

3R - 214

REPORTS

DATE:

2003

3R214



Certified Mail: #7002 0510 0000 0307 7497

February 26, 2004

RECEIVED

Mr. William C. Olson
New Mexico Oil Conservation Division
1220 St. Francis Dr.
Santa Fe, NM 87504

MAR 03 2004

**Oil Conservation Division
Environmental Bureau**

RE: 2003 Pit Project Annual Groundwater Report

Dear Mr. Olson:

In accordance with reporting requirements, El Paso Field Services (EPFS) has enclosed annual reports for the 24 remaining groundwater impacted sites that were identified during our pit closure project of 1994 / 1995.

EPFS has organized the 24 Annual Reports (Volumes 1, 2 and 3) by land type. Volume 1 contains Annual Reports for sites found on Federal land. Volume 2 contains Non Federal sites and Volume 3 contains sites on Navajo land. Of the 24 reports submitted, EPFS is requesting closure of one site located on Navajo lands (Jennepah #1). EPFS understands closure of groundwater sites on Navajo lands falls under jurisdiction of the Navajo Nation Environmental Protection Agency and original documents have been submitted to them for review. Other Navajo sites are included in the report for your information.

If you have any questions concerning the enclosed reports, please call me at (505) 599-2124.

Sincerely,

A handwritten signature in dark ink, appearing to read "Scott T. Pope".

Scott T. Pope P.G.
Senior Environmental Scientist

xc: Mr. Denny Foust, NMOCD, Aztec - w / enclosures; **Certified Mail # 7002 0510 0000 0307 7473**
Mr. Bill Liesse, BLM - w / enclosures (federal sites only), **Certified Mail # 7002 0510 0000 0307 7466**

**2003 ANNUAL GROUNDWATER REPORT
NON-FEDERAL SITES VOLUME II**

EL PASO FIELD SERVICES

TABLE OF CONTENTS

METER or LINE ID	SITE NAME	TOWNSHIP	RANGE	SECTION	UNIT
71669	State Gas Com N #1	31N	12W	16	H
70194	Johnston Fed #4	31N	09W	33	H
93388	Horton #1E	31N	09W	28	H
72556	Knight #1	30N	13W	5	A
73551	Coldiron A #1	30N	11W	2	K
03906	GCU Com A #142E	29N	12W	25	G
70445	Standard Oil Com #1	29N	09W	36	N
LD087	K-31 Line Drip	25N	06W	16	N
94967	Lindrith B #24	24N	03W	9	N



MWH

MONTGOMERY WATSON HARZA

This topographic map depicts the Fort Belknap National Monument and its surroundings in Montana. The monument's boundary is clearly marked with a thick black line. Key geographical features include the Fort Belknap River, the Judith River, and the Judith Mountains. Towns such as Fort Belknap, Brownsdale, and Fort Benton are labeled. The map also shows the Fort Belknap Indian Reservation and the Fort Belknap National Monument. A scale bar at the bottom indicates a distance of 1 mile, and the map is dated 1964.

3-D Tqoo Qeeqd Copyright © 1999 DelCorno Yarnsworth ME 04096
3 mi Scale: 1:600,000 Detail: 3:4 Datum: WGS84

LIST OF ACRONYMS

B	benzene
btoc	below top of casing
E	ethylbenzene
EPFS	El Paso Field Services
ft	foot/feet
GWEL	groundwater elevation
ID	identification
MW	monitoring well
PSH	phase-separated hydrocarbons
NMWQCC	New Mexico Water Quality Control Commission
T	toluene
TOC	top of casing
NA	not applicable
NE	not established
NM	not measured
NMOCD	New Mexico Oil Conservation Division
NS	not sampled
ORC	oxygen-releasing compound
ppb	parts per billion
µg/L	micrograms per liter
X	total xylenes

**EPFS GROUNDWATER SITES
2003 ANNUAL GROUNDWATER REPORT**

**Lindrith B #24
Meter Code: 94967**

SITE DETAILS

Legal Description:	Town: 24N	Range: 3W	Sec: 9	Unit: N
NMOCD Haz Ranking: 40	Land Type: Fee	Operator: Mobil		

PREVIOUS ACTIVITIES

Site Assessment: 8/94	Excavation: 10/94 (60 cy)	Soil Boring: 6/95
Monitor Well: 5/97	Geoprobe: NA	Additional MWs: 10/99
Downgradient MWs: 10/99	Replace MW: NA	Quarterly Initiated: 8/97
ORC Nutrient Injection: NA	Re-Excavation: 8/97 (180 cy)	PSH Removal Initiated: 2/01
Annual Initiated: NA	Quarterly Resumed: NA	

SUMMARY OF 2003 ACTIVITIES

MW-1: Groundwater sampling was performed in February and May 2003. In August and November 2003, free-product recovery was removed from this well.

MW-2: Water level monitoring was conducted quarterly in 2003.

MW-3: Water level monitoring was conducted quarterly in 2003.

Site-Wide Activities: No other activities were performed at this site during 2003.

SITE MAPS

Site maps (February and May) are attached in Figures 1 and 2.

SUMMARY TABLES AND GRAPHS

- Analytical data from 2003 are summarized in Table 1, and historic data are presented graphically in Figures 3 through 5.
- Free-product recovery data from 2003 are summarized in Table 2, and historic data are presented graphically in Figure 6.
- Laboratory reports are presented in Attachment 1.
- Field documentation is presented in Attachment 2.

**EPFS GROUNDWATER SITES
2003 ANNUAL GROUNDWATER REPORT**

**Lindrith B #24
Meter Code: 94967**

GEOLOGIC LOGS AND WELL COMPLETION DIAGRAMS

No subsurface activities were performed at this site during 2003.

DISPOSITION OF GENERATED WASTES

No wastes were generated at this site during 2003.

