

SECTION 4

PROJECT CASE NARRATIVES

AND CHAIN-OF-CUSTODY RECORDS



CASE NARRATIVE

**CLIENT: KERR-McGEE CORP.
SDG: HMS07**

LANCASTER LABORATORIES

VOLATILES by GC/MS

LL NUMBERS:	SAMPLE CODES:	MATRIX		COMMENTS
		SOIL	WATER	
3018874	W12--		X	
3018875	W10--		X	
3018878	W13--		X	
3018879	W23--		X	
3018880	TB-1-		X	CLIENT BLANK
3018881	RB1--		X	
3018882	W11--		X	

LABORATORY SUBMITTED QC:

VBLKD28	VBLKD28		X	METHOD BLANK
VBLKD29	VBLKD29		X	METHOD BLANK
VBLKD30	VBLKD30		X	METHOD BLANK
3018496	18762		X	UNSPIKED
3018497	18762MS		X	MATRIX SPIKE
3018498	18762MSD		X	MATRIX SPIKE DUP
LCSW-28	LCSW-28		X	LAB CONTROL SAMPLE

SAMPLE PREPARATION:

No sample preparation was necessary for the VOA fraction.

ANALYSIS:

The method used for analysis was EPA SW846 Method 8260B.

No problems were encountered during the analysis of these samples.

QUALITY CONTROL and NONCONFORMANCE SUMMARY:

Only client requested compounds are addressed in this narrative.

All QC was within specifications.

DATA INTERPRETATION:

No further interpretation is necessary for the data submitted.

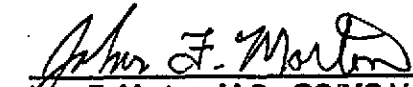


Lancaster Laboratories

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Where quality is a science.

Case Narrative Reviewed and Approved by:



John F. Morton, M.S., GC/MS Volatiles

Date 11/11/98

CASE NARRATIVE

Client: Kerr-McGee Corporation
 SDG #: HMS07

**LANCASTER LABORATORIES
 SEMIVOLATILES BY GC/MS**
SAMPLE NUMBER(S) :

LL #'s	Sample Code	Matrix		Comments
		Soil	Water	
3018865	W03--		X	
3018866	W01--		X	
3018867	W05--		X	
3018868	W09--		X	
3018868DL	W09--DL		X	20X Dilution
3018869	W19--		X	
3018869DL	W19--DL		X	30X Dilution
3018870	W08--		X	
3018871	W04--		X	Unspiked
3018872	W04--MS		X	Matrix Spike
3018873	W04--MSD		X	Matrix Spike Dup
3018874	W12--		X	
3018875	W10--		X	
3018876	W06--		X	
3018876DL	W06--DL		X	10X Dilution
3018877	W07--		X	
3018878	W13--		X	
3018879	W23--		X	
3018881	RB1--		X	
3018882	W11--		X	
LABORATORY SUBMITTED QC:				
SBLKWA293	SBLKWA2937		X	Method Blank
293WALCS	293WALCS7		X	Lab Control Sample

Case Narrative
SDG #: HMS07 continued

SAMPLE PREPARATION:

Due to insufficient sample, reduced volumes were used in the extraction of the following samples.

<u>Sample Code</u>	<u>Volume</u>
W05--	971 mls
W09--	996 mls
W19--	985.935 mls ^{K6} 11-14-98
W08--	977 mls
W06--	985 mls
W13--	997 mls
W23--	963 mls

No other problems were encountered during the extraction of these samples.

ANALYSIS:

The method used for analysis was SW-846 8270C.

All samples were analyzed for the semivolatile CLP OLM03.2 target compounds.

The following samples were analyzed at further dilutions due to target recoveries above calibration range.

<u>Sample Code</u>	<u>Dilution</u>	<u>Compounds</u>
W09--	20	naphthalene, 2-methylnaphthalene, acenaphthene
W19--	30	naphthalene, 2-methylnaphthalene, acenaphthene
W06--	10	naphthalene

No other problems were encountered during the analysis of these samples.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

The recoveries of 2,6-dinitrotoluene and 2,4-dinitrotoluene in 293WALCS7 were outside QC limits.



Case Narrative
SDG #: HMS07 continued

All other QC was within specifications.

DATA INTERPRETATION:

Only non-conformances for client requested compounds are addressed in this case narrative.

No further interpretation is necessary for the data submitted.

Case Narrative Reviewed and Approved by:

Charles J. Neslund
Charles J. Neslund
Group Leader, GC/MS Semivolatiles

Date: 11/18/98

CLIENT: Kerr-McGee
SDG: HMS07
LANCASTER LABORATORIES
PAHs

<u>LL SAMPLE #</u>	<u>SAMPLE CODE</u>	<u>MATRIX</u>		<u>COMMENTS</u>
		<u>SOLID</u>	<u>WATER</u>	
BLANKA 10/17/98	PBLK5G		X	Method Blank
LCSA 10/17/98	LCS10		X	Lab Control Spike
3018865	W03--		X	
3018866	W01--		X	
3018867	W05--		X	
3018868	W09--		X	DF1 DF50
3018869	W19--		X	DF1 DF50
3018870	W08--		X	
3018871	W04--		X	Unspiked
3018872MS	W04--MS		X	Matrix Spike
3018873MSD	W04--MSD		X	Matrix Spike Duplicate
3018874	W12--		X	
3018875	W10--		X	
3018876	W06--		X	DF1 DF20
3018877	W07--		X	
3018878	W13--		X	
3018879	W23--		X	
3018881	RB1--		X	
3018882	W11--		X	

A. Sample Preparation:

Several samples required dilutions as noted in the sample list above. No problems were encountered with the preparation of the samples.

B. Analysis:

The analysis was performed using the following runs:

- 1,9C9P296 and 1,9C9P296B
- 1,2C9P293 and 1,2C9P293B

No problems were encountered. Quantitation of individual PAH compounds was performed using the primary detector for that compound as noted on the Form 7E. All continuing calibration data are within specifications since the average of the % difference values met the 15% criteria.

C. Quality Control:

The surrogates are reported from the UV detector. The triphenylene surrogate recovery is outside the QC limits for samples 3018866, 3018867, 3018876, 3018877, 3018870, 3018878, and 3018879 due to matrix interference. All other surrogates are within the acceptance limits.

The pyrene recovery is outside the QC limits in the MS/MSD.

The LCS data is within the QC criteria.

D. Data Interpretation:

The method blank was evaluated to the MDL. Values between the MDL and the LOQ are reported with a "J" qualifier.

No further interpretation is needed.

Narrative reviewed and approved by:



Jenifer E. Hess, Group Leader



Date

Sample Reference List for SDG # HMS07
with a Package Type of I

Lab Sample Number	Sample Code	Client Sample Description
3018865	W03--	MW-03 Grab Water Sample
3018866	W01--	MW-01 Grab Water Sample
3018867	W05--	MW-05 Grab Water Sample
3018868	W09--	MW-09 Grab Water Sample
3018869	W19--	MW-19 Grab Water Sample
3018870	W08--	MW-08 Grab Water Sample
3018871	W04--	MW-04 Unspiked Grab Water Sample
3018872	W04--	MW-04 Matrix Spike Grab Water Sample
3018873	W04--	MW-04 Matrix Spike Duplicate Grab Water Sample
3018874	W12--	MW-12 Grab Water Sample
3018875	W10--	MW-10 Grab Water Sample
3018876	W06--	MW-06 Grab Water Sample
3018877	W07--	MW-07 Grab Water Sample
3018878	W13--	MW-13 Grab Water Sample
3018879	W23--	MW-23 Grab Water Sample
3018880	TB-1-	Trip Blank (TB-1/101498) Water Sample
3018881	RB1--	RB-1/101498 Grab Water Sample
3018882	W11--	MW-11 Grab Water Sample



For Lancaster Laboratories use only

Acct. # 7802 Sample # 3018865-882

Please print. Instructions on reverse side correspond with circled numbers.

Client: MPAA Acct. #: _____
 Project Name/#: 6654 PWSID #: _____
 Project Manager: D. UPTHEGROVE P.O.# 21-04
 Sampler: UPTHEGROVE/TODD Quote #: _____
 Name of state where samples were collected: MS

Sample Identification	Date Collected	Time Collected	Grab ³	Composite	Matrix ⁴			Total # of Containers	Analyses Requested ⁵	Remarks	For lab use only	
					Soil	Water <input type="checkbox"/> Potable (check if NIDES applicable)	Other				FSC	SCR #
MW-03	10/14/98	0925	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		2	TEL VOA			
MW-01	10/13/98	0910	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		3	TEL VOA			
MW-05	10/14/98	1100	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		3	TEL VOA			
MW-04	10/13/98	1630	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		3	TEL VOA			
MW-19	10/13/98	1655	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		3	TEL VOA			
MW-08	10/13/98	1730	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		3	TEL VOA			
MW-04/MS	10/14/98	1051	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		3	TEL VOA			
MW-04	10/14/98	1050	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		3	TEL VOA			
MW-04/MSD	10/14/98	1052	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		2	TEL VOA			

Turnaround Time Requested (TAT) (please circle): Normal Rush
 (Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
 Date results are needed: _____
 Rush results requested by (please circle): Phone Fax
 Phone #: _____ Fax #: _____

Data Package Options (please circle if requested)

QC Summary	Type VI (Raw Data)	SDG Complete? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Type I (Tier I)	GLP	
Type II (Tier II)	Other	Site-specific QC required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If yes, indicate QC sample and submit triplicate volume.)
Type III (NL Red. Del.)		
Type IV (CLP)		Internal Chain of Custody required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Relinquished by:	Date	Time	Received by:	Date	Time
<i>[Signature]</i>	10-9-98	1600	<i>[Signature]</i>	10-13	0930
<i>[Signature]</i>	10-14	1700	TEL EX	10-14	1740



For Lancaster Laboratories use only

Acct # 7802 Sample # 3018565-882

Please print. Instructions on reverse side correspond with circled numbers.

Client: MP+A Acct. #: _____
 Project Name/ #: GCSC PWSID #: _____
 Project Manager: T. UPTHEGROVE P.O.# 21-04
 Sampler: UPTHEGROVE/TOOD Quote #: _____
 Name of state where samples were collected: MS

Matrix: 4
 Soil
 Water
 NPDES
 Other
 Potable (check if applicable)
 NPDES applicable

Analyses Requested: 5
TCL VOA
TCL SVOCs PAHs

For lab use only
 FSC: _____
 SCR #: 1117921
 Temperature of samples upon receipt (if requested) 6

Sample Identification	Date Collected	Time Collected	Grab Composite	Soil	Water	NPDES	Other	Total # of Containers	Analyses Requested	Remarks	Temperature of samples upon receipt (if requested)
MW-12	10/13/98	1420	✓		✓			5	✓ ✓	TCL SVOCs L 8270	
MW-10	10/13/98	1320	✓		✓			5	✓ ✓	TCL SVOCs L 8240	
MW-06	10/13/98	1550	✓		✓			3	✓ ✓	PAHs L 8310	
MW-07	10/13/98	1740	✓		✓			3	✓ ✓		
MW-13	10/14/98	1400	✓		✓			5	✓ ✓		
MW-23	10/14/98	1330	✓		✓			5	✓ ✓		
TRIP BLANK (TB-1/101498)	NA	NA			✓			2	✓ ✓		
RB-1/101498	10/14/98	1520	✓		✓			5	✓ ✓		
MW-11	10/14/98	1435	✓		✓			5	✓ ✓		

Turnaround Time Requested (TAT) (please circle): Normal 1 Rush
 (Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
 Date results are needed: _____
 Rush results requested by (please circle): Phone 1 Fax _____
 Phone #: _____ Fax #: _____

Data Package Options (please circle if requested)
 QC Summary: Type VI (Raw Data) 2
 Type I (Tier I) GLP
 Type II (Tier II) Other
 Type III (NI, Red, Del.)
 Type IV (CLP) 2
 SDG Complete? Yes 2 No
 Site-specific QC required? Yes 2 No
 (If yes, indicate QC sample and submit triplicate volume.)
 Internal Chain of Custody required? Yes 2 No

Relinquished by: <u>[Signature]</u>	Date: <u>10-9-98</u>	Time: <u>1600</u>	Received by: <u>[Signature]</u>	Date: <u>10-13</u>	Time: <u>0730</u>
Relinquished by: <u>[Signature]</u>	Date: <u>10-14</u>	Time: <u>1700</u>	Received by: <u>[Signature]</u>	Date: <u>10-14</u>	Time: <u>1700</u>
Relinquished by: _____	Date: _____	Time: _____	Received by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____	Received by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____	Received by: <u>[Signature]</u>	Date: <u>11-18-98</u>	Time: <u>0910</u>

Sample Administration Receipt Documentation Log

Client/Project: MP2 A Shipping Container Sealed: Y / N
 Date of Receipt: 10/15/98 COC Seal Present: Y / N
 Time of Receipt: 0910 COC Seal Intact: Y / N
 Source Code: 504 Package: Chilled / Not Chilled
 Unpacker Emp. No.: 184

Temperature of Shipping Containers	
#1	#2
Thermometer ID: <u>2723</u>	Thermometer ID: <u>2723</u>
Temp.: <u>3.0</u>	Temp.: <u>2.0</u>
Temp. Bottle / Surface Temp.	Temp. Bottle / Surface Temp.
Wet Ice / Dry Ice / Ice Packs	Wet Ice / Dry Ice / Ice Packs
Ice Present? <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	Ice Present? <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N
#3	#4
Thermometer ID: <u>2723</u>	Thermometer ID: <u>2723</u>
Temp.: <u>1.5</u>	Temp.: <u>3.0</u>
Temp. Bottle / Surface Temp. <u>LIAS</u>	Temp. Bottle / Surface Temp.
Wet Ice / Dry Ice / Ice Packs	Wet Ice / Dry Ice / Ice Packs
Ice Present? <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	Ice Present? <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N

Paperwork Discrepancy/Unpacking Problems: _____

Sample Administration Chain of Custody			
Name	Date	Time	Reason for Transfer
<u>Vigil</u>	<u>10/15/98</u>	<u>1035</u>	Unpacking
<u>W. H. ...</u>	<u>10/15/98</u>	<u>1045</u>	Place in Storage or Entry
<u>Jeffery S. ...</u>	<u>10/15/98</u>	<u>11:55</u>	Remove from Storage <u>Entry</u>
			Place in Storage or Entry
			Entry

**Sample Administration
 Receipt Documentation Log**

Client/Project: MDA Shipping Container Sealed: Y / N
 Date of Receipt: 10/15/98 COC Seal Present: Y / N
 Time of Receipt: 0905 COC Seal Intact: Y / N
 Source Code: 501 Package: Chilled / Not Chilled
 Unpacker Emp. No.: 184

Temperature of Shipping Containers	
#1	#2
Thermometer ID: <u>2723</u>	Thermometer ID: _____
Temp.: <u>5.0</u>	Temp.: _____
Temp. Bottle / Surface Temp. _____	Temp. Bottle / Surface Temp. _____
Wet Ice / Dry Ice / Ice Packs _____	Wet Ice / Dry Ice / Ice Packs _____
Ice Present? <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	Ice Present? <input type="checkbox"/> Y / <input type="checkbox"/> N
#3	#4
Thermometer ID: _____	Thermometer ID: _____
Temp.: _____	Temp.: _____
Temp. Bottle / Surface Temp. _____	Temp. Bottle / Surface Temp. _____
Wet Ice / Dry Ice / Ice Packs _____	Wet Ice / Dry Ice / Ice Packs _____
Ice Present? <input type="checkbox"/> Y / <input type="checkbox"/> N	Ice Present? <input type="checkbox"/> Y / <input type="checkbox"/> N

Paperwork Discrepancy/Unpacking Problems: _____

Sample Administration Chain of Custody			
Name	Date	Time	Reason for Transfer
<u>[Signature]</u>	<u>10/15/98</u>	<u>1035</u>	Unpacking
<u>[Signature]</u>	<u>10/15/98</u>	<u>1045</u>	<input checked="" type="checkbox"/> Place in Storage or <input type="checkbox"/> Entry
<u>[Signature]</u>	<u>10/15/98</u>	<u>1155</u>	Remove from Storage <input checked="" type="checkbox"/> or <input type="checkbox"/> Entry
			Place in Storage or <input type="checkbox"/> Entry
			Entry

**Locked Storage Chain of Custody
 Original Sample**

Client/Project: Ferris McGee - Gulf States Creation
 Preservative: HCl Matrix: Liquid SDG: HMS07
 Sample # Range of Entry Group: 3018865-882 Bottle Type: 40ml G10 Vial C30

Sample Number(s) in Custody	Released By	Received By	Date of Transfer	Time of Transfer	Reason for Change of Custody	Dist., Extr., or Digest Chain Created (X)
3018874, 875, 878, 879, 880, 881, 882	S75 J. Meyer	VOA Hold Storage	10/15/98	15:08	Storage	
3018874, 875, 878, 879, 880, 881, 882	X	Dept 21 Storage	*	*	transfer to Dept 21 storage	
3018874, 5, 8, 9, 80, 1, 2	Dept 21 Storage	J. BAKER 569	10/21/98	2315	VOA ANALYSIS 6291	
3018874, 5, 8, 9, 80, 1, 2	J. BAKER 569	Dept 21 Storage	10/22/98	0330	Return To Storage	
3018882	Dept 21 Storage	J. BAKER 569	10/22/98	0630	VOA ANALYSIS 6291	
3018882	J. BAKER 569	Dept 21 Storage	10/22/98	0700	Return To Storage	
* These samples were transferred to Dept 21 storage by Amanda Fish / 751 on 10/16/98 at approximated 0830. The chain of custody was not completed at that time. Fish + SI 10/16/98						

