



AE Order Number Banner

Report Description

This report shows an AE Order Number in Barcode format for purposes of scanning. The Barcode format is Code 39.



App Number: pJXK1621129540

1RP - 4373

JAY MANAGEMENT COMPANY, LLC

District I
1625 N. French Dr., Hobbs, NM 88240

HOBBS OCD

State of New Mexico
Energy Minerals and Natural Resources

Form C-141
Revised October 10, 2003

District II
1301 W. Grand Avenue, Artesia, NM 88210

MAY 19 2011

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

District III
1000 Rio Brazos Road, Aztec, NM 87410

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

RECEIVED

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

Name of Company	Jay Management Co., LLC	Contact	Karen Friday
Address	2425 West Loop South, Ste 810, Houston, TX 77042	Telephone No.	713 456-7892
Facility Name	Sohio A State #1	Facility Type	Tank Battery
Surface Owner	Ricky Pierce	Mineral Owner	State of New Mexico
		Lease No.	011342

LOCATION OF RELEASE

30 02S 22206

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	4	11S	33E	660	South	1980	East	Lea

Latitude 33.38946634729 Longitude -103.617233498763

NATURE OF RELEASE

Type of Release	Oil released when lightning struck oil tank	Volume of Release	194 BO	Volume Recovered	0 bbls
Source of Release	Oil Tank	Date and Hour of Occurrence	May 10, 2011 evening	Date and Hour of Discovery	May 11, 2011 morning
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?			
By Whom?		Date and Hour			
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.* No

Describe Cause of Problem and Remedial Action Taken.*
Lightning struck tank and ruptured the tank. Oil escaped on the ground

Describe Area Affected and Cleanup Action Taken.*
Picked up approximately 25 Bbls of burnt trash oil and disposed of it. The rest had soaked in and was unable to recover. Most of the oil was contained in the firewall but some escape and ran down the road and soaked in. We scrapped up the oily surface dirt and backfilled with clean dirt.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <i>Karen Friday</i>	OIL CONSERVATION DIVISION		
Printed Name: Karen Friday	Approved by District Supervisor:		
Title: Production Analyst	Approval Date:	Expiration Date:	
E-mail Address: karenf@isramco-jay.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 5/17/2011	Phone: 713 456-7892		

* Attach Additional Sheets If Necessary

Carr Environmental Group, Inc.
504 Spring Hill Dr., Suite 300, Spring, Texas 77386
T 281.872.9300 F 281.872.4521 www.ceg-group.com

HOBBS OCD



AUG 05 2011

RECEIVED

August 1, 2011

Mr. Geoffrey R. Leking
New Mexico Oil Conservation Division
1625 N. French Drive
Hobbs, New Mexico 88240

Re: Assessment Report
Jay Management
Sohio A State No. 1 Tank Battery Condensate Release
Bagley North Field - Lea County, New Mexico
SW1/4 SE1/4, Sec. 4, T11S R33E

WATER @ 40'

Dear Mr. Leking:

At the request of Jay Management, LLC (Jay Management), Carr Environmental Group, Inc. (CEG) has prepared this letter to document the assessment activities following a condensate release at the Sohio A State No. 1 Tank Battery in Lea County, New Mexico ('Site').

The Site consists of two 400 barrel (bbl) condensate storage tanks, a separator, and an oil/gas wellhead with pumping unit.

A lightning strike to a 400 bbl welded steel condensate storage tank resulted in the release of an estimated 194 bbls of condensate. Released fluids impacted approximately 7,730 ft².

The Site is located approximately 5.6 miles east of Caprock, New Mexico (Figures 1 & 2). The surrounding area is characterized as flat to slightly sloping rural land used for cattle grazing and oil/gas production. Soils at the Site consist of gravelly loam, underlain by cemented petrocalcic soils. Surface flow is to the southeast.

Release Discovery/Response

The release was discovered and reported by Jay Management's pumper, Clarence Craig on 05/14/2011. Upon release discovery, Jay Management personnel immediately vacuumed the released condensate, recovering approximately 25 bbls.

During an inspection on 06/20/2011, CEG noted released fluids at the Site had flowed south from the point of release and breached the tank battery's secondary containment. Fluids then traveled east across and alongside the Site entrance road approximately 300 ft before terminating. A site plat depicting the spill trajectory is shown on Figure 3. Site photographs are included in the Photographic Log.

Collection of Soil Samples

On 06/20/2011 through 06/23/2011, soil samples were collected at the Site to determine the extent of soil impacts. CEG advanced 18 soil borings and collected 17 soil samples using either a pickaxe or backhoe to vertically and horizontally delineate impacted soils. A single five point composite sample (COMP No. 1) was collected from impacted soils at the Site to obtain a representative sample of impacted soils. Two additional soil borings were advanced in undisturbed areas at the Site to obtain soil samples to determine native constituents of concern (COC) concentrations. Sampling equipment was decontaminated between samples using Alconox and deionized water to eliminate cross contamination. Sample locations are shown in Figure 3.

The vertical extent of impacted soils could not be determined because cemented petrocalcic soil material was encountered 5.5 ft below ground surface (bgs). All samples were placed in laboratory-provided sample containers, stored on ice, and transported under proper chain-of-custody protocol to Accutest[®] Laboratories in Houston, Texas.

Sample Analysis

Soil samples were analyzed for the following COC: total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene, xylenes (BTEX), and chlorides.

Laboratory reports containing analytical methods, results and chain-of-custody documents are attached. Analytical results are summarized in Table 1 (attached).

Cleanup Criteria

The New Mexico Oil Conservation Division (OCD) has established cleanup criteria for soils impacted by oilfield products or wastes, which are documented in the *Guidelines for Remediation of Leaks, Spills and Releases*.

The OCD has established a ranking system that determines a site's potential to contaminate based upon its distance to water resources. The cleanup criteria are dependent upon a sites total ranking score. The ranking system and cleanup criteria are summarized in Table 2 and 3, respectively.

Table 2. OCD Ranking System

Category	Distance to Resource (ft)	Score
Depth to groundwater	< 50	20
	50 to 99	10
	> 100	0
Wellhead protection	< 200	20
	> 200	0
Surface water protection	< 200	20
	200 to 1,000	10
	> 1,000	0

Sites receive a score from each category. The three scores are summed to reach a total ranking score. The score provides site-specific cleanup criteria for individual sites. Based on prior environmental drilling activities at the Site, groundwater is first encountered approximately 45 ft bgs, which results in a score of 20. No surface water or wellhead is located within 1,000 feet of the Site, which results in a score of 0 for both categories. Therefore, the total ranking score at the Site is 20.

The cleanup criteria established by the OCD are presented in Table 4 below.

Table 3. OCD Soil Cleanup Criteria by Total Ranking Score

Constituent	Total Ranking Score		
	> 19	10-19	0-9
	Cleanup Criteria (mg/kg)		
Benzene	10	10	10
Total BTEX	50	50	50
TPH	100	1,000	5,000
Chlorides	250	500	1,000

BTEX – benzene, toluene, ethylbenzene and xylenes
 TPH – total petroleum hydrocarbons
 mg/kg – milligrams per kilograms

Conclusions

Based on OCD cleanup criteria and analytical results, the following is concluded:

- Soils at the Site are impacted by chlorides, TPH, benzene, and total BTEX.
- The horizontal extent of all COCs have been delineated.
- The vertical extent of benzene, total BTEX, TPH, and chloride have not been delineated



Mr. Leking
August 1, 2011
Page 4 of 4

Further Actions

In August 2011, additional soil borings will be advanced to vertically delineate petroleum hydrocarbon and chloride impacts at the Site. Borings will be advanced with a drilling rig and soils will be field screened with a photoionization detector. Samples will be collected and analyzed for BTEX, TPH, and chloride. Following sample collection and analysis, CEG will submit findings and present a remedial action plan to address impacted soils at the Site.

If you have any questions regarding this letter or need further assistance, please call us at 281-872-9300.

Sincerely,
CEG, INC.



Gordon Banks
Project Manager



Jim Foster
Principal-in-Charge

Attachments – Tables
Figures
Photographic Log
Laboratory Analytical Reports and Chain-of-Custody Documents

Table 1. Analytical Results of Soil Samples

Sample ID	Petroleum Hydrocarbons (mg/kg)						Chloride (mg/kg)
	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	TPH 1005	
SB-1 (2.5')	6.35	30.7	10.5	68.5	116.05	1,180	9,800
SB-1 (5.5')	3.1	24.6	12.4	86.5	126.6	4,390	8,500
SB-2 (4.5')	41.4	152	51.2	328	572.6	14,400	140
SB-3 (0-6")	0.0013J	< 0.00075	< 0.00077	0.0024J	0.0037J	< 4.9	21.1
SB-4 (0-6")	0.0134	0.0159	0.0032	0.0175	0.050	< 4.5	1,190
SB-5 (0-6")	< 0.00055	< 0.00073	< 0.00075	< 0.0019	< 0.0019	< 4.8	98
SB-6 (0-6")	< 0.00052	< 0.0007	< 0.00072	< 0.0018	< 0.0018	< 4.5	710
SB-7 (0-6")	0.0064	0.0025J	< 0.00088	0.0041J	0.013	< 5.6	37.2
SB-8 (0-6")	0.0016J	< 0.00072	< 0.00074	< 0.0019	0.0016J	< 4.6	8.6
SB-9 (0-6")	0.0014J	0.0013J	< 0.00073	< 0.0019	0.0027J	< 4.8	19.8
SB-10 (0-6")	0.0561	0.103	0.0159	0.0926	0.2676	< 4.8	10.5
SB-11 (0-6")	0.0018J	0.0014J	< 0.00079	< 0.002	0.0032J	< 5.1	18.5
SB-12 (2')	32.4	168	57.9	356	614.3	11,800	34.3
SB-12 (5')	17.4	91.7	35.2	226	370.3	12,700	280
COMP No. 1	0.073	1.22	1.15	8.17	10.613	2,840	146
BG-1	NA	NA	NA	NA	NA	NA	13.3
BG-2	NA	NA	NA	NA	NA	NA	28.9
Cleanup Criteria	10	--	--	--	50	100	250