ISOCONCENTRATION MAPS

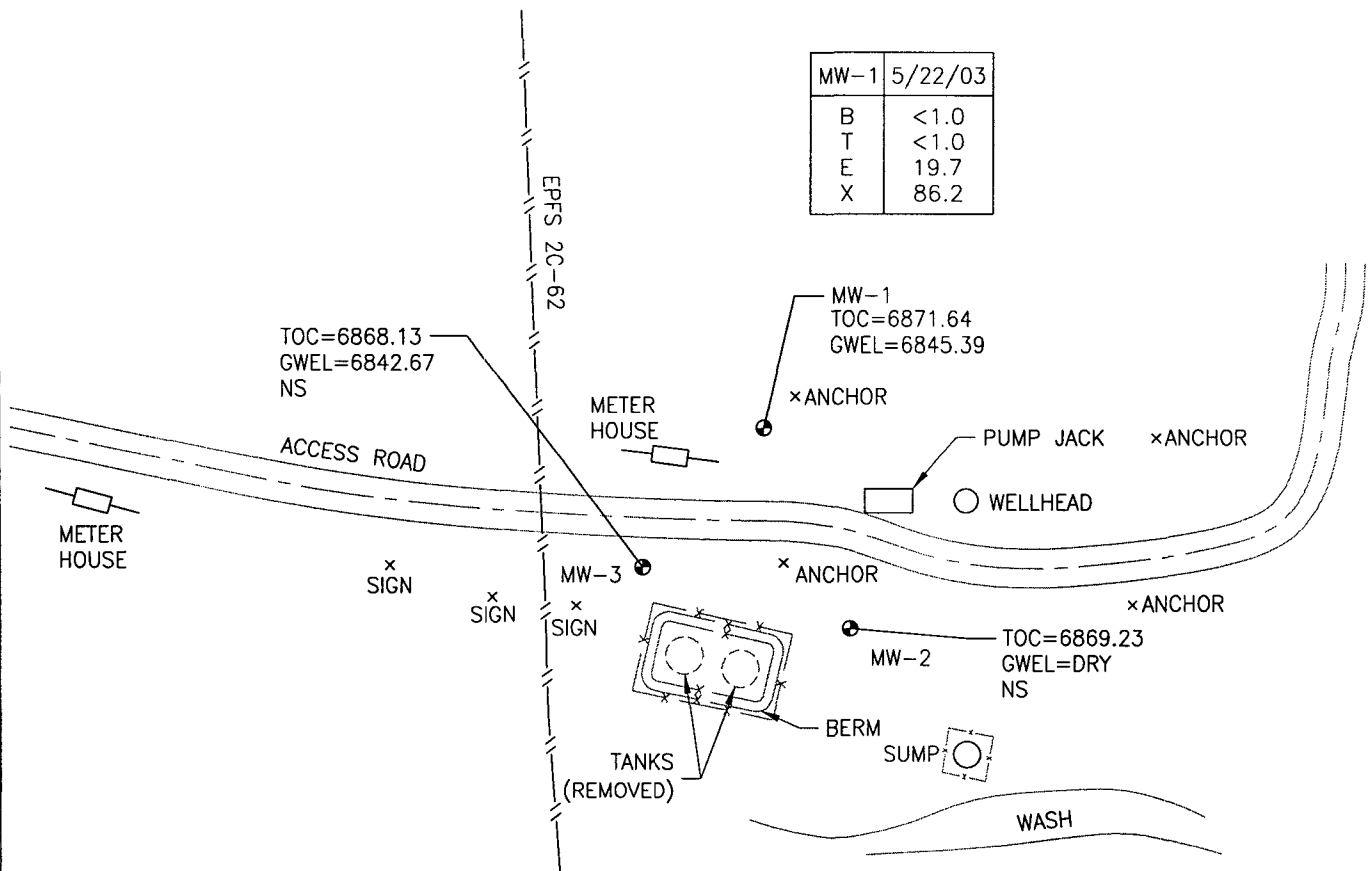
No isoconcentration maps were prepared for this site, however, the attached site maps present water level and analytical data collected during 2003.

CONCLUSIONS

- The groundwater flow direction trends to the southwest.
- BTEX concentrations in MW-1 were below standards during the first two quarters of 2003.
- Free-product was not detected in MW-1 during 2002 or the first two quarters of 2003. However, free-product was detected in MW-1 during the third and fourth quarters of 2003.
- MW-2 was dry in May 2003.

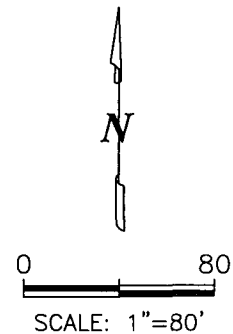
RECOMMENDATIONS

- EPFS recommends that MW-1 be monitored quarterly for free-product. Groundwater samples will be collected when no free-product is present. Quarterly samples will be collected until closure standards are met during four consecutive quarters.
- Because historic analytical results from MW-2 and MW-3 indicate BTEX concentrations below detection limits, EPFS recommends that these wells not be sampled until the final closure samples are collected at this site.
- EPFS recommends that quarterly water level measurements are collected at MW-2 and MW-3.
- Following approval for closure, all monitoring wells will be removed according to the approved EPFS Monitoring Well Abandonment Plan.



LEGEND

- MW-1 Approximate Monitoring Well Location and Number
- — — — — Centerline of Road
- x — x — Fence Line
- // — // — Pipe Line
- B Benzene ($\mu\text{g/L}$)
- T Toluene ($\mu\text{g/L}$)
- E Ethylbenzene ($\mu\text{g/L}$)
- X Total Xylenes ($\mu\text{g/L}$)
- GWEL Groundwater Elevation
(FT Above Mean Sea Level Unless Noted Otherwise)
- TOC Top of Casing
- NS Not Sampled
- < Not Detected. Value Shown is Detection Limit.



LINDRITH B#24, METER 94967
MAY 2003

GROUNDWATER SITES
EL PASO FIELD SERVICES

FIGURE 2

TABLE 1

SUMMARY OF BTEX COMPOUNDS IN 2003 GROUNDWATER SAMPLES
LINDRITH B #24 (METER #94967)

Site Name	Monitoring Well	Sample Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	Depth to Water (ft btoc)
Lindrith B #24	MW-1	2/26/2003	4.3	0.8	4.7	22.5	26.15
Lindrith B #24	MW-1	5/22/2003	<1.0	<1.0	19.7	86.2	26.25

TABLE 2

SUMMARY OF FREE-PRODUCT REMOVAL DURING 2003
LINDRITH B #24 (METER #94967)

Site Name	Monitoring Well	Removal Date	Depth to Product (feet btoc)	Depth to Water (feet btoc)	Product Thickness (feet)	Volume of Product Removed (gallons)	Cummulative Volume of Product Removed (gallons)
Lindrith B #24	MW-1	2/26/03	NA	26.15	0.00	0.00	0.35
Lindrith B #24	MW-1	5/22/03	NA	26.25	0.00	0.00	0.35
Lindrith B #24	MW-1	8/18/03	26.51	26.80	0.29	0.20	0.55
Lindrith B #24	MW-1	11/26/03	25.89	25.90	0.01	0.01	0.56

