

LABORATORY NUMBER: 104631
 CLIENT: AQUA RESOURCES
 PROJECT ID: 90239.3
 LOCATION: RANSOME

DATE RECEIVED: 07/26/91
 DATE ANALYZED: 07/30/91
 DATE REPORTED: 08/02/91

Total Volatile Hydrocarbons with BTXE in Soils and Wastes
 TVH by California DOHS Method/LUFT Manual October 1989
 BTXE by EPA 5030/8020

LAB ID	SAMPLE ID	TVH AS GASOLINE (mg/Kg)	BENZENE (ug/Kg)	TOLUENE (ug/Kg)	ETHYL BENZENE (ug/Kg)	TOTAL XYLENES (ug/Kg)
104631-11	<u>SP-J1-1,2,3,4</u>	23	250	11	33	460

ND = Not detected at or above reporting limit; Reporting limit
 indicated in parentheses.

QA/QC SUMMARY

RPD, % 5
 RECOVERY, % 102

LABORATORY NUMBER: 104631
 CLIENT: AQUA RESOURCES
 PROJECT ID: 90239.3
 LOCATION: RANSOME

DATE RECEIVED: 07/26/91
 DATE EXTRACTED: 07/29/91
 DATE ANALYZED: 08/01-02/91
 DATE REPORTED: 08/02/91

Extractable Petroleum Hydrocarbons in Soils & Wastes
 California DOHS Method
 LUFT Manual October 1989

LAB ID	SAMPLE ID	KEROSENE RANGE (mg/Kg)	DIESEL RANGE (mg/Kg)	REPORTING LIMIT* (mg/Kg)
104631-11	SP-J1-1,2,3,4	ND	98	1.0

ND = Not Detected at or above reporting limit.

*Reporting limit applies to all analytes.

QA/QC SUMMARY

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=====
RPD, %                                18
RECOVERY, %                            117
=====
  
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Client: Aqua Resources

Laboratory Login Number: 104631

Project Name: Ransome
Project Number: 90239.3

Report Date: 05 August 91

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric)

METHOD: SMWW 17:5520EF

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
104631-011	SP-J1-1,2,3,4	Soil	26-JUL-91	26-JUL-91	31-JUL-91	2000	mg/Kg	50	TR	2193

ND = Not Detected at or above Reporting Limit (RL).

Q C B a t c h R e p o r t

 Client: Aqua Resources
 Project Name: Ransome
 Project Number: 90239.3

 Laboratory Login Number: 104631
 Report Date: 02 August 91

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric)

QC Batch Number: 2193

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	50	mg/Kg	SMWW 17:5520EF	31-JUL-91

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	91%	SMWW 17:5520EF	31-JUL-91
BSD	89%	SMWW 17:5520EF	31-JUL-91

		Control Limits
Average Spike Recovery	90%	80% - 120%
Relative Percent Difference	2.6%	< 20%

AQUA RESOURCES, INC.



CHAIN OF CUSTODY RECORD

SHIPMENT NO.: 31

PAGE 1 OF 1

DATE 7/26/91

PROJECT NAME: RANSOME

PROJECT NO.: 90239.3

Sample Number	Location (Depth-ft)	Type of Sample		Type of Container	Type of Preservation		Analysis Required
		Material	Method		Temp	Chemical	
SP-TI-1	4 1/2	Soil	Drive	Brass Tube	±4°C		COMPOSITE AND RUN 11 ANALYSIS 1, 2, 3
SP-TI-2	3	"	"	"	"		
SP-TI-3	6 1/2	"	"	"	"		
SP-TI-4	2 1/2	"	"	"	"		
TP-J-1	9 1/2	"	"	"	"		1
TP-J-2	5 1/2	"	"	"	"		1
TP-T-3	9 1/2	"	"	"	"		1, 2, 3
DE-45*	5	"	"	"	"		1, 2
DB-46	10 1/2	"	"	"	"		1
DS-47	6	"	"	"	"		

Total Number of Samples Shipped: 10 Sampler's Signature: [Signature]

