0058787

FS0109

FROM THE DESK OF: Doris E. Ayres
Sample and Data Management
372-9576/H9-03

TO: FILE **DATE:** December 30, 1998

SUBJECT: RECEIPT OF DATA

The following data package was not formally transmitted to Sample and Data Management under BHI-EE-05 Section 1.7. The package was prepared using copies of all pertinent logbook pages provided by the Field Samplers.

This package is now considered a record under BHI-EE-01. It will be transmitted to the records holding area as outlined in section 2.6 of the referenced procedure.

RECEIVED
FEB 18 2003
EDMC

DATA DELIVERABLE COVER SHEET FS0109

Data Deliverable Cover Sheet

Date: Wednesday, December 30, 1998

Deliverable type (check one): _____ **Preliminary Test Results**
✓ **Final Data Deliverable**

Sample authorization form number: B97-155

Attachments (check all that apply or n/a): ✓ **Narrative Summary**
✓ **Test Results**
_____ **Chains of Custody**

Total number of pages (including cover sheet): 11 **pages**

Comments:

(Note: If Preliminary results were provided verbally, document information provided below including instrument used and results as Communicated to the project.)

M.G. Buechler
Analyst Signature

12/30/98
Date

Distribution: **Sample Management – Doris Ayres H9- 03**
Project (specify) None. Distributed electronically

Requires distribution to listed project personnel by Sample Management.

PROJECT Field Screening - North Slope

Notebook No. EL-1390

Continued From Page NA

8/11/97 I. D. Jacques

0800 Arrived at 2,4-D Remedial Action site located on North Slope with Jeff Leech. Set up mobile lab 68N-1985 to field screen soils for 2,4-D using Enviroguard Immunoassay test kits for 2,4-D.

0805 Set up Immunoassay test kit equipment.

0810 Prepared Phosphate Buffer Solution (PBS) by adding 1 test kit tablet to 25 ml deionized water. Let tablet dissolve.

1000 Prepared extraction solvent. Added 10 ml of glacial acetic acid, 375 ml methanol to 115 ml deionized water. Stored solution in refrigerator.

1445 Work completed for the day. Packed up equipment. I.D. Jacques

8/12/97 I.D. Jacques

0745 Arrived at North Slope 2,4-D site with Mike Baechler. Set up Mobile lab 68N-1985 to analyze soil samples.

0800 Set up Enviroguard test kit.

0955 Collected samples. Prepared to analyze samples using Enviroguard kit.

1000 Checked balance with check weight. Reading 100.1 g. Check weight = 100g. Weighed out 5.0 grams of soil samples into extraction vial.

1015 Added 10 ml of Methanol/Acetic acid solvent into each vial. This is a 2X dilution. Shook samples. Let samples incubate 30 minutes.

1120 Diluted extracted samples 100 ml in 900 ml PBS for 10x dilution. Total dilution is therefore 20x.

1210 Completed 1st batch of samples. Photometer batteries were dead and it did not operate. Put photometer on charger.

1215 Mike Baechler began next sample batch by adding 10 ml of extractant to each vial.

Continued on Page 2

Read and Understood By

Duane Jacques — Signed — 8/12/97 — Date — Signed — Date

1250 Mike filtering extract from each sample.
1300 Compared calibration standards and samples to deionized water blank using differential photometer
Negative Control = 2.63
4 ppm (0.2 x 20) = 2.61
20 ppm (1 x 20) = 2.53
100 ppm (5 x 20) = 2.15

Sample #	Photometer Value	Concentration (ppm)
BOLKY9	2.13	>100
BOLL00	2.61	≥4
BOLL01	2.54	>4 <20
BOLL02	2.12	>100
BOLL03	2.34	>20 <100
BOLKY3	2.24	>20 <100

~~Spec~~ Photometer readings were irradic. Also samples sat for an extended period of time. Will rerun samples.
1435 Compared calibration standards and sample photometer values to deionized water. Values Reported below

Sample	Photometer value	Concentration (ppm)
NC	1.65	0
C1	1.52	4
C2	1.05	20
C3	0.47	100
BOLKY4	1.03	>4 <20
BOLKY5	1.67	<4
BOLKY6	1.85	<4
BOLKY7	2.14	<4
BOLKY8	2.10	<4
BOLL04	2.08	<4
BOLL05	1.65	<4
BOLL06	1.81	<4

1450 Rerun 1st set of samples.
530 Completed sample analysis. Check samples using photometer. Results on following page.

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Read and Understood By

D. Jacques 8/12/97
Signed Date Signed Date

PROJECT Field Screening - North Slope Notebook No. EL-1390

Continued From Page 2

Sample #	Concentration (ppm)
BOLKY3	>20 <100
BOLKY9	>20 <100
BOLL00	<4
BOLL01	<4
BOLL02	<4
BOLL03	<4
NC	0
C1	4
C2	20
C3	100

1545 Packed up equipment. Left site.

Diane Jacques

8/18/97

0705 Arrived at North Slope 2,4-D site with Jeff Lerch. Set up mobile lab 68N,198E. Set up Envirogard kit (2,4-D).

1105 Checked balance with check weight. Reading 100.0g. Check weight = 100g. Weighed out 5g sample into extraction vial.

1135 Added 10ml of Methanol/Acetic Acid solvent into each vial. This is a 2X dilution. Shook samples for 2 min. and let incubate for 30 min.