FIGURE 3
HISTORIC BTEX CONCENTRATIONS AND GROUNDWATER ELEVATIONS
LINDRITH B#24
MW-1

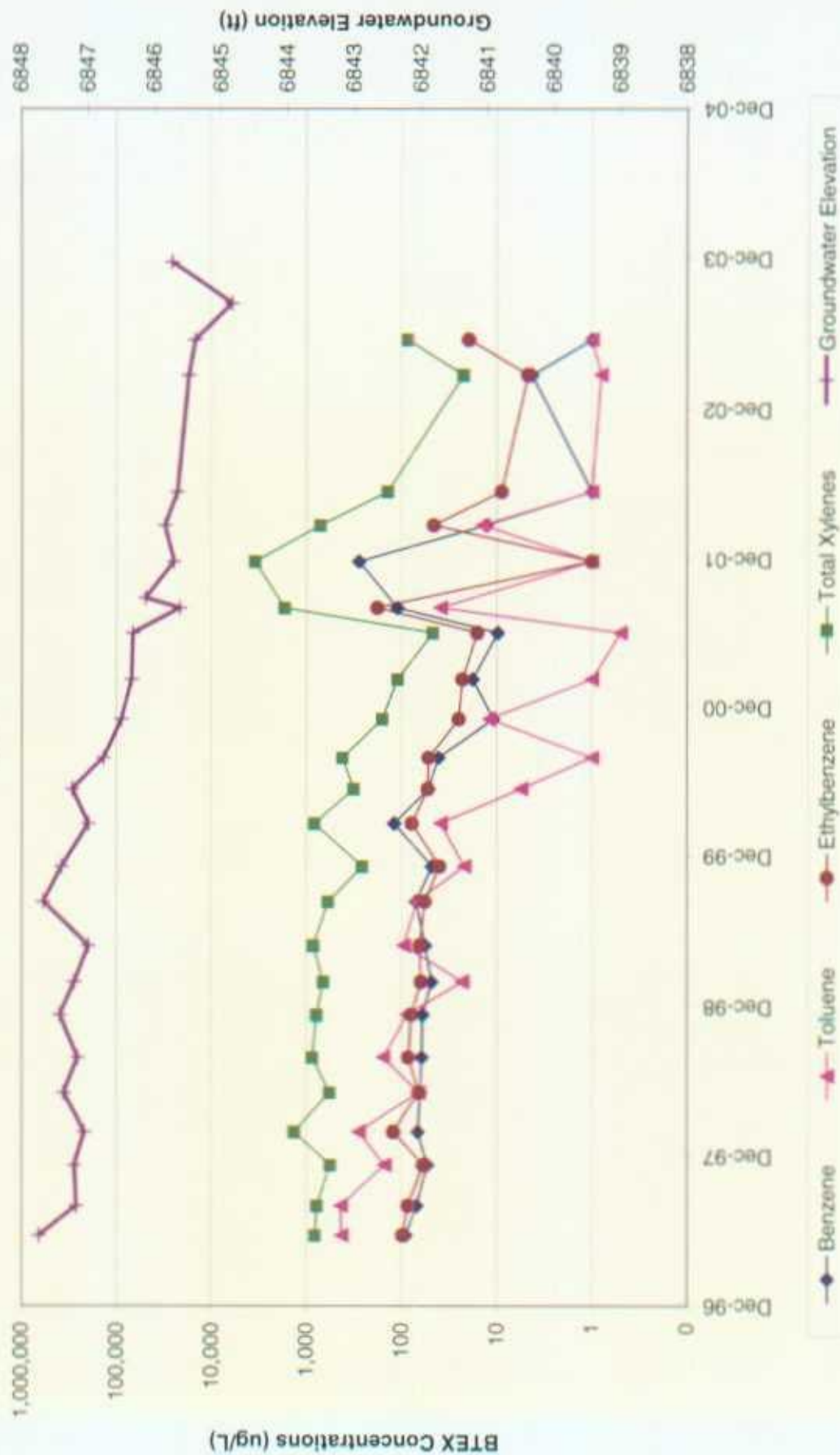


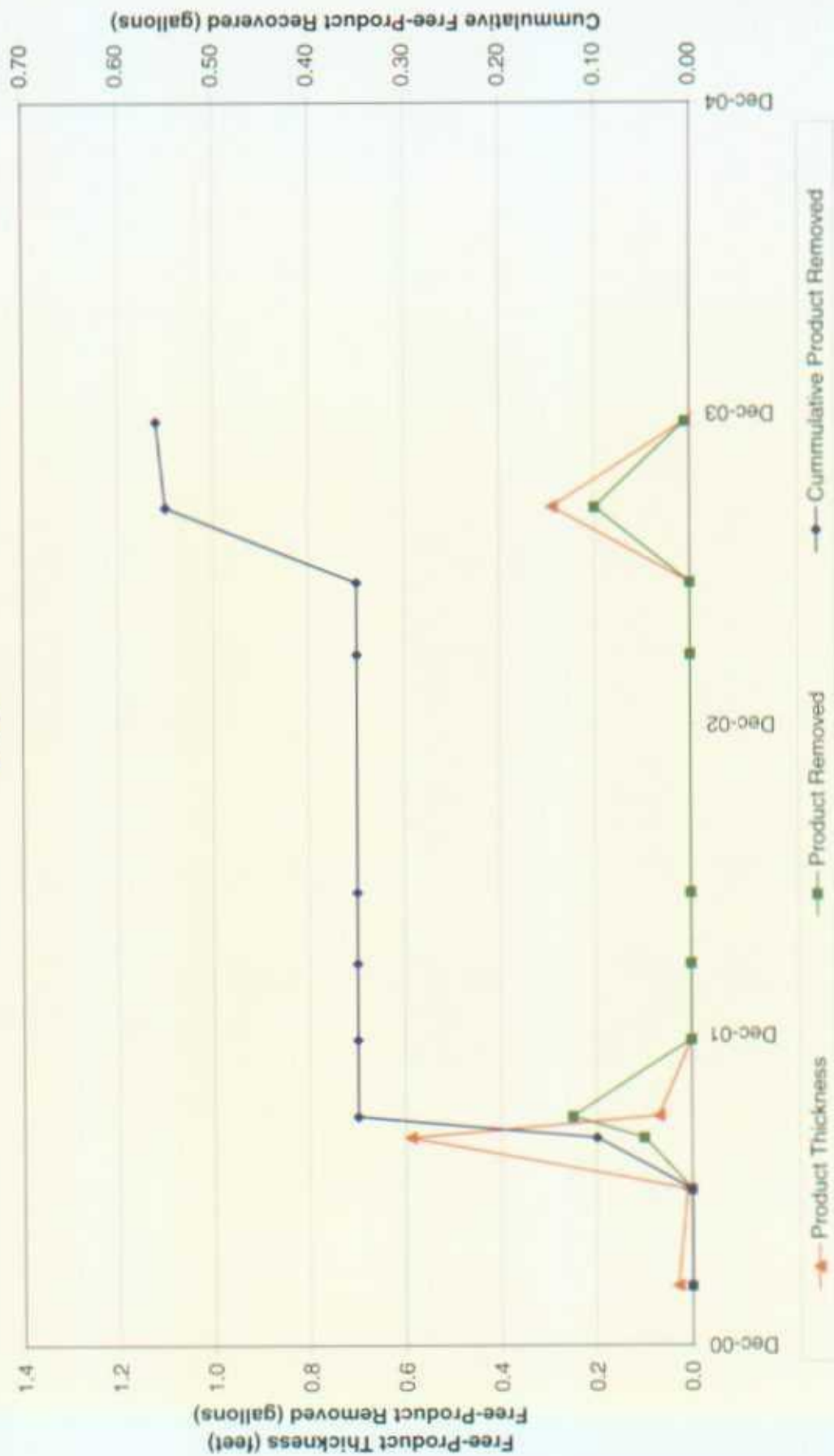
FIGURE 4
HISTORIC BTEX CONCENTRATIONS AND GROUNDWATER ELEVATIONS
LINDRITH B#24
MW-2



FIGURE 5
HISTORIC BTEX CONCENTRATIONS AND GROUNDWATER ELEVATIONS
LINDRITH B#24
MW-3



FIGURE 6
HISTORIC FREE-PRODUCT RECOVERY
LINDRITH B#24
MW-1



ATTACHMENT 1
LABORATORY REPORTS

(Page 1 of 2)

Analytical Method/Analytes: SW-846 8021B (BTEX) **Sample Collection Date(s):** 05/22/03

Laboratory: Accutest

MWH Job Number: EPC-SJRB
(Groundwater)

Batch Identification: T4392

Matrix: **Water**

MS/MSD Parent(s)^(a): **None**

Field Replicate Parent(s): **None**

Validation Complete:

Erin Batters 6-2-23
(Date/Signature)

(Date/Signature)

DATA VALIDATION WORKSHEET

(Page 2 of 2)

Analytical Method: SW-846 8021B (BTEX) MWH Job Number: EPC-SJRB (Groundwater)

Laboratory: Accutest Batch Identification: T4392

Validation Criteria							
Sample ID	220503TB 01	Lindrith MW-1					
Lab ID	T4392-01	T4392-02					
Holding Time	A	A					
Analyte List	A	A					
Reporting Limits	A	A					
Trip Blank	A	A					
Equipment Rinseate Blanks	N/A	N/A					
Field Duplicate/Replicate	N/A	N/A					
Surrogate Spike Recovery	A	A ¹					
Initial Calibration	N	N					
Initial Calibration Verification (ICV)	N	N					
Continuing Calibration Verification (CCV)	N	N					
Laboratory Control Sample (LCS)	A	A					
Laboratory Control Sample Duplicate (LCSD)	N	N					
Method Blank	A	A					
Matrix Spike/Matrix Spike Dup. (MS/MSD)	N/A	N/A					
Retention Time Window	N	N					
Injection Time(s)	N	N					
Hardcopy vs. Chain-of-Custody	A	A					
EDD vs. Hardcopy	N	N					
EDD vs. Chain of Custody	N	N					

(a) List QC batch identification if different than Batch ID
 A indicates validation criteria were met
 A/L indicates validation criteria met based upon Laboratory's QC Summary Form
 X indicates validation criteria were not met
 N indicates data review were not a project specific requirement
 N/A indicates criteria are not applicable for the specified analytical method or sample
 N/R indicates data not available for review

NOTES:



Gulf Coast
ACCUTEST.
Laboratories

06/02/03

Technical Report for

Montgomery Watson

EPFS San Juan Basin GS

San Juan Basin

Accutest Job Number: T4392

Report to:

lynn.benally@elpaso.com

Total number of pages in report: 11



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Ron Martino
Laboratory Manager

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sample Summary

Montgomery Watson

Job No: T4392

EPFS San Juan Basin GS
Project No: San Juan Basin

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T4392-1	05/22/03	06:00 MJN	05/23/03	AQ	Trip Blank Water	220503TB01
T4392-2	05/22/03	09:53 MJN	05/23/03	AQ	Water	LINDRITH MW-1

Report of Analysis

Page 1 of 1

Client Sample ID: 220503TB01
Lab Sample ID: T4392-1
Matrix: AQ - Trip Blank Water
Method: SW846 8021B
Project: EPFS San Juan Basin GS

Date Sampled: 05/22/03
Date Received: 05/23/03
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK005180.D	1	05/28/03	JH	n/a	n/a	GKK272
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	85%		64-121%
98-08-8	aaa-Trifluorotoluene	84%		71-121%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: LINDRITH MW-1
Lab Sample ID: T4392-2
Matrix: AQ - Water
Method: SW846 8021B
Project: EPFS San Juan Basin GS

Date Sampled: 05/22/03
Date Received: 05/23/03
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK005205.D	1	05/30/03	JH	n/a	n/a	GKK273
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	19.7	1.0	ug/l	
1330-20-7	Xylenes (total)	86.2	3.0	ug/l	
95-47-6	o-Xylene	11.9	1.0	ug/l	
	m,p-Xylene	74.3	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	109%		64-121%
98-08-8	aaa-Trifluorotoluene	101%		71-121%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Blank Spike Summary

Page 1 of 1

Job Number: T4392
Account: MWHSLCUT Montgomery Watson
Project: EPFS San Juan Basin GS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK272-BS	KK005176.D1		05/28/03	JH	n/a	n/a	GKK272

The QC reported here applies to the following samples:

Method: SW846 8021B

T4392-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	17.4	87	74-119
100-41-4	Ethylbenzene	20	17.8	89	82-115
108-88-3	Toluene	20	17.7	89	77-116
1330-20-7	Xylenes (total)	60	54.3	91	79-115
95-47-6	o-Xylene	20	17.7	89	78-114
	m,p-Xylene	40	36.6	92	79-116

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	86%	64-121%
98-08-8	aaa-Trifluorotoluene	85%	71-121%

Blank Spike Summary

Page 1 of 1

Job Number: T4392
Account: MWHSLCUT Montgomery Watson
Project: EPFS San Juan Basin GS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK273-BS	KK005202.D 1		05/30/03	JH	n/a	n/a	GKK273

The QC reported here applies to the following samples:

Method: SW846 8021B

T4392-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	21.3	107	74-119
100-41-4	Ethylbenzene	20	21.4	107	82-115
108-88-3	Toluene	20	21.3	107	77-116
1330-20-7	Xylenes (total)	60	63.9	107	79-115
95-47-6	o-Xylene	20	21.1	106	78-114
	m,p-Xylene	40	42.8	107	79-116

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	102%	64-121%
98-08-8	aaa-Trifluorotoluene	101%	71-121%

Method Blank Summary

Page 1 of 1

Job Number: T4392
Account: MWHSLCUT Montgomery Watson
Project: EPFS San Juan Basin GS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK272-MB	KK005177.D1		05/28/03	JH	n/a	n/a	GKK272

The QC reported here applies to the following samples:

Method: SW846 8021B

T4392-1

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	86%	64-121%
98-08-8	aaa-Trifluorotoluene	85%	71-121%

Method Blank Summary

Page 1 of 1

Job Number: T4392
Account: MWHSLCUT Montgomery Watson
Project: EPFS San Juan Basin GS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK273-MB	KK005203.D 5		05/30/03	JH	n/a	n/a	GKK273

The QC reported here applies to the following samples:

Method: SW846 8021B

T4392-2

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	5.0	ug/l	
100-41-4	Ethylbenzene	ND	5.0	ug/l	
108-88-3	Toluene	ND	5.0	ug/l	
1330-20-7	Xylenes (total)	ND	15	ug/l	
95-47-6	o-Xylene	ND	5.0	ug/l	
	m,p-Xylene	ND	10	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	101%	64-121%
98-08-8	aaa-Trifluorotoluene	102%	71-121%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: T4392

Account: MWHSLCUT Montgomery Watson

Project: EPFS San Juan Basin GS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T4390-3MS	KK005192.D 1		05/28/03	JH	n/a	n/a	GKK272
T4390-3MSD ^a	KK005193.D 1		05/28/03	JH	n/a	n/a	GKK272
T4390-3	KK005191.D 1		05/28/03	JH	n/a	n/a	GKK272

The QC reported here applies to the following samples:

Method: SW846 8021B

T4392-1

CAS No.	Compound	T4390-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	13.7	69	17.0	85	21*	64-124/16
100-41-4	Ethylbenzene	18.2		20	30.1	60*	36.2	90	18*	64-123/14
108-88-3	Toluene	ND		20	13.7	69	16.8	84	20*	64-120/13
1330-20-7	Xylenes (total)	ND		60	42.3	71	52.0	87	21*	66-118/18
95-47-6	o-Xylene	ND		20	13.9	70	17.1	86	21*	65-119/20
	m,p-Xylene	ND		40	28.4	71	34.9	87	21*	66-120/14

CAS No.	Surrogate Recoveries	MS	MSD	T4390-3	Limits
460-00-4	4-Bromofluorobenzene	68%	80%	72%	64-121%
98-08-8	aaa-Trifluorotoluene	68%* ^b	81%	74%	71-121%

(a) High RPD due to low spike recoveries of the MSD.

(b) Outside control limits due to matrix interference.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: T4392
Account: MWHSLCUT Montgomery Watson
Project: EPFS San Juan Basin GS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T4410-4MS	KK005210.D 1		05/30/03	JH	n/a	n/a	GKK273
T4410-4MSD	KK005211.D 1		05/30/03	JH	n/a	n/a	GKK273
T4410-4	KK005209.D 1		05/30/03	JH	n/a	n/a	GKK273

The QC reported here applies to the following samples:

Method: SW846 8021B

T4392-2

CAS No.	Compound	T4410-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	1.5		20	22.0	103	24.3	114	10	64-124/16
100-41-4	Ethylbenzene	ND		20	20.9	105	23.5	118	12	64-123/14
108-88-3	Toluene	ND		20	21.1	106	23.0	115	9	64-120/13
1330-20-7	Xylenes (total)	ND		60	61.8	103	69.2	115	11	66-118/18
95-47-6	o-Xylene	ND		20	20.1	101	22.6	113	12	65-119/20
	m,p-Xylene	ND		40	41.6	104	46.6	117	11	66-120/14

CAS No.	Surrogate Recoveries	MS	MSD	T4410-4	Limits
460-00-4	4-Bromofluorobenzene	100%	102%	103%	64-121%
98-08-8	aaa-Trifluorotoluene	100%	102%	102%	71-121%



Laboratories

10165 Harwin Drive, Ste. 150, Houston, TX 77036
TEL: 713-271-4700 FAX: 713-271-4770
www.accutest.com

FED-EX Tracking # 836557905599	Bottle Order Control #
Accutest Quote #	Accutest Job #

[illegible]

(Page 1 of 2)

Validation Complete: 1 sign 1 return 3-27-03
(Date/Signature)

[illegible]

DATA VALIDATION WORKSHEET
(Page 2 of 2)

Analytical Method: SW-846 8021B (BTEX) **MWH Job Number:** EPC-SJRB (Jaquez)

Laboratory: APCL **Batch Identification:** 03-01960

Validation Criteria								
Sample ID	Lindrith No. 24 MW-1	Ohio C Govt 3 MW-1	TB 260203-1					
Lab ID	03-01960- 01	03-01960- 02	03-01960- 03					
Holding Time	A	A	A					
Analyte List	A	A	A					
Reporting Limits	A	A	A					
Trip Blank	A ¹	A ¹	A ¹					
Equipment Rinseate Blanks	N/A	N/A	N/A					
Field Duplicate/Replicate	N/A	N/A	N/A					
Initial Calibration	N	N	N					
Initial Calibration Verification (ICV)	N	N	N					
Continuing Calibration Verification (CCV)	A	A	A					
Method Blank	A	A	A					
Laboratory Control Sample (LCS)	A	A	A					
Laboratory Control Sample Duplicate (LCSD)	N	N	N					
Matrix Spike/Matrix Spike Dup. (MS/MSD)	N/A	N/A	N/A					
Surrogate Spike Recovery	A	A	A					
Retention Time Window	N	N	N					
Injection Time(s)	N	N	N					
Hardcopy vs. Chain-of-Custody	A	A	A					
EDD vs. Hardcopy	N	N	N					
EDD vs. Chain of Custody	N	N	N					

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method or sample
N/R indicates data not available for review

NOTES:

- 1) The following compounds were detected in the trip blank (TB 270203-1):
 - a) Toluene @ 0.2 T µg/l, qualify associated sample concentrations greater than 1.0 µg/l with "B" flags and associated sample concentrations less than 1.0 µg/l with "UB" flags.

Applied P & Ch Laboratory

13760 Magnolia Ave. Chino CA 91710

Tel: (909) 590-1828 Fax: (909) 590-1498

Submitted to:

Montgomery Watson Harza

Attention: Brian Buttars

10619 South Jordan Gateway

Salt Lake City UT 84095

Tel: (801)617-3200 Fax: (801)617-4200

APCL Analytical Report

Service ID #: 801-031960

Collected by: M.J. Nee.

Collected on: 02/26/03

Received: 03/01/03

Extracted: N/A

Tested: 03/03-05/03

Reported: 03/05/03

Sample Description: Water

Project Description: 220013 San Juan River Basin

Analysis of Water Samples

Component Analyzed	Method	Unit	PQL	Analysis Result	
				MW-1 Lindrith No. 24	
				03-01960-1	
BTXE					
Dilution Factor					1
BENZENE	8021B	µg/L	0.5		4.3
ETHYLBENZENE	8021B	µg/L	0.5		4.7
TOLUENE	8021B	µg/L	0.5		0.8
O-XYLENE	8021B	µg/L	0.5		2.5
M,P-XYLENE	8021B	µg/L	1		20

Component Analyzed	Method	Unit	PQL	Analysis Result	
				MW-1 Ohio C Govt 3	TB 260203-1
				03-01960-2	03-01960-3
BTXE					
Dilution Factor				1	1
BENZENE	8021B	µg/L	0.5	0.08J	<0.5
ETHYLBENZENE	8021B	µg/L	0.5	<0.5	<0.5
TOLUENE	8021B	µg/L	0.5	0.2J	0.2J
O-XYLENE	8021B	µg/L	0.5	<0.5	<0.5
M,P-XYLENE	8021B	µg/L	1	1	<1

PQL: Practical Quantitation Limit.

MDL: Method Detection Limit.

CRDL: Contract Required Detection Limit

N.D.: Not Detected or less than the practical quantitation limit.

": Analysis is not required.

J: Reported between PQL and MDL.

Listed Dilution Factors (DF) are relative to the method default DF. All unlisted DFs are 1.0

Respectfully submitted,

Dominic Lau

Laboratory Director

Applied P & Ch Laboratory

Applied P & Ch Laboratory

13760 Magnolia Ave. Chino CA 91710

Tel: (909) 590-1828 Fax: (909) 590-1498

APCL QA/QC Report

Submitted to:

Montgomery Watson Harza
Attention: Brian Buttars
10619 South Jordan Gateway
Salt Lake City, UT 84095
Tel: (801)617-3200 Fax: (801)617-4200

Service ID #: 801-031960

Collected by: M.J. Nee.

Collected on: 02/26/03

Sample description:

Water

Project: San Juan River Basin /220013

Received: 03/01/03

Tested: 03/03-05/03

Reported: 03/10/03

Analysis of Water

801-031960QC

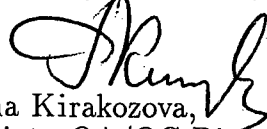
Component Name	Analysis Batch #	CCV (µg/L)	CCV %Rec	M-Blank	Conc. Unit	SP Level	LCS %Rec	MS %Rec	MSD %Rec	MS/MSD %RPD	Control Limit %Rec	%Diff
BTXE												
Benzene	03G1615	100	97	N.D.	µg/L	18.0	87	91	91	0	71-126	28
Toluene	03G1615	100	101	N.D.	µg/L	70.0	89	91	92	1	70-117	24
Ethylbenzene	03G1615	100	104	N.D.	µg/L	18.0	95	97	98	1	65-131	33
m/p-Xylene	03G1615	200	98	N.D.	µg/L	70.0	90	89	91	2	66-122	28
o-Xylene	03G1615	100	96	N.D.	µg/L	25.0	87	89	90	1	65-130	33

Component Name	Analysis Batch #	CCV (µg/L)	CCV %Rec	M-Blank	Conc. Unit	SP Level	LCS %Rec	MS %Rec	MSD %Rec	MS/MSD %RPD	Control Limit %Rec	%Diff
BTXE												
Benzene	03G1636	100	94	N.D.	µg/L	180	100	81	91	12	71-126	28
Toluene	03G1636	100	97	N.D.	µg/L	700	102	81	95	15	70-117	24
Ethylbenzene	03G1636	100	100	N.D.	µg/L	180	103	84	103	20	65-131	33
m/p-Xylene	03G1636	200	93	N.D.	µg/L	700	99	84	101	19	66-122	28
o-Xylene	03G1636	100	93	N.D.	µg/L	250	94	89	108	19	65-130	33

Notation: ICV - Initial Calibration Verification
CCV - Continuation Calibration Verification
LCS - Lab Control Spike
MS - Matrix Spike
MSD - Matrix Spike Duplicate
ICS - Interference Check Standard
MD - Matrix Duplicate
N.D. - Not detected or less than PQL

CCB - Continuation Calibration Blank
M-blank - Method Blank
SP Level - Spike Level
%Rec - Recovery Percent
%RPD - Relative Percent Differences
%Diff - Control Limit for %RPD
ICP-SD - ICP Serial Dilution
N.A. - Not Applicable

Respectfully submitted,


Regina Kirakozova,
Associate QA/QC Director
Applied P & Ch Laboratory

FORM-2A

Applied P & Ch Laboratory

Surrogate Recovery Summary for Method 8021B

Client Name: Montgomery Watson Harza

Contract No:

Lab Code:

APCL

Case No:

SAS No:

SDG Number:

031960

Project ID: San Juan River Basin

Project No: 220013

Sample Matrix:

Water

Batch No: 03G1615

#	Client Sample No	Lab Sample ID	S1 % #	TOT OUT
1		03G1615-LCS-01	89	0
2		03G1615-LSD-01	90	0
3		03G1615-MB-01	84	0
4	MW-1 LINDRITH NO. 24	03-1960-1	97	0
5	MW-1 OHIO C GOVT 3	03-1960-2	96	0
6	MW-1 JAQUEZ	03-1958-1MS	88	0
7	MW-1 JAQUEZ	03-1958-1MSD	89	0
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

S1 = 4-BROMO-FLUOROBENZENE (PID)

QC Control Limit
66-133

Column to be used to flag recovery values:

* - Values outside of contract required QC Limits

D - Surrogate diluted out

I - Matrix Interference

FORM-2A

Applied P & Ch Laboratory

Surrogate Recovery Summary for Method 8021B

Client Name: Montgomery Watson Harza

Contract No:

Lab Code:

APCL

Case No:

SAS No:

Service ID:

031960

Project ID: San Juan River Basin

Project No: 220013

Sample Matrix:

Water

Batch No: 03G1636

#	Client Sample No	Lab Sample ID	S1 % #	TOT OUT
1		03G1636-MB-02	91	0
2	TB 260203-1	03-1960-3	94	0
3	03-0395-01	03-1981-1MS	90	0
4	03-0395-01	03-1981-1MSD	94	0
5		03G1636-LCS-01	88	0
6		03G1636-LSD-01	87	0
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

S1 = 4-BROMO-FLUOROBENZENE (PID)

QC Control Limit
66-133

Column to be used to flag recovery values:

* - Values outside of contract required QC Limits

D - Surrogate diluted out

I - Matrix Interference

Applied P & Ch Laboratory

13760 Magnolia Ave. Chino CA 91710

Tel: (909) 590-1828 Fax: (909) 590-1498

Submitted to:

Montgomery Watson Harza

Attention: Brian Buttars

10619 South Jordan Gateway

Salt Lake City UT 84095

Tel: (801)617-3200 Fax: (801)617-4200

APCL Analytical Report

Service ID #: 801-031960

Collected by: M.J. Nee.

Collected on: 02/26/03

Sample Description: Water

Project Description: 220013 San Juan River Basin

Received: 03/01/03

Extracted: N/A

Tested: 03/03-05/03

Reported: 03/05/03

Analysis of Water Samples

Component Analyzed	Method	Unit	PQL	Analysis Result	
				MW-1 Lindrith No. 24	
				03-01960-1	
BTXE					
Dilution Factor				1	
BENZENE	8021B	µg/L	0.5	4.3	
ETHYLBENZENE	8021B	µg/L	0.5	4.7	
TOLUENE	8021B	µg/L	0.5	0.8	
O-XYLENE	8021B	µg/L	0.5	2.5	
M,P-XYLENE	8021B	µg/L	1	20	

Component Analyzed	Method	Unit	PQL	Analysis Result	
				MW-1 Ohio C Govt 3	TB 260203-1
				03-01960-2	03-01960-3
BTXE					
Dilution Factor				1	1
BENZENE	8021B	µg/L	0.5	0.08J	<0.5
ETHYLBENZENE	8021B	µg/L	0.5	<0.5	<0.5
TOLUENE	8021B	µg/L	0.5	0.2J	0.2J
O-XYLENE	8021B	µg/L	0.5	<0.5	<0.5
M,P-XYLENE	8021B	µg/L	1	1	<1

PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit

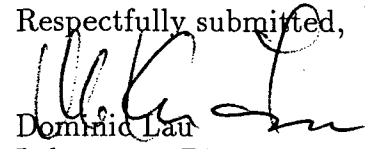
N.D.: Not Detected or less than the practical quantitation limit.

"-": Analysis is not required.

J: Reported between PQL and MDL.

Listed Dilution Factors (DF) are relative to the method default DF. All unlisted DFs are 1.0

Respectfully submitted,


Dominic Lau

Laboratory Director

Applied P & Ch Laboratory

Part 2: Sample Information

Seq. #	Sample ID (on COC)	Sample APCL Sub-ID	Sample ID	Matrix	Cont- tainer	Preser- vative	Vol, ml Am. g	# of Replica	Condition G, L, B	Collected mmddyy	Hold ?	Composite Group	TAT Days	
1	MW-1 Lindrith No. 24	VOA	03-01960-1	W	V		40	3	G	022603	N	0	6	☐
2	MW-1 Ohio C Govt 3	VOA	03-01960-2	W	V		40	3	G	022603	N	0	6	☐
3	TB 260203-1	VOA	03-01960-3	W	V		40	3	G	022603	N	0	6	☐

Part 3: Analysis Information

Test Items:

☒ 8021B

BTXE

Seq. #	Client's Sample ID (as given on COC)	Sample Sub-ID	APCL Sample ID	Matrix	BTXE	
1	MW-1 Lindrith No. 24	VOA	03-01960-1	W	X	☐
2	MW-1 Ohio C Govt 3	VOA	03-01960-2	W	X	☐
3	TB 260203-1	VOA	03-01960-3	W	X	☐

☐ Client's Requirement:

BTEX UNPRESERVED, 7 DAY HOLDING TIME

Login By En-Yu Paul Kou

Check By JS

Applied P & Ch Laboratory

13760 Magnolia Ave. Chino CA 91710

Tel: (909) 590-1828 Fax: (909) 590-1498

Sample Login: Check List

03-01960 (0984_1031) (2721900_1031)

03/03/03

Part 1: General Information

☐ Company Information	Name:	Montgomery Watson Harza
	Address:	10619 South Jordan Gateway ,Salt Lake City ,UT 84095
☐ Project Information	Project Description:	San Juan River Basin
		Hill AFB
	Project #:	220013
☐ Billing Information	P.O. #:	
	Bill Address:	10619 South Jordan Gateway ,Salt Lake City ,UT 84095
	Lab Project ID:	1999-0746
	Client Database #:	04
☐ Receiving Information	Who Received Sample?	Kenny Chan
	Receiving Date/Time:	03/01/03 1200
	CDC No.	
☐ Shipping Information	Shipping Company	Express
	Packing Information:	Cooler/Ice Chester
	Cooler Temperature:	3.9 °C
☐ Container Information	Container Provider:	Client
☐ Sampling Information	Sampling Person:	
	Sampling Company:	Client
☐ Turn-Around-Time Option:		Rush 5 working day(s)
☐ QC Option:		QC and Surro. Rep.
☐ Disposal Option:		Not specify

Applied P & Ch Laboratory

13760 Magnolia Ave., Chino CA 91710

Tel: (909) 590-1828 Fax: (909) 590-1498

Sample Receiving Checklist

APCL ServiceID: **1960**

Client Name/Project: MWH / E1 Pao

1. Sample Arrival

Date/Time Received 3/1/03 1200P Date/Time Opened 3/1/03 1200P By (name): Kenny Chan
Custody Transfer: ☐ Client ☐ Golden State ☐ UPS ☐ US Mail ☒ FedEx ☐ APCL Empl: _____

2. Chain-of-Custody (CoC)

☒ With Samples? ☐ Faxed? ☐ Client has Copy? ☐ Signed, dated? By: _____
☒ Project ID? ☐ Analyses Clear? ☐ Hold Samples? # on Hold _____ # Received 3
☒ CoC/Docs Zip-Locked under lid? ☐ Compos. #: _____ ☒ #Samples OK? _____
☐ Discrepancies? ☐ Client notified? ☐ Response (attach docs): _____

3. Shipping Container/Cooler

☒ Cooler Used? # of 1 Cooled by: ☒ Ice ☐ Blue Ice ☐ Dry Ice ☐ None
Temp °C 39°C
(Cooler temperature measured from temp blank if present, otherwise measured from the cooler).
Cooler Custody Seal? ☐ Absent ☐ Intact ☐ Tampered?

4. Sample Preservation

☐ pH <2 ☐ pH >12
If Not, pH = _____ Preserved by: ☐ Client ☐ APCL ☐ Third Party _____

5. Holding-time Requirements

☐ pH 24hr ☐ BACT 6/24hr ☐ Cr^{VI} 24hr ☐ NO₃⁻ 48hr ☐ BOD 48hr
☐ Cl₂ ASAP ☐ Turbidity 48hr ☐ DO ASAP ☐ Fe(II) ASAP
☐ HT Expired? ☐ Client notified?

6. Sample Container Condition

☒ Intact? ☐ Broken? ☐ Documented? Number: _____
Type: ☐ plastic ☒ glass ☐ Tube: brass/SS ☐ Tedlar Bag
☒ Quantity OK? ☐ Leaking? ☐ Anomaly?
☐ Caps tight? ☐ Air Bubbles? ☐ Anomaly?
Labels: ☒ Unique ID? ☒ Date/Time ☐ Preserved?

7. Turn Around Time

☒ RUSH TAT: 5 days ☐ Std (7-10 days) ☐ Not Marked

8. Sample Matrix

☐ Drinking H₂O ☒ Other Liq ☐ Soil ☐ Wipe ☐ Polymer ☐ Air ☐ Other: _____
☐ Ground H₂O ☐ Sludge ☐ Filter ☐ Oil/Petro ☐ Paint ☐ W. Water ☐ Extract ☐ Unknown

9. Pre-Login Check List Completed & OK?

☒ ALL OK? (if not, attach docs) ☐ Client Contact? (Name: _____) Date/Time: _____

Received/Checked by: Kenny Chan Date: 1 Mar 2003 Time: 9:46 a.m.

Samples must be analyzed for results to reflect total concentrations. Results generated outside required of holding times are considered minimal values and may be used to define waste as hazardous but not as non-hazardous.

Chain of Custody ID 88003MN01
 Page 1 of 1
 Air Bill No. 8363 8167 4367

LABORATORY APCL
Contract El Paso Corp., San Jaun River Basin

Phone (801) 617-3200 FAX (801) 617-4200

Project Say Ten Basin

Date Due Standard

Sampler's Name MJ Lee
(print clearly)

[illegible]

(a) Matrix: AA – Air

SO – Soil
WS – Surface Water
WG – Ground Water
WQ – Trip Blank/
Equipment Blanks
WW – Wastewater

(b) **Sampling Technique:**
Composite=C
Grab=G
Hand Auger=HA
Submersible Pump=SP
Bladder Pump=BP
Bailer=B
Wellhead Faucet=WF
Hydropunch=HP

Location IDs:
Groundwater Sites=GW
Bisti=BI
Jaquez=JA

North Flare Pit=NF
South Flare Pit=SF
San Juan River Pla

Relinquished by/Affiliation	Received by/Affiliation	Date	Time
MS / ABE		2/28/03	1500
	MS / APL	3/1/03	1200P

LABORATORY USE ONLY	
SAMPLES WERE:	
1 Shipped or hand delivered	Notes: Fed-Ex
2 Ambient or Chilled	Notes:
3 Temperature	39°C
4 Received Broken/Leaking (Improperly Sealed)	Y N
Notes:	
5 Properly Preserved	N
Notes:	
6 Received Within Holding Times	Y N
Notes:	
COC Tape Was:	
1 Present on Outer Package	Y N NA
2 Unbroken on Outer Package	Y N NA
3 Present on Sample	Y N NA
4 Unbroken on Sample	Y N NA
Notes:	
Discrepancies Between Sample Labels and COC Record?	
Y	N
Notes:	

ATTACHMENT 2
FIELD DOCUMENTATION

PRODUCT RECOVERY/WATER LEVEL DATA

Martin J. Nee
PO Box 3861
Farmington, NM 87499-3861
(505)334-2791 (505)320-9675cell

Project Name_ San Juan Basin Ground Water Project No. 30001.0
Project Manager MJN
Client Company MWH Date 11-26-03
Site Name Lindreth B24

Well	Time	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Volume Removed
MW-1	0815	25.89	25.90	0.01	1-2 oz
MW-2		-	24.72	-	-
MW-3		-	25.13	-	-

Comments

Bailed 3 gallons of water with the 1-2 oz product. This is the first time we've seen water in MW-2 in a while.

