

ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92868 - 714/771-6900

FAX 714/538-1209

CLIENT Stetson Engineers Inc. (10442)
ATTN: Ken Reich
861 Village Oaks
Suite 100
Covina, CA 91724

LAB REQUEST 238048

REPORTED 08/03/2009

RECEIVED 07/23/2009

PROJECT #2258
Lower SMR Watershed

SUBMITTER Client

COMMENTS

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods as indicated on the report. This cover letter is an integral part of the final report.

Order No.

1010440

1010441

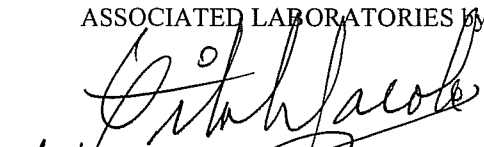
Client Sample Identification

#11044350 Sandia Creek

Laboratory Method Blank

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,


Edward S. Behare, Ph.D.
Vice President

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

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TESTING & CONSULTING
Chemical
Microbiological
Environmental

Order #: 1010440 Client Sample ID: #11044350 Sandia Creek

Matrix: WATER

Date Sampled: 07/23/2009

Time Sampled: 10:55

Method	Analyte	Result	DF	EQL	MDL	Units	Date/Analyst
10200H	Chlorophyll	ND	1	1.0		mg/M3	07/23/09 HK
2510B	Specific Conductance	1670	1	1.0	0.86	umhos/c	07/24/09 AE
300.0	Nitrate (as NO3)	10.4	1	0.44	0.07	mg/L	07/23/09 WW
300.0	Nitrite (as NO2)	ND	1	0.33	0.06	mg/L	07/23/09 WW
350.1	Ammonia -N	0.04 J	1	0.1	0.01	mg/L	07/25/09 TP
351.2	Total Kjeldahl Nitrogen (TKN)	0.06 J	1	0.4	0.06	mg/L	07/25/09 TP
4500-H+B	pH	7.98	1			NA	07/23/09 MS
4500-P-B.5-E	Total Phosphorus as P	0.016 J	1	0.02	0.01	mg/L	07/29/09 DK
4500-P-E	Ortho Phosphate as PO4	0.040 J	1	0.06	0.015	mg/L	07/24/09 DK
5210B	BOD	ND	1	3.0	1.5	mg/L	07/23/09 LT

EQL = Estimated Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor
ND = Not detected below indicated MDL, J=Trace, S = Surrogate outside control limits

ASSOCIATED LABORATORIES

Analytical Results Report



Order #: 1010441 Client Sample ID: Laboratory Method Blank

Matrix: WATER

Method	Analyte	Result	DF	EQL	MDL	Units	Date/Analyst
2510B	Specific Conductance	0.84	1	1.0	0.86	umhos/c	07/24/09 AE
300.0	Nitrate (as NO3)	ND	1	0.44	0.07	mg/L	07/23/09 WW
300.0	Nitrite (as NO2)	ND	1	0.33	0.06	mg/L	07/23/09 WW
350.1	Ammonia -N	ND	1	0.1	0.01	mg/L	07/25/09 TP
351.2	Total Kjeldahl Nitrogen (TKN)	ND	1	0.4	0.06	mg/L	07/25/09 TP
4500-H+B	pH	5.27	1			NA	07/23/09 MS
4500-P-B.5-E	Total Phosphorus as P	ND	1	0.02	0.01	mg/L	07/29/09 DK
4500-P-E	Ortho Phosphate as PO4	ND	1	0.06	0.015	mg/L	07/24/09 DK
5210B	BOD	ND	1	3.0	1.5	mg/L	07/23/09 LT

EQL = Estimated Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor
ND = Not detected below indicated MDL, J=Trace, S = Surrogate outside control limits

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Analytical Results Report



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QA REPORT FORM

QC Sample: 237905-1009773

Matrix: WATER

Prep. Date: 07/25/09

Analysis Date: 07/27/09

Lab ID#'s in Batch: 237905, 238040, 238041, 238042, 238045, 238047, 238048,
238061, 237850, 238061

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RESULT

Reporting Units = mg/L

Test	Method	Sample Result	Spike Added	Matrix Spike	Matrix Spk. Dup	%Rec MS	%Rec MSD	RPD
TKN	351.2	0.22	12.5	13.6	12.9	107	101	5

ND = Not Detected

RPD = Relative Percent Difference of Matrix Spike and Matrix Spike Duplicate

%REC-MS & MSD = Percent Recovery of Matrix Spike & Matrix Spike Duplicate

%REC LIMITS = 80 - 120

RPD LIMITS = 20

PREPARATION BLANK / LAB CONTROL SAMPLE RESULTS

Test	Method	PREP BLK LCS					
		Value	Result	True	%Rec	L.Limit	H.Limit
TKN	351.2	ND	2.57	2.50	103	80%	120%

Test	Method	DIG CHK				
		Result	True	%Rec	L.Limit	H.Limit
TKN	351.2	2.96	3.17	93	85%	115%

Value = Preparation Blank Value

LCS Result = Lab Control Sample Result

True = True Value of LCS

L.Limit / H.Limit = LCS Control Limits

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QA REPORT FORM

QC Sample : 238053-1010453

Matrix: WATER

Prep. Date: 07/23/09

Analysis Date: 07/23/09

Lab ID#'s in Batch: 238053, 238040, 238041, 208042, 238045, 238046, 238047, 238048, 238062, 238061, 238063

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RESULT

Reporting Units = mg/L

Test	Method	Sample Result	Spike Added	Matrix Spike	Matrix Spike Dup	%Rec MS	%Rec MSD	RPD
CL	300.0	102	200	285.75	287.36	92	93	1
SO4	300.0	150	200	348.06	338.15	99	94	3
NO3	300.0	17.7	100	102.96	107.86	85	90	5
NO2	300.0	ND	100	89.91	89.97	90	90	0

RPD = Relative Percent Difference of Matrix Spike and Matrix Spike Dup

%REC-MS & MSD = Percent Recovery of Matrix Spike & Matrix Spike Duplicate

%Rec Limits = 80 - 120

RPD Limits = 20

PREPARATION BLANK / LAB CONTROL SAMPLE RESULTS

Test	Method	PREP BLK	LCS				
		Value		True	%Rec	L.Limit	H.Limit
CL	300.0	ND	37.79	40	94	90%	110%
SO4	300.0	ND	43.77	40	109	90%	110%
NO3	300.0	ND	18.13	20	91	90%	110%
NO2	300.0	ND	8.89	10	89	90%	110%

VALUE = Preparation Blank Value; ND = Not-Detected

LCS = Lab Control Sample Result

TRUE = True Value of LCS

L.LIMIT / H.LIMIT = LCS Control Limits

* = Outside QC Limit

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QA REPORT FORM

QC Sample: 237905-1009773

Matrix: WATER

Prep. Date: 07/25/09

Analysis Date: 07/27/09

Lab ID#'s in Batch: 237901, 237903, 237904, 237905, 238040, 238041, 238042, 238045, 238046, 238047,
238048, 238058, 237923, 238118

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RESULT

Reporting Units = mg/L

Test	Method	Sample Result	Spike Added	Matrix Spike	Matrix Spike Dup	%Rec MS	%Rec MSD	RPD
NH3-N	350.1	ND	5.00	5.23	5.29	105	106	1

ND = Not Detected

RPD = Relative Percent Difference of Matrix Spike and Matrix Spike Duplicate

%REC-MS & MSD = Percent Recovery of Matrix Spike & Matrix Spike Duplicate

<i>%REC LIMITS = 80 - 120</i>

<i>RPD LIMITS = 20</i>

PREPARATION BLANK / LAB CONTROL SAMPLE RESULTS

PREP BLK LCS					
Value	Result	True	%Rec	L.Limit	H.Limit
ND	5.19	5.00	104	80%	120%

Value = Preparation Blank Value

LCS Result = Lab Control Sample Result

True = True Value of LCS

L.Limit / H.Limit = LCS Control Limits

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QA REPORT FORM - INORGANICS

QC Sample: LR 238040

Matrix: WATER

Prep. Date: July 24, 2009

Analysis Date: July 24, 2009

Lab ID#'s in Batch: LR 238040, 238041, 238042, 238045, 238046, 238047, 238048, 238058

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RESULT

Reporting Units = mg/L

Test	Method	Sample Result	Spike Added	Matrix Spike	Matrix Spike Dup	%Rec MS	%Rec MSD	RPD
Ortho-Phosphate (as PO ₄)	4500-P-E	ND	1.53	1.51	1.51	99	99	0
Ortho-Phosphate (as P)	4500-P-E	0.00	0.50	0.49	0.49	99	99	0

RPD = Relative Percent Difference of Matrix Spike and Matrix Spike Duplicate
%REC-MS & MSD = Percent Recovery of Matrix Spike & Matrix Spike Duplicate

%REC LIMITS = 75 - 125
RPD LIMITS = 20

PREPARATION BLANK / LAB CONTROL SAMPLE RESULTS

Test	Method	PREP BLK	LCS				
		Value	Result	True	%Rec	L.Limit	H.Limit
Ortho-Phosphate (as PO ₄)	4500-P-E	ND	1.00	1.00	100	80%	120%
Ortho-Phosphate (as P)	4500-P-E	ND	0.33	0.33	100	80%	120%

Value = Preparation Blank Value; ND = Not-Detected
LCS Result = Lab Control Sample Result
True = True Value of LCS
L.Limit / H.Limit = LCS Control Limits

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QA REPORT FORM - INORGANICS

QC Sample: LR 237841

Matrix: WATER

Prep. Date: July 29, 2009

Analysis Date: July 29, 2009

Lab ID#'s in Batch: LR 237841, 237843, 237844, 237845, 237846, 237847, 237848, 237897, 237898, 237899
238047, 238048, 237995

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RESULT

Reporting Units = mg/L

Test	Method	Sample Result	Spike Added	Matrix Spike	Matrix Spike Dup	%Rec MS	%Rec MSD	RPD
Total Phosphate (as P)	4500-P-E	0.01	0.40	0.41	0.41	100	100	0
Total Phosphate (as PO4)	4500-P-E	ND	1.23	1.25	1.25	102	102	0

RPD = Relative Percent Difference of Matrix Spike and Matrix Spike Duplicate
%REC-MS & MSD = Percent Recovery of Matrix Spike & Matrix Spike Duplicate

%REC LIMITS = 75-125
RPD LIMITS = 20

PREPARATION BLANK / LAB CONTROL SAMPLE RESULTS

Test	Method	PREP BLK	LCS				
		Value	Result	True	%Rec	L.Limit	H.Limit
Total Phosphate (as P)	4500-P-E	ND	0.33	0.33	100	80%	120%
Total Phosphate (as PO4)	4500-P-E	ND	1.01	1.00	100	80%	120%

Value = Preparation Blank Value; ND = Not-Detected

LCS Result = Lab Control Sample Result

True = True Value of LCS

L.Limit / H.Limit = LCS Control Limits

ASSOCIATED LABORATORIES
LCS REPORT FORM

QC Sample: Std. Sol

Matrix: WATER

Prep. Date: July 23, 2009

Analysis Date: July 28, 2009

Lab ID#'s in Batch: 238044, 238039, 238047, 238046, 238045, 238041, 238048, 238040, 238042

Reporting Units = mg/L

PREPARATION BLANK / LAB CONTROL SAMPLE RESULTS

Test	Method	PREP. BLANK	LCS				
		Value	Result	True	%Rec	L.Limit	H.Limit
BOD	405.1/5210B	ND	173.56	200	87	80%	120%

Value = Preparation Blank Value; ND = Not-Detected

LCS Result = Lab Control Sample Result

True = True Value of LCS

L.Limit / H.Limit = LCS Control Limits

CHAIN OF CUSTODY FOR LOWER SANTA MARGARITA RIVER WATGERSHED MONITORING PROGRAM

238048

Client Name/Account #:

Stetson Engineers Inc.

Address:

861 Village Oaks Dr., Suite 100

City/State/Zip:

Covina, CA 91724

Project Manager:

Ken Reich

Telephone Number:

626-967-6202

Fax No.: 626-331-7065

Sampler Name: (Print)

Joel Barnard / Ken Reich

Sampler Signature:

Joel Barnard

Report To: Ken Reich

Invoice To: Ken Reich

Quote #:

Project ID: Lower SMR Watershed

Project #: 2258

Sample ID / Description	Sampling Information						Preservative							Analyses				Reporting/TAT					
	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Ice	HNO ₃	HCl	NaOH	H ₂ SO ₄	None	Other	Conductivity, Nitrate, Nitrite, Ortho Phosphate, pH	BOD ₅	Chlorophyll a	Total Phosphorous, TKN, Ammonia		RUSH TAT	Standard TAT	Fax Results	Send QC with report	
DAY 3 JULY INDEX SAMPLING	07/23/09	10:55	1	X			X					X		X							X		X
	"	"	1	X			X					X			X						X		X
	"	"	1	X			X					X					X				X		X
	"	"	1	X			X														X		X

Special Instructions: 1) Electronic Data Deliverable Required
2) "J" flag results between the MDL and the reporting limit

Laboratory Comments:

Temperature Upon Receipt:

VOCs Free of Headspace? Y N

Relinquished by:

Tuan A. Nguyen

Date

07/23/09

Time

13:55

Received by:

M. E. Ebert

Time

7-23-09 1355

Relinquished by:

Received by Associated Labs:

Time

**ASSOCIATED LABORATORIES**

806 North Batavia – Orange, California 92868 – 714-771-6900

FAX 714-538-1209

SAMPLE ACCEPTANCE CHECKLIST

Section 1	Client: <u>Stetson Eng</u>	Project: <u>Lower SMR Watershed</u>
Date Received: <u>7-23-09</u>	Sampler's Name: <u>Yes</u> <input checked="" type="checkbox"/> <u>No</u> <input type="checkbox"/>	
Sample(s) received in cooler: <u>Yes</u> <input checked="" type="checkbox"/>	No (Skip Section 2)	
Shipping Information: _____		

Section 2
Was the cooler packed with: <u>X</u> Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Bubble Wrap <input type="checkbox"/> Styrofoam <input type="checkbox"/> <u> </u> Paper <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/>
Cooler or box temperature: <u>3.0</u>
(Acceptance range is 2 to 6 Deg. C.)

Section 3	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>		
Is it properly completed? (IDs, sampling date and time, signature, test)	<input checked="" type="checkbox"/>		
Were custody seals present?			<input checked="" type="checkbox"/>
If Yes – were they intact?			<input checked="" type="checkbox"/>
Were all samples sealed in plastic bags?	<input checked="" type="checkbox"/>		
Did all samples arrive intact? If no, indicate below.	<input checked="" type="checkbox"/>		
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>		
Were correct containers used for the tests required?	<input checked="" type="checkbox"/>		
Was a sufficient amount of sample sent for tests indicated?	<input checked="" type="checkbox"/>		
Was there headspace in VOA vials?			<input checked="" type="checkbox"/>
Were the containers labeled with correct preservatives?	<input checked="" type="checkbox"/>		
Was total residual chlorine measured (Fish Bioassay samples only)? *			<input checked="" type="checkbox"/>

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

Section 4
Explanations/Comments

Section 5
Was Project Manager notified of discrepancies: Y / N N/A

Completed By: M. E. BentDate: 7-23-09