Relinquished By: Signature: <u>[Signature]</u> Printed Name: <u>Aaron M. Stessman</u> Company: <u>Aqua Resources</u> Reason: <u>For Analysis</u>	Received By: Signature: <u>[Signature]</u> Printed Name: <u>Lourinda Brewer</u> Company: <u>CT - Berkeley</u>	Date: <u>7/26/91</u> Time: _____
Relinquished By: Signature: _____ Printed Name: _____ Company: _____ Reason: _____	Received By: Signature: _____ Printed Name: _____ Company: _____	Date: <u>1/1</u> Time: _____

REMARKS:

- ① = TVHG + BTEX
- ② = TPHD
- ③ = O&G
- ④ = TVHG only
- * = 48 hr. Rest

5 day turnaround on all samples

Special Shipment / Handling / Storage Requirements:



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

DATE RECEIVED: 08/07/91
DATE REPORTED: 08/20/91

LABORATORY NUMBER: 104747

AQUA RESOURCES, INC.
RECEIVED

AUG 23 1991

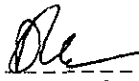
CLIENT: AQUA RESOURCES, INC.

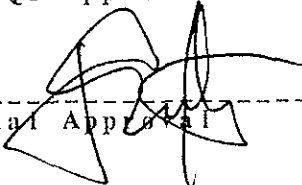
JOB NO. _____
FILE _____

PROJECT ID: 90239.3

LOCATION: RANSOME

RESULTS: SEE ATTACHED



QA/QC Approval


Final Approval

Client: Aqua Resources

Laboratory Login Number: 104747

Project Name: Ransome
Project Number: 90239.3

Report Date: 20 August 91

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) METHOD: SMWW 17:5520EF

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
104747-009	SP-J1-5,6,7,8	Soil	07-AUG-91	07-AUG-91	09-AUG-91	440	mg/Kg	50	TR	2294
104747-010	SP-J1-9,10,11,12	Soil	07-AUG-91	07-AUG-91	09-AUG-91	310	mg/Kg	50	TR	2294

ND = Not Detected at or above Reporting Limit (RL).

Q C B a t c h R e p o r t

Client: Aqua Resources
 Project Name: Ransome
 Project Number: 90239.3

Laboratory Login Number: 104747
 Report Date: 20 August 91

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric)

QC Batch Number: 2294

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	50	mg/Kg	SMWW 17:5520EF	09-AUG-91

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	81%	SMWW 17:5520EF	09-AUG-91
BSD	85%	SMWW 17:5520EF	09-AUG-91

		Control Limits
Average Spike Recovery	83%	80% - 120%
Relative Percent Difference	4.6%	< 20%

LABORATORY NUMBER: 104747
 CLIENT: AQUA RESOURCES, INC.
 PROJECT ID: 90239.3
 LOCATION: RANSOME

DATE RECEIVED: 08/07/91
 DATE ANALYZED: 08/10,13/91
 DATE REPORTED: 08/20/91

Total Volatile Hydrocarbons with BTXE in Soils and Wastes
 TVH by California DOHS Method/LUFT Manual October 1989
 BTXE by EPA 5030/8020

LAB ID	SAMPLE ID	TVH AS GASOLINE (mg/Kg)	BENZENE (ug/Kg)	TOLUENE (ug/Kg)	ETHYL BENZENE (ug/Kg)	TOTAL XYLENES (ug/Kg)
104747-9	SP-J1-5,6,7,8	6.2	ND(5.0)	ND(5.0)	19	120
104747-10	SPJ1-9,10,11,12	5.2	ND(5.0)	ND(5.0)	16	97

ND = Not detected at or above reporting limit; Reporting limit indicated in parentheses.

QA/QC SUMMARY

RPD, %	3
RECOVERY, %	101

LABORATORY NUMBER: 104747
 CLIENT: AQUA RESOURCES, INC.
 PROJECT ID: 90239.3
 LOCATION: RANSOME

DATE RECEIVED: 08/07/91
 DATE EXTRACTED: 08/08/91
 DATE ANALYZED: 08/09,17/91
 DATE REPORTED: 08/20/91

Extractable Petroleum Hydrocarbons in Soils & Wastes
 California DOHS Method
 LUFT Manual October 1989

LAB ID	SAMPLE ID	KEROSENE RANGE (mg/Kg)	DIESEL RANGE (mg/Kg)	REPORTING LIMIT* (mg/Kg)
104747-9	SP-J1-5,6,7,8	ND	53	10
104747-10	SP-J1-9,10,11,12	ND	79	10

ND = Not Detected at or above reporting limit.