— exceeds cleanup criteria

mg/kg – milligram per kilogram

BTEX – benzene, toluene, ethylbenzene, and xylenes

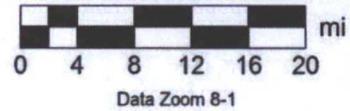
TPH – total petroleum hydrocarbons

NA – not analyzed

-- – not applicable



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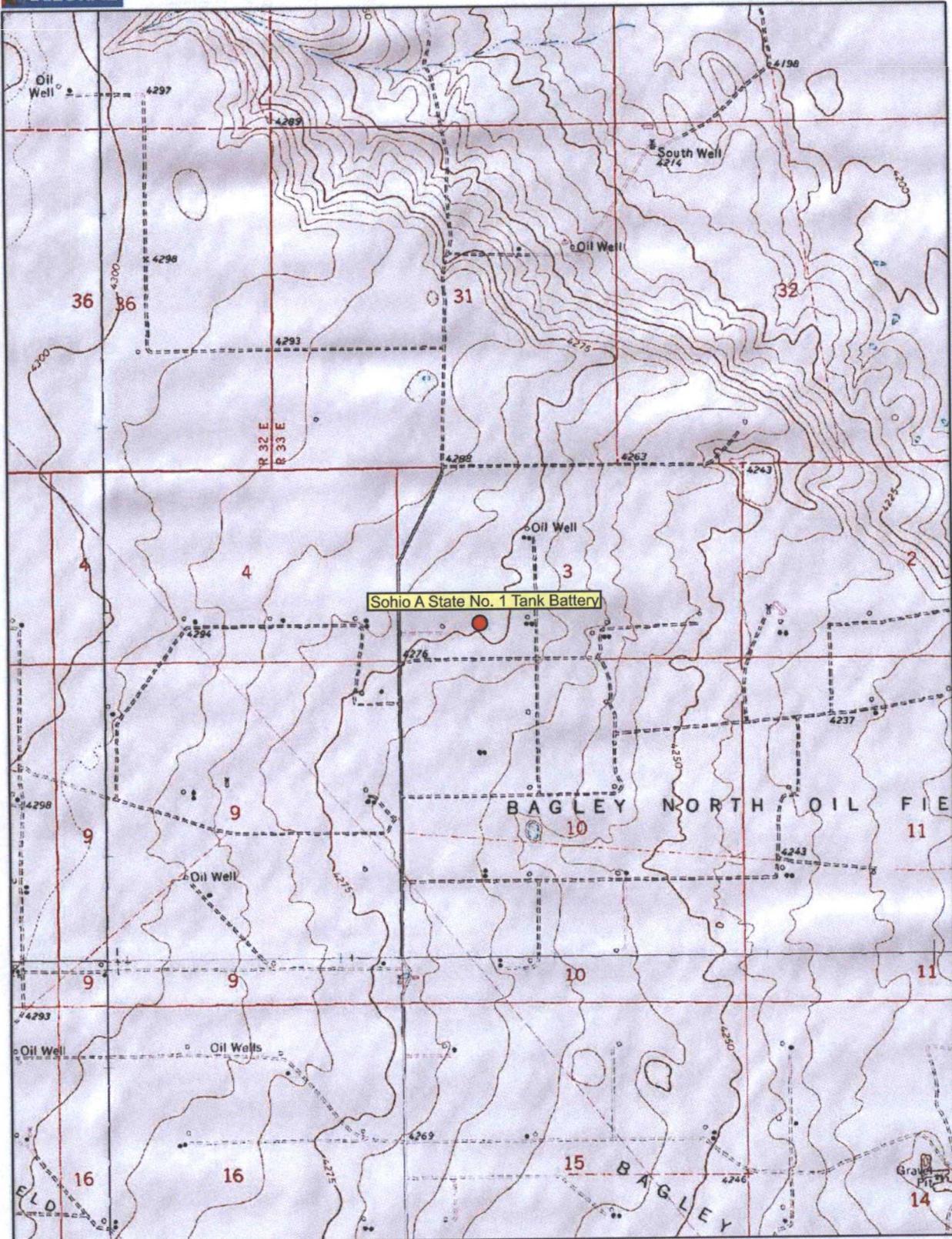


Prepared by:

 Date:
 07/07/2011

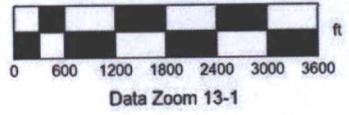
Assessment Report
 Isramco - Jay Management
 Sohio A State No. 1 Tank Battery Condensate Release
 Bagley North Field - Lea County, New Mexico
 SW1/4 SE1/4, Sec. 4, T11S R33E

Fig.
SITE LOCATION MAP
1



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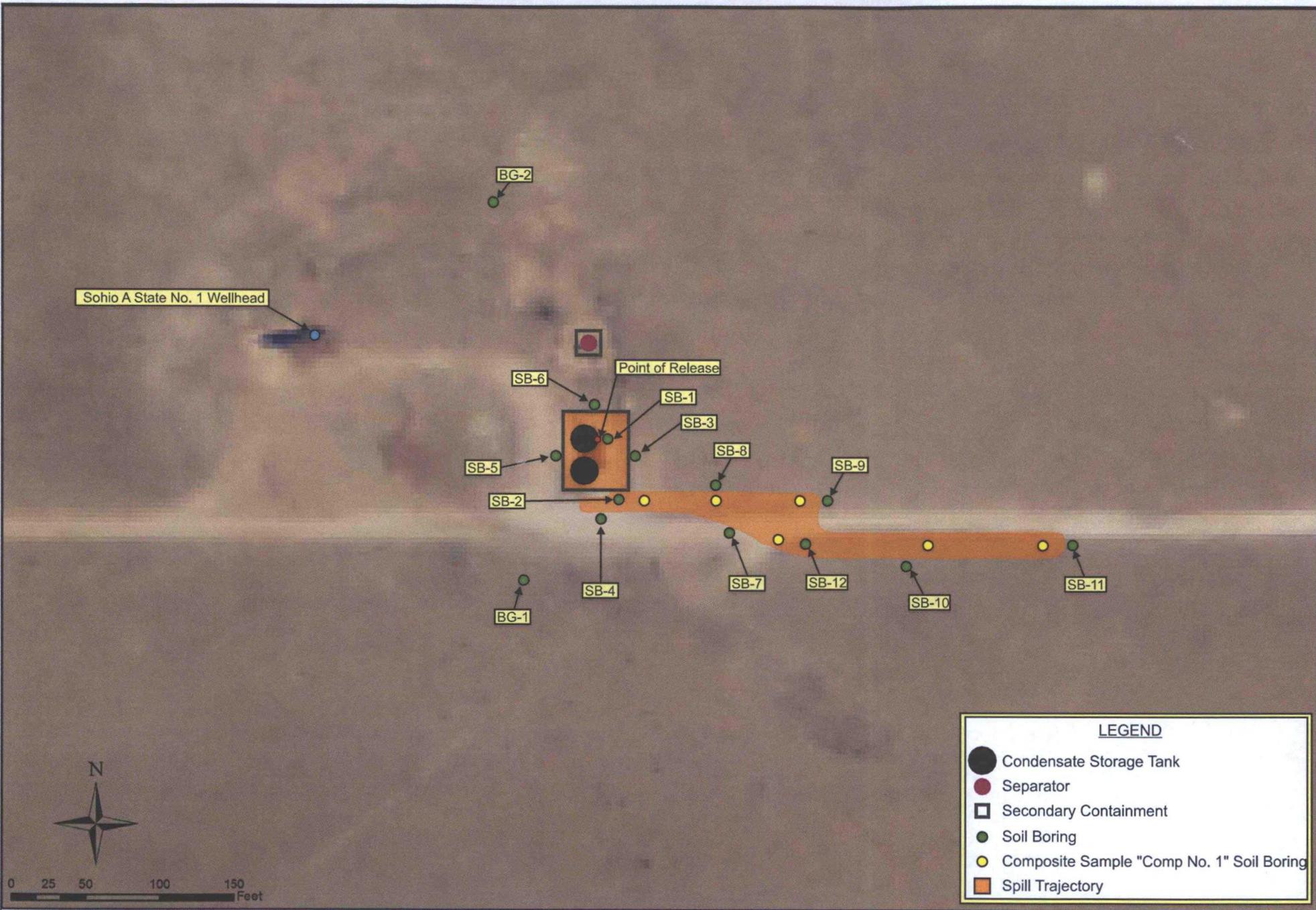
Prepared by:

 Date:
 07/07/2011

Assessment Report
 Isramco - Jay Management
 Sohio A State No. 1 Tank Battery Condensate Release
 Bagley North Field - Lea County, New Mexico
 SW1/4 SE1/4, Sec. 4, T11S R33E

AREA MAP

Fig.
2



Prepared by:

 CARR ENVIRONMENTAL GROUP, INC.
 Date: 07/07/2011

Assessment Report
 Isramco - Jay Management
 Sohio A State No. 1 Tank Battery Condensate Release
 Bagley North Field - Lea County, New Mexico
 SW1/4 SE1/4, Sec. 4, T11S R33E

SITE PLAT

Fig. **3**

CARR ENVIRONMENTAL GROUP, INC.
Photographic Log



Client: Isramco – Jay Management

Project No.: ISR_SAMP_1100419

Project Name: Sohio A State No. 1 Tank Battery
Condensate Release

Site Location: Lea County, New Mexico

Photograph No.
1

Photographer:
G. Sparks

Date:
06/20/2011

Direction:
Northeast

Comments:
View of tank
battery



Photograph No.
2

Photographer:
G. Sparks

Date:
06/20/2011

Direction:
Southeast

Comments:
View of
hydrocarbon
impacts on
west side of
tank battery



CARR ENVIRONMENTAL GROUP, INC.
Photographic Log



Client: Isramco – Jay Management

Project No.: ISR_SAMP_1100419

Project Name: Sohio A State No. 1 Tank Battery
Condensate Release

Site Location: Lea County, New Mexico

Photograph No.
3

Photographer:
G. Sparks

Date:
06/20/2011

Direction:
South

Comments:
View of
hydrocarbon
impacts on east
side of tank
battery



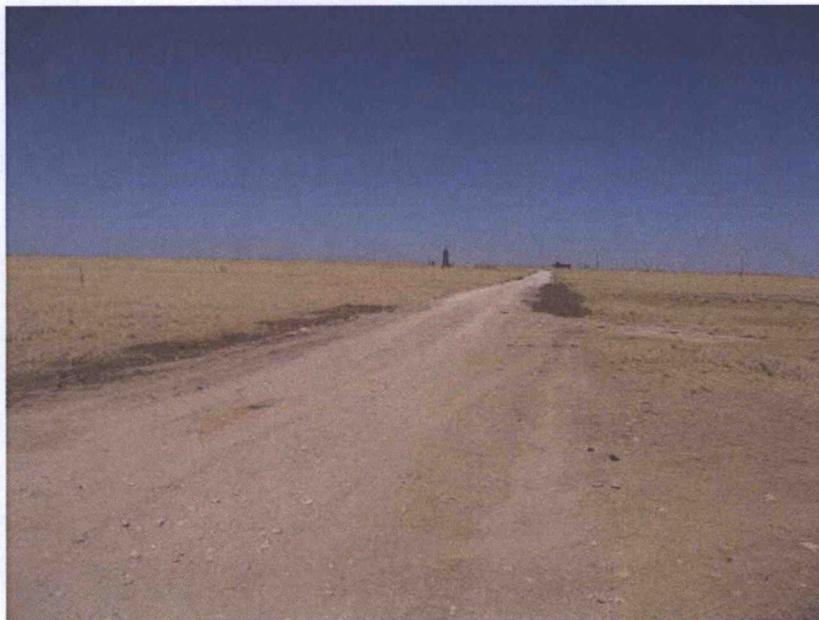
Photograph No.
4

Photographer:
G. Sparks

Date:
06/20/2011

Direction:
east

Comments:
View of
hydrocarbon
impacts along
the sides of the
entrance road





07/12/11

Technical Report for

Carr Environmental Group

Sohio A#1

ISR-11-419

Accutest Job Number: T79710

Sampling Dates: 06/20/11 - 06/22/11

Report to:

Carr Environmental Group
504 Spring Hill Drive, Suite 300
Spring, TX 77386
jwilson@ceg-group.com; gbanks@ceg-group.com;
eborden@ceg-group.com; jfoster@ceg-group.com;
ATTN: Jim Foster

Total number of pages in report: **69**



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.

