/A = Not applicable

TABLE 4

SOIL VAPOR EXTRACTION & BIO-VENTING SYSTEM OPERATIONAL DATA – APRIL 2002

---------- PARAMETERS ----------

LOCATION	AIR FLOW (CFM)	VACUUM (inches of H_2O)	CONCENTRATION OF VOLATILES (ppm)	% WELLS OPEN
VE - 1	2	20	1.3	100 %
VE - 2	44	21	1.4	100 %
VE – 3	51	12	6.5	< 5 %
EXHAUST STACK	26	11	4.2	N/A

Note:
CFM = Cubic Feet per Minute
ppm = Parts Per Million
N/A = Not applicable

Appendix A

Laboratory Analytical Results

CT&E Environmental Services Inc.

200 W. Potter Drive
Anchorage, AK 99518-1605
Tel: (907) 562-2343
Fax: (907) 561-5301
Web: http://www.cteesi.com

Darrin Lawless
AGVIQ Inc.
2121 Abbott Road Suite 100
Anchorage, AK 995074453

Work Order:	1021920
	Bld 986 200110 DACA-85-0170080
Client:	AGVIQ Inc.
Report Date:	May 14, 2002

Enclosed are the analytical results associated with the above workorder.

As required by the state of Alaska and the USEPA, a formal Quality Assurance/Quality Control Program is maintained by E. A copy of our Quality Control Manual that outlines this program is available at your request.

Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth in our Quality Assurance Program Plan.

If you have any questions regarding this report or if we can be of any other assistance, please call your CT&E Project Manager at (907) 562-2343.

The following descriptors may be found on your report which will serve to further qualify the data.

U	Indicates the analyte was analyzed for but not detected.
F	Indicates an estimated value that falls below PQL, but is greater than the MDL.
B	Indicates the analyte is found in the blank associated with the sample.
*	The analyte has exceeded allowable limits.
GT	Greater Than
D	Secondary Dilution
LT	Less Than
!	Surrogate out of range

CT&E Environmental Services Inc.

CT&E Ref.#	1021920001	**All Dates/Times are Alaska Standard Time**	
Client Name	AGVIQ Inc.	**Printed Date/Time**	05/14/2002 12:01
Project Name/#	Bld 986 200110 DACA-85-0170080	**Collected Date/Time**	04/15/2002 12:00
Client Sample ID	02FRA003AG	**Received Date/Time**	04/16/2002 11:35
Matrix	Gas & Air	**Technical Director**	**Stephen C. Ede**
Ordered By		**Released By**	J. Windebank

Sample Remarks:

Corrected Report, PQL.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Fuels Department								
Gasoline Range Organics	20.0 U	20.0	ppm	CTE 8015M/8021B		04/22/02	04/22/02	PFL
Benzene	0.780 U	0.780	ppm	CTE 8015M/8021B		04/22/02	04/22/02	PFL
Toluene	0.660 U	0.660	ppm	CTE 8015M/8021B		04/22/02	04/22/02	PFL
Ethylbenzene	0.580 U	0.580	ppm	CTE 8015M/8021B		04/22/02	04/22/02	PFL
P & M -Xylene	0.580 U	0.580	ppm	CTE 8015M/8021B		04/22/02	04/22/02	PFL
o-Xylene	0.580 U	0.580	ppm	CTE 8015M/8021B		04/22/02	04/22/02	PFL
Surrogates								
1,4-Difluorobenzene <Surr>	96.1		%	CTE 8015M/8021B	60-120	04/22/02	04/22/02	PFL
4-Bromofluorobenzene <Surr>	96.4		%	CTE 8015M/8021B	50-150	04/22/02	04/22/02	PFL

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0204497-02A

NATURAL GAS ANALYSIS BY ASTM D-1945 GC/TCD/FID

File Name:	3042606	**Date of Collection:**	NA
Dil. Factor:	1.00	**Date of Analysis:**	4/26/02

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.10	Not Detected
Nitrogen	0.10	Not Detected
Methane	0.00010	Not Detected
Carbon Dioxide	0.0010	Not Detected

Container Type: NA - Not Applicable

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0204497-03A

NATURAL GAS ANALYSIS BY ASTM D-1945 GC/TCD/FID

File Name:	3042604	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	4/26/02

Compound	Rpt. Limit (%)	%Recovery
Oxygen	0.10	105
Nitrogen	0.10	103
Methane	0.00010	106
Carbon Dioxide	0.0010	106

Container Type: NA - Not Applicable

1021920

AGVIQ
2121Abbott Rd. Suite 100
Anchorage, Alaska 99507
phone (907) 341-6299
fax (907) 341-6256

CHAIN OF CUSTODY/LABORATORY ANALYSIS RI

Date 4/15/02 Page 1 of 1 Cooler # COC# 002

Client: AGVIQ, Inc	Sample Safe Conditions
Project Site: Bld 986 FRA	Packed by: Seal #
Sampling Company: AGVIQ, Inc	Seal intact upon receipt by sampling company? Yes No
Sampling Site: BV System Exhaust	Condition of contents:
Project Manager: Darrin Lawless	Sealed for Shipping by:
Team Leader: Scott Kendall	Initial contents temp(C):
Project No.: 200110	Sampling status: Continuing unit:
Receiving Lab: CT&E	Seal intact upon receipt by laboratory? Yes No
P.O. #: DACA-85-01-7-0080	Contents temp upon receipt:
	Condition of contents:

Date	Time	Location ID	Sample ID	Matrix	LabID	DRO AK102	GRO AK101	RRO AK103	TPH E418.1	BTEX SW8020	TCLP Benzene SW1311/8240	RCRA Metals SW1310/6010 & SW7470	Lead SW7420	PCBs & Pesticides SW8080	Ignitability SW1010/1020	Number of Containers	$CH_4/CO_2/O_2/N_2$ ASTM 1945	Comments:
4/15/02	1200	Exhaust	02FRA003AG	Air	(1)A		X			X						1		
4/15/02	1200	Exhaust	02FRA004AG	Air	(2)A											1	X	

ANALYTICAL METHOD REQUESTED

Relinquished by:	Relinquished by:	Relinquished by:
Signature P.L.	Signature	Signature
Printed Name Paul Davis	Printed Name	Printed Name
Firm AGVIQ Inc	Firm	Firm
Date/Time 4/16/02 1135	Date/Time	Date/Time
Received by:	**Received by:**	**Received by:**
Signature	Signature	Signature Paul Taylor
Printed Name	Printed Name	Printed Name PAUL TAYLOR
Firm	Firm	Firm CT&E
Date/Time	Date/Time	Date/Time 4/16/02 1135

Turnaround Time Required

___Standard (30 days)

___24 hr. ___48 hr.

___3-5 days ✓ 7 days

___14 days ___days

Provide verbal preliminary results?
___Yes ✓No

Providee FAX preliminary results? ✓Yes ___No

Requested report date _____

EDF data required?
___Yes ___No

Shipping Details

Delivered to shipper by: AGVIQ, Inc

Method of shipment: Hand Delivered Airbill #

Received for lab: Signed:

Special Instructions/Comments:

CoE Data Deliverables

CHAIN OF CUS DY RECORD

CT&E Environmental Services Inc.
Laboratory Division

• Alaska • M d
• Michigan • Ne sey
• West Virginia • Ne eans
www.cteesi.com

(1)

CLIENT: CTE AK
CONTACT: Rhonda Snarr PHONE NO: 907562 2343
PROJECT: AEVIG Inc. PWSID#:
REPORTS TO: 200 W. Potter Dr. Anch, AK 99518 FAX NO: 907 561 5301
INVOICE TO: QUOTE# P.O. NUMBER:

CT&E Reference: Air Tox

PAGE 1 OF 1

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	Preservatives Used	Analysis Required (3)	REMARKS
	113120.002	11/30/12	1200	Air	1			✓	CUFBAC04AG

(5)

Collected/Relinquished By: (1)	Date	Time	Received By:
Rhonda Snarr	11/30/12	1100	
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received For Laboratory By:

(4)

Shipping Carrier: Temperature C:
Shipping Ticket No:
Data Deliverables: Chain of Custody Seal: (Circle)
Level I Level II Level III EDD Type: INTACT BROKEN ABSENT
Requested Turnaround Time and Special Instructions:
1 Hr - put Client ID + CIT # on report

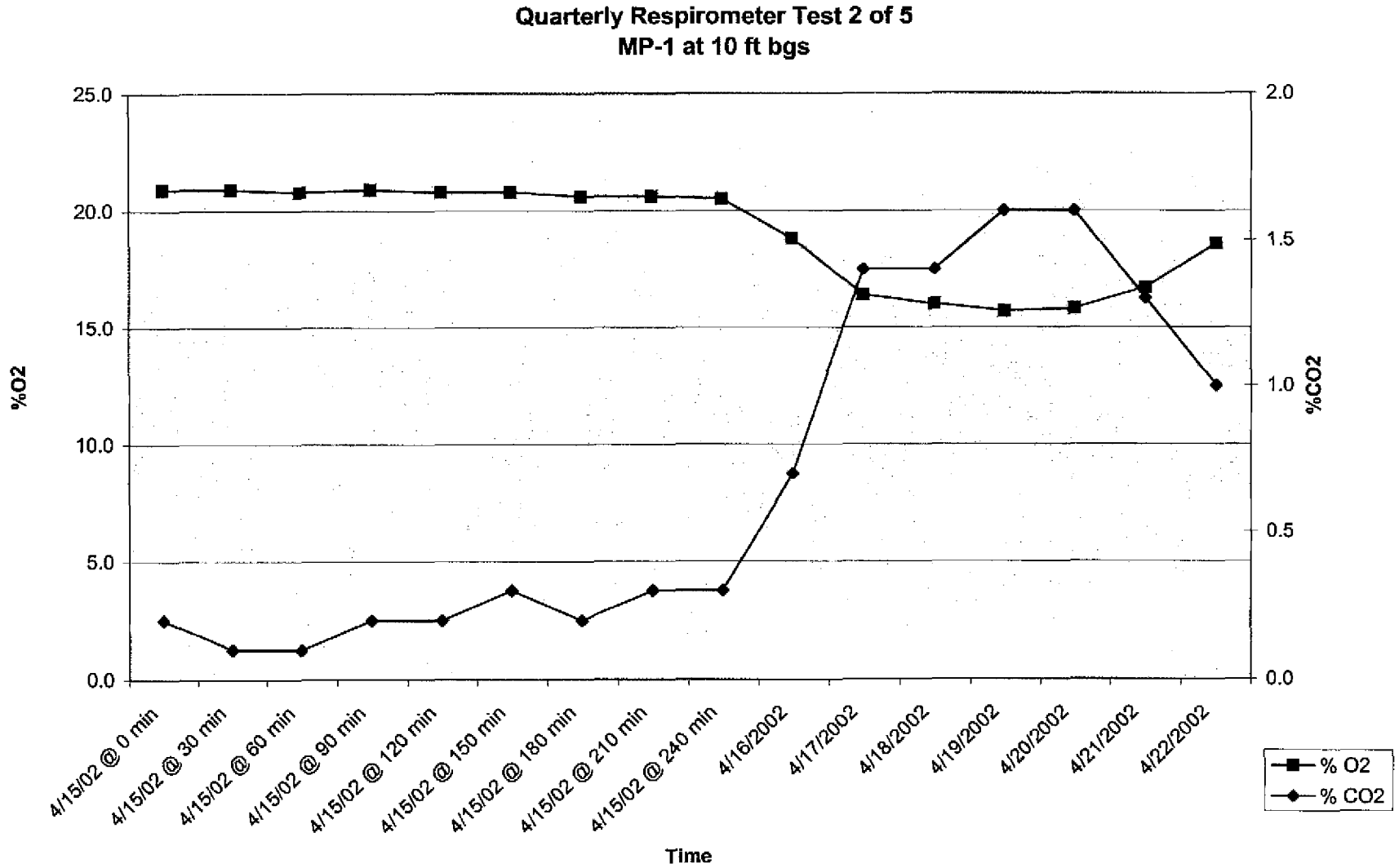
200 W. Potter Drive **Anchorage, AK 99518** Tel: (907) 562-2343 Fax: (907) 561-5301
3180 Peger Road **Fairbanks, AK 99701** Tel: (907) 474-8656 Fax: (907) 474-9685

Appendix B

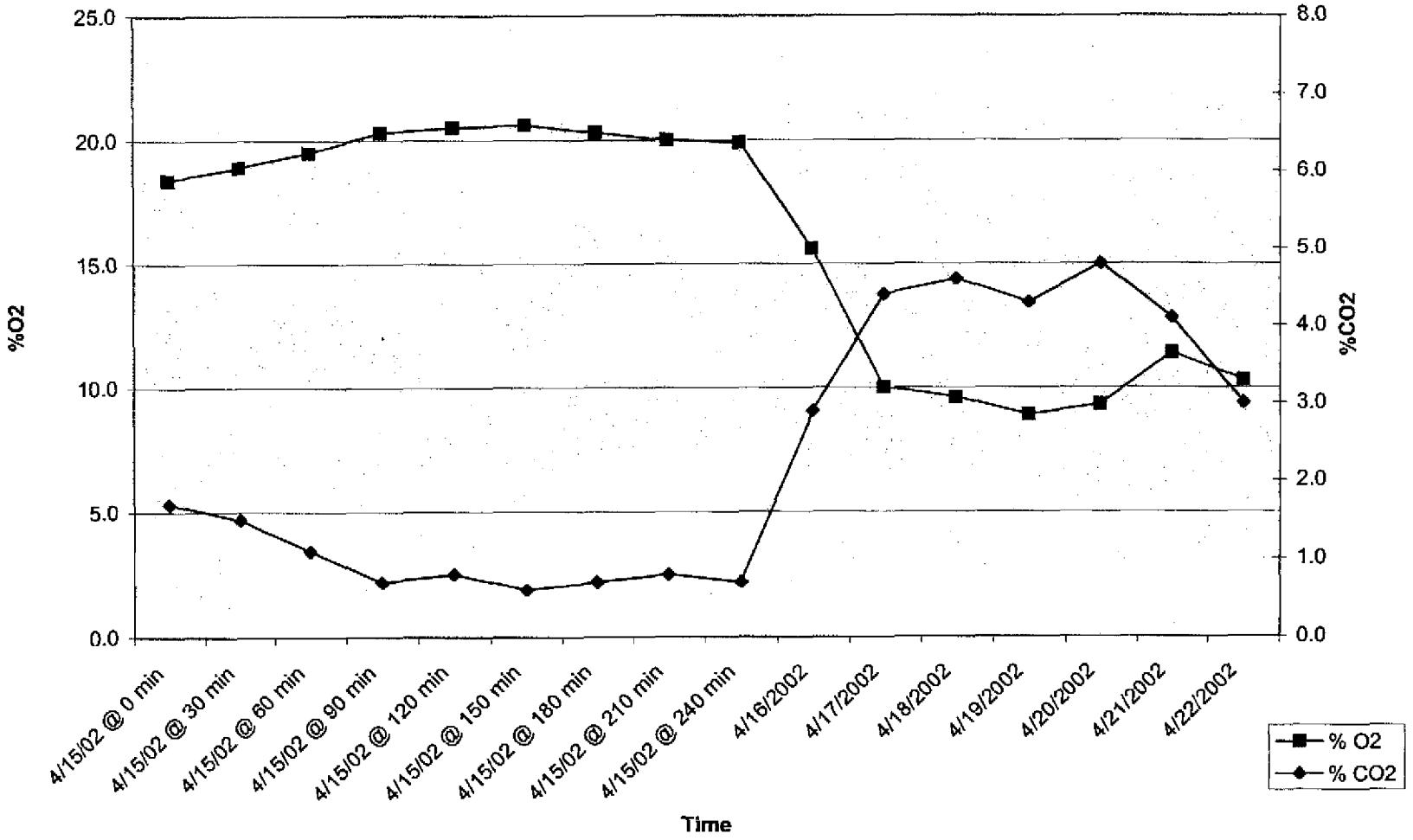
Combustible Gas Indicator Results From Quarterly Respirometer Test 2 of 5

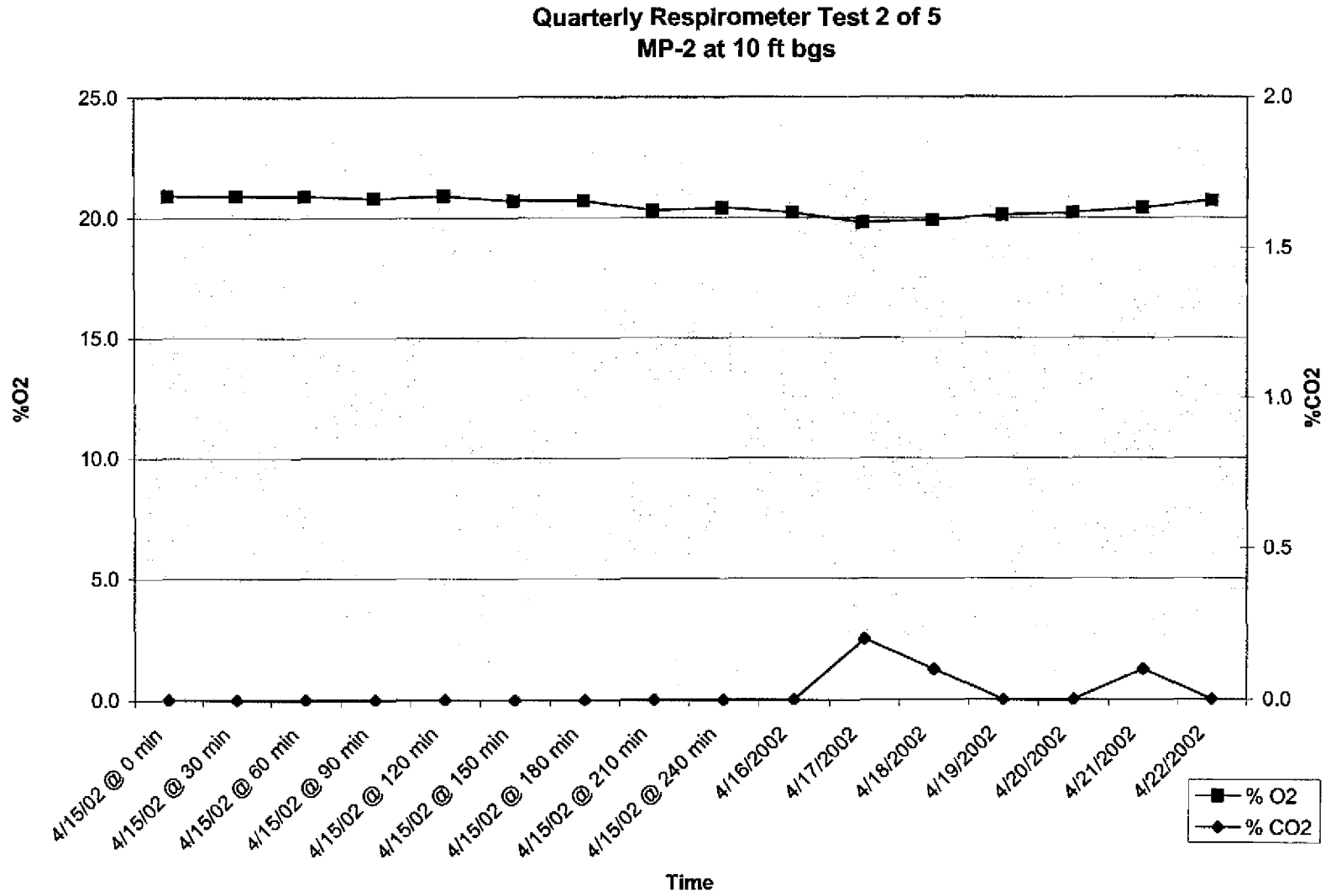
DATE	MP - 1				MP - 2				MP - 3			
	10 ft bgs (Blue)		20 ft bgs (Green)		10 ft bgs (Blue)		20 ft bgs (Green)		10 ft bgs (Blue)		20 ft bgs (Green)	
	% CO_2	% O_2	% CO_2	% O_2	% CO_2	% O_2	% CO_2	% O_2	% CO_2	% O_2	% CO_2	% O_2
2/28/2002	0.2	20.8	1.6	18.9	0.0	20.9	0.4	20.7	0.0	20.9	0.0	20.9
3/28/2002	0.4	20.7	1.1	18.4	0.0	20.9	0.4	20.4	0.0	20.9	0.1	20.9
4/15/02 @ 0 min	0.2	20.9	1.7	18.4	0.0	20.9	0.4	20.4	0.0	20.9	0.0	20.9
4/15/02 @ 30 min	0.1	20.9	1.5	18.9	0.0	20.9	0.4	20.3	0.0	20.9	0.0	20.9
4/15/02 @ 60 min	0.1	20.8	1.1	19.5	0.0	20.9	0.6	20.3	0.0	20.9	0.0	20.9
4/15/02 @ 90 min	0.2	20.9	0.7	20.3	0.0	20.8	0.6	20.1	0.0	20.8	0.1	20.9
4/15/02 @ 120 min	0.2	20.8	0.8	20.5	0.0	20.9	0.6	19.8	0.0	20.8	0.2	20.9
4/15/02 @ 150 min	0.3	20.8	0.6	20.6	0.0	20.7	0.7	19.6	0.0	20.8	0.1	20.8
4/15/02 @ 180 min	0.2	20.6	0.7	20.3	0.0	20.7	0.8	19.5	0.0	20.7	0.2	20.6
4/15/02 @ 210 min	0.3	20.6	0.8	20.0	0.0	20.3	1.0	19.3	0.0	20.8	0.2	20.7
4/15/02 @ 240 min	0.3	20.5	0.7	19.9	0.0	20.4	1.2	19.0	0.0	20.8	0.2	20.6
4/16/2002	0.7	18.8	2.9	15.6	0.0	20.2	2.7	13.0	0.0	20.8	0.3	20.0
4/17/2002	1.4	16.4	4.4	10.0	0.2	19.8	3.4	9.6	0.0	20.7	0.3	19.7
4/18/2002	1.4	16.0	4.6	9.6	0.1	19.9	4.2	8.5	0.0	20.8	0.4	19.6
4/19/2002	1.6	15.7	4.3	8.9	0.0	20.1	3.8	7.9	0.1	20.7	0.3	20.1
4/20/2002	1.6	15.8	4.8	9.3	0.0	20.2	3.0	7.6	0.0	20.8	0.2	20.7
4/21/2002	1.3	16.7	4.1	11.4	0.1	20.4	3.5	7.7	0.0	20.6	0.4	19.9
4/22/2002	1.0	18.6	3.0	10.3	0.0	20.7	3.8	8.3	0.0	20.9	0.2	20.2

Note:
MP = monitoring point
ft = feet
bgs = below ground surface

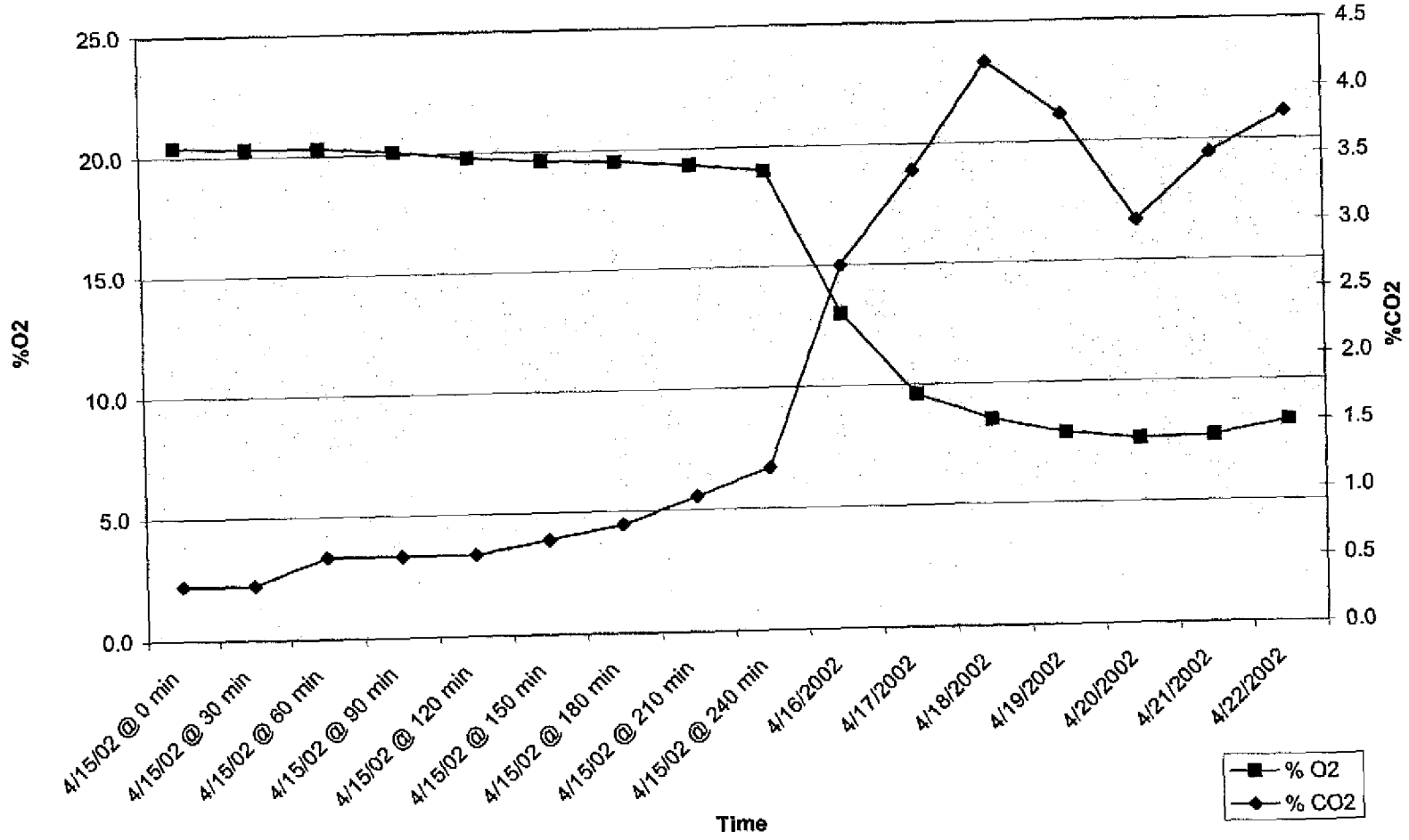

Quarterly Respirometer Test 2 of 5
MP-1 at 10 ft bgs
%O2
%CO2
25.0
20.0
15.0
10.0
5.0
0.0
2.0
1.5
1.0
0.5
0.0
4/15/02 @ 0 min
4/15/02 @ 30 min
4/15/02 @ 60 min
4/15/02 @ 90 min
4/15/02 @ 120 min
4/15/02 @ 150 min
4/15/02 @ 180 min
4/15/02 @ 210 min
4/15/02 @ 240 min
4/16/2002
4/17/2002
4/18/2002
4/19/2002
4/20/2002
4/21/2002
4/22/2002
Time
% O2
% CO2

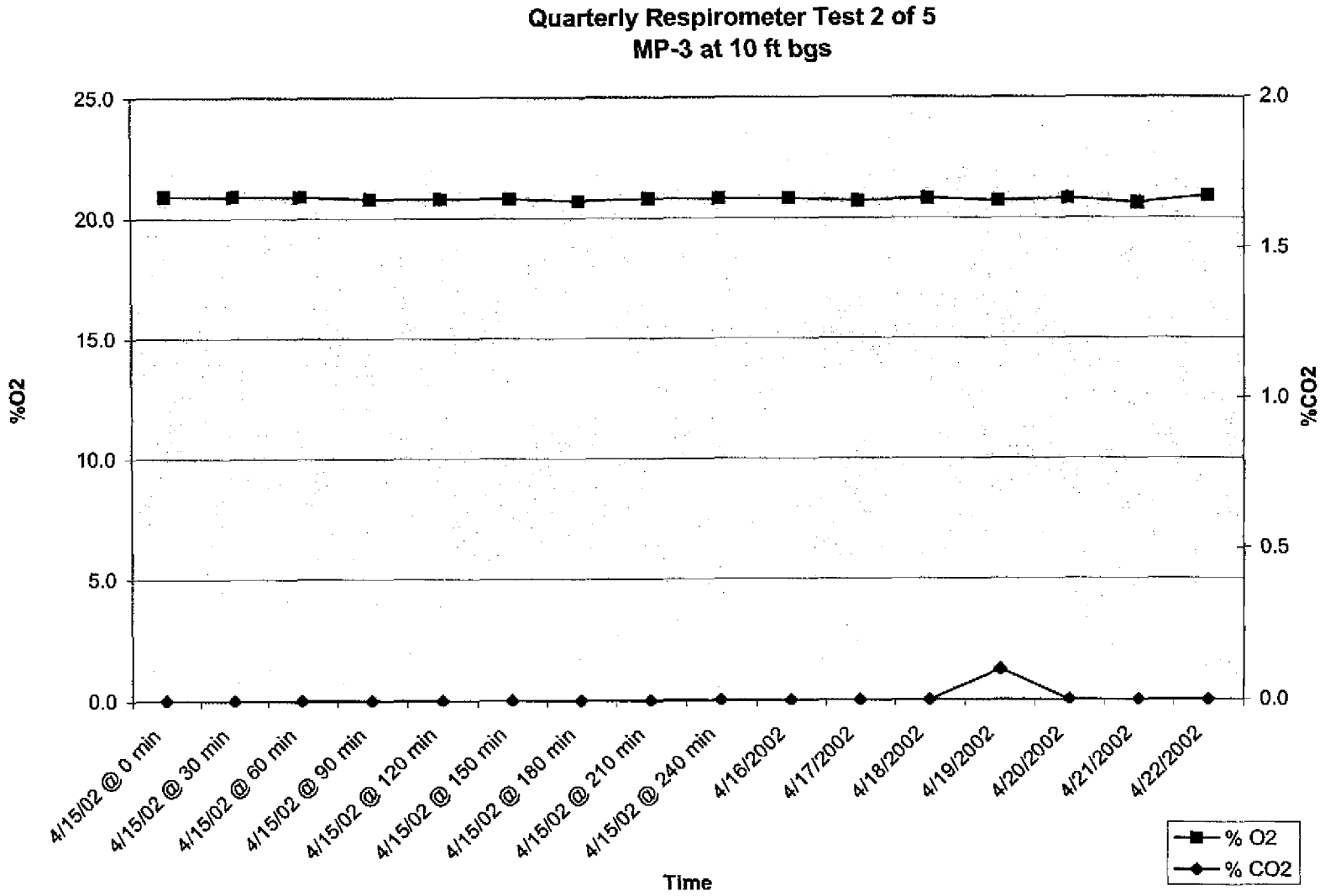
Quarterly Respirometer Test 2 of 5
MP-1 at 20 ft bgs

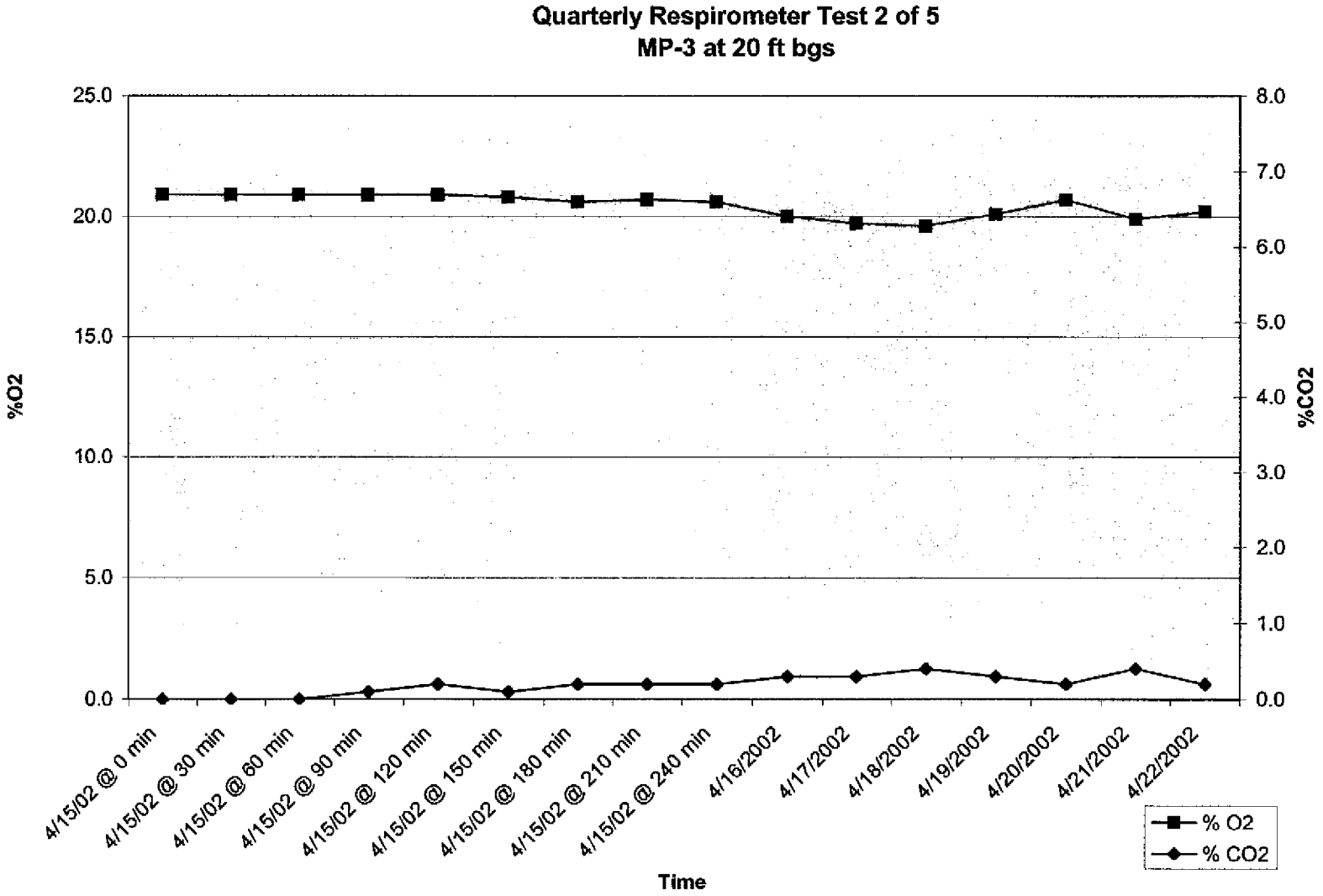



Quarterly Respirometer Test 2 of 5
MP-2 at 10 ft bgs
%O2
%CO2
25.0
20.0
15.0
10.0
5.0
0.0
2.0
1.5
1.0
0.5
0.0
4/15/02 @ 0 min
4/15/02 @ 30 min
4/15/02 @ 60 min
4/15/02 @ 90 min
4/15/02 @ 120 min
4/15/02 @ 150 min
4/15/02 @ 180 min
4/15/02 @ 210 min
4/15/02 @ 240 min
4/16/2002
4/17/2002
4/18/2002
4/19/2002
4/20/2002
4/21/2002
4/22/2002
Time
% O2
% CO2

Quarterly Respirometer Test 2 of 5
MP-2 at 20 ft bgs

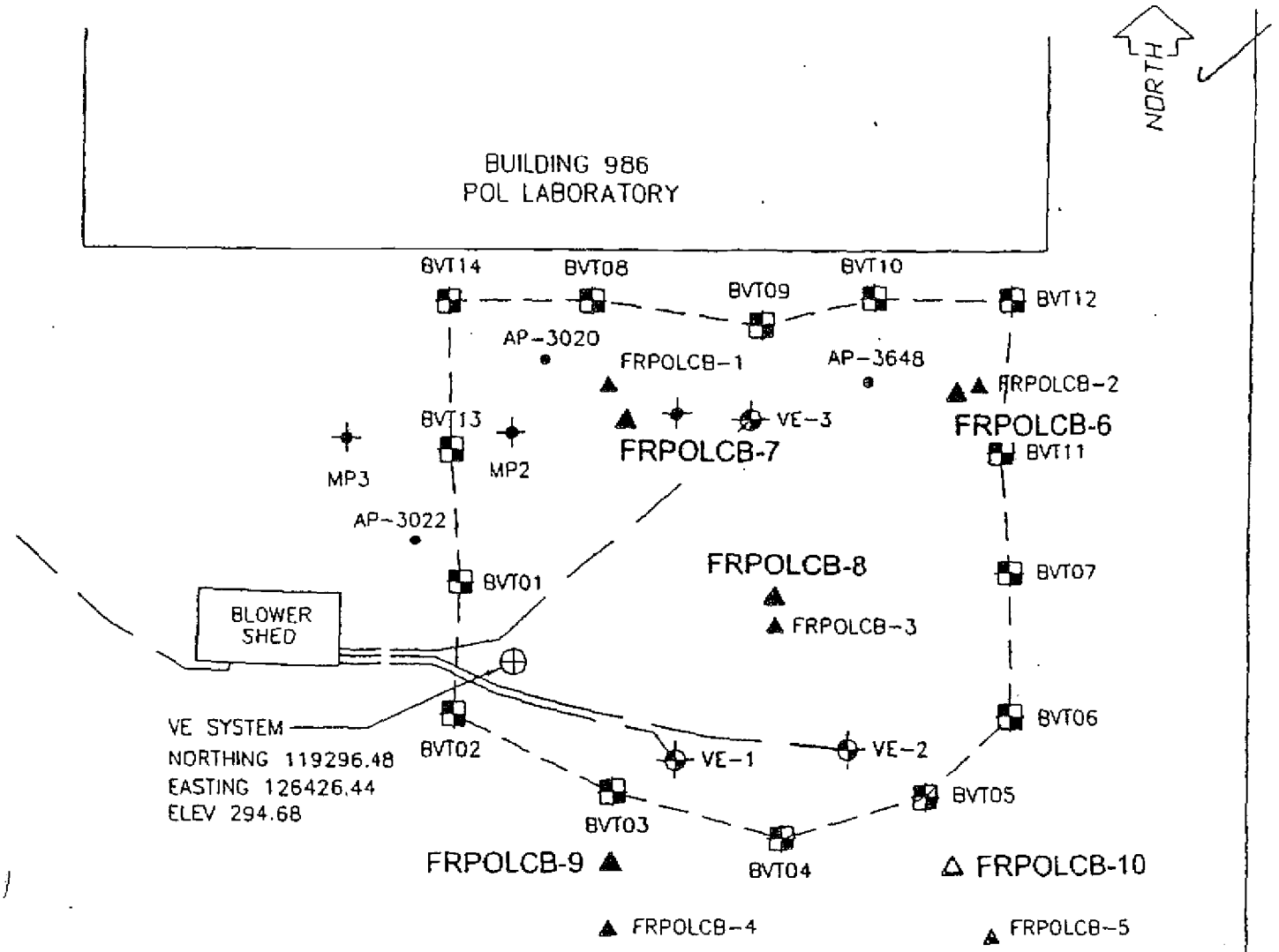



Quarterly Respirometer Test 2 of 5
MP-3 at 10 ft bgs
%O2
%CO2
25.0
20.0
15.0
10.0
5.0
0.0
2.0
1.5
1.0
0.5
0.0
4/15/02 @ 0 min
4/15/02 @ 30 min
4/15/02 @ 60 min
4/15/02 @ 90 min
4/15/02 @ 120 min
4/15/02 @ 150 min
4/15/02 @ 180 min
4/15/02 @ 210 min
4/15/02 @ 240 min
4/16/2002
4/17/2002
4/18/2002
4/19/2002
4/20/2002
4/21/2002
4/22/2002
Time
% O2
% CO2


Quarterly Respirometer Test 2 of 5
MP-3 at 20 ft bgs
%O2
%CO2
25.0
20.0
15.0
10.0
5.0
0.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
4/15/02 @ 0 min
4/15/02 @ 30 min
4/15/02 @ 60 min
4/15/02 @ 90 min
4/15/02 @ 120 min
4/15/02 @ 150 min
4/15/02 @ 180 min
4/15/02 @ 210 min
4/15/02 @ 240 min
4/16/2002
4/17/2002
4/18/2002
4/19/2002
4/20/2002
4/21/2002
4/22/2002
Time
% O2
% CO2

Appendix C

Site map



NOTE:

CONTROL IS BASED ON COORDINATES PROVIDED BY COE SURVEY SECTION IN LOCAL FORT RICHARDSON GRID SYSTEM. ELEVATIONS ARE TO MEAN SEA LEVEL DATUM. UG LINES SHOWN CONNECTING THE VE WELLS TO THE BLOWER ARE AS DESCRIBED BY EMCON STAFF AND LOCATED BY STAKES PLACED AT ANGLE POINTS ON GROUND SURFACE. MONUMENT "VE SYSTEM" IS A STANDARD COE DISK MONUMENT SET AS PER EM 1110-1-1002 WITH FINNED ROD SECTION, DRIVEN TO A 4' REFUSAL DEPTH.

0 7.5 15 22.5 30
APPROX SCALE IN FEET

LEGEND

MP1	SOIL GAS MONITORING POINTS
VE-1	VAPOR EXTRACTION WELL
AP-3020	MONITORING WELL
FRPOLCB-4	CONFIRMATION BORING LOCATION
BVT01	BIOVENTING WELLS
⊕	MONUMENT
— —	SUBSURFACE PIPE

FRPOLCB-6 2000 CONFIRMATION BORING LOCATION

EMCON Alaska, Inc.

DATE DEC. 1997
DWN. 99ftrf2.dwg
CKD. L. RAYMORE
REV. OCT. 1999
PROJECT No.

FORT RICHARDSON
BUILDING 986 REMEDIAL ACTION
Anchorage, Alaska

SITE LAYOUT

FIGURE
3

PROJECTS\IOTRA\016000800
AME: 99FTRF2.DWG