

September 25, 21

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

Exp. 396

Site/Hole 11574A

1

Core/Section,	Offset	Text ID example: SHLF 3215071	container #	Mass Wet (g)	Mass dry (g)	Sample volume cm <sup>3</sup>	Pycnomet. cell #	MAD	Comments
1R3	68	11217231	29005	17.984	13.101	4.770	1	1.867	51% 2.755
3R1	38	11217861	29070	18.338	13.02	4.726	2	1.830	54% 2.765
2R1	101	11217701	29071	15.486	10.618	4.052	3	1.740	55% 2.628
4R2	66	11217881	29079	9.624	3.379	1.310	4	1.278	84% 2.610
1R1	62	11217221	29080	15.712	9.752	3.545	6	1.658	64% 2.766
5R1	$\frac{36}{38}$	11218301	29062	7.904	3.381	1.243	4	1.376	80% 2.751
6R1	$\frac{76}{78}$	11218411	29076	10.127	6.609	2.176	4	1.783	63% 3.059
8R2	$\frac{96}{98}$	11218441	29068	6.938	3.822	1.388	2	1.545	70% 2.774
8R3	$\frac{34}{36}$	11218451	29074	8.875	4.335	1.558	5	1.460	76% 2.811
9R1	$\frac{69}{71}$	11218981	29058	5.424	2.599	0.955	5	1.440	76% 2.747
9R1	$\frac{14}{16}$	11219361	29038	9.375	5.238	1.901	3	1.557	70% 2.775
10R1	$\frac{24}{26}$	11219371	29039	9.336	4.803	1.744	2	1.492	73% 2.778

measured 4

greenish claystone above ash 2 ~ 15-30 cm

grayish claystone

September 26, 21

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

Exp. 396

Site/Hole

11574A

2

Core/Section,	Offset	Text ID example: SHLF 3215071	Container #	Mass Wet (g)	Mass dry (g)	Sample volume cm <sup>3</sup>	Pycnometer cell #	Comments
11R1	$\frac{13}{15}$	cyl 11220381	29037	9.201	4.931	1.784	4	brown mud 1.525 72% 2.786
12R1	$\frac{92}{94}$	cyl 11220391	29040	7.659	6.343	2.252	3	CaCO <sub>3</sub> layer, lighter colored, laminated 2.15 37% 2.822
12R2	$\frac{31}{33}$	wedge 11220521	29041	6.803	4.367	1.568	6	1.704 62% 2.800
15R1	$\frac{54}{56}$	cyl 11220061	29046	8.20	5.442	1.970	1	1.739 59% 2.775
16R2	$\frac{101}{103}$	cyl 11220081	29054	10.858	6.670	2.573	2	1.740 60% 2.804
16R1	$\frac{79}{81}$	cyl 11220071	29043	10.619	6.670	2.414	3	1.674 63% 2.778
17R1	$\frac{59}{61}$	cyl 11220101	29049	12.537	8.475	3.053	1	1.772 wrong vial ID (2309) → double check 58% 2.788 calculated wet mass   Fixed
17R2	$\frac{85}{87}$	cyl 11220111	29047	10.436	7.065	2.573	4	1.761 58% 2.757
17R3	$\frac{9}{11}$	cyl 11220121	29042	12.188	8.119	2.935	5	1.745 59% 2.779
18R1	$\frac{57}{59}$	cyl 11220131	29082	9.465	6.663	2.221	6	1.688 61% 2.743
19R1	$\frac{6}{8}$	other 11221401	0	20.808	20.260	7.324	4	piece of carbonated metalogite - soaked 2.644 79% 2.767
19R1	$\frac{125}{127}$	other 11221511	29052	5.207	4.149	1.471	3	hydroclastic, piece in vial, soaked. 2.063 42% 2.828

