Appendix I

Detailed Core Descriptions and Photographs

C-Block Quarry
Building 1200
Load Line 7
Load Line 10

DETAILED CORE DESCRIPTIONS

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: CBL MW-001

PROJECT: RVAAP 14

INSPECTOR: Shahram Tanerrina

SHEET 1 OF 5

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT - (g)	REMARKS (h)
	6	Moderately strong, Light Gray with orange stains slightly decomposed closely spaced horizontal fractures					CORE BOX # 1 TOP
	7						
	8	med to coarse grained partially weathered massive, Permeable					
	9	clastic sand stone					
	10	change in colore orangish stains (Fe stains) vertical fractures at 9.7' & 10.1'					
	11	Continuous till 11'					
	12						
	13						
	14	change in colore Lighth grey with Pinkish stains (Fe) Horizontal fractures Closely spaced					CORE BOX # 1 BOTTOM
	15						CORE BOX # 2 TOP
	16						

PROJECT: RVAAP 14

HOLE NO.: CBL MW-001

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-EG)

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: CBL MW-001

PROJECT: RVAAP IC

INSPECTOR: Shahram Tahernia

SHEET 2 OF 3 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT - (g)	REMARKS (h)
	16						
	17						
	18	Moderately Strong Light orange ish Gray with horizontal closely spaced fractures containg Fe staing slightly decomposed massive, partially weathered med to coarse grained. Permeable clastic Sand Stone					
	19						
	20						
	21						
	22	change ~~in~~ Colore to light gray					
	23	more Fe stain at 23.1'					
	24	→ vertical fracture at 24.3' → Fe stain					
	25	→ weathered sandstone at 25.1 (fractured) highly permeable					CORE BOX #2 BOTTOM / CORE BOX #3 TOP
	26						

PROJECT: RVAAP IC

HOLE NO. CBL MW-001

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-EG)

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: CBL 00

PROJECT: RVAAP K4

INSPECTOR: Shahram Tavarinia

SHEET 3 OF 5 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT - (g)	REMARKS (h)
	26						
	27	moderately strong orangish Gray with closely spaced horizontal & inclined fractures with Fe stains on the surface slightly decomposed massive, partially weathered med to Coarse grained Permeable Clastic Sand Stone at 28' dark Reddish interbedded fractured sand stone (Fe rich) at 29' back to Gray Color at 31' a 3' thick layer of dark brownish gray interbedded med grained stand stone fractured					CORE BOX #3 BOTTOM CORE BOX #4 TOP
	28						
	29						
	30						
	31						
	32						
	33						
	34						
	35						
	36						

PROJECT: RVAAP K4

HOLE NO. CBL MW-001

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-EG)

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER CSL MW 001

PROJECT RVAAP 14 | INSPECTOR Shahram Tamerinia | SHEET 4 OF 5 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT - (g)	REMARKS (h)
	36	Vertical fracture at 35.3' Change in Colore at 35.8 to orangish gray and to dark brownish gray at 36.1 back to Gray at 36.5					
	37						
	38						
	39						
	40	Moderately strong light orangish Gray closely spaced horizental & inclined fractures, few Fe stains					
	41						
	42						
	43	slightly decomposed massive, partially weathered, med to coarse grained Permeable clastic sand stone					
	44						
	45	moderately weak Reddish orangish Gray,					
	46						

PROJECT RVAAP 14 | HOLE NO. CSL MW-001

ENG FORM 5056A-R, AUG 94 (Proponent: CECW-EG)

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: CRL MW-001

PROJECT: RVAAP 14

INSPECTOR: Shahram Tahmiyya

SHEET 5 OF 5 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT - (g)	REMARKS (h)
	46	highly fractured slightly decomposed interbedded layers of weakness with Fe stains on the fracture surfaces uneven fractures med to coarse grained highly permeable weathered clastic sand stone					CORE BOX #4 BOTTOM
	47						
	48						
	49						
	50						

PROJECT: RVAAP 14

HOLE NO. CRL MW-001

C-Block Quarry– MONITORING WELL # 001

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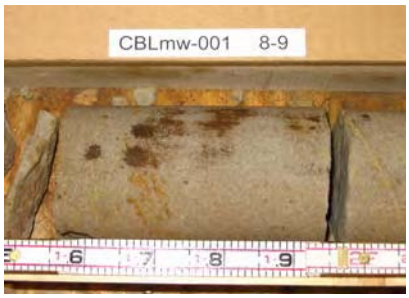

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C-Block Quarry– MONITORING WELL # 001

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C-Block Quarry– MONITORING WELL # 001

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C-Block Quarry– MONITORING WELL # 001

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C-Block Quarry– MONITORING WELL # 001

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C-Block Quarry– MONITORING WELL # 001

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C-Block Quarry– MONITORING WELL # 001

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C-Block Quarry– MONITORING WELL # 001