1220 Diluted samples 100ul in 900 ul ABS for 10x dilution. Total dilution is 20X. Two samples were also diluted 100ul in 1900ul ABS for 20x dilution. (Total dilution of 40X).

1330 Completed Batch.

1340 Compared calibration standards and samples to deionized water blank using differential photometer.

Negative Control = 1.66

4 ppm	(.2x20) = 1.14	(0.2x40) 8 ppm	40X dilutions (2 samples)
20 ppm	(1x20) = 0.88	(1x40) 40 ppm	
100 ppm	(5x20) = 0.47	(5x40) 200 ppm	

Sample results on following page.

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M.G. Baechler 8/18/97

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Sample #	Photometer Value	Concentration (ppm)
BOLL07	0.25	>100
BOLL08	0.37	>100
BOLL08 (40X)	0.45	~200
BOLL09	0.82	>20 <100
BOLL10	0.97	>4 <20
BOLL11	0.43	~100
BOLL11 (40X)	0.61	>40 <200

350 Began next sample batch by weighing out 5g soil and adding 10ml extraction solvent. (2X dilution.) Shook samples for 2 min & incubated for 30 min.
430 Diluted samples 100µl in 900µl DI H2O for 10X dilution (20X total)
505 Completed Batch. Compared calibration standards and samples to deionized water using differential photometer.

Negative Control = 1.88
4ppm (0.2X20) = 1.48
20ppm (1X20) = 1.00
100ppm (5X20) = 0.44

Sample #	Photometer Value	Concentration (ppm)
BOLL12	~~1.84~~ MGB 8/18/97 1.94	<4
BOLL13	1.84	<4

510 Packed up equipment & left site

M.G. Buchler

8/19/97

925 Arrived at Bath Slope 2,4-D Site. Set up mobile lab 68N/185. Set up Enviroguard Kit to screen for 2,4-D.
935 Checked balance with check weight. Reading 100.0g Check weight = 100g. Weighed 5g sample and transferred to extraction vials.
955 Added 10ml Methanol / Acetic Acid solvent into each vial. (2X dilution)

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Read and Understood By

M.G. Buchler 8/19/97
Signed Date Signed Date

PROJECT Field Screening - North Slope Notebook No. EL-1390

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1055 (cont.) Shook for 2 min. and let incubate for 30 min.
1130 Diluted samples (2) 100 ul + 900 ul PBS for 10X dilution (total dilution 20X). Diluted samples (4) 100 ul in 1900 ul PBS for 20X dilution (total dilution 40X).
1230 Completed Batch
1235 Compared calibration standards & samples to deionized water using a differential photometer

Sample #	Photometric Value	Concentration (ppm)
Negative Control	1.74	0
C1	1.20	4 (20X) 8 (40X)
C2	0.84	20 (20X) 40 (40X)
C3	0.39	100 (20X) 200 (40X)
BOLL14	1.51	< 8
BOLL15	0.59	> 8 < 40
BOLL16	1.19	~ 8
BOLL17	1.56	< 4
BOLL18	1.59	< 4
BOLL19 (Dup BOLL15)	1.04	> 8 < 40

1255 Packed up equipment & left site

M. G. Buchler

8/20/97

0700 Arrived at North Slope 2,4-D Site.
1215 Took photos of trench from top of dune.
1430 Received 3 samples from Jeff Lerch.
1500 Packed up equipment & left site

M. G. Buchler

8/21/97

0705 Arrived at North Slope 2,4-D Site

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Read and Understood By

M. G. Buchler 8/21/97

Signed Date Signed Date

8/21/97

0730 Set up Enviroguard test kit to screen for 2,4-D.
0735 Checked balance with check weight. Reading 100.0g check weight = 100g.
0745 Prepared PBS by adding 1 test kit tablet to 25mL deionized water. Let tablet dissolve.
0800 Weighed out 5g sample and transferred to extraction vials. Added 10ml Methanol/Acetic Acid solvent to each vial (2x dilution). Shook for 2 min. Let incubate for 30 min.
0845 Diluted samples (4) 100ul in 900ul PBS for 10X dilution (20X total). Diluted 1 sample 100ul in 1900uL PBS for 20X dilution (40X total).
0930 Completed batch.
0935 Compared calibration standards and samples to deionized water using a differential photometer.