*Reporting limit applies to all analytes.

QA/QC SUMMARY

RPD, %	<1
RECOVERY, %	81

AQUA RESOURCES, INC.

SHIPMENT NO.: 44

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

DATE 8/14/91

PROJECT NAME: RANSOME

PROJECT NO.: 90239.3

Sample Number	Location (DEPTH)	Type of Sample		Type of Container	Type of Preservation		Analysis Required
		Material	Method		Temp	Chemical	
JS-63 1	8'	Soil	Drive	Brass Tube	Exc		1, 2, 3
JS-64 1	7 1/2'	"	"	"	"		1*
JB-65 2	13'	"	"	"	"		1*
JS-66 2	8'	"	"	"	"		1, 2, 3
JB-67 3	13'	"	"	"	"		1*
JS-68 3	9'	"	"	"	"		

Total Number of Samples Shipped: <u>6</u>		Sampler's Signature: <u>[Signature]</u>		Date: <u>8/14/91</u>
Relinquished By: <u>[Signature]</u>		Received By: <u>[Signature]</u>		Time: <u>4:50</u>
Signature: <u>[Signature]</u>		Signature: <u>[Signature]</u>		
Printed Name: <u>Aaron K. Stessman</u>		Printed Name: <u>Nancy Wilson</u>		
Company: <u>Aqua Resources</u>		Company: <u>C-Tab</u>		
Reason: <u>For Analysis</u>				
Relinquished By:		Received By:		Date:
Signature:		Signature:		Time:
Printed Name:		Printed Name:		
Company:		Company:		
Reason:				

REMARKS:

- ① = TVH + BTEX
- ② = TEAD
- ③ = OFG
- * = AB hr rush others 5 day

Special Shipment / Handling / Storage Requirements:

LABORATORY NUMBER: 104631
 CLIENT: AQUA RESOURCES
 PROJECT ID: 90239.3
 LOCATION: RANSOME

DATE RECEIVED: 07/26/91
 DATE ANALYZED: 07/30/91
 DATE REPORTED: 08/02/91

Total Volatile Hydrocarbons with BTXE in Soils and Wastes
 TVH by California DOHS Method/LUFT Manual October 1989
 BTXE by EPA 5030/8020

LAB ID	SAMPLE ID	TVH AS GASOLINE (mg/Kg)	BENZENE (ug/Kg)	TOLUENE (ug/Kg)	ETHYL BENZENE (ug/Kg)	TOTAL XYLENES (ug/Kg)
104631-11	<u>SP-J1-1,2,3,4</u>	23	250	11	33	460

ND = Not detected at or above reporting limit; Reporting limit
 indicated in parentheses.

QA/QC SUMMARY

=====
 RPD, % 5
 RECOVERY, % 102
 =====

LABORATORY NUMBER: 104631
 CLIENT: AQUA RESOURCES
 PROJECT ID: 90239.3
 LOCATION: RANSOME

DATE RECEIVED: 07/26/91
 DATE EXTRACTED: 07/29/91
 DATE ANALYZED: 08/01-02/91
 DATE REPORTED: 08/02/91

Extractable Petroleum Hydrocarbons in Soils & Wastes
 California DOHS Method
 LUFT Manual October 1989

LAB ID	SAMPLE ID	KEROSENE RANGE (mg/Kg)	DIESEL RANGE (mg/Kg)	REPORTING LIMIT* (mg/Kg)
104631-11	<u>SP-J1-1,2,3,4</u>	ND	98	1.0

ND = Not Detected at or above reporting limit.

*Reporting limit applies to all analytes.