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DETAILED CORE DESCRIPTION

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: CBL MW-003

PROJECT: RVAAP 14

INSPECTOR: RVAAP ST Shahram Tamizmir

SHEET 1 OF 4

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	6	Strong, Pinkish grey massive, Slightly decomposed mechanical weathering Sand Stone, fractured					CORE BOX #1 TOP
	7	Partially weathered horizontal fractured close spacing med grain size					
	8	Strong light grey massive, partially weathered sandstone, ~~widely~~ closed					
	9	spaced horizontal fractured few FeO_2 stains at 10.3' and 12'					
	10	12.4' change in Color at 12.2 to Pinkish, orangish grey med grain size Permeable Clastic Sand Stone					
	11						
	12						
	13	Strong light grey massive, Partially weathered, ~~widely~~ closed					
	14	spaced fractured (horizontal) Sand Stone					
	15	Color changes to Pinkish grey at various depth and becomes Pinkish Red at 15'					
	16						CORE BOX #1 BOTTOM CORE BOX #2 TOP

PROJECT: RVAAP 14

HOLE NO. CBL MW-003

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-EG)

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: CBL MW-003

PROJECT: RVAAP 14 | INSPECTOR: Shahram Tanrinia | SHEET 2 OF 4 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	16	moderately weak Pinkish orange, massive moderately decomposed very close spaced					
	17	fractures (Horizontal) med grain size partially weathered permeable					
	18	clastic Sand Stone					
	19						
	20	Change of Color to yellowish					
	21	grey at 20' Fe_2O_3 stains at 21.4'					
	22						
	23	Dark, Pinkish Red Moderately weak decomposed, very close					
	24	horizontal fractured med grain size Partially weathered Low permeability					
	25	Clastic sand stone with Fe_2O_3 (iron oxidised)					Core Box #2 Bottom Core Box #3 Top
	26						

PROJECT: RVAAP 14 | HOLE NO. CBL-MW-003

ENG FORM 5056A-R, AUG 94 (Proponent: CECW-EG)

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: CRL MW-003

PROJECT: RVAAP 14 | INSPECTOR: Shahram Tahernia | SHEET 3 OF 4

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT - (g)	REMARKS (h)
	26						
	27	Light orangish grey moderately weak Decomposed, very close spaced horizontal fractures med size grains Partially weathered inter bedded clastic Sand Stone					
	28						
	29						
	30	Change in color to reddish grey Fe stains					
	31	light pinkish moderately strong Slightly decomposed very close spaced horizontal fractures med grained Partially weathered with close interbedded structure, Permeable clastic Sand Stone					
	32						
	33						
	34						
	35						CORE BOX # 3 BOTTOM CORE BOX # 4 TOP
	36						

PROJECT: RVAAP 14 | HOLE NO. CRL MW-003

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: CBL MW-003

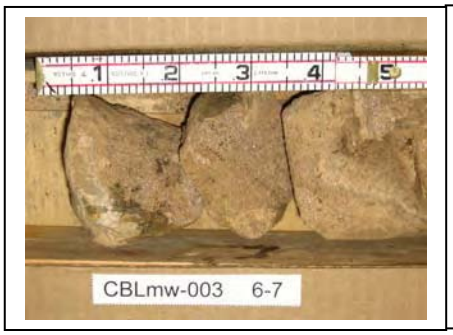
PROJECT: RVAAP 14 | INSPECTOR: Shahram Tahmasebi | SHEET 4 OF 4

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT - (g)	REMARKS (h)
	36	1					
	37						
	38						
	39	Moderately strong Light pinkish Grey Slighty decomposed closely spaced un even horizontal fractures med grained partially weathered massive, Permeable Clastic Sand Stone					
	40						
	41						
	42						
	43						
	44						CORE BOX #4 BOTTOM
	45						
	46						

PROJECT: RVAAP 14 | HOLE NO: CBL MW-003

ENG FORM 5056A-R, AUG 94 (Proponent: CECW-EG)

C-Block Quarry– MONITORING WELL # 003



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C-Block Quarry– MONITORING WELL # 003

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C-Block Quarry– MONITORING WELL # 003

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C-Block Quarry– MONITORING WELL # 003

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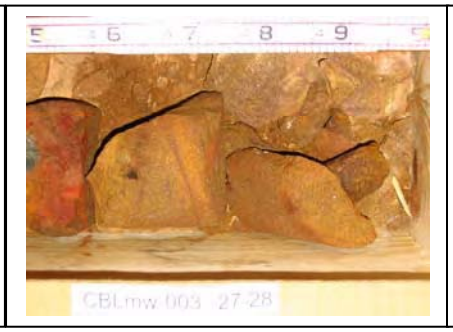

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C-Block Quarry– MONITORING WELL # 003

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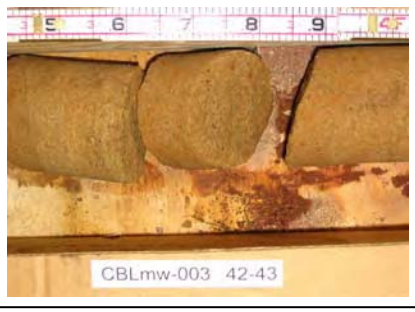

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DETAILED CORE DESCRIPTIONS

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER B1200 MW-010

PROJECT RVAAP 12 | INSPECTOR Shahram Tahernia | SHEET 1 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT - (g)	REMARKS (h)
	5	Moderately weak Light orangish Gray closely spaced fracture interbedded Fe stain, uneven fracture slightly decomposed Partially weathered med to fine grained Permeable clastic sand stone					CORE BOX #1 TOP
	6						
	7						
	8						
	9	Reddish orange vertial fractures in moderately weathered sandstone					
	10	interbedded with shale (weak layer)					
	11	Fe stain on the horizontal fractures surface, high Permeability					
	12	weathered gray shale					
	13	Gray, strong fine to med grain massive clastic sand stone (mika)					CORE BOX #1 BOTTOM CORE BOX #2 TOP
	14	weathered shale					
	15						

PROJECT RVAAP 12 | HOLE NO. B1200 MW-010

ENG FORM 5056A-R, AUG 94 (Proponent: CECW-EG)

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: B1200-mw 010

PROJECT: RVAAP 14

INSPECTOR: Shahram Tamerinia

SHEET 2 OF 2

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	15	orangish gray moderately weak interbedded fine to med grained sand stone with horizental fracturing with Fe stain on the fractures Permeable					
	16						
	17						
	18						
	19						
	20	~~weathered~~ gray shale					CORE BOX #2 BOTTOM
	21						

PROJECT: RVAAP 14

HOLE NO. B1200 MW-010

ENG FORM 5056A-R, AUG 94 (Proponent: CECW-EG)

Building 1200 – MONITORING WELL # 10

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Building 1200 – MONITORING WELL # 10

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Building 1200 – MONITORING WELL # 10

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DETAILED CORE DESCRIPTIONS

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER B1200 MW-012

PROJECT RVAAP IC

INSPECTOR Shahram Taherinia

SHEET 1 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT - (g)	REMARKS (h)
	7	weak to ~~moderat~~ weak grey, closely spaced horizontal fractures interbedded with many weak layers of shale & Fe stain, decomposed shale layers, med to small grained permeable clastic sandstone					CORE BOX #1 TOP
	8						
	9						
	10						
	11	change in color at 9' + o orangish gray					
	12	~~Highly~~ Permeable weathered shale layers					
	13	~~at~~ 13.2' with Fe stain ~~color~~					
	14						
	15	~~interbedded weak~~ dark gray shale ~~weathered~~ impermeable ~~vertical fractures~~					CORE BOX #1 BOTTOM
	16	oranges gray moderately weak to moderately strong, shale stone					CORE BOX #2 TOP
	17	~~vertical fractures~~					

PROJECT RVAAP IC

HOLE NO. B1200 MW-012

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-EG)

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER B1200 MW-012

PROJECT RVAAP 14 | INSPECTOR Shahram Tahereh | SHEET 2 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT - (g)	REMARKS (h)
	17	Grey interbedded weak, fractured shale, weathered					
	18	Light Gray, strong horizontal fractured massive, med grained unweathered clastic Sand Stone					CORE BOX #2 BOTTOM
	19	interbedded Sand Stone dark grey, weak interbedded shale, weathered decomposed Horizontal fractures					CORE BOX #3 TOP
	20						
	21	interbedded Sandstone shale					
	22	moderately strong Light Gray					CORE BOX #3 BOTTOM
	23	Partially weathered horizontally fractured med grained massive, clastic Sand Ston					
	24						
	25						
	26						
	27						

PROJECT RVAAP 14 | HOLE NO. B1200-MW 012

ENG FORM 5056A-R, AUG 94 (Proponent: CECW-EG)

Building 1200 – MONITORING WELL # 12

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Building 1200 – MONITORING WELL # 12

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Building 1200 – MONITORING WELL # 12

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DETAILED CORE DESCRIPTIONS

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: LL7 MW-002

PROJECT: RVAAP 14

INSPECTOR:

SHEET 1 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT - (g)	REMARKS (h)
	6	Moderately strong organish gray slightly decomposed					CORE BOX #1 TOP
	7	Partially weathered massive, horizontally & inclined fractures					
	8	closely spaced smooth fractures med to coarse grained, permeable					
	9	clastic sandstone with Fe stains on fracture surface					
	10						
	11	Change in color to orange color weathered at 10'-11'					
	12	some vertical fractures					
	13						
		NO Recovery					
	14	Dark gray, weak, decomposed weathered, interbedded closely horizontal fractures					
	15	weak layers, presence of mika, Low permeability smooth fractures					CORE BOX #1 BOTTOM
		fine grained shale					CORE BOX #2 TOP
	16						

PROJECT: RVAAP 14

HOLE NO: LL7 MW-002

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-EG)

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: LL7MW-002

PROJECT: RVAAP | INSPECTOR: | SHEET 2 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT - (g)	REMARKS (h)
	17	Dark gray Moderately Strong Slightly decomposed Partially weathered Closely spaced horizontally fractures, smooth fractures, interbedded, fine ~~Small~~ grain changes with depth to Coarse grains clastic Sand Stone, Permeable, Qtz & mika & trace of Feldspar minerals, Fe Stains at weakness layers					
	18						
	19						
	20						
	21						
	22						
	23						
	24						
	25	Bottom of core					CORE BOX #2 BOTTOM
	26						

PROJECT | HOLE NO.

ENG FORM 5056A-R, AUG 94 (Proponent: CECW-EG)

LOAD LINE 7 – MONITORING WELL # 2

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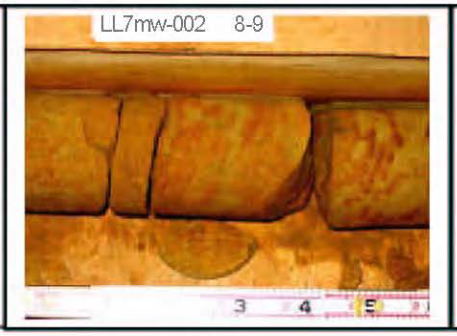

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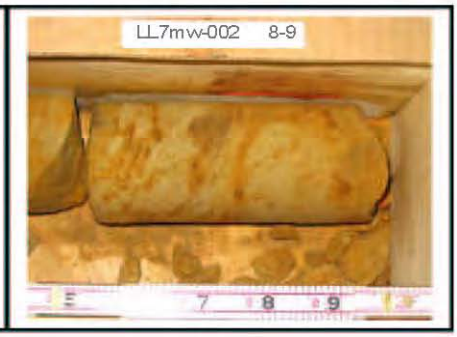

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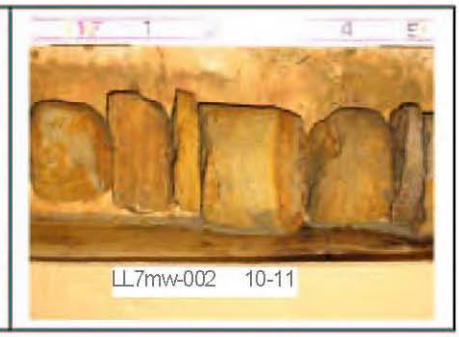

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LOAD LINE 7 – MONITORING WELL # 2

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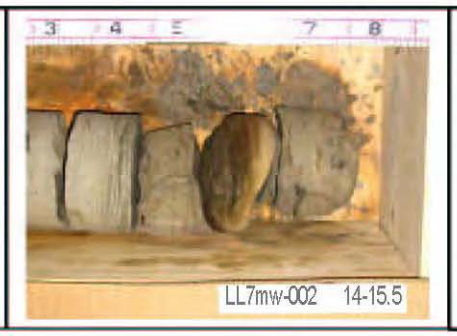

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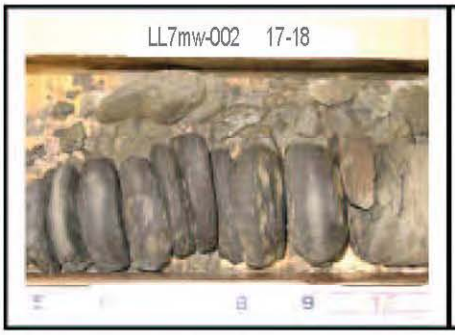

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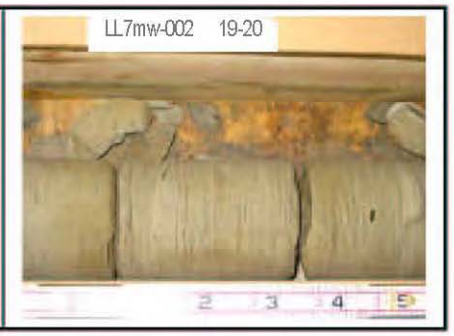

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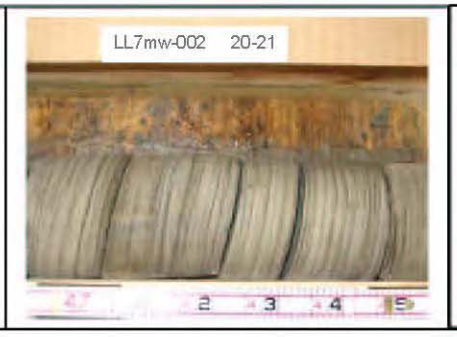

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LOAD LINE 7 – MONITORING WELL # 2

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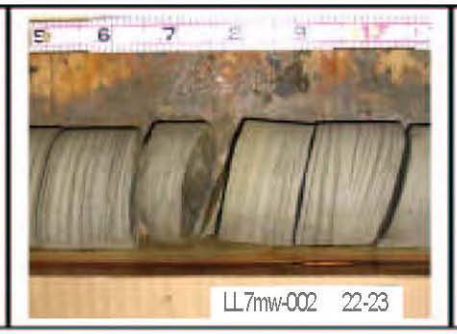

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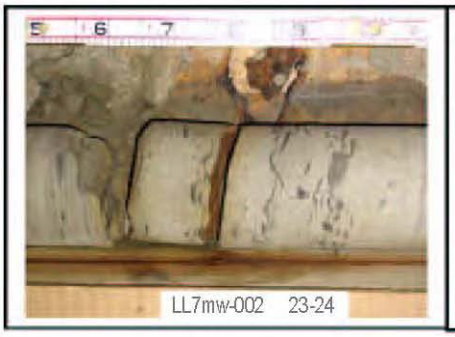

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DETAILED CORE DESCRIPTION

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER LL7 MW-003

PROJECT RVAAP 14 | INSPECTOR Shahram Tahernia | SHEET 1 OF 1 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	20	DS. gray, weathered fractured, shale:					CORE BOX #1 TOP
	21	Moderately strong Dark Grey with Fe staining slightly decomposed					
	22	closely spaced horizontal &					
	23	vertical fractures with Fe stain at surface of fractures					
	24	interbedded small to med grained					
	25	permeable clastic Sandstone					
	26	Quartz & mika & trace of					
	27	Feldespar minerals					
	28	Dominant vertical fracture					
	29						
	30						CORE BOX #1 BOTTOM

PROJECT RVAAP 14 | HOLE NO. LL7MW-003

ENG FORM 5056A-R, AUG 94 (Proponent: CECW-EG)

LOAD LINE 7 – MONITORING WELL # 3

1 of 10

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DETAILED CORE DESCRIPTION

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: LLT MW-006

PROJECT: RVAAP 14

INSPECTOR: Shahram Tahernia

SHEET 1 OF 2

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	12	Moderately strong Orangish brown with Fe stains & trace of water path. Slightly decomposed highly fractured (mostly horizontal) rough fracture surfaces massive, med to large grained porous, highly permeable clastic sandstone Quartz is the main minerals					CORE BOX #1 TOP
	19	moderately strong Light Gray with trace of water path at weakness plains Fe stains, interbedded close fractures (inclined) Partially weathered clastic sandstone (med grains) Qtz & mica					CORE BOX #1 BOTTOM CORE BOX #2 TOP

PROJECT: RVAAP 14

HOLE NO. LLT MW-006

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-EG)

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: LL7 MW-006

PROJECT: RVAAP 14

INSPECTOR: Shahram Tahmirnia

SHEET 2 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT - (g)	REMARKS (h)
	22	Color changes to darker gray					
	23	light gray moderately strong slightly decomposed partially weathered close horizontal fractures, trace of water path at plains of weakness massive with few bedding marks at 24.5' & 25.3' small grained, permeable clastic sand stone Qtz, mika, feldspar					CORE BOX #2 BOTTOM
	24						
	25						
	26						
	27						
	28	color changes to orangish gray with depth					
	29						
	30						

PROJECT: RVAAP 14

HOLE NO. LL7 MW -006

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-EG)

LOAD LINE 7 – MONITORING WELL # 6

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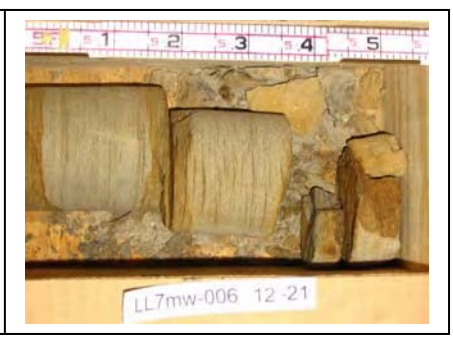

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LOAD LINE 7 – MONITORING WELL # 6

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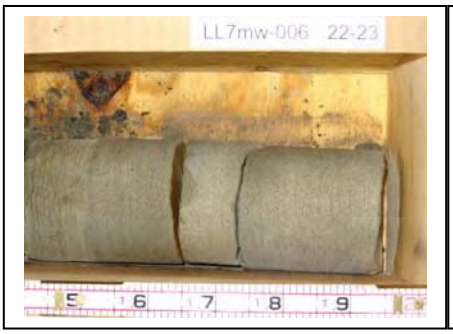

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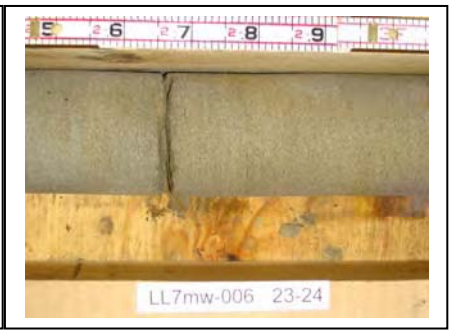

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DETAILED CORE DESCRIPTIONS

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: LL10 MW-001

PROJECT: RVAAP 14

INSPECTOR: Shahram Tanzinia

SHEET 1 OF 2

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	15–21.5	Moderately strong light gray, slightly decomposed, partially weathered massive, inclined close spaced fractures with smooth surface large grained permeable clastic sand stone Qtz & trace of mika trace of gas at weakness planes & fractures, thin carbonaceous layer at various depths trace of water pathway					CORE BOX #1 TOP; (at 20) CORE BOX #1 BOTTOM / CORE BOX #2
	21.5–24	structure changes to interbedded sand stone with weak planes of weathered sand stone (water & gas path way)					
	24–25	orangish gray in color massive					

PROJECT: RVAAP 14

HOLE NO. LL10 MW-001

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: 410 MW-001

PROJECT: RVAAP 14

INSPECTOR: Shahram Taherinia

SHEET 2 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT - (g)	REMARKS (h)
	25	Large grained Partially weathered permeable clastic Sand Stone Qtz Carbonaceous layers					CORE BOX #2 BOTTOM
	26						
	27						
	28						
	29						
	30						

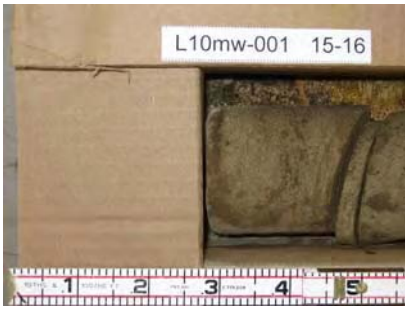
PROJECT: RVAAP 14

HOLE NO.: CC12 MW-001

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-EG)

Load Line 10 – MONITORING WELL # 1



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Load Line 10 – MONITORING WELL # 1

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Load Line 10 – MONITORING WELL # 1

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DETAILED CORE DESCRIPTIONS

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: LL10 MW-002

PROJECT: RVAAP - RI 14

INSPECTOR: Shahram Tahernia

SHEET 1 OF 2

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT - (g)	REMARKS (h)
	16	MODERATELY STRONG, LT BRN & GREY, SLIGHTLY DECOMP PARTIALLY WEATHERED					CORE BOX #1 TOP
	17	MASSIVE W/ CLOSED SPACED FRACTURES, SMOOTH SURFACE FRACTURES, MED ~~TO LARGE~~ COARSE					
		GRAINED, FeO_2 STAINS AT					
	18	FRACTURES, PERMEABLE CLASTIC ~~SANDSTONE~~ W/ QUARTZ, TRACE MICA					
		COLOR CHANGES TO ~~GREY~~					
	19	@ 17.65' AND BACK TO ORIG					
		17.8', VERT FRACTURE					
		@ 18.15 TO 18.65					
	20	TRACE OF WATER PATH AT					
		VARIOUS DEPTHS ALONG					
		BEDDING PLANES (PLANE OF WEAKNESS)					
		STRUCTURE CHANGES TO					
	21	INTERBEDDED SANDSTONE					
		AT 19.6, VERY CLOSED SPACED					
		HORIZ FRACTURES, MOD WEAK					
	22	ALONG BEDS					
		COLOR CHANGES TO LT GREY					
		AT 19.6' W/ FeO_2 STAINS					
		AT SURFACE OF FRACTURES					
	23	SOME VERT FRAC AT 22.1 &					
		23.3', PARTIALLY WEATHERED					
		GRAIN SIZE FINES W/ DEPTH					
		& COLOR CHANGES TO					
	24	DARK GREY					
		~~INTE~~ BEDDING STRUCTURE					
		GETS TIGHTER, MORE CLOSELY					
	25	SPACED, VERY WEAK ALONG					
		PLANES					
							CORE BOX #1 BOTTOM

PROJECT 26 RVAAP - RI 14

HOLE NO. LL10 MW-002

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-EG)

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: LI10MW-002

PROJECT: RVAAP - RI 14

INSPECTOR: Shahram Tavassoli

SHEET 2 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	26	COLOR					CORE BOX #2 TOP
	27	COLOR IS BRNISH GREY					
		SLIGHTY DECOMPOSED					
		PART WEATHERED					CORE BOX #2 BOTTOM
	28	CLOSELY SPACED					
		INCLINED FRACTURES					
		MED GRAINED, PERMEABLE					
		CLASTIC SANDSTONE					
		@ 27.3 TRACE OF COAL					
		ON VERT & HORIZ FRACTURES					

PROJECT: RVAAP - RI 14

HOLE NO.: LIOMW-002

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-EG)

Load Line 10 – MONITORING WELL # 2

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Load Line 10 – MONITORING WELL # 2

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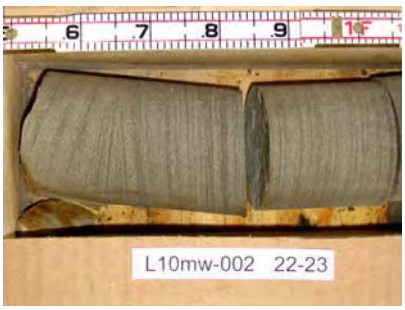

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DETAILED CORE DESCRIPTIONS

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: L10mw-003

PROJECT: RVAAP-RI14

INSPECTOR: Shahram Dahmardeh

SHEET 1 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT - (g)	REMARKS (h)
		14.3					2" THICK, STRONG DK GRN IMPERM WELL CEMENTED COARSE GRAINED MASSIVE, SANDSTONE QTZ, FELDSPAR, DARK STAINING (NOT PART OF NATIVE ROCK) CORE BOX #1 TOP
		MODERATELY STRONG, MASSIVE					
	15	PART DECOMPOSED, U. CLOSELY					
		SPACED FRAC, HIGHLY PERM					
		HORIZ & INCLINED, SMOOTH					
		FRACTURES W/ FeO_2					
	16	STAINED ALONG WATER PATH					
		PART WEATHERED, ~~STAIN~~					
		FINE TO MED GRAIN SIZE					
		BLACK ~~STAINING~~ SPOTS					
	17	(ALTERED MINERALS DUE TO					
		WEATHERING)					
		QTZ W/ TRACE MICA					
	18	~~LT~~ TAN TO LT BRN					
		STRUCTURE					
		TAN MODERATELY STRONG					
	19	INTERBEDDED MOD DECOMP					
		MOD WEATHERED; CLOSED					
		SPACED, HORIZ & INCLINED					
		FRACT W/ SMOOTH SURFACE					
	20	W/ FeO_2 STAINS, WATER PATH					
		ALONG BEDDING PLANE					
		INCREASING W/ DEPTH					
	21	INCREASED MICA %,					CORE BOX #1 BOTTOM
		GRAINS ARE FINER					CORE BOX #2 TOP
		WATER STAINS ON CORE					
	22	PERM INCREASES W/ DEPTH					
		STRUCT CHANGE @ 21.9					
		LT GREY MOD STRONG					
	23	WELL CEMENTED, DECOMP					
		MINERALS, PERMEABLE					
		MOD WEATHERED, CLOSELY					
		SPACE, HORIZ ~~FRACTURE~~					
		W/ SMOOTH SURFACE					

PROJECT: RVAAP-RI14

HOLE NO.: L10mw-003

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-EG)

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: L10mw-003

PROJECT: RVAAP - RI 14

INSPECTOR: Shahram Tahmasebia

SHEET 2 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT - (g)	REMARKS (h)
	23	TRACE OF Fe STAINS AT BEDDING PLANES ALTERED MINERALS AT SURFACE OF FRACTURE MED TO COARSE GRAIN SIZE, GRAINS VARIE-					
	24						
	25	MOSTLY QTZ & MICA CLASTIC SANDSTONE VERY WEAK ALONG					CORE BOX #2 BOTTOM
	26	BEDDING PLANE.					
	27						

PROJECT: RVAAP - RI 14

HOLE NO.: L10mw-003

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-EG)

Load Line 10 – MONITORING WELL # 3

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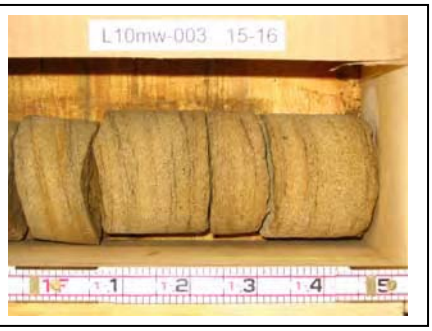

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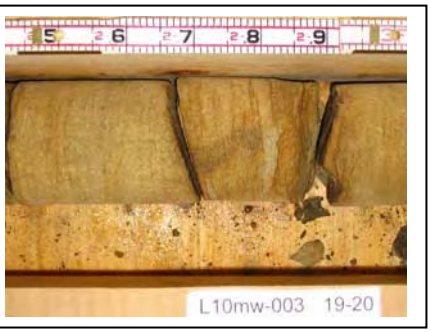

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Load Line 10 – MONITORING WELL # 3

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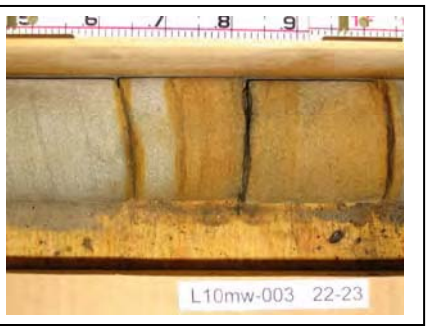

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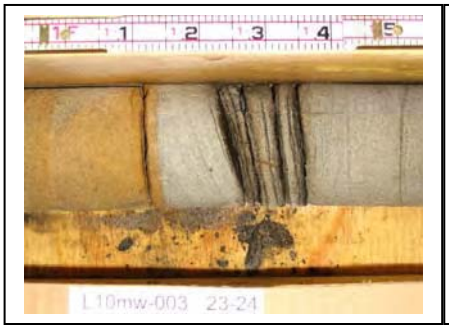

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DETAILED CORE DESCRIPTIONS

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER L10mw-004

PROJECT RVAAP - RI 14

INSPECTOR Shahram Tahmasebi

SHEET 1 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
							CORE BOX #1 TOP
		MOD STRONG, TAN COLOR					
		SLIGHTLY DECOMP					
	20	PART WEATHERED, MASSIVE					
		CLOSED SPACED, HORIZ					
		FRAC W/ LEVEL & UNEVEN					
	21	SURFACES					
		MED TO COARSE GRAINED					
		HIGHLY PERMEABLE					
	22	CLASTIC SANDSTONE					
		BLACK SPOTS POSSIBLY					
		ALTERED MINERALS					
	23	QTZ & MICA, TRACE					
		FELDSPAR, WELL CEMENTED					
		COLOR CHANGES					
	24	AT 24.8' TO RUSTY					
		BROWN					
		HIGHER PERM					
	25	MORE POROUS					
		AT 25.6'					
		MOD STRONG, LT GREY					
	26	SLIGHTLY DECOMP, PART					
		WEATHERED, MASSIVE					
		CLOSELY SPACED, HORIZ					
		FRACTURES W/ SMOOTH					
	27	SURFACES, FEW Fe STAINS					
		AT FRACTURES, SOME ALTERED					
		MINERALS AT SURFACE OF					
	28	FRACTURES, FINE TO MED GRAINED					
		CHANGES TO MED TO COARSE					
		WITH DEPTH					
		HIGHLY PERM					

PROJECT RVAAP - RI 14

HOLE NO. L10mw-004

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-EG)

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: L10mw-004

PROJECT: RVAAP RI 14

INSPECTOR: Shahrzad Tabernia

SHEET 2 OF 2

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT - (g)	REMARKS (h)
	30	CLASTIC SANDSTONE WELL CEMENTED, QTZ W/ SOME MICA					CORE BOX #1 BOTTOM
	31						

PROJECT: RVAAP - RI 14

HOLE NO.: L10 mw - 004

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-EG)

Load Line 10 – MONITORING WELL # 4

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Load Line 10 – MONITORING WELL # 4

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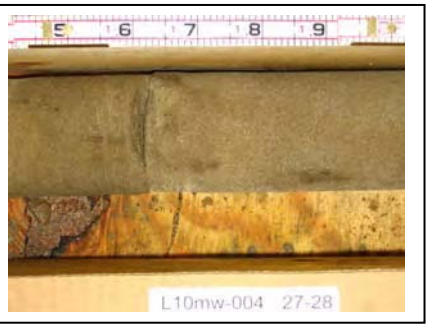

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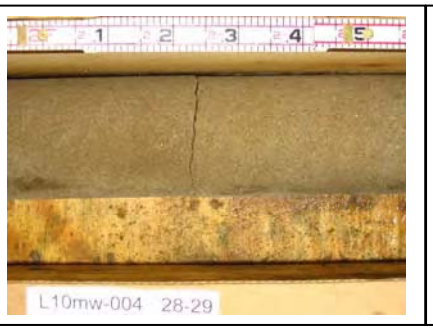

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DETAILED CORE DESCRIPTIONS

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: L10MW-005

PROJECT: RVAAP-RI 14

INSPECTOR: Shahram Tahernia

SHEET 1 OF 1

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT - (g)	REMARKS (h)
	15	MOD STRONG, TAN SLIGHTLY DECOMP, PART WEATHERED, INTERBEDDED STRUCTURE, BLACK SPOTS POSSIBLE COAL, VERY CLOSELY SPACED HORIZ FRACTURED W/ EVEN SURFACES					CORE BOX #1 TOP
	16						
	17	FINE TO MED GRAINED WATER & Fe STAINS VERTICAL & HORIZ STAINS					
	18	ALONG THE CORE & ALONG THE BEDDING & FRACTURE					
	19	TRACE OF MINERAL ACCUMULATION					
		MOSTLY QTZ & MICA SANDSTONE					
	20	19.2 MOD STRONG RUSTY TAN COLOR SLIGHTLY DECOMPOSED PARTIALLY WEATHERED					
	21	HORIZ FRAC W/ EVEN SURFACES, MASSIVE, ~~OXIDATION~~ FeO2 & WATER					
	22	STAINS ON SURFACE OF FRACTURES, TRACE BLACK SPOTS					
	23	COARSE ~~GRAINED~~ HIGH PERM & POROUS WELL CEMENTED CLASTIC SANDSTONE					
	24	MOSTLY QTZ W/ TRACE MICA					CORE BOX #1 BOTTOM
	25						

PROJECT: RVAAP-RI 14

HOLE NO.: L10MW-005

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-EG)

Load Line 10 – MONITORING WELL # 5

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Load Line 10 – MONITORING WELL # 5

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