

GW - 115

REPORTS

YEAR(S):

1999

Acid Tank

**UNDERGROUND STORAGE TANK
REMOVAL REPORT**

**HALLIBURTON ENERGY SERVICES
2311 SOUTH FIRST
ARTESIA, EDDY COUNTY, NEW MEXICO**

DELTA PROJECT NO. F098-130

Prepared for:

**Jim McGinty
Halliburton Shared Services
4100 Clinton Drive
Building 3, 1107H
Houston, Texas 77020**

February 26, 1999

Prepared By:

**Delta Environmental Consultants, Inc.
2340 Trinity Mills Road, Suite 230
Carrollton, TX 75006-1939
(972) 418-6202**

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UNDERGROUND STORAGE TANK REMOVAL REPORT

**HALLIBURTON ENERGY SERVICES
2311 SOUTH FIRST
ARTESIA, EDDY COUNTY, NEW MEXICO**

DELTA PROJECT NO. F098-130

1.0 INTRODUCTION

Two 5,000-gallon fiberglass acid neutralization tanks were excavated and removed from Halliburton Energy Services in Artesia, New Mexico.

The scope of work for this project is detailed below.

- Δ Water and sludge material were removed from two 5,000 gallon fiberglass tanks;
- Δ Two fiberglass tanks were excavated and removed;
- Δ Excavation walls were sampled and analyzed for Total Petroleum Hydrocarbons (TPH by EPA Method 418.1)
- Δ Stockpiled soil and sludge were sampled and analyzed for TCLP Volatile Organic Compounds (VOC's), TCLP Semi-volatile Organic Compounds (SVOC's), and TCLP Metals (EPA Methods 1311/8260, 1311/8270, and 1311/6000/7000, respectively).
- Δ An Underground Storage Tank Removal Report was prepared documenting site activities.

2.0 BACKGROUND INFORMATION

The site is located at 2311 South First Street, Artesia, Eddy County, New Mexico. The facility is an active oil field service yard and provides support for oil field cementing stimulation and vehicle repair activities. The tanks were used for acid neutralization and batch water storage for the acid terminal.

3.0 TANK REMOVAL ACTIVITIES

3.1 Regulatory Notification

Because the system being removed did not discharge into local systems, no regulatory notifications were necessary. Mr. Jack Ford of the New Mexico Oil Conservation Division was informed of the project and scope of work during the removal operation.

3.2 Tank Removal

The liquids were removed from the two tanks by Controlled Recovery, Inc. of Hobbs, New Mexico. The tanks were flushed with fresh water and evacuated a second time. All liquid wastes were stored on-site in a specially coated frac tank until analytical results were received. A copy of the Oil Conservation Division (OCD) Disposal Approval form and the liquid waste manifest are included in Appendix A. Due to the presence of sludge materials on the bottom of the two tanks, further cleaning prior to removing the tanks was not possible.

All excavation and removal activities were performed by Rhino Environmental Services of Hobbs, New Mexico. Halliburton and Delta personnel were onsite to observe and supervise site activities.

The southern tank was excavated first to allow access by the backhoe. Overlying sediments were removed until the tank was accessible. The top of the tank was then removed to allow access to the sludge materials within. Soil was added to the sludge material to facilitate stabilization and removal. After sludge removal, the tank was pulled for disposal. The entire procedure was repeated for the northern tank. The soil/sludge material was sampled and stockpiled on and covered with plastic sheeting. Ground water was encountered at approximately fifteen feet below ground surface during excavation of the southern tank. Photographs of the site activities are included in Appendix B.

Following OCD approval, Rhino transported 96 cubic yards of material to the Rhino Environmental Services OCD Land Farm located on Highway 18 in Lee County. The OCD approval form and waste manifests are included in Appendix A.

3.3 Soil and Ground Water Sample Collection

The sampled soil was predominantly gravel. No hydrocarbon odors were noted during sample collection. The excavation side walls were sampled to assess possible soil impact. The sample locations are shown on Figure 1. The soil samples were collected with the bucket of the backhoe.

Each sample was taken from approximately 10-13 feet below ground surface. One sample was collected from the ground water that entered the excavation.

All of the excavation samples were analyzed for petroleum oil hydrocarbons (POH) by EPA Method 418.1. The sample from each half of the tank excavation with the highest POH result was also analyzed for volatile organic compounds (VOCs) by EPA Method 8260 and semi-volatile organic compounds (SVOCs) by EPA Method 8270. The ground water sample (pit water) was submitted for analyses of VOCs, SVOCs, and RCRA metals.

POH concentrations ranged from <5.0 mg/kg to 2600 mg/kg. VOCs ranged from <0.500 mg/kg to 414.4 mg/kg. SVOCs ranged from <0.0400 mg/kg to 51.94 mg/kg. Pit water results indicated TPH-DRO concentrations of 8.2 mg/l, VOCs of 10.31 mg/l, and no measurable concentrations of RCRA metals.

4.0 CONCLUSIONS

- Δ Two 5,000-gallon fiberglass UST's were emptied and removed.
- Δ Analytical results indicate that soil and ground water have been impacted by operation of the neutralization tanks.

5.0 SIGNATURES

This report was prepared by:

DELTA ENVIRONMENTAL CONSULTANTS, INC. (RCAS #00222)

Jam (Jahn) Date 5/12/99
Destini Baldonado
Staff Geologist

Reviewed by:

Mark T. Smith Date 05-12-99
Mark T. Smith
Senior Geologist

DJB/bgw

TABLES

TABLE 1
SUMMARY OF SOIL AND WATER SAMPLE ANALYTICAL RESULTS
HALLIBURTON ENERGY SERVICES
ARTESIA, NEW MEXICO
DELTA PROJECT NO. F098-130

All measurements in ppm (mg/kg or mg/l)

<u>Boring</u>	<u>Date</u>	<u>TPH-DRO</u>	<u>VOCs</u>	<u>SVOCs</u>	<u>POH 8270C</u>	<u>POH 418.1</u>	<u>pH</u>	<u>Arsenic</u>	<u>Barium</u>	<u>Cadmium</u>	<u>Chromium</u>	<u>Lead</u>	<u>RCRAs Metals</u>	<u>Selenium</u>	<u>Silver</u>	<u>Mercury</u>
So. Tank - SW	9/24/98	NA	NA	NA	55	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
So. Tank - EW	9/24/98	NA	NA	NA	510	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
So. Tank - NW	9/24/98	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
So. Tank - WW	9/24/98	NA	12.89	1.30	1400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
No. Tank - SW	9/24/98	NA	NA	NA	95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
No. Tank - EW	9/24/98	NA	NA	NA	1800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
No. Tank - NW	9/24/98	NA	414.4	51.94	2600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
No. Tank - WW	9/24/98	NA	NA	NA	1.90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Stockpile*	9/24/98	NA	<0.500	<0.0400	NA	6.12	<0.200	0.45	<0.0300	<0.0300	<0.100	<0.200	<0.0300	<0.000200	<0.0300	<0.000200
Tank Water	9/24/98	NA	NA	NA	110	NA	<0.200	0.17	0.15	0.031	0.13	<0.20	<0.030	<0.00200	<0.030	<0.00200
Pit Water	9/24/98	8.2	10.31	NA	NA	NA	<0.0050	<0.10	<0.010	<0.03	<0.0050	<0.050	<0.030	<0.030	<0.00200	<0.00200

NA - Not Analyzed

VOCs and SVOCs = Volatile organic compounds and semi-volatile organic compounds

VOCs and SVOCs reported as one number for all compounds above detection limits, please refer to laboratory report for constituent specific detection limits and results.

POH = Petroleum Oil Hydrocarbons

* TCLP Analysis

FIGURES

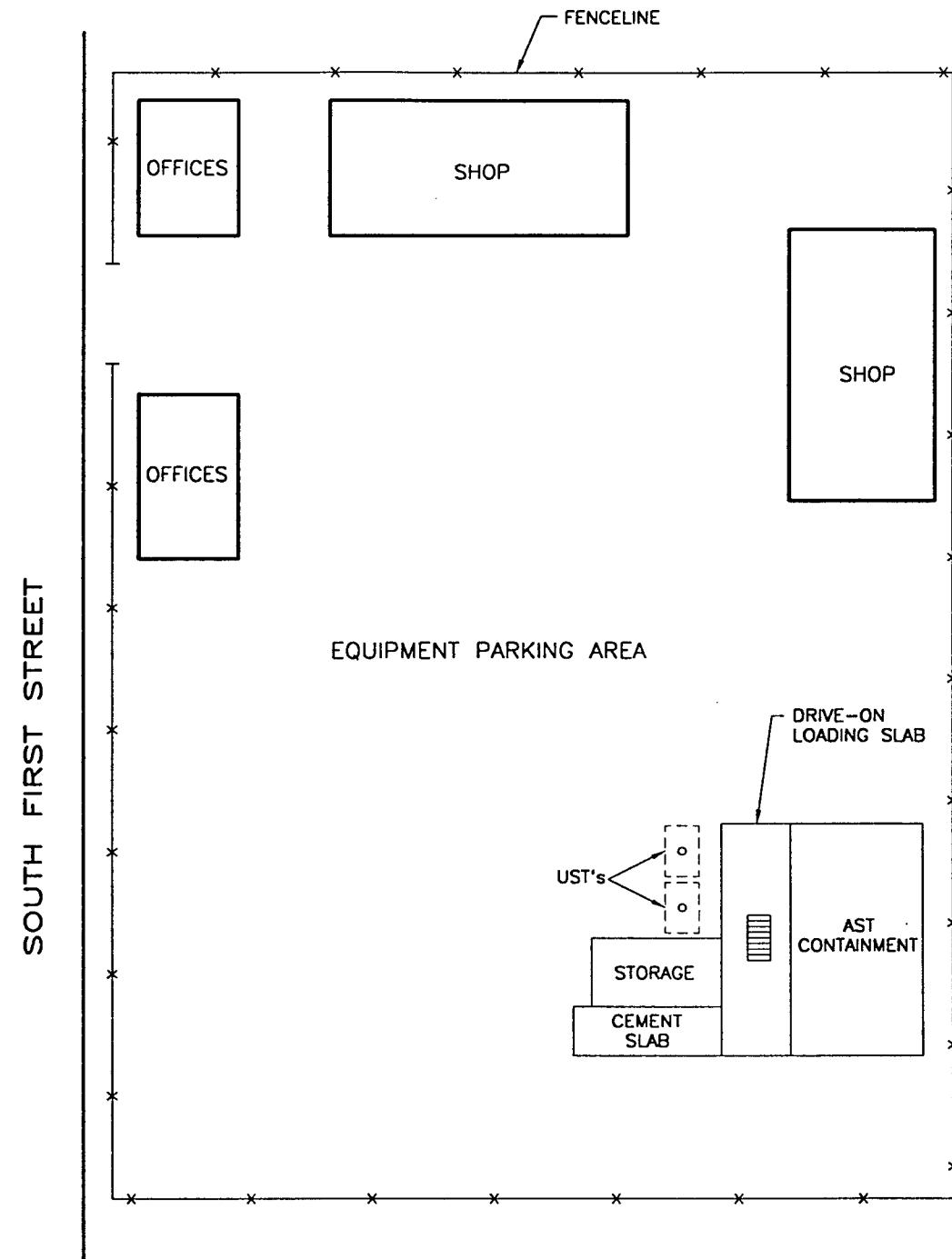
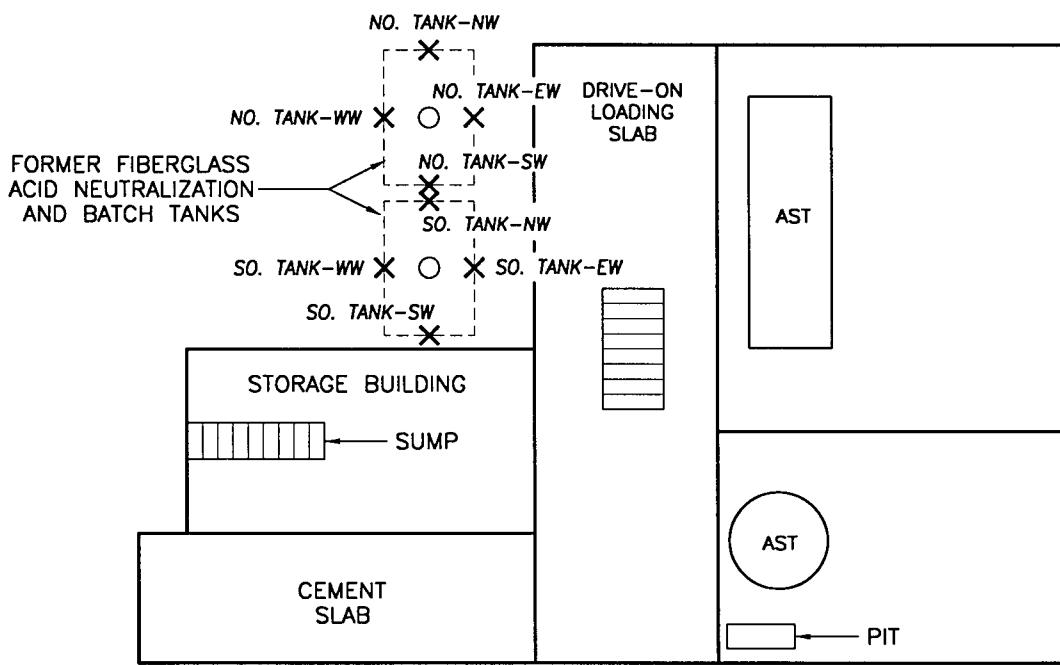


FIGURE 1
SITE MAP
HALLIBURTON ENERGY SERVICES
ARTESIA, NEW MEXICO

PROJECT NO. F098-130	PREPARED BY DB	DRAWN BY DD
DATE 1/25/99	REVIEWED BY	FILE NAME 98130SM





LEGEND

✗ = SAMPLE LOCATIONS



NOT TO SCALE

FIGURE 2
PARTIAL SITE MAP WITH SAMPLING LOCATIONS
HALLIBURTON ENERGY SERVICES
ARTESIA, NEW MEXICO

PROJECT NO. F098-130	PREPARED BY DB	DRAWN BY DD
DATE 2/26/99	REVIEWED BY	FILE NAME 98130PSM



APPENDIX A
WASTE MANIFESTS

District II - (505) 748-1283
411 S. First
Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Road
Artesia, NM 87410
District IV - (505) 827-7131

Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

RECEIVED

Submit
Plus
to app
District

DEC 03 1998

Environmental Bureau
Oil Conservation Division

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator Haliburton Energy
Verbal Approval Received: Yes <input type="checkbox"/> No <input type="checkbox"/>	5. Originating Site Artesia Facility
2. Management Facility Destination Controlled Recovery, Inc.	6. Transporter CRI
3. Address of Facility Operator P.O. Box 388 Hobbs	8. State New Mexico
7. Location of Material (Street Address or ULSTR) 2311 South 1st Street	Artesia, New Mexico
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous listing or testing will be approved.	
All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

The following analytical is from the Haliburton Artesia facility's wash water. The material was generated by make up water from former acid terminal. I have included a certificate of waste and a chain of custody.

11-007

Estimated Volume 4000 gallons cy Known Volume (to be entered by the operator at the end of the haul) _____

SIGNATURE: Billie Charo TITLE: Envir. Compliance Manger DATE: 11/30/98
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Billie Charo TELEPHONE NO. (505)393-1079

(This space for State Use)

APPROVED BY: _____ TITLE: _____ DATE: _____

APPROVED BY: Martyn J. Kelly TITLE: Env Geology ST DATE: 12/2/98

P098-130

0083

NON-HAZARDOUS WASTE MANIFEST

PART I: Generator Halliburton Energy Services
 Address 2311 S. 1st St.
 City/State Artesia, NM

Telephone No. _____

ORGINATION OF WASTE:

Operations Center Artesia, New Mexico Permit No. _____
 Property Name Artesia Facility
 (Well, Tank Battery, Plant, Facility)

WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT.,LBS., UNITS, ETC.)

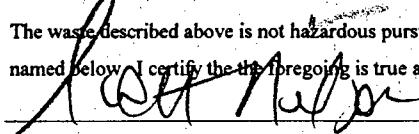
Drilling Fluids	Tank Bottoms	Exempt Fluids
Completion Fluids	Gas Plant Waste	C117 No.
Contaminated Soil	Other Material <input checked="" type="checkbox"/>	Pit No.

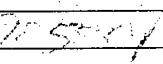
DESCRIPTION / NOTES

95 bbls. of batch water from acid terminal

CERTIFICATION:

The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify the foregoing is true and correct to the best of my knowledge.


 Signature of Generator's Authorized Agent


 Date and time of Shipment

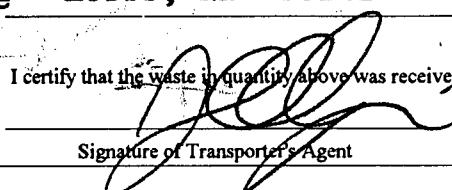
PART II: TRANSPORTER: (To be completed in full by Transporter)

Name Controlled Recovery, Inc. (505) 393-1079
 Address P. O. Box 388 Telephone No.
 City/State Hobbs, NM 88241 V-2

Truck No. _____

CERTIFICATION:

I certify that the waste in quantity above was received by me for shipment to the destination below.


 12-4-98 7:30PM

Date and time of Received

Signature of Transporter's Agent

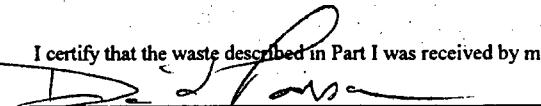
PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc. (505)393-1079
 Address P.O. Box 388 Telephone No.
 City/State Hobbs, NM 88241

Telephone No. _____

CERTIFICATION:

I certify that the waste described in Part I was received by me via the transporter described in Part II.


 12-4-98 7:30PM

Date and time of Received

Signature of Facility Agent

Post-it® Fax Note 7671
To: Destiny Baldinato
Co./Dept.: Delta Env.
Phone #: (972) 418-5311
Fax #: -5243

Energy Minerals and Natural Resources Department

Oil Conservation Division

2040 South Pacheco Street
 Santa Fe, New Mexico 87505
 (505) 827-7131

RECEIVED

JAN 23 1999

Form C-138
Originated 8/895Submit Original
Plus 1 Copy
to appropriate
District OfficeEnvironmental Bureau
Oil Conservation Division**REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE**

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator Halliburton Energy Services
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site 2311 S. 1st St. Artesia, NM
2. Management Facility Destination Rhino Commercial Landfarm	6. Transporter Rhino
3. Address of Facility Operator 5 CR 6065, Farmington, NM 8701	8. State New Mexico
7. Location of Material (Street Address or ULSTR)	2311 S. 1st St., Artesia, NM

9. Circle One:

- A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job.
- B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved.

All transporters must certify the wastes delivered are only those consigned for transport.

BRIEF DESCRIPTION OF MATERIAL:

Sludge & Soil from the waste neutralization tank associated with
The acid terminal.

Estimated Volume 100 cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: 
Waste Management Facility Authorized Agent TITLE: Landfarm Manager DATE: 1-22-99
 TYPE OR PRINT NAME: Danielle Berardelli TELEPHONE NO: (505) 598-9626
fax - 9627

(This space for State Use)

APPROVED BY: Connie Williams TITLE: Environmental Engineer DATE: 2-5-99

APPROVED BY: Martyn J. Williams TITLE: Environmental Geologist DATE: 1-28-99

Please print or type (do not use 1/2 pitch) typewriter
 (Form designed for use on 8 1/2 x 11 inch paper)

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of
3. Generator's Name and Mailing Address <i>Halliburton</i> P O Box 539				
4. Generator's Phone (505) 746-2758				
5. Transporter 1 Company Name <i>RHINO ENV. SERV. INC.</i>		6. US EPA ID Number		
7. Transporter 2 Company Name		8. US EPA ID Number		
9. Designated Facility Name and Site Address <i>RHINO ENV. SERV. INC.</i> 8 MILES SOUTH OF HOBBS HWY 18 OLD FARM		10. US EPA ID Number	A. Transporter's Phone <i>505-392-4498</i>	B. Transporter's Phone <i>1-800-499-8393</i>
11. Waste Shipping Name and Description a. <i>Non-Hazardous</i> <i>Hydrocarbon Impacted Soil</i>		12. Containers No.	13. Total Quantity	14. Unit Wt/Vol
b.				
c.				
d.				
D. Additional Descriptions for Materials Listed Above		E. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information <i>NONE</i>				
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste. Printed/Typed Name <i>Steve D. Meyett</i> Signature <i>Steve D. Meyett</i> Month <i>2</i> Day <i>22</i> Year <i>99</i>				
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name <i>Billy Hull</i> Signature <i>Billy Hull</i> Month <i>2</i> Day <i>22</i> Year <i>99</i>				
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name _____ Signature _____ Month _____ Day _____ Year _____				
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19 Printed/Typed Name <i>Royce Cooper</i> Signature <i>Royce Cooper</i> Month <i>2</i> Day <i>22</i> Year <i>99</i>				

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No. <i>000</i>	2. Page 1 of
3. Generator's Name and Mailing Address <i>HALLIBURTON PO BOX 539 ARTISAN NM 88210</i>				
4. Generator's Phone (<i>505-746-2582</i>)				
5. Transporter 1 Company Name <i>RHINO ENV. SERV. INC.</i>		6. US EPA ID Number		
7. Transporter 2 Company Name		8. US EPA ID Number		
9. Designated Facility Name and Site Address <i>Rhino OCD Farm 8 miles S of Hwy 18 Robbs NM</i>		10. US EPA ID Number	A. Transporter's Phone <i>505-392-4498</i> B. Transporter's Phone C. Facility's Phone <i>1800-499-8393</i>	
11. Waste Shipping Name and Description a. <i>NON HAZARDOUS Hydrocarbon Impacted Soils</i>		12. Containers No.	13. Total Quantity	14. Unit Wt/Vol
		<i>BLK</i>	<i>24yds</i>	
b.				
c.				
d.				
D. Additional Descriptions for Materials Listed Above		E. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information <i>NONE</i>				
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste. Printed/Typed Name <i>Steve DeMerritt</i> Signature <i>Steve DeMerritt</i> Month <i>12</i> Day <i>22</i> Year <i>99</i>				
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name <i>Billy Hull</i> Signature <i>Billy Hull</i> Month <i>12</i> Day <i>22</i> Year <i>99</i>				
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name _____ Signature _____ Month _____ Day _____ Year _____				
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19. Printed/Typed Name <i>Joyce Cooper</i> Signature <i>Joyce Cooper</i> Month <i>12</i> Day <i>22</i> Year <i>99</i>				

Please print or type
Form designed for use on one (12 pt.) typewriter.

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of	
3. Generator's Name and Mailing Address <i>HALLIBURTON PO BOX 539 ARTESIA NM 88210</i>					
4. Generator's Phone (<i>505-2746-25758</i>)					
5. Transporter 1 Company Name <i>RHINO Env. SERV. INC</i>		6. US EPA ID Number			
7. Transporter 2 Company Name		8. US EPA ID Number			
9. Designated Facility Name and Site Address <i>RHINO Env. SERV. INC 8 miles south of Hobbs Hwy 18 OCD Farm</i>		10. US EPA ID Number	A. Transporter's Phone <i>505-392-4498</i> B. Transporter's Phone C. Facility's Phone <i>1-800-499-8393</i>		
GENERATOR	11. Waste Shipping Name and Description <i>a. NON-HAZARDOUS HYDROCARBON IMPACTED SOIL</i>		12. Containers No.	13. Total Quantity	14. Unit Wt/Vol
			Bulk	24cyts	
	b.				
	c.				
	d.				
D. Additional Descriptions for Materials Listed Above		E. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information <i>NONE</i>					
TRANSPORTER	16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.				
	Printed/Typed Name <i>Steve Demeritt</i>	Signature <i>Steve Demeritt</i>	Month	Day	Year
17. Transporter 1 Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Billy Hall</i>	Signature <i>Billy Hall</i>	Month	Day	Year	
					<i>12 22 99</i>
18. Transporter 2 Acknowledgement of Receipt of Materials					
Printed/Typed Name	Signature	Month	Day	Year	
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name <i>Royce Cooper</i>	Signature <i>Royce Cooper</i>	Month	Day	Year	
					<i>12 22 99</i>

Please print clearly
(Form designed for inkjet printer)

**NON-HAZARDOUS
WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest
Document No.
0042. Page 1
of

3. Generator's Name and Mailing Address

Hall, Burton
PO BOX 539 ARTESIA NM 88210
4. Generator's Phone () 505-746-2758

5. Transporter 1 Company Name

RHINO ENVIRONMENTAL SERV. INC.

6. US EPA ID Number

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

10. US EPA ID Number

Rhino Env Serv Inc
8 mile South on Hwy 18
10665 Hwy 18 OCD Farm

A. Transporter's Phone 505 392 4498

B. Transporter's Phone

C. Facility's Phone

1800 499 8393

11. Waste Shipping Name and Description

12. Containers No.	13. Total Quantity	14. Unit Wt/Vol
-----------------------	-----------------------	--------------------

a. Non HazardousHydrocarbon Impacted SoilsBLK24 yds

b.

c.

d.

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

NONE

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Steve Demerritt

Signature

Month Day Year

12 22 99

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Billy Hall

Signature

Month Day Year

12 23 99

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Joyce Cooper

Signature

Month Day Year

12 23 99

APPENDIX B

SITE PHOTOGRAPHS



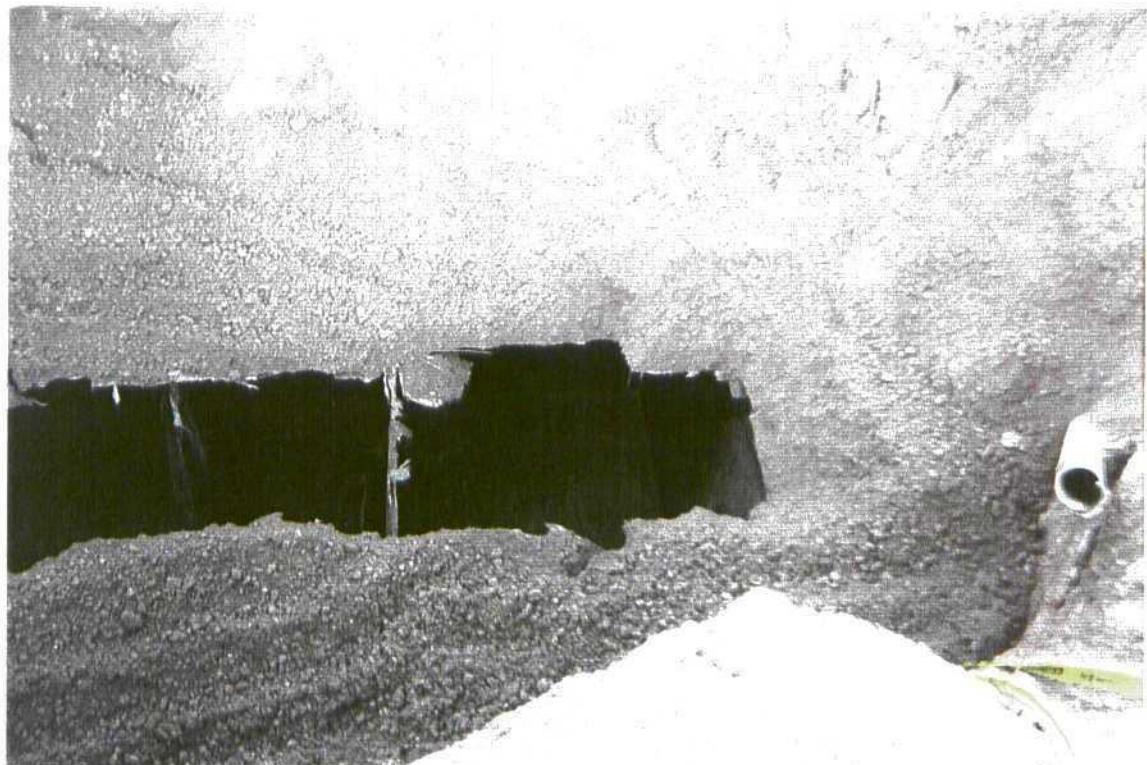
Halliburton Energy Services
Artesia, New Mexico
Delta Project No. F098-130

PHOTOGRAPH 1



DESCRIPTION: Neutralization tank area, north tank manhole in foreground.

PHOTOGRAPH 2



DESCRIPTION: Removal of top of south tank.



Halliburton Energy Services
Artesia, New Mexico
Delta Project No. F098-130

PHOTOGRAPH 3



DESCRIPTION: Interior of south tank.

PHOTOGRAPH 4



DESCRIPTION: Removal of north tank.

APPENDIX C
LABORATORY REPORTS

F098-130



STAR ANALYTICAL

14500 Trinity Boulevard, Suite 106 • Fort Worth, Texas 76155
(817) 571-6800 • Metro (817) 540-6982 • FAX (817) 267-5431



Delta Environmental
12340 Trinity Mills, Suite 230
Carrollton, TX 75006

Project: Artesia
Project Number: F098-130
Project Manager: Destini Baldonado

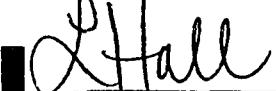
Sampled: 9/23/98 to 9/24/98
Received: 9/26/98
Reported: 10/14/98 09:57

ANALYTICAL REPORT FOR SAMPLES:

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
No. Tank - SW	8090291-01	Soil	9/24/98
So. Tank - EW	8090291-02	Soil	9/24/98
No. Tank - NW	8090291-03	Soil	9/24/98
So. Tank - WW	8090291-04	Soil	9/24/98
No. Tank - SW	8090291-05	Soil	9/24/98
No. Tank - EW	8090291-06	Soil	9/24/98
No. Tank - NW	8090291-07	Soil	9/24/98
No. Tank - WW	8090291-08	Soil	9/24/98
Stockpile	8090291-10	Soil	9/24/98
Dump	8090291-11	Soil	9/23/98
Cont.-Pit	8090291-12	Soil	9/23/98
Cont.- 1	8090291-13	Soil	9/23/98
Cont.- 2	8090291-14	Soil	9/23/98
Cont.- 3	8090291-15	Soil	9/23/98
Cont.- 4	8090291-16	Soil	9/23/98
Cont.- 5	8090291-17	Soil	9/23/98
Tank	8090291-18	Water	9/24/98
Pit Water	8090291-19	Water	9/24/98

Star Analytical, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document.
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Lari Hall, Project Manager



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Delta Environmental
 2340 Trinity Mills, Suite 230
 Carrollton, TX 75006

Project: Artesia
 Project Number: F098-130
 Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
 Received: 9/26/98
 Reported: 10/14/98 09:57

Diesel Hydrocarbons (C12-C24) by EPA Method 8015 (modified)
Star Analytical, Inc.

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
Imp				<u>8090291-11</u>				
Diesel Range Hydrocarbons	09V8445	9/28/98	9/30/98		500	16000	Soil mg/kg	1,D
Surrogate: o-Terphenyl	"	"	"	49-170		NR	%	2,D
Cont.-Pit				<u>8090291-12</u>				
Diesel Range Hydrocarbons	09V8445	9/28/98	9/30/98		10	55	Soil mg/kg	3,D
Surrogate: o-Terphenyl	"	"	"	49-170		110	%	
Cont.-1				<u>8090291-13</u>				
Diesel Range Hydrocarbons	09V8445	9/28/98	9/30/98		10	56	Soil mg/kg	4,D
Surrogate: o-Terphenyl	"	"	"	49-170		NR	%	2,D
Cont.-2				<u>8090291-14</u>				
Diesel Range Hydrocarbons	09V8445	9/28/98	9/30/98		1.0	7.5	Soil mg/kg	
Surrogate: o-Terphenyl	"	"	"	49-170		88	%	
Cont.-3				<u>8090291-15</u>				
Diesel Range Hydrocarbons	09V8445	9/28/98	9/30/98		1.0	17	Soil mg/kg	
Surrogate: o-Terphenyl	"	"	"	49-170		130	%	
Cont.-4				<u>8090291-16</u>				
Diesel Range Hydrocarbons	09V8445	9/28/98	9/30/98		1.0	5.4	Soil mg/kg	5
Surrogate: o-Terphenyl	"	"	"	49-170		82	%	
Cont.-5				<u>8090291-17</u>				
Diesel Range Hydrocarbons	09V8445	9/28/98	9/30/98		1.0	ND	Soil mg/kg	
Surrogate: o-Terphenyl	"	"	"	49-170		88	%	
at Water				<u>8090291-19</u>				
Diesel Range Hydrocarbons	09V8439	9/28/98	9/28/98		2.0	8.2	Water mg/l	6,D
Surrogate: o-Terphenyl	"	"	"	49-170		74	%	

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14500 Trinity Boulevard, Suite 106 • Fort Worth, Texas 76155
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Delta Environmental
 12340 Trinity Mills, Suite 230
 Carrollton, TX 75006

Project: Artesia
 Project Number: F098-130
 Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
 Received: 9/26/98
 Reported: 10/14/98 09:57

Volatile Organic Compounds by EPA Method 8260 Star Analytical, Inc.

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
Co. Tank - WW								
Acetone	10V8023	10/1/98	10/1/98		250	ND	ug/kg	D
Benzene	"	"	"		20	ND	"	D
Bromobenzene	"	"	"		20	ND	"	D
Bromochloromethane	"	"	"		20	ND	"	D
Bromodichloromethane	"	"	"		20	ND	"	D
Bromoform	"	"	"		20	ND	"	D
Bromomethane	"	"	"		20	ND	"	D
2-Butanone	"	"	"		100	ND	"	D
n-Butylbenzene	"	"	"		20	ND	"	D
sec-Butylbenzene	"	"	"		20	ND	"	D
tert-Butylbenzene	"	"	"		20	ND	"	D
Carbon disulfide	"	"	"		20	ND	"	D
Carbon tetrachloride	"	"	"		20	ND	"	D
Chlorobenzene	"	"	"		20	ND	"	D
Chloroethane	"	"	"		20	ND	"	D
Chloroform	"	"	"		20	ND	"	D
Chloromethane	"	"	"		20	ND	"	D
1-Chlorotoluene	"	"	"		20	ND	"	D
4-Chlorotoluene	"	"	"		20	ND	"	D
Dibromochloromethane	"	"	"		20	ND	"	D
1,2-Dibromo-3-chloropropane	"	"	"		20	ND	"	D
1,2-Dibromoethane	"	"	"		20	ND	"	D
Dibromomethane	"	"	"		20	ND	"	D
1,2-Dichlorobenzene	"	"	"		20	ND	"	D
1,3-Dichlorobenzene	"	"	"		20	ND	"	D
1,4-Dichlorobenzene	"	"	"		20	ND	"	D
Dichlorodifluoromethane	"	"	"		20	ND	"	D
1,1-Dichloroethane	"	"	"		20	ND	"	D
1,2-Dichloroethane	"	"	"		20	ND	"	D
1,1-Dichloroethene	"	"	"		20	ND	"	D
cis-1,2-Dichloroethene	"	"	"		20	ND	"	D
trans-1,2-Dichloroethene	"	"	"		20	ND	"	D
1,2-Dichloropropane	"	"	"		20	ND	"	D
1,3-Dichloropropane	"	"	"		20	ND	"	D
1,2-Dichloropropene	"	"	"		20	ND	"	D
1,1-Dichloropropene	"	"	"		20	ND	"	D
cis-1,3-Dichloropropene	"	"	"		20	ND	"	D
trans-1,3-Dichloropropene	"	"	"		20	ND	"	D
Methylbenzene	"	"	"		20	310	"	D
Hexachlorobutadiene	"	"	"		20	ND	"	D
2-Hexanone	"	"	"		100	ND	"	D

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Lari Hall, Project Manager

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Delta Environmental
 2340 Trinity Mills, Suite 230
 Carrollton, TX 75006

Project: Artesia
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 Project Manager: Destini Baldonado

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Volatile Organic Compounds by EPA Method 8260 Star Analytical, Inc.

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
o. Tank - WW (continued)								
				8090291-04				
Isopropylbenzene	10V8023	10/1/98	10/1/98		20	130	ug/kg	D
n-Isopropyltoluene	"	"	"		20	ND	"	D
Methylene chloride	"	"	"		500	ND	"	D
Methyl tert-butyl ether	"	"	"		20	ND	"	D
4-Methyl-2-pentanone	"	"	"		100	ND	"	D
Naphthalene	"	"	"		200	4900	"	D
-Propylbenzene	"	"	"		20	510	"	D
Styrene	"	"	"		20	ND	"	D
1,1,1,2-Tetrachloroethane	"	"	"		20	ND	"	D
1,1,2,2-Tetrachloroethane	"	"	"		20	ND	"	D
Tetrachloroethene	"	"	"		20	ND	"	D
Toluene	"	"	"		20	1200	"	D
1,2,3-Trichlorobenzene	"	"	"		20	ND	"	D
1,2,4-Trichlorobenzene	"	"	"		20	ND	"	D
1,1,1-Trichloroethane	"	"	"		20	ND	"	D
1,1,2-Trichloroethane	"	"	"		20	ND	"	D
Trichloroethene	"	"	"		20	ND	"	D
Trichlorofluoromethane	"	"	"		20	ND	"	D
1,2,3-Trichloropropane	"	"	"		20	ND	"	D
1,2,4-Trimethylbenzene	"	"	"		20	1900	"	D
3,5-Trimethylbenzene	"	"	"		20	2000	"	D
Vinyl acetate	"	"	"		20	ND	"	D
Vinyl chloride	"	"	"		20	ND	"	D
m,p-Xylene	"	"	"		20	1200	"	D
-Xylene	"	"	"		20	740	"	D
Surrogate: DBFM	"	"	"	80-120		96	%	D
Surrogate: Toluene-d8	"	"	"	81-120		100	"	D
Surrogate: 4-BFB	"	"	"	74-120		94	"	D

Star Analytical, Inc.

Lari Hall, Project Manager

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Delta Environmental
 12340 Trinity Mills, Suite 230
 Carrollton, TX 75006

Project: Artesia
 Project Number: F098-130
 Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
 Received: 9/26/98
 Reported: 10/14/98 09:57

Volatile Organic Compounds by EPA Method 8260 Star Analytical, Inc.

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
No. Tank - NW								
Acetone	10V8023	10/1/98	10/1/98		25000	ND	ug/kg	D
Benzene	"	"	"		2000	ND	"	D
Bromobenzene	"	"	"		2000	ND	"	D
Bromochloromethane	"	"	"		2000	ND	"	D
Bromodichloromethane	"	"	"		2000	ND	"	D
Bromoform	"	"	"		2000	ND	"	D
Bromomethane	"	"	"		2000	ND	"	D
2-Butanone	"	"	"		10000	ND	"	D
n-Butylbenzene	"	"	"		2000	ND	"	D
sec-Butylbenzene	"	"	"		2000	ND	"	D
tert-Butylbenzene	"	"	"		2000	ND	"	D
Carbon disulfide	"	"	"		2000	ND	"	D
Carbon tetrachloride	"	"	"		2000	ND	"	D
Chlorobenzene	"	"	"		2000	ND	"	D
Chloroethane	"	"	"		2000	ND	"	D
Chloroform	"	"	"		2000	ND	"	D
Chloromethane	"	"	"		2000	ND	"	D
1-Chlorotoluene	"	"	"		2000	ND	"	D
4-Chlorotoluene	"	"	"		2000	ND	"	D
Dibromochloromethane	"	"	"		2000	ND	"	D
2-Dibromo-3-chloropropane	"	"	"		2000	ND	"	D
1,2-Dibromoethane	"	"	"		2000	ND	"	D
Dibromomethane	"	"	"		2000	ND	"	D
2-Dichlorobenzene	"	"	"		2000	ND	"	D
3-Dichlorobenzene	"	"	"		2000	ND	"	D
1,4-Dichlorobenzene	"	"	"		2000	ND	"	D
Dichlorodifluoromethane	"	"	"		2000	ND	"	D
1,1-Dichloroethane	"	"	"		2000	ND	"	D
1,2-Dichloroethane	"	"	"		2000	ND	"	D
1,1-Dichloroethene	"	"	"		2000	ND	"	D
cis-1,2-Dichloroethene	"	"	"		2000	ND	"	D
trans-1,2-Dichloroethene	"	"	"		2000	ND	"	D
1,2-Dichloropropane	"	"	"		2000	ND	"	D
1,3-Dichloropropane	"	"	"		2000	ND	"	D
2-Dichloropropane	"	"	"		2000	ND	"	D
1,1-Dichloropropene	"	"	"		2000	ND	"	D
cis-1,3-Dichloropropene	"	"	"		2000	ND	"	D
trans-1,3-Dichloropropene	"	"	"		2000	ND	"	D
Methylbenzene	"	"	"		2000	8100	"	D
Hexachlorobutadiene	"	"	"		2000	ND	"	D
2-Hexanone	"	"	"		10000	ND	"	D

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Star Analytical, Inc.

Lari Hall, Project Manager



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14500 Trinity Boulevard, Suite 106 • Fort Worth, Texas 76155
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Delta Environmental
 2340 Trinity Mills, Suite 230
 Carrollton, TX 75006

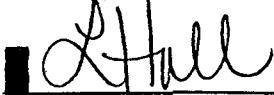
Project: Artesia
 Project Number: F098-130
 Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
 Received: 9/26/98
 Reported: 10/14/98 09:57

Volatile Organic Compounds by EPA Method 8260
Star Analytical, Inc.

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
So. Tank - NW (continued)								
				8090291-07				
Isopropylbenzene	10V8023	10/1/98	10/1/98		2000	6300	ug/kg	D
n-Isopropyltoluene	"	"	"		2000	ND	"	D
Methylene chloride	"	"	"		50000	ND	"	D
Methyl tert-butyl ether	"	"	"		2000	ND	"	D
4-Methyl-2-pentanone	"	"	"		10000	ND	"	D
Naphthalene	"	"	"		2000	62000	"	D
m-Propylbenzene	"	"	"		2000	29000	"	D
Styrene	"	"	"		2000	ND	"	D
1,1,1,2-Tetrachloroethane	"	"	"		2000	ND	"	D
1,2,2-Tetrachloroethane	"	"	"		2000	ND	"	D
1,1,2-Tetrachloroethene	"	"	"		2000	ND	"	D
Toluene	"	"	"		2000	13000	"	D
1,2,3-Trichlorobenzene	"	"	"		2000	ND	"	D
1,2,4-Trichlorobenzene	"	"	"		2000	ND	"	D
1,1,1-Trichloroethane	"	"	"		2000	ND	"	D
1,1,2-Trichloroethane	"	"	"		2000	ND	"	D
Trichloroethene	"	"	"		2000	ND	"	D
Trichlorofluoromethane	"	"	"		2000	ND	"	D
1,2,3-Trichloropropane	"	"	"		2000	ND	"	D
1,2,4-Trimethylbenzene	"	"	"		2000	130000	"	D
3,5-Trimethylbenzene	"	"	"		2000	120000	"	D
Vinyl acetate	"	"	"		2000	ND	"	D
Vinyl chloride	"	"	"		2000	ND	"	D
m,p-Xylene	"	"	"		2000	24000	"	D
Xylene	"	"	"		2000	22000	"	D
Surrogate: DBFM	"	"	"	80-120		98	%	D
Surrogate: Toluene-d8	"	"	"	81-120		100	"	D
Surrogate: 4-BFB	"	"	"	74-120		98	"	D

Star Analytical, Inc.


 Lari Hall, Project Manager

*Refer to end of report for text of notes and definitions.



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 14500 Trinity Boulevard, Suite 106 • Fort Worth, Texas 76155
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Delta Environmental
 2340 Trinity Mills, Suite 230
 Carrollton, TX 75006

Project: Artesia
 Project Number: F098-130
 Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
 Received: 9/26/98
 Reported: 10/14/98 09:57

Volatile Organic Compounds by EPA Method 8260
 Star Analytical, Inc.

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
8090291-11								
Acetone	10V8023	10/1/98	10/1/98		13000	ND	ug/kg	D
Benzene	"	"	"		1000	ND	"	D
Toluobenzene	"	"	"		1000	ND	"	D
Dromochloromethane	"	"	"		1000	ND	"	D
Bromodichloromethane	"	"	"		1000	ND	"	D
Chloroform	"	"	"		1000	ND	"	D
Chloromethane	"	"	"		1000	ND	"	D
2-Butanone	"	"	"		5000	ND	"	D
n-Butylbenzene	"	"	"		1000	ND	"	D
m-Butylbenzene	"	"	"		1000	ND	"	D
p-Butylbenzene	"	"	"		1000	ND	"	D
Carbon disulfide	"	"	"		1000	ND	"	D
Carbon tetrachloride	"	"	"		1000	ND	"	D
Chlorobenzene	"	"	"		1000	ND	"	D
Chloroethane	"	"	"		1000	ND	"	D
Chloroform	"	"	"		1000	ND	"	D
Chloromethane	"	"	"		1000	ND	"	D
Chlorotoluene	"	"	"		1000	ND	"	D
4-Chlorotoluene	"	"	"		1000	ND	"	D
Dibromochloromethane	"	"	"		1000	ND	"	D
1,2-Dibromo-3-chloropropane	"	"	"		1000	ND	"	D
1,2-Dibromoethane	"	"	"		1000	ND	"	D
Dibromomethane	"	"	"		1000	ND	"	D
1,2-Dichlorobenzene	"	"	"		1000	ND	"	D
1,3-Dichlorobenzene	"	"	"		1000	ND	"	D
1,4-Dichlorobenzene	"	"	"		1000	ND	"	D
Dichlorodifluoromethane	"	"	"		1000	ND	"	D
1,1-Dichloroethane	"	"	"		1000	ND	"	D
1,2-Dichloroethane	"	"	"		1000	ND	"	D
1,1-Dichloroethene	"	"	"		1000	ND	"	D
1,1,2-Dichloroethene	"	"	"		1000	ND	"	D
cis-1,2-Dichloroethene	"	"	"		1000	ND	"	D
trans-1,2-Dichloroethene	"	"	"		1000	ND	"	D
1,2-Dichloropropane	"	"	"		1000	ND	"	D
1,3-Dichloropropane	"	"	"		1000	ND	"	D
1,2-Dichloropropene	"	"	"		1000	ND	"	D
trans-1,2-Dichloropropene	"	"	"		1000	ND	"	D
cis-1,3-Dichloropropene	"	"	"		1000	ND	"	D
trans-1,3-Dichloropropene	"	"	"		1000	ND	"	D
Phenylbenzene	"	"	"		1000	ND	"	D
Hexachlorobutadiene	"	"	"		1000	ND	"	D
2-Hexanone	"	"	"		5000	ND	"	D

*Refer to end of report for text of notes and definitions.

Star Analytical, Inc.

Lari Hall, Project Manager



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Delta Environmental
 2340 Trinity Mills, Suite 230
 Carrollton, TX 75006

Project: Artesia
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 Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
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Volatile Organic Compounds by EPA Method 8260 Star Analytical, Inc.

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
Bump (continued)								
				8090291-11			Soil	
Isopropylbenzene	10V8023	10/1/98	10/1/98		1000	ND	ug/kg	D
n-Isopropyltoluene	"	"	"		1000	ND	"	D
Methylene chloride	"	"	"		25000	ND	"	D
Methyl tert-butyl ether	"	"	"		1000	ND	"	D
4-Methyl-2-pentanone	"	"	"		5000	ND	"	D
Phthalene	"	"	"		1000	3400	"	D
-Propylbenzene	"	"	"		1000	ND	"	D
Styrene	"	"	"		1000	ND	"	D
1,1,1,2-Tetrachloroethane	"	"	"		1000	ND	"	D
1,2,2-Tetrachloroethane	"	"	"		1000	ND	"	D
Tetrachloroethene	"	"	"		1000	ND	"	D
Toluene	"	"	"		1000	2500	"	D
2,3-Trichlorobenzene	"	"	"		1000	ND	"	D
2,4-Trichlorobenzene	"	"	"		1000	ND	"	D
1,1,1-Trichloroethane	"	"	"		1000	ND	"	D
1,1,2-Trichloroethane	"	"	"		1000	ND	"	D
Trichloroethene	"	"	"		1000	ND	"	D
Trichlorofluoromethane	"	"	"		1000	ND	"	D
1,2,3-Trichloropropane	"	"	"		1000	ND	"	D
1,2,4-Trimethylbenzene	"	"	"		1000	1100	"	D
3,5-Trimethylbenzene	"	"	"		1000	1100	"	D
Vinyl acetate	"	"	"		1000	ND	"	D
Vinyl chloride	"	"	"		1000	ND	"	D
,p-Xylene	"	"	"		1000	ND	"	D
Xylene	"	"	"		1000	ND	"	D
Surrogate: DBFM	"	"	"	80-120		100	%	D
Surrogate: Toluene-d8	"	"	"	81-120		100	"	D
Surrogate: 4-BFB	"	"	"	74-120		96	"	D

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Delta Environmental 2340 Trinity Mills, Suite 230 Carrollton, TX 75006	Project: Artesia Project Number: F098-130 Project Manager: Destini Baldonado	Sampled: 9/23/98 to 9/24/98 Received: 9/26/98 Reported: 10/14/98 09:57
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Volatile Organic Compounds by EPA Method 8260
Star Analytical, Inc.

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
Water								
Acetone	09V8447	9/30/98	9/30/98		100	ND	ug/l	D
Benzene	"	"	"		20	ND	"	D
Chlorobenzene	"	"	"		20	ND	"	D
Chlorochloromethane	"	"	"		20	ND	"	D
Bromodichloromethane	"	"	"		20	ND	"	D
Chloroform	"	"	"		20	ND	"	D
Chloromethane	"	"	"		20	ND	"	D
2-Butanone	"	"	"		100	ND	"	D
n-Butylbenzene	"	"	"		20	ND	"	D
c-Butylbenzene	"	"	"		20	ND	"	D
t-Butylbenzene	"	"	"		20	ND	"	D
Carbon disulfide	"	"	"		20	ND	"	D
Carbon tetrachloride	"	"	"		20	ND	"	D
Chlorobenzene	"	"	"		20	ND	"	D
Chloroethane	"	"	"		20	ND	"	D
Chloroform	"	"	"		20	ND	"	D
Chloromethane	"	"	"		20	ND	"	D
Chlorotoluene	"	"	"		20	ND	"	D
4-Chlorotoluene	"	"	"		20	ND	"	D
Dibromochloromethane	"	"	"		20	ND	"	D
2-Dibromo-3-chloropropane	"	"	"		20	ND	"	D
1,2-Dibromoethane	"	"	"		20	ND	"	D
Dibromomethane	"	"	"		20	ND	"	D
2-Dichlorobenzene	"	"	"		20	ND	"	D
3-Dichlorobenzene	"	"	"		20	ND	"	D
1,4-Dichlorobenzene	"	"	"		20	ND	"	D
Dichlorodifluoromethane	"	"	"		20	ND	"	D
1-Dichloroethane	"	"	"		20	ND	"	D
1,2-Dichloroethane	"	"	"		20	ND	"	D
1,1-Dichloroethene	"	"	"		20	ND	"	D
1-1,2-Dichloroethene	"	"	"		20	ND	"	D
trans-1,2-Dichloroethene	"	"	"		20	ND	"	D
1,2-Dichloropropane	"	"	"		20	ND	"	D
1,3-Dichloropropane	"	"	"		20	ND	"	D
1,2-Dichloropropane	"	"	"		20	ND	"	D
1,3-Dichloropropene	"	"	"		20	ND	"	D
cis-1,3-Dichloropropene	"	"	"		20	ND	"	D
trans-1,3-Dichloropropene	"	"	"		20	ND	"	D
Phenylbenzene	"	"	"		20	390	"	D
Hexachlorobutadiene	"	"	"		20	ND	"	D
2-Hexanone	"	"	"		100	ND	"	D

*Refer to end of report for text of notes and definitions.

Star Analytical, Inc.

Lori Hall, Project Manager



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Delta Environmental
 2340 Trinity Mills, Suite 230
 Carrollton, TX 75006

Project: Artesia
 Project Number: F098-130
 Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
 Received: 9/26/98
 Reported: 10/14/98 09:57

Volatile Organic Compounds by EPA Method 8260
Star Analytical, Inc.

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
Water (continued)								
Isopropylbenzene	09V8447	9/30/98	9/30/98		20	110	ug/l	D
n-Isopropyltoluene	"	"	"		20	ND	"	D
Ethylene chloride	"	"	"		100	ND	"	D
Methyl tert-butyl ether	"	"	"		20	ND	"	D
4-Methyl-2-pentanone	"	"	"		100	ND	"	D
Naphthalene	"	"	"		20	1800	"	D
Propylbenzene	"	"	"		20	440	"	D
Styrene	"	"	"		20	ND	"	D
1,1,1,2-Tetrachloroethane	"	"	"		20	ND	"	D
1,1,2,2-Tetrachloroethane	"	"	"		20	ND	"	D
Tetrachloroethylene	"	"	"		20	ND	"	D
Toluene	"	"	"		20	1300	"	D
2,3-Trichlorobenzene	"	"	"		20	ND	"	D
2,4-Trichlorobenzene	"	"	"		20	ND	"	D
1,1,1-Trichloroethane	"	"	"		20	ND	"	D
1,1,2-Trichloroethane	"	"	"		20	ND	"	D
1-chloroethene	"	"	"		20	ND	"	D
1-chlorofluoromethane	"	"	"		20	ND	"	D
1,2,3-Trichloropropane	"	"	"		20	ND	"	D
1,2,4-Trimethylbenzene	"	"	"		20	2300	"	D
3,5-Trimethylbenzene	"	"	"		20	2100	"	D
Vinyl acetate	"	"	"		20	ND	"	D
Vinyl chloride	"	"	"		20	ND	"	D
p-Xylene	"	"	"		20	1000	"	D
Xylene	"	"	"		20	870	"	D
Surrogate: DBFM	"	"	"	86-120		100	%	
Surrogate: Toluene-d8	"	"	"	88-110		100	"	
Surrogate: 4-BFB	"	"	"	86-120		94	"	

Star Analytical, Inc.


 Lari Hall

Lari Hall, Project Manager

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14500 Trinity Boulevard, Suite 106 • Fort Worth, Texas 76155
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Delta Environmental
 2340 Trinity Mills, Suite 230
 Carrollton, TX 75006

Project: Artesia
 Project Number: F098-130
 Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
 Received: 9/26/98
 Reported: 10/14/98 09:57

Semivolatile Organic Compounds by EPA Method 8270C
Star Analytical, Inc.

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
8090291-04								
8090291-04								Soil
Acenaphthene	10V8024	10/1/98	10/1/98	"	33	ND	ug/kg	
Acenaphthylene	"	"	"	"	33	ND	"	
Aniline	"	"	"	"	33	ND	"	
Anthracene	"	"	"	"	33	ND	"	
Benzoic Acid	"	"	"	"	170	ND	"	
Benzo (a) anthracene	"	"	"	"	33	ND	"	
Benzo (b) fluoranthene	"	"	"	"	33	ND	"	
Benzo (k) fluoranthene	"	"	"	"	33	ND	"	
Benzo (ghi) perylene	"	"	"	"	33	ND	"	
Benzo (a) pyrene	"	"	"	"	33	ND	"	
Benzyl alcohol	"	"	"	"	33	ND	"	
Bis(2-chloroethoxy)methane	"	"	"	"	33	ND	"	
Bis(2-chloroethyl)ether	"	"	"	"	33	ND	"	
Bis(2-chloroisopropyl)ether	"	"	"	"	33	ND	"	
Bis(2-ethylhexyl)phthalate	"	"	"	"	170	ND	"	
4-Bromophenyl phenyl ether	"	"	"	"	33	ND	"	
Butyl benzyl phthalate	"	"	"	"	33	ND	"	
Carbazole	"	"	"	"	33	ND	"	
4-Chloroaniline	"	"	"	"	33	ND	"	
2-Chloronaphthalene	"	"	"	"	33	ND	"	
Chloro-3-methylphenol	"	"	"	"	33	ND	"	
2-Chlorophenol	"	"	"	"	33	ND	"	
4-Chlorophenyl phenyl ether	"	"	"	"	33	ND	"	
Crylsene	"	"	"	"	33	ND	"	
benz (a,h) anthracene	"	"	"	"	33	ND	"	
Dibenzofuran	"	"	"	"	33	ND	"	
Di-n-butyl phthalate	"	"	"	"	170	ND	"	
3-Dichlorobenzene	"	"	"	"	33	ND	"	
1,4-Dichlorobenzene	"	"	"	"	33	ND	"	
1,2-Dichlorobenzene	"	"	"	"	33	ND	"	
3'-Dichlorobenzidine	"	"	"	"	170	ND	"	
4-Dichlorophenol	"	"	"	"	33	ND	"	
Diethyl phthalate	"	"	"	"	33	ND	"	
2,4-Dimethylphenol	"	"	"	"	33	ND	"	
Methyl phthalate	"	"	"	"	33	ND	"	
5-Dinitro-2-methylphenol	"	"	"	"	170	ND	"	
2,4-Dinitrophenol	"	"	"	"	170	ND	"	
2,4-Dinitrotoluene	"	"	"	"	33	ND	"	
5-Dinitrotoluene	"	"	"	"	33	ND	"	
Di-n-octyl phthalate	"	"	"	"	33	ND	"	
Fluoranthene	"	"	"	"	33	ND	"	

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Lari Hall, Project Manager

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14500 Trinity Boulevard, Suite 106 • Fort Worth, Texas 76155
 (817) 571-6800 • Metro (817) 540-6982 • FAX (817) 267-5431



Delta Environmental
 2340 Trinity Mills, Suite 230
 Carrollton, TX 75006

Project: Artesia
 Project Number: F098-130
 Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
 Received: 9/26/98
 Reported: 10/14/98 09:57

Semivolatile Organic Compounds by EPA Method 8270C Star Analytical, Inc.

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
So. Tank - WW (continued)								
Fluorene	10V8024	10/1/98	10/1/98		33	ND	ug/kg	Soil
Hexachlorobenzene	"	"	"		33	ND	"	
Hexachlorobutadiene	"	"	"		33	ND	"	
Hexachlorocyclopentadiene	"	"	"		33	ND	"	
Hexachloroethane	"	"	"		33	ND	"	
Indeno (1,2,3-cd) pyrene	"	"	"		33	ND	"	
Sophorone	"	"	"		33	ND	"	
2-Methylnaphthalene	"	"	"		33	300	"	
2-Methylphenol	"	"	"		33	ND	"	
& 4-Methylphenol	"	"	"		33	ND	"	
Naphthalene	"	"	"		33	1000	"	
2-Nitroaniline	"	"	"		170	ND	"	
3-Nitroaniline	"	"	"		170	ND	"	
-Nitroaniline	"	"	"		170	ND	"	
Nitrobenzene	"	"	"		33	ND	"	
2-Nitrophenol	"	"	"		33	ND	"	
-Nitrophenol	"	"	"		170	ND	"	
N-Nitrosodiphenylamine	"	"	"		33	ND	"	
N-Nitrosodi-n-propylamine	"	"	"		33	ND	"	
Pentachlorophenol	"	"	"		170	ND	"	
Phenanthrene	"	"	"		33	ND	"	
Phenol	"	"	"		33	ND	"	
Pyrene	"	"	"		33	ND	"	
,2,4-Trichlorobenzene	"	"	"		33	ND	"	
,4,5-Trichlorophenol	"	"	"		170	ND	"	
,2,4,6-Trichlorophenol	"	"	"		33	ND	"	
Surrogate: 2-FP	"	"	"	25-120		36	%	
Surrogate: Phenol-d6	"	"	"	24-110		42	"	
Surrogate: 2,4,6-TBP	"	"	"	19-120		45	"	
Surrogate: Nitrobenzene-d5	"	"	"	23-120		45	"	
Surrogate: 2-FBP	"	"	"	30-120		59	"	
Surrogate: p-Terphenyl-d14	"	"	"	18-140		71	"	

Star Analytical, Inc.

Lari Hall, Project Manager

*Refer to end of report for text of notes and definitions.



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14500 Trinity Boulevard, Suite 106 • Fort Worth, Texas 76155
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Delta Environmental
 2340 Trinity Mills, Suite 230
 Carrollton, TX 75006

Project: Artesia
 Project Number: F098-130
 Project Manager: Destini Baldonado

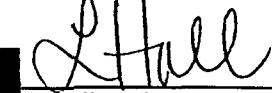
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 Received: 9/26/98
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Semivolatile Organic Compounds by EPA Method 8270C
Star Analytical, Inc.

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
No. Tank - NW								
				8090291-07				Soil
Acenaphthene	10V8024	10/1/98	10/1/98		33	ND	ug/kg	
Acenaphthylene	"	"	"		33	ND	"	
Aniline	"	"	"		33	ND	"	
Anthracene	"	"	"		33	ND	"	
Benzoic Acid	"	"	"		170	ND	"	
Benzo (a) anthracene	"	"	"		33	ND	"	
Benzo (b) fluoranthene	"	"	"		33	ND	"	
Benzo (k) fluoranthene	"	"	"		33	ND	"	
Benzo (ghi) perylene	"	"	"		33	ND	"	
Benzo (a) pyrene	"	"	"		33	ND	"	
Benzyl alcohol	"	"	"		33	ND	"	
Bis(2-chloroethoxy)methane	"	"	"		33	ND	"	
Bis(2-chloroethyl)ether	"	"	"		33	ND	"	
Bis(2-chloroisopropyl)ether	"	"	"		33	ND	"	
Bis(2-ethylhexyl)phthalate	"	"	"		170	220	"	
4-Bromophenyl phenyl ether	"	"	"		33	ND	"	
Butyl benzyl phthalate	"	"	"		33	ND	"	
Carbazole	"	"	"		33	ND	"	
4-Chloroaniline	"	"	"		33	ND	"	
2-Chloronaphthalene	"	"	"		33	ND	"	
-Chloro-3-methylphenol	"	"	"		33	ND	"	
-Chlorophenol	"	"	"		33	ND	"	
4-Chlorophenyl phenyl ether	"	"	"		33	ND	"	
Chrysene	"	"	"		33	ND	"	
Dibenz (a,h) anthracene	"	"	"		33	ND	"	
Dibenzofuran	"	"	"		33	ND	"	
Di-n-butyl phthalate	"	"	"		170	ND	"	
,3-Dichlorobenzene	"	"	"		33	ND	"	
,4-Dichlorobenzene	"	"	"		33	ND	"	
1,2-Dichlorobenzene	"	"	"		33	ND	"	
,3'-Dichlorobenzidine	"	"	"		170	ND	"	
,4-Dichlorophenol	"	"	"		33	ND	"	
Diethyl phthalate	"	"	"		33	ND	"	
2,4-Dimethylphenol	"	"	"		33	ND	"	
Dimethyl phthalate	"	"	"		33	1400	"	
6-Dinitro-2-methylphenol	"	"	"		170	ND	"	
2,4-Dinitrophenol	"	"	"		170	ND	"	
2,4-Dinitrotoluene	"	"	"		33	ND	"	
6-Dinitrotoluene	"	"	"		33	ND	"	
Di-n-octyl phthalate	"	"	"		33	ND	"	
Fluoranthene	"	"	"		33	ND	"	

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Star Analytical, Inc.


 Mari Hall, Project Manager

STAR ANALYTICAL

14500 Trinity Boulevard, Suite 106 • Fort Worth, Texas 76155
 (817) 571-6800 • Metro (817) 540-6982 • FAX (817) 267-5431



Delta Environmental
 12340 Trinity Mills, Suite 230
 Carrollton, TX 75006

Project: Artesia
 Project Number: F098-130
 Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
 Received: 9/26/98
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Semivolatile Organic Compounds by EPA Method 8270C Star Analytical, Inc.

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
o. Tank - NW (continued)								
Fluorene	10V8024	10/1/98	10/1/98		33	530	ug/kg	Soil
Hexachlorobenzene	"	"	"		33	ND	"	
Hexachlorobutadiene	"	"	"		33	ND	"	
Hexachlorocyclopentadiene	"	"	"		33	ND	"	
Hexachloroethane	"	"	"		33	ND	"	
Indeno (1,2,3-cd) pyrene	"	"	"		33	ND	"	
Isophorone	"	"	"		33	ND	"	
2-Methylnaphthalene	"	"	"		33	17000	"	
2-Methylphenol	"	"	"		33	ND	"	
& 4-Methylphenol	"	"	"		33	ND	"	
Naphthalene	"	"	"		33	32000	"	
2-Nitroaniline	"	"	"		170	ND	"	
3-Nitroaniline	"	"	"		170	ND	"	
4-Nitroaniline	"	"	"		170	ND	"	
Nitrobenzene	"	"	"		33	ND	"	
2-Nitrophenol	"	"	"		33	ND	"	
4-Nitrophenol	"	"	"		170	ND	"	
4-Nitrosodiphenylamine	"	"	"		33	ND	"	
N-Nitrosodi-n-propylamine	"	"	"		33	ND	"	
Pentachlorophenol	"	"	"		170	ND	"	
Phenanthrene	"	"	"		33	790	"	
Phenol	"	"	"		33	ND	"	
Pyrene	"	"	"		33	ND	"	
2,4-Trichlorobenzene	"	"	"		33	ND	"	
4,5-Trichlorophenol	"	"	"		170	ND	"	
2,4,6-Trichlorophenol	"	"	"		33	ND	"	
Surrogate: 2-FP	"	"	"	25-120		64	%	
Surrogate: Phenol-d6	"	"	"	24-110		45	"	
Surrogate: 2,4,6-TBP	"	"	"	19-120		64	"	
Surrogate: Nitrobenzene-d5	"	"	"	23-120		57	"	
Surrogate: 2-FBP	"	"	"	30-120		65	"	
Surrogate: p-Terphenyl-d14	"	"	"	18-140		88	"	

Star Analytical, Inc.

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Lari Hall, Project Manager



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Delta Environmental
2340 Trinity Mills, Suite 230
Carrollton, TX 75006

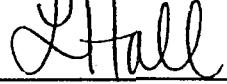
Project: Artesia
Project Number: F098-130
Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
Received: 9/26/98
Reported: 10/14/98 09:57

Total Metals by EPA 200 Series Methods
Star Analytical, Inc.

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
Pit Water								
Arsenic	10V8214	10/6/98	10/14/98	EPA 206.1	0.0050	ND	mg/l	
Cadmium	10V8209	"	"	EPA 213.2	0.010	ND	"	D
Lead	10V8210	"	"	EPA 239.2	0.0050	ND	"	
Selenium	10V8171	9/29/98	10/11/98	EPA 270.2	0.050	ND	"	7,D

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14500 Trinity Boulevard, Suite 106 • Fort Worth, Texas 76155
 (817) 571-6800 • Metro (817) 540-6982 • FAX (817) 267-5431



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 2340 Trinity Mills, Suite 230
 Carrollton, TX 75006

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Sampled: 9/23/98 to 9/24/98
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Total Metals by EPA 6000/7000 Series Methods
Star Analytical, Inc.

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
Sump								
Arsenic	09V8442	9/29/98	9/30/98	EPA 6010B	5.0	ND	mg/kg	
Barium	"	"	"	EPA 6010B	2.5	930	"	8
Cadmium	"	"	"	EPA 6010B	0.75	ND	"	
Chromium	"	"	"	EPA 6010B	0.75	ND	"	
Lead	"	"	"	EPA 6010B	5.0	6.0	"	
Selenium	"	"	"	EPA 6010B	5.0	ND	"	
Silver	10V8084	"	10/6/98	EPA 6010B	40	1100	"	
Mercury	10V8104	10/1/98	10/1/98	EPA 7471A	0.040	0.31	"	D
Cont.-Pit								
Arsenic	09V8442	9/29/98	9/30/98	EPA 6010B	5.0	ND	mg/kg	
Barium	"	"	"	EPA 6010B	2.5	22	"	
Cadmium	"	"	"	EPA 6010B	0.75	ND	"	
Chromium	"	"	"	EPA 6010B	0.75	3.5	"	
Lead	"	"	"	EPA 6010B	5.0	ND	"	
Selenium	"	"	"	EPA 6010B	5.0	ND	"	
Silver	10V8084	"	10/6/98	EPA 6010B	2.0	28	"	
Mercury	10V8104	10/1/98	10/1/98	EPA 7471A	0.040	ND	"	
Cont.-1								
Arsenic	09V8442	9/29/98	9/30/98	EPA 6010B	5.0	ND	mg/kg	
Barium	"	"	"	EPA 6010B	2.5	90	"	
Cadmium	"	"	"	EPA 6010B	0.75	ND	"	
Chromium	"	"	"	EPA 6010B	0.75	7.3	"	
Lead	"	"	"	EPA 6010B	5.0	ND	"	
Selenium	"	"	"	EPA 6010B	5.0	ND	"	
Silver	10V8084	"	10/6/98	EPA 6010B	2.0	5.3	"	
Mercury	10V8104	10/1/98	10/1/98	EPA 7471A	0.040	ND	"	
Cont.-2								
Arsenic	09V8442	9/29/98	9/30/98	EPA 6010B	5.0	ND	mg/kg	
Barium	"	"	"	EPA 6010B	2.5	43	"	
Cadmium	"	"	"	EPA 6010B	0.75	ND	"	
Chromium	"	"	"	EPA 6010B	0.75	3.5	"	
Lead	"	"	"	EPA 6010B	5.0	ND	"	
Selenium	"	"	"	EPA 6010B	5.0	ND	"	
Silver	10V8084	"	10/6/98	EPA 6010B	2.0	5.8	"	
Mercury	10V8104	10/1/98	10/1/98	EPA 7471A	0.040	0.066	"	
Cont.-3								
Arsenic	09V8442	9/29/98	9/30/98	EPA 6010B	5.0	ND	mg/kg	

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Lari Hall, Project Manager



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14500 Trinity Boulevard, Suite 106 • Fort Worth, Texas 76155
(817) 571-6800 • Metro (817) 540-6982 • FAX (817) 267-5431



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2340 Trinity Mills, Suite 230
Carrollton, TX 75006

Project: Artesia
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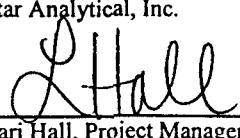
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Received: 9/26/98
Reported: 10/14/98 09:57

Total Metals by EPA 6000/7000 Series Methods
Star Analytical, Inc.

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
Cont.- 3 (continued)								
				8090291-15			Soil	
Barium	09V8442	9/29/98	9/30/98	EPA 6010B	2.5	83	mg/kg	
Cadmium	"	"	"	EPA 6010B	0.75	ND	"	
Chromium	"	"	"	EPA 6010B	0.75	9.0	"	
Lead	"	"	"	EPA 6010B	5.0	ND	"	
Selenium	"	"	"	EPA 6010B	5.0	ND	"	
Silver	10V8084	"	10/6/98	EPA 6010B	2.0	5.5	"	
Mercury	10V8104	10/1/98	10/1/98	EPA 7471A	0.040	0.043	"	
Cont.- 4								
				8090291-16			Soil	
Arsenic	09V8442	9/29/98	9/30/98	EPA 6010B	5.0	ND	mg/kg	
Barium	"	"	"	EPA 6010B	2.5	85	"	
Cadmium	"	"	"	EPA 6010B	0.75	ND	"	
Chromium	"	"	"	EPA 6010B	0.75	8.3	"	
Lead	"	"	"	EPA 6010B	5.0	ND	"	
Selenium	"	"	"	EPA 6010B	5.0	ND	"	
Silver	10V8084	"	10/6/98	EPA 6010B	2.0	4.8	"	
Mercury	10V8104	10/1/98	10/1/98	EPA 7471A	0.040	ND	"	
Cont.- 5								
				8090291-17			Soil	
Arsenic	09V8442	9/29/98	9/30/98	EPA 6010B	5.0	ND	mg/kg	
Barium	"	"	"	EPA 6010B	2.5	90	"	
Cadmium	"	"	"	EPA 6010B	0.75	ND	"	
Chromium	"	"	"	EPA 6010B	0.75	7.8	"	
Lead	"	"	"	EPA 6010B	5.0	ND	"	
Selenium	"	"	"	EPA 6010B	5.0	ND	"	
Silver	10V8084	"	10/6/98	EPA 6010B	2.0	6.0	"	
Mercury	10V8104	10/1/98	10/1/98	EPA 7471A	0.040	ND	"	
Tank								
				8090291-18			Water	
Arsenic	10V8095	9/29/98	10/7/98	EPA 6010B	0.20	ND	mg/l	
Barium	"	"	"	EPA 6010B	0.10	0.17	"	
Cadmium	"	"	"	EPA 6010B	0.030	0.15	"	
Chromium	"	"	"	EPA 6010B	0.030	0.031	"	
Lead	"	"	"	EPA 6010B	0.10	0.13	"	
Selenium	"	"	"	EPA 6010B	0.20	ND	"	
Silver	"	"	"	EPA 6010B	0.030	ND	"	
Mercury	10V8105	10/1/98	10/1/98	EPA 7470A	0.00200	ND	"	
Pit Water								
				8090291-19			Water	
Barium	10V8095	9/29/98	10/7/98	EPA 6010B	0.10	ND	mg/l	
Chromium	"	"	"	EPA 6010B	0.030	ND	"	

*Refer to end of report for text of notes and definitions.

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Lari Hall, Project Manager



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2340 Trinity Mills, Suite 230
Carrollton, TX 75006

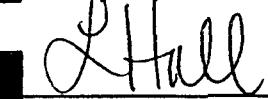
Project: Artesia
Project Number: F098-130
Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
Received: 9/26/98
Reported: 10/14/98 09:57

Total Metals by EPA 6000/7000 Series Methods
Star Analytical, Inc.

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
Pit Water (continued)								
Silver	10V8095	9/29/98	10/7/98	EPA 6010B	0.030	ND	mg/l	
Mercury	10V8105	10/1/98	10/1/98	EPA 7470A	0.00200	ND	"	

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 Carrollton, TX 75006

Project: Artesia
 Project Number: F098-130
 Project Manager: Destini Baldonado

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Conventional Chemistry Parameters by APHA/EPA Methods Star Analytical, Inc.

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
No. Tank - SW Petroleum Oil Hydrocarbons	09V8446	9/30/98	9/30/98	<u>8090291-01</u> EPA 418.1	5.0	55	Soil mg/kg	
No. Tank - EW Petroleum Oil Hydrocarbons	09V8446	9/30/98	9/30/98	<u>8090291-02</u> EPA 418.1	5.0	510	Soil mg/kg	
No. Tank - NW Petroleum Oil Hydrocarbons	09V8446	9/30/98	9/30/98	<u>8090291-03</u> EPA 418.1	5.0	ND	Soil mg/kg	
No. Tank - WW Petroleum Oil Hydrocarbons	09V8446	9/30/98	9/30/98	<u>8090291-04</u> EPA 418.1	5.0	1400	Soil mg/kg	
No. Tank - SW Petroleum Oil Hydrocarbons	09V8446	9/30/98	9/30/98	<u>8090291-05</u> EPA 418.1	5.0	95	Soil mg/kg	
No. Tank - EW Petroleum Oil Hydrocarbons	09V8446	9/30/98	9/30/98	<u>8090291-06</u> EPA 418.1	50	1800	Soil mg/kg	D
No. Tank - NW Petroleum Oil Hydrocarbons	09V8446	9/30/98	9/30/98	<u>8090291-07</u> EPA 418.1	50	2600	Soil mg/kg	D
No. Tank - WW Petroleum Oil Hydrocarbons	09V8446	9/30/98	9/30/98	<u>8090291-08</u> EPA 418.1	5.0	190	Soil mg/kg	
Stockpile pH Reactivity	09V8389 09V8382	9/28/98 "	9/28/98 "	<u>8090291-10</u> EPA 9045B N/A		6.12 ND	Soil pH units N/A	
Dump pH	09V8389	9/28/98	9/28/98	<u>8090291-11</u> EPA 9045B		2.15	Soil pH units	
Cont.-Pit pH	09V8389	9/28/98	9/28/98	<u>8090291-12</u> EPA 9045B		6.79	Soil pH units	
Cont.-1 pH	09V8389	9/28/98	9/28/98	<u>8090291-13</u> EPA 9045B		7.68	Soil pH units	
Cont.-2 pH	09V8389	9/28/98	9/28/98	<u>8090291-14</u> EPA 9045B		7.67	Soil pH units	
Cont.-3 pH	09V8389	9/28/98	9/28/98	<u>8090291-15</u> EPA 9045B		7.47	Soil pH units	

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Star Analytical, Inc.

Lari Hall, Project Manager



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 (817) 571-6800 • Metro (817) 540-6982 • FAX (817) 267-5431



Delta Environmental
 2340 Trinity Mills, Suite 230
 Carrollton, TX 75006

Project: Artesia
 Project Number: F098-130
 Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
 Received: 9/26/98
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Conventional Chemistry Parameters by APHA/EPA Methods
Star Analytical, Inc.

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
Cont.- 4 pH	09V8389	9/28/98	9/28/98	8090291-16 EPA 9045B		7.86	Soil pH units	
Cont.- 5 pH	09V8389	9/28/98	9/28/98	8090291-17 EPA 9045B		7.89	Soil pH units	
Tank Petroleum Oil Hydrocarbons	09V8416	9/29/98	9/29/98	8090291-18 EPA 418.1	10	110	Water mg/l	D
Pit Water Total Dissolved Solids	10V8117	10/1/98	10/1/98	8090291-19 EPA 160.1	10	4600	Water mg/l	

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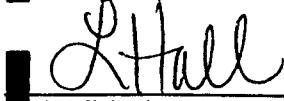
Project: Artesia
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Project Manager: Destini Baldonado

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Physical Parameters by APHA/ASTM/EPA Methods Star Analytical, Inc.

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
Stockpile				8090291-10				Soil
Flashpoint	09V8451	9/30/98	9/30/98	EPA 1010	70.0	ND	°C	
Reactive Cyanide	09V8425	9/29/98	9/29/98	EPA 9010B	250	ND	mg/kg	
Reactive Sulfide	09V8455	9/30/98	9/30/98	EPA 9030B	1.0	ND	"	

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 Carrollton, TX 75006

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TCLP Volatile Organic Compounds by EPA Method 1311/8260

Star Analytical, Inc.

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
Stockpile				8090291-10			Soil	
Benzene	10V8021	10/1/98	10/1/98		0.100	ND	mg/l	D
2-Butanone	"	"	"		0.500	ND	"	D
Carbon tetrachloride	"	"	"		0.100	ND	"	D
Chlorobenzene	"	"	"		0.100	ND	"	D
Chloroform	"	"	"		0.100	ND	"	D
1,2-Dichloroethane	"	"	"		0.100	ND	"	D
1,1-Dichloroethene	"	"	"		0.100	ND	"	D
Tetrachloroethene	"	"	"		0.100	ND	"	D
Trichloroethene	"	"	"		0.100	ND	"	D
Vinyl chloride	"	"	"		0.100	ND	"	D
Surrogate: DBFM	"	"	"	86.0-118		102	%	D
Surrogate: Toluene-d8	"	"	"	88.0-110		101	"	D
Surrogate: 4-BFB	"	"	"	86.0-115		98.0	"	D



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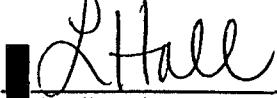
Project: Artesia
 Project Number: F098-130
 Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
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 Reported: 10/14/98 09:57

TCLP Semivolatiles by EPA Method 1311/8270
Star Analytical, Inc.

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
Rockpile								
o-Cresol	10V8040	10/1/98	10/2/98		0.00800	ND	mg/l	
m,p-Cresols	"	"	"		0.00800	ND	"	
4-Dichlorobenzene	"	"	"		0.00800	ND	"	
2,4-Dinitrotoluene	"	"	"		0.00800	ND	"	
Hexachlorobenzene	"	"	"		0.00800	ND	"	
Exachlorobutadiene	"	"	"		0.00800	ND	"	
Exachloroethane	"	"	"		0.00800	ND	"	
Nitrobenzene	"	"	"		0.00800	ND	"	
Pentachlorophenol	"	"	"		0.0400	ND	"	
Pyridine	"	"	"		0.0400	ND	"	
4,5-Trichlorophenol	"	"	"		0.0400	ND	"	
2,4,6-Trichlorophenol	"	"	"		0.00800	ND	"	
Surrogate: 2-FP	"	"	"	43.0-116		51.6	%	
Surrogate: Phenol-d6	"	"	"	10.0-94.0		45.0	"	
Surrogate: 2,4,6-TBP	"	"	"	10.0-123		69.0	"	
Surrogate: Nitrobenzene-d5	"	"	"	35.0-114		56.5	"	
Surrogate: 2-FBP	"	"	"	43.0-116		62.4	"	
Surrogate: p-Terphenyl-d14	"	"	"	33.0-141		112	"	

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Delta Environmental
 12340 Trinity Mills, Suite 230
 Carrollton, TX 75006

Project: Artesia
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 Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
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TCLP Metals by EPA 1311/6000/7000 Series Methods
Star Analytical, Inc.

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
Rockpile								
Arsenic	10V8096	10/2/98	10/7/98	EPA 6010B	0.200	ND	mg/l	
Barium	"	"	"	EPA 6010B	0.230	0.450	"	
Cadmium	"	"	"	EPA 6010B	0.0300	ND	"	
Chromium	"	"	"	EPA 6010B	0.0300	ND	"	
Lead	"	"	"	EPA 6010B	0.100	ND	"	
Selenium	"	"	"	EPA 6010B	0.200	ND	"	
Silver	"	"	"	EPA 6010B	0.0300	ND	"	
Mercury	10V8103	10/5/98	10/6/98	EPA 7470A	0.000200	ND	"	

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 2340 Trinity Mills, Suite 230
 Carrollton, TX 75006

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Diesel Hydrocarbons (C12-C24) by EPA Method 8015 (modified)/Quality Control
Star Analytical, Inc.

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Reporting Limit Units	Recov. Recov. Limits	RPD %	RPD % Notes*
Batch: 09V8439	Date Prepared: 9/28/98					Extraction Method: EPA 3510/600 Series		
Blank	09V8439-BLK1							
Diesel Range Hydrocarbons	9/28/98			ND	mg/l	0.20		
Surrogate: o-Terphenyl	"	0.10		0.070	"	49-170	70	
LCS	09V8439-BS1							
Diesel Range Hydrocarbons	9/28/98	1.0		0.73	mg/l	60-120	73	
Surrogate: o-Terphenyl	"	0.10		0.11	"	49-170	110	
LCS Dup	09V8439-BSD1							
Diesel Range Hydrocarbons	9/28/98	1.0		1.1	mg/l	60-120	110	30 40
Surrogate: o-Terphenyl	"	0.10		0.11	"	49-170	110	
Matrix Spike	09V8439-MS1 8090259-03							
Diesel Range Hydrocarbons	9/28/98	2.0	ND	1.2	mg/l	60-120	60	
Surrogate: o-Terphenyl	"	0.20		0.17	"	49-170	85	
Matrix Spike Dup	09V8439-MSD1 8090259-03							
Diesel Range Hydrocarbons	9/28/98	2.0	ND	1.4	mg/l	60-120	70	30 15
Surrogate: o-Terphenyl	"	0.20		0.18	"	49-170	90	
Batch: 09V8445	Date Prepared: 9/28/98					Extraction Method: EPA 3550		
Blank	09V8445-BLK1							
Diesel Range Hydrocarbons	9/29/98			ND	mg/kg	1.0		
Surrogate: o-Terphenyl	"	1.7		1.7	"	49-170	100	
LCS	09V8445-BS1							
Diesel Range Hydrocarbons	9/29/98	17		11	mg/kg	60-120	65	
Surrogate: o-Terphenyl	"	1.7		1.4	"	49-170	82	
LCS Dup	09V8445-BSD1							
Diesel Range Hydrocarbons	9/29/98	17		11	mg/kg	60-120	65	30 0
Surrogate: o-Terphenyl	"	1.7		1.5	"	49-170	88	
Matrix Spike	09V8445-MS1 8090291-16							
Diesel Range Hydrocarbons	9/29/98	17	5.4	15	mg/kg	60-120	56	
Surrogate: o-Terphenyl	"	1.7		1.7	"	49-170	100	
Matrix Spike Dup	09V8445-MSD1 8090291-16							
Diesel Range Hydrocarbons	9/29/98	17	5.4	18	mg/kg	60-120	74	30 28
Surrogate: o-Terphenyl	"	1.7		1.7	"	49-170	100	

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Mari Hall, Project Manager



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Delta Environmental
 2340 Trinity Mills, Suite 230
 Carrollton, TX 75006

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 Project Manager: Destini Baldonado

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 Reported: 10/14/98 09:57

Volatile Organic Compounds by EPA Method 8260/Quality Control Star Analytical, Inc.

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit	Recov. Recov. Limits	%	RPD Limit	RPD % Notes*
Batch: 09V8447	Date Prepared: 9/30/98						Extraction Method: EPA 5030			
Blank	09V8447-BLK1									
Acetone	9/30/98			ND	ug/l		10			
Benzene	"			ND	"		2.0			
Bromobenzene	"			ND	"		2.0			
Bromochloromethane	"			ND	"		2.0			
Bromodichloromethane	"			ND	"		2.0			
Bromoform	"			ND	"		2.0			
Bromomethane	"			ND	"		2.0			
2-Butanone	"			ND	"		10			
Butylbenzene	"			ND	"		2.0			
c-Butylbenzene	"			ND	"		2.0			
tert-Butylbenzene	"			ND	"		2.0			
Carbon disulfide	"			ND	"		2.0			
Carbon tetrachloride	"			ND	"		2.0			
Chlorobenzene	"			ND	"		2.0			
Chloroethane	"			ND	"		2.0			
Chloroform	"			ND	"		2.0			
Chloromethane	"			ND	"		2.0			
2-Chlorotoluene	"			ND	"		2.0			
4-Chlorotoluene	"			ND	"		2.0			
Dibromochloromethane	"			ND	"		2.0			
1,2-Dibromo-3-chloropropane	"			ND	"		2.0			
1,2-Dibromoethane	"			ND	"		2.0			
Dibromomethane	"			ND	"		2.0			
2-Dichlorobenzene	"			ND	"		2.0			
1,3-Dichlorobenzene	"			ND	"		2.0			
1,4-Dichlorobenzene	"			ND	"		2.0			
Chlorodifluoromethane	"			ND	"		2.0			
1,1-Dichloroethane	"			ND	"		2.0			
1,2-Dichloroethane	"			ND	"		2.0			
1,1-Dichloroethene	"			ND	"		2.0			
trans-1,2-Dichloroethene	"			ND	"		2.0			
1,2-Dichloropropane	"			ND	"		2.0			
3-Dichloropropane	"			ND	"		2.0			
2-Dichloropropane	"			ND	"		2.0			
1,1-Dichloropropene	"			ND	"		2.0			
trans-1,3-Dichloropropene	"			ND	"		2.0			
trans-1,3-Dichloropropene	"			ND	"		2.0			
Ethylbenzene	"			ND	"		2.0			
Hexachlorobutadiene	"			ND	"		2.0			

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Delta Environmental
 2340 Trinity Mills, Suite 230
 Carrollton, TX 75006

Project: Artesia
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 Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
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Volatile Organic Compounds by EPA Method 8260/Quality Control Star Analytical, Inc.

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit	Recov. %	RPD Limit	RPD % Notes*
Blank (continued)									
2-Hexanone	9/30/98			ND	ug/l	10			
Isopropylbenzene	"			ND	"	2.0			
-Isopropyltoluene	"			ND	"	2.0			
Methylene chloride	"			ND	"	10			
Methyl tert-butyl ether	"			ND	"	2.0			
-Methyl-2-pentanone	"			ND	"	10			
Aphthalene	"			ND	"	2.0			
n-Propylbenzene	"			ND	"	2.0			
Styrene	"			ND	"	2.0			
1,1,2-Tetrachloroethane	"			ND	"	2.0			
1,1,2,2-Tetrachloroethane	"			ND	"	2.0			
Tetrachloroethene	"			ND	"	2.0			
Toluene	"			ND	"	2.0			
2,3-Trichlorobenzene	"			ND	"	2.0			
1,2,4-Trichlorobenzene	"			ND	"	2.0			
1,1,1-Trichloroethane	"			ND	"	2.0			
1,2-Trichloroethane	"			ND	"	2.0			
Trichloroethene	"			ND	"	2.0			
Trichlorofluoromethane	"			ND	"	2.0			
1,2,3-Trichloropropane	"			ND	"	2.0			
2,4-Trimethylbenzene	"			ND	"	2.0			
1,3,5-Trimethylbenzene	"			ND	"	2.0			
Vinyl acetate	"			ND	"	2.0			
vinyl chloride	"			ND	"	2.0			
,p-Xylene	"			ND	"	2.0			
o-Xylene	"			ND	"	2.0			
Surrogate: DBFM	"	50		50	"	86-120	100		
Surrogate: Toluene-d8	"	50		50	"	88-110	100		
Surrogate: 4-BFB	"	50		50	"	86-120	100		
CS									
Benzene	9/30/98	50		54	ug/l	76-130	110		
Chlorobenzene	"	50		59	"	75-130	120		
1,1-Dichloroethene	"	50		46	"	58-150	92		
Toluene	"	50		57	"	76-130	110		
Trichloroethene	"	50		56	"	71-140	110		
Surrogate: DBFM	"	50		50	"	86-120	100		
Surrogate: Toluene-d8	"	50		50	"	88-110	100		
Surrogate: 4-BFB	"	50		49	"	86-120	98		

*Refer to end of report for text of notes and definitions.

Star Analytical, Inc.

Lari Hall, Project Manager



STAR ANALYTICAL

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Delta Environmental
 12340 Trinity Mills, Suite 230
 Carrollton, TX 75006

Project: Artesia
 Project Number: F098-130
 Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
 Received: 9/26/98
 Reported: 10/14/98 09:57

Volatile Organic Compounds by EPA Method 8260/Quality Control Star Analytical, Inc.

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD % Notes*
CS Dup <u>09V8447-BSD1</u>									
Benzene	9/30/98	50		54	ug/l	76-130	110	21	0
Chlorobenzene	"	50		60	"	75-130	120	21	0
1-Dichloroethene	"	50		44	"	58-150	88	22	4.4
Toluene	"	50		58	"	76-130	120	21	8.7
Trichloroethene	"	50		56	"	71-140	110	24	0
Surrogate: DBFM	"	50		51	"	86-120	100		
Surrogate: Toluene-d8	"	50		50	"	88-110	100		
Surrogate: 4-BFB	"	50		49	"	86-120	98		

Batch: 10V8023

Date Prepared: 10/1/98

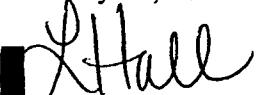
Extraction Method: EPA 5030

Blank

Acetone	10/1/98	ND	ug/kg	25
Benzene	"	ND	"	2.0
Chlorobenzene	"	ND	"	2.0
Bromochloromethane	"	ND	"	2.0
Bromodichloromethane	"	ND	"	2.0
Bromoform	"	ND	"	2.0
Bromomethane	"	ND	"	2.0
2-Butanone	"	ND	"	10
2-Butylbenzene	"	ND	"	2.0
c-Butylbenzene	"	ND	"	2.0
tert-Butylbenzene	"	ND	"	2.0
Carbon disulfide	"	ND	"	2.0
Carbon tetrachloride	"	ND	"	2.0
Chlorobenzene	"	ND	"	2.0
Chloroethane	"	ND	"	2.0
Chloroform	"	ND	"	2.0
Chloromethane	"	ND	"	2.0
2-Chlorotoluene	"	ND	"	2.0
4-Chlorotoluene	"	ND	"	2.0
Dibromochloromethane	"	ND	"	2.0
2-Dibromo-3-chloropropane	"	ND	"	2.0
1,2-Dibromoethane	"	ND	"	2.0
Dibromomethane	"	ND	"	2.0
2-Dichlorobenzene	"	ND	"	2.0
1,3-Dichlorobenzene	"	ND	"	2.0
1,4-Dichlorobenzene	"	ND	"	2.0
1,1-Dichlorodifluoromethane	"	ND	"	2.0
1,1-Dichloroethane	"	ND	"	2.0
1,2-Dichloroethane	"	ND	"	2.0
1,1-Dichloroethene	"	ND	"	2.0

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*Refer to end of report for text of notes and definitions.


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Delta Environmental
 12340 Trinity Mills, Suite 230
 Carrollton, TX 75006

Project: Artesia
 Project Number: F098-130
 Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
 Received: 9/26/98
 Reported: 10/14/98 09:57

Volatile Organic Compounds by EPA Method 8260/Quality Control
Star Analytical, Inc.

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD % Notes*
Blank (continued)			10V8023-BLK1						
cis-1,2-Dichloroethene	10/1/98			ND	ug/kg		2.0		
trans-1,2-Dichloroethene	"			ND	"		2.0		
1,2-Dichloropropane	"			ND	"		2.0		
1,3-Dichloropropane	"			ND	"		2.0		
2,2-Dichloropropane	"			ND	"		2.0		
1,1-Dichloropropene	"			ND	"		2.0		
trans-1,3-Dichloropropene	"			ND	"		2.0		
Ethylbenzene	"			ND	"		2.0		
Exachlorobutadiene	"			ND	"		2.0		
2-Hexanone	"			ND	"		10		
Isopropylbenzene	"			ND	"		2.0		
-Isopropyltoluene	"			ND	"		2.0		
Methylene chloride	"			ND	"		50		
Methyl tert-butyl ether	"			ND	"		2.0		
4-Methyl-2-pentanone	"			ND	"		10		
Aphthalene	"			ND	"		2.0		
-Propylbenzene	"			ND	"		2.0		
Styrene	"			ND	"		2.0		
1,1,2-Tetrachloroethane	"			ND	"		2.0		
1,2,2-Tetrachloroethane	"			ND	"		2.0		
Tetrachloroethene	"			ND	"		2.0		
Toluene	"			ND	"		2.0		
2,3-Trichlorobenzene	"			ND	"		2.0		
2,4-Trichlorobenzene	"			ND	"		2.0		
1,1,1-Trichloroethane	"			ND	"		2.0		
1,1,2-Trichloroethane	"			ND	"		2.0		
Trichloroethene	"			ND	"		2.0		
Trichlorofluoromethane	"			ND	"		2.0		
1,2,3-Trichloropropane	"			ND	"		2.0		
2,4-Trimethylbenzene	"			ND	"		2.0		
3,5-Trimethylbenzene	"			ND	"		2.0		
Vinyl acetate	"			ND	"		2.0		
Vinyl chloride	"			ND	"		2.0		
1,p-Xylene	"			ND	"		2.0		
o-Xylene	"			ND	"		2.0		
Surrogate: DBFM	"	50		51	"	80-120	100		
Surrogate: Toluene-d8	"	50		51	"	81-120	100		
Surrogate: 4-BFB	"	50		49	"	74-120	98		

Star Analytical, Inc.

Lari Hall, Project Manager

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Delta Environmental
 2340 Trinity Mills, Suite 230
 Carrollton, TX 75006

Project: Artesia
 Project Number: F098-130
 Project Manager: Destini Baldonado

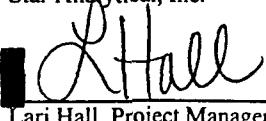
Sampled: 9/23/98 to 9/24/98
 Received: 9/26/98
 Reported: 10/14/98 09:57

Volatile Organic Compounds by EPA Method 8260/Quality Control
Star Analytical, Inc.

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Reporting Limit Units	Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
LCS										
Benzene	10/1/98	50		54	ug/kg	66-140	110			
Chlorobenzene	"	50		60	"	60-130	120			
,1-Dichloroethene	"	50		41	"	59-170	82			
Toluene	"	50		58	"	59-130	120			
Trichloroethene	"	50		55	"	62-140	110			
<i>Surrogate: DBFM</i>	"	50		51	"	80-120	100			
<i>Surrogate: Toluene-d8</i>	"	50		50	"	81-120	100			
<i>Surrogate: 4-BFB</i>	"	50		51	"	74-120	100			
LCS Dup										
Benzene	10/1/98	50		53	ug/kg	66-140	110	21	0	
Chlorobenzene	"	50		60	"	60-130	120	21	0	
,1-Dichloroethene	"	50		41	"	59-170	82	22	0	
Toluene	"	50		58	"	59-130	120	21	0	
Trichloroethene	"	50		56	"	62-140	110	24	0	
<i>Surrogate: DBFM</i>	"	50		51	"	80-120	100			
<i>Surrogate: Toluene-d8</i>	"	50		50	"	81-120	100			
<i>Surrogate: 4-BFB</i>	"	50		50	"	74-120	100			

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Delta Environmental 2340 Trinity Mills, Suite 230 Carrollton, TX 75006	Project: Artesia Project Number: F098-130 Project Manager: Destini Baldonado	Sampled: 9/23/98 to 9/24/98 Received: 9/26/98 Reported: 10/14/98 09:57
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Semivolatile Organic Compounds by EPA Method 8270C/Quality Control
Star Analytical, Inc.

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit	Recov. %	RPD Limit	RPD % Notes*
Batch: 10V8024									
Blank									
10V8024-BLK1									
Date Prepared: 10/1/98									
Extraction Method: EPA 3550									
Acenaphthene	10/1/98			ND	ug/kg	33			
Acenaphthylene	"			ND	"	33			
Aniline	"			ND	"	33			
Anthracene	"			ND	"	33			
Benzoic Acid	"			ND	"	170			
Benzo (a) anthracene	"			ND	"	33			
Benzo (b) fluoranthene	"			ND	"	33			
Benzo (k) fluoranthene	"			ND	"	33			
Benzo (ghi) perylene	"			ND	"	33			
Benzo (a) pyrene	"			ND	"	33			
Benzyl alcohol	"			ND	"	33			
Bis(2-chloroethoxy)methane	"			ND	"	33			
Bis(2-chloroethyl)ether	"			ND	"	33			
Bis(2-chloroisopropyl)ether	"			ND	"	33			
Bis(2-ethylhexyl)phthalate	"			ND	"	170			
Bromophenyl phenyl ether	"			ND	"	33			
Butyl benzyl phthalate	"			ND	"	33			
Carbazole	"			ND	"	33			
Chloroaniline	"			ND	"	33			
Chloronaphthalene	"			ND	"	33			
4-Chloro-3-methylphenol	"			ND	"	33			
2-Chlorophenol	"			ND	"	33			
Chlorophenyl phenyl ether	"			ND	"	33			
Chrysene	"			ND	"	33			
Dibenz (a,h) anthracene	"			ND	"	33			
Dibenzofuran	"			ND	"	33			
i-n-butyl phthalate	"			ND	"	170			
1,3-Dichlorobenzene	"			ND	"	33			
1,4-Dichlorobenzene	"			ND	"	33			
2-Dichlorobenzene	"			ND	"	33			
3'-Dichlorobenzidine	"			ND	"	170			
2,4-Dichlorophenol	"			ND	"	33			
Diethyl phthalate	"			ND	"	33			
4-Dimethylphenol	"			ND	"	33			
Dimethyl phthalate	"			ND	"	33			
4,6-Dinitro-2-methylphenol	"			ND	"	170			
4-Nitrophenol	"			ND	"	170			
4-Dinitrotoluene	"			ND	"	33			
2,6-Dinitrotoluene	"			ND	"	33			
Di-n-octyl phthalate	"			ND	"	33			

*Refer to end of report for text of notes and definitions.

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Delta Environmental 2340 Trinity Mills, Suite 230 Carrollton, TX 75006	Project: Artesia Project Number: F098-130 Project Manager: Destini Baldonado	Sampled: 9/23/98 to 9/24/98 Received: 9/26/98 Reported: 10/14/98 09:57
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Semivolatile Organic Compounds by EPA Method 8270C/Quality Control
Star Analytical, Inc.

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD % Notes*
Blank (continued)									10V8024-BLK1
Fluoranthene	10/1/98			ND	ug/kg		33		
Fluorene	"			ND	"		33		
Hexachlorobenzene	"			ND	"		33		
Hexachlorobutadiene	"			ND	"		33		
Hexachlorocyclopentadiene	"			ND	"		33		
Hexachloroethane	"			ND	"		33		
Indeno (1,2,3-cd) pyrene	"			ND	"		33		
Isophorone	"			ND	"		33		
2-Methylnaphthalene	"			ND	"		33		
Methylphenol	"			ND	"		33		
& 4-Methylphenol	"			ND	"		33		
Naphthalene	"			ND	"		33		
Nitroaniline	"			ND	"	170			
Nitroaniline	"			ND	"	170			
4-Nitroaniline	"			ND	"	170			
Nitrobenzene	"			ND	"	33			
Nitrophenol	"			ND	"	33			
Nitrophenol	"			ND	"	170			
N-Nitrosodiphenylamine	"			ND	"	33			
N-Nitrosodi-n-propylamine	"			ND	"	33			
o-Chlorophenol	"			ND	"	170			
Phenanthrene	"			ND	"	33			
Phenol	"			ND	"	33			
Toluene	"			ND	"	33			
2,4-Trichlorobenzene	"			ND	"	33			
2,4,5-Trichlorophenol	"			ND	"	170			
2,4,6-Trichlorophenol	"			ND	"	33			
Surrogate: 2-FP	"	3300		1100	"	25-120	33		
Surrogate: Phenol-d6	"	3300		1400	"	24-110	42		
Surrogate: 2,4,6-TBP	"	3300		2300	"	19-120	70		
Surrogate: Nitrobenzene-d5	"	1700		760	"	23-120	45		
Surrogate: 2-FBP	"	1700		1900	"	30-120	110		
Surrogate: p-Terphenyl-d14	"	1700		1300	"	18-140	76		
CS									10V8024-BS1
Benaphthene	10/1/98	1700		990	ug/kg	31-140	58		
4-Chloro-3-methylphenol	"	3300		1700	"	26-100	52		
Chlorophenol	"	3300		1700	"	25-100	52		
Dichlorobenzene	"	1700		740	"	28-100	44		
2,4-Dinitrotoluene	"	1700		990	"	28-89	58		
4-Nitrophenol	"	3300		1800	"	11-110	55		

*Refer to end of report for text of notes and definitions.

Star Analytical, Inc.

Lari Hall, Project Manager

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Delta Environmental
 2340 Trinity Mills, Suite 230
 Carrollton, TX 75006

Project: Artesia
 Project Number: F098-130
 Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
 Received: 9/26/98
 Reported: 10/14/98 09:57

Semivolatile Organic Compounds by EPA Method 8270C/Quality Control Star Analytical, Inc.

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD % Notes*
CS (continued)		10V8024-BS1							
N-Nitrosodi-n-propylamine	10/1/98	1700		900	ug/kg	41-130	53		
Pentachlorophenol	"	3300		2000	"	17-110	61		
Phenol	"	3300		1500	"	26-90	45		
Pyrene	"	1700		1200	"	35-140	71		
1,2,4-Trichlorobenzene	"	1700		890	"	38-110	52		
CS Dup		10V8024-BSD1							
Acenaphthene	10/1/98	1700		940	ug/kg	31-140	55	19	5.3
4-Chloro-3-methylphenol	"	3300		1700	"	26-100	52	33	0
Chlorophenol	"	3300		1600	"	25-100	48	50	8.0
1,4-Dichlorobenzene	"	1700		700	"	28-100	41	27	7.1
2,4-Dinitrotoluene	"	1700		900	"	28-89	53	47	9.0
Nitrophenol	"	3300		1700	"	11-110	52	50	5.6
N-Nitrosodi-n-propylamine	"	1700		850	"	41-130	50	38	5.8
Pentachlorophenol	"	3300		1700	"	17-110	52	47	16
Phenol	"	3300		1500	"	26-90	45	35	0
Pyrene	"	1700		1000	"	35-140	59	36	18
1,2,4-Trichlorobenzene	"	1700		840	"	38-110	49	23	5.9
Matrix Spike		10V8024-MS1 8090189-31							
Acenaphthene	10/1/98	1700	ND	1000	ug/kg	31-140	59		
4-Chloro-3-methylphenol	"	3300	ND	1800	"	26-100	55		
2-Chlorophenol	"	3300	ND	1800	"	25-100	55		
1,4-Dichlorobenzene	"	1700	ND	780	"	28-100	46		
2,4-Dinitrotoluene	"	1700	ND	960	"	28-89	56		
4-Nitrophenol	"	3300	ND	1700	"	11-110	52		
N-Nitrosodi-n-propylamine	"	1700	ND	910	"	41-130	54		
Pentachlorophenol	"	3300	ND	1900	"	17-110	58		
Phenol	"	3300	ND	1700	"	26-90	52		
Pyrene	"	1700	ND	1100	"	35-140	65		
1,2,4-Trichlorobenzene	"	1700	ND	940	"	38-110	55		

Star Analytical, Inc.

Lari Hall, Project Manager

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Delta Environmental
 2340 Trinity Mills, Suite 230
 Carrollton, TX 75006

Project: Artesia
 Project Number: F098-130
 Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
 Received: 9/26/98
 Reported: 10/14/98 09:57

Total Metals by EPA 200 Series Methods/Quality Control Star Analytical, Inc.

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit	Recov. Recov. Limits	%	RPD Limit	RPD % Notes*
Batch: 10V8171	Date Prepared: 9/29/98						Extraction Method: General Preparation			
Blank	10V8171-BLK1									
Selenium	10/11/98			ND	mg/l	0.0050				
LCS	10V8171-BS1									
Selenium	10/11/98	1.0		1.1	mg/l	80-120	110			D
LCS Dup	10V8171-BSD1									
Selenium	10/11/98	1.0		1.2	mg/l	80-120	120	30	8.7	D
Batch: 10V8209	Date Prepared: 10/6/98						Extraction Method: General Preparation			
Blank	10V8209-BLK1									
Cadmium	10/14/98			ND	mg/l	0.0010				
LCS	10V8209-BS1									
Cadmium	10/14/98	1.0		1.0	mg/l	80-120	100			D
LCS Dup	10V8209-BSD1									
Cadmium	10/14/98	1.0		1.1	mg/l	80-120	110	30	9.5	D
Batch: 10V8210	Date Prepared: 10/6/98						Extraction Method: General Preparation			
Blank	10V8210-BLK1									
Lead	10/14/98			ND	mg/l	0.0050				
LCS	10V8210-BS1									
Lead	10/14/98	1.0		1.0	mg/l	80-120	100			D
LCS Dup	10V8210-BSD1									
Lead	10/14/98	1.0		0.99	mg/l	80-120	99	30	1.0	D
Matrix Spike	10V8210-MS1 8100007-06									
Lead	10/14/98	0.025	ND	0.024	mg/l	80-120	96			
Batch: 10V8214	Date Prepared: 10/6/98						Extraction Method: General Preparation			
Blank	10V8214-BLK1									
Arsenic	10/14/98			ND	mg/l	0.0050				
LCS	10V8214-BS1									
Arsenic	10/14/98	1.0		1.1	mg/l	80-120	110			D
LCS Dup	10V8214-BSD1									
Arsenic	10/14/98	1.0		1.2	mg/l	80-120	120		8.7	D

*Refer to end of report for text of notes and definitions.

Star Analytical, Inc.

Lari Hall, Project Manager

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Delta Environmental
 2340 Trinity Mills, Suite 230
 Carrollton, TX 75006

Project: Artesia
 Project Number: F098-130
 Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
 Received: 9/26/98
 Reported: 10/14/98 09:57

Total Metals by EPA 6000/7000 Series Methods/Quality Control Star Analytical, Inc.

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Reporting Limit Units	Recov. Recov. Limits	RPD %	RPD %	Notes*
Batch: 09V8442	Date Prepared: 9/29/98						Extraction Method: General Preparation		
Blank	09V8442-BLK1								
Arsenic	9/30/98			ND	mg/kg	5.0			
Barium	"			ND	"	2.5			
Cadmium	"			ND	"	0.75			
Chromium	"			ND	"	0.75			
Lead	"			ND	"	5.0			
Selenium	"			ND	"	5.0			
LCS	09V8442-BS1								
Arsenic	9/30/98	25		28	mg/kg	80-120	110		
Barium	"	25		28	"	80-120	110		
Cadmium	"	25		28	"	80-120	110		
Chromium	"			28	"	80-120			
Lead	"	25		28	"	80-120	110		
Selenium	"	25		25	"	80-120	100		
CS Dup	09V8442-BSD1								
Arsenic	9/30/98	25		25	mg/kg	80-120	100	30	9.5
Barium	"	25		25	"	80-120	100	30	9.5
Cadmium	"	25		25	"	80-120	100	30	9.5
Chromium	"			28	"	80-120		30	
Lead	"	25		25	"	80-120	100	30	9.5
Selenium	"	25		25	"	80-120	100	30	0
Batch: 10V8084	Date Prepared: 9/29/98						Extraction Method: General Preparation		
Blank	10V8084-BLK1								
Silver	10/6/98			ND	mg/kg	2.0			
LCS	10V8084-BS1								
Silver	10/6/98	25		25	mg/kg	70-130	100		
CS Dup	10V8084-BSD1								
Silver	10/6/98	25		22	mg/kg	70-130	88	20	13
Batch: 10V8095	Date Prepared: 9/29/98						Extraction Method: General Preparation		
Blank	10V8095-BLK1								
Arsenic	10/7/98			ND	mg/l	0.20			
Barium	"			ND	"	0.10			
Cadmium	"			ND	"	0.030			
Chromium	"			ND	"	0.030			
Lead	"			ND	"	0.10			

*Refer to end of report for text of notes and definitions.

Star Analytical, Inc.

Lari Hall, Project Manager



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 14500 Trinity Boulevard, Suite 106 • Fort Worth, Texas 76155
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Delta Environmental
 2340 Trinity Mills, Suite 230
 Carrollton, TX 75006

Project: Artesia
 Project Number: F098-130
 Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
 Received: 9/26/98
 Reported: 10/14/98 09:57

Total Metals by EPA 6000/7000 Series Methods/Quality Control
Star Analytical, Inc.

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD % Notes*
Blank (continued)									
Selenium	10/7/98			ND	mg/l		0.20		
Silver	"			ND	"		0.030		
LCS									
Arsenic	10/7/98	1.0		1.0	mg/l	80-120	100		
Barium	"	1.0		1.1	"	80-120	110		
Cadmium	"	1.0		1.0	"	80-120	100		
Chromium	"	1.0		1.0	"	80-120	100		
Lead	"	1.0		1.1	"	80-120	110		
Selenium	"	1.0		1.0	"	80-120	100		
Silver	"	1.0		0.97	"	80-120	97		
LCS Dup									
Arsenic	10/7/98	1.0		1.0	mg/l	80-120	100	20	0
Barium	"	1.0		1.0	"	80-120	100	30	9.5
Cadmium	"	1.0		1.1	"	80-120	110	30	9.5
Chromium	"	1.0		1.0	"	80-120	100	30	0
Lead	"	1.0		1.0	"	80-120	100	30	9.5
Selenium	"	1.0		0.95	"	80-120	95	30	5.1
Silver	"	1.0		1.0	"	80-120	100	20	3.0

*Refer to end of report for text of notes and definitions.

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Delta Environmental
 2340 Trinity Mills, Suite 230
 Carrollton, TX 75006

Project: Artesia
 Project Number: F098-130
 Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
 Received: 9/26/98
 Reported: 10/14/98 09:57

Conventional Chemistry Parameters by APHA/EPA Methods/Quality Control Star Analytical, Inc.

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit	Recov. %	RPD Limit	RPD % Notes*
Batch: 09V8382	Date Prepared: 9/25/98							Extraction Method: General Preparation	
Duplicate			09V8382-DUP1	8090264-04					
Reactivity	9/25/98		ND	ND	N/A				
Batch: 09V8389	Date Prepared: 9/28/98							Extraction Method: General Preparation	
Duplicate			09V8389-DUP1	8090291-17					
H	9/28/98		7.89	7.90	pH units			10.0	0.127
Batch: 09V8416	Date Prepared: 9/29/98							Extraction Method: General Preparation	
Blank			09V8416-BLK1						
Petroleum Oil Hydrocarbons	9/29/98		ND	mg/l		1.0			
LCS			09V8416-BS1						
Petroleum Oil Hydrocarbons	9/29/98	8.0	7.8	mg/l	80-120	98			
LCS Dup			09V8416-BSD1						
Petroleum Oil Hydrocarbons	9/29/98	8.0	8.0	mg/l	80-120	100	30	2.0	
Batch: 09V8446	Date Prepared: 9/30/98							Extraction Method: General Preparation	
Blank			09V8446-BLK1						
Petroleum Oil Hydrocarbons	9/30/98		ND	mg/kg		5.0			
LCS			09V8446-BS1						
Petroleum Oil Hydrocarbons	9/30/98	200	170	mg/kg	80-120	85			
LCS Dup			09V8446-BSD1						
Petroleum Oil Hydrocarbons	9/30/98	200	170	mg/kg	80-120	85	30	0	
Matrix Spike			09V8446-MS1	8090291-03					
Petroleum Oil Hydrocarbons	9/30/98	200	ND	mg/kg	80-120	90			
Matrix Spike Dup			09V8446-MSD1	8090291-03					
Petroleum Oil Hydrocarbons	9/30/98	200	ND	mg/kg	80-120	85	30	5.7	
Batch: 10V8117	Date Prepared: 10/1/98							Extraction Method: General Preparation	
Blank			10V8117-BLK1						
Total Dissolved Solids	10/1/98		10	mg/l		10			
Duplicate			10V8117-DUP1	8090291-19					
Total Dissolved Solids	10/1/98	4600	4400	mg/l				17	4.4

*Refer to end of report for text of notes and definitions.

Star Analytical, Inc.

Lari Hall, Project Manager



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Delta Environmental
2340 Trinity Mills, Suite 230
Carrollton, TX 75006

Project: Artesia
Project Number: F098-130
Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
Received: 9/26/98
Reported: 10/14/98 09:57

Physical Parameters by APHA/ASTM/EPA Methods/Quality Control Star Analytical, Inc.

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Reporting Limit Units	Recov. Recov. Limits	RPD %	RPD % Notes*
Batch: 09V8425								
Blank								
Reactive Cyanide	9/29/98			ND	mg/kg		250	
LCS								
Reactive Cyanide	9/29/98			ND	mg/kg			
Duplicate								
Reactive Cyanide	9/29/98	<u>09V8425-DUP1</u>	<u>8090291-10</u>	ND	mg/kg		20	
Batch: 09V8455								
Blank								
Reactive Sulfide	9/30/98			ND	mg/kg		1.0	
Duplicate								
Reactive Sulfide	9/30/98	<u>09V8455-DUP1</u>	<u>8090291-10</u>	ND	mg/kg		30	

Star Analytical, Inc.

Lari Hall, Project Manager

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Delta Environmental 2340 Trinity Mills, Suite 230 arrollton, TX 75006	Project: Artesia Project Number: F098-130 Project Manager: Destini Baldonado	Sampled: 9/23/98 to 9/24/98 Received: 9/26/98 Reported: 10/14/98 09:57
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TCLP Volatile Organic Compounds by EPA Method 1311/8260/Quality Control
Star Analytical, Inc.

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit	Recov. %	RPD Limit	RPD % Notes*
<u>Batch: 10V8021</u>	<u>Date Prepared: 10/1/98</u>				<u>Extraction Method: EPA 5030</u>				
<u>Blank</u>	<u>10V8021-BLK1</u>								
Benzene	10/1/98			ND	mg/l	0.0200			
-Butanone	"			ND	"	0.100			
Carbon tetrachloride	"			ND	"	0.0200			
Chlorobenzene	"			ND	"	0.0200			
Chloroform	"			ND	"	0.0200			
2-Dichloroethane	"			ND	"	0.0200			
1,1-Dichloroethene	"			ND	"	0.0200			
Tetrachloroethylene	"			ND	"	0.0200			
Trichloroethylene	"			ND	"	0.0200			
Vinyl chloride	"			ND	"	0.0200			
<u>Surrogate: DBFM</u>	"	0.0500		0.0507	"	86.0-118	101		
<u>Surrogate: Toluene-d8</u>	"	0.0500		0.0508	"	88.0-110	102		
<u>Surrogate: 4-BFB</u>	"	0.0500		0.0488	"	86.0-115	97.6		
<u>LCS</u>	<u>10V8021-BS1</u>								
Benzene	10/1/98	0.0500		0.0539	mg/l	76.0-127	108		
Chlorobenzene	"	0.0500		0.0609	"	75.0-130	122		
1,1-Dichloroethene	"	0.0500		0.0409	"	58.0-145	81.8		
Trichloroethylene	"	0.0500		0.0552	"	71.0-140	110		
<u>Surrogate: DBFM</u>	"	0.0500		0.0512	"	86.0-118	102		
<u>Surrogate: Toluene-d8</u>	"	0.0500		0.0502	"	88.0-110	100		
<u>Surrogate: 4-BFB</u>	"	0.0500		0.0506	"	86.0-115	101		
<u>CS Dup</u>	<u>10V8021-BSD1</u>								
Benzene	10/1/98	0.0500		0.0531	mg/l	76.0-127	106	15.0	1.87
Chlorobenzene	"	0.0500		0.0605	"	75.0-130	121	15.0	0.823
1,1-Dichloroethene	"	0.0500		0.0406	"	58.0-145	81.2	15.0	0.736
Trichloroethylene	"	0.0500		0.0558	"	71.0-127	112	15.0	1.80
<u>Surrogate: DBFM</u>	"	0.0500		0.0508	"	86.0-118	102		
<u>Surrogate: Toluene-d8</u>	"	0.0500		0.0501	"	88.0-110	100		
<u>Surrogate: 4-BFB</u>	"	0.0500		0.0497	"	86.0-115	99.4		

*Refer to end of report for text of notes and definitions.

Star Analytical, Inc.

Lari Hall, Project Manager



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Delta Environmental 2340 Trinity Mills, Suite 230 Carrollton, TX 75006	Project: Artesia Project Number: F098-130 Project Manager: Destini Baldonado	Sampled: 9/23/98 to 9/24/98 Received: 9/26/98 Reported: 10/14/98 09:57
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TCLP Semivolatiles by EPA Method 1311/8270/Quality Control
Star Analytical, Inc.

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit	Recov. %	RPD Limit	RPD % Notes*
Batch: 10V8040	Date Prepared: 10/1/98				Extraction Method: EPA 3550				
Blank	10V8040-BLK1								
-Cresol	10/2/98			ND	mg/l	0.00800			
,p-Cresols	"			ND	"	0.00800			
1,4-Dichlorobenzene	"			ND	"	0.00800			
2,4-Dinitrotoluene	"			ND	"	0.00800			
Hexachlorobenzene	"			ND	"	0.00800			
Hexachlorobutadiene	"			ND	"	0.00800			
Hexachloroethane	"			ND	"	0.00800			
Nitrobenzene	"			ND	"	0.00800			
Pentachlorophenol	"			ND	"	0.0400			
Pyridine	"			ND	"	0.0400			
2,4,5-Trichlorophenol	"			ND	"	0.0400			
4,6-Trichlorophenol	"			ND	"	0.00800			
Surrogate: 2-FP	"	0.200		0.0745	"	43.0-116	37.3		9
Surrogate: Phenol-d6	"	0.200		0.0622	"	10.0-94.0	31.1		
Surrogate: 2,4,6-TBP	"	0.200		0.0891	"	10.0-123	44.6		
Surrogate: Nitrobenzene-d5	"	0.100		0.0357	"	35.0-114	35.7		
Surrogate: 2-FBP	"	0.100		0.0366	"	43.0-116	36.6		9
Surrogate: p-Terphenyl-d14	"	0.100		0.0908	"	33.0-141	90.8		
LCS	10V8040-BS1								
1,4-Dichlorobenzene	10/2/98	0.100		0.0503	mg/l	30.0-150	50.3		D
2,4-Dinitrotoluene	"	0.100		0.101	"	30.0-150	101		D
Pentachlorophenol	"	0.200		0.166	"	30.0-150	83.0		D
LCS Dup	10V8040-BSD1								
1,4-Dichlorobenzene	10/2/98	0.100		0.0463	mg/l	30.0-150	46.3	50.0	8.28 D
2,4-Dinitrotoluene	"	0.100		0.102	"	30.0-150	102	50.0	0.985 D
Pentachlorophenol	"	0.200		0.164	"	30.0-150	82.0	50.0	1.21 D

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*Refer to end of report for text of notes and definitions.

Lari Hall, Project Manager



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Delta Environmental
 2340 Trinity Mills, Suite 230
 Carrollton, TX 75006

Project: Artesia
 Project Number: F098-130
 Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
 Received: 9/26/98
 Reported: 10/14/98 09:57

TCLP Metals by EPA 1311/6000/7000 Series Methods/Quality Control
Star Analytical, Inc.

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Reporting Limit Units	Recov. Recov. Limits	RPD %	RPD Limit %	Notes*
Batch: 10V8096	Date Prepared: 9/24/98						Extraction Method: General Preparation		
Blank	10V8096-BLK1								
Arsenic	10/7/98			ND	mg/l	0.200			
Barium	"			ND	"	0.100			
Cadmium	"			ND	"	0.0300			
Chromium	"			ND	"	0.0300			
Lead	"			ND	"	0.100			
Selenium	"			ND	"	0.200			
Silver	"			ND	"	0.0300			
Blank	10V8096-BLK2								
Arsenic	10/7/98			ND	mg/l	0.200			
Barium	"			ND	"	0.230			
Cadmium	"			ND	"	0.0300			
Chromium	"			ND	"	0.0300			
Lead	"			ND	"	0.100			
Selenium	"			ND	"	0.200			
Silver	"			ND	"	0.0300			
LCS	10V8096-BS1								
Arsenic	10/7/98	1.00		1.00	mg/l	50.0-150	100		
Barium	"	1.00		1.00	"	50.0-150	100		
Cadmium	"	1.00		1.00	"	50.0-150	100		
Chromium	"	1.00		1.00	"	50.0-150	100		
Lead	"	1.00		1.00	"	50.0-150	100		
Selenium	"	1.00		1.00	"	50.0-150	100		
Silver	"	1.00		0.950	"	50.0-150	95.0		
LCS	10V8096-BS2								
Arsenic	10/7/98	1.00		0.950	mg/l	50.0-150	95.0		
Barium	"	1.00		1.25	"	50.0-150	125		
Cadmium	"	1.00		0.980	"	50.0-150	98.0		
Chromium	"	1.00		0.980	"	50.0-150	98.0		
Lead	"	1.00		0.950	"	50.0-150	95.0		
Selenium	"	1.00		0.940	"	50.0-150	94.0		
Silver	"	1.00		1.00	"	50.0-150	100		
LCS Dup	10V8096-BSD1								
Arsenic	10/7/98	1.00		1.00	mg/l	50.0-150	100	30.0	0
Barium	"	1.00		1.00	"	50.0-150	100	30.0	0
Cadmium	"	1.00		1.00	"	50.0-150	100	30.0	0
Chromium	"	1.00		1.00	"	50.0-150	100	30.0	0

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*Refer to end of report for text of notes and definitions.



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Delta Environmental
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 Carrollton, TX 75006

Project: Artesia
 Project Number: F098-130
 Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
 Received: 9/26/98
 Reported: 10/14/98 09:57

TCLP Metals by EPA 1311/6000/7000 Series Methods/Quality Control
Star Analytical, Inc.

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD % Notes*
CS Dup (continued)									
Lead	10/7/98	1.00		1.00	mg/l	50.0-150	100	30.0	0
Selenium	"	1.00		1.00	"	50.0-150	100	30.0	0
Silver	"	1.00		1.00	"	50.0-150	100	30.0	5.13
LCS Dup									
Arsenic	10/7/98	1.00		1.10	mg/l	50.0-150	110	30.0	14.6
Manganese	"	1.00		1.00	"	50.0-150	100	30.0	22.2
Cadmium	"	1.00		1.26	"	50.0-150	126	30.0	25.0
Chromium	"	1.00		1.00	"	50.0-150	100	30.0	2.02
Lead	"	1.00		1.00	"	50.0-150	100	30.0	5.13
Selenium	"	1.00		1.00	"	50.0-150	100	30.0	6.19
Silver	"	1.00		0.980	"	50.0-150	98.0	30.0	2.02

Star Analytical, Inc.

Lari Hall, Project Manager

*Refer to end of report for text of notes and definitions.

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Delta Environmental
2340 Trinity Mills, Suite 230
Carrollton, TX 75006

Project: Artesia
Project Number: F098-130
Project Manager: Destini Baldonado

Sampled: 9/23/98 to 9/24/98
Received: 9/26/98
Reported: 10/14/98 09:57

Notes and Definitions

Note

D Data reported from a dilution.

1 Diesel

3 Surrogate recovery outside control limits due to interference from coeluting compounds within the sample matrix.

5 various hydrocarbons C4 to C30

Non-diesel hydrocarbons C12 to C24

Various peak >C22

Non-diesel hydrocarbons <C12

10X WAS NEEDED DUE TO MATRIX EFFECTS; 218-18 10X WAS ND AS WELL

8 Estimated value.

DET Method blank re-running for surr recovery

ID

Analyte NOT DETECTED at or above the reporting limit

NR

Not Reported

dry

Sample results reported on a dry weight basis

Recov.

Recovery

RPD

Relative Percent Difference

Star Analytical, Inc.

A handwritten signature in black ink that reads "Lari Hall".

Lari Hall, Project Manager

CLIENT NAME: Dept. Env.REC. BY (PRINT): A. M. Drey

WORK ORDER:

R7K & R8J

DATE OF LOG-IN:

9/26/98

CIRCLE THE APPROPRIATE RESPONSE

	LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	01	A	So. Tank - SW	1-402	Soil	9/24/98	
2. Custody Seal #: <u>43446 13</u>	02		So. Tank - EW				
3. Chain of Custody present?	03		So. Tank - NW				
4. Chain of Custody filled out properly?	04		So. Tank - WSW				
5. Ice and packing material?	05		No. Tank - SW				
6. Correct containers used?	06		No. Tank - SW				
7. Containers intact?	07		No. Tank - SW				
8. Does information on custody reports, traffic reports and sample tags agree?	08	✓	No. Tank - SW	✓	✓	9/24/98	No. Tests Performed No. Samples Collected
9. Headspace in VOA's? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	09	A	6.4 cu. composite	1-402	Soil	9/24/98	
10. Preserved properly?	10	A	Stockpile	1-402	Soil	9/24/98	
11. Date Rec. at Lab: <u>9/26/98</u>	11	A-B	Ground	2-402	Soil	9/23/98	
12. Time Rec. at Lab: <u>10:30</u>	12		Cont. - Pit				
13. Temp Rec. at Lab: <u>10 °C (68)</u>	13		Cont - 1				
2 cont'd-s Revd. <input checked="" type="checkbox"/>	14		Cont - 2				
	15	✓	Cont - 3				

Shipping Method (circle one):

AIRBORNE

FED EX

UPS OTHER:

STAR

CLIENT NAME: Delta Env.

REC. BY (PRINT): A. Dillay

WORK ORDER:

80997
9/26/98

DATE OF LOG-IN:

CIRCLE THE APPROPRIATE RESPONSE

1. Custody Seal(s) present? No
2. Custody Seal #: 9/26/98
3. Chain of Custody present?
4. Chain of Custody filled out properly?
5. Ice and packing material?
6. Correct containers used?
7. Containers intact?
8. Does information on custody reports, traffic reports and sample tags agree?
9. Headspace in VOA's?
10. Preserved properly?
11. Date Rec. at Lab: 9/26/98
12. Time Rec. at Lab: 10:30
13. Temp Rec. at Lab:

LAB SAMPLE #

DASH #

CLIENT IDENTIFICATION

CONTAINER DESCRIPTION

SAMPLE MATRIX

DATE SAMP

REMARKS: CONDITION (ETC.)

17	✓	cont - 4	✓	✓	✓	✓
18	✓	TANK	✓	✓	✓	✓
19	✓	A-F fit water	✓	✓	✓	✓

1. Yes / No
2. Yes / No
3. Yes / No
4. Yes / No
5. Yes / No
6. Yes / No
7. Yes / No
8. Yes / No
9. Yes / No
10. Yes / No
11. Yes / No
12. Yes / No
13. Yes / No

Shipping Method (circle one):

AIRBORNE

STAR

FED EX

UPS

OTHER:



STAR ANALYTICAL
CHAIN-OF-CUSTODY FORM

14500 Trinity Boulevard, Suite 106
Fort Worth, Texas 76155
(817) 571-6800 • Metro (817) 540-6982 • FAX (817) 267-5431

Company Name: Delta Environmental Cons.

Project Name: Artesia

Address: 2340 Trinity Mills Rd. Suite 230

Billing Address (if different):

City/Corridor State: TX Zip Code: 76007

Telephone: 972/412-5311 FAX#: 972/412-5243

Report To: Destini Bahena Sampler: DB

Turnaround Time: 10 Working Days 4 Working Days 24 Hours
 7 Working Days 3 Working Days 2 - 8 Hours
 5 Working Days 2 Working Days

Analyses Requested

TPH (410)
VOC (410)
SVOC (410)
TCLP (410)
HT (410)

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Star's Sample #	Comments
1. So. Tank SW 9/24/01	10:00	soil	1	glass	8040391-01	X
2. So. Tank 2 W	12:00				8040391-02	X
3. So. Tank NW	12:05				8040391-03	X
4. So. Tank NW 12:10	12:10	soil	1	glass	8040391-04	X
5. No. Tank SW	12:30				8040391-05	X
6. No. Tank SW	15:35				8040391-06	X
7. No. Tank SW	15:40				8040391-07	X
8. No. Tank SW	15:45	soil	1	glass	8040391-08	X
9 G.W. Composite	9/24/01 15:55 water			glass	8040391-09	
10 Stockpile	9/24/01 17:00 soil		1	glass	8040391-10	X

Relinquished By: <u>Z. Johnson</u>	Date: <u>9/24/01</u>	Time: <u>12:00pm</u>	Received By: <u>J. H. H.</u>	Method of Shipment: <u>Fed Ex</u>	Date: <u>9/24/01</u>	Time: <u>12:00pm</u>
Relinquished By: _____	Date: _____	Time: _____	Received By: _____	Method of Shipment: _____	Date: _____	Time: _____
Relinquished By: _____	Date: _____	Time: _____	Received By: _____	Method of Shipment: _____	Date: _____	Time: _____

Samples Received in Good Condition? Yes No
 Samples Pre-Preserved? Yes No N/A

Custody Seal Intact? Yes No N/A

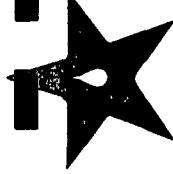
Samples Received Cold? Yes No
 Custody Seal Intact? Yes No N/A

Pink - Client

Yellow - Star

White - Star

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**STAR ANALYTICAL
CHAIN-OF-CUSTODY FORM**

14500 Trinity Boulevard, Suite 106
Fort Worth, Texas 76155
(817) 571-6800 • Metro (817) 540-6982 • FAX (817) 267-5431

Company Name: **Delta Environmental**

Address: **2340 Trinity Mills Rd. Suite 230**

City: **Carrollton** State: **TX** Zip Code: **75007**

Telephone: **972/418-5311** FAX#: **972/418-5243**

Report To: **Destin' Balloado** Sampler: **DB**

Project Name: **F098-130-Astesia**

Billing Address (if different):

Turnaround Time:

- 10 Working Days
- 4 Working Days
- 24 Hours

- 7 Working Days
- 3 Working Days
- 2 - 8 Hours

- 5 Working Days
- 2 Working Days

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Star's Sample #	Comments
1. Sump	9/23/98 9:30	soil	2	Glass	GC90241-11	
2. Cont.-Dit	9:45				GC90241-12	
3. Cont.-1	10:00				GC90241-13	
4. Cont.-2	10:20				GC90241-14	X
5. Cont.-3	10:40				GC90241-15	X
6. Cont.-4	11:00				GC90241-16	X
7. Cont.-5	9/23/98 11:20	soil	2	Glass	GC90241-17	X
8. Tank	9/24/98 9:45	water	2	glass/plastic	GC90241-18	X
9. Filter	9/24/98 10:00	water in	2	Glass	GC90241-19	X
10.						

Relinquished By: <u>Destin Balloado</u>	Date: <u>9/24/98</u>	Time: <u>9:40pm</u>	Received By:	Date: <u></u>	Time: <u></u>
Relinquished By: _____	Date: _____	Time: _____	Received By:	Date: _____	Time: _____
Relinquished By: _____	Date: <u>9/24/98</u>	Time: <u></u>	Received By: <u>Destin Balloado</u>	Date: <u>9/24/98</u>	Time: <u>9:30</u>

Samples Received in Good Condition? Yes No Samples Cold? Yes No
Samples Pre-Preserved? Yes No N/A Custody Seal Intact? Yes No N/A

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