QA/QC SUMMARY

RPD, %	18
RECOVERY, %	117

Client: Aqua Resources

Laboratory Login Number: 104631

Project Name: Ransome
Project Number: 90239.3

Report Date: 05 August 91

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) METHOD: SMWW 17:5520EF

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
104631-011	SP-J1-1,2,3,4	Soil	26-JUL-91	26-JUL-91	31-JUL-91	2000	mg/Kg	50	TR	2193

ND = Not Detected at or above Reporting Limit (RL).

Q C B a t c h R e p o r t

 Client: Aqua Resources
 Project Name: Ransome
 Project Number: 90239.3

 Laboratory Login Number: 104631
 Report Date: 02 August 91

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric)

QC Batch Number: 2193

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	50	mg/Kg	SMWW 17:5520EF	31-JUL-91

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	91%	SMWW 17:5520EF	31-JUL-91
BSD	89%	SMWW 17:5520EF	31-JUL-91

		Control Limits
Average Spike Recovery	90%	80% - 120%
Relative Percent Difference	2.6%	< 20%

AQUA RESOURCES, INC.

SHIPMENT NO.: 31
 PAGE 1 OF 1
 DATE 7/26/91



CHAIN OF CUSTODY RECORD

PROJECT NAME: RANSOME
 PROJECT NO.: 90239.3

Sample Number	Location (Depth - ft)	Type of Sample		Type of Container	Type of Preservation		Analysis Required
		Material	Method		Temp	Chemical	
SP-TI-1	4 1/2	Soil	Drive	Brass Tube	±4°C		COMPOSITE AND RUN 11 ANALYSIS 1, 2, 3
SP-TI-2	3	"	"	"	"		
SP-TI-3	6 1/2	"	"	"	"		
SP-TI-4	2 1/2	"	"	"	"		
TP-J-1	9 1/2	"	"	"	"		1
TP-J-2	5 1/2	"	"	"	"		1
TP-J-3	9 1/2	"	"	"	"		1, 2, 3
DF-45*	5	"	"	"	"		1, 2
DB-46	7 1/2	"	"	"	"		1
DS-47	6	"	"	"	"		

Total Number of Samples Shipped: 10 Sampler's Signature: [Signature]

Relinquished By: Signature: <u>[Signature]</u> Printed Name: <u>Aaron N. Stessman</u> Company: <u>Aqua Resources</u> Reason: <u>For Analysis</u>	Received By: Signature: <u>[Signature]</u> Printed Name: <u>Lourinda Brewer</u> Company: <u>CT - Berkeley</u>	Date: <u>7/26/91</u> Time: _____
Relinquished By: Signature: _____ Printed Name: _____ Company: _____ Reason: _____	Received By: Signature: _____ Printed Name: _____ Company: _____	Date: <u>1/1</u> Time: _____

REMARKS:
 (1) = TVHG + BTEX
 (2) = TPHD
 (3) = O&G
 (4) = TVHG only
 * = 43 hr. Resl
 5 day turnaround on all samples

Special Shipment / Handling / Storage Requirements:



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

DATE RECEIVED: 08/07/91

DATE REPORTED: 08/20/91

LABORATORY NUMBER: 104747

AQUA RESOURCES, INC.
RECEIVED

AUG 23 1991


CLIENT: AQUA RESOURCES, INC.


JOB NO. _____
FILE _____

PROJECT ID: 90239.3

LOCATION: RANSOME

RESULTS: SEE ATTACHED



QA/QC Approval


Final Approval

Client: Aqua Resources

Laboratory Login Number: 104747

Project Name: Ransome
Project Number: 90239.3

Report Date: 20 August 91

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) METHOD: SMWW 17:5520EF

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
104747-009	SP-J1-5,6,7,8	Soil	07-AUG-91	07-AUG-91	09-AUG-91	440	mg/Kg	50	TR	2294
104747-010	SP-J1-9,10,11,12	Soil	07-AUG-91	07-AUG-91	09-AUG-91	310	mg/Kg	50	TR	2294

ND = Not Detected at or above Reporting Limit (RL).

Q C B a t c h R e p o r t

 Client: Aqua Resources
 Project Name: Ransome
 Project Number: 90239.3

 Laboratory Login Number: 104747
 Report Date: 20 August 91

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric)

QC Batch Number: 2294

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	50	mg/Kg	SMWW 17:552OEF	09-AUG-91

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	81%	SMWW 17:552OEF	09-AUG-91
BSD	85%	SMWW 17:552OEF	09-AUG-91

		Control Limits
Average Spike Recovery	83%	80% - 120%
Relative Percent Difference	4.6%	< 20%

LABORATORY NUMBER: 104747
 CLIENT: AQUA RESOURCES, INC.
 PROJECT ID: 90239.3
 LOCATION: RANSOME

DATE RECEIVED: 08/07/91
 DATE ANALYZED: 08/10,13/91
 DATE REPORTED: 08/20/91

Total Volatile Hydrocarbons with BTXE in Soils and Wastes
 TVH by California DOHS Method/LUFT Manual October 1989
 BTXE by EPA 5030/8020

LAB ID	SAMPLE ID	TVH AS GASOLINE (mg/Kg)	BENZENE (ug/Kg)	TOLUENE (ug/Kg)	ETHYL BENZENE (ug/Kg)	TOTAL XYLENES (ug/Kg)
104747-9	SP-J1-5,6,7,8	6.2	ND(5.0)	ND(5.0)	19	120
104747-10	SPJ1-9,10,11,12	5.2	ND(5.0)	ND(5.0)	16	97

ND = Not detected at or above reporting limit; Reporting limit indicated in parentheses.

QA/QC SUMMARY

RPD, %	3
RECOVERY, %	101

LABORATORY NUMBER: 104747
 CLIENT: AQUA RESOURCES, INC.
 PROJECT ID: 90239.3
 LOCATION: RANSOME

DATE RECEIVED: 08/07/91
 DATE EXTRACTED: 08/08/91
 DATE ANALYZED: 08/09,17/91
 DATE REPORTED: 08/20/91

Extractable Petroleum Hydrocarbons in Soils & Wastes
 California DOHS Method
 LUFT Manual October 1989

LAB ID	SAMPLE ID	KEROSENE RANGE (mg/Kg)	DIESEL RANGE (mg/Kg)	REPORTING LIMIT* (mg/Kg)
104747-9	SP-J1-5,6,7,8	ND	53	10
104747-10	SP-J1-9,10,11,12	ND	79	10

ND = Not Detected at or above reporting limit.

*Reporting limit applies to all analytes.

QA/QC SUMMARY

RPD, %	<1
RECOVERY, %	81

AQUA RESOURCES, INC.

SHIPMENT NO.: 44

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

DATE 8/14/91

PROJECT NAME: RANSOME
PROJECT NO.: 90239.3

4838-und

Sample Number	Location (Depth)	Type of Sample		Type of Container	Type of Preservation		Analysis Required
		Material	Method		Temp	Chemical	
JS-63 1	8'	Soil	Drive	Brass Tube	4°C		1, 2, 3
JS-64 1	7 1/2'	"	"	"	"		1*
JB-65 2	13'	"	"	"	"		1
JS-66 2	8'	"	"	"	"		1*
JB-67 3	13'	"	"	"	"		1, 2, 3
JS-68 3	9'	"	"	"	"		1*

Total Number of Samples Shipped: <u>6</u>	Sampler's Signature: <u>[Signature]</u>	Date: <u>8/14/91</u>
Relinquished By: Signature: <u>[Signature]</u> Printed Name: <u>Aaron R. Stessman</u> Company: <u>Aqua Resources</u> Reason: <u>For Analysis</u>	Received By: Signature: <u>[Signature]</u> Printed Name: <u>Nancy Wilson</u> Company: <u>C. Lab</u>	Time: <u>4:50</u>
Relinquished By: Signature: _____ Printed Name: _____ Company: _____ Reason: _____	Received By: Signature: _____ Printed Name: _____ Company: _____	Date: _____ Time: _____

REMARKS:
 ① = TVH + BTEX
 ② = TEHD
 ③ = O&G
 * = AB hr rush others 5 day

Special Shipment / Handling / Storage Requirements: