Ozark UNDERGROUND LABORATORY 1572 Aley Lane Protem, MO 65733 (417) 785-4289 fax (417) 785-4290 oul@tri-lakes.net

July 2, 2004

CERTIFICATE OF ANALYSIS

Mr. Peter Butt
Karst Environmental Services, Inc.
P. O. Box 1368
High Springs, FL 32643

RE: Down Stream Madison Blue Spring Trace
Analysis results for charcoal and water samples shipped on June 8, 2004.
Ozark Underground Laboratory (OUL) numbers N3837 through N3841.

Dear Peter:

We have completed analysis of the additional charcoal and water samples that you requested by phone on June 22, 2004. These samples were received at the OUL on June 9, 2004. We have indicated the OUL number for each of these samples on the enclosed table.

The fluorescein dye concentration is based upon a standard routinely used at the OUL. The fluorescein is a mixture of 75% dye and 25% diluent; the concentration is based upon the as-sold weight of the dye.

A summary of the results is presented in Table 1. Additional sampling information is available on the enclosed analysis graphs.

Sincerely,

Thomas J. Aley

Thomas J. Aley, PHG and RG

Enclosures:
1) Table 1 - Analysis results for charcoal and water samples
2) Sample Collection Data Sheets
3) Sample analysis graphs

f:\docs\coa\kes32.doc

July 2, 2004

CERTIFICATE OF ANALYSIS

Mr. Peter Butt
Karst Environmental Services, Inc.
P. O. Box 1368
High Springs, FL 32643

RE: Down Stream Madison Blue Spring Trace
Analysis results for charcoal and water samples shipped on June 8, 2004.
Ozark Underground Laboratory (OUL) numbers N3837 through N3841.

Dear Peter:

We have completed analysis of the additional charcoal and water samples that you requested by phone on June 22, 2004. These samples were received at the OUL on June 9, 2004. We have indicated the OUL number for each of these samples on the enclosed table.

The fluorescein dye concentration is based upon a standard routinely used at the OUL. The fluorescein is a mixture of 75% dye and 25% diluent; the concentration is based upon the as-sold weight of the dye.

A summary of the results is presented in Table 1. Additional sampling information is available on the enclosed analysis graphs.

Sincerely,

Thomas J. Aley, PHG and RG

Enclosures:
1) Table 1 - Analysis results for charcoal and water samples
2) Sample Collection Data Sheets
3) Sample analysis graphs

f:\docs\coa\kes32.doc

Ozark Underground Laboratory, Inc. for Karst Environmental Services, Inc.

Project name: Downstream Madison Blue Spring Trace
Samples collected by: KES Staff
Date samples shipped: June 8, 2004
Date samples rec'd at OUL: June 9, 2004
Date samples analyzed by OUL: June 25, 2004

Table 1. Results for charcoal and water samples analyzed for the presence of fluorescein dye. Peak wavelengths are reported in nanometers (nm); dye concentrations are reported in parts per billion (ppb). All results are for charcoal unless otherwise indicated.

OUL #	Stn. #	Station Name	Date/Time Placed 2004	Date/Time Collected 2004	Fluorescein Results	
					Peak	Conc.
N3837	5	Snake Spring	**Water**	6/6 1410	ND	
N3838	11	The Crack	**Water**	6/6 1645	ND	
N3839	12	Corbett Spring	**Water**	6/6 1655	508.8 **	0.009
N3840	Laboratory control water blank					
N3841	22	W.R. D/S of Corbett Spring	5/23 1308	6/6 1703	517.1 *	0.848

FOOTNOTES:

ND = None Detected

* = A fluorescence peak is present that does not meet all the criteria for a positive dye result but has been calculated as though it were the tracer dye.

** = A fluorescence peak is present that does not meet all the criteria for a positive dye result but has been calculated as though it were the tracer dye because dye was found in the corresponding charcoal.

OZARK UNDERGROUND LABORATORY, INC.

1572 Aley Lane Protem, MO 65733 (417) 785-4289 fax (417) 785-4290 email: oul@tri-lakes.net

SAMPLE COLLECTION DATA SHEET for FLUORESCENCE ANALYSIS

Project: DOWNSTREAM MADISON BLUE SPRING TRACE Week No: 3/4 Samples Collected By: KES Staff

Samples Shipped By: Peter Butt/KES Samples Received By: J. Arnold

Date Samples Shipped: 6 / 8 / 04 Date Samples Received: 6/9/04 Time Samples Received: 13:15 Return Cooler? Yes ____ No ____

Bill to: SRWMD Send Results to: KES

Analyze for: Fluorescein X Eosine ____ Rhodamine WT ____ Other ____ Ship cooler to: ____

OUL use only		Please indicate stations where dye was visible in the field (for field technician use - use black ink only)							OUL use only
# CHAR REC'D	LAB NUMBER Water	STATION NUMBER 14 Numbers	STATION NAME Charcoal Samplers	PLACED 2004 DATE	PLACED TIME	COLLECTED 2004 DATE	COLLECTED TIME		# WATER REC'D
1		5	Snake Spring	5/23	11:29	6/6	14:10		0
1		6	Bare Inn Spring	5/23	11:42	6/6	14:40		0
			Water Sampler						
0	13837	5	Snake Spring	—	—	6/6	14:10		1
0		6	Bare Inn Spring	—	—	6/6	14:40		1

Box Middle-1

COMMENTS: ____

This sheet filed in KARST ENVIRONMENTAL No X Charts for samples on this page proofed by OUL: CL

KARST ENVIRONMENTAL SERVICES INC.
5779 NE County Rd. 340
High Springs, FL 32643
(386) 454-3556 • FAX (386) 454-3541

OUL 3 of 5

Analyzed 6/16/04 project 604

OZARK UNDERGROUND LABORATORY, INC.

1572 Aley Lane Protem, MO 65733 (417) 785-4289 fax (417) 785-4290 email: oul@tri-lakes.net

SAMPLE COLLECTION DATA SHEET for FLUORESCENCE ANALYSIS

Project: DOWNSTREAM MADISON BLUE SPRING TRACE Week No: 3/4 Samples Collected By: KES Staff

Samples Shipped By: Peter Butt/KES Samples Received By: T. Arnold

Date Samples Shipped: 6 / 8 / 04 Date Samples Received: 6/9/04 Time Samples Received: 13:15 Return Cooler? Yes ___ No ___

Bill to: SRWMD Send Results to: KES

Analyze for: Fluorescein X Eosine ___ Rhodamine WT ___ Other ___ Ship cooler to: ___

Bag Lower-3

OUL use only			Please indicate stations where dye was visible in the field (for field technician use - use black ink only)					OUL use only
# CHAR REC'D	LAB NUMBER Water	STATION NUMBER 1-4 Numbers	STATION NAME	PLACED 2004 DATE	PLACED TIME	COLLECTED 2004 DATE	COLLECTED TIME	# WATER REC'D
1		7	Charcoal Samplers					
1		8	Owl Eyes Spring	5/23	12:12	6/6	15:35	0
1		9	Morgan's Spring	5/23	12:21	6/6	15:55	0
1		10	Chaplain Spring	5/23	12:27	6/6	16:05	0
1		11	Rabbit Hole Spring	5/23	12:47	6/6	16:22	0
1		12	The Crack	5/23	12:57	6/6	16:45	0
			Corbett Spring	5/23	13:05	6/6	16:55	0
			Water Samples					
0		7	Owl Eyes Spring	—	—	6/6	15:35	1
0		8	Morgans Spring	—	—	6/6	15:55	1
0		9	Chaplain Spring	—	—	6/6	16:05	1
0		10	Rabbit Hole Spring	—	—	6/6	16:22	1
0	N3838	11	The Crack	—	—	6/6	16:45	1
0	N3839	12	Corbett Spring	—	—	6/6	16:55	1

COMMENTS: Water Blank N3840

This sheet reviewed by OUL staff: Yes ___ No X Charts for samples on this page proofed by OUL: Ch

KARST ENVIRONMENTAL SERVICES INC.
5779 NE County Rd. 340
High Springs, FL 32643
(386) 454-3556 • FAX (386) 454-3541

Analyzed 6/25/04 by KC

OZARK UNDERGROUND LABORATORY, INC.

1572 Aley Lane Protem, MO 65733 (417) 785-4289 fax (417) 785-4290 email: oul@tri-lakes.net

SAMPLE COLLECTION DATA SHEET for FLUORESCENCE ANALYSIS

Project: DOWNSTREAM MADISON BLUE SPRING TRACE Week No: 3/4 Samples Collected By: KES Staff

Samples Shipped By: Peter Butt/KES Samples Received By: I. Arnold

Date Samples Shipped: 6 / 8 / 04 Date Samples Received: 6/9/04 Time Samples Received: 13:15 Return Cooler? Yes ____ No ____

Bill to: SRWMD Send Results to: KES

Analyze for: Fluorescein X Eosine ____ Rhodamine WT ____ Other ____ Ship cooler to: ____

Please indicate stations where dye was visible in the field

for field technician use - use black ink only

# CHAR REC'D (OUL use only)	LAB NUMBER (OUL use only)	STATION NUMBER 1-4 Numbers	STATION NAME	PLACED DATE (2004)	PLACED TIME	COLLECTED DATE	COLLECTED TIME	# WATER REC'D (OUL use only)
	Charcoal		Charcoal Samplers					
1		20	W.R. U/S of Madison Blue Spring	5/23	17:02	6/6	11:18	0
1		21	W.R. U/S of Landing	5/23	14:45	6/6	12:57	0
1	1B841	22	W.R. D/S of Corbett Spring	5/23	13:08	6/6	17:03	0
1		23	W.R. U/S of Pott Spring	5/23	16:15	6/6	12:24	0

Bag WR-3

COMMENTS: ____

KARST ENVIRONMENTAL SERVICES INC. ____ No X Charts for samples on this page proofed by OUL: ____

Analyzed 6/25/04 by cwe

Page 5 of 5 OUL 5 of 5

5779 NE County Rd. 340
High Springs, FL 32643
(386) 454-3556 • FAX (386) 454-3541