APPENDIX G.Well Purge Forms



GROUNDWATER LEVEL MEASUREMENTS FIELD DATA SHEET

	PERSONNEL: _	Paul Pa	arrish; E	mily Coor	ringham;	Amanda 1	renton	
	WEATHER CON		TEMP (°F): _	55 F px	urtly Su	My, 5CG	ittered 1a	10 (04/21/09
	DATE:	21/09		·	/	P	AGE	OF
1906 1906 1906 1906 1906	Well Number SCFMW-001 SCFMW-003 SCFMW-004 SCFMW-005 SCFMW-006 SCFMW-001	1314	PID/FID Reading (ppm) 1.3	LEL Reading (% LEL) NA NA O O O	Depth To Water ^A (ft) \$\frac{9}{17.91} 7.49 \$\phi\$ 9.49 \$\frac{17.51}{88.18}	139.76 112.40 153.75	Open Hzs Open Hzs Open of	: \$PPP 0 . HZS OPPM 0 1 0 /20.9 HZS OPPM
				A	ma OU	20,		
					'(-	7703		
_								
L					;			
-	Comments/Observ	vations: <u>⊤</u>	OTAL WELL	DEPTHS		D DURIN	G WRL DO	VELOPMENT
<u>-</u>	Recorded By: (M	mano	de Ire	nt		ac: /mu	le Cunin	Low osla

			Pag	e: 1 of <u>3</u>
Project Name:	RVAAP SCFMW	1st Quarter 2009 GWS	Well ID and Location: SCFMW-CCOI	
Activity:	Purge	□ Development	SAMPLE ID: SCFMW-001-0015-6W DATE/TIME: 04/24/09; 1000	
Personnel: 때신	Amanda	Treaton + Paul Parris		
04/2	24 Amando		Cunningham; SAIC	
Date and Time:	S	start: <u>(14 31 69 1058 104 34 </u> 04	9,0835 Complete: <u>04/21/09,1129 04/24/09</u> - 0955	
Purge Method(s):	☐ Bailer	Bladder Pump	Other:	
Monitoring Method MUHIKHE PI Ahr Ma	d(s):	PID (1,3ppm) P FID (11ppm)	D LEL (NA) I H2S (⊕ppr) □ Other:	No. and installed manage
the Mo	NUTTOR ID:	<u> 195-517599</u> ID: <u>(195-5175</u> 99	ID: <u>(195-5175</u> 99 ID: <u>695-5175</u> 99 ID:	
Total Volume of W	ater Removed (G	allons): 0,75 lb	4/24/09) Total (4/21+4/24) 1.0 gal	

FIELD INSTRUMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION
Water Quality: HORIBA U-22	801008	04/24/09
Water Level Tape: SOUNST 300' WATER LEVEL INDICATOR	5a545	NA
Other: MP-16 Controller + Co	11910	NA
Other: MP-10 Controller	14067	NA
Other: MP-40 AIR COMPRESSOR	10564	NA
Other: Sample Pro Bladder Pump	11854	NA
Other:		A

Recorded By:

amanda Irenton 04/24/09

QA Checked By:

Emily annighmos/ou/x07

Page: 2 of 3

Project Name: RVAAP SCFMW 1st Quarter 2009 GWS Well ID and Location: CFmw-00 213.52 Bottom of Screen 200.52 Top of Filter Pack 203,52Top of Screen Depths (btoc): 88. 18 Water Level BTOC Well Construction: Stainless Steel Other: Casing I.D. (inches) Vt (Total Well-Volume) = Well Volume: Vt = Vc + VfWhere Vt: Total well volume Vc: Riser casing volume Vf: Filter pack volume Vc = (Height of water column) x (Volume of casing per foot) Vf = (((Saturated thickness of filter pack) x (Volume of borehole per foot)) x (0.3) - ((Saturated thickness of filter pack) x (Volume of casing per foot)) TTr2h × 7.42 = THE VOI in gallons $TT \left(\frac{.125}{12}\right)^2 h \times 7.42 =$.0025 × h = .0025 x 125.34 = 0.31gal = TT.18L 04/21/09: 45 F; scattered rain; windy; overcast Site Conditions: 04/24/09; 70-80'F; Sunny; clear MH24109 - Prograte of ~35ml/min. able to increase Field Observations: Still produmatic used both D.45 um Filter Used **Deviations from Approved SAP:** MOU/24/07 Recorded By: QA Checked By:

Page: 3 of 3

Project Name: SCF MW GWS 1St Qualter 2009

Well ID and Location: SCFmw - OOI

	-		- TOTAL	r			5					
Dat	te	Time	Callons Removed	Temp (oC)	Specific Cond. (mS/cm)	pH (std. unit)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	eH (mV)	Total Gallons Removed	Total Well Vols Removed	Comments
4/2	2 10	1058	Φ	13.18	Φ.395	8,64	109	8.94	12	<u> 4</u> 0.25	Ø	Initial
<u> </u>		1129	Ι.Φ	13.17	0.405	8.90	206	8.49	3	<i>18</i>	41	STOP PURGING-ITEADURT ISSUES
				and the same and the same of t			and the second s	and the second of the land of the second of				
14/2	409	ø835	Φ	10,66	0,9\$3	4.74	121.0	12.03	+128	(1)	∠1.Ø	mihal m4/24. ~ 88.18'Bra
		0845	0.35	14.82	0,483	5.91	325	3.45	- 39	0.36	41.0	Duge rate ~35mL/min
		Φ 955	0.7	10.67	0,484	6.02	194	3,20	- 51	0.7	41.0	water is clear to a palerusty orange
		0905	1.05	11.03	0.481	6.64	131	1.54	-55	1.05	41.0	position y Ground
		0910	1.225	11.14	0,481	6.04	287	2.49	-49	1.225	Ι, φ	
	_	0915	1,4	11.31	0.478	5,95	199	a .୫ର	- 31	1,4	42.0	WL@ 88 44'
	_	0926	1.575	11.80	06,473	6.82	363	3.13	-9	1.575		
	_	ф935	2.1	13.45	0,454	5.81	61.3	10.94	- 8	2.1	42.0	PESET PLOW CUP - WAS LEAKING - CHANGED DO LEVEL.
		0 940	2.275	13.07	0,480	5,63	8.40	7.10	21	2.275	-2.0	water is clear
-	\dashv	0945	2.45	13.24	Ф. 4 77	5.51	42.8	5.77	37	2.45	2	water level @ 88.22'BTOC
-		0950	2.625	13.46	0,477	5.45	34.6	5.63	46	2.025	>2	30.00
		0955	2.8	13.71	0.476	5.40	43.5	5.58	51	2.8	72	Parameters Stable-Sample
									***		AND MANY TO MINE TO SERVE A SERVICE AND AS INC.	Jan

Recorded By:

Comanda Sento 14/24/09

QA Checked By:

Emily Curinglan of 610/0)

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Project Name:	RVAAP SCFMW 1st Quarter 2009 GWS Well ID and Location: SCFmw - 002	
Activity:	Purge Development SAMPLE 1D: SCFMW-002-0016-6W+SCFMW-002-0025	5-Gi
Personnel:	Amanda Trenton + Paul Parrish (SATC)	
Date and Time:	Start: 042109; 19 Complete: 042109; 2000	
Purge Method(s):	☐ Bailer ☐ Bladder Pump ☐ Other:	
Monitoring Method Multiple PLUS	(95-517599) 1 Other:	
MR MONIT	1D: <u>(295-5175</u> 99 ID: <u>495-5175</u> 99 ID: <u>NA AM</u> ID: <u>(195-5175</u> 99 ID:	
Total Volume of W	Vater Removed (Gallons): 1. D. GAL	

FIELD INSTRUMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION
Water Quality: HORIPA U-22	501030 5010084m	04/21/09
Water Level Tape: SOLINST 300 WATER LEVEL INDICATION	59545	NA
Other: MP-10 CONTROLLER	14007	NA
Other: MP-40 AIR COMPRESSOR	145704	M
Other: SAMPLE PRO BLADDER PUMP	11854	WH
Other:	do	
Other:	1114 041211 09	

Recorded By:

amanda Irento

QA Checked By:

il Cunishon 05/0409

Page: 2 of 3 Well ID and Location: SCFmw-002 Project Name: RVAAP SCFMW 1st Quarter 2009 GWS 139,18 Top of Screen 130,18 Top of Filter Pack 149, 18 Bottom of Screen Depths (btoc): 17,97 Water Level Well Construction: Stainless Steel Other: Casing I.D. (inches) Vt (Total Well Volume) = Well Volume: Vt = Vc + VfWhere Vt: Total well volume gallons Vc: Riser casing volume Vf: Filter pack volume Vc = (Height of water column) x (Volume of casing per foot) Vf = (((Saturated thickness of filter pack) x (Volume of borehole per foot)) x (0.3) - ((Saturated thickness of filter pack) x (Volume of casing per foot)) Tr2h x7.42 = the Pvol in gallons TT (-125)2 h x 7.42-.0025×h -.0025 x 131.21 = 0.328 gallons = Site Conditions: -90-100mL/min. Pump placement depth ~ 144FT BTOC (midscreen) Field Observations: metals Daused rotiol air compressor outilog Collected Deviations from Approved SAP: MIE manda Recorded By: QA Checked By:

Page: <u>3</u> of <u>3</u>

Project Name: RUAAP SCF MW GWS 1St QUarter ZDD9 Well ID and Location: SCFmw-002

				Specific		<u> </u>	Dissolved	<u> </u>	Total	T-4-1	
Data	-	Gallons	Temp	Cond.	рН	Turbidity	Oxygen	еH	Gallons	Total Well Vois	
Date	Time	Removed	(oC)	(mS/cm)	(std. ur;it)	(NTU)	(mg/L)	(mV)	Removed	Well Vols Removed	Comments
Ф4/21/09	1410	40.25		0.696	40.00	41.9	6.49	107	20.25	ϕ	Initial; 100 mc/min purgerate
	1425	1.5L	11.54	0.661	6.82	1.2	0.30	95	1.51	1	Clear
	1435	12365	11.77	0.001	6.89	frasning (0.0	0.00	89	2.5L	2	
	1445	1_	12.04	0.658	6.95	Hashing Q.O	0.00	85	3.5L		
V	1450	054	12.13	0.057	6.97	hashing O.O	0.00	83	4.04	>3	Darameters Stable - Sample
											seasonic et o globble semple
										Andrew Control of the	
							, , ,	19			
					•	~	Helly	77			
					A						
					/						
											CPM24/6: 100psi

Recorded By:

amanda Trento 04/2/109

QA Checked By:

mily anninghow of 100/09

Page: 1 of <u>3</u>

Project Name:	RVAAP SO	CFMW 1st Quarter 2009 GWS	Well ID and Location: SCFmw-003				
Activity:	Purge	□ Development	Well ID and Location: SCFMW - 003 SMMPLE ID: SCFMW 003-0017-6W DATE + TIME: 04/23/09; 1725				
Personnel:	Amai	nda Trenton & Emily	Cunningham (SATC)				
Date and Time:		Start: <u>04/23/09</u> ; 1028	Complete: <u>(14/23/09)</u> 1830				
Purge Method(s):		Bailer	Other:				
Monitoring Method MultiRAE	d(s):	PID (0.3pm) P FID (0	ppm) ∇ LEL (0%) ∇ Red (0 ppm) Γ Other:				
AIR MON	-	ID: <u>(195-5175</u> 99 ID: <u>(195-5175</u> 9	19 ID: <u>095-51759</u> 9 ID: <u>095-5175</u> 99 ID:				
Total Volume of W	ater Remo	ved (Gallons):	GAL				

FIELD INSTRUMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION
Water Quality: HDRIBA U-22	8\$1908	04/23/09
Water Level Tape: Sounst 300' Water Level meter	52545	M
Other: MP-10 Controller	140107	NA
Other: MP-40 AIR COMPRESSOR	10564	NA
Other: SAMPLE PRO BLADDER PUMP	11854	NA
Other:		
Other:	AM OYBZAG	

Recorded By: amanda Sento

QA Checked By: Emily Curringlam 05/46/09

Project Name:	RVAAP SCF	MW 1st Quarter 2	009 GWS	Well ID and	Location:	Emw-COC	Page: 2 of <u>2</u>
Depths (btoc):	129.70	op of Screen	139. DBottom of Screen	n <u>127.2</u>	Top of Filter Pack	<u>7,49</u> Water L	evel
Well Construction	·	evc EH40 1	Stainless Steel	Other:	- Alberta	_ 2	Casing I.D. (inches)
Well Volume:	Vt = Vc + Vf	Where	Vt: Total well volume Vc: Riser casing volume Vf: Filter pack volume	Vt (Total ₩	^{bγγ} jVolume) =	0,33	gallons
	Vf = (((Saturat	red thickness of filter T(2h x7, T(12)2 h T(0025 x	h =	ume in g	allons	r pack) x (Volume of casi	ing per foot))
Site Conditions:	<u> </u>	55 F, SUN	x 132.21 = 0.33 (bal = 17	25L		
Field Observations	<u>U</u>	SED FOR	Pump placed r COLLECTION DE DPOWN EXHIBI	= METALS	SAMPLE,	TBTOW); ON PURGE RAT	45mm FILTER TE OF NITSMYMI
Deviations from A	pproved SAP	: LOVE	Kiliz lor				
Recorded By:	Aman	da <u>Ne</u>	nton 04/23/09	QA Checked	вы: От	y Cunin	Thore oslow/40

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Project Name: RVAAP SCF MW GWS 1St Quarter 2009 Well ID and Location: SCFmw 003

Date	Time	Liters Gallons Removed	Temp (oC)	Specific Cond. (mS/cm)	pH (std. unit)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	eH (mV)	Total Gallone Removed	Total Well Vols Removed	Comments
4 2309	14631	1.25	13.14	0.562	7.41	35.6	8.7a	+54	1,25	1	
	1641	1.25	11,91	0.562		214.6	Ф.2ф		2.5	2	1428 STHETED INITED Claudy VITS.
	1651	1.25	11.85	0.559	6.74	75.2	Ø. ØØ	-35	375	3	
	1701	1.25	11,77	0.559	6.69	18.7	(b. pap	- 3Lp	5	4	WATER LEVEL 7.50 BTOC
<u>V</u>	1721	2.5	11.71	0.5cp	6.62	Ф.Ф	Q.QQ	-39	7.5	(0	PARAMETERS STABLE - SAMPLE
											Spirit CC
						7	1				
							DAY (H.,	٠		
								17 Sta	9		

Recorded By:

QA Checked By: Cuminelian \$5 06/09

Page: 1 of <u>3</u>

Project Name: RVAAF	SCFMW 1st Quarter 2009 GWS	Well ID and Location: SCFmw - 004
Activity: Furge	C Development	Well ID and Location: SVMW - OOA SAMPLE ID: SCFMW - OO4 - OO18 - GW + SCFMW - OO4 - C DATE + TIME: OH122109; 1240 (LAB SPLIT
Personnel:	NDA TRANTON + FMILY CUNNI	
	11 100 17 to 100	
Date and Time:	Start: 04/22/09 11 8 5	Complete: <u>04/22/09</u> ; 1415
Purge Method(s):	☐ Bailer ☐ Bladder Pump	Other:
Monitoring Method(s): MuhiRれをPiしら	FID (D. ppm) FFID (Opm)	F LEL(ゆる) F Red (Oppm) 「Other:
AIR MONTE	D: <u>(195-51760</u> 00 ID: <u>(195-5170</u> 000 ID:	<u>095-5/70</u> 46 ID: <u>095-5/7</u> 066 ID:
Total Volume of Water Re	moved (Gallons): 1, U.S. GAL	

FIELD INSTRUMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION
Water Quality: HORIBA U-ZZ	501026	04/22/09
Water Level Tape: SOLINST 300' WHITER LEVEL METER	52545	NA
Other: MP-15 CONTROLLER + CO7	11910	NA
Other: MP-10 CONTROLLER	14067	NA
Other: MP-4(1) AIR COMPRESSOR	10504	NA
Other: SAMPLE PRO BLADDER PUMP	11854	NA
Other:		

Amanda nentro 04/20109 QA Checked By: Emily Curinglism ostolet 99

				Page: 2 of <u>3</u>
Project Name:	RVAAP SCFMW 1st Quarter 200	09 GWS	Well ID and Location:	SCFnw-004
Depths (btoc):	102.40 Top of Screen	112.40 Bottom of Screen	97,40 Top of Filter Pa	ck Water Level
Well Construction	T PVCH 40 F	Stainless Steel	Other:	Casing I.D. (inches)
Well Volume:	Vt = Vc + Vf Where	Vt: Total well volume Vc: Riser casing volume Vf: Filter pack volume	Vt (Total Wel l Volume) =	
	Trzh T (!	lume of casing per foot) pack) x (Volume of borehole per foot)): $(x, 7, 42 = +vbing = v0)$ $(x, 7, 42 = v)^2 \times h \times 7, 42 = v)$ $(x, 7, 42 = v)^2 \times h = v$	x (0.3) - ((Saturated thickness of June in gallons	f filter pack) x (Volume of casing per foot))
Site Conditions:		0025 × 112.40 = 0.2	8 gal = 1.06	<u></u>
Field Observation	MP-15 INSTE	, , , , , , , , , , , , , , , , , , ,	TORIBA PH SENSO	+ Star+ in Cold (A.M.) USED CONSISTANT WITH ITSELF-
Deviations from A	AFTER PURGI Should be of Metals so		UNCTIONING - RIM	DARD - ATTEMPTED RECALIBRATION DUED TRUM SERVICE - PH reactings Decousty high. O.45mm filter used for
Recorded By:	amande !	renton	QA Checked By:	rily Cuninglians \$5/06/09

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Project Name: RVAAP SCF MW GWS 1St Quarter 2009 Well ID and Location: SCFmw-004

Date	Time	Gallons Removed	Temp (oC)	Specific Cond. (mS/cm)	pH (std. unit)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	eH (mV)	Total Gallons Removed	Total Well Vols Removed	Comments
04/22/09	1146	0.25	9.82	1.46	11.45	Ø . Ø	2.18		0.25		
	1155	1.50	10.24	1.43	12.47	* Ø. Ø	9.00	-121	1.75	1.75	ciear * Do master plashing o. 0.
	1205	1.50	10.18	1.42	12.57	* O. O	0.09	-126	3 ,25	3,25	
1	1215	1.50	10.17	1,42	12.60	Φ. Φ	φ. φφ	- 127	4.75	4.75	
\mathbb{V}	1225	1.5¢	9.78	1.42	12.44	φ, φ	φ. Φ	-131	0.25		Parameters stable - Sample
											TAIL STATE STATE
											,
					c.						
							Ass				
						,	Sing O	42/09			
								1 - 10			

Recorded By:

amanda Mon

QA Checked By:

Page: 1 of <u>3</u>

Project Name:	RVAAP SCFM	W 1st Quarter 2009 GWS		Well ID and	Location: SCFM ID: SCFMW-DOS	1W-005	_
Activity:	Purge	□ Development		SAMPLE DATE!	TIME: 04/23/09; ()	-0019-GW 1940	+ S.F. G.C. 204-0023 ER 04/23/09;0775-
Personnel:	TMANDE	A TRENTON +	EMILY	CUNNING	HAM; SAI		_
			***				N
Date and Time:		Start: 04/23/09.	0845	Complete:	04/23/09	1100	
Purge Method(s):	Г Bai	iler 🔽 Bladder	Pump	Cother:	, 		
Monitoring Method MUHIRAE K AIR MO	م اراد	ID: <u>095-517</u>	. , ,		П Наб (Дррк)		
Total Volume of W	/ater Removed	(Gallons):	2.1 GA	t <u>L</u>			

FIELD INSTRUMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION
Water Quality: HORIGH U-22	801408	04/23/09
Water Level Tape: SOLINST 300' WATER LAVEL METER	52545	NA
Other: MP-14 CONTROLLER	14067	NA
Other: MP-40 AIR COMPRESSOR	10504	NA
Other: SAMPLE PRO BLANDER PUMP	11854	M
Other:	AMT 04/23/19	
Other:	WY1625709	

Recorded By:

amanda Scentin

QA Checked By:

Emily anninghow ostorolos

Page: 2 of 3 SCFMW-005 **Project Name:** RVAAP SCFMW 1st Quarter 2009 GWS Well ID and Location: 138,75 Top of Screen 9.49 Water Level BTOC 153.75 Bottom of Screen Depths (btoc): 130 Top of Filter Pack Well Construction: Stainless Steel Casing I.D. (inches) Other: Well Volume: (0.310 Vt = Vc + VfWhere Vt: Total well volume Vc: Riser casing volume Vf: Filter pack volume Vc = (Height of water column) x (Volume of casing per foot) Vf = (((Saturated thickness of filter pack) x (Volume of borehole per foot)) x (0.3) - ((Saturated thickness of filter pack) x (Volume of casing per foot)) Tr2h x 7.42=tubing volume in gailons .0025 xh = .0025 x 144.26 = 0.36 GAL = 1,36 LITERS Site Conditions: EQUIPMENT RINSATE ASSOCIATED WITH SCFMW-QQ5 : BLADDER PUMP PLACED Field Observations: MID SCATEN ("1410.25 FT BITK); O.45 MM FICTER USED W/ METALS SAMPLE ONLY PURGE RATE OF ~150 mulmin - no drawdown exhibited Deviations from Approved SAP: Durge rates >100ml/min can used if no exhibited no deviations Recorded By: QA Checked By: Unanchan

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Project Name: RUMAP SCFinu GWS 1st Quarter 2409

Well ID and Location: SCF mw - 005

Date	Time	LITERS Gallens Removed	Temp (oC)	Specific Cond. (mS/cm)	pH (std. unit)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	eH (mV)	Total Gallons Removed	Total Well Vols Removed	
4/23/0	ΦΡΦΦ	2L	8,91	0.885	5.81	291.0	331	19	2L	Ф	Initial: ~150mVmin pagerate
	क्ताक	1.5	8.70	රා ශය	6.20	231.φ		-23	3,5	2.5	brown turned
	1920	1.5	8.73	ø,853	6.26	194.0	0.09	-29	5.0	3.7	
	0930	1.5		0.843		167.4	0.00	-30	6.5	4.75	
	4944	1.5	9.48	0.836	6.29	1260	Ø.00	-28	8.0	5.9	PARAMETERS STABLE-SAMPLE 1945 FIRMHZU RUZL: 9.49 3700
							A				
							Mo	*/~			
								4/23/4	9		
						j					CPM 3 14/6

Recorded By:

amanda Trento

QA Checked By:

Mily Cuningham ostale

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Project Name:	RVAAP SCFMW 1st Quarter 2009 GWS	Well ID and Location: SCFMW - QQQ
Activity:	Purge	SAMPLE ID: SCFMW-006-0020-GW + MS/MSD DATE + TIME: 04/03/09; 13/5
Personnel:	Hmanda Trenton + Emily Cur	ningham (SAIC)
	MI	
Date and Time:	Start: 04/23/09; 1229	Complete: 04/33/09: 1530
Purge Method(s)	, Diaddol i dilip	Other:
Monitoring Metho MUHIRATE ALD		LEL (0%) F + (0pm) F Other: 35-517599 ID: 095-517599ID:
•	Water Removed (Gallons):	-