Sample #	Photometer Reading	Concentration (ppm)
NC	1.52	0
C1	1.19	4 (20X) 8 (40X)
C2	0.86	20 (20X) 40 (40X)
C3	0.39	100 (20X) 200 (40X)
BOL20	0.53	> 20 < 100
BOL21	1.05	> 4 < 20
BOL22	0.87	~ 20
BOL23 (Dup) BOL21	1.05	> 4 < 20
BOL24	0.29	> 200

1405 Packed up equipment and left site

M. G. Baechler

8/25/97

0715 Arrived at North Slope 2,4-D Site w/ Jeff Lerch

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M. G. Baechler 8/25/97

Signed Date Read and Understood By Signed Date

PROJECT Field Screening - North Slope Notebook No. EL-1342

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0730 Labeled sample bottles.
0930 Checked balance with check weight. Reading 100.0g
Check weight = 100g.
0935 Set up Envirogard test kit to screen for 2,4-D.
1030 Weighed out 5g sample and transferred to extraction vials. Added 10ml Methanol/Acetic Acid solvent to each vial (2x dilution). Shook for 2min. let incubate for 30 min.
1050 Prepared extraction solvent. Added 10 ml of glacial acetic acid, 375 ml methanol to 115 ml deionized water.
1115 Diluted samples, 100ul in 900ul PBS for 10X dilution (20X total).
1205 Completed batch.
1270 Compared calibration standards and samples to deionized water using a differential photometer

Sample #	Photometer Reading	Concentration (ppm)
NC	1.48	0 ~~>20 <100~~ MAB
C1	1.17	4 ~~>20 <100~~ 8/25
C2	0.80	20
C3	0.38	100
BOLL50	0.52	>20 <100
BOLL51	0.66	>20 <100
BOLL52	0.26	>100
BOLL53	0.31	>100
BOLL54	0.33	>100
BOLL55	1.00	>4 <20

1225 Packed up equipment and left site.

M. A. Buchler

8/26/97
0645 Arrived at North Slope 2,4-D Site w/ Jeff Lerch

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M. A. Buchler 8/26/97
Signed Date Signed Date

8/26/97 (cont.)

0710 Set up mobile lab, 68N-1985. Set up enviroguard test kit to screen for 2,4-D.
0730 Checked balance with check weight. Reading 100.1g. Check weight = 100 g.
50 ~~0850~~ Prepared PBS by adding test kit tablet to 25mL
AB 8/26/97 deionized water. Let tablet dissolve.
0820 Weighed out 5g sample and transferred to extraction vials. Added 10mL Methanol/Acetic Acid solvent to each vial (2x dilution). Shook for 2min. Let incubate for 30min.
0905 Diluted samples 100uL in 1900uL PBS for 20X dilution (40X total).
0950 Completed batch.
0955 Compared calibration standards and samples with deionized water using a differential photometer.

Sample #	Photometer Reading	Concentration (ppm)
NC	1.36	0
C1	0.98	8
C2	0.73	40
C3	0.37	200
BOLL56	1.27	<8
BOLL57	1.23	<8
BOLL58	0.37	~200
BOLL59	0.59	>40 <200
BOLL60	0.35	~200
BOLL61	0.31	~200

1330 Helped Jeff lay sampling grid and pull samples.
1655 Packed up equipment and left site

M. G. Baechler

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M. G. Baechler 8/27/97
Signed Date

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OJECT Field Screening - North Slope

Notebook No. CL-1540

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9/22/97

1630 Arrived at 100 N.

1710 Set up mobile lab 68N-1985. Set up EnviroGuard Kit for 2,4-D screening.

1730 Checked balance with 100g check weight. Balance reading 100.1g.

2045 Weighed out 5g sample and transferred to extraction vial. Added 10mL Methanol/Acetic Acid to each vial (2x dilution). Shook samples for 2 min., let incubate for 30 min.

2115 Filtered extracts. Diluted samples 100uL in 1900uL PBS for a 20X dilution (40X total). Also diluted samples 50uL in 1950 uL for a 40X dilution (80X total).

2205 Completed batch.

2210 Compared calibrators and samples with deionized water using a differential photometer.

Sample #	Dilution	Photometer Reading	Concentration (ppm)
NC	–	1.34	0
C1	–	1.05	8 (40X) 16 (80X)
C2	–	0.78	40 (40X) 80 (80X)
C3	–	0.37	200 (40X) 400 (80X)
BOLL64	40X	0.83	>8 <40
BOLL64	80X	0.93	>16 <80
BOLL65	40X	0.81	~40
BOLL65	80X	0.94	>16 <80
BOLL66	40X	0.80	~40
BOLL66	80X	0.94	>16 <80
BOLL67	40X	0.92	>8 <40
BOLL67	80X	0.91	>16 <80

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M.G. Baechler — Signed

9/22/97 — Date

Read and Understood By

Signed

Date

PROJECT Field Screening - North Slope Notebook No. CL-1340

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9/22/97 (Cont.)

Sample #	Dilution	Photometer Reading	Concentration (ppm)
BOLL68	40X	0.98	>8 <40
BOLL68	80X	1.26	<16

2240 Packed up equipment and left site.

M. G. Baechler

Not Used

ppm)

80x)
80x)
80x)

17

Continued on Page N/A

M. G. Baechler 9/22/97

Signed Date Read and Understood By Signed Date