MAD (Moisture and Density) Logsheet - *Balance and pycnometer measurements* MINICORES

Aug. 19, 2021

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Exp. 396 WRITE DOWN CYL#####

Site/Hole U1566 A

Core/Section,	Offset	Text ID example: SHLF 3215071	container #	Mass Wet (g)	Mass dry (g)	Sample volume cm^3	Pycnomet. cell #	caliper measurements (average of 3 for each) Comments
12R2	74/76	MILL	0	58.265	57,1271	21.945	5	d = 25,17mm H = 46.63mm ρ = 2.51 g/cc
12R3	7/9	MILL	0	~~49~~.387	47,354	17.806	5	d = 25.11 H = 41.34 ρ = 2.41 g/cc
12R4	6/8	MILL	0	58,858	57,678	21.600	5	d = 25.16 H = 46.86 ρ = 2.53 g/cc
12R4	91/93	MILL	0	56.667	55,155	20.601	5	d = 25.16 H = 45.06 ρ = 2.53 g/cc
12R4	135/137	MILL	0	62.893	62,013	22.626	5	d = 25.19 H = 47.09 ρ = 2.68 g/cc
17R3	19/21	MILL	0	~~42.826~~ ~~42.785~~	~~37.499~~	16.167	5	d = 25.03 H = 42.79 remeasured weight 42.826 ρ = 1.95 g/cc
15R2	28/30	MILL	0	48,449	44,632	16.768	5	d = 25.14 H = 44.32 vesicular ρ = 2.20 g/cc
15R2	49/51	MILL	0	61.715	60,128	21.935	5	d = 24.48 H = 48.06 ρ = ~~2.73~~ g/cc
16R3	32/34	MILL	0	44.81	40,865			d = 25.15 H = 45.03 altered ρ = 2.00 g/cc
17R3	72/74	MILL	0	39.728				d = 25.22 H = 39.93 altered ρ = 1.99 g/cc
16R3	13/15	MILL	0	41.327	37,932	16,60558	5	d = 25.04 H = 41.77 ρ = 2.01 g/cc
19R3	104/106	MILL	0	51.525	47.525	18.015	5	d = 25.24 H = 45.96 ρ = 2.24 g/cc
19R3	92/94	MILL	0	44.04	37,403	15.760	5	d = 25.18 H = 45.14 ρ = 1.96 g/cc

MAD (Moisture and Density) Logsheet - *Balance and pycnometer measurements* MINICORES Aug. 20, 21

Exp. 396 samples drained ~17:00 Aug 22 **Site/Hole** U1566A page 2

Core/Section,	Offset	Text ID example: SHLF 3215071	container #	Mass Wet (g)	Mass dry (g) Aug 23, 23:30 ~36 hr after	Sample volume cm^3	Pycnomet. cell #	Comments
								mm
20R1	12/14	MiLL	CYL 11071721	57.47	55.815	20.366	5	d = 25.18 H = 47.09 ρ = 2.45 g/cc
20R1	101/103	MiLL	CYL 11071731	67.355	66.646	23.358	5	d = 25.19 H = 48.65 ρ = 2.78 g/cc
20R2	84/86	MiLL	CYL 11071741	48.599	45.473	16,92486	5	d = 25.26 H = 41.31 ρ = 2.35 g/cc
20R2	111/113	MiLL	CYL 11071751	40.704 ~~40.684~~	36.056	16.520	5	remeasured ∴ altered basalts d = 25.21 H = 43.62 1.87 g/cc
20R2	136/138	MiLL	CYL 11071761	49.515	46.627	17,18086	5	d = 25.18 H = 45.0 ρ = 2.2 g/cc
26R1	52/54	MiLL	CYL 11075441	44.737	40.125	15.100	5	d = 25.01 H = 45.91 ρ = 1.98 g/cc very fragile
26R2	105/107	MiLL	CYL 11075401	49.022	45.024	17,40343	5	d = 2.5 cm H = 46.97 ρ = 2.13 g/cc
26R3	5/7	MiLL	CYL 11075411	48.1	45.631	18.609	5	d = 25.19 H = 43.96 ρ = 2.2 g/cc
26R3	105/107	MiLL	CYL 11075431	51.328	48.694	18.260	5	d = 25.27 H = 43.49 ρ = 2.35 g/cc
26R3	48/50	MiLL	CYL 11075421	53.16	50.875	19,40389	5	d = 25.2 H = 44.7 ρ = 2.38 g/cc

MAD (Moisture and Density) Logsheet - *Balance and pycnometer measurements* MINICORES

drained ~ 17:00 Aug. 22

Aug 27, 21

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Exp. 396 **Site/Hole** U1566A

Core/Section,	Offset	Text ID example: SHLF 3215071	container #	Mass Wet (g)	Mass dry (g) Aug. 23 Measured ~ 30 hrs after	Sample volume cm^3	Pycnomet. cell #	Comments (mm) wet ρ
28R1	140/142	cyl 11075931	0	49.984	48.557	18,20917		d = 25.08 H = 46.13 1.97 g/cc altered
28R2	17/19	cyl 11075941	0	46.216	46.957	17.827		d = 25.03 H = 44.28 2.12 g/cc Sandstone
28R2	28/30	cyl 11075951	0	45.085				d = 24.97 H = 44.23 2.08 g/cc
33R1	63/65	cyl 11076001	0	42..522	wrapped 40.133			d = 25.12 H = 42.05 extremely fragile, wrapped wrapping removed for measure. re-wrapped 2.04
33R2	6/8	cyl 11075981	0	46.125	44.520	16,32676	5	d = 25.03 H = 44.55 2.10
→ 33R2	77/79	cyl 11075991	0	45.085	42.386	21.66	5	V = 21.66 cm^3 was measured before? 2.08
32R3	14/16	cyl 11075961	0	46.872	(30 spc: 43.238) 44.342	16.442	5	d = 25.05 H = 45.21 2.10
32R3	64/66	cyl 11075971	0	57.224	54.850	20.891	5	d = 25.23 H = 48.92 2.34
28R2	28/30	11075951	0	not measured	43.699	16.435	5	
7R2	55/57	11060161	0	46.536				
7R3	8/10	11060171	0	60.837				
7R2	13/15	11060151	0	56.871	55.357			

September 09, 21

MAD (Moisture and Density) Logsheet - *Balance and pycnometer measurements*

MINICORES

(1)

Exp. 396 **Site/Hole** U1571A

Core/Section,	Offset	Text ID example: SHLF 3215071	container #	Mass Wet (g)	Mass dry (g)	Sample volume cm³	Pycnomet. cell #	d = diameter, mm H = height, mm Wet density, g/cm³ — average of 3 measurements — Comments
19R1	8/10	cyl 11155611	0	~~47.959~~ ~~48.761~~	45.184			d = 25.09 H = 45.21 2.15
19R1	89/91	cyl 11155631	0	57.909	56.026			d = 25.25 H = 45.02 2.57
22R1	88/90	cyl 11156701	0	64.109	63.126			d = 25.21 H = 47.80 2.70
24R1	27/29	cyl 11159231	0	43.382	40.148			d = 25.24 H = 39.97 2.17
24R1	51/53	cyl 11159241	0	55.921	53.847			d = 25.21 H = 45.95 2.44
24R1	75/77	cyl 11159251	0	53.766	50.075			d = 25.25 H = 46.40 2.31
24R1	122/124	cyl 11159261	0	57.82	56.237			d = 25.22 H = 44.77 2.58
25R3	32/34	cyl 11160221	0	38.06				d = 25.15 H = 39.85 1.92
25R3	106/108	11160241	0	49.188	44.161			d = 25.16 H = 45.24 2.19
25R3	139/141	11160251	0	44.324	39.852			d = 25.17 H = 42.68 2.09
26R2	24/26	11160621	0	48.395	44.395			d = 25.18 H = 44.26 2.20
26R2	37/39	11160631	0	48.071	44.579			d = 25.19 H = 44.34 2.18
27R3	105/107	11162601	0	65.971	65.524			d = 25.27 H = 47.82 2.75
30R2	49/51	11163981	0	55.519	54.989			d = 25.22 2.76

drying since Sept. 10, 00:00

drying since Sept. 10, 16:00

MAD (Moisture and Density) Logsheet - *Balance and pycnometer measurements*

MINICORES

JM minis Saturated (2)

Exp. 396 **Site/Hole** 1571A / 72A

September 09, 2021

Sept. 13, 2021

Core/Section,	Offset	Text ID example: SHLF 3215071	container #	Mass Wet (g)	Mass dry (g)	Sample volume cm^3	Pycnomet. cell #	Comments (wet bulk density, g/cc)
34R2	48	cyl 11164481	0	53.915	50.900			d = 25.18 H = 43.8 2.47
35R1	80	cyl 11164511	0	57.136	55.166			d = 25.18 H = 44.51 2.58
35R1	137	cyl 11164501	0	52.830	51.157			d = 25.16 H = 41.46 2.56
35R2	53	cyl 11164521	0	53.273	49.350			d = 25.15 H = 45.92 2.34
35R2	67	cyl 11164531	0	55.282	52.410			d = 25.14 H = 44.55 2.50
37R1	71	11165051	0	63.459	62.796			
37R1	23	11165041	0	57.~~8~~6	53.696			
37R1	12	11165031	0	44.085	41.034			
24R4	10/12	cyl 11182211	0	65.846	65.637			??
25R4	21/23	cyl 11182201	0	53.999	63.524			Dry Mass 10g heavier.... wet 63.999
26R2	24/26	cyl 11182181	0	53.993	63.419			?? ~~dried up with~~ wet 63.993
26R3	126/128	cyl 11182191	0	52.863	60.371			?? Wrong weight during measurement of Sat wet 62.863
27R3	24/26	cyl 11183201	0	32.368	31.932			Correct

3 x Samples fixed by Tim - 10 g added to wet.

1 drying since Sept. 10, 16:00

1571A → 1572A

MINICORES

MAD (Moisture and Density) Logsheet - *Balance and pycnometer measurements*

Sept. 16, 2021

Exp. 396 **Site/Hole** 1572A / 1574A (Sept. 29, 2021

Core/Section,	Offset	Text ID example: SHLF 3215071	container #	Mass Wet (g)	Mass dry (g)	Sample volume cm^3	Pycnomet. cell #	Comments
39R1	11/13	cyl 1119 0851	0	59.358	57.584	19.766	5	
39R1	34/36	cyl 1119 0861	0	58.275	56.726			
42R3	37/39	cyl 1119 1071	0	54.732				
42R3	64/66	cyl 1119 1081	0	63.325	61.350			
44R4	31/33	cyl 1119 1091	0	56.978				
28R3	9/11	cyl 1122 3161	0	58.175				
27R4	19/21	cyl 1122 3151	0	59.845				

air drying since 16:30 Sept. 16

air drying since Sept. 29 1157A

air drying since 1572A