Paul Canevaro
Laboratory Director

Client Service contact: Sonia West 713-271-4700

Certifications: TX (T104704220-10-3) AR (88-0756) FL (E87628) KS (E-10366) LA (85695/04004)
OK (9103)

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Test results relate only to samples analyzed.

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Sample Summary

Carr Environmental Group

Job No: T79710

Sohio A#1

Project No: ISR-11-419

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T79710-1	06/20/11	12:42	06/25/11	SO	Soil	SB-6(0-6")
T79710-2	06/20/11	12:53	06/25/11	SO	Soil	SB-5(0-6")
T79710-3	06/20/11	13:10	06/25/11	SO	Soil	SB-4(0-6")
T79710-4	06/20/11	13:17	06/25/11	SO	Soil	SB-3(0-6")
T79710-5	06/20/11	13:25	06/25/11	SO	Soil	BG-1
T79710-6	06/20/11	13:30	06/25/11	SO	Soil	BG-2
T79710-7	06/20/11	13:53	06/25/11	SO	Soil	SB-7(0-6")
T79710-8	06/20/11	14:04	06/25/11	SO	Soil	SB-8(0-6")
T79710-9	06/20/11	14:07	06/25/11	SO	Soil	SB-9(0-6")
T79710-10	06/20/11	14:16	06/25/11	SO	Soil	SB-10(0-6")
T79710-11	06/20/11	14:26	06/25/11	SO	Soil	SB-11(0-6")
T79710-12	06/20/11	14:45	06/25/11	SO	Soil	SB-12(2")
T79710-13	06/20/11	15:03	06/25/11	SO	Soil	COMP#1

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Sample Summary

(continued)

Carr Environmental Group

Job No: T79710

Sohio A#1

Project No: ISR-11-419

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T79710-14	06/21/11	07:42	06/25/11	SO	Soil	SB-1(2.5)
T79710-15	06/22/11	11:40	06/25/11	SO	Soil	SB-1(5.5)
T79710-16	06/22/11	11:57	06/25/11	SO	Soil	SB-2(4.5)
T79710-17	06/22/11	12:16	06/25/11	SO	Soil	SB-12(5')

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Carr Environmental Group

Job No T79710

Site: Sohio A#1

Report Date 7/9/2011 10:27:19 AM

17 Sample(s), were collected on between 06/20/2011 and 06/22/2011 and were received at Accutest on 06/25/2011 properly preserved, at 1.6 Deg. C and intact. These Samples received an Accutest job number of T79710. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GC By Method SW846 8021B

Matrix	SO	Batch ID:
		GKK1905

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T79710-2MS, T79710-2MSD were used as the QC samples indicated.
- Sample(s) T79710-15MS, T79710-15MSD, T79710-14 have surrogates outside control limits. Probable cause due to matrix interference.
- T79710-9: Sample was received unpreserved and outside the 48 hour preservation time.
- T79710-11: Sample was received unpreserved and outside the 48 hour preservation time.
- T79710-10: Sample was received unpreserved and outside the 48 hour preservation time.
- T79710-1: Sample was received unpreserved and outside the 48 hour preservation time.
- T79710-2: Sample was received unpreserved and outside the 48 hour preservation time.
- T79710-3: Sample was received unpreserved and outside the 48 hour preservation time.
- T79710-4: Sample was received unpreserved and outside the 48 hour preservation time.
- T79710-8: Sample was received unpreserved and outside the 48 hour preservation time.
- T79710-7: Sample was received unpreserved and outside the 48 hour preservation time.

Matrix	SO	Batch ID:
		GKK1907

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T79710-15MS, T79710-15MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Toluene, Xylenes (total) are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- Sample(s) T79710-15MS, T79710-15MSD, T79710-14 have surrogates outside control limits. Probable cause due to matrix interference.
- T79710-14: Sample was received unpreserved and outside the 48 hour preservation time.
- T79710-12: Sample was received unpreserved and outside the 48 hour preservation time.
- T79710-13: Sample was received unpreserved and outside the 48 hour preservation time.
- T79710-15: Sample was received unpreserved and outside the 48 hour preservation time.
- T79710-16: Sample was received unpreserved and outside the 48 hour preservation time.
- T79710-17: Sample was received unpreserved and outside the 48 hour preservation time.
- T79710-14: Confirmation run for surrogate recoveries.
- T79710-14 for aaa-Trifluorotoluene: Outside control limits due to matrix interference. Confirmed by reanalysis.
- T79710-15MS for aaa-Trifluorotoluene: Outside control limits due to matrix interference. Confirmed by MS/MSD.

Saturday, July 09, 2011

Page 1 of 3

Volatiles by GC By Method SW846 8021B

Matrix SO	Batch ID: GKK1907
------------------	--------------------------

- T79710-15MSD for aaa-Trifluorotoluene: Outside control limits due to matrix interference. Confirmed by MS/MSD.

Extractables by GC By Method TNRCC 1005

Matrix SO	Batch ID: OP19051
------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) OP19051-MSMSD, T79710-1MS, T79710-1MSD were used as the QC samples indicated.
- Sample(s) T79710-12, T79710-16, T79710-14, T79710-15, T79710-17 have surrogates outside control limits. Probable cause due to matrix interference.
- T79710-12 for aaa-Trifluorotoluene: Outside control limits due to dilution.
- T79710-12 for o-Terphenyl: Outside control limits due to dilution.
- T79710-16 for aaa-Trifluorotoluene: Outside control limits due to dilution.
- T79710-16 for o-Terphenyl: Outside control limits due to dilution.
- T79710-14 for o-Terphenyl: Outside control limits due to matrix interference.
- T79710-15 for o-Terphenyl: Outside control limits due to matrix interference.

Matrix SO	Batch ID: OP19054
------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) OP19054-MSMSD, T79787-7MS, T79787-7MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T79710-12, T79710-16, T79710-14, T79710-15, T79710-17 have surrogates outside control limits. Probable cause due to matrix interference.
- T79710-17 for o-Terphenyl: Outside control limits due to matrix interference.

Wet Chemistry By Method SM 2540 G

Matrix SO	Batch ID: GN32462
------------------	--------------------------

- Sample(s) T79613-9DUP were used as the QC samples for Solids, Percent.

Matrix SO	Batch ID: GN32599
------------------	--------------------------

- Sample(s) T79710-11DUP were used as the QC samples for Solids, Percent.

Matrix SO	Batch ID: GN32600
------------------	--------------------------

- Sample(s) T79710-17DUP were used as the QC samples for Solids, Percent.

Wet Chemistry By Method SW846 9056

Matrix SO	Batch ID: GP13779
------------------	--------------------------

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T79350-1MS, T79350-1DUP were used as the QC samples for Chloride.
- RPD(s) for Duplicate for Chloride are outside control limits for sample GP13779-D1. RPD acceptable due to low duplicate and sample concentrations.

Matrix SO	Batch ID: GP13780
------------------	--------------------------

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T79710-15DUP, T79710-15MS were used as the QC samples for Chloride.

Accutest Laboratories Gulf Coast (ALGC) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALGC and as stated on the COC. ALGC certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALGC Quality Manual except as noted above. This report is to be used in its entirety. ALGC is not responsible for any assumptions of data quality if partial data packages are used

Sample Results

Report of Analysis

Report of Analysis

3.1
3

Client Sample ID: SB-6(0-6")	
Lab Sample ID: T79710-1	Date Sampled: 06/20/11
Matrix: SO - Soil	Date Received: 06/25/11
Method: SW846 8021B	Percent Solids: 85.1
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK040597.D	1	06/28/11	LL	n/a	n/a	GKK1905
Run #2							

	Initial Weight	Final Volume
Run #1	5.45 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.3	0.52	ug/kg	
108-88-3	Toluene	ND	4.3	0.70	ug/kg	
100-41-4	Ethylbenzene	ND	4.3	0.72	ug/kg	
1330-20-7	Xylenes (total)	ND	13	1.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		21-163%
98-08-8	aaa-Trifluorotoluene	117%		39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

3.1
3

Client Sample ID: SB-6(0-6")							
Lab Sample ID: T79710-1				Date Sampled: 06/20/11			
Matrix: SO - Soil				Date Received: 06/25/11			
Method: TNRCC 1005 TX1005				Percent Solids: 85.1			
Project: Sohio A#1							

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL055449.D	1	06/29/11	EM	06/27/11	OP19051	GLB819
Run #2							

	Initial Weight	Final Volume
Run #1	10.8 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	27	4.5	mg/kg	
	TPH (> C12-C28)	ND	27	4.5	mg/kg	
	TPH (> C28-C35)	ND	27	4.5	mg/kg	
	TPH (C6-C35)	ND	27	4.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	106%		70-130%
98-08-8	aaa-Trifluorotoluene	114%		70-130%

ND = Not detected MDL - Method Detection Limit
 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

Client Sample ID: SB-5(0-6")	
Lab Sample ID: T79710-2	Date Sampled: 06/20/11
Matrix: SO - Soil	Date Received: 06/25/11
Method: SW846 8021B	Percent Solids: 84.7
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK040594.D	1	06/28/11	LL	n/a	n/a	GKK1905
Run #2							

	Initial Weight	Final Volume
Run #1	5.26 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.5	0.55	ug/kg	
108-88-3	Toluene	ND	4.5	0.73	ug/kg	
100-41-4	Ethylbenzene	ND	4.5	0.75	ug/kg	
1330-20-7	Xylenes (total)	ND	13	1.9	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	62%		21-163%
98-08-8	aaa-Trifluorotoluene	112%		39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

ND = Not detected MDL - Method Detection Limit
 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

3.2
3

Client Sample ID: SB-5(0-6")	
Lab Sample ID: T79710-2	Date Sampled: 06/20/11
Matrix: SO - Soil	Date Received: 06/25/11
Method: TNRCC 1005 TX1005	Percent Solids: 84.7
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL055440.D	1	06/29/11	EM	06/27/11	OP19051	GLF819
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	29	4.8	mg/kg	
	TPH (> C12-C28)	ND	29	4.8	mg/kg	
	TPH (> C28-C35)	ND	29	4.8	mg/kg	
	TPH (C6-C35)	ND	29	4.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	116%		70-130%
98-08-8	aaa-Trifluorotoluene	107%		70-130%

ND = Not detected MDL - Method Detection Limit
 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

Client Sample ID: SB-4(0-6")	
Lab Sample ID: T79710-3	Date Sampled: 06/20/11
Matrix: SO - Soil	Date Received: 06/25/11
Method: SW846 8021B	Percent Solids: 89.8
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK040598.D	1	06/28/11	LL	n/a	n/a	GKK1905
Run #2							

	Initial Weight	Final Volume
Run #1	5.20 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	13.4	4.3	0.52	ug/kg	
108-88-3	Toluene	15.9	4.3	0.70	ug/kg	
100-41-4	Ethylbenzene	3.2	4.3	0.71	ug/kg	J
1330-20-7	Xylenes (total)	17.5	13	1.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	72%		21-163%
98-08-8	aaa-Trifluorotoluene	101%		39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

ND = Not detected MDL - Method Detection Limit
 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

3.3
3

Client Sample ID: SB-4(0-6")	
Lab Sample ID: T79710-3	Date Sampled: 06/20/11
Matrix: SO - Soil	Date Received: 06/25/11
Method: TNRCC 1005 TX1005	Percent Solids: 89.8
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL055442.D	1	06/29/11	EM	06/27/11	OP19051	GLF819
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	27	4.5	mg/kg	
	TPH (> C12-C28)	ND	27	4.6	mg/kg	
	TPH (> C28-C35)	ND	27	4.6	mg/kg	
	TPH (C6-C35)	ND	27	4.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	117%		70-130%
98-08-8	aaa-Trifluorotoluene	111%		70-130%

ND = Not detected MDL - Method Detection Limit
 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

Client Sample ID: SB-3(0-6")	
Lab Sample ID: T79710-4	Date Sampled: 06/20/11
Matrix: SO - Soil	Date Received: 06/25/11
Method: SW846 8021B	Percent Solids: 80.7
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK040599.D	1	06/28/11	LL	n/a	n/a	GKK1905
Run #2							

	Initial Weight	Final Volume
Run #1	5.38 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	1.3	4.6	0.56	ug/kg	J
108-88-3	Toluene	ND	4.6	0.75	ug/kg	
100-41-4	Ethylbenzene	ND	4.6	0.77	ug/kg	
1330-20-7	Xylenes (total)	2.4	14	2.0	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	84%		21-163%
98-08-8	aaa-Trifluorotoluene	113%		39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

ND = Not detected MDL - Method Detection Limit
 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

3.4
3

Client Sample ID: SB-3(0-6")	
Lab Sample ID: T79710-4	Date Sampled: 06/20/11
Matrix: SO - Soil	Date Received: 06/25/11
Method: TNRCC 1005 TX1005	Percent Solids: 80.7
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL055444.D	1	06/29/11	EM	06/27/11	OP19051	GLF819
Run #2							

	Initial Weight	Final Volume
Run #1	10.4 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	30	4.9	mg/kg	
	TPH (> C12-C28)	ND	30	5.0	mg/kg	
	TPH (> C28-C35)	ND	30	5.0	mg/kg	
	TPH (C6-C35)	ND	30	4.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	121%		70-130%
98-08-8	aaa-Trifluorotoluene	109%		70-130%

ND = Not detected MDL - Method Detection Limit
 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

Client Sample ID: BG-1	Date Sampled: 06/20/11
Lab Sample ID: T79710-5	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 80.4
Project: Sohio A#1	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	13.3	3.1	1.2	mg/kg	1	07/05/11 19:06	ES	SW846 9056
Solids, Percent	80.4			%	1	07/01/11	ID	SM 2540 G

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

Report of Analysis

3.6
3

Client Sample ID: BG-2	Date Sampled: 06/20/11
Lab Sample ID: T79710-6	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 72.4
Project: Sohio A#1	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	28.9	3.5	1.4	mg/kg	1	07/05/11 19:23	ES	SW846 9056
Solids, Percent	72.4			%	1	07/01/11	ID	SM 2540 G

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: SB-7(0-6")	
Lab Sample ID: T79710-7	Date Sampled: 06/20/11
Matrix: SO - Soil	Date Received: 06/25/11
Method: SW846 8021B	Percent Solids: 73.9
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK040600.D	1	06/28/11	LL	n/a	n/a	GKK1905
Run #2							

	Initial Weight	Final Volume
Run #1	5.15 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	6.4	5.3	0.64	ug/kg	
108-88-3	Toluene	2.5	5.3	0.85	ug/kg	J
100-41-4	Ethylbenzene	ND	5.3	0.88	ug/kg	
1330-20-7	Xylenes (total)	4.1	16	2.3	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	72%		21-163%
98-08-8	aaa-Trifluorotoluene	111%		39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

ND = Not detected MDL - Method Detection Limit
 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

3.7
3

Client Sample ID: SB-7(0-6")	Date Sampled: 06/20/11
Lab Sample ID: T79710-7	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 73.9
Method: TNRCC 1005 TX1005	
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL055446.D	1	06/29/11	EM	06/27/11	OP19051	GLF819
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	34	5.6	mg/kg	
	TPH (> C12-C28)	ND	34	5.6	mg/kg	
	TPH (> C28-C35)	ND	34	5.6	mg/kg	
	TPH (C6-C35)	ND	34	5.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	105%		70-130%
98-08-8	aaa-Trifluorotoluene	101%		70-130%

ND = Not detected MDL - Method Detection Limit
 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

Client Sample ID: SB-8(0-6")	
Lab Sample ID: T79710-8	Date Sampled: 06/20/11
Matrix: SO - Soil	Date Received: 06/25/11
Method: SW846 8021B	Percent Solids: 85.2
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK040603.D	1	06/28/11	LL	n/a	n/a	GKK1905
Run #2							

	Initial Weight	Final Volume
Run #1	5.28 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	1.6	4.4	0.54	ug/kg	J
108-88-3	Toluene	ND	4.4	0.72	ug/kg	
100-41-4	Ethylbenzene	ND	4.4	0.74	ug/kg	
1330-20-7	Xylenes (total)	ND	13	1.9	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	83%		21-163%
98-08-8	aaa-Trifluorotoluene	107%		39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

ND = Not detected MDL - Method Detection Limit
 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

Client Sample ID: SB-8(0-6")	Date Sampled: 06/20/11
Lab Sample ID: T79710-8	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 85.2
Method: TNRCC 1005 TX1005	
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL055448.D	1	06/29/11	EM	06/27/11	OP19051	GLF819
Run #2							

	Initial Weight	Final Volume
Run #1	10.5 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	28	4.6	mg/kg	
	TPH (> C12-C28)	ND	28	4.7	mg/kg	
	TPH (> C28-C35)	ND	28	4.7	mg/kg	
	TPH (C6-C35)	ND	28	4.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	118%		70-130%
98-08-8	aaa-Trifluorotoluene	109%		70-130%

ND = Not detected MDL - Method Detection Limit
 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

39
3

Client Sample ID: SB-9(0-6")	
Lab Sample ID: T79710-9	Date Sampled: 06/20/11
Matrix: SO - Soil	Date Received: 06/25/11
Method: SW846 8021B	Percent Solids: 83.6
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK040604.D	1	06/29/11	LL	n/a	n/a	GKK1905
Run #2							

	Initial Weight	Final Volume
Run #1	5.47 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	1.4	4.4	0.53	ug/kg	J
108-88-3	Toluene	1.3	4.4	0.71	ug/kg	J
100-41-4	Ethylbenzene	ND	4.4	0.73	ug/kg	
1330-20-7	Xylenes (total)	ND	13	1.9	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	64%		21-163%
98-08-8	aaa-Trifluorotoluene	87%		39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

39
3

Client Sample ID: SB-9(0-6")	Date Sampled: 06/20/11
Lab Sample ID: T79710-9	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 83.6
Method: TNRCC 1005 TX1005	
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL055450.D	1	06/29/11	EM	06/27/11	OP19051	GLF819
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	29	4.8	mg/kg	
	TPH (> C12-C28)	ND	29	4.9	mg/kg	
	TPH (> C28-C35)	ND	29	4.9	mg/kg	
	TPH (C6-C35)	ND	29	4.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	112%		70-130%
98-08-8	aaa-Trifluorotoluene	98%		70-130%

ND = Not detected MDL - Method Detection Limit
 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

Client Sample ID: SB-10(0-6")	
Lab Sample ID: T79710-10	Date Sampled: 06/20/11
Matrix: SO - Soil	Date Received: 06/25/11
Method: SW846 8021B	Percent Solids: 85.1
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK040605.D	1	06/29/11	LL	n/a	n/a	GKK1905
Run #2							

	Initial Weight	Final Volume
Run #1	5.23 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	56.1	4.5	0.55	ug/kg	
108-88-3	Toluene	103	4.5	0.73	ug/kg	
100-41-4	Ethylbenzene	15.9	4.5	0.75	ug/kg	
1330-20-7	Xylenes (total)	92.6	13	1.9	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	84%		21-163%
98-08-8	aaa-Trifluorotoluene	118%		39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

ND = Not detected MDL - Method Detection Limit
 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

3.10
3

Client Sample ID: SB-10(0-6")	
Lab Sample ID: T79710-10	Date Sampled: 06/20/11
Matrix: SO - Soil	Date Received: 06/25/11
Method: TNRCC 1005 TX1005	Percent Solids: 85.1
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL055451.D	1	06/29/11	EM	06/27/11	OP19051	GLB819
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	29	4.8	mg/kg	
	TPH (> C12-C28)	ND	29	4.8	mg/kg	
	TPH (> C28-C35)	ND	29	4.8	mg/kg	
	TPH (C6-C35)	ND	29	4.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	109%		70-130%
98-08-8	aaa-Trifluorotoluene	88%		70-130%

ND = Not detected MDL - Method Detection Limit
 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

3.11
3

Client Sample ID: SB-11(0-6")	
Lab Sample ID: T79710-11	Date Sampled: 06/20/11
Matrix: SO - Soil	Date Received: 06/25/11
Method: SW846 8021B	Percent Solids: 79.4
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK040606.D	1	06/29/11	LL	n/a	n/a	GKK1905
Run #2							

	Initial Weight	Final Volume
Run #1	5.30 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	1.8	4.8	0.58	ug/kg	J
108-88-3	Toluene	1.4	4.8	0.77	ug/kg	J
100-41-4	Ethylbenzene	ND	4.8	0.79	ug/kg	
1330-20-7	Xylenes (total)	ND	14	2.0	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	81%		21-163%
98-08-8	aaa-Trifluorotoluene	109%		39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

ND = Not detected MDL - Method Detection Limit
 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

3.11
3

Client Sample ID: SB-11(0-6")						
Lab Sample ID: T79710-11				Date Sampled: 06/20/11		
Matrix: SO - Soil				Date Received: 06/25/11		
Method: TNRCC 1005 TX1005				Percent Solids: 79.4		
Project: Sohio A#1						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL055452.D	1	06/29/11	EM	06/27/11	OP19051	GLF819
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	31	5.1	mg/kg	
	TPH (> C12-C28)	ND	31	5.1	mg/kg	
	TPH (> C28-C35)	ND	31	5.1	mg/kg	
	TPH (C6-C35)	ND	31	5.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	117%		70-130%
98-08-8	aaa-Trifluorotoluene	117%		70-130%

ND = Not detected MDL - Method Detection Limit
 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

Client Sample ID: SB-12(2")	Date Sampled: 06/20/11
Lab Sample ID: T79710-12	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 83.7
Method: SW846 8021B	
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK040694.D	20	07/01/11	LL	n/a	n/a	GKK1907
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.14 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	32400	5400	660	ug/kg	
108-88-3	Toluene	168000	5400	880	ug/kg	
100-41-4	Ethylbenzene	57900	5400	910	ug/kg	
1330-20-7	Xylenes (total)	356000	16000	2300	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	119%		21-163%
98-08-8	aaa-Trifluorotoluene	157%		39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

3.12
3

Client Sample ID: SB-12(2")	
Lab Sample ID: T79710-12	Date Sampled: 06/20/11
Matrix: SO - Soil	Date Received: 06/25/11
Method: TNRCC 1005 TX1005	Percent Solids: 83.7
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL055453.D	20	06/29/11	EM	06/27/11	OP19051	GLB819
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	6120	590	98	mg/kg	
	TPH (> C12-C28)	5220	590	98	mg/kg	
	TPH (> C28-C35)	425	590	98	mg/kg	J
	TPH (C6-C35)	11800	590	98	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	0% ^a		70-130%
98-08-8	aaa-Trifluorotoluene	0% ^a		70-130%

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 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

Client Sample ID: SB-12(2")	Date Sampled: 06/20/11
Lab Sample ID: T79710-12	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 83.7
Project: Sohio A#1	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	34.3	3.0	1.2	mg/kg	1	07/05/11 19:40	ES	SW846 9056
Solids, Percent	83.7			%	1	07/01/11	ID	SM 2540 G

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: COMP#1	Date Sampled: 06/20/11
Lab Sample ID: T79710-13	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 77.0
Method: SW846 8021B	
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK040668.D	1	06/30/11	LL	n/a	n/a	GKK1907
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.27 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	73.0	310	37	ug/kg	J
108-88-3	Toluene	1220	310	50	ug/kg	
100-41-4	Ethylbenzene	1150	310	51	ug/kg	
1330-20-7	Xylenes (total)	8170	920	130	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	107%		21-163%
98-08-8	aaa-Trifluorotoluene	124%		39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

ND = Not detected MDL - Method Detection Limit
 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

Client Sample ID: COMP#1	Date Sampled: 06/20/11
Lab Sample ID: T79710-13	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 77.0
Method: TNRCC 1005 TX1005	
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL055457.D	1	06/29/11	EM	06/27/11	OP19051	GLB819
Run #2							

	Initial Weight	Final Volume
Run #1	10.5 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	266	31	5.1	mg/kg	
	TPH (> C12-C28)	2320	31	5.1	mg/kg	
	TPH (> C28-C35)	256	31	5.1	mg/kg	
	TPH (C6-C35)	2840	31	5.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	124%		70-130%
98-08-8	aaa-Trifluorotoluene	99%		70-130%

ND = Not detected MDL - Method Detection Limit
 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

Client Sample ID: COMP#1	Date Sampled: 06/20/11
Lab Sample ID: T79710-13	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 77.0
Project: Sohio A#1	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	146	6.5	2.6	mg/kg	2	07/06/11 00:12	ES	SW846 9056
Solids, Percent	77			%	1	07/01/11	ID	SM 2540 G

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: SB-1(2.5)	Date Sampled: 06/21/11
Lab Sample ID: T79710-14	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 82.0
Method: SW846 8021B	
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK040669.D	4	06/30/11	LL	n/a	n/a	GKK1907
Run #2 ^b	KK040682.D	10	06/30/11	LL	n/a	n/a	GKK1907

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.01 g	5.0 ml	100 ul
Run #2	5.01 g	5.0 ml	100 ul

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	6350	1100	140	ug/kg	
108-88-3	Toluene	30700	1100	190	ug/kg	
100-41-4	Ethylbenzene	10500	1100	190	ug/kg	
1330-20-7	Xylenes (total)	68500	3400	490	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	121%	102%	21-163%
98-08-8	aaa-Trifluorotoluene	201% ^c	139%	39-170%

- (a) Sample was received unpreserved and outside the 48 hour preservation time.
- (b) Confirmation run for surrogate recoveries.
- (c) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected MDL - Method Detection Limit
 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

3.14
3

Client Sample ID: SB-1(2.5)	Date Sampled: 06/21/11
Lab Sample ID: T79710-14	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 82.0
Method: TNRCC 1005 TX1005	
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL055455.D	1	06/29/11	EM	06/27/11	OP19051	GLB819
Run #2							

	Initial Weight	Final Volume
Run #1	10.5 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	601	29	4.8	mg/kg	
	TPH (> C12-C28)	503	29	4.9	mg/kg	
	TPH (> C28-C35)	71.7	29	4.9	mg/kg	
	TPH (C6-C35)	1180	29	4.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	143% ^a		70-130%
98-08-8	aaa-Trifluorotoluene	93%		70-130%

(a) Outside control limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
 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

Client Sample ID: SB-1(2.5)	Date Sampled: 06/21/11
Lab Sample ID: T79710-14	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 82.0
Project: Sohio A#1	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	9800	1500	610	mg/kg	500	07/06/11 00:29	ES	SW846 9056
Solids, Percent	82			%	1	07/01/11	ID	SM 2540 G

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: SB-1(5.5)	
Lab Sample ID: T79710-15	Date Sampled: 06/22/11
Matrix: SO - Soil	Date Received: 06/25/11
Method: SW846 8021B	Percent Solids: 90.7
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK040673.D	5	06/30/11	LL	n/a	n/a	GKK1907
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.37 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	3100	1100	140	ug/kg	
108-88-3	Toluene	24600	1100	180	ug/kg	
100-41-4	Ethylbenzene	12400	1100	190	ug/kg	
1330-20-7	Xylenes (total)	86500	3400	480	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	117%		21-163%
98-08-8	aaa-Trifluorotoluene	162%		39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

ND = Not detected MDL - Method Detection Limit
 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

3.15
3

Client Sample ID: SB-1(5.5)	Date Sampled: 06/22/11
Lab Sample ID: T79710-15	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 90.7
Method: TNRCC 1005 TX1005	
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL055456.D	1	06/29/11	EM	06/27/11	OP19051	GLF819
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	1920	27	4.5	mg/kg	
	TPH (> C12-C28)	2320	27	4.5	mg/kg	
	TPH (> C28-C35)	148	27	4.5	mg/kg	
	TPH (C6-C35)	4390	27	4.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	134% ^a		70-130%
98-08-8	aaa-Trifluorotoluene	110%		70-130%

(a) Outside control limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
 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

Client Sample ID: SB-1(5.5)	Date Sampled: 06/22/11
Lab Sample ID: T79710-15	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 90.7
Project: Sohio A#1	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	8500	1400	550	mg/kg	500	07/06/11 05:35	ES	SW846 9056
Solids, Percent	90.7			%	1	07/01/11	ID	SM 2540 G

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: SB-2(4.5)	Date Sampled: 06/22/11
Lab Sample ID: T79710-16	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 81.0
Method: SW846 8021B	
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK040678.D	20	06/30/11	LL	n/a	n/a	GKK1907
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.45 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	41400	5500	660	ug/kg	
108-88-3	Toluene	152000	5500	890	ug/kg	
100-41-4	Ethylbenzene	51200	5500	910	ug/kg	
1330-20-7	Xylenes (total)	328000	16000	2300	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	109%		21-163%
98-08-8	aaa-Trifluorotoluene	155%		39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

ND = Not detected MDL - Method Detection Limit
 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

Client Sample ID: SB-2(4.5)		Date Sampled: 06/22/11
Lab Sample ID: T79710-16		Date Received: 06/25/11
Matrix: SO - Soil		Percent Solids: 81.0
Method: TNRCC 1005 TX1005		
Project: Sohio A#1		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL055454.D	20	06/29/11	EM	06/27/11	OP19051	GLF819
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	8310	610	100	mg/kg	
	TPH (> C12-C28)	5500	610	100	mg/kg	
	TPH (> C28-C35)	579	610	100	mg/kg	J
	TPH (C6-C35)	14400	610	100	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	0% ^a		70-130%
98-08-8	aaa-Trifluorotoluene	0% ^a		70-130%

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 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

Client Sample ID: SB-2(4.5)	Date Sampled: 06/22/11
Lab Sample ID: T79710-16	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 81.0
Project: Sohio A#1	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	140	6.2	2.5	mg/kg	2	07/06/11 03:53	ES	SW846 9056
Solids, Percent	81			%	1	07/01/11	ID	SM 2540 G

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: SB-12(5')	Date Sampled: 06/22/11
Lab Sample ID: T79710-17	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 83.6
Method: SW846 8021B	
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK040679.D	20	06/30/11	LL	n/a	n/a	GKK1907
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.13 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	17400	5400	660	ug/kg	
108-88-3	Toluene	91700	5400	890	ug/kg	
100-41-4	Ethylbenzene	35200	5400	910	ug/kg	
1330-20-7	Xylenes (total)	226000	16000	2300	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	106%		21-163%
98-08-8	aaa-Trifluorotoluene	143%		39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-12(5')	Date Sampled: 06/22/11
Lab Sample ID: T79710-17	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 83.6
Method: TNRCC 1005 TX1005	
Project: Sohio A#1	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL055415.D	5	06/29/11	EM	06/27/11	OP19054	GLB818
Run #2							

	Initial Weight	Final Volume
Run #1	10.3 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	6280	150	24	mg/kg	
	TPH (> C12-C28)	5900	150	24	mg/kg	
	TPH (> C28-C35)	541	150	24	mg/kg	
	TPH (C6-C35)	12700	150	24	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	156% ^a		70-130%
98-08-8	aaa-Trifluorotoluene	111%		70-130%

(a) Outside control limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
 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

Client Sample ID: SB-12(5')	Date Sampled: 06/22/11
Lab Sample ID: T79710-17	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 83.6
Project: Sohio A#1	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	280	15	6.0	mg/kg	5	07/06/11 04:44	ES	SW846 9056
Solids, Percent	83.6			%	1	07/01/11	ID	SM 2540 G

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

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

FED-EX Tracking # _____ Bottle Order Control # _____
Accutest Quote # _____ Accutest Job # **T79710**

