

Well Construction Details

Top of PVC Casing
Elev. **496.75 ft.**

GROUND SURFACE

4" DIA. SCHED. 40 BLANK CASING: +2.0 to 10 ft.

BENTONITE-CEMENT SEAL: 0 to 4 ft.

BENTONITE-PELLET SEAL: 4 to 7 ft.

Medium Aquarium SAND PACK: 7 to 31 ft.

8.5" DIA. BOREHOLE: 0 to 40 ft.

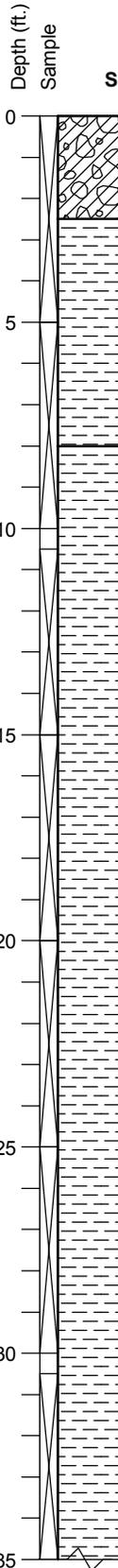
4" DIA. SLOTTED CASING (0.04"): 10 to 30 ft.

HOLE CLEANED OUT to 31 ft.
BOTTOM WELL CAP: 30.5 ft.

Recovery (inches)
PID Reading (ppm)

0	0
60	0
60	0
54	0
60	0
60	0
60	0
60	0
60	0
54	0

Date 11/17/04
 Driller Air Rotary
 Drilling Method ARCH
 Sampler Continuous Core
 Hammer Weight NA Drop NA
 Logged by _____ Datum _____
 Surface Elevation 494.69 Hole Dia. 8.5 in.
 Northing 505168.9098 Easting 1238117.08



Light Yellowish Brown Clayey Gravel with Sand (GC) (10YR 6/4) Dense, dry, 60% fine angular mudstone gravel, 20% sand, 20% clay/fines (Fill)

Grayish Brown Weathered Mudstone (2.5Y 5/2) Moderately consolidated, crushed to intensely fractured, low hardness, weak, deeply weathered, some laminated bedding, iron oxide throughout
 @ 3.7 - 4.9 ft.: Subhorizontal fractures with gypsum
 @ 5 ft.: Very dark grayish brown

Dark Gray Unweathered Mudstone, Moderately consolidated, massive, occasionally fractured, low hardness, weak, little to no weathering

@ 10.9 - 12 ft.: Vertical fracture
 @ 13.1 ft.: Subangular fractures at 13.1, 14.1, and 14.5 ft.

@ 15 ft.: Changes to moderately hard, moderately strong
 @ 16 ft.: Vertical fractures seen in video

@ 18.4 ft.: Irregular vertical fracture observed in video
 @ 19.5 ft.: Vertical fracture with iron oxide.
 From 19.5 - 23.8 ft.: Iron oxide gone by 21 ft.

Vertical fractures from 20.8 - 23.3 ft. and 20.9 - 22.1 ft.
 @ 22 ft.: White mineral in-filling visible in video log, water streaming in at 22.6 ft. in video.

@ 24.3 ft.: White nodules, mildly calcareous from 24.3 - 25 ft.; subhorizontal fracture visible in video log at 24.3 ft.

@ 29.3 ft.: Small subhorizontal fractures at 29.3, 29.6 and 30.2 ft.

@ 32.7 ft.: White layers

BORING_WELL2_CASMLIARIFS.GPJ_GEOL.GDT 12/13/10

Well Construction Details and Log of Boring RIMW-01

Final Remedial Investigation Report
 Casmalia Resources Superfund Site
 Casmalia, California

PLATE

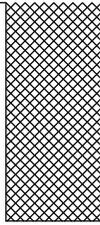
E9-1

DRAWN	JOB NUMBER	CHECKED	CHK'D DATE	APPROVED	APPR'V DATE
CN	4088097619	WJF	1/11	WBC	1/11

Well Construction Details

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BENTONITE
 PELLET
 BACKFILL: 31 to
 40 ft.



Recovery
 (inches)
 PID Reading
 (ppm)

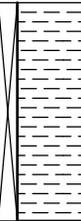
60

0

Depth (ft.)
 Sample

35

40



@ 35.2 ft.: White layer

@ 37.7 ft.: White layer

Bottom of boring at 40 ft.

BORING_WELL2_CASMAL/ARIFS.GPJ_GEOLOGDT_12/13/10

Well Construction Details and Log of Boring RIMW-01

PLATE

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