1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID:

MW-15

Project ID: EL DORADO CHEMICAL

SWLO ID:

24931.03

Report:

24931.03

Collected: 03/13/1996 Received: 03/14/1996

Report Date: 03/27/1996 Last Modified:

Page:

Matrix: Water

TEST	DATE EXTRACTED	DETECTION	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE			
*** INORGANICS ***									
NITRATE		0.2	mg/l	34.5	03/14/96	SW 9056			
SULFATE		0.2	mg/l	4.4	03/14/96	SW 9056			
*** METALS ***									
CHROMIUM		5.0	ug/l	ND	03/19/96	SW 6010			
LEAD		2.0	ug/l	ND	03/22/96	SW 7421			

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

= UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

1 = NOT APPLICABLE

Methodology: SM = STANDARD METHODS, 16th EDITION, 1985

BPA = #EPA600/4-79-020, MARCH 1985

\* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID: MW-15-F

Project ID: EL DORADO CHEMICAL

SWLO ID:

24931.19

Report:

24931.19

Collected: 03/13/1996

Report Date: 03/27/1996

Matrix: Water

1 Page:

Received: 03/14/1996 Last Modified:

METHOD DATE DETECTION DATE LIMIT RESULTS REFERENCE TEST EXTRACTED UNITS ANALYZED \*\*\* METALS \*\*\* 5.0 ug/l ND 03/19/96 SW 6010 CHROMIUM 03/21/96 SW 7421 2.0 ug/l ND LEAD

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

= UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

A = NOT APPLICABLE

Methodology: SM = STANDARD METHODS, 16th EDITION, 1985

BPA = #BPA600/4-79-020, MARCH 1985

\* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = BSTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID:

MW-16

Project ID: EL DORADO CHEMICAL

1

SWLO ID:

24931.04

Report:

24931.04

Collected: 03/13/1996

Report Date: 03/27/1996

Page: Matrix: Water

Received: 03/14/1996 Last Modified:

TEST	DATE EXTRACTED	DETECTION LIMIT	UNITS	RESULTS	DATE ANALYZED	method reference			
		*** INORG	ANICS ***						
NITRATE SULFATE		2.0	mg/l mg/l	137 4.6	03/15/96 03/14/96	SW 9056 SW 9056			
*** METALS ***									
CHROMIUM LEAD		5.0 2.0	ug/l ug/l	ND 3.6	03/19/96 03/21/96	SW 6010 SW 7421			

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

A = NOT APPLICABLE

Methodology: SM = STANDARD METHODS, 16th EDITION, 1985

BPA = #BPA600/4-79-020, MARCH 1985

\* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

<sup>=</sup> UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID:

MW-16-F

Project ID: EL DORADO CHEMICAL

SWLO ID:

24931.20

Report:

24931.20

Collected: 03/13/1996

Report Date: 03/27/1996

Received:

03/14/1996

Last Modified:

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Matrix: Water

<u>test</u>	DATE EXTRACTED	DETECTION	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE			
*** METALS ***									
CHROMIUM		5.0	ug/l	ND	03/19/96	SW 6010			
LEAD		2.0	ug/l	3.4	03/21/96	SW 7421			

methodology: SM = STANDARD METHODS, 16th EDITION, 1985

BPA = #BPA600/4-79-020, MARCH 1985

\_\_ = NOT DETECTED ABOVE QUANTITATION LIMIT

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

<sup>-</sup> UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

A = NOT APPLICABLE

<sup>\* =</sup> SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID: MW-17

Project ID: EL DORADO CHEMICAL

SWLO ID:

Report:

24931.01

Collected: 03/13/1996

24931.01

Report Date: 03/27/1996

Received:

03/14/1996

Last Modified:

Page:

Matrix: Water

	DATE	DETECTION			DATE	METHOD	
TEST	EXTRACTED	LIMIT	UNITS	RESULTS	ANALYZED	REFERENCE	
		*** INORG	ANICS ***		•		
NITRATE		0.2	mg/l	45.0	03/14/96	SW 9056	
SULFATE		2.0	mg/1	145	03/15/96	SW 9056	
		*** MBT.	ALS ***				
CHROMIUM		5.0	ug/l	ND	03/19/96	SW 6010	
I.RAD		2.0	ug/l	ND	03/21/96	SW 7421	

D = NOT DETECTED ABOVE QUANTITATION LIMIT

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

T = UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

A = NOT APPLICABLE

<sup>..</sup>ethodology: SM = STANDARD METHODS, 16th EDITION, 1985 SW = EPA METHODOLOGY, "#SW846", THIRD EDITION, NOVEMBER 1986 BPA = #EPA600/4-79-020, MARCH 1985

<sup>\* =</sup> SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID: MW-17-F

Project ID: EL DORADO CHEMICAL

SWLO ID:

24931.17

Report:

24931.17

Collected: 03/13/1996 Received: 03/14/1996 Report Date: 03/27/1996

Page:

1

Last Modified:

Matrix: Water

	DATE	DETECTION			DATE	METHOD			
TEST	EXTRACTED	LIMIT	UNITS	RESULTS	ANALYZED	REFERENCE			
*** METALS ***									
CHROMIUM		5.0	ug/l	ND	03/19/96	SW 6010			
LEAD		2.0	ug/l	ND	03/21/96	SW 7421			

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

: = UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

(A = NOT APPLICABLE

Methodology: SM = STANDARD METHODS, 16th EDITION, 1985

EPA = #EPA600/4-79-020, MARCH 1985

\* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID: MW-18

Project ID: EL DORADO CHEMICAL

SWLO ID: 24948.14

Report: 24948.14

Collected: 03/14/1996 Report Date: 03/27/1996 Page: 1
Received: 03/15/1996 Last Modified: Matrix: Water

TEST	DATE EXTRACTED	DETECTION LIMIT	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE			
1831	miliateras	221.22	011210		141444				
		*** INORG	ANICS ***						
NITRATE		0.2	mg/l	0.4	03/15/96	SW 9056			
SULFATE		0.2	mg/l	3.3	03/15/96	SW 9056			
*** MSTALS ***									
CHROMIUM		5.0	ug/l	19.4	03/26/96	SW 6010			
LEAD		2.0	ug/l	17.0	03/22/96	SW 7421			

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

<sup>=</sup> UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

<sup>\ =</sup> NOT APPLICABLE

Methodology: SM = STANDARD METHODS, 16th EDITION, 1985

BPA = #BPA600/4-79-020, MARCH 1985

<sup>\* =</sup> SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

SW = BPA METHODOLOGY, "#SW846", THIRD EDITION, NOVEMBER 1986

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID: MW-18-F Project ID: EL DORADO CHEMICAL

SWLO ID:

24948.24

Report:

24948.24

Collected: 03/14/1996

Report Date: 03/27/1996

Page: Matrix: Water

03/15/1996 Last Modified: Received:

	DATE	DETECTION			DATE	METHOD			
TEST	BXTRACTED	LIMIT	UNITS	RESULTS	ANALYZED	REFERENCE			
*** METALS ***									
CHROMIUM		5.0	ug/l	ND	03/27/96	SW 6010	,		
LEAD		2.0	ug/l	ND	03/21/96	SW 7421			

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

<sup>=</sup> UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

A = NOT APPLICABLE

<sup>\* =</sup> SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID:

FIELD BLANK

Project ID: EL DORADO CHEMICAL

SWLO ID:

Report:

24948.15

Collected: 03/14/1996 Received:

24948.15

03/15/1996

Report Date: 03/27/1996

Page:

Last Modified:

Matrīx: Water

TEST	DATE EXTRACTED	DETECTION	UNITS	RESULTS	DATE ANALYZED	method Reference				
*** INORGANICS ***										
NITRATE SULFATE		0.2	mg/l mg/l	ND ND	03/15/96 03/15/96	SW 9056 SW 9056				
	*** METALS ***									
CHROMIUM LEAD		5.0 2.0	ug/l ug/l	ND ND	03/26/96 03/21/96	SW 6010 SW 7421				

methodology: SM = STANDARD METHODS, 16th EDITION, 1985 SW = EPA METHODOLOGY, "#SW846", THIRD EDITION, NOVEMBER 1986 BPA = #EPA600/4-79-020, MARCH 1985

D = NOT DETECTED ABOVE QUANTITATION LIMIT

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

<sup>=</sup> UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

A = NOT APPLICABLE

<sup>\* =</sup> SURROGATE RECOVERY OUTSIDE OF QC LIMITS D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID: FIELD BLANK-F

Project ID: EL DORADO CHEMICAL

SWLO ID:

24948.25

Report:

24948.25

Collected: 03/14/1996 Received: 03/15/1996

Report Date: 03/27/1996 Last Modified:

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1 Matrix: Water

TEST	DATE EXTRACTED	DETECTION LIMIT	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE			
*** METALS ***									
CHROMIUM		5.0	ug/l	ND	03/27/96	SW 6010			
LEAD		2.0	ug/l	ND	03/21/96	SW 7421			

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

A = NOT APPLICABLE

Methodology: SM = STANDARD METHODS, 16th EDITION, 1985 SW = EPA METHODOLOGY, "#SW846", THIRD EDITION, NOVEMBER 1986 EPA = #EPA600/4-79-020, MARCH 1985

\* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

<sup>=</sup> UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID: FIELD BLANK

Project ID: EL DORADO CHEMICAL

SWLO ID:

24931.16

Report:

24931.16

Collected: 03/13/1996

Report Date: 03/27/1996

1 Page: Matrix: Water

Received: 03/14/1996 Last Modified:

TEST	DATE EXTRACTED	DETECTION	UNITS	RESULTS	DATE ANALYZED	method Reference			
*** INORGANICS ***									
NITRATE SULFATE		0.2	mg/l mg/l	0.2 ND	03/14/96 03/14/96	SW 9056 SW 9056			
*** METALS ***									
CHROMIUM LEAD		5.0	ug/l ug/l	ND ND	03/19/96 03/21/96	SW 6010 SW 7421			

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

Methodology: SM = STANDARD METHODS, 16th EDITION, 1985 SW = EPA METHODOLOGY, "#SW846", THIRD EDITION, NOVEMBER 1986 BPA = #EPA600/4-79-020, MARCH 1985

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

<sup>=</sup> UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

A = NOT APPLICABLE

<sup>\* =</sup> SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID:

FIELD BLANK-F

Project ID:

EL DORADO CHEMICAL

SWLO ID:

24931.32

Report:

24931.32

Collected: 03/13/1996

Report Date: 03/27/1996

Page: 1

Received: 03/14/1996

Last Modified:

Matrix: Water

DETECTION METHOD DATE DATE REFERENCE BXTRACTED LIMIT UNITS RESULTS ANALYZED TEST \*\*\* MBTALS \*\*\* ND 03/19/96 SW 6010 5.0 ug/l CHROMIUM ND 03/21/96 SW 7421 LBAD 2.0 ug/l

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

Methodology: SM = STANDARD METHODS, 16th EDITION, 1985 EPA = #EPA600/4-79-020, MARCH 1985

\* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

R = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

<sup>=</sup> UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

<sup>..</sup>A = NOT APPLICABLE

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID: BLIND DUP Project ID: EL DORADO CHEMICAL

SWLO ID: 24931.15 Report: 24931.15

Collected: 03/13/1996 Report Date: 03/27/1996 Page: 1
Received: 03/14/1996 Last Modified: Matrix: Water

TEST	DATE EXTRACTED	DETECTION	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE			
*** INORGANICS ***									
NITRATE		2.0	mg/l	144	03/15/96	SW 9056			
SULFATE		0.2	mg/l	4.7	03/14/96	SW 9056			
*** MBTALS ***									
CHROMIUM		5.0	ug/l	ND	03/19/96	SW 6010			
LEAD		2.0	ug/l	4.0	03/21/96	SW 7421			

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

<sup>=</sup> UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

A = NOT APPLICABLE

Methodology: SM = STANDARD METHODS, 16th EDITION, 1985

EPA = #EPA600/4-79-020, MARCH 1985

<sup>\* =</sup> SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

SW = BPA METHODOLOGY, "#SW846", THIRD EDITION, NOVEMBER 1986

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID: BLIND DUP-F

Project ID: EL DORADO CHEMICAL

SWLO ID:

24931.31

Report:

24931.31

Collected: 03/13/1996 Received: 03/14/1996

Report Date: 03/27/1996 Last Modified:

Page:

1 Matrix: Water

TEST	DATE EXTRACTED	DETECTION	UNITS	RESULTS	DATE	method reference			
*** METALS ***									
CHROMIUM		5.0	ug/l	ND	03/19/96	SW 6010			
LEAD		2.0	ug/1	3.4	03/21/96	SW 7421			

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

Methodology: SM = STANDARD METHODS, 16th EDITION, 1985 BPA = #EPA600/4-79-020, MARCH 1985

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

<sup>=</sup> UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

A = NOT APPLICABLE

<sup>\* =</sup> SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID: MW-B

Project ID: EL DORADO CHEMICAL

SWLO ID:

25306.01

Report:

25306.01

Collected: 04/17/1996 Received: 04/18/1996

Report Date: 05/03/1996 Page: Last Modified: 05/02/1996 Matrix: Water

TEST	DATE EXTRACTED	DETECTION LIMIT	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE			
*** INORGANICS ***									
NITRATE		0.2	mg/l	1.4	04/18/96	SW 9056			
SULPATE		2.0	mg/l	125	04/26/96	SW 9056			
		*** MET	ALS ***						
CHROMIUM		5	ug/l	55.9	04/23/96	SW 6010			
LEAD		2.0	ug/l	33.7	04/30/96	SW 7421			

\_ID = NOT DETECTED ABOVE QUANTITATION LIMIT

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

<sup>=</sup> UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

A = NOT APPLICABLE

Methodology: SM = STANDARD METHODS, 16th EDITION, 1985 SW = EPA METHODOLOGY, "#SW846", THIRD EDITION, NOVEMBER 1986 EPA = #EPA600/4-79-020, MARCH 1985

<sup>\* =</sup> SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID: MW-B

Project ID: EL DORADO CHEMICAL

SWLO ID:

25306.02 MS

Report: 25306.02

Collected: 04/17/1996 Received: 04/18/1996 Report Date: 05/03/1996 Page: 1
Last Modified: 05/02/1996 Matrix: Water

TEST	DATE	DETECTION	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCS				
*** INORGANICS ***										
NITRATE SULPATE		0.2	mg/l mg/l	19.4 310	04/18/96 04/26/96	SW 9056 SW 9056				
	*** METALS ***									
CHROMIUM LEAD		4.0	ug/l ug/l	280 47.0	04/23/96 04/30/96	SW 6010 SW 7421				

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

= UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

A = NOT APPLICABLE

Methodology: SM = STANDARD METHODS, 16th EDITION, 1985

EPA = #EPA600/4-79-020, MARCH 1985

\* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID: MW-B

Project ID: EL DORADO CHEMICAL

SWLO ID:

25306.03 MSD

Report: 25306.03

Collected: 04/17/1996 Received: 04/18/1996 Report Date: 05/03/1996 Page: 1
Last Modified: 05/02/1996 Matrix: Water

TEST	DATE EXTRACTED	DETECTION LIMIT	UNITS	RESULTS	DATE	METHOD REFERENCE			
*** INORGANICS ***									
NITRATE SULFATE		0.2	mg/l mg/l	24.9 319	04/18/96 04/26/96	SW 9056 SW 9056			
		*** MET	ALS ***						
CHROMIUM LEAD		5 2.0	ug/l ug/l	266 45.5	04/23/96 04/30/96	SW 6010 SW 7421			

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

<sup>=</sup> UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

A = NOT APPLICABLE

<sup>\* =</sup> SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID: MW-B-F

Project ID: EL DORADO CHEMICAL

SWLO ID:

25306.10

Report: 2

25306.10

Collected: 04/17/1996 Received: 04/18/1996 Report Date: 05/03/1996 Last Modified: 05/02/1996

Page: 1 Matrix: Water

DATE DETECTION DATE METHOD LIMIT UNITS RESULTS ANALYZED EXTRACTED REFERENCE TEST \*\*\* METALS \*\*\* 5.4 04/23/96 CHROMIUM 5 ug/l SW 6010 ug/l 7.0 04/30/96 SW 7421 LEAD 2.0

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

= UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

A = NOT APPLICABLE

Methodology: SM = STANDARD METHODS, 16th EDITION, 1985

BPA = #BPA600/4-79-020, MARCH 1985

\* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID: MW-B-F

Project ID: EL DORADO CHEMICAL

SWLO ID:

25306.11 MS

Report: 25306.11

Collected: 04/17/1996 Received: 04/18/1996 Report Date: 05/03/1996 Page: 1
Last Modified: 05/02/1996 Matrix: Water

TEST	DATE EXTRACTED	DETECTION LIMIT	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE			
*** METALS ***									
CHROMIUM LEAD		5 2.0	ug/l ug/l	197 22.7	04/23/96 04/30/96	SW 6010 SW 7421			

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

= UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

IA = NOT APPLICABLE

Methodology: SM = STANDARD METHODS, 16th EDITION, 1985

BPA = #EPA600/4-79-020, MARCH 1985

\* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID: MW-B-F

Project ID: EL DORADO CHEMICAL

SWLO ID:

25306.12 MSD

Report: 25306.12

Collected: 04/17/1996 Report Date: 05/03/1996 Page: 1
Received: 04/18/1996 Last Modified: 05/02/1996 Matrix: Water

TEST	DATE EXTRACTED	DETECTIONLIMIT	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE			
*** METALS ***									
CHROMIUM		5	ug/l	194	04/23/96	SW 6010			
LEAD		2.0	ug/l	23.7	04/30/96	SW 7421			

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

= UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

A = NOT APPLICABLE

Methodology: SM = STANDARD METHODS, 16th EDITION, 1985

BPA = #BPA600/4-79-020, MARCH 1985

\* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID: MW-1

Project ID: EL DORADO CHEMICAL

SWLO ID:

25306.04

Report: 25306.04

Collected: 04/17/1996 Received: 04/18/1996 Report Date: 05/03/1996 Last Modified:

Page: 1 Matrix: Water

	DATE	DETECTION			DATE	METHOD
TEST	BXTRACTED	LIMIT	UNITS	RESULTS	ANALYZED	REFERENCE
		*** INORG	ANICS ***			
NITRATE		0.2	mg/1	4.8	04/18/96	SW 9056
SULFATE		2.0	mg/l	349	04/26/96	SW 9056
		*** MET.	ALS ***			
CHROMIUM		5	ug/l	82.4	04/23/96	SW 6010
LEAD		2.0	ug/l	32.8	04/25/96	SW 7421

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

I = UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

NA = NOT APPLICABLE

Methodology: SM = STANDARD METHODS, 16th EDITION, 1985

EPA = #EPA600/4-79-020, MARCH 1985

\* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID:

MW-1-F

Project ID: EL DORADO CHEMICAL

SWLO ID:

25306.13

Report:

25306.13

Collected: 04/17/1996 Received: 04/18/1996

Report Date: 05/03/1996 Last Modified:

Page: Matrix: Water

TEST	DATE EXTRACTED	DETECTION	UNITS	RESULTS	DATE ANALYZED	METHOD REFERBNCS				
*** METALS ***										
CHROMIUM		5	ug/l	ND	04/23/96	SW 6010				
LRAD		2.0	ug/l	ND	04/25/96	SW 7421				

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

= UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

A = NOT APPLICABLE

Methodology: SM = STANDARD METHODS, 16th EDITION, 1985

EPA = #EPA600/4-79-020, MARCH 1985

\* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID: MW-2

Project ID: EL DORADO CHEMICAL

SWLO ID:

25306.05

Report:

25306.05

Collected: 04/17/1996 Received: 04/18/1996 Report Date: 05/03/1996 Last Modified:

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Matrix: Water

TEST	DATE EXTRACTED	DETECTION LIMIT	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE			
*** INORGANICS ***									
NITRATE SULFATE		0.2 20.0	mg/l mg/l	ND 777	04/18/96 04/26/96	SW 9056 SW 9056			
		*** MET.	ALS ***						
CHROMIUM LEAD		5 2.0	ug/l ug/l	19.8 10.0	04/23/96 04/25/96	SW 6010 SW 7421			

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

: = UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

IA = NOT APPLICABLE

Methodology: SM = STANDARD METHODS, 16th EDITION, 1985

EPA = #EPA600/4-79-020, MARCH 1985

\* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID:

MW-2-F

Project ID: EL DORADO CHEMICAL

SWLO ID:

25306.14

Report:

25306.14

Collected: 04/17/1996 Received: 04/18/1996

Report Date: 05/03/1996 Last Modified:

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Matrix: Water

TEST	DATE EXTRACTED	DETECTION LIMIT	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE	
		*** ME	TALS ***				
CHROMIUM		5	ug/l	ND	04/23/96	SW 6010	
LEAD		2.0	ug/l	ND	04/25/96	SW 7421	

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

= UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

Methodology: SM = STANDARD METHODS, 16th EDITION, 1985

BPA = #BPA600/4-79-020, MARCH 1985

\* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = BSTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID: MW-3

Project ID: EL DORADO CHEMICAL

SWLO ID:

25306.06

Report: 25306.06

Collected: 04/17/1996 Received: 04/18/1996 Report Date: 05/03/1996
Last Modified:

Page: 1 Matrix: Water

TĒST	DATE EXTRACTED	DETECTION	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE			
*** INORGANICS ***									
NITRATE		0.2	mg/l	ND	04/18/96	SW 9056			
SULFATE		2.0	mg/l	211	04/26/96	SW 9056			
*** METALS ***									
CHRONIUM		S	ug/l	ND	04/23/96	SW 6010			
LEAD		2.0	ug/l	2.8	04/25/96	SW 7421			

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

A = NOT APPLICABLE

Methodology: SM = STANDARD METHODS, 16th EDITION, 1985

EPA = #EPA600/4-79-020, MARCH 1985

\* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

<sup>=</sup> UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID:

MW-3-F

Project ID: EL DORADO CHEMICAL

SWLO ID:

25306.15

Report:

25306.15

Collected: 04/17/1996 Received: 04/18/1996

Report Date: 05/03/1996 Last Modified:

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Matrix: Water

TEST	DATE EXTRACTED	DETECTION LIMIT	UNITS	RESULTS	DATE ANALYZED	method Reference			
*** METALS ***									
CHROMIUM		5	ug/l	ND	04/23/96	SW 6010			
LEAD		2.0	ug/l	ND	04/25/96	SW 7421			

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

= UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

IA = NOT APPLICABLE

Methodology: SM = STANDARD METHODS, 16th EDITION, 1985

EPA = #EPA600/4-79-020, MARCH 1985

\* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID: FIELD BLANK

Project ID: EL DORADO CHEMICAL

SWLO ID:

25306.07

Report:

25306.07

Collected: 04/17/1996

Report Date: 05/03/1996

Page: Matrix: Water

Received: 04/18/1996 Last Modified:

TEST	date extracted	DETECTION	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE				
*** INORGANICS ***										
NITRATE SULFATE		0.2	mg/l mg/l	0.3	04/18/96 04/18/96	SW 9056 SW 9056				
John			ALS ***		,,					
						av				
CHROMIUM LEAD		5 2.0	ug/l ug/l	ND ND	04/23/96 04/25/96	SW 6010 SW 7421				

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

Methodology: SM = STANDARD METHODS, 16th EDITION, 1985 BPA = #EPA600/4-79-020, MARCH 1985

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

<sup>=</sup> UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

A = NOT APPLICABLE

<sup>\* =</sup> SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID:

FIELD BLANK-F

Project ID: EL DORADO CHEMICAL

SWLO ID:

25306.16

Report:

25306.16

Collected: 04/17/1996 Received: 04/18/1996

Report Date: 05/03/1996 Last Modified:

Page:

Matrix: Water

TEST	DATE EXTRACTED	DETECTION LIMIT	UNIŢS	RESULTS	DATE ANALYZED	method reference			
*** METALS ***									
CHROMIUM		5	ug/l	ND	04/23/96	SW 6010			
LEAD		2.0	ug/l	ND	04/25/96	SW 7421			

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

: = UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

LA = NOT APPLICABLE

Methodology: SM = STANDARD METHODS, 16th EDITION, 1985

BPA = #BPA600/4-79-020, MARCH 1985

\* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Last Modified:

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID:

BLIND DUP

Project ID: EL DORADO CHEMICAL

SWLO ID:

25306.08

Report:

25306.08

Collected: 04/17/1996 Received: 04/18/1996 Report Date: 05/03/1996

Page:

Matrix: Water

TEST	date extracted	DETECTION LIMIT	UNITS	RESULTS	DATE ANALYZED	method Reference			
*** INORGANICS ***									
NITRATE		0.2	mg/l	ND	04/18/96	SW 9056			
SULFATE		2.0	mg/l	345	04/26/96	SW 9056			
*** METALS ***									
CHROMIUM		5	ug/l	102	04/23/96	SW 6010			
LEAD		2.0	ug/l	34.8	04/25/96	SW 7421			

<sup>&</sup>quot;D = NOT DETECTED ABOVE QUANTITATION LIMIT

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

<sup>=</sup> UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

A = NOT APPLICABLE

Methodology: SM = STANDARD METHODS, 16th EDITION, 1985

EPA = #EPA600/4-79-020, MARCH 1985

<sup>\* =</sup> SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

SW = EPA METHODOLOGY, "#SW846", THIRD EDITION, NOVEMBER 1986

1700 W. ALBANY SUITE C BROKEN ARROW, OK 74012-1421 (918) 251-2858

Client Name: WOODWARD CLYDE CONSULTANTS-LITTLE ROCK

900 SOUTH SHACKLEFORD

SUITE 412

LITTLE ROCK, AR 72211

Client ID:

BLIND DUP-F

Project ID: EL DORADO CHEMICAL

SWLO ID:

25306.17

Report:

25306.17

Collected: 04/17/1996 Received: 04/18/1996

Report Date: 05/03/1996 Last Modified:

1 Page: Matrix: Water

TEST	DATE EXTRACTED	DBTECTION	UNITS	RESULTS	date analyzed	METHOD REFERENCE	
		*** ME	TALS ***				
CHROMIUM		5	ug/l	ND	04/23/96	SW 6010	
LEAD		2.0	ug/l	ND	04/25/96	SW 7421	

ID = NOT DETECTED ABOVE QUANTITATION LIMIT

B = ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE

T = UNABLE TO QUANTITATE DUE TO MATRIX INTERFERENCE

IA = NOT APPLICABLE

Methodology: SM = STANDARD METHODS, 16th EDITION, 1985

EPA = #EPA600/4-79-020, MARCH 1985

<sup>\* =</sup> SURROGATE RECOVERY OUTSIDE OF QC LIMITS

D = SURROGATES DILUTED OUT

J = ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION

SW = EPA METHODOLOGY, "#SW846", THIRD EDITION, NOVEMBER 1986