Client / Reporting Information		Project Information		Requested Analyses		Matrix Codes	
Company Name CEG-Group		Project Name Sohio AH#1		STEX 8021 TPH 1005 Chlorides 300.1		DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank	
Street Address 504 Spring Hill Ste 300		Street SWSE Sec 4					
City State Zip Spring TX 77386		City State TII S, R. 33E NM					
Project Contact Gordon Banks		Project # ISR-11-419					
Phone # 281-870-9300		Client Purchase Order #					
Sampler(s) Name(s) Mary Sparks 281-903-8815		Project Manager Gordon Banks					
Field ID / Point of Collection		Date					
Time		Sampled By					
Matrix		# of bottles					
Matrix		Matrix					

Accutest Sample #	Field ID / Point of Collection	Date	Time	Sampled By	Matrix	# of bottles	PCD	NO3H	ZANONH	HNH	1230H	NO3E	CV Water	MEOH	TPP	HNH2O4	ENCORE	OTHER		
1	SB-6 (0-6")	6/20/11	1242	GS	S	1						X						X	X	H
2	SB-5 (0-6")		1253	GS		1						X						X	X	H
3	SB-4 (0-6")		1310	GS		1						X						X	X	H
4	SB-3 (0-6")		1317	GS		1						X						X	X	H
5	SB-1		1325	GS								X								X
6	SB-2		1330	GS								X								X
7	SB-7 (0-6")		1353	GS								X						X	X	H
8	SB-8C (0-6")		1404	GS								X						X	X	H
9	SB-9 (0-6")		1407	GS								X						X	X	H
10	SB-10 (0-6")		1416	GS								X						X	X	H
11	SB-11 (0-6")		1426	GS								X						X	X	H
12	SB-12 (2')	6/20/11	1445	GS								X						X	X	X

<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 8 Day RUSH <input type="checkbox"/> 4 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day EMERGENCY Emergency & Rush T/A data available VIA Lablink	Approved By (Accutest PM) / Date: _____ _____ _____	<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULT1 (Level 3+4) <input type="checkbox"/> REDT1 (Level 3+4) <input type="checkbox"/> Commercial "C" Commercial "A" = Results Only Commercial "B" = Results + QC Summary Commercial "C" = Results + QC & Surrogate Summary	<input type="checkbox"/> TRRP <input type="checkbox"/> EDD Format <input type="checkbox"/> Other _____	Comments / Special Instructions H = Hold for chlorides per Caur instructions
---	---	--	--	--

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by: _____	Date Time: _____	Received By: _____	Date Time: _____	Relinquished by: _____	Date Time: _____	Received By: _____	Date Time: _____
1	4:29 / 6/23/11	1		2	FedEx	1055	6/25/11
Relinquished by: _____	Date Time: _____	Received By: _____	Date Time: _____	Relinquished by: _____	Date Time: _____	Received By: _____	Date Time: _____
3		3		4			
Relinquished by: _____	Date Time: _____	Received By: _____	Date Time: _____	Custody Seal #	<input type="checkbox"/> Intact	Preserved where applicable	On Ice / Cooler Temp.
5		5			<input type="checkbox"/> Not Intact	<input type="checkbox"/> 2 coolers	6.6, 2.3°C

4.1
4

Accutest Job Number: T79710 Client: CARR ENVIRONMENTAL GROUP Project: SOHIO A # 1
 Date / Time Received: 6/25/2011 10:55 Delivery Method: FedEx Airbill #'s: 875852229254,486899909668
 No. Coolers: 2 Therm ID: 110; IRGUN4; Temp Adjustment Factor: -0.5; -0.1;
 Cooler Temps (Initial/Adjusted): #1: (2.1/1.6); #2: (2.4/2.3);

Cooler Security

	<u>Y</u> or <u>N</u>		<u>Y</u> or <u>N</u>
1. Custody Seals Present:	<input checked="" type="checkbox"/> <input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/> <input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/> <input type="checkbox"/>

Cooler Temperature

	<u>Y</u> or <u>N</u>
1. Temp criteria achieved:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Cooler temp verification:	<u>IR Gun</u>
3. Cooler media:	<u>Ice (Bag)</u>

Quality Control Preservation

	<u>Y</u> or <u>N</u>	<u>N/A</u>	<u>WTB</u>	<u>STB</u>
1. Trip Blank present / cooler:	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>			
3. Samples preserved properly:	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
4. VOCs headspace free:	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>			

Sample Integrity - Documentation

	<u>Y</u> or <u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/> <input type="checkbox"/>
3. Sample container label / COC agree:	<input type="checkbox"/> <input checked="" type="checkbox"/>

Sample Integrity - Condition

	<u>Y</u> or <u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/> <input type="checkbox"/>
3. Condition of sample:	<u>Intact</u>

Sample Integrity - Instructions

	<u>Y</u> or <u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/> <input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/> <input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/> <input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments COC ID COMP #1, bottle ID COMP #1 (0-6").
COC ID BG-1, bottle ID BG-1 (0-6").
COC ID BG-2, bottle ID BG-2 (0-6").

Donner Huddell 6/25/11

4.1
4

Job #: T79710 Date / Time Received: 6/25/2011 10:55:00 AM Initials: DARRELLH
 Client: CARR ENVIRONMENTAL GROUP

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
2	T79710-1	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	2.4	-0.1	2.3
2	T79710-2	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	2.4	-0.1	2.3
2	T79710-3	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	2.4	-0.1	2.3
1	T79710-4	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	110	2.1	-0.5	1.6
1	T79710-5	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	110	2.1	-0.5	1.6
1	T79710-6	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	110	2.1	-0.5	1.6
2	T79710-7	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	2.4	-0.1	2.3
2	T79710-8	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	2.4	-0.1	2.3
2	T79710-9	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	2.4	-0.1	2.3
2	T79710-10	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	2.4	-0.1	2.3
2	T79710-11	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	2.4	-0.1	2.3
2	T79710-12	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	2.4	-0.1	2.3
1	T79710-13	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	110	2.1	-0.5	1.6
2	T79710-14	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	2.4	-0.1	2.3
2	T79710-15	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	2.4	-0.1	2.3
1	T79710-16	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	110	2.1	-0.5	1.6
1	T79710-17	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	110	2.1	-0.5	1.6

4.1
4

T79710: Chain of Custody
Page 4 of 4

GC Volatiles

5

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: T79710
Account: CARR Carr Environmental Group
Project: Sohio A#1

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1905-MB	KK040593.D 1		06/28/11	LL	n/a	n/a	GKK1905

The QC reported here applies to the following samples:

Method: SW846 8021B

T79710-1, T79710-2, T79710-3, T79710-4, T79710-7, T79710-8, T79710-9, T79710-10, T79710-11

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.0	0.49	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	0.67	ug/kg	
108-88-3	Toluene	ND	4.0	0.65	ug/kg	
1330-20-7	Xylenes (total)	ND	12	1.7	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	87%	21-163%
98-08-8	aaa-Trifluorotoluene	113%	39-170%

5.1.1
5

Method Blank Summary

Page 1 of 1

Job Number: T79710
Account: CARR Carr Environmental Group
Project: Sohio A#1

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1907-MB	KK040663.D 1		06/30/11	LL	n/a	n/a	GKK1907

The QC reported here applies to the following samples:

Method: SW846 8021B

T79710-12, T79710-13, T79710-14, T79710-15, T79710-16, T79710-17

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.0	0.49	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	0.67	ug/kg	
108-88-3	Toluene	ND	4.0	0.65	ug/kg	
1330-20-7	Xylenes (total)	ND	12	1.7	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	81%	21-163%
98-08-8	aaa-Trifluorotoluene	109%	39-170%

5.1.2
5

Blank Spike Summary

Page 1 of 1

Job Number: T79710
Account: CARR Carr Environmental Group
Project: Sohio A#1

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1905-BS	KK040591.D 1		06/28/11	LL	n/a	n/a	GKK1905

The QC reported here applies to the following samples:

Method: SW846 8021B

T79710-1, T79710-2, T79710-3, T79710-4, T79710-7, T79710-8, T79710-9, T79710-10, T79710-11

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	20	21.7	109	73-132
100-41-4	Ethylbenzene	20	22.3	112	70-133
108-88-3	Toluene	20	22.1	111	74-133
1330-20-7	Xylenes (total)	60	68.0	113	73-134

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	90%	21-163%
98-08-8	aaa-Trifluorotoluene	116%	39-170%

5.2.1
5

Blank Spike Summary

Job Number: T79710
Account: CARR Carr Environmental Group
Project: Sohio A#1

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1907-BS	KK040661.D 1		06/30/11	LL	n/a	n/a	GKK1907

The QC reported here applies to the following samples:

Method: SW846 8021B

T79710-12, T79710-13, T79710-14, T79710-15, T79710-16, T79710-17

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	20	20.3	102	73-132
100-41-4	Ethylbenzene	20	20.5	103	70-133
108-88-3	Toluene	20	20.4	102	74-133
1330-20-7	Xylenes (total)	60	62.8	105	73-134

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	85%	21-163%
98-08-8	aaa-Trifluorotoluene	111%	39-170%

5.2.2
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T79710
Account: CARR Carr Environmental Group
Project: Sohio A#1

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T79710-2MS	KK040595.D 1		06/28/11	LL	n/a	n/a	GKK1905
T79710-2MSD	KK040596.D 1		06/28/11	LL	n/a	n/a	GKK1905
T79710-2 ^a	KK040594.D 1		06/28/11	LL	n/a	n/a	GKK1905

The QC reported here applies to the following samples:

Method: SW846 8021B

T79710-1, T79710-2, T79710-3, T79710-4, T79710-7, T79710-8, T79710-9, T79710-10, T79710-11

CAS No.	Compound	T79710-2 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	23.6	22.5	95	20.0	88	12	41-129/33
100-41-4	Ethylbenzene	ND	23.6	17.7	75	14.3	63	21	15-139/36
108-88-3	Toluene	ND	23.6	14.4	61	11.3	50	24	26-141/38
1330-20-7	Xylenes (total)	ND	70.8	50.9	72	41.7	61	20	22-132/33

CAS No.	Surrogate Recoveries	MS	MSD	T79710-2	Limits
460-00-4	4-Bromofluorobenzene	68%	71%	62%	21-163%
98-08-8	aaa-Trifluorotoluene	118%	115%	112%	39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

5.3.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T79710
Account: CARR Carr Environmental Group
Project: Sohio A#1

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T79710-15MS	KK040674.D 5		06/30/11	LL	n/a	n/a	GKK1907
T79710-15MSD	KK040675.D 5		06/30/11	LL	n/a	n/a	GKK1907
T79710-15 ^a	KK040673.D 5		06/30/11	LL	n/a	n/a	GKK1907

The QC reported here applies to the following samples:

Method: SW846 8021B

T79710-12, T79710-13, T79710-14, T79710-15, T79710-16, T79710-17

CAS No.	Compound	T79710-15 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	3100	5650	9390	111	9030	105	4	41-129/33
100-41-4	Ethylbenzene	12400	5650	19900	133	19300	122	3	15-139/36
108-88-3	Toluene	24600	5650	33500	158* ^b	32600	142* ^b	3	26-141/38
1330-20-7	Xylenes (total)	86500	16900	114000	162* ^b	111000	145* ^b	3	22-132/33

CAS No.	Surrogate Recoveries	MS	MSD	T79710-15	Limits
460-00-4	4-Bromofluorobenzene	121%	126%	117%	21-163%
98-08-8	aaa-Trifluorotoluene	200%* ^c	199%* ^c	162%	39-170%

- (a) Sample was received unpreserved and outside the 48 hour preservation time.
- (b) Outside control limits due to high level in sample relative to spike amount.
- (c) Outside control limits due to matrix interference. Confirmed by MS/MSD.