FIELD INSTRUMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION
Water Quality: HORIBA U-22	801008	04/23/09
Water Level Tape: SOLINST 300' WATER LOVER METER	52545	NA
Other: MP-10 CONTROLLER	14007	M
Other: MP-40 AIR COMPRESSOR	10564	NA
Other: SAMPLE PRO BLADDER PUMP	11854	M
Other:	Ant (04/23/03	
Other:	711. 1 W7100/W7	

Recorded By:

amande Trento

QA Checked By:

mily Currighan 05/86/09

							F	Page: 2 of 3
Project Name:	RVAAP SCFMV	V 1st Quarter 200	9 GWS	Well ID and Location	on: <u>SG</u>	Emw-	000	
Depths (btoc):	75.75 Top	of Screen	85,75 Bottom of Screen in Colleged during		Filter Pack	<u>17.51</u> w	ater Level	
Well Construction	" 🗶 🔀	H49 F	Stainless Steel	Other:			2_Casing	I.D. (inches)
Well Volume:	Vt = Vc + Vf	Where	Vt: Total well volume Vc: Riser casing volume Vf: Filter pack volume	Vt (Total Well Volu	ume) =		gallon	s
	Vc = (Height of wa Vf = (((Saturated t	thickness of filter particular pa	Time of casing per foot) $47.42 = 100$ $47.42 = $	Tume In gallo	15	pack) x (Volume	of casing per foot)	·)
Site Conditions:	<u>55</u>	D'F SUNY	25 x 68,24 = 0,17	GAL = U.U.	5 L 			
Field Observations	m		0 (~80, 15 FT B		BLADO FILTER Trawdo	USED OI		s SAMPU-
Deviations from A	pproved SAP:	NON	A04 73 10°1					
Recorded By:	_ Qmar	nda In	entr	QA Checked By:	- Emi	hy a	minghe	m) oslowlog

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Project Name: RUMAP SCF MW GWS 1ST Grafter 2009 Well ID and Location: SCFMW-0006

Date	Time	Callens Removed	- Temp (oC)	Specific Cond. (mS/cm)	pH (std. unit)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	eH (mV)	Total Gallens Removed	Total Well Vols Removed	Comments
04/28/04	1240	4.52.0	10,93	Q.455	7.01	339	1.71	- WФ	2.0	3.4	STACTED AT 250mL/min: initial
	1250	2, Ф	14,70	0.449	6.91	167	0,00	-73	4,\$	9.1) JOSE (SIMILITY MINIO
	135%	2.0	10.66	0.449	6.88	48. Ø	Ø.00	-76	6.0	9.25	WATER WITC: 17,55 BTOC
V	1370	ə. Ø	10.73	0419	10.89	3, 2	0.00	-81	8.0	12.3	PARAMETERS STABLE - SAMPLE
		_									
									·		
			\rightarrow								
						A	,				
	-							** / ~	3		
							<u> </u>	7 623	42		
									j		_

Recorded By:

amanda Sunt

QA Checked By:

Emiles Chrishmaslow 100

		Page: 1 of <u>3</u>
Project Name: RVAAP SCFmw 2nd Quarter 2009 GWS	Well ID: SCF	mw - 001
Activity: ☐ Purge ☐ Development Sample ID:	:SCFmw-001-0026-GW	
Personnel: EMILY CUNNINGHAM: AMANDA TRANSON;		
Date and Time: Start: 07/14/09 1140	Complete: <u>\$\phi7/1+/\phi\$\$</u>	1. 1848
Purge Method(s):	Other:	
Monitoring Method(s):	T H2S T CO	Other:
ID: ID:	ID:	ID:
Initial Reading		
Total Volume of Water Removed (Gallons):	LONS	
FIELD INSTRUMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION
Water Quality: HORIGA U-22	2012031	07/14/09
Water Level Tape: Solini St 101 300' WATER LEVEL	43850	NA
Other: Solinist Bladder Pump Controller	16213	NA

amanda Sientin 07/14/09 Recorded By:

Other: GED 1.75" x 30" Bladder Pump

Other:

Other:

Other:

QA Checked By:

1513Ø

Page: 2 of 3

Project Name: RVAAP SCFmw 2nd Quarter 2009 GWS SCFmw-001 Well ID: Depths (btoc): 203 Top of Screen Bottom of Screen Top of Filter Pack DEPTH TO BOTTOM Well Construction: Stainless Steel Other: Casing I.D. (inches) Well Volume: Vt = Vc + VfWhere Vt: Total well volume Vt (Total Well Volume) = NA gallons Vc: Riser casing volume Vf: Filter pack volume Vc = (Height of water column) x (Volume of casing per foot) Vf = (((Saturated thickness of filter pack) x (Volume of borehole per foot)) x (0.3) - ((Saturated thickness of filter pack) x (Volume of casing per foot)) **Site Conditions:** Field Observations: As Dumping continued - it appears That over time decreased rate tended to **Deviations from Approved SAP:** NONE-PARAMETERS STABLE PER FUSAP PRIOR TO SAMPLING

Page: 3 of 3

Project Name:

RVAAP SCFmw 2nd Quarter 2009 GWS

Well ID:

SCFmw-OPI

				Specific			I			DEPTH TO WA	
_		Liters	Temp	Cond.	pН	Turbidity	Dissolved Oxygen	eH	Total Liters	Total Tubing Vol	
Date	Time	Removed	(oC)	(mS/cm)	(std. unit)	(NTU)	(mg/L)	(mV)	Removed	Removed	Comments
07/14/09	1149	1	14.9	0.649	6.56	305	5.49	-11	11	89.97	Initial ~250mL/min
	1154	1.25	14.8	0.605	(v.\$8	268	2.74	Ø	2,25	89,98	
	1159	1,25	14.0	0.603	6.07	380	2.35		3.5	89.97	
	1244	1,25	13.9	0.607	6.06	269	1.94	-4	4,75		Fluctuates Hun 905' + 87.6' W/pumping
	1209	1.25	15,0	0.626	600	294	1.13	9	6.4		1213-AIR IN LINE-WAIT UNTIL IT HAS
	1340	1.25	14.4	0.578	EO. [539	5,53	-32	7.25		RESTART AFTER TROUBLES HOOTING PUMP
	1345	1.25	13.7	0.612	41.0	557	2.06	-27	8.5		
	1350	1.25	13.6	0.620	6.54	442	O.8ø	-25	9.75		difficulties w/ air pressure bluon 1350-1405
	1405	1.25	15.6	0.617	64.0	514	0.82	-27	11.0	89,97	
	1410	1.25	16.4	P.600	6.58	410	0,73	-33	12.25		
	1415	1.25	17.6	O.665	6.72	353	Ø8.0	ئی م	13.5		Danp is pumping@rate @50mymin
	142φ	1.25	17.8	0.621	6.85	371	0.97	-49	14.75		YIII
	1425	1,25	18.5	0.607	6.90	319	0.95	-49	16.0	,	tubing in sun
	1430	1.25	16.9	0.622	6.93	328	0.99	⁻ 53	17.25		J
	1435	1,25	17.3	0.618	(0.94	418	0.93	-55	18,5		punito is pumping <250 mymin
	1440	1.25	17.0	0.617	6,94	366	0.91	-55	19.75	89.96	PARAMETERS STARLE

Recorded By:

amanda Sienton 07/14/09

QA Checked By:

Emily Curringhan \$7/21/00

Page: 1 of 3

Project Name: RVAAP SCFmw 2nd Quarter 2009 GWS	Well ID: SCF	nw-602		
Activity: ☐ Purge ☐ Development	: SCFmw-002-0028-GW	Date/Time: 1950 07 1 10/69		
Personnel: EULLY CONNINGHAM PAUL PARE	-0188-6F -pp29-6F			
Date and Time: Start: 1933 . 07/110/09	Complete: 7 0 2 6 1	57/1 7 /69		
Purge Method(s): □ Bailer □ □ Bladder Pump	Other:			
Monitoring Method(s):	□ H2S □ CO	Cther:		
ID:	ID:	ID:		
Initial Reading NA NA	NA NA	NA		
Total Volume of Water Removed (Gallons):	Management of the second of th			
FIELD INSTRUMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION		
Water Quality: \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	0612931	67/17/69		
Water Level Tape: SOLINIST 161-360	43850	NA		
Other: Sotinist Bladder Pump Controll		NA		
Other: QED 1,75" x 36" Bladder Puno2	15130	NA		
Other:	110/69			
Other:				
Other:				

Recorded By:

mily Currighon Michag QA Checked By: Amande Setter 01/21/09

Page: 2 of 2

SCFMW-602 **Project Name:** RVAAP SCFmw 2nd Quarter 2009 GWS Well ID: $3\omega_{-}$ Top of Filter Pack 30 Top of Screen Depths (btoc): Bottom of Screen Well Construction: PVC Stainless Steel Casing I.D. (inches) Other: SCH YO PUC Well Volume: Vt = Vc + VfVt (Total Well Volume) = Where Vt: Total well volume gallons Vc: Riser casing volume Vf: Filter pack volume Vc = (Height of water column) x (Volume of casing per foot) Vf = (((Saturated thickness of filter pack) x (Volume of borehole per foot)) x (0.3) - ((Saturated thickness of filter pack) x (Volume of casing per foot)) **Site Conditions:** Field Observations: NONE **Deviations from Approved SAP:** Recorded By: QA Checked By:

Page: 3 of 3

Project Name:

RVAAP SCFmw 2nd Quarter 2009 GWS

Well ID:

SCFmw-6002

Date	Time	Liters Removed	Temp (oC)	Specific Cond. (mS/cm)	pH (std. unit)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	eH (mV)	Total Liters Removed	Total Tubing Vol Removed	Comments
7/16/09	\$1933	.25	12.9	0.699	6.99	145	0.09	- 63	.25		Initia 19.87, claudy 250m Play
	1937		12.7	0.679	6.77	85.7	Φ.ΦΦ	-64	.50		
	1942		12.7	Φ.669	6.47	47.00	Ф. ф ф	-74	,75		
	1947	4	12.5	9.659	6.66	Sle.8	ø. 4 9	-75	1.0		SAMPLE @ 1950 perameters state
					- EC	, ,		*******			
						J.F.	# (pg				
							77				
			<u> </u>								
	7.4.WILLOW										
			· · · · · · · · · · · · · · · · · · ·								

Recorded By:

Emily Conighan 4/20/09

QA Checked By:

amanda Sento-Odrilog

Page: 1 of 3

Project Name: RVAAP SCFmw 2nd Quarter 2009 GWS	Well ID: SCFM	w- 003
Activity: Purge	: SCFmw-0036 - 0030 Gn	Date/Time: 1800 07.16.09
Personnel: EMILY CHONINGHAM PAUL PARRICH	-	
Date and Time: Start: 07/16/09 . 1736	Complete: 1823 : 07	116/09
Purge Method(s): ☐ Bailer ☐ Bladder Pump	Other:	
Monitoring Method(s):	F H2S F CO	Other:
ID: ID:	ID:	ID:
Initial Reading NA NA	NA NA	NA
Total Volume of Water Removed (Gallons):		
FIELD INSTRUMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION
FIELD INSTRUMENT Water Quality: HORIBO V-22	SERIAL NUMBER	DATE OF LAST CALIBRATION
Water Quality: Hoerso V-22	2012031 43850	07/14/09
Water Quality: HORIBO V-22 Water Level Tape: SOUNIST 101-300	2012031 43850 Moller 16213	07/14/09 NA
Water Quality: HORIBO V-22 Water Level Tape: SOUNIST 101-300' Other: SOUNIST 101-300' Other: SOUNIST 101-300'	2012031 43850 Molle (16213	07/16/09 NA
Water Quality: Horne V-22 Water Level Tape: Sounist 101-300' Other: Solinist Let Bladder Pump (on Other: Solinist 1.75" y 34" Bladder Pump	2012031 43850 Moller 16213	07/16/09 NA

Recorded By:

Emily Curighon 07/17/09

QA Checked By:

amande Scent 07/2/109



Page: 2 of 3

							i age. Z oi 🚅
Project Name:	RVAAP S	CFmw 2nd Quar	er 2009 GWS	Well ID:	SCF	nw-0003	
Depths (btoc):	129	_Top of Screen	139Bottom	of Screen 127	_Top of Filter Pack	8.53 Water Lo	
Well Construction	: 7	PVC	Stainless Steel	Cother:	***************************************	<u> 2</u>	Casing I.D. (inches)
Well Volume:	Vt = Vc + V	'f Whe	re Vt: Total well volume Vc: Riser casing volu Vf: Filter pack volum	ime	Well Volume) =	NA	gallons
			x (Volume of casing per foot filter pack) x (Volume of bore		urated thickness of filter	pack) x (Volume of casing	g per foot))
Site Conditions:		seinny,	grass has gra	un IVI IVI seed	ied areas +	; 80°F	
Field Observation	s:	JD OF W	ELL 139.65',	Grass arand	Well has	grown in	back,
				EC CZ/IVE	(p.,		
Deviations from A	pproved S	AP:	DONE GC				
			/		_		
Recorded By:	Emis	of Cunn	rghan office	QA Chec	ked By: $\underbrace{\partial m}$	ranch Sre	at 07/210

Page: <u>3</u> o <u>3</u>

Project Name:

RVAAP SCFmw 2nd Quarter 2009 GWS

Well ID:

SCFmw-003

Date	Time	ートリング Alemoved	Temp (oC)	Specific Cond. (mS/cm)	pH (std. unit)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	eH (mV)	Total Liters Removed	Total Tubing Vol Removed	i l
07/10/09	1730				5.70						Comments (U.S. W.)
7/16/09	1735	200mL	13.1	0.635	7.88	296	3,48	-54	.2Φ		Initial we 8.78' char
	1740	250mL		0.523		ł	Ø.00	-43	,45		
	1745	250	13.3	į	6.5Le		Φ.ΦΦ	-43	.70		
	1750	350	129	(6.48		Ø. QQ	-53	1.05		350mL
4	1755	350	12.8	φ. ≤ 93	6.41	309	φ. α Φ	-47	1.50		SAMPLE TIME 1840
											Shorts were read
				/							
						2	3 .				
								elps			
								,			

Recorded By:

Smily Currighan 7/11/1007

QA Checked By:

Smande Duth 07/21/09

Page: 1 of _3 Well ID: SCFmw-004 **Project Name:** RVAAP SCFmw 2nd Quarter 2009 GWS Purge F Development Sample ID: SCFmw-004-0032-GW Date/Tin SCFmw-004-0032-GF + MS/MSD

EMILY CUNNINGHAM + AMANDA TRENTON SCFmw-004-0033-GF Activity: Purge Date/Time: 07/15/09 : 1545 Personnel: Complete: 07/15/09:1708 Date and Time: Purge Method(s): ✓ Bladder Pump Bailer-Monitoring Method(s): PID LEL . H2S √ CO Other: Initial Reading 2.4 GAL Total Volume of Water Removed (Gallons): FIELD INSTRUMENT **SERIAL NUMBER DATE OF LAST CALIBRATION** 07/15/09 Water Quality: 12031 Water Level Tape: < +3850 Bladder Pump Controller 10213 75" x36" Bladder Pump NA Other: Other: Other:

Recorded By:

manda Scentin 07/5/09 QA Checked By: Smile

Page: 2 of 3

Project Name:	RVAAP SC	Fmw 2nd Quarter 20	09 GWS	Well ID:	SCFmw-004
Depths (btoc):	102.4	Top of Screen	112.4 Bottom of Screen	97.4 Top of Filter F	Pack <u>0.21</u> Water Level 112,47 DEPTH TO BOTTOM
Well Construction:	V	PVC	Stainless Steel	Other:	Casing I.D. (inches)
Well Volume:	Vt = Vc + Vf	Where	Vt: Total well volume Vc: Riser casing volume Vf: Filter pack volume	Vt (Total Well Volume) =	gallons
	Vc = (Height Vf = (((Satur	t of water column) x (Vo ated thickness of filter p	lume of casing per foot) back) x (Volume of borehole per foot)) x	(0.3) - ((Saturated thickness	of filter pack) x (Volume of casing per foot))
Site Conditions:		80 F ; Sun	ny m		
Field Observations	:: .	· · · · · · · · · · · · · · · · · · ·	1 1 1	growth.	004 + abandoned borehole
Deviations from Ap	pproved SA	NP: NOW	April 1		
Recorded By:	ama	nda Sne	tm 07/15/09	QA Checked By:	mily Curringlan orkile

Page: 3 of 3

Project Name:

RVAAP SCFmw 2nd Quarter 2009 GWS

Well ID:

SCFMW-004

r	r	r	1	T		y				Flow onte	
		Liters	Temp	Specific Cond.	pН	Turbidity	Dissolved Oxygen	еH	Total Liters	Total Tubility Vol	
Date	Time	Removed	(oC)	(mS/cm)	(std. unit)	(NTU)	(mg/L)	(mV)	Removed	Removed	Comments
07/15/09	1528	3L	14,3	1.19	6.85	186	0.45	-87	3		initial; rottenlegg suttur odor
	1533	24	14.2	1.15	6,59	82,3	0.00	- BO	5		no drawdown exhibited
	1538	24	14.1	1.14	6.53	49.9	Ø.00	-89	7		CAMPINO CAMPINO
	1543	2L	14.4	1.13	6.53	4.5	0.00	-91	9	V	Parameters Stable - collect samp
		MD	OTIST	\$ 758	6.30	143-	MD-				0.0000000000000000000000000000000000000
			11.7								
					/						
					VIIII						
							-77	787	H5/12		
		******							715/0	3	
								,			
<u> </u>	1						}		1		

Recorded By:

amanda Trento 07/15/09

QA Checked By:

Emily Cunninghas 04/21/09

Page: 1 of 3 Well ID: SCFmw-005 **Project Name:** RVAAP SCFmw 2nd Quarter 2009 GWS Sample ID: SOFmw - 005-00 Activity: Purge Development Date/Time: 07/10/09 1255 Personnel: MIKE DENALO Date and Time: Complete: MILLIOG. 1100 Purge Method(s): Bailer Bladder Pump Cther: Monitoring Method(s): LEL F PID F H2S CO Cther: NA NA NA Initial Reading NA 1.0 GAL Total Volume of Water Removed (Gallons): FIELD INSTRUMENT **SERIAL NUMBER DATE OF LAST CALIBRATION** HORIBA V-22 07/16/0S 201203 Water Quality: 01-3001 SOLINIST Water Level Tape: 4385 D NA Solinist Bladder Pump Controller 16213 NA Other: 5130 NA Other: Other: Other: 4/10/09

QA Checked By:

Recorded By:

Page: 2 of 3__ **Project Name:** RVAAP SCFmw 2nd Quarter 2009 GWS Well ID: SCFMW.005 Depths (btoc): Top of Screen 15(o Bottom of Screen 138 Top of Filter Pack 11.72 Water Level 156.41 DEPTH TO BOTTOM Well Construction: PVC Stainless Steel Other: Casing I.D. (inches) Well Volume: Vt = Vc + VfWhere Vt: Total well volume Vt (Total Well Volume) = NA gallons Vc: Riser casing volume Vf: Filter pack volume Vc = (Height of water column) x (Volume of casing per foot)Vf = (((Saturated thickness of filter pack) x (Volume of borehole per foot)) x (0.3) - ((Saturated thickness of filter pack) x (Volume of casing per foot)) Site Conditions: SUMMY AND PARTLY CLOUDY INSPICTS Field Observations: : FLOW RATE TO PEDUCED DUE TO INE - LINE ONLYPARTIALLY RONFLATED - TUBING WILL QUARTER **Deviations from Approved SAP:** erior. TO SAMPLIANG Recorded By: QA Checked By:

Page: 3 of 3

Project Name:

RVAAP SCFmw 2nd Quarter 2009 GWS

Well ID:

SCFmw-005

Date	Time	Liters Removed	Temp (oC)	Specific Cond. (mS/cm)	pH (std. unit)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	eH (mV)	Total Liters Removed	Total Tubing Vol	
07/16/00	1152	~11	21.2	0.817	6,45	153	4.22	-62	~14	11.73	
	1217	0185	21.3	0.783	6,43	103	3,44	-43	N 2L	11.72	~50mUminfloorak
	1227	0.5	21.1	0.781	6.16	113	1.66	-34	25	11.72	7771171140
	1232	0.25	20.2	0.782	6.22	128	1.57	-36	2.75		
	12.37	0.25	22.7	0.743	6.31	142	1,40	-41	3.p		
	1242	0.25	24.1	0.750	6.43	161	1.56	-48	3,25		
	1247	0.25	24.09	0.761	6.55	169	1.63	-53	3.5		50nl nin flav r
A	1252	0.25	24.5	\$.761	le.le2	170	1.70	rs7	.3.75	11.73	
					- E	A16[q	9				

Recorded By:

Emily Cungle

Cumpleso Fluelog

QA Checked By:

amanda Trenton or 120/09

Page: 1 of 3 **Project Name:** Well ID: SCFmw-(DOCO RVAAP SCFmw 2nd Quarter 2009 GWS Sample ID: SCFMW-006-0036-GW Activity: Purge Development Date/Time: (1) 15/09 , 1216 SCF MW-000 -0036 - OF (metals) Emily Cunningham + Amanda Trenton Personnel: SCFMW-101010-0037-GFPerchloak + duplicate + split (see eg 2) Start: 07/15/09 · 1058 Date and Time: Complete: <u>07/15/09</u> Purge Method(s): Bailer Bladder Pump Other: Monitoring Method(s): PID T LEL H2S CO Other: ID: NA ID: _ NA 1D: ___NA__ NA ID: NA Initial Reading 2.65 gal Total Volume of Water Removed (Gallons): FIELD INSTRUMENT SERIAL NUMBER **DATE OF LAST CALIBRATION** Water Quality: 07/15/09 2012031 Water Level Tape: Solinist 101 - 300 NA 43850 Other: Solinist Bladder tump Controller 16/213 .75" x36" Bladder Pump Other: Other: Other: Other:

Recorded By:

amanda Irentm 07/15/09

QA Checked By:

Emily Cunigher 04/21/09

Page: 2 of 3 **Project Name:** RVAAP SCFmw 2nd Quarter 2009 GWS SCFmw-006 Well ID: Top of Screen 75 Top of Filter Pack Depths (btoc): Bottom of Screen 18,28 Water Level 88,32 Dept to BOTTOM Well Construction: PVC Stainless Steel Other: Well Volume: Vt = Vc + VfWhere Vt: Total well volume Vt (Total Well Volume) = gallons Vc: Riser casing volume Vf: Filter pack volume Vc = (Height of water column) x (Volume of casing per foot)Vf = (((Saturated thickness of filter pack) x (Volume of borehole per foot)) x (0.3) - ((Saturated thickness of filter pack) x (Volume of casing per foot)) Site Conditions: Sample SCFmw-006-0040-GW; SCFmw-006-0040-GF + SCFmw-006-Field Observations: plit Sample SCFmw-0000-0042-6W GOOD VEGETATION GROWTH **Deviations from Approved SAP:** NONE Recorded By: QA Checked By:

Page: 3 of 3

Project Name:

RVAAP SCFmw 2nd Quarter 2009 GWS

Well ID:

SCFMW-0000

	<u> </u>	I		Y					FLOW RAT	Ł
	Litere		1 -			Dissolved		Total	Total	
Time				, ,	•		i	1		,
								 		Comments
		100		4	219	7000	14	71	200 ml/m	Initial - AIR PRESSURE MUST BEMAN
1138	< 3 L					0.30	- 44	-3L		no drawdown exhibited we K. 24
1145	125L	14.2	0.434	6.40	63.5	0.02	-49	-41	l	THE CHARLES THE STATE OF THE ST
1150	1250	14.1						5L	V	no drawdown exhibited WC= 18.28
1155	<u>lL</u>	12.7	ወ. ዛ ዣ ወ	6.50		1		(OL	ł .	in - Fixed ALP PRESSURE DIFFICULTIES
1200	2L	12.2	0.437	6.56				8L		no drawdown exhibited ht 18.27
1205	2L	12.5	0.439	6.63	22.2	0.00	-73	194	1 /	PARAMETERS STABLE
										couler Samples
						1				
					3	m	37/_,			
							15/4	7		

	1128 1145 1156 1155 1200	1128 -11 1138 -34 1145 126 1156 126 1155 11 1200 21	Time Removed (oC) 1128 -1	Time Removed (oC) (mS/cm) 1128 -1	Time Removed (oC) (mS/cm) (std. unit) 1128	Time Removed (oC) (mS/cm) (std. unit) (NTU) 1128	Time Removed (oC) (mS/cm) (std. unit) (NTU) Oxygen (mg/L) 1128	Time Removed (oC) (mS/cm) (std. unit) (NTU) (mg/L) (mV) 1128	Time Liters Removed Removed (oC) Temp (oC) Cond. (mS/cm) pH (std. unit) Turbidity (NTU) Oxygen (mg/L) eH (mV) Liters Removed Removed (mV) 1128 21L 16.7 0.463 6.45 216 205 14 4L 138 31 0.445 6.37 91.2 0.30 -44 3L 145 32 14.2 0.434 6.40 63.5 0.02 -49 -4L 1150 12 14.1 0.441 6.45 47.1 0.00 -55 5L 1155 1L 12.7 0.440 6.50 43.6 0.00 -62 6L 1200 2L 12.2 0.437 6.56 38.4 0.00 -69 8L	Liters Temp (oC)

Recorded By:

amanda Trentm 07/15/09

QA Checked By:

Emily Curi den 04/21/49

Page: 1 of 3

Project Name: RVAAP SCFmw 3rd Quarter 2009 GWS	Well ID: SCF	mw-001
Activity: Purge	:SCFmw-001-0046-6W SCFmw-001-0046-6F	Date/Time: 16/10/09:10.30
Personnel: AMANDA TRONTON + HEATT	ter miller	, , ,
Date and Time: Start: 10112109; 1549	Complete: 10 11 109;	1 9 2¢
Purge Method(s): ☐ Bailer ☐ Bladder Pump	Cother:	
Monitoring Method(s):	T H2S T CO	Other:
ID:NA ID:NA	ID:NA ID:NA	ID:NA
Initial ReadingNANANA	NANA	NA
Total Volume of Water Removed (Gallons): ~ , 5	GAL	
FIELD INSTRUMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION
Water Quality: Horiba U-22	82121	10/12/09
Water Level Tape: Heron Dipper-T 300' Water Level Indicator	15480	, NA
Other: Solinst 466 Pump Control Unit	16213	NA
Other: QED 1.75"x36" Bladder Pump	15130	NA
Other:		
Other:		
Other:		
Recorded By: Amnda henton	QA Checked By: Puil	1_ Geninolas 12/21/09

Project Name:	RVAAP SO	CFmw 3rd Quarter	2009 GWS		Page: 2 of <u>3</u> Well ID:
Depths (btoc):	_a\psi	Top of Screen	<u>213</u> ′_Bottom of Screen	n	$\underline{-2\phi_{\mathbb{C}}}'$ Top of Filter Pack $\underline{-93.7\phi}$ Water Level
Well Construction	n:	PVC	Stainless Steel	-	Other: Casing I.D. (inches)
Well Volume:	Vt = Vc + V	f Where	Vt: Total well volume Vc: Riser casing volume Vf: Filter pack volume		Vt (Total Well Volume) = gallons
	Vc = (Heigh Vf = (((Satu	t of water column) x rated thickness of filt	(Volume of casing per foot) er pack) x (Volume of borehole per fo	oot))	x (0.3) - ((Saturated thickness of filter pack) x (Volume of casing per foot))
Site Conditions:		45 F. n	nostly cloudy. Sparse areas	<u>q</u>	ood vegetative growth at SCFMW-001-
Field Observation	s:	Reduced (tank w	volume due to as losing a lot o	of	ow flow pressure)
Deviations from A	pproved SA	AP: <u>NON</u>	DE CONTRACTOR OF THE PARTY OF T		
Recorded By:	amo	inda (1	rento 10/12/09		QA Checked By: July lumingher 12/21/60

Page: <u>3</u> of <u>3</u>

Project Name: RVAAP SCFmw 3rd Quarter 2009 GWS

Well ID:

SCFmw-001

	<u> </u>	1				I	T			WATERW	VKZ
Date	Time	Liters Removed	Temp (oC)	Specific Cond. (mS/cm)	pH (std. unit)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	eH (mV)	Total Liters Removed	Total Tubing Vol Removed	Comments
10/12/09	1555	ÌЦ	11.8	78.3	6,69	999	2.00	-65	1L		Initial; 150-175me/min
	1600	0.75	11.9	82.2	6.67	999	0.36	-85	175		
	1005	0.75	11.8	71.7	6.69	999	9.58	-76	2.5	90.57	Emphed flow cell @ 1602
	1610	0,75	12.0	84.5	6.70	999	1.58		3,25		~H5mc Imia
	1015	0.75	12.2	84.9	6.70	999	0,91	-103	4,0		
	1620	0,75	12.2	85.6	6.71	999	0.27	-108	426		
	1025	0.75	12.3	86.3	6.72	999	0.00	~1	5,5	90.60	
V	1630	ক্ষাই তি	1		A COLUMN TO A COLU				manifestation of security of the file	Silve of Champion Control of Champion	COLLECT SAMPLE; purge rate slowing
											,, ,
							4				
							Arre				

Recorded By:

10/12/09 QA Checked By:

Page: 1 of 3

		. ugo o. <u></u>
Project Name: RVAAP SCFmw 3rd Quarter 2009 GWS	Well ID:SC	-mw-002
Activity: Purge T Development Sample ID	:SCFmw-002-0047-GW	Date/Time: 10/14/09:1705
Personnel: AMANDA TRENTON AND HEA	THER MILLER	
Date and Time: Start: 10/14/09; 1027	Complete: 10/14/09	: 1740
Purge Method(s): ☐ Bailer ☐ Bladder Pump	Other:	
Monitoring Method(s):	F H2S F CO	Cother:
ID:NA ID:NA	ID:NA ID:NA	ID:NA
Initial ReadingNANANA	NANA	NA
Total Volume of Water Removed (Gallons): ~ \(\triangle \) \(\triangle A)	L	
FIELD INSTRUMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION
Water Quality: Horiba U-22	82121	10/14/09
Water Level Tape: Heron Dipper-T 300' Water Level Indicator	15480	NA
Other: Solinst 466 Pump Control Unit	16213	NA
Other: QED 1.75"x36" Bladder Pump	15130	NA
Other:		
Other:		

Recorded By: amanda henten 10/14/09

Other:

QA Checked By:

Emily Cunninghor 10/14/0

								Page: 2 of <u>戈</u>
Project Name:	RVAAP SO	CFmw 3rd Quarter	2009 GWS		Well ID:	SCF	-mw-002	
Depths (btoc):	139	_Top of Screen	149 Bottom of Sc	reen	136 Top of Filte	r Pack	21.18 Water Level	
Well Construction	ı: 🔽	PVC	Stainless Steel	-	Other:		<u> 2"</u> c	Casing I.D. (inches)
Well Volume:	Vt = Vc + V	f Where	Vt: Total well volume Vc: Riser casing volume Vf: Filter pack volume		Vt (Total Well Volume	e) =		gallons
			(Volume of casing per foot) er pack) x (Volume of borehole p	per foot))	x (0.3) - ((Saturated thickne	ess of filter	pack) x (Volume of casing p	er foot))
Site Conditions:		110°E.	vercost .	e				
			Del OSI					
Field Observations	s:	Good Vec	jetative grow	<u>m</u>	in area ar	ound	SCFmw-0	02
		- 120						
Deviations from A	approved S	AP: <u>N</u> O	DE					
Recorded By:	(dm	randa <	henton 101.	14/09	QA Checked By:	Jni	les Vunner	ng har 2/4/10

Page: <u>3</u> of <u>3</u>

Project Name:

RVAAP SCFmw 3rd Quarter 2009 GWS

Well ID:

SCF mw - 002

Date	Time	Liters Removed	Temp (oC)	Specific Cond. (mS/cm)	pH (std. unit)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	eH (mV)	Total Liters Removed	Water Level (ft btoc)	Comments
10/14/09	1630	1,35	11.3	80.6	0.52	367	3.87	17	1,35		Conmerce or 1027 Initial 450mL/min
	1035	2,35	11.4	79.5	6.69	175	0.00	-36	36	21.30	
	1040	2.35	11.4	78.8	6,69	5	0.25	-63	5,85		
	1445	2.25	11.4	78.3	6.71	14.1	0.02	-77	8.1	21,31	
	1650	2,25	11.4	78.2	6.7¢	9.8	00.00	-81	10,35		
	1655	2.25	11,4	77.9	6.69	9.7	000	-85	12.6		
	1700	2,25	11.5	77.7	6.68	9.0	00.00	-88	14.85	21.31	PARAMETERS STABLE

									:		
										:	

Recorded By:

amanda Nentra 10/14/09 QA Checked By: Imaly Curry cha 10/14/09

Page: 1 of 3 RVAAP SCFmw 3rd Quarter 2009 GWS **Project Name:** Well ID: SCFmw- 003 Sample ID: SCF mw - 003 - 0048 GW Date/Time: 10113109; 1835 Activity: Development Purge AMANDA Personnel: SPRINT L Complete: 1(0|13| Date and Time: Purge Method(s): □ Bailer Cther: Monitoring Method(s): F PID / LEL F H2S ┌ co Other: ID: ____NA ID: NA Initial Reading NA ~ 3.3 GAL Total Volume of Water Removed (Gallons):

FIELD INSTRUMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION
Water Quality: Horiba U-22	82121	10/13/09
Water Level Tape: Heron Dipper-T 300' Water Level Indicator	15480	NA
Other: Solinst 466 Pump Control Unit	16213	NA NA
Other: QED 1.75"x36" Bladder Pump	15130	NA
Other:		
Other:		
Other:		

Recorded By:	amanda	hentm	10/13/00
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QA Checked By:

mily lunning her 1/2/109

				Page: 2 of <u>3</u>
Project Name:	RVAAP SCFmw 3rd Quart	er 2009 GWS	Well ID:	SCFMW-0013
Depths (btoc):	Top of Screen	<u>139</u> Bottom of Screen	127! Top of Filter Pack	<u>! Φ₁Φ5΄</u> Water Level
Well Construction	PVC	Stainless Steel	Other:	Casing I.D. (inches)
Well Volume:	Vt = Vc + Vf Whe	ore Vt: Total well volume Vc: Riser casing volume Vf: Filter pack volume	Vt (Total Well Volume) =	gallons
	Vc = (Height of water column Vf = (((Saturated thickness o) x (Volume of casing per foot) filter pack) x (Volume of borehole per foot))	x (0.3) - ((Saturated thickness of f	ilter pack) x (Volume of casing per foot))
Site Conditions:	50'F, area	overcost, good	grass growth	around SCFmw-003
Field Observation	s: none			
Deviations from A	pproved SAP: <u>M</u>	ne		
Recorded By:	amanda C	renta 10/13/09	QA Checked By:	rily lunninghar 12/21/0

Page: 3 of 3

Project Name:

RVAAP SCFmw 3rd Quarter 2009 GWS

Well ID:

SCFmw-003

Date	Time	Liters Removed	Temp (oC)	Specific Cond. (mS/cm)	pH (std. unit)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	eH (mV)	Total Liters Removed	Water Level (ft btoc)		ments
10/13/09	6 46	0.75	11.60	62.1	6.45	79.2	5.15	27	0.75		Commence	PURGINGO1800
}	1807	1.9	11.6	62.5	6.39	51.9	0.59	-7	2.75	10.06		
	1812	20	11.6	62.0	6.38	16.7	0,40	-22	4.75	0.09	400 inc/min	
	1817	2.0	11.6	62.5	6.38	9.1	0.05	-30	6.75	70.01		
	1822	2.0	11,5	62.6	6.39	-10.0	- ,	-35	8.75	10.07		
	1827	2.0	11.6	62.6	6.39	-10.00	(t), (c) (c)	-39	10.75	10.07		
V	1832	4 .6	11,6	62.6	6.39	-10.0	0.00	-41	12.75	10,07	Parameters	Stable
							A					
	·											

Recorded By:

amanda Trento 10/13/09

QA Checked By:

Imaly Curring law 12/21/09

Page: 1 of _3 Well ID: SCFmw-004 **Project Name:** RVAAP SCFmw 3rd Quarter 2009 GWS Sample ID: <u>SCFmw-004-0049-GW</u> Date/Time: 1\$\phi\$/14\ldot 9; 1025 Activity: Purge Development Personnel: Start: 10/14/09; 0950 Complete: 101409 Date and Time: Purge Method(s): □ Bailer Bladder Pump Cther: Monitoring Method(s): F PID ſ LEL r co I H2S Other: ID: ____NA____ ID: NA ID: ___NA ID: NA Initial Reading NA ~2 GAL Total Volume of Water Removed (Gallons):

FIELD INSTRUMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION
Water Quality: Horiba U-22	82121	10/14/09
Water Level Tape: Heron Dipper-T 300' Water Level Indicator	15480	NA
Other: Solinst 466 Pump Control Unit	16213	NA
Other: QED 1.75"x36" Bladder Pump	15130	NA
Other:		
Other:		
Other:		

Recorded By: Amanda henter 10/14/09 QA Checked By:

Smily Cunningho 12/21/09

							P	age: 2 of <u></u>
Project Name:	RVAAP SCFr	mw 3rd Quarter 200	9 GWS		Well ID:	Sc	Fmw-004	
Depths (btoc):	<u>1Φ2,4</u> το	op of Screen	112.4 Bottom of Screen		97.4 Top of Filte	er Pack	<u>ΙΠΦ΄</u> Water Level (<i>f</i> +	btac)
Well Construction	: V P'	VC p	Stainless Steel		Other:		<i>Q /¹</i> _ Casing	I.D. (inches)
Well Volume:	Vt = Vc + Vf	Where	Vt: Total well volume Vc: Riser casing volume Vf: Filter pack volume		Vt (Total Well Volum	e) =	gallon	s
	Vc = (Height of Vf = (((Saturate	f water column) x (Volued thickness of filter page	ume of casing per foot) ack) x (Volume of borehole per foo	ot)) x	(0.3) - ((Saturated thickn	ness of filter	pack) x (Volume of casing per foot)	i)
Site Conditions:	4	O'F; overco	ist; trace rain	₩.				
Field Observation	s: <u>r</u>	none						
Deviations from A	pproved SAP	: none	. /					
		*	A					
Recorded By:	Omar	rda The	nton 10/14/09		QA Checked By:	Brile	Danninghoù) 12/2/100,

Page: <u>3</u> of <u>3</u>

Project Name:

RVAAP SCFmw 3rd Quarter 2009 GWS

Well ID:

SCFmw-004

Date	Time	Liters Removed	Temp (oC)	Specific Cond. (pr\$/cm)	pH (std. unit)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	eH (mV)	Total Liters Removed	Water Level (ft btoc)	Comments
10/14/09	0950	0,5	11.3	Q 133	5.57	127	1.85	25	0,5		Initial; 250mL/min
	0955	1,25	11.3	0.135	6.00	98.1	0.30	-49	1.75		
	1000	1.26	11.3	0.134	6.11	103	0,25	-59	3,0	1.85	
	1005	1,25	11.4	0.133	6.21	108	40.0	-71	4.25		
	1010	1,25	11.3	0.133	6.25	100	0.04	-77	5,5	1.85	
	1015	1,25	11.3	0.132	6.30	90.2	0.00	-85	4.75		
V	1020	1,25	11.2	0.132	6.34	83.8	000	9	8.0	1.85	Parameters Stable
						A.K.					
						*					
						:					

Recorded By:

amanda pentin

QA Checked By:

Smily Genninghon 12/2/10

		Page: 1 of <u>3</u>						
Project Name: RVAAP SCFmw 3rd Quarter 2009 GWS	Well ID: SF	mw-005						
Activity: Purge Development Sampl	le ID: SCFMW-005-0050-GW	D: SCFmw-005-0050-GW Date/Time: 10/13/09; 1420						
	TP MILLER							
Date and Time: Start: 1013109; 1149	Complete: 1013 0 9	HOO 1700						
Purge Method(s):	Cother:							
Monitoring Method(s):	F H2S F CO	Other:						
ID:NA ID:NA	ID:NA ID:NA	ID:NA						
Initial ReadingNANANA	NANA	NA						
Total Volume of Water Removed (Gallons):	5 GAL							
FIELD INSTRUMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION						
Water Quality: Horiba U-22	82121	10/13/09						

FIELD INSTRUMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION
Water Quality: Horiba U-22	82121	10/13/09
Water Level Tape: Heron Dipper-T 300' Water Level Indicator	15480	NA
Other: Solinst 466 Pump Control Unit	16213	NA
Other: QED 1.75"x36" Bladder Pump	15130	NA
Other:		
Other:		
Other:		

amanda Trenton 10/13/09 Recorded By:

QA Checked By: Emily luminghow 121/09

			Page: 2 of <u>소</u>
Project Name: RVAAP	SCFmw 3rd Quarter 2009 GWS	Well ID:	Fmw-005
Depths (btoc):	Top of Screen \(\sum_{150}^{\text{t}} \) Bottom of Screen	138 Top of Filter Pack	13.25 Water Level (ptoc)
Well Construction:	PVC Stainless Steel	Other:	Casing I.D. (inches)
Well Volume: Vt = Vc +	Vf: Total well volume Vc: Riser casing volume Vf: Filter pack volume	Vt (Total Well Volume) =	gallons
Vc = (Hei Vf = (((Sa	ight of water column) x (Volume of casing per foot) aturated thickness of filter pack) x (Volume of borehole per foot))	x (0.3) - ((Saturated thickness of filte	r pack) x (Volume of casing per foot))
Site Conditions:	50°F; Quercast		
Field Observations:	SAMPLES SCFMWY-00 SOGW/S	SCFqc-011-18055- SCFMW-0058-005 FMW-005-0053-	56-GF + SPLIT SAMPLE
Deviations from Approved	SAP: NONE		
Recorded By:	anda henton 10/13/09	QA Checked By:	Les Junning la 012/21/00,

Page: <u>3</u> of <u>3</u>

Project Name:

RVAAP SCFmw 3rd Quarter 2009 GWS

Well ID:

SCFmw-005

Date	Time	Liters Removed	Temp (oC)	Specific Cond. (mS/cm)	pH (std. unit)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	eH (mV)	Total Liters Removed	Water Level (ft btoc)	Comments
10/13/09	1149	11_	12.2	92.8	5.74	158	2.50	9	1_	13.30	Initial 400mL/min
	1159	4L	11.4	89.9	5.87	43.2	0.39	18	54		
	1204		11.4	89.4	5.92	30.1	0.28	-5	7945	13.3Ø	
	1209	244	11.5	88.8	5.95			-19	9,139		
	1214	244	11.76	88.6	5.98	9.8	0.31	-27	11th	13.30	
V	1219	aL	11.7	و، 88	۵.00	7.3	0.32	~31	13L		400me/min purge rate - tank out
			,								of nitrogen-go+obtain replacement prior to sampling.
				/			:			***************************************	Pris is a my might
							,				
							Ana				

Recorded By:

amanda Trenton 10/13/09

QA Checked By:

Emily lungla 12/21/09

Page: 1 of 3 **Project Name:** RVAAP SCFmw 3rd Quarter 2009 GWS Well ID: SCFmw - OOLO Sample ID: SCFmw - 000 - 005 | GW Date/Time: 10112 | 09 Activity: Purge Development Personnel: 10/12/09 1148 Complete: 10/12/09:1430 Date and Time: Start: Purge Method(s): □ Bailer Cther: Monitoring Method(s): ☐ PID IT LEL TH2S IT CO Other: ID: ____NA____ ID: ___NA____ ID: ___NA Initial Reading ____NA ~3,5 GAL Total Volume of Water Removed (Gallons): FIELD INSTRUMENT **SERIAL NUMBER** DATE OF LAST CALIBRATION Water Quality: Horiba U-22 82121 Water Level Tape: Heron Dipper-T 300' Water Level Indicator 15480 Other: Solinst 466 Pump Control Unit 16213 NA Other: QED 1.75"x36" Bladder Pump 15130 NA Other: Other: Other: Imanda Inentin 10/12/09

QA Checked By:

Recorded By:

Project Name:	RVAAP S	CFmw 3rd Quarter 2	009 GWS	Well ID:	SCFmw-000	Page: 2 of <u>3</u>
Depths (btoc):	<u> 78'</u>	_Top of Screen	Bottom of Screen			
Well Construction	ı: V	PVC	Stainless Steel	Other:		Casing I.D. (inches)
Well Volume:	Vt = Vc + V	/f Where	Vt: Total well volume Vc: Riser casing volume Vf: Filter pack volume	Vt (Total Well Volume) =	NA	gallons
	Vc = (Heigh Vf = (((Satu	nt of water column) x (\undersetarrow urated thickness of filter	olume of casing per foot) pack) x (Volume of borehole per foot)) x (0.3) - ((Saturated thickness o	of filter pack) x (Volume of casing	per foot))
Site Conditions:		45°F; mo	stly cloudy;	good vegetative	growth and	nd well
Field Observations	s:	ms/msD	COLLECTED BT S	XFmw-OOG; F	DUMP INTAKE I	DEPTH ~ 83 BTOC
Deviations from A	pproved S	AP: <u>NON</u>				
Recorded By:	am	anda Ir	ento 10/12/09	QA Checked By:	nily Junni	nglice > 12/21/09

Page: 3 of 3

Project Name:

RVAAP SCFmw 3rd Quarter 2009 GWS

Well ID:

SCFMW-006

							1			TOTAL LIT	ers
Date	Time	Liters Removed	Temp (oC)	Specific Cond. (mS/cm)	pH (std. unit)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	eH (mV)	Total Liters Removed	Total Tubing Vol Removed	Comments
10/12/09	1152	١∟	14.8	5\$.9	5.96	73.1	0,95	૪૧	19.04	ال	INITIAL . 400 ML/min
	1202	244	8.01.	505	6.26	423	0.02	9		5L	
	1207	2L	10.8	50.4	6.45		Ø.00	-31	19.09	7L	
	1212	2∟	10.8	5Ø.4			Q. QQ	*****		91	
	1217	2L	10,8	50.6	6.59			-53	,	11	
V	1222	2L	10.8		6.64		0.00	-64	19.02	136	Parameters Stable.
											TOTAL CITY OF A SEC.

							Am				
			۷•								
			•								
									1.00		

Recorded By:

amanda henton 10/12/09

QA Checked By:

rely Curringlia 12/21/6

Page: 1 of <u>3</u>

Project Name:	RVAAP SO	CFmw 4th Quarter GW			Well ID: SCF		
Activity:	Purge	☐ Developm	ent Sample ID	SCFmw-DOI - (: SCFmw-DOI -	D057-GW 0057-GF	Date/Time: <u>Φ1/18/1Φ</u> ;	1335
Personnel:	Amanda T	renton/Jackie Getson				•	
Date and Time:		Start: 01/18	110 ; 1255	_ Complete:	01/18/10;	1410	
Purge Method(s):	Г	Bailer 🔽	Bladder Pump	COther:			
Monitoring Method	d(s):	☐ PID	☐ LEL	☐ H2S	г со	Cother:	
		ID:NA	ID:NA	ID:NA	ID:NA	NA	
Initi	ial Reading	NA	NA	NA	NA	NA	
Total Volume of W	ater Remo	ved (Gallons):	~2.5 GH	41			
	FIF	I D INSTRUMENT		OFFINA N			

FIELD INSTRUMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION
Water Quality: Horiba U-22	706008	01/18/10
Water Level Tape: Solinst 300' Water Level Indicator	48721	NA
Other: Solinst 466 Pump Control Unit	16213	NA
Other: QED 1.75"x36" Bladder Pump	15130	NA
Other:		
Other:		
Other:		

Recorded By: amanda Scentin 01/18/10

QA Checked By:

Juta 1/20/10

Page: 2 of 3 Project Name: RVAAP SCFmw 4th Quarter GWS SCFmw-001 Well ID: 303^{1} Top of Screen 213 Bottom of Screen Depths (btoc): Top of Filter Pack 89.77 Water Level Well Construction: Stainless Steel Other: Casing I.D. (inches) Well Volume: Vt = Vc + VfWhere Vt: Total well volume Vt (Total Well Volume) = NA gallons Vc: Riser casing volume Vf: Filter pack volume Vc = (Height of water column) x (Volume of casing per foot) Vf = (((Saturated thickness of filter pack) x (Volume of borehole per foot)) x (0.3) - ((Saturated thickness of filter pack) x (Volume of casing per foot)) Sample ID: SCFMW-001-0057-GW + SCFmw-001-0057-GF Sample Date & Time: 01/18/10:1335 Analysis: RVAAP Full Suite (VOC, SVOC, PCB, Pesticides, Explosives, Propellents, Nitrate/Nitrite, Cyanide, 0.45 micron filtered TAL Metals) Site Conditions: 32 F overeast snow on amuno Field Observations: rinsate **Deviations from Approved SAP:** NONE rento oilistip Recorded By: QA Checked By:

Page: 3 of 3

Project Name:

RVAAP SCFmw 4th Quarter GWS

Well ID:

SCFmw-ppl

Date	Time	Liters Removed	Temp (oC)	Specific Cond. (mS/cm)		Turbidity (NTU)	Dissolved Oxygen (mg/L)	eH (mV)	Total Liters Removed	Flow Rate (mL/mi	,	Water Level (ft btoc)	Comments
D1/18/10	1302		9.5	0.903	6.40	362	9.4	-99	0,5	3фф			Initial; Slight Sulfur odor
	13¢7	1536	O.Q!	0.882	6.51	269	7.1	-106	2.0	1		90,57	minutes, significant bad
	1312	1.5L	9.8	0.882	6.51	179	6.8	-111	3.5		- 1	90.57	
	1317	1,56	100	0.877	6.50	122	6.8	-109				90,57	
	1322	1,54	7,8	0.874		84.6	6.6						
	1328	1.5L	9.8	0.875	6.48	157	6.5	-112	1			90.57	
V	1332	1,50	10,1	0.879	6.51	105		<u>-116</u>	8.0 9.5				
					- 0,0,	140	6.4	-114	4,5	<u>V</u>		90.5 /	Parameters Stable
											_		
											_		
						\rightarrow	A						
							W Po						
											+		

Recorded By:

amanda Grentin 01/18/10

QA Checked By:

fal fet 01/20/10

	Page: 1 of <u>3</u>
Project Name: RVAAP SCFmw 4th Quarter GWS	SCE MUSCOUZ Well ID: SCF MW - QQZ
Activity: ☐ Purge ☐ Development Sample II	SCF mw-002-0058-GW Date/Time: 01/19/10; 1430
Personnel: Amanda Trenton/Jackie Getson	
Date and Time: Start: <u>01 19 1φ 1336</u>	Complete: 01 19 10 1525
Purge Method(s): ☐ Bailer ☐ Bladder Pump	Other:
Monitoring Method(s): ☐ PID ☐ LEL	□ H2S □ CO □ Other:
ID:NA ID:NA	ID:NA
Initial ReadingNANANA	NA NA NA
Total Volume of Water Removed (Gallons): ~2.5 6	AC
FIELD INSTRUMENT	SERIAL NUMBER DATE OF LAST CALIBRATION
Water Quality: Horiba U-22	706008 01/19/10
Water Level Tape: Solinst 300' Water Level Indicator	48721 NA
Other: Solinst 466 Pump Control Unit	16213 NA
Other: QED 1.75"x36" Bladder Pump	45420

amanda Irenta 0/19/10 Recorded By:

Other:

Other:

Other:

QA Checked By:

15130

NA

Page: 2 of 3

			1 age. 2 01 <u> </u>
Project Name:	RVAAP SCFmw 4th Quarter GWS	Well ID:	SCFMW. DOZ
Depths (btoc):	139' Top of Screen 149' Bottom of Screen	_136' Top of Filter	Pack <u>& . 39</u> Water Level
Well Construction	n: PVC Stainless Steel	Other:	Casing I.D. (inches)
Well Volume:	Vt = Vc + Vf Where Vt: Total well volume Vc: Riser casing volume Vf: Filter pack volume Vc = (Height of water column) x (Volume of casing per foot) Vf = (((Saturated thickness of filter pack) x (Volume of borehole per foot))	Vt (Total Well Volume) x (0.3) - ((Saturated thickness	
Sample ID:	SCFMW-002-0058-GW + SCFM	· · · · · · · · · · · · · · · · · · ·	
Sample Date & Ti	ime: 01/19/10; 1430	<u>nw - wwz - ww.</u>	58-GF
	Full Suite (VOC, SVOC, PCB, Pesticides, Explosives, Propellents, Ni		
	Topellents, NI	trate/Nitrite, Cyanide, 0.45	micron filtered TAL Metals)
Site Conditions:	30: F; overcast; light u	aind	
Field Observation	Plan RATE PLON RATE	C. PROBLEMS	INITIALLY STABILIZING
	/		
Deviations from A	Approved SAP: NO NE		
Recorded By:	amanda Szentin 01/19/10	QA Checked By:	fex 1/20/11
		/ /	

Page: 3 of 3

Project Name:

RVAAP SCFmw 4th Quarter GWS

Well ID:

SCFmw-0002

Date	Time	Liters Removed	Temp (oC)	Specific Cond. (mS/cm)	pH (std. unit)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	eH (mV)	Total Liters Removed	Flow Rate (mL/min)	Water Level (ft btoc)	Comments
61/19/10	1358	~1gai	9,4		6.69	45.0	7.9	-170	4L	250	20.80	in , has
	1403	1上	9.0	0.81 B	6.43	48.4	7.4	-156	51	200	20.80	
	1408	0.875	8.7	0.85	635	95.2	7.1	-148	5.875	175		halle Da C
	1413	0.875	9.1	0.810	Ce, 45	77.8	6.8	-157	(0.75	175	20,75	bushles in Flow cell
	1418				6.36	48,2	6.60	-145	7.75	200	20.75	
	14/23	1∟	9,60	Ø.818	6:46	73.7	6.5	-146	8.75		20.71	
V	1428	1L		0.821			6.4	-146	9.75			Parameters Stable
							•				<u> </u>	· chapteress since
							idan					

Recorded By:

amanda Irenton collalia

QA Checked By:

Jal Jet 1/20/10

Page: 1 of <u>3</u>

Project Name:	RVAAP SO	CFmw 4th C	Quarter GWS			Well ID: SCI	Fmw-003	
Activity:	Purge	Γ-	Development	Sample ID:	SCFmw-0		Date/Time: 01/19	10,0950
Personnel:	Amanda T	renton/Jack	ie Getson	`	SCF mw-0	103-0059-GF		$100 \cdot 100$
Date and Time:		Start:	01/19/10;	0906	Comple	te: 01/19/10;	1115	
Purge Method(s):		Bailer	☞ Bladder	Pump	C Other:			
Monitoring Method	d(s):	Г	PID r	1 LEL	☐ H2S	Г со	Cother:	
		ID:1	۱۵:	_NA	ID:NA	ID:NA	ID:NA	*
	ial Reading			_NA	NA	NA	NA	
Total Volume of W	ater Remov	ved (Gallor	ns):^	3.25	DAL_			

FIELD INSTRUMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION
Water Quality: Horiba U-22	706008	01/19/10
Water Level Tape: Solinst 300' Water Level Indicator	48721	NA
Other: Solinst 466 Pump Control Unit	16213	NA
Other: QED 1.75"x36" Bladder Pump	15130	NA
Other:		
Other:		
Other:		

Recorded By: amanda Szenton 0/19/10

QA Checked By:

1/20/10

Page: 2 of 3 Project Name: RVAAP SCFmw 4th Quarter GWS SCFMW-003 Well ID: 129' Top of Screen 1391_Bottom of Screen Depths (btoc): Top of Filter Pack 9,49 Water Level **Well Construction:** PVC Stainless Steel Other: Casing I.D. (inches) Well Volume: Vt = Vc + VfWhere Vt: Total well volume Vt (Total Well Volume) = NA gallons Vc: Riser casing volume Vf: Filter pack volume Vc = (Height of water column) x (Volume of casing per foot) Vf = (((Saturated thickness of filter pack) x (Volume of borehole per foot)) x (0.3) - ((Saturated thickness of filter pack) x (Volume of casing per foot)) SCFmw-003-0059-GW + SCFmw-003-0059-GF Sample ID: Sample Date & Time: 01/19/10:0950 Analysis: RVAAP Full Suite (VOC, SVOC, PCB, Pesticides, Explosives, Propellents, Nitrate/Nitrite, Cyanide, 0.45 micron filtered TAL Metals) 30 F; Overcast; scattered snow + sleet Site Conditions: Field Observations: collected @ Scfmw-003; Dump intake deptn ~134'Brac **Deviations from Approved SAP:** NONE Recorded By: QA Checked By: 01/20/10

Page: 3 of 3

Project Name:

RVAAP SCFmw 4th Quarter GWS

Well ID:

SCFmw-003

Date	Time	Liters Removed	Temp (oC)	Specific Cond. (mS/cm)	pH (std. unit)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	eH (mV)	Total Liters Removed	Flow Rate (mL/min)	Water Level (ft btoc)	Comments
4/19/04		12.Φ	9.5	,709	6.42	332	8.1	-94	2,0	325	9.71	initial
1	0917	1.625	9.8	:691	6.81	143.0	6,6	-135	3.425	325	9.7-1	
	6922	1.625	9.9	1688	6.83	71.2		-141			9.70	
	0927	1.625	9.8	0.691	6.81	66.4	6.3	-141	6.875		9.68	
	0932	1.75	9.9	0,691				-137	8.625		9.08	
	0937	1,75	10,1	P-691			612	-134	10,735		9.68	
V	09412	1,75		0.695	6.77	1	6.1	-129	12,125			Do
					V	51676		101	14(12)	-33φ	7.70	Parameters Stable
							The					

Recorded By:

amanda Grenton al 19/10

QA Checked By:

Jal Jet

WELLPURGERORM

Page: 1 of <u>ろ</u>

Project Name: RVAAP SCFmw 4th Quarter GWS	Well ID: SCF	mw-004
Activity: ☐ Purge ☐ Development Sample ID	: <u>See pg 2</u>	Date/Time: 01/00/10; 0948
Personnel: Amanda Trenton/Jackie Getson		
Date and Time: Start: $01/30/10$; 0840	Complete: OI AD III	1357
Purge Method(s): ☐ Bailer ☐ Bladder Pump	Cother:	
Monitoring Method(s): ☐ PID ☐ LEL	☐ H2S ☐ CO	Other:
ID:NA ID:NA	ID:NA	ID:NA
Initial ReadingNANANA	NANA	NA
Total Volume of Water Removed (Gallons): ~2.25 G	AL	
FIELD INSTRUMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION
Water Quality: Horiba U-22	706008	Ollaplip
Water Level Tape: Solinst 300' Water Level Indicator	48721	NA NA
Other: Solinst 466 Pump Control Unit	16213	NA
Other: QED 1.75"x36" Bladder Pump	15130	NA NA
Other:	-	
Other:		
Other:		

Recorded By:

amanda Trento 01/20/10

QA Checked By:

Page: 2 of 3

							1 agc. 2 of <u>3</u>
Project Name:	RVAAP SO	CFmw 4th Quarter GW	S	Well ID:		200-u	
Depths (btoc):	102.4	Top of Screen	112.4 Bottom of Screen	97.4 ¹ Top of Filte	er Pack <u>67</u>	9, 7⊘¹ <u>-0,7</u> Water Leve	l
Well Construction	n: 🔽	PVC	Stainless Steel	Other:	<u></u>	<u>2 M</u>	Casing I.D. (inches)
Well Volume:		it of water column) x (Voli	Vt: Total well volume Vc: Riser casing volume Vf: Filter pack volume ume of casing per foot) ack) x (Volume of borehole per fo	Vt (Total Well Volume		(Volume of casing p	gallons er foot))
Sample ID: Sample Date & Ti Analysis: RVAAP	SCFMW ime:	<u> </u>	w:SCFmw-004-000	00-GF; DUPLICATE	SCFMUT(F SCF MW- (04 <u>-</u> 0 03- 00034 104 - 0003-6	SPLIT STMW-0004-0
Site Conditions:		28:F; scat		light wind			
Field Observation	-		ie depth at MPLING DUET + SPLIT SAMI				COLLECTED
Deviations from A	Approved SA	AP: <u>NONE</u>					
Recorded By:	amo	inda She	nton ollaolio	QA Checked By:	Jahr	10	<u> </u>

Page: 3 of 3

Project Name:

RVAAP SCFmw 4th Quarter GWS

Well ID:

SCFmw-004

Date	Time	Liters Removed	Temp (oC)	Specific Cond. (mS/cm)	pH (std. unit)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	eH (mV)	Total Liters Removed	Flow Rate (mL/min)	Water Level (ft btoc)	Comments
		2,25	8,0	1,25	6.93	199.0	8.2	-183	0,25		0.85	initial
	0917	1.5	8.0	1,27	706	186.0	6.8	-206	1,75	300	0.85	war. as
	0922	- 1.5	7.9	1.27	705	2320		-214	3,25		2.85	
	0927	1.5	811	1,26	7.05	2020		-217	4.75		0.85	
	<i>1</i> 2932	1.5	8.2	1.24	7.05	214.0	6,5	-220	6.25	700 200 300	0.85	
	0937	1.p	8.3	1,24	7,06	1600	6.3	-223		200	2.85	
V	0942	1,0	8.6	1,23	7.05	145D	6.2	-225	8.25		· · · · · · · · · · · · · · · · · · ·	PARAMOTERS STARILE
												Stant samply 0948
								Show				

Recorded By:

Jah J 1/28/10 QA Checked By:

amanda Trento orladio

Page: 1 of <u>3</u>

Project Name:	RVAAP S	CFmw 4th Quarter	GWS		Well ID:	Fmw-005
Activity:	Purge	☐ Develo	ppment Sample ID	: SCFmw-O	05-0061-GW	Date/Time: 01/18/10, 16 25
Personnel:	Amanda T	renton/Jackie Gets	on	54 mw - 0	05-0061-6F	
Date and Time:		Start: 01	18/10:1548	_ Complete:	01/18/10	1707
Purge Method(s):	Г	Bailer		Other:	/	
Monitoring Metho	d(s):	□ PID	□ LEL	┌ H2S	Гсо	Cther:
		ID:NA	ID:NA	ID:NA	ID:NA	ID:NA
Init	tial Reading	NA	NA	NA	NA	NA
Total Volume of W	/ater Remo	ved (Gallons):	~3,25	GAL		

FIELD INSTRUMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION
Water Quality: Horiba U-22	706008	01/18/10
Water Level Tape: Solinst 300' Water Level Indicator	48721	NA
Other: Solinst 466 Pump Control Unit	16213	NA
Other: QED 1.75"x36" Bladder Pump	15130	NA
Other:		
Other:		
Other:		

Recorded By:	<u>Omanda</u>	Szentin	01/18/	10
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QA Checked By:

01/20/10

Page: 2 of 3 **Project Name:** RVAAP SCFmw 4th Quarter GWS SCFMW-005 Well ID: Depths (btoc): Top of Screen 150 Bottom of Screen Top of Filter Pack 12,95 Water Level @ 1521 @1/18/10 Well Construction: Stainless Steel Other: Casing I.D. (inches) Well Volume: Vt = Vc + VfWhere Vt: Total well volume Vt (Total Well Volume) = NA gallons Vc: Riser casing volume Vf: Filter pack volume Vc = (Height of water column) x (Volume of casing per foot) Vf = (((Saturated thickness of filter pack) x (Volume of borehole per foot)) x (0.3) - ((Saturated thickness of filter pack) x (Volume of casing per foot)) SCFMW-005-0061-GW + SCFMW-005-0061-GF Sample ID: 01/18/10:1625 Sample Date & Time: Analysis: RVAAP Full Suite (VOC, SVOC, PCB, Pesticides, Explosives, Propellents, Nitrate/Nitrite, Cyanide, 0.45 micron filtered TAL Metals) 32. F; overcast; snow on ground-area very Site Conditions: Field Observations: Associated w/ trip blank SCFQC-014-00610-TB **Deviations from Approved SAP:** NONE Recorded By: QA Checked By:

Page: 3 of 3

Project Name:

RVAAP SCFmw 4th Quarter GWS

Well ID:

SCFmw-005

 Time	Liters Removed	Temp (oC)	Specific Cond. (mS/cm)	pH (std. unit)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	eH (mV)	Total Liters Removed	Flow Rate (mL/min)	Water Level (ft btoc)	Comments
1559	1.75	9.6	0.948		77,3		- 95 -82	1.5 3.26	3500°%		Initial
1004	1,75	9,9	0,956		67.9	6.8	-87		35¢	12.42	
1609			0.942		62.8	6.6	-96	6.75	35¢	12.42	
1614	1.75	10.0	Ø.944	6.39	49.3	6,5	-99		35Ø	17.42	
1624	1,75		Ø.949 Ø.949		41.6	6.4	-100	10.25		12,42	
		, , , ,	2.79-7	U'S I	1116	6,4	-101	12.p	35¢	17.42	Parameters Stable
						And					

Recorded By:

amanda Sientin 0/18/10

QA Checked By:

Jala Jet 1/20/10

Page: 1 of 3

FIELD IN:	STRUMENT	SERIAL NUMBER	DATE OF LAST CALLED				
Total Volume of Water Removed (Gallons): 3, 25 GAL							
Initial Reading	NANA	NANA	NA				
ID:	NA ID:NA	ID:NA ID:NA	ID:NA				
Monitoring Method(s):	F PID F LEL	Г H2S Г CO	Cother:				
Purge Method(s):	er 🔽 Bladder Pump	Cother:	<u> </u>				
Date and Time:	Start: 01 20 10; 1443	Complete: 01/20 10	: 1405				
Personnel: Amanda Trentor	n/Jackie Getson						
Activity: Purge	☐ Development Sample ID	5: <u>SCFMW-006-0002-6W</u> SCFMW-006-0062-GF	Date/Time: (1) 1/20/10; 1530				
Project Name: RVAAP SCFmw	v 4th Quarter GWS	Well ID: SCFmw - OOO					
5			r agc. 1 of <u></u>				

FIELD INSTRUMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION
Water Quality: Horiba U-22	706008	01/20/10
Water Level Tape: Solinst 300' Water Level Indicator	48721	NA
Other: Solinst 466 Pump Control Unit	16213	NA
Other: QED 1.75"x36" Bladder Pump	15130	NA
Other:		
Other:		
Other:		

Recorded By: amanda Jenton 01/20/10

QA Checked By:

1/29/10

Page: 2 of 3 **Project Name:** RVAAP SCFmw 4th Quarter GWS SCFmw-006 Well ID: 78 Top of Screen Depths (btoc): 8 Bottom of Screen 18,49 Water Level Top of Filter Pack Well Construction: Stainless Steel Other: Casing I.D. (inches) Well Volume: Vt = Vc + VfWhere Vt: Total well volume Vt (Total Well Volume) = Vc: Riser casing volume Vf: Filter pack volume Vc = (Height of water column) x (Volume of casing per foot) Vf = (((Saturated thickness of filter pack) x (Volume of borehole per foot)) x (0.3) - ((Saturated thickness of filter pack) x (Volume of casing per foot)) SCFMW-006-0062-6W + SCFMW-006-0062-GF Sample ID: 01/20/10: 1530 Sample Date & Time: Analysis: RVAAP Full Suite (VOC, SVOC, PCB, Pesticides, Explosives, Propellents, Nitrate/Nitrite, Cyanide, 0.45 micron filtered TAL Metals) Site Conditions: See below Field Observations: **Deviations from Approved SAP:** Recorded By: QA Checked By:

Page: <u>3</u> of <u>3</u>

Project Name:

RVAAP SCFmw 4th Quarter GWS

Well ID:

SCFMW-000

Date	Time	Liters Removed	Temp (oC)	Specific Cond. (mS/cm)	pH (std. unit)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	eH (mV)	Total Liters Removed	Flow Rate (mL/min)	Water Level (ft btoc)	Comments
1/20/10	1458	2,25	11.1	.637	7.10	2120	10.3	-96	0,25	400		initiao
	1503	2.ø	9.4	,586	6.61	98.9	8,6	-100	2.25	400	18.56	
	1508	2.0	9,4	.588	6.47	74.4	8.0	-98	4.25	480	18.56	
	1513		9.3	.587	6.45	58.8	7.4	-lo2	l	400	18.56	
	1518	2.0	9.4	B.587	6,43	51.5	7,1	-113		400	18.56	
	1523			×,587	647	39.7	^ ^	-126	10,25	400	18.56	
<u> </u>	1528	2.0	9.4	0.587	6158	35.7	6.7	-136	12.25	400		PARAMETERS STABLE
											, -	THE MOVELLORS SUPPLEY
							Amo					
										No. College States		
										7		

Recorded By:

fet 1/28/10

QA Checked By:

amanda hentin