

Appendix B. General Constituents, Nutrients, and Pathogens



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2218 Railroad Avenue
Redding, California 96001

December 09, 2003

Lab ID: 3110618

DAVID L BROWN
DEPT OF GEOLOGICAL & ENVIRO SCIENCES
CALIFORNIA STATE UNIVERSITY
CHICO, CA 95929-0205
RE: CHEROKEE WQP 59049

Dear DAVID L BROWN,

Enclosed are the analysis results for Work Order number 3110618. All analysis were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

For

James E. Hawley
Laboratory Director

California ELAP Certification Number 1677



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voice 530.243.7234 2218 Railroad Avenue
fax 530.243.7494 Redding, California 96001

Report To: DEPT OF GEOLOGICAL & ENVIRO SCIENCES
CALIFORNIA STATE UNIVERSITY
CHICO, CA 95929-0205
Attention: DAVID L BROWN
Project: CHEROKEE WQP 59049

Lab No: 3110618
Reported: 12/09/03
Phone: 898-4035
P.O. #

General Chemistry

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
CHEROKEE CWCC-N Water (3110618-02) Sampled:11/16/03 12:30 Received:11/17/03 16:20									
Nitrate+Nitrite as N	mg/l	0.05	J	0.05	0.16	EPA 353.2	11/24/03	11/24/03	B3K0345
CHEROKEE CWCC-O Water (3110618-03) Sampled:11/16/03 12:30 Received:11/17/03 16:20									
Orthophosphate as P	mg/l	0.04		0.01	0.03	SM 4500P-E	11/18/03	11/18/03	B3K0308
CHEROKEE CWGRC-N Water (3110618-04) Sampled:11/16/03 13:35 Received:11/17/03 16:20									
Nitrate+Nitrite as N	mg/l	ND		0.05	0.16	EPA 353.2	11/24/03	11/24/03	B3K0345
CHEROKEE CWGRC-O Water (3110618-05) Sampled:11/16/03 13:35 Received:11/17/03 16:20									
Orthophosphate as P	mg/l	0.02	J	0.01	0.03	SM 4500P-E	11/18/03	11/18/03	B3K0308
CHEROKEE CWDC-N Water (3110618-06) Sampled:11/16/03 14:10 Received:11/17/03 16:20									
Nitrate+Nitrite as N	mg/l	0.06	J	0.05	0.16	EPA 353.2	11/24/03	11/24/03	B3K0345
CHEROKEE CWDC-O Water (3110618-07) Sampled:11/16/03 14:10 Received:11/17/03 16:20									
Orthophosphate as P	mg/l	ND		0.01	0.03	SM 4500P-E	11/18/03	11/18/03	B3K0308
CHEROKEE CWCLR-N Water (3110618-08) Sampled:11/16/03 14:40 Received:11/17/03 16:20									
Nitrate+Nitrite as N	mg/l	0.22		0.05	0.16	EPA 353.2	11/24/03	11/24/03	B3K0345
CHEROKEE CWCLR-O Water (3110618-09) Sampled:11/16/03 14:40 Received:11/17/03 16:20									
Orthophosphate as P	mg/l	ND		0.01	0.03	SM 4500P-E	11/18/03	11/18/03	B3K0308


Approved By

Basic Laboratory, Inc.
California D.O.H.S. Cert #1677



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Report To: DEPT OF GEOLOGICAL & ENVIRO SCIENCES
CALIFORNIA STATE UNIVERSITY
CHICO, CA 95929-0205
Attention: DAVID L BROWN
Project: CHEROKEE WQP 59049


Lab No: 3110618
Reported: 12/09/03
Phone: 898-4035
P.O. #

Microbiology

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
CHEROKEE CWCC-FC Water (3110618-01)		Sampled:11/16/03 12:30		Received:11/17/03 16:20					
Fecal Coliforms	MPN/100 ml	300			2	SM 9221B/E	11/21/03	11/17/03	B3L0045

Notes and Definitions

- J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the detection limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- < Less than reporting limit
- ≤ Less than or equal to reporting limit
- > Greater than reporting limit
- ≥ Greater than or equal to reporting limit
- MDL Method Detection Limit
- RL/ML Minimum Level of Quantitation
- MCL/AL Maximum Contaminant Level/Action Level
- mg/kg Results reported as wet weight
- TTLIC Total Threshold Limit Concentration
- STLC Soluble Threshold Limit Concentration
- TCLP Toxicity Characteristic Leachate Procedure


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January 05, 2004

Lab ID: 3120727

DAVE BROWN
CSUC RESEARCH FOUNDATION
CSU CHICO; GEO SCIENCES DEPT.
CHICO, CA 95929-0205
RE: CHEROKEE WQ 66755

Dear DAVE BROWN,

Enclosed are the analysis results for Work Order number 3120727. All analysis were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

Ricky Jensen

For

James E. Hawley

James E. Hawley
Laboratory Director

California ELAP Certification Number 1677



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Report To: CSUC RESEARCH FOUNDATION
CSU CHICO; GEO SCIENCES DEPT.
CHICO, CA 95929-0205

Lab No: 3120727
Reported: 01/05/04
Phone: 898-4035
P.O. #

Attention: DAVE BROWN
Project: CHEROKEE WQ 66755

General Chemistry

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
CWFB1 Surface Water (3120727-01) Sampled:12/08/03 05:30 Received:12/19/03 17:25									
Hardness	mg/l	ND		1	3	SM 2340C	12/31/03	12/31/03	B3L0592
Alkalinity as CaCO3	"	ND	I-02	2	5	SM 2320B	12/30/03	12/30/03	B3L0524
Bicarbonate	"	ND	I-02	2	5	"	"	"	"
Carbonate	"	ND	I-02	2	5	"	"	"	"
Total Dissolved Solids	"	ND	I-03	2	6	SM 2540C	12/24/03	12/24/03	B3L0614
Total Suspended Solids	"	2	I-03, J, QR-04	2	6	SM 2540D	12/23/03	12/23/03	B3L0525
CWDC DRY CREEK Surface Water (3120727-02) Sampled:12/08/03 07:10 Received:12/19/03 17:25									
Hardness	mg/l	49		1	3	SM 2340C	12/31/03	12/31/03	B3L0592
Alkalinity as CaCO3	"	55	I-02	2	5	SM 2320B	12/30/03	12/30/03	B3L0524
Bicarbonate	"	67	I-02	2	5	"	"	"	"
Carbonate	"	ND	I-02	2	5	"	"	"	"
Total Dissolved Solids	"	105	I-03	2	6	SM 2540C	12/24/03	12/24/03	B3L0614
Total Suspended Solids	"	5	I-03, J, QR-04	2	6	SM 2540D	12/23/03	12/23/03	B3L0525
CWCLR CLEAR CREEK Surface Water (3120727-03) Sampled:12/08/03 07:53 Received:12/19/03 17:25									
Hardness	mg/l	57		1	3	SM 2340C	12/31/03	12/31/03	B3L0592
Alkalinity as CaCO3	"	62	I-02	2	5	SM 2320B	12/30/03	12/30/03	B3L0524
Bicarbonate	"	76	I-02	2	5	"	"	"	"
Carbonate	"	ND	I-02	2	5	"	"	"	"
Total Dissolved Solids	"	139	I-03	2	6	SM 2540C	12/24/03	12/24/03	B3L0614
Total Suspended Solids	"	4	I-03, J, QR-04	2	6	SM 2540D	12/23/03	12/23/03	B3L0525
CWGRC GOLD RUN CREEK Surface Water (3120727-04) Sampled:12/08/03 08:53 Received:12/19/03 17:25									
Hardness	mg/l	35		1	3	SM 2340C	12/31/03	12/31/03	B3L0592
Alkalinity as CaCO3	"	45	I-02	2	5	SM 2320B	12/30/03	12/30/03	B3L0524
Bicarbonate	"	55	I-02	2	5	"	"	"	"
Carbonate	"	ND	I-02	2	5	"	"	"	"
Total Dissolved Solids	"	83	I-03	2	6	SM 2540C	12/24/03	12/24/03	B3L0614
Total Suspended Solids	"	4	I-03, J, QR-04	2	6	SM 2540D	12/23/03	12/23/03	B3L0525
CWCWC COTTONWOOD CREEK Surface Water (3120727-05) Sampled:12/08/03 09:35 Received:12/19/03 17:25									
Hardness	mg/l	31		1	3	SM 2340C	12/31/03	12/31/03	B3L0592
Alkalinity as CaCO3	"	37	I-02	2	5	SM 2320B	12/30/03	12/30/03	B3L0524
Bicarbonate	"	45	I-02	2	5	"	"	"	"
Carbonate	"	ND	I-02	2	5	"	"	"	"
Total Dissolved Solids	"	74	I-03	2	6	SM 2540C	12/24/03	12/24/03	B3L0614
Total Suspended Solids	"	3	I-03, J, QR-04	2	6	SM 2540D	12/23/03	12/23/03	B3L0525
CWCC CHEROKEE CANAL Surface Water (3120727-06) Sampled:12/08/03 10:30 Received:12/19/03 17:25									
Hardness	mg/l	59		1	3	SM 2340C	12/31/03	12/31/03	B3L0592
Alkalinity as CaCO3	"	69	I-02	2	5	SM 2320B	12/30/03	12/30/03	B3L0524
Bicarbonate	"	84	I-02	2	5	"	"	"	"
Carbonate	"	ND	I-02	2	5	"	"	"	"
Total Dissolved Solids	"	125	I-03	2	6	SM 2540C	12/24/03	12/24/03	B3L0614
Total Suspended Solids	"	10	I-03, QR-04	2	6	SM 2540D	12/23/03	12/23/03	B3L0525

Ricky Jensen
Approved By

Basic Laboratory, Inc.
California D.O.H.S. Cert #1677



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Report To: CSUC RESEARCH FOUNDATION
CSU CHICO; GEO SCIENCES DEPT.
CHICO, CA 95929-0205

Attention: DAVE BROWN

Project: CHEROKEE WQ 66755

Lab No: 3120727
Reported: 01/05/04
Phone: 898-4035
P.O. #

Notes and Definitions

I-02 Sample was analyzed outside of the EPA recommended holding time.
I-03 Sample was received past the EPA recommended holding time.
J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
QR-04 Duplicate results are within one reporting limit and pass all necessary QC criteria.
DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the detection limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference
< Less than reporting limit
≤ Less than or equal to reporting limit
> Greater than reporting limit
≥ Greater than or equal to reporting limit
MDL Method Detection Limit
RL/ML Minimum Level of Quantitation
MCL/AL Maximum Contaminant Level/Action Level
mg/kg Results reported as wet weight
TTLC Total Threshold Limit Concentration
STLC Soluble Threshold Limit Concentration
TCLP Toxicity Characteristic Leachate Procedure


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February 03, 2004

Lab ID: 4010614

DAVE BROWN
CSUC RESEARCH FOUNDATION
CSU CHICO; GEO SCIENCES DEPT.
CHICO, CA 95929-0205
RE: CHEROKEE WQ 56755

Dear DAVE BROWN,

Enclosed are the analysis results for Work Order number 4010614. All analysis were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

Ricky Jensen
For

James E. Hawley
James E. Hawley
Laboratory Director

California ELAP Certification Number 1677



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 fax 530.243.7494 Redding, California 96001

Report To: CSUC RESEARCH FOUNDATION
 CSU CHICO; GEO SCIENCES DEPT.
 CHICO, CA 95929-0205
Attention: DAVE BROWN
Project: CHEROKEE WQ 56755

Lab No: 4010614
Reported: 02/03/04
Phone: 898-4035
P.O. #

General Chemistry

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
CWCC Water (4010614-01) Sampled:01/12/04 08:45 Received:01/21/04 14:38									
Hardness	mg/l	45		1	3	SM 2340C	02/02/04	02/02/04	B4B0019
Alkalinity as CaCO3	"	48		2	5	SM 2320B	01/23/04	01/23/04	B4A0409
Bicarbonate	"	59		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	100	I-03	2	6	SM 2540C	01/27/04	01/27/04	B4A0476
Total Suspended Solids	"	16	I-03	2	6	SM 2540D	01/26/04	01/26/04	B4A0493
CWGRC Water (4010614-02) Sampled:01/12/04 09:50 Received:01/21/04 14:38									
Hardness	mg/l	33		1	3	SM 2340C	02/02/04	02/02/04	B4B0019
Alkalinity as CaCO3	"	34		2	5	SM 2320B	01/23/04	01/23/04	B4A0409
Bicarbonate	"	41		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	82	I-03	2	6	SM 2540C	01/27/04	01/27/04	B4A0476
Total Suspended Solids	"	3	I-03, J	2	6	SM 2540D	01/26/04	01/26/04	B4A0493
CWCWC Water (4010614-03) Sampled:01/12/04 10:35 Received:01/21/04 14:38									
Hardness	mg/l	33		1	3	SM 2340C	02/02/04	02/02/04	B4B0019
Alkalinity as CaCO3	"	37		2	5	SM 2320B	01/23/04	01/23/04	B4A0409
Bicarbonate	"	45		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	77	I-03	2	6	SM 2540C	01/27/04	01/27/04	B4A0476
Total Suspended Solids	"	2	I-03, J	2	6	SM 2540D	01/26/04	01/26/04	B4A0493
CWDC Water (4010614-04) Sampled:01/12/04 11:20 Received:01/21/04 14:38									
Hardness	mg/l	47		1	3	SM 2340C	02/02/04	02/02/04	B4B0019
Alkalinity as CaCO3	"	46		2	5	SM 2320B	01/23/04	01/23/04	B4A0409
Bicarbonate	"	56		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	98	I-03	2	6	SM 2540C	01/27/04	01/27/04	B4A0476
Total Suspended Solids	"	6	I-03	2	6	SM 2540D	01/26/04	01/26/04	B4A0493
CWCLR Water (4010614-05) Sampled:01/12/04 11:55 Received:01/21/04 14:38									
Hardness	mg/l	57		1	3	SM 2340C	02/02/04	02/02/04	B4B0019
Alkalinity as CaCO3	"	65		2	5	SM 2320B	01/23/04	01/23/04	B4A0409
Bicarbonate	"	79		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	107	I-03	2	6	SM 2540C	01/27/04	01/27/04	B4A0476
Total Suspended Solids	"	ND	I-03	2	6	SM 2540D	01/26/04	01/26/04	B4A0493

Ricky Jensen

Approved By

Basic Laboratory, Inc.

California D.O.H.S. Cert #1677



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Report To: CSUC RESEARCH FOUNDATION
CSU CHICO; GEO SCIENCES DEPT.
CHICO, CA 95929-0205
Attention: DAVE BROWN
Project: CHEROKEE WQ 56755

Lab No: 4010614
Reported: 02/03/04
Phone: 898-4035
P.O. #

Notes and Definitions

I-03 Sample was received past the EPA recommended holding time.
J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the detection limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference
< Less than reporting limit
≤ Less than or equal to reporting limit
> Greater than reporting limit
≥ Greater than or equal to reporting limit
MDL Method Detection Limit
RL/ML Minimum Level of Quantitation
MCL/AL Maximum Contaminant Level/Action Level
mg/kg Results reported as wet weight
TTLC Total Threshold Limit Concentration
STLC Soluble Threshold Limit Concentration
TCLP Toxicity Characteristic Leachate Procedure

Ricky Jensen

Approved By

Basic Laboratory, Inc.

California D.O.H.S. Cert #1677



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voice 530.243.7234 2218 Railroad Avenue
fax 530.243.7494 Redding, California 96001

February 18, 2004

Lab ID: 4020158

DAVE BROWN
CSUC RESEARCH FOUNDATION
C/O: GEOS DEPT. - 101 ORANGE STREET
CHICO, CA 95929-0205
RE: CHEROKEE WQ 66755

Dear DAVE BROWN,

Enclosed are the analysis results for Work Order number 4020158. All analysis were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

For

James E. Hawley
Laboratory Director

California ELAP Certification Number 1677



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 fax 530.243.7494 Redding, California 96001

Report To: CSUC RESEARCH FOUNDATION
 C/O: GEOS DEPT. - 101 ORANGE STREET
 CHICO, CA 95929-0205
Attention: DAVE BROWN
Project: CHEROKEE WQ 66755

Lab No: 4020158
Reported: 02/18/04
Phone: 898-4035
P.O. #

General Chemistry

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
CWCC Surface Water (4020158-02) Sampled:02/03/04 07:55 Received:02/04/04 14:30									
Hardness	mg/l	30		1	3	SM 2340C	02/13/04	02/13/04	B4B0267
Alkalinity as CaCO3	"	34		2	5	SM 2320B	02/13/04	02/13/04	B4B0249
Bicarbonate	"	41		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	90		2	6	SM 2540C	02/09/04	02/09/04	B4B0150
Total Suspended Solids	"	55		2	6	SM 2540D	02/10/04	02/10/04	B4B0186
CWCC-N Surface Water (4020158-03) Sampled:02/03/04 07:55 Received:02/04/04 14:30									
Nitrate+Nitrite as N	mg/l	0.20		0.05	0.16	EPA 353.2	02/05/04	02/05/04	B4B0093
CWCC-O Surface Water (4020158-04) Sampled:02/03/04 07:55 Received:02/04/04 14:30									
Orthophosphate as P	mg/l	0.01	J	0.01	0.03	SM 4500P-E	02/05/04	02/05/04	B4B0076
CWCWC Surface Water (4020158-05) Sampled:02/03/04 09:00 Received:02/04/04 14:30									
Hardness	mg/l	22		1	3	SM 2340C	02/13/04	02/13/04	B4B0267
Alkalinity as CaCO3	"	27		2	5	SM 2320B	02/13/04	02/13/04	B4B0249
Bicarbonate	"	32		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	57		2	6	SM 2540C	02/09/04	02/09/04	B4B0150
Total Suspended Solids	"	12		2	6	SM 2540D	02/10/04	02/10/04	B4B0186
CWCWC-N Surface Water (4020158-06) Sampled:02/03/04 09:00 Received:02/04/04 14:30									
Nitrate+Nitrite as N	mg/l	0.20		0.05	0.16	EPA 353.2	02/05/04	02/05/04	B4B0093
CWCWC-O Surface Water (4020158-07) Sampled:02/03/04 09:00 Received:02/04/04 14:30									
Orthophosphate as P	mg/l	0.03		0.01	0.03	SM 4500P-E	02/05/04	02/05/04	B4B0076
CWGRC Surface Water (4020158-08) Sampled:02/03/04 09:35 Received:02/04/04 14:30									
Hardness	mg/l	23		1	3	SM 2340C	02/13/04	02/13/04	B4B0267
Alkalinity as CaCO3	"	29		2	5	SM 2320B	02/13/04	02/13/04	B4B0249
Bicarbonate	"	35		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	70		2	6	SM 2540C	02/09/04	02/09/04	B4B0150
Total Suspended Solids	"	22		2	6	SM 2540D	02/10/04	02/10/04	B4B0186
CWGRC-N Surface Water (4020158-09) Sampled:02/03/04 09:35 Received:02/04/04 14:30									
Nitrate+Nitrite as N	mg/l	0.24		0.05	0.16	EPA 353.2	02/05/04	02/05/04	B4B0093
CWGRC-O Surface Water (4020158-10) Sampled:02/03/04 09:35 Received:02/04/04 14:30									
Orthophosphate as P	mg/l	0.05		0.01	0.03	SM 4500P-E	02/05/04	02/05/04	B4B0076
CWDC Surface Water (4020158-11) Sampled:02/03/04 10:15 Received:02/04/04 14:30									
Hardness	mg/l	41		1	3	SM 2340C	02/13/04	02/13/04	B4B0267
Alkalinity as CaCO3	"	41		2	5	SM 2320B	02/13/04	02/13/04	B4B0249
Bicarbonate	"	50		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	93		2	6	SM 2540C	02/09/04	02/09/04	B4B0150
Total Suspended Solids	"	13		2	6	SM 2540D	02/10/04	02/10/04	B4B0186
CWDC-N Surface Water (4020158-12) Sampled:02/03/04 10:15 Received:02/04/04 14:30									
Nitrate+Nitrite as N	mg/l	0.28		0.05	0.16	EPA 353.2	02/05/04	02/05/04	B4B0093
CWDC-O Surface Water (4020158-13) Sampled:02/03/04 10:15 Received:02/04/04 14:30									
Orthophosphate as P	mg/l	ND		0.01	0.03	SM 4500P-E	02/05/04	02/05/04	B4B0076
CWCLR Surface Water (4020158-14) Sampled:02/03/04 10:55 Received:02/04/04 14:30									
Hardness	mg/l	44		1	3	SM 2340C	02/13/04	02/13/04	B4B0267
Alkalinity as CaCO3	"	51		2	5	SM 2320B	02/13/04	02/13/04	B4B0249
Bicarbonate	"	62		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"

[Signature]
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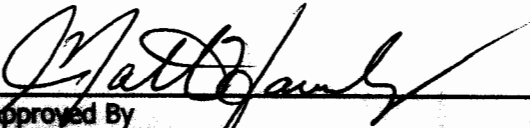
voice 530.243.7234 2218 Railroad Avenue
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Report To: CSUC RESEARCH FOUNDATION
C/O: GEOS DEPT. - 101 ORANGE STREET
CHICO, CA 95929-0205
Attention: DAVE BROWN
Project: CHEROKEE WQ 66755

Lab No: 4020158
Reported: 02/18/04
Phone: 898-4035
P.O. #

General Chemistry

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
CWCLR Surface Water (4020158-14) Sampled:02/03/04 10:55 Received:02/04/04 14:30									
Total Dissolved Solids	"	106		2	6	SM 2540C	02/09/04	02/09/04	B4B0150
Total Suspended Solids	"	21		2	6	SM 2540D	02/10/04	02/10/04	B4B0186
CWCLR-N Surface Water (4020158-15) Sampled:02/03/04 10:55 Received:02/04/04 14:30									
Nitrate+Nitrite as N	mg/l	0.38		0.05	0.16	EPA 353.2	02/05/04	02/05/04	B4B0093
CWCLR-O Surface Water (4020158-16) Sampled:02/03/04 10:55 Received:02/04/04 14:30									
Orthophosphate as P	mg/l	ND		0.01	0.03	SM 4500P-E	02/05/04	02/05/04	B4B0076


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Report To: CSUC RESEARCH FOUNDATION
C/O: GEOS DEPT. - 101 ORANGE STREET
CHICO, CA 95929-0205
Attention: DAVE BROWN
Project: CHEROKEE WQ 66755

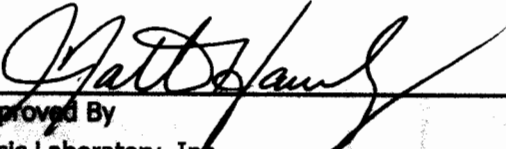
Lab No: 4020158
Reported: 02/18/04
Phone: 898-4035
P.O. #

Microbiology

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
CWCC-C Surface Water (4020158-01) Sampled:02/03/04 07:55 Received:02/04/04 14:30									
Fecal Coliforms	MPN/100 ml	>=1600	I-03		2	SM 9221E	02/06/04	02/04/04	B4B0149

Notes and Definitions

- A-01 >=1600
- I-03 Sample was received past the EPA recommended holding time.
- J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the detection limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- < Less than reporting limit
- ≤ Less than or equal to reporting limit
- > Greater than reporting limit
- ≥ Greater than or equal to reporting limit
- MDL Method Detection Limit
- RL/ML Minimum Level of Quantitation
- MCL/AL Maximum Contaminant Level/Action Level
- mg/kg Results reported as wet weight
- TTLIC Total Threshold Limit Concentration
- STLC Soluble Threshold Limit Concentration
- TCLP Toxicity Characteristic Leachate Procedure


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February 24, 2004

Lab ID: 4020374

DAVE BROWN
CSUC RESEARCH FOUNDATION
C/O: GEOS DEPT. - 101 ORANGE STREET
CHICO, CA 95929-0205
RE: CHEROKEE WQ 66755 FRESH WATER CREEK

Dear DAVE BROWN,

Enclosed are the analysis results for Work Order number 4020374. All analysis were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

For

James E. Hawley
Laboratory Director

California ELAP Certification Number 1677



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Report To: CSUC RESEARCH FOUNDATION
 C/O: GEOS DEPT. - 101 ORANGE STREET
 CHICO, CA 95929-0205
Attention: DAVE BROWN
Project: CHEROKEE WQ 66755 FRESH WATER CREEK

Lab No: 4020374
Reported: 02/24/04
Phone: 898-4035
P.O. #

General Chemistry

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
CWCC Water (4020374-01) Sampled:02/09/04 09:25 Received:02/10/04 14:56									
Hardness	mg/l	46		1	3	SM 2340C	02/17/04	02/17/04	B4B0328
Alkalinity as CaCO3	"	50		2	5	SM 2320B	02/23/04	02/23/04	B4B0429
Bicarbonate	"	61		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	89		2	6	SM 2540C	02/16/04	02/16/04	B4B0346
Total Suspended Solids	"	22		2	6	SM 2540D	02/16/04	02/16/04	B4B0344
CWCWC Water (4020374-02) Sampled:02/09/04 10:25 Received:02/10/04 14:56									
Hardness	mg/l	35		1	3	SM 2340C	02/17/04	02/17/04	B4B0328
Alkalinity as CaCO3	"	38		2	5	SM 2320B	02/23/04	02/23/04	B4B0429
Bicarbonate	"	46		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	72		2	6	SM 2540C	02/16/04	02/16/04	B4B0346
Total Suspended Solids	"	4		2	6	SM 2540D	02/16/04	02/16/04	B4B0344
CW2 Water (4020374-03) Sampled:02/09/04 10:45 Received:02/10/04 14:56									
Hardness	mg/l	41		1	3	SM 2340C	02/17/04	02/17/04	B4B0328
Alkalinity as CaCO3	"	39		2	5	SM 2320B	02/23/04	02/23/04	B4B0429
Bicarbonate	"	47		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	58		2	6	SM 2540C	02/16/04	02/16/04	B4B0346
Total Suspended Solids	"	5		2	6	SM 2540D	02/16/04	02/16/04	B4B0344
CWGRC Water (4020374-04) Sampled:02/09/04 11:10 Received:02/10/04 14:56									
Hardness	mg/l	28		1	3	SM 2340C	02/17/04	02/17/04	B4B0328
Alkalinity as CaCO3	"	32		2	5	SM 2320B	02/23/04	02/23/04	B4B0429
Bicarbonate	"	39		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	57		2	6	SM 2540C	02/16/04	02/16/04	B4B0346
Total Suspended Solids	"	4		2	6	SM 2540D	02/16/04	02/16/04	B4B0344
CWDC Water (4020374-05) Sampled:02/09/04 12:00 Received:02/10/04 14:56									
Hardness	mg/l	54		1	3	SM 2340C	02/17/04	02/17/04	B4B0328
Alkalinity as CaCO3	"	49		2	5	SM 2320B	02/23/04	02/23/04	B4B0429
Bicarbonate	"	60		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	92		2	6	SM 2540C	02/16/04	02/16/04	B4B0346
Total Suspended Solids	"	7		2	6	SM 2540D	02/16/04	02/16/04	B4B0344
CWCLR Water (4020374-06) Sampled:02/09/04 12:30 Received:02/10/04 14:56									
Hardness	mg/l	60		1	3	SM 2340C	02/17/04	02/17/04	B4B0328
Alkalinity as CaCO3	"	65		2	5	SM 2320B	02/23/04	02/23/04	B4B0429
Bicarbonate	"	79		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	105		2	6	SM 2540C	02/16/04	02/16/04	B4B0346
Total Suspended Solids	"	3		2	6	SM 2540D	02/16/04	02/16/04	B4B0344

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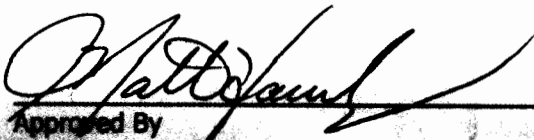
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fax 530.243.7494 Redding, California 96001

Report To: CSUC RESEARCH FOUNDATION
C/O: GEOS DEPT. - 101 ORANGE STREET
CHICO, CA 95929-0205
Attention: DAVE BROWN
Project: CHEROKEE WQ 66755 FRESH WATER CREEK

Lab No: 4020374
Reported: 02/24/04
Phone: 898-4035
P.O. #

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the detection limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
<	Less than reporting limit
≤	Less than or equal to reporting limit
>	Greater than reporting limit
≥	Greater than or equal to reporting limit
MDL	Method Detection Limit
RL/ML	Minimum Level of Quantitation
MCL/AL	Maximum Contaminant Level/Action Level
mg/kg	Results reported as wet weight
TTLC	Total Threshold Limit Concentration
STLC	Soluble Threshold Limit Concentration
TCLP	Toxicity Characteristic Leachate Procedure



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March 16, 2004

Lab ID: 4030062

DAVE BROWN
CSUC RESEARCH FOUNDATION
C/O: GEOS DEPT. - 101 ORANGE STREET
CHICO, CA 95929-0205
RE: CHEROKEE WQ 66755

Dear DAVE BROWN,

Enclosed are the analysis results for Work Order number 4030062. All analysis were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

Ricky Jensen
For

James E. Hawley
James E. Hawley
Laboratory Director

California ELAP Certification Number 1677



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Report To: CSUC RESEARCH FOUNDATION
 C/O: GEOS DEPT. - 101 ORANGE STREET
 CHICO, CA 95929-0205
Attention: DAVE BROWN
Project: CHEROKEE WQ 66755

Lab No: 4030062
Reported: 03/16/04
Phone: 898-4035
P.O. #

General Chemistry

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
CWCC Surface Water (4030062-01) Sampled:02/27/04 08:30 Received:03/01/04 15:56									
Hardness	mg/l	35		1	3	SM 2340C	03/10/04	03/10/04	B4C0214
Alkalinity as CaCO3	"	38		2	5	SM 2320B	03/08/04	03/08/04	B4C0162
Bicarbonate	"	46		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	86		2	6	SM 2540C	03/02/04	03/02/04	B4C0054
Total Suspended Solids	"	69		2	6	SM 2540D	03/03/04	03/03/04	B4C0158
CWC2 Surface Water (4030062-02) Sampled:02/27/04 08:30 Received:03/01/04 15:56									
Hardness	mg/l	34		1	3	SM 2340C	03/10/04	03/10/04	B4C0214
Alkalinity as CaCO3	"	38		2	5	SM 2320B	03/08/04	03/08/04	B4C0162
Bicarbonate	"	46		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	99		2	6	SM 2540C	03/02/04	03/02/04	B4C0054
Total Suspended Solids	"	67		2	6	SM 2540D	03/03/04	03/03/04	B4C0158

Notes and Definitions

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the detection limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- < Less than reporting limit
- ≤ Less than or equal to reporting limit
- > Greater than reporting limit
- ≥ Greater than or equal to reporting limit
- MDL Method Detection Limit
- RL/ML Minimum Level of Quantitation
- MCL/AL Maximum Contaminant Level/Action Level
- mg/kg Results reported as wet weight
- TTLCL Total Threshold Limit Concentration
- STLCL Soluble Threshold Limit Concentration
- TCLP Toxicity Characteristic Leachate Procedure

Timothy Jensen
 Approved By
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March 23, 2004

Lab ID: 4030362

DAVID L BROWN
DEPT OF GEOLOGICAL & ENVIRO SCIENCES
CALIFORNIA STATE UNIVERSITY
CHICO, CA 95929-0205
RE: CHEROKEE WQP 66755

Dear DAVID L BROWN,

Enclosed are the analysis results for Work Order number 4030362. All analysis were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

For

James E. Hawley
Laboratory Director

California ELAP Certification Number 1677



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Report To: DEPT OF GEOLOGICAL & ENVIRO SCIENCES
 CALIFORNIA STATE UNIVERSITY
 CHICO, CA 95929-0205
Attention: DAVID L BROWN
Project: CHEROKEE WQP 66755

Lab No: 4030362
Reported: 03/23/04
Phone: 898-4035
P.O. #

General Chemistry

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
CWCC Water (4030362-01) Sampled:03/08/04 11:00 Received:03/09/04 14:58									
Hardness	mg/l	49		1	3	SM 2340C	03/10/04	03/10/04	B4C0211
pH	pH Units	8.03	I-03	0.01	0.01	SM 4500H+	03/09/04	03/09/04	B4C0187
Alkalinity as CaCO3	mg/l	54		2	5	SM 2320B	03/15/04	03/15/04	B4C0335
Bicarbonate	"	66		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Chloride	"	2.21		0.04	0.20	EPA 300.0	03/17/04	03/17/04	B4C0389
Sulfate as SO4	"	5.52		0.08	0.40	"	"	"	"
Specific Conductance	umhos/cm	130		2	10	SM 2510B	03/15/04	03/15/04	B4C0290
Total Dissolved Solids	mg/l	100		2	6	SM 2540C	03/15/04	03/15/04	B4C0351
Total Suspended Solids	"	17		2	6	SM 2540D	03/15/04	03/15/04	B4C0358
MBAS	"	ND		0.02	0.03	SM 5540	03/15/04	03/15/04	B4C0311
CWCWC Water (4030362-02) Sampled:03/08/04 11:55 Received:03/09/04 14:58									
Hardness	mg/l	41		1	3	SM 2340C	03/10/04	03/10/04	B4C0211
pH	pH Units	8.15	I-03	0.01	0.01	SM 4500H+	03/09/04	03/09/04	B4C0187
Alkalinity as CaCO3	mg/l	51		2	5	SM 2320B	03/15/04	03/15/04	B4C0335
Bicarbonate	"	62		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Chloride	"	1.49		0.04	0.20	EPA 300.0	03/17/04	03/17/04	B4C0389
Sulfate as SO4	"	3.20		0.08	0.40	"	"	"	"
Specific Conductance	umhos/cm	111		2	10	SM 2510B	03/15/04	03/15/04	B4C0290
Total Dissolved Solids	mg/l	109		2	6	SM 2540C	03/15/04	03/15/04	B4C0351
Total Suspended Solids	"	8		2	6	SM 2540D	03/15/04	03/15/04	B4C0358
MBAS	"	0.04		0.02	0.03	SM 5540	03/15/04	03/15/04	B4C0311
CWGRC Water (4030362-03) Sampled:03/08/04 12:25 Received:03/09/04 14:58									
Hardness	mg/l	25		1	3	SM 2340C	03/10/04	03/10/04	B4C0211
pH	pH Units	8.13	I-03	0.01	0.01	SM 4500H+	03/09/04	03/09/04	B4C0187
Alkalinity as CaCO3	mg/l	33		2	5	SM 2320B	03/15/04	03/15/04	B4C0335
Bicarbonate	"	40		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Chloride	"	1.15		0.04	0.20	EPA 300.0	03/17/04	03/17/04	B4C0389
Sulfate as SO4	"	1.88		0.08	0.40	"	"	"	"
Specific Conductance	umhos/cm	72		2	10	SM 2510B	03/15/04	03/15/04	B4C0290
Total Dissolved Solids	mg/l	67		2	6	SM 2540C	03/15/04	03/15/04	B4C0351
Total Suspended Solids	"	4	J	2	6	SM 2540D	03/15/04	03/15/04	B4C0358
MBAS	"	ND		0.02	0.03	SM 5540	03/15/04	03/15/04	B4C0311
CWGRC2 Water (4030362-04) Sampled:03/08/04 12:25 Received:03/09/04 14:58									
Hardness	mg/l	25		1	3	SM 2340C	03/10/04	03/10/04	B4C0211
pH	pH Units	8.09	I-03	0.01	0.01	SM 4500H+	03/09/04	03/09/04	B4C0187
Alkalinity as CaCO3	mg/l	33		2	5	SM 2320B	03/15/04	03/15/04	B4C0335
Bicarbonate	"	40		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Chloride	"	1.13		0.04	0.20	EPA 300.0	03/17/04	03/17/04	B4C0389
Sulfate as SO4	"	1.90		0.08	0.40	"	"	"	"
Specific Conductance	umhos/cm	72		2	10	SM 2510B	03/15/04	03/15/04	B4C0290
Total Dissolved Solids	mg/l	68		2	6	SM 2540C	03/15/04	03/15/04	B4C0351
MBAS	"	0.03		0.02	0.03	SM 5540	03/15/04	03/15/04	B4C0311
CWDC Water (4030362-05) Sampled:03/08/04 12:55 Received:03/09/04 14:58									
Hardness	mg/l	48		1	3	SM 2340C	03/10/04	03/10/04	B4C0211
pH	pH Units	8.14	I-03	0.01	0.01	SM 4500H+	03/09/04	03/09/04	B4C0187
Alkalinity as CaCO3	mg/l	50		2	5	SM 2320B	03/15/04	03/15/04	B4C0335
Bicarbonate	"	60		2	5	"	"	"	"

Matthew Shultz
 Approved By

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Report To: DEPT OF GEOLOGICAL & ENVIRO SCIENCES
 CALIFORNIA STATE UNIVERSITY
 CHICO, CA 95929-0205
Attention: DAVID L BROWN
Project: CHEROKEE WQP 66755

Lab No: 4030362
Reported: 03/23/04
Phone: 898-4035
P.O. #

General Chemistry

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
CWDC Water (4030362-05) Sampled:03/08/04 12:55 Received:03/09/04 14:58									
Carbonate	"	ND		2	5	"	"	03/15/04	"
Chloride	"	2.15		0.04	0.20	EPA 300.0	03/17/04	03/17/04	B4C0389
Sulfate as SO4	"	7.80		0.08	0.40	"	"	"	"
Specific Conductance	umhos/cm	125		2	10	SM 2510B	03/15/04	03/15/04	B4C0290
Total Dissolved Solids	mg/l	111		2	6	SM 2540C	03/15/04	03/15/04	B4C0351
Total Suspended Solids	"	11		2	6	SM 2540D	03/15/04	03/15/04	B4C0358
MBAS	"	ND		0.02	0.03	SM 5540	03/15/04	03/15/04	B4C0311
CWCLR Water (4030362-06) Sampled:03/08/04 13:20 Received:03/09/04 14:58									
Hardness	mg/l	52		1	3	SM 2340C	03/10/04	03/10/04	B4C0211
pH	pH Units	8.47	I-03	0.01	0.01	SM 4500H+	03/09/04	03/09/04	B4C0187
Alkalinity as CaCO3	mg/l	60		2	5	SM 2320B	03/15/04	03/15/04	B4C0335
Bicarbonate	"	73		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Chloride	"	3.38		0.04	0.20	EPA 300.0	03/17/04	03/17/04	B4C0389
Sulfate as SO4	"	1.94		0.08	0.40	"	"	"	"
Specific Conductance	umhos/cm	138		2	10	SM 2510B	03/15/04	03/15/04	B4C0290
Total Dissolved Solids	mg/l	113		2	6	SM 2540C	03/15/04	03/15/04	B4C0351
Total Suspended Solids	"	3	J	2	6	SM 2540D	03/15/04	03/15/04	B4C0358
MBAS	"	ND		0.02	0.03	SM 5540	03/15/04	03/15/04	B4C0311


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Report To: DEPT OF GEOLOGICAL & ENVIRO SCIENCES
 CALIFORNIA STATE UNIVERSITY
 CHICO, CA 95929-0205
Attention: DAVID L BROWN
Project: CHEROKEE WQP 66755

Lab No: 4030362
Reported: 03/23/04
Phone: 898-4035
P.O. #

Metals - Total

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
CWCC Water (4030362-01) Sampled:03/08/04 11:00 Received:03/09/04 14:58									
Calcium	mg/l	8.99		0.01	0.05	EPA 200.8	03/15/04	03/15/04	B4C0302
Copper	ug/l	1.9		0.1	0.5	"	"	"	"
Iron	"	944		3	10	"	"	"	"
Magnesium	mg/l	4.97		0.001	0.005	"	"	"	"
Manganese	ug/l	49.4		0.1	0.5	"	"	"	"
Potassium	mg/l	1.03		0.005	0.025	"	"	"	"
Sodium	"	3.76		0.002	0.010	"	"	"	"
Zinc	ug/l	1.7	J	0.4	2.0	"	"	"	"
CWCWC Water (4030362-02) Sampled:03/08/04 11:55 Received:03/09/04 14:58									
Calcium	mg/l	7.67		0.01	0.05	EPA 200.8	03/15/04	03/15/04	B4C0302
Copper	ug/l	1.0		0.1	0.5	"	"	"	"
Iron	"	602		3	10	"	"	"	"
Magnesium	mg/l	4.27		0.001	0.005	"	"	"	"
Manganese	ug/l	19.5		0.1	0.5	"	"	"	"
Potassium	mg/l	1.03		0.005	0.025	"	"	"	"
Sodium	"	3.27		0.002	0.010	"	"	"	"
Zinc	ug/l	ND		0.4	2.0	"	"	"	"
CWGRC Water (4030362-03) Sampled:03/08/04 12:25 Received:03/09/04 14:58									
Calcium	mg/l	5.02		0.01	0.05	EPA 200.8	03/15/04	03/15/04	B4C0302
Copper	ug/l	0.8		0.1	0.5	"	"	"	"
Iron	"	553		3	10	"	"	"	"
Magnesium	mg/l	2.79		0.001	0.005	"	"	"	"
Manganese	ug/l	16.3		0.1	0.5	"	"	"	"
Potassium	mg/l	0.728		0.005	0.025	"	"	"	"
Sodium	"	2.21		0.002	0.010	"	"	"	"
Zinc	ug/l	0.5	J	0.4	2.0	"	"	"	"
CWGRC2 Water (4030362-04) Sampled:03/08/04 12:25 Received:03/09/04 14:58									
Calcium	mg/l	5.04		0.01	0.05	EPA 200.8	03/15/04	03/15/04	B4C0302
Copper	ug/l	0.8		0.1	0.5	"	"	"	"
Iron	"	537		3	10	"	"	"	"
Magnesium	mg/l	2.78		0.001	0.005	"	"	"	"
Manganese	ug/l	14.7		0.1	0.5	"	"	"	"
Potassium	mg/l	0.741		0.005	0.025	"	"	"	"
Sodium	"	2.23		0.002	0.010	"	"	"	"
Zinc	ug/l	4.3		0.4	2.0	"	"	"	"
CWDC Water (4030362-05) Sampled:03/08/04 12:55 Received:03/09/04 14:58									
Calcium	mg/l	8.49		0.01	0.05	EPA 200.8	03/15/04	03/15/04	B4C0302
Copper	ug/l	1.3		0.1	0.5	"	"	"	"
Iron	"	625		3	10	"	"	"	"
Magnesium	mg/l	4.80		0.001	0.005	"	"	"	"
Manganese	ug/l	59.1		0.1	0.5	"	"	"	"
Potassium	mg/l	0.734		0.005	0.025	"	"	"	"
Sodium	"	3.29		0.002	0.010	"	"	"	"
Zinc	ug/l	0.9	J	0.4	2.0	"	"	"	"
CWCLR Water (4030362-06) Sampled:03/08/04 13:20 Received:03/09/04 14:58									
Calcium	mg/l	9.06		0.01	0.05	EPA 200.8	03/15/04	03/15/04	B4C0302
Copper	ug/l	0.6		0.1	0.5	"	"	"	"
Iron	"	170		3	10	"	"	"	"
Magnesium	mg/l	5.56		0.001	0.005	"	"	"	"
Manganese	ug/l	4.0		0.1	0.5	"	"	"	"

Matthew J. Family
 Approved By
 Basic Laboratory, Inc.
 California D.O.H.S. Cert #1677



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Report To: DEPT OF GEOLOGICAL & ENVIRO SCIENCES
 CALIFORNIA STATE UNIVERSITY
 CHICO, CA 95929-0205
Attention: DAVID L BROWN
Project: CHEROKEE WQP 66755


Lab No: 4030362
Reported: 03/23/04
Phone: 898-4035
P.O. #

Metals - Total

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
CWCLR Water (4030362-06) Sampled:03/08/04 13:20 Received:03/09/04 14:58									
Potassium	mg/l	0.822		0.005	0.025	"	"	03/15/04	"
Sodium	"	4.43		0.002	0.010	"	"	"	"
Zinc	ug/l	ND		0.4	2.0	"	"	"	"

Notes and Definitions

- I-03 Sample was received past the EPA recommended holding time.
- J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the detection limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- < Less than reporting limit
- ≤ Less than or equal to reporting limit
- > Greater than reporting limit
- ≥ Greater than or equal to reporting limit
- MDL Method Detection Limit
- RL/ML Minimum Level of Quantitation
- MCL/AL Maximum Contaminant Level/Action Level
- mg/kg Results reported as wet weight
- TTLIC Total Threshold Limit Concentration
- STLC Soluble Threshold Limit Concentration
- TCLP Toxicity Characteristic Leachate Procedure


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April 28, 2004

Lab ID: 4040449

DAVE BROWN
CSUC RESEARCH FOUNDATION
C/O: GEOS DEPT. - 101 ORANGE STREET
CHICO, CA 95929-0205
RE: CHEROKEE WQ 66755

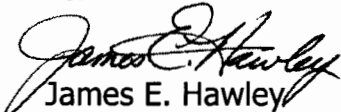
Dear DAVE BROWN,

Enclosed are the analysis results for Work Order number 4040449. All analysis were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

For


James E. Hawley
Laboratory Director

California ELAP Certification Number 1677



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 fax 530.243.7494 Redding, California 96001

Report To: CSUC RESEARCH FOUNDATION
 C/O: GEOS DEPT. - 101 ORANGE STREET
 CHICO, CA 95929-0205
Attention: DAVE BROWN
Project: CHEROKEE WQ 66755

Lab No: 4040449
Reported: 04/28/04
Phone: 898-4035
P.O. #

General Chemistry

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
CWCC Surface Water (4040449-01) Sampled:04/12/04 11:00 Received:04/14/04 12:15									
Hardness	mg/l	75		1	3	SM 2340C	04/27/04	04/27/04	B4D0544
Alkalinity as CaCO3	"	52		2	5	SM 2320B	04/26/04	04/26/04	B4D0513
Bicarbonate	"	63		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	75		2	6	SM 2540C	04/19/04	04/19/04	B4D0358
Total Suspended Solids	"	17		2	6	SM 2540D	"	"	B4D0356
CWCWC Surface Water (4040449-02) Sampled:04/12/04 11:45 Received:04/14/04 12:15									
Hardness	mg/l	93		1	3	SM 2340C	04/27/04	04/27/04	B4D0544
Alkalinity as CaCO3	"	82		2	5	SM 2320B	04/26/04	04/26/04	B4D0513
Bicarbonate	"	99		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	102		2	6	SM 2540C	04/19/04	04/19/04	B4D0358
Total Suspended Solids	"	10		2	6	SM 2540D	"	"	B4D0356
CWGRC Surface Water (4040449-03) Sampled:04/12/04 12:10 Received:04/14/04 12:15									
Hardness	mg/l	25		1	3	SM 2340C	04/27/04	04/27/04	B4D0544
Alkalinity as CaCO3	"	27		2	5	SM 2320B	04/26/04	04/26/04	B4D0513
Bicarbonate	"	33		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	39		2	6	SM 2540C	04/19/04	04/19/04	B4D0358
Total Suspended Solids	"	8		2	6	SM 2540D	"	"	B4D0356
CWDC Surface Water (4040449-04) Sampled:04/12/04 12:30 Received:04/14/04 12:15									
Hardness	mg/l	63		1	3	SM 2340C	04/27/04	04/27/04	B4D0544
Alkalinity as CaCO3	"	61		2	5	SM 2320B	04/26/04	04/26/04	B4D0513
Bicarbonate	"	74		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	102		2	6	SM 2540C	04/19/04	04/19/04	B4D0358
Total Suspended Solids	"	6		2	6	SM 2540D	"	"	B4D0356
CWCLR Surface Water (4040449-05) Sampled:04/12/04 12:50 Received:04/14/04 12:15									
Hardness	mg/l	69		1	3	SM 2340C	04/27/04	04/27/04	B4D0544
Alkalinity as CaCO3	"	66		2	5	SM 2320B	04/26/04	04/26/04	B4D0513
Bicarbonate	"	81		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	113		2	6	SM 2540C	04/19/04	04/19/04	B4D0358
Total Suspended Solids	"	7		2	6	SM 2540D	"	"	B4D0356
CWCC2 Surface Water (4040449-06) Sampled:04/12/04 11:00 Received:04/14/04 12:15									
Hardness	mg/l	57		1	3	SM 2340C	04/27/04	04/27/04	B4D0544
Alkalinity as CaCO3	"	52		2	5	SM 2320B	04/26/04	04/26/04	B4D0513
Bicarbonate	"	63		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	67		2	6	SM 2540C	04/19/04	04/19/04	B4D0358
Total Suspended Solids	"	16		2	6	SM 2540D	"	"	B4D0356

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Report To: CSUC RESEARCH FOUNDATION
C/O: GEOS DEPT. - 101 ORANGE STREET
CHICO, CA 95929-0205

Attention: DAVE BROWN
Project: CHEROKEE WQ 66755

Lab No: 4040449
Reported: 04/28/04
Phone: 898-4035
P.O. #

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the detection limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference
< Less than reporting limit
≤ Less than or equal to reporting limit
> Greater than reporting limit
≥ Greater than or equal to reporting limit
MDL Method Detection Limit
RL/ML Minimum Level of Quantitation
MCL/AL Maximum Contaminant Level/Action Level
mg/kg Results reported as wet weight
TTLC Total Threshold Limit Concentration
STLC Soluble Threshold Limit Concentration
TCLP Toxicity Characteristic Leachate Procedure



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June 01, 2004

Lab ID: 4050584

DAVID L BROWN
DEPT OF GEOLOGICAL & ENVIRO SCIENCES
CALIFORNIA STATE UNIVERSITY
CHICO, CA 95929-0205
RE: CHEROKEE WQP 66755

Dear DAVID L BROWN,

Enclosed are the analysis results for Work Order number 4050584. All analysis were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

For

James E. Hawley
Laboratory Director

California ELAP Certification Number 1677



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Report To: DEPT OF GEOLOGICAL & ENVIRO SCIENCES
 CALIFORNIA STATE UNIVERSITY
 CHICO, CA 95929-0205
Attention: DAVID L BROWN
Project: CHEROKEE WQP 66755

Lab No: 4050584
Reported: 06/01/04
Phone: 898-4035
P.O. #

General Chemistry

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
CWRB Water (4050584-01) Sampled:05/10/04 09:45 Received:05/14/04 13:48									
Hardness	mg/l	ND		1	3	SM 2340C	05/24/04	05/24/04	B4E0481
Alkalinity as CaCO3	"	ND		2	5	SM 2320B	05/17/04	05/17/04	B4E0341
Bicarbonate	"	ND		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	ND		2	6	SM 2540C	05/17/04	05/17/04	B4E0364
Total Suspended Solids	"	ND		2	6	SM 2540D	"	"	B4E0362
CWCC Water (4050584-02) Sampled:05/10/04 10:45 Received:05/14/04 13:48									
Hardness	mg/l	34		1	3	SM 2340C	05/24/04	05/24/04	B4E0481
Alkalinity as CaCO3	"	41		2	5	SM 2320B	05/17/04	05/17/04	B4E0341
Bicarbonate	"	50		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	57		2	6	SM 2540C	05/17/04	05/17/04	B4E0364
Total Suspended Solids	"	14		2	6	SM 2540D	"	"	B4E0362
CWDC Water (4050584-03) Sampled:05/10/04 11:40 Received:05/14/04 13:48									
Hardness	mg/l	55		1	3	SM 2340C	05/24/04	05/24/04	B4E0481
Alkalinity as CaCO3	"	66		2	5	SM 2320B	05/17/04	05/17/04	B4E0341
Bicarbonate	"	81		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	99		2	6	SM 2540C	05/17/04	05/17/04	B4E0364
Total Suspended Solids	"	4	J	2	6	SM 2540D	"	"	B4E0362
CWCLR Water (4050584-04) Sampled:05/10/04 12:05 Received:05/14/04 13:48									
Hardness	mg/l	59		1	3	SM 2340C	05/24/04	05/24/04	B4E0481
Alkalinity as CaCO3	"	78		2	5	SM 2320B	05/17/04	05/17/04	B4E0341
Bicarbonate	"	95		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	108		2	6	SM 2540C	05/17/04	05/17/04	B4E0364
Total Suspended Solids	"	5	J	2	6	SM 2540D	"	"	B4E0362

Matthew
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Report To: DEPT OF GEOLOGICAL & ENVIRO SCIENCES
CALIFORNIA STATE UNIVERSITY
CHICO, CA 95929-0205
Attention: DAVID L BROWN
Project: CHEROKEE WQP 66755

Lab No: 4050584
Reported: 06/01/04
Phone: 898-4035
P.O. #

Notes and Definitions

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the detection limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference
< Less than reporting limit
≤ Less than or equal to reporting limit
> Greater than reporting limit
≥ Greater than or equal to reporting limit
MDL Method Detection Limit
RL/ML Minimum Level of Quantitation
MCL/AL Maximum Contaminant Level/Action Level
mg/kg Results reported as wet weight
TTLC Total Threshold Limit Concentration
STLC Soluble Threshold Limit Concentration
TCLP Toxicity Characteristic Leachate Procedure



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June 29, 2004

Lab ID: 4060606

DAVE BROWN
CSUC RESEARCH FOUNDATION
C/O: GEOS DEPT. - 101 ORANGE STREET
CHICO, CA 95929-0205
RE: CHEROKEE WQ 66755

Dear DAVE BROWN,

Enclosed are the analysis results for Work Order number 4060606. All analysis were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

For

James E. Hawley
Laboratory Director

California ELAP Certification Number 1677



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Report To: CSUC RESEARCH FOUNDATION
 C/O: GEOS DEPT. - 101 ORANGE STREET
 CHICO, CA 95929-0205

Attention: DAVE BROWN
Project: CHEROKEE WQ 66755

Lab No: 4060606
Reported: 07/06/04
Phone: 898-4035
P.O. #

General Chemistry

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
CWCC CHEROKEE CREEK Surface Water (4060606-01) Sampled:06/14/04 10:05 Received:06/15/04 16:29									
Hardness	mg/l	29		1	3	SM 2340C	06/17/04	06/17/04	B4F0388
Alkalinity as CaCO3	"	38		2	5	SM 2320B	06/24/04	06/24/04	B4F0559
Bicarbonate	"	46		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	60		2	6	SM 2540C	06/17/04	06/17/04	B4F0462
Total Suspended Solids	"	15		2	6	SM 2540D	06/18/04	06/18/04	B4F0461
CWDC DRY CREEK Surface Water (4060606-02) Sampled:06/14/04 11:00 Received:06/15/04 16:29									
Hardness	mg/l	60		1	3	SM 2340C	06/17/04	06/17/04	B4F0388
Alkalinity as CaCO3	"	70		2	5	SM 2320B	06/24/04	06/24/04	B4F0559
Bicarbonate	"	85		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	110		2	6	SM 2540C	06/17/04	06/17/04	B4F0462
Total Suspended Solids	"	4	J	2	6	SM 2540D	06/18/04	06/18/04	B4F0461
CWCLR CLEAR CREEK Surface Water (4060606-03) Sampled:06/14/04 11:30 Received:06/15/04 16:29									
Hardness	mg/l	61		1	3	SM 2340C	06/17/04	06/17/04	B4F0388
Alkalinity as CaCO3	"	73		2	5	SM 2320B	06/24/04	06/24/04	B4F0559
Bicarbonate	"	88		2	5	"	"	"	"
Carbonate	"	ND		2	5	"	"	"	"
Total Dissolved Solids	"	122		2	6	SM 2540C	06/17/04	06/17/04	B4F0462
Total Suspended Solids	"	ND		2	6	SM 2540D	06/18/04	06/18/04	B4F0461

Notes and Definitions

- J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the detection limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- < Less than reporting limit
- ≤ Less than or equal to reporting limit
- > Greater than reporting limit
- ≥ Greater than or equal to reporting limit
- MDL Method Detection Limit
- RL/ML Minimum Level of Quantitation
- MCL/AL Maximum Contaminant Level/Action Level
- mg/kg Results reported as wet weight
- TTLIC Total Threshold Limit Concentration
- STLIC Soluble Threshold Limit Concentration
- TCLP Toxicity Characteristic Leachate Procedure

[Signature]
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