5.3.2
5

GC Semi-volatiles

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QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Page 1 of 1

Job Number: T79710
Account: CARR Carr Environmental Group
Project: Sohio A#1

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19054-MB	LL055424.D	1	06/29/11	EM	06/27/11	OP19054	GLF818

The QC reported here applies to the following samples:

Method: TNRCC 1005

T79710-17

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	24	4.0	mg/kg	
	TPH (> C12-C28)	ND	24	4.0	mg/kg	
	TPH (> C28-C35)	ND	24	4.0	mg/kg	
	TPH (C6-C35)	ND	24	4.0	mg/kg	

CAS No.	Surrogate Recoveries	Results	Limits
84-15-1	o-Terphenyl	114%	70-130%
98-08-8	aaa-Trifluorotoluene	121%	70-130%

6.1.1
6

Method Blank Summary

Job Number: T79710
Account: CARR Carr Environmental Group
Project: Sohio A#1

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19051-MB	LL055439.D	1	06/29/11	EM	06/27/11	OP19051	GLB819

The QC reported here applies to the following samples:

Method: TNRCC 1005

T79710-1, T79710-2, T79710-3, T79710-4, T79710-7, T79710-8, T79710-9, T79710-10, T79710-11, T79710-12, T79710-13, T79710-14, T79710-15, T79710-16

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	24	4.0	mg/kg	
	TPH (> C12-C28)	ND	24	4.0	mg/kg	
	TPH (> C28-C35)	ND	24	4.0	mg/kg	
	TPH (C6-C35)	ND	24	4.0	mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	125%	70-130%
98-08-8	aaa-Trifluorotoluene	106%	70-130%

6.1.2

6

Blank Spike/Blank Spike Duplicate Summary

Job Number: T79710
Account: CARR Carr Environmental Group
Project: Sohio A#1

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19054-BS	LL055396.D 1		06/29/11	EM	06/27/11	OP19054	GLF818
OP19054-BSD	LL055398.D 1		06/29/11	EM	06/27/11	OP19054	GLF818

The QC reported here applies to the following samples:

Method: TNRCC 1005

T79710-17

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C6-C12)	236	216	92	220	90	2	75-125/25
	TPH (> C12-C28)	236	180	76	184	75	2	75-125/25
	TPH (C6-C35)		396		405		2	75-125/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	127%	94%	70-130%
98-08-8	aaa-Trifluorotoluene	122%	93%	70-130%

6.2.1
6

Blank Spike/Blank Spike Duplicate Summary

Job Number: T79710
Account: CARR Carr Environmental Group
Project: Sohio A#1

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19051-BS	LL055441.D	1	06/29/11	EM	06/27/11	OP19051	GLB819
OP19051-BSD	LL055443.D	1	06/29/11	EM	06/27/11	OP19051	GLB819

The QC reported here applies to the following samples:

Method: TNRCC 1005

T79710-1, T79710-2, T79710-3, T79710-4, T79710-7, T79710-8, T79710-9, T79710-10, T79710-11, T79710-12, T79710-13, T79710-14, T79710-15, T79710-16

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C6-C12)	236	228	97	235	95	3	75-125/25
	TPH (> C12-C28)	236	268	114	277	112	3	75-125/25
	TPH (C6-C35)		496		513		3	75-125/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	121%	114%	70-130%
98-08-8	aaa-Trifluorotoluene	85%	78%	70-130%

6.2.2
6

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T79710
Account: CARR Carr Environmental Group
Project: Sohio A#1

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19054-MS	LL055400.D	1	06/29/11	EM	06/27/11	OP19054	GLF818
OP19054-MSD	LL055402.D	1	06/29/11	EM	06/27/11	OP19054	GLF818
T79787-7	LL055404.D	1	06/29/11	EM	06/27/11	OP19054	GLF818

The QC reported here applies to the following samples:

Method: TNRCC 1005

T79710-17

CAS No.	Compound	T79787-7 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C6-C12)	43.7	297	321	93	299	88	7	75-125/25
	TPH (> C12-C28)	104	297	351	83	331	78	6	75-125/25
	TPH (C6-C35)	172		672		630		6	75-125/25

CAS No.	Surrogate Recoveries	MS	MSD	T79787-7	Limits
84-15-1	o-Terphenyl	101%	105%	98%	70-130%
98-08-8	aaa-Trifluorotoluene	93%	96%	88%	70-130%

6.3.1

6

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T79710
Account: CARR Carr Environmental Group
Project: Sohio A#1

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19051-MS	LL055445.D	1	06/29/11	EM	06/27/11	OP19051	GLB819
OP19051-MSD	LL055447.D	1	06/29/11	EM	06/27/11	OP19051	GLB819
T79710-1	LL055449.D	1	06/29/11	EM	06/27/11	OP19051	GLB819

The QC reported here applies to the following samples:

Method: TNRCC 1005

T79710-1, T79710-2, T79710-3, T79710-4, T79710-7, T79710-8, T79710-9, T79710-10, T79710-11, T79710-12, T79710-13, T79710-14, T79710-15, T79710-16

CAS No.	Compound	T79710-1 mg/kg	Spike Q	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD	
	TPH (C6-C12)	ND		276	241	87	269	98	11	75-125/25
	TPH (> C12-C28)	ND		276	258	94	260	95	1	75-125/25
	TPH (C6-C35)	ND			499		529		6	75-125/25

CAS No.	Surrogate Recoveries	MS	MSD	T79710-1	Limits
84-15-1	o-Terphenyl	96%	109%	106%	70-130%
98-08-8	aaa-Trifluorotoluene	74%	103%	114%	70-130%

6.3.2
6

General Chemistry

QC Data Summaries

7

Includes the following where applicable:

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

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T79710
Account: CARR - Carr Environmental Group
Project: Sohio A#1

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Bromide	GP13779/GN32757	2.5	0.0	mg/kg	50	46.9	93.8	90-110%
Chloride	GP13779/GN32757	2.5	0.0	mg/kg	50	47.7	95.4	90-110%
Chloride	GP13780/GN32758	2.5	0.0	mg/kg	50	48.8	97.6	90-110%
Fluoride	GP13779/GN32757	2.5	0.0	mg/kg	50	48.0	96.0	90-110%
Sulfate	GP13779/GN32757	2.5	0.0	mg/kg	50	46.0	92.0	90-110%

Associated Samples:

Batch GP13779: T79710-12, T79710-13, T79710-14, T79710-16, T79710-17, T79710-5, T79710-6

Batch GP13780: T79710-15

(*) Outside of QC limits

7.1
7

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T79710
Account: CARR - Carr Environmental Group
Project: Sohio A#1

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Bromide	GP13779/GN32757	T79350-1	mg/kg	0.0	0.0	0.0	0-20%
Chloride	GP13779/GN32757	T79350-1	mg/kg	10.1	0.0	200.0(a)	0-20%
Chloride	GP13780/GN32758	T79710-15	mg/kg	8500	8590	1.1	0-20%
Fluoride	GP13779/GN32757	T79350-1	mg/kg	49.8	48.8	2.0	0-20%
Solids, Percent	GN32462	T79613-9	%	86.6	85.9	0.8	0-5%
Solids, Percent	GN32599	T79710-11	%	79.4	79.7	0.4	0-5%
Solids, Percent	GN32600	T79710-17	%	83.6	81.9	2.1	0-5%
Sulfate	GP13779/GN32757	T79350-1	mg/kg	97.2	100	2.8	0-20%

Associated Samples:

Batch GN32462: T79710-1

Batch GN32599: T79710-10, T79710-11, T79710-2, T79710-3, T79710-4, T79710-5, T79710-6, T79710-7, T79710-8, T79710-9

Batch GN32600: T79710-12, T79710-13, T79710-14, T79710-15, T79710-16, T79710-17

Batch GP13779: T79710-12, T79710-13, T79710-14, T79710-16, T79710-17, T79710-5, T79710-6

Batch GP13780: T79710-15

(*) Outside of QC limits

(a) RPD acceptable due to low duplicate and sample concentrations.

7.2
7

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T79710
Account: CARR - Carr Environmental Group
Project: Sohio A#1

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Bromide	GP13779/GN32757	T79350-1	mg/kg	0.0	506	474	93.7	80-120%
Chloride	GP13779/GN32757	T79350-1	mg/kg	10.1	506	490	94.8	80-120%
Chloride	GP13780/GN32758	T79710-15	mg/kg	8500	27600	34900	95.8	80-120%
Fluoride	GP13779/GN32757	T79350-1	mg/kg	49.8	506	562	101.2	80-120%
Sulfate	GP13779/GN32757	T79350-1	mg/kg	97.2	506	562	91.8	80-120%

Associated Samples:

Batch GP13779: T79710-12, T79710-13, T79710-14, T79710-16, T79710-17, T79710-5, T79710-6

Batch GP13780: T79710-15

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

7.3
7

Technical Report for

Carr Environmental Group

Sohio A#1

ISR-11-419

Accutest Job Number: T79710R

Sampling Date: 06/20/11

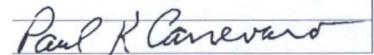
Report to:

Carr Environmental Group
504 Spring Hill Drive, Suite 300
Spring, TX 77386
jwilson@ceg-group.com; gbanks@ceg-group.com;
eborden@ceg-group.com; jfoster@ceg-group.com;
ATTN: Jim Foster

Total number of pages in report: **23**



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.



Paul Canevaro
Laboratory Director

Client Service contact: Sonia West 713-271-4700

Certifications: TX (T104704220-10-3) AR (88-0756) FL (E87628) KS (E-10366) LA (85695/04004)
OK (9103)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.

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Sample Summary

Carr Environmental Group

Job No: T79710R

Sohio A#1
Project No: ISR-11-419

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T79710-1R	06/20/11	12:42	06/25/11	SO	Soil	SB-6(0-6")
T79710-2R	06/20/11	12:53	06/25/11	SO	Soil	SB-5(0-6")
T79710-3R	06/20/11	13:10	06/25/11	SO	Soil	SB-4(0-6")
T79710-4R	06/20/11	13:17	06/25/11	SO	Soil	SB-3(0-6")
T79710-7R	06/20/11	13:53	06/25/11	SO	Soil	SB-7(0-6")
T79710-8R	06/20/11	14:04	06/25/11	SO	Soil	SB-8(0-6")
T79710-9R	06/20/11	14:07	06/25/11	SO	Soil	SB-9(0-6")
T79710-10R	06/20/11	14:16	06/25/11	SO	Soil	SB-10(0-6")
T79710-11R	06/20/11	14:26	06/25/11	SO	Soil	SB-11(0-6")

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Carr Environmental Group

Job No T79710R

Site: Sohio A#1

Report Date 7/20/2011 11:51:43 AM

9 Samples were collected on 06/20/2011 and received at Accutest on 06/25/2011 properly preserved, at 1.6 Deg. C and intact. These Samples received an Accutest job number of T79710R. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Wet Chemistry By Method SW846 9056

Matrix SO	Batch ID: GP13961
------------------	--------------------------

- All samples were prepared within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T81386-3DUP, T81386-3MS were used as the QC samples for Chloride.