Signature: Martin J. Nee Date: November 26, 2003

PRODUCT RECOVERY/WATER LEVEL DATA

Martin J. Nee
PO Box 3861
Farmington, NM 87499-3861
(505)334-2791 (505)320-9675cell

Project Name	<u>San Juan Basin Ground Water</u>	Project No.	<u>30001.0</u>
Project Manager	<u>MJN</u>		
Client Company	<u>MWH</u>	Date	<u>8-18-03</u>
Site Name	<u>Lindreth B24</u>		

Well	Time	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Volume Removed
MW-1	0830	26.51	26.80	0.29	0.2
MW-2		-	dry	-	-
MW-3		-	25.77	-	-

Comments

Bailed 5 gallons of water with the 0.2 gallons product.

Signature: Martin J. Nee Date: August 18, 2003

WELL DEVELOPMENT AND SAMPLING LOG

Project No: 300010 Project Name: San Juan Basin Client: MWH
 Location: Linderoth Well No: B MW-1 Development ☐ Sampling ☐
 Project Manager: MTN Date: 5-22-03 Start Time: 0900 Weather: Sunny 60s
 Depth to Water: 2625 Depth to Product: Product Thickness: Measuring Point: TOL
 Water Column Height: 553 Well Dia: 4"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐
 Bottom Valve Bailer ☒ Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐
 Criteria: 3 to 5 Casing Volumes of Water Removal ☒ Stabilization of Indicator Parameters ☒ Other: on buildy

Gal/ft x ft of water		Water Volume In Well		Gal/oz to be removed				
		Gallons	Ounces					
5.53 x .65		3.594 x 3		10.78				
Time (military)	pH	SC (umhos/cm)	Temp (°C)	Eh-ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (gal.)	Comments/ Flow rate
917	6.95	897	18.7				1	Clear w/ yellow particles
	6.98	846	16.0				2	floats
	6.95	841	15.8				3	
	7.22	871	16.3				6	Water is grey
	7.21	862	15.6				7	
	7.27	883	15.6				8	
	7.32	862	15.5				9	Water has cleared
	7.32	877	15.6				10	
0942	7.31	879	15.5				11	

Final:
 Time: 0942 pH: 7.31 SC: 879 Temp: 15.5 Eh-ORP: D.O.: Turbidity: Ferrous Iron: Vol Evac.: 11 Comments/Flow rate:

COMMENTS:

INSTRUMENTATION: pH Meter ☒ DO Monitor ☐ Conductivity Meter ☒ Temperature Meter ☒ Other ☐

Water Disposal:
 Sample ID: Linderoth MW-1 Sample Time: 0953 BTEX ☒ VOCs ☐ Alkalinity ☐
 TDS ☐ Cations ☐ Anions ☐ Nitrate ☐ Nitrite ☐ Ammonia ☐ TKN ☐ NM WQCC Metals ☐
 Total Phosphorus ☐
 MS/MSD BD BD Name/Time TB 220503TB01

PRODUCT RECOVERY/WATER LEVEL DATA

Martin J. Nee
PO Box 3861
Farmington, NM 87499-3861
(505)334-2791 (505)320-9675cell

Project Name	<u>San Juan Basin Ground Water</u>	Project No.	<u>30001.0</u>
Project Manager	<u>MJN</u>		
Client Company	<u>MWH</u>	Date	<u>5-22-03</u>
Site Name	<u>Lindreth B24</u>		

Well	Time	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Volume Removed
MW-1	0830	-	26.25	-	-
MW-2		-	dry	-	-
MW-3		-	25.465	-	-

Comments

The February water level for MW-3 was incorrect and should have been 25.38 BTOC.

Signature: Martin J. Nee Date: May 22, 2003

WELL DEVELOPMENT AND SAMPLING LOG

Project No: 220013 Project Name: San Juan Basin Client: MWH
 Location: Linderth B24 Well No: MW-1 Development ☐ Sampling ☒
 Project Manager MTN Date 2-26-05 Start Time 1140 Weather Cloudy Snow/Rain
 Depth to Water 26.15 Depth to Product N2 Product Thickness N2 Measuring Point TOC
 Water Column Height 5.65 Well Dia. 4"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐
 Bottom Valve Bailer ☒ Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐
 Criteria: 3 to 5 Casing Volumes of Water Removal ☒ Stabilization of Indicator Parameters ☒ Other on bail dry

Gal/ft x ft of water	Water Volume In Well		Gal/oz to be removed
	Gallons	Ounces	
<u>.65 x 5.65</u>	<u>3.67</u>		<u>11.01</u>

Time (military)	pH	SC (umhos/cm)	Temp (°C)	Eh-ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (gal.)	Comments/ Flow rate
<u>1140</u>	<u>683</u>	<u>787</u>	<u>13.9</u>				<u>1</u>	<u>Some of footings yellow</u>
	<u>685</u>	<u>734</u>	<u>12.8</u>				<u>2</u>	
	<u>695</u>	<u>739</u>	<u>12.2</u>				<u>3</u>	
	<u>696</u>	<u>724</u>	<u>11.5</u>				<u>4</u>	
	<u>709</u>	<u>756</u>	<u>11.4</u>				<u>5</u>	<u>Clear</u>
	<u>714</u>	<u>766</u>	<u>11.2</u>				<u>6</u>	
	<u>715</u>	<u>766</u>	<u>11.4</u>				<u>7</u>	
	<u>715</u>	<u>772</u>	<u>11.4</u>				<u>8</u>	
	<u>732</u>	<u>797</u>	<u>11.3</u>				<u>9</u>	
	<u>719</u>	<u>755</u>	<u>11.0</u>				<u>10</u>	
	<u>727</u>	<u>773</u>	<u>11.0</u>				<u>11</u>	
<u>1159</u>	<u>727</u>	<u>776</u>	<u>10.7</u>				<u>12</u>	<u>Grey</u>
<u>1202</u>		<u>Sample</u>						

Final:
 Time 1159 pH 727 SC 776 Temp 10.7 Eh-ORP _____ D.O. _____ Turbidity _____ Ferrous Iron _____ Vol Evac. 12 Comments/Flow rate _____

COMMENTS: Eastern Ground Post removed by surveyors
Let's put in its place

INSTRUMENTATION: pH Meter ☒ _____ Temperature Meter ☒ _____
 DO Monitor ☐ _____ Other ☐ _____
 Conductivity Meter ☒ _____

Water Disposal Kutz
 Sample ID Linderth B No 24 MW-1 Sample Time 1202 BTEX ☒ VOCs ☐ Alkalinity ☐

TDS ☐ Cations ☐ Anions ☐ Nitrate ☐ Nitrite ☐ Ammonia ☐ TKN ☐ NM WQCC Metals ☐
 Total Phosphorus ☐ _____
 MS/MSD _____ BD _____ BD Name/Time _____ TB TB160203-

Product Recovery and Well Observation Data

Project Name: San Juan Basin
 Project Manager: MTN
 Client Company: MWH
 Site Name: Linderoth B 24

Project No: 220013
 Date: 2-26-03

Well	Time	Depth to Water (ft)	Depth to Product (ft)	Total Well Depth (ft)	Product Thickness (ft)	Volume Removed	Comments
MW-1	1130	26'5	N ₂				
MW-2	1117	24'9.75	N ₂				
MW-3	1112	26'5	N ₂				
		25.38					

COMMENTS: System guard post removed by surveyor
and a lathe put in its place

Signature: [Signature]

Date: 2-26-03