

**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 237842

REPORTED 07/31/2009

RECEIVED 07/20/2009

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.**

1009417

1009418

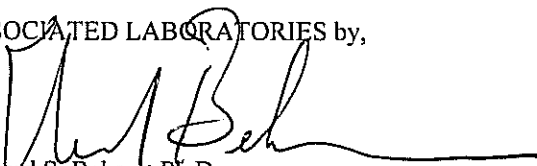
**Client Sample Identification**

#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 #: 1009417

Client Sample ID: #11044350 Sandia Creek

Matrix: WATER

Date Sampled: 07/20/2009

Time Sampled: 09:30

Method	Analyte	Result	DF	EQL	MDL	Units	Date/Analyst
10200H	Chlorophyll	ND	1	1.0		mg/M3	07/21/09 HK
2510B	Specific Conductance	1660	1	1.0	0.86	umhos/c	07/22/09 AE
300.0	Nitrate (as NO3)	12.4	1	0.44	0.07	mg/L	07/20/09 WW
300.0	Nitrite (as NO2)	ND	1	0.33	0.06	mg/L	07/20/09 WW
350.1	Ammonia -N	0.07 J	1	0.1	0.01	mg/L	07/25/09 TP
351.2	Total Kjeldahl Nitrogen (TKN)	0.11 J	1	0.4	0.06	mg/L	07/25/09 TP
4500-H+B	pH	7.86	1			NA	07/20/09 MS
4500-P-B.5-E	Total Phosphorus as P	0.022	1	0.02	0.01	mg/L	07/21/09 DK
4500-P-E	Ortho Phosphate as PO4	0.058 J	1	0.06	0.015	mg/L	07/21/09 DK
5210B	BOD	ND	1	3.0	1.5	mg/L	07/21/09 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 #: 1009418

Client Sample ID: Laboratory Method Blank

Matrix: WATER

Method	Analyte	Result	DF	EQL	MDL	Units	Date/Analyst
2510B	Specific Conductance	0.56	1	1.0	0.86	umhos/c	07/22/09 AE
300.0	Nitrate (as NO3)	ND	1	0.44	0.07	mg/L	07/20/09 WW
300.0	Nitrite (as NO2)	ND	1	0.33	0.06	mg/L	07/20/09 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	5.76	1			NA	07/20/09 MS
4500-P-B.5-E	Total Phosphorus as P	ND	1	0.02	0.01	mg/L	07/21/09 DK
4500-P-E	Ortho Phosphate as PO4	ND	1	0.06	0.015	mg/L	07/21/09 DK
5210B	BOD	ND	1	3.0	1.5	mg/L	07/21/09 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



**ASSOCIATED LABORATORIES  
LCS REPORT FORM**

QC Sample: Std. Sol

Matrix: WATER

Prep. Date: July 21, 2009

Analysis Date: July 26, 2009

Lab ID#'s in Batch: 237876, 237840, 237841, 237842, 237843, 237844, 237846

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	188.69	200	94	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**  
**QA REPORT FORM**

QC Sample : 237839-1009409

Matrix: WATER

Prep. Date: 07/20/09

Analysis Date: 07/21/09

Lab ID#'s in Batch: 237839, 237840, 237841, 237842, 237843, 237844, 237845, 237846, 237847, 237863, 237876

**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	29.09	200	243.49	243.84	107	107	0
SO4	300.0	19.60	200	245.02	243.95	113	112	0
Br <sup>-</sup>	300.0	ND	100	109.81	109.98	110	110	0
NO3	300.0	0.72	100	96.98	95.47	96	95	2
NO2	300.0	ND	100	115.02	112.39	115	112	2

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
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**PREPARATION BLANK / LAB CONTROL SAMPLE RESULTS**

Test	Method	PREP BLK	LCS				
		Value	Result	True	%Rec	L.Limit	H.Limit
CL	300.0	ND	43.99	40	110	90%	110%
SO4	300.0	ND	43.96	40	110	90%	110%
Br <sup>-</sup>	300.0	ND	21.52	20	108	90%	110%
NO3	300.0	ND	21.76	20	109	90%	110%
NO2	300.0	ND	11.09	10	111	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

# ASSOCIATED LABORATORIES QA REPORT FORM

QC Sample: 237839-1009409

Matrix: WATER

Prep. Date: 07/25/09

Analysis Date: 07/27/09

Lab ID#'s in Batch: 237839, 237840, 237841, 237842, 237843, 237844, 237845,  
237846, 237847, 237897, 237898, 237899, 237900, 237903, 237904

## 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	0.08	12.5	12.8	13.0	102	103	2

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
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RPD LIMITS = 20
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## PREPARATION BLANK / LAB CONTROL SAMPLE RESULTS

Test	Method	PREP BLK	LCS				
		Value	Result	True	%Rec	L.Limit	H.Limit
TKN	351.2	ND	2.72	2.50	109	80%	120%

Test	Method	DIG CHK				
		Result	True	%Rec	L.Limit	H.Limit
TKN	351.2	3.10	3.17	98	85%	115%

Value = Preparation Blank Value

LCS Result = Lab Control Sample Result

True = True Value of LCS

L.Limit / H.Limit = LCS Control Limits

**ASSOCIATED LABORATORIES  
QA REPORT FORM**

QC Sample: 237835-1009429

Matrix: WATER

Prep. Date: 07/25/09

Analysis Date: 07/27/09

Lab ID#'s in Batch: 237835, 237839, 237840, 237841, 237842, 237843, 237844,  
237845, 237846, 237847, 237897, 237898, 237899, 237900

**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	1.81	5.00	6.93	6.87	102	101	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*

*%REC LIMITS = 80 - 120*

*RPD LIMITS = 20*

**PREPARATION BLANK / LAB CONTROL SAMPLE RESULTS**

PREP BLK		LCS			
Value	Result	True	%Rec	L.Limit	H.Limit
ND	5.16	5.00	103	80%	120%

*Value = Preparation Blank Value*

*LCS Result = Lab Control Sample Result*

*True = True Value of LCS*

*L.Limit / H.Limit = LCS Control Limits*

**ASSOCIATED LABORATORIES  
QA REPORT FORM - INORGANICS**

QC Sample: LR 237839

Matrix: WATER

Prep. Date: July 21, 2009

Analysis Date: July 21, 2009

Lab ID#'s in Batch: LR 237839, 237840, 237841, 237842, 237843, 237844, 237845, 237846, 237847, 237850

**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 <sub>4</sub> )	4500-P-E	0.07	1.53	1.29	1.28	80	79	1
Ortho-Phosphate (as P)	4500-P-E	0.02	0.50	0.42	0.42	80	79	1

*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 = 75 - 125</i>
<i>RPD LIMITS = 20</i>

**PREPARATION BLANK / LAB CONTROL SAMPLE RESULTS**

Test	Method	PREP BLK	LCS				
		Value	Result	True	%Rec	L.Limit	H.Limit
Ortho-Phosphate (as PO <sub>4</sub> )	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*



**ASSOCIATED LABORATORIES  
QA REPORT FORM - INORGANICS**

QC Sample: LR 237900

Matrix: WATER

Prep. Date: July 29, 2009

Analysis Date: July 29, 2009

Lab ID#'s in Batch: LR 237900, 237901, 237903, 237904, 237905, 237856, 237995, 237840, 237842

**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	0.02	0.40	0.43	0.43	102	101	0
Total Phosphate (as PO4)	4500-P-E	ND	1.23	1.32	1.31	107	107	0

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

<b>%REC LIMITS = 75-125</b>
<b>RPD LIMITS = 20</b>

**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*

237892

CHAIN OF CUSTODY FOR LOWER SANTA MARGARITA RIVER WATGERSHED MONITORING PROGRAM

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:

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 <sub>3</sub>	HCl	NaOH	H <sub>2</sub> SO <sub>4</sub>	None	Other	Conductivity, Nitrate, Nitrite, Ortho Phosphate, pH	BOD <sub>5</sub>	Chlorophyll a	Total Phosphorous, TKN, Ammonia	RUSH TAT	Standard TAT	Fax Results	Send QC with report	
#11044350 Sandia Creek	7/20/09	9:30	1	X			X					X			X					X		X
#11044350 Sandia Creek			1	X			X					X				X				X		X
#11044350 Sandia Creek			1	X			X					X					X			X		X
#11044350 Sandia Creek			1	X			X					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:	Date	Time	Received by:	Time
	7/20/09	15:20	M. Eckert	7-20-09 1513
Relinquished by:	Date	Time	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: StetsonProject: # 2758Date Received: 7/20Sampler's Name: Yes NoSample(s) received in cooler: Yes

No (Skip Section 2)

Shipping Information: \_\_\_\_\_

**Section 2**Was the cooler packed with: X Ice \_\_\_\_\_ Ice Packs \_\_\_\_\_ Bubble Wrap \_\_\_\_\_ Styrofoam

\_\_\_\_\_ Paper \_\_\_\_\_ None \_\_\_\_\_ Other \_\_\_\_\_

Cooler or box temperature: 4.6

(Acceptance range is 2 to 6 Deg. C.)

**Section 3**

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

\*: 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/ACompleted By: Ada Rames Date: 7/20/09