Matrix SO	Batch ID: GP13978
------------------	--------------------------

- All samples were prepared within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T79710-3RDUP, T79710-3RMS were used as the QC samples for Chloride.

Accutest Laboratories Gulf Coast (ALGC) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALGC and as stated on the COC. ALGC certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALGC Quality Manual except as noted above. This report is to be used in its entirety. ALGC is not responsible for any assumptions of data quality if partial data packages are used

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: SB-6(0-6")	Date Sampled: 06/20/11
Lab Sample ID: T79710-1R	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 85.1
Project: Sohio A#1	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	710	29	12	mg/kg	10	07/17/11 18:52	ES	SW846 9056

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

3.2
3

Client Sample ID: SB-5(0-6")	Date Sampled: 06/20/11
Lab Sample ID: T79710-2R	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 84.7
Project: Sohio A#1	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	98.0	30	12	mg/kg	10	07/17/11 19:09	ES	SW846 9056

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis



Client Sample ID: SB-4(0-6")	Date Sampled: 06/20/11
Lab Sample ID: T79710-3R	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 89.8
Project: Sohio A#1	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	1190	56	22	mg/kg	20	07/18/11 17:57	ES	SW846 9056

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: SB-3(0-6")	Date Sampled: 06/20/11
Lab Sample ID: T79710-4R	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 80.7
Project: Sohio A#1	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	21.1	3.1	1.2	mg/kg	1	07/18/11 18:48	ES	SW846 9056

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

3.5
3

Client Sample ID: SB-7(0-6")	Date Sampled: 06/20/11
Lab Sample ID: T79710-7R	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 73.9
Project: Sohio A#1	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	37.2	3.4	1.4	mg/kg	1	07/18/11 19:05	ES	SW846 9056

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: SB-8(0-6")	Date Sampled: 06/20/11
Lab Sample ID: T79710-8R	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 85.2
Project: Sohio A#1	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	8.6	2.9	1.2	mg/kg	1	07/18/11 19:22	ES	SW846 9056

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: SB-9(0-6")	Date Sampled: 06/20/11
Lab Sample ID: T79710-9R	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 83.6
Project: Sohio A#1	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	19.8	3.0	1.2	mg/kg	1	07/18/11 19:39	ES	SW846 9056

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: SB-10(0-6")	Date Sampled: 06/20/11
Lab Sample ID: T79710-10R	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 85.1
Project: Sohio A#1	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	10.5	2.9	1.2	mg/kg	1	07/18/11 19:56	ES	SW846 9056

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: SB-11(0-6")	Date Sampled: 06/20/11
Lab Sample ID: T79710-11R	Date Received: 06/25/11
Matrix: SO - Soil	Percent Solids: 79.4
Project: Sohio A#1	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	18.5	3.1	1.3	mg/kg	1	07/18/11 20:47	ES	SW846 9056

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

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

FED-EX Tracking # _____ Bottle Order Control # _____
Accutest Quote # _____ Accutest Job # **T79710**

Client / Reporting Information		Project Information		Requested Analyses		Matrix Codes	
Company Name CEG-Group		Project Name Sohio AH 1		DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment CI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank		LAB USE ONLY	
Street Address 504 Spring Hill Ste 300		Street SW/SE Sec 4					
City State Zip Spring TX 77386		City State TII S, R. 33E N/M					
Project Contact Gordon Banks		Project # ISR-11-419					
Phone # 281-872-9300		Client Purchase Order #					
Fax #		City State Zip					
Sampler(s) Name(s) Mary Sparks 281-903-8815		Project Manager Gordon Banks					
Phone #		Attention:					
Field ID / Point of Collection		Number of preserved bottles					

Accutest Sample #	Field ID / Point of Collection	Date	Time	Sampled By	Matrix	# of bottles	PC	INCR	ZANON	INDD	HSDA	NDIR	DI/WR	MECH	TSP	HAHSA	ENCORE	OTHER	
1	SB-6 (0-6")	6/20/11	1242	GS	S	1													X
2	SB-5 (0-6")		1253	GS		1													X
3	SB-4 (0-6")		1310	GS		1													X
4	SB-3 (0-6")		1317	GS		1													X
5	SB-1		1325	GS															X
6	SB-2		1330	GS															X
7	SB-7 (0-6")		1353	GS															X
8	SB-8 (0-6")		1404	GS															X
9	SB-9 (0-6")		1407	GS															X
10	SB-10 (0-6")		1416	GS															X
11	SB-11 (0-6")		1426	GS															X
12	SB-12 (2')	6/20/11	1445	GS															X

Turnaround Time (Business days)		Approved By (Accutest PM): / Date:		Data Deliverable Information		Comments / Special Instructions	
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 4 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day EMERGENCY Emergency & Rush T/A data available VIA Lablink				<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULL1 (Level 3+4) <input type="checkbox"/> REDT1 (Level 3+4) <input type="checkbox"/> Commercial "C" Commercial "A" = Results Only Commercial "B" = Results + QC Summary Commercial "C" = Results + QC & Surrogate Summary		H = Hold for chlorides per Caur instructions	

Sample Custody must be documented below each time samples change possession, including courier delivery.							
Relinquished by: 1	Date Time: 4/29/6/23/11	Received By: 1	Relinquished By: 2	Date Time: 1055 6/23/11	Received By: 2	Intact <input type="checkbox"/> Preserved where applicable <input type="checkbox"/> On Ice <input checked="" type="checkbox"/> Cooler Temp. 16.2, 2.3°C	
Relinquished by: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4		
Relinquished by: 5	Date Time:	Received By: 5	Relinquished By:	Date Time:	Received By:		

4.1
4

Accutest Job Number: T79710 Client: CARR ENVIRONMENTAL GROUP Project: SOHIO A # 1
 Date / Time Received: 6/25/2011 10:55 Delivery Method: FedEx Airbill #'s: 875852229254,486899909668
 No. Coolers: 2 Therm ID: 110; IRGUN4; Temp Adjustment Factor: -0.5; -0.1;
 Cooler Temps (Initial/Adjusted): #1: (2.1/1.6); #2: (2.4/2.3);

Cooler Security Y or N Y or N
 1. Custody Seals Present: 3. COC Present:
 2. Custody Seals Intact: 4. Smpl Dates/Time OK

Cooler Temperature Y or N
 1. Temp criteria achieved:
 2. Cooler temp verification: IR Gun
 3. Cooler media: Ice (Bag)

Quality Control Preservation Y or N N/A WTB STB
 1. Trip Blank present / cooler:
 2. Trip Blank listed on COC:
 3. Samples preserved properly:
 4. VOCs headspace free:

Sample Integrity - Documentation Y or N
 1. Sample labels present on bottles:
 2. Container labeling complete:
 3. Sample container label / COC agree:

Sample Integrity - Condition Y or N
 1. Sample recvd within HT:
 2. All containers accounted for:
 3. Condition of sample: Intact

Sample Integrity - Instructions Y or N N/A
 1. Analysis requested is clear:
 2. Bottles received for unspecified tests:
 3. Sufficient volume recvd for analysis:
 4. Compositing instructions clear:
 5. Filtering instructions clear:

Comments COC ID COMP #1, bottle ID COMP #1 (0-6").
COC ID BG-1, bottle ID BG-1 (0-6").
COC ID BG-2, bottle ID BG-2 (0-6").

Donna Huddell 6/25/11

4.1
4

Job #: T79710 Date / Time Received: 6/25/2011 10:55:00 AM Initials: DARRELLH
 Client: CARR ENVIRONMENTAL GROUP

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
2	T79710-1	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	2.4	-0.1	2.3
2	T79710-2	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	2.4	-0.1	2.3
2	T79710-3	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	2.4	-0.1	2.3
1	T79710-4	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	110	2.1	-0.5	1.6
1	T79710-5	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	110	2.1	-0.5	1.6
1	T79710-6	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	110	2.1	-0.5	1.6
2	T79710-7	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	2.4	-0.1	2.3
2	T79710-8	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	2.4	-0.1	2.3
2	T79710-9	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	2.4	-0.1	2.3
2	T79710-10	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	2.4	-0.1	2.3
2	T79710-11	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	2.4	-0.1	2.3
2	T79710-12	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	2.4	-0.1	2.3
1	T79710-13	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	110	2.1	-0.5	1.6
2	T79710-14	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	2.4	-0.1	2.3
2	T79710-15	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	2.4	-0.1	2.3
1	T79710-16	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	110	2.1	-0.5	1.6
1	T79710-17	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	110	2.1	-0.5	1.6

4.1
4

T79710R: Chain of Custody
Page 4 of 4

General Chemistry

5

QC Data Summaries

Includes the following where applicable:

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

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T79710R
Account: CARR - Carr Environmental Group
Project: Sohio A#1

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP13961/GN33098	2.5	0.0	mg/kg	50	49.2	98.4	90-110%
Chloride	GP13978/GN33136	2.5	0.0	mg/kg	50	50.1	100.2	90-110%

5.1
5

Associated Samples:

Batch GP13961: T79710-1R, T79710-2R

Batch GP13978: T79710-10R, T79710-11R, T79710-3R, T79710-4R, T79710-7R, T79710-8R, T79710-9R

(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T79710R
Account: CARR - Carr Environmental Group
Project: Sohio A#1

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chloride	GP13961/GN33098	T81386-3	mg/kg	91.9	92.2	0.3	0-20%
Chloride	GP13978/GN33136	T79710-3R	mg/kg	1190	1190	0.0	0-20%

Associated Samples:

Batch GP13961: T79710-1R, T79710-2R

Batch GP13978: T79710-10R, T79710-11R, T79710-3R, T79710-4R, T79710-7R, T79710-8R, T79710-9R

(*) Outside of QC limits

5.2
5

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T79710R
Account: CARR - Carr Environmental Group
Project: Sohio A#1

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP13961/GN33098	T81386-3	mg/kg	91.9	108	182	83.1	80-120%
Chloride	GP13978/GN33136	T79710-3R	mg/kg	1190	1110	2320	101.5	80-120%

5.3
5

Associated Samples:

Batch GP13961: T79710-1R, T79710-2R

Batch GP13978: T79710-10R, T79710-11R, T79710-3R, T79710-4R, T79710-7R, T79710-8R, T79710-9R

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits