

Rotary Sidewall Core Plugs

Coring Performed by: Schlumberger


Wallula, WA - CO2 Sequestration Pilot

1/19/2009

Descriptions compiled from field journals of Dr. Charlotte Sullivan and Sarah Finne

Depth = feet below ground surface

Ground Elevation = 363.18 ft MSL

 = Wanapum Basalt

 = Grande Ronde Basalt

[Sorted by Depth]

Sample #	Depth (ft)	Description	Formation (tentative; as of 6-2-09)
31	1542	Basalt: dense; hairline fracture	Frenchman Springs Member - Flow 4
30	1701.6	Basalt: some fractures; dense	Sentinel Bluffs Member - Flow 1
29	1750	Basalt: dense; no fractures; coring tool marks	Sentinel Bluffs Member - Flow 1 (base)
28	1940	Basalt: large vesicles, mostly filled; 2 pieces; plagioclase phenocrysts	Sentinel Bluffs Member - Flow 4 (top)
27	1978	Basalt: dense; 2 pieces; angled fracture	Sentinel Bluffs Member - Flow 4
26	2085	Basalt: dense	Contact: Sentinel Bluffs - Flow 5 & Flow 6
25	2230	Basalt: very fractured	Sentinel Bluffs Member - Flow 7
24	2290	Basalt: dense; couple of hairline fractures; few tiny vesicles	Sentinel Bluffs Member - Flow 8
22	2410	Basalt: several small pieces; vesicles	Winterwater Member
23	2413	Basalt: one small piece; with large vesicle	Winterwater Member
21	2540	Basalt: dense; few vesicles	Umtanum Member
20	2624	Basalt: fairly dense; tiny vesicles	Slack Canyon Member - Flow 1
19	2688	Basalt: dense; hairline fractures	Slack Canyon Member - Flow 1
18	2750	Basalt: vesicular; oxidized(red); fractured (2 pieces; 1 small)	Slack Canyon Member - Flow 2
17	2810	Basalt: calcite-filled large veins	Slack Canyon Member - Flow 3
16	2920	Basalt: dense; fractured; 2 pieces	Ortley Member - Flow 1
15	2940	Basalt: highly vesicular - mainly filled with clay coatings	Contact: Ortley - Flow 1 & Flow 2
14	2955.8	Basalt: dense; fractured	Ortley Member - Flow 2
13	3002	Basalt: large filled vesicles; calcite/quartz rim; black fill	Ortley Member - Flow 2
12	3110.2	Basalt: vesicular, filled with green-blue coatings	Ortley Member - Flow 2
11	3166	Basalt: vesicular, green-blue fill	Ortley Member - Flow 2
10	3245	Mudstone? Possible contact metamorphism.	Ortley Member - Flow 3
9	3258	Basalt: large vesicles; many w/ green-blue fill	Ortley Member - Flow 3

7	3396	Basalt: fractured; vesicles; 2 pieces	Ortley Member - Flow 4
6	3450	Basalt: dense; fractured (1 large, thin fracture)	Ortley Member - Flow 4
5	3490	Basalt: dense; 2 large angled fractures	Grouse Creek Member- Flow 1
4	3540	Basalt: dense; fractured	Grouse Creek Member- Flow 1
3	3590	Basalt: dense; fractured; 3 pieces	Grouse Creek Member- Flow 1
8	3614	Basalt: vesicular; partly filled	Grouse Creek Member- Flow 2
2	3810	Basalt: dense	Contact: Grouse Creek - Flow 2 & WR- Flow 1
1	3914	Mudstone/claystone: fractured (natural); 2 pieces	Wapshilla Ridge Member - Flow 1
32	3972	Basalt: diktytaxitic?; brown oxidized iron in small fractures	Wapshilla Ridge Member - Flow 1