

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 228457

REPORTED 02/12/2009

RECEIVED 02/05/2009

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.

968259

968260


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. Behard, 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 #: 968259 Client Sample ID: #11044350 Sandia Creek

Matrix: WATER

Date Sampled: 02/05/2009

Time Sampled: 10:20

Method	Analyte	Result	DF	EQL	MDL	Units	Date/Analyst
10200H	Chlorophyll	3.47	1	1.0		mg/M3	02/05/09 HK
2510B	Specific Conductance	1650	1	1.0	0.86	umhos/c	02/06/09 AE
300.0	Nitrate (as NO3)	18.6	1	0.44	0.07	mg/L	02/06/09 WW
300.0	Nitrite (as NO2)	0.07 J	1	0.33	0.06	mg/L	02/06/09 WW
350.1	Ammonia -N	ND	1	0.1	0.01	mg/L	02/07/09 TP
351.2	Total Kjeldahl Nitrogen (TKN)	0.22 J	1	0.4	0.06	mg/L	02/07/09 TP
4500-H+B	pH	7.68	1			NA	02/05/09 MS
4500-P-B.5-E	Total Phosphorus as P	0.01 J	1	0.02	0.01	mg/L	02/09/09 DK
4500-P-E	Ortho Phosphate as PO4	ND	1	0.06	0.015	mg/L	02/06/09 DK
5210B	BOD	ND	1	3.0	1.5	mg/L	02/05/09 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

Lab Request 228457 results, page 1 of 2



Order #: 968260 Client Sample ID: Laboratory Method Blank

Matrix: WATER

Method	Analyte	Result	DF	EQL	MDL	Units	Date/Analyst
2510B	Specific Conductance	0.59	1	1.0	0.86	umhos/c	02/06/09 AE
300.0	Nitrate (as NO3)	ND	1	0.44	0.07	mg/L	02/06/09 WW
300.0	Nitrite (as NO2)	ND	1	0.33	0.06	mg/L	02/06/09 WW
350.1	Ammonia -N	ND	1	0.1	0.01	mg/L	02/07/09 TP
351.2	Total Kjeldahl Nitrogen (TKN)	ND	1	0.4	0.06	mg/L	02/07/09 TP
4500-H+B	pH	5.18	1			NA	02/05/09 MS
4500-P-B.5-E	Total Phosphorus as P	ND	1	0.02	0.01	mg/L	02/09/09 DK
4500-P-E	Ortho Phosphate as PO4	ND	1	0.06	0.015	mg/L	02/06/09 DK
5210B	BOD	ND	1	3.0	1.5	mg/L	02/05/09 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



ASSOCIATED LABORATORIES
QA REPORT FORM

QC Sample : LR 228417-968112

Matrix: WATER

Prep. Date: 02/05-06/09

Analysis Date: 02/07-08/09

Lab ID#'s in Batch: LR 228457, 228458, 228459, 228460, 228397, 228407, 228508, 228517, 228620, 228606, 228519, 228307, 228261

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	10	200	211	211	100	101	0
SO4	300.0	25	200	231	232	103	103	0
Br ⁻	300.0	ND	100	104	101	104	101	3
NO3	300.0	2.8	100	102.8	102	100	99	1
NO2	300.0	2.4	100	98	98	95	96	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	Result	True	%Rec	L.Limit	H.Limit
CL	300.0	ND	40	40	100	90%	110%
SO4	300.0	ND	40	40	99	90%	110%
Br ⁻	300.0	ND	19	20	97	90%	110%
NO3	300.0	ND	18.7	20	94	90%	110%
NO2	300.0	ND	9.5	10	95	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: 228453-968247

Matrix: WATER

Prep. Date: 02/07/09

Analysis Date: 02/08/09

Lab ID#'s in Batch: 228453, 228454, 228455, 228456, 228457, 228458, 228459, 228460,
228393, 228518

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	ND	12.5	13.5	13.3	108	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

%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	2.22	2.50	89	80%	120%

Test	Method	DIG CHK				
		Result	True	%Rec	L.Limit	H.Limit
TKN	351.2	2.99	3.17	94	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: 228453-968247

Matrix: WATER

Prep. Date: 02/07/09

Analysis Date: 02/08/09

Lab ID#'s in Batch: 228453, 228454, 228455, 228456, 228457, 228458, 228628

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	4.85	4.86	97	97	0

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	4.96	5.00	99	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
LCS REPORT FORM**

QC Sample: Std. Sol

Matrix: WATER

Prep. Date: February 5, 2009

Analysis Date: February 10, 2009

Lab ID#'s in Batch: 228390, 228391, 228392, 228453, 228454, 228455, 228456, 228457, 228458, 228459
228460

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	ND	192	200	96	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 228453

Matrix: WATER

Prep. Date: 02/06/09

Analysis Date: 02/06/09

Lab ID#'s in Batch: LR 228453, 228454, 228455, 228456, 228457, 228458, 228459, 228450, 228518, 228517

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	1.53	1.54	100	101	1
Ortho-Phosphate (as P)	4500-P-E	0.00	0.50	0.50	0.50	100	101	1

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	0.99	1.00	99	80%	120%
Ortho-Phosphate (as P)	4500-P-E	ND	0.32	0.33	99	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

228457

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:

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	
#11044350 Sandia Creek	2/5/09	10:20	1	X			X					X		X					X		X	X
#11044350 Sandia Creek	"	"	1	X			X					X			X				X		X	X
#11044350 Sandia Creek	"	"	1	X			X					X				X			X		X	X
#11044350 Sandia Creek	"	"	1	X			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: Y
VOCs Free of Headspace? Y

13.59

Relinquished by:	Date	Time	Received by:	Time
Tuan A. Nguyen	2/5/09	13:55	<i>Joel Barnard</i>	7:5
Relinquished by:	Date	Time	Received by Associated Labs:	Time

**ASSOCIATED LABORATORIES**

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SAMPLE ACCEPTANCE CHECKLIST**Section 1**Client: Stetson

Project: _____

Date Received: 2-5-09

Sampler's Name: Yes No

Sample(s) received in cooler: Yes

No (Skip Section 2)

Shipping Information: _____

Section 2Was the cooler packed with: X Ice _____ Ice Packs _____ Bubble Wrap _____ Styrofoam
_____ Paper f. 2 None _____ Other _____

Cooler or box temperature: _____

(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>	<u>X</u>
If Yes – were they intact?			
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>		
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 5Was Project Manager notified of discrepancies: Y / N N/ACompleted By: Aha Jim Date: 2-5-09