Leaving 1



# MAD (Moisture and Density) Logsheets - Balance and pycnometer measurements

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Site/Hole U1574A

Core/Section,	Offset	Text ID example: SHLF 3215071	Container #	Mass Wet (g)	Mass dry (g)	Sample volume cm <sup>3</sup>	Pycnomet. cell #	Comments
19R1	$\frac{141}{143}$	cube 11221441	29060 D	14.057 14.057	11.551	4.123	1	pyroclastic cube is not full! <b>Not</b> cube felt apart! 2.124 38% 2.807
19R2	$\frac{68}{70}$	cube 11221451	29053	12.744	10.307	3.604	2	cube fell apart during VP inverted so void, soaked for wick. 2.113 41% 2.867
20R2	$\frac{117}{119}$	cube 11221471	0	21.013 19.809	19.809	6.785	5	resic. barrel with filled vane. + (Soaked) 2.636 15% 2.919 2.63 15% 2.922
21R2	$\frac{52}{54}$	11222801		19.209	19.209	6.587	4	2.617 16% 2.918 2.629 15% 2.916
21R3	$\frac{47}{49}$	11222811		19.441	17.684	6.153	2	2.460 23% 2.877 2.482 21% 2.874
22R1	$\frac{11}{13}$	11222821		21.275	20.690	7.209	4	2.731 8% 2.871 2.774 5% 2.870
22R2	$\frac{108}{110}$	11222831		21.464	21.019	7.179	1	2.816 6% 2.929 2.833 5% 2.928
23R2	$\frac{132}{134}$	11222871		19.339 19.195	18.257	6.342	6	damaged corner. use method 2.606 15% 2.881 ! use cube 2.599 15% 2.878 ! C 2.648 13% 2.878 ! full! 2.661 12% 2.876
24R3	$\frac{109}{111}$	11222801		20.083	19.143	6.655	3	2.545 19% 2.904 2.474 23% 2.901
24R4	$\frac{80}{82}$	11223031		18.802	17.407	6.00	3	2.430 8% 2.557 2.522 2% 2.556
U1569A	$\frac{80}{82}$			19.846	19.180	7.503	3	2.706 16% 3.036 2.721 16% 3.034
20R1	$\frac{50}{52}$	11119091		18.842	17.713	5.838	4	
30X1		11208791						

Two old  
PMAG

Not from  
U1574A

3

Sept ember 27-28 (4)

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Site/Hole 11574A

Core/Section,	Offset	Text ID example: SHLF 3215071	Container #	Mass Wet (g)	Mass dry (g)	Sample volume cm <sup>3</sup>	Pycnomet. cell #	Comments
<del>20R2</del>	<del>17</del>	<del>11224131</del>	<del>1</del>	<del>21623</del>				see page 3
<del>25R1</del>	<del>64</del>	<del>11223121</del>	<del>1</del>	<del>15.640</del>	<del>12.952</del>	<del>4.518</del>	<del>2</del>	<del>damaged corner, use</del>
<del>25R2</del>	<del>88</del>	<del>11223141</del>	<del>1</del>	<del>17.800</del>	<del>16.261</del>	<del>5.714</del>	<del>1</del>	<del>2.174 39% 2.873 ! use</del>
<del>26R1</del>	<del>86</del>	<del>11224081</del>	<del>29078</del>	<del>9.715</del>	<del>8.937</del>	<del>3.121</del>	<del>6</del>	<del>2.13 40% 2.866 ! method C</del>
<del>27R1</del>	<del>26</del>	<del>11224091</del>	<del>0</del>	<del>20.79</del>	<del>19.670</del>	<del>6.799</del>	<del>3</del>	<del>polka-dot filled vesicles</del>
<del>27R3</del>	<del>13</del>	<del>11224111</del>	<del>0</del>	<del>20.134</del>	<del>18.626</del>	<del>6.51</del>	<del>2</del>	<del>2.456 21% 2.849</del>
<del>28R1</del>	<del>76</del>	<del>11224131</del>	<del>0</del>	<del>20.388</del>	<del>18.891</del>	<del>6.589</del>	<del>1</del>	<del>2.449 22% 2.845</del>
<del>29R1</del>	<del>120</del>	<del>11224191</del>	<del>29051</del>	<del>8.991</del>	<del>2.311</del>	<del>PER</del>	<del>er</del>	<del>weathered corals, filled vesicles (soaked)</del>
<del>29R2</del>	<del>24</del>	<del>11224201</del>	<del>0</del>	<del>19.666</del>	<del>17.930</del>	<del>6.284</del>	<del>2</del>	<del>2.494 20% 2.866 not a cube!</del>
<del>29R3</del>	<del>91</del>	<del>11224321</del>	<del>0</del>	<del>20.0</del>	<del>18.502</del>	<del>6.422</del>	<del>4</del>	<del>2.627 14% 2.895</del>
<del>29R3</del>	<del>29</del>	<del>11224211</del>	<del>29063</del>	<del>10.255</del>	<del>9.182</del>	<del>3.216</del>	<del>3</del>	<del>2.513 19% 2.864</del>
<del>29R3</del>	<del>103</del>	<del>11224241</del>	<del>29057</del>	<del>5.284</del>	<del>4.444</del>	<del>1.526</del>	<del>4</del>	<del>2.523 19% 2.869</del>
<del>29R3</del>	<del>105</del>	<del>11224241</del>	<del>29057</del>	<del>5.284</del>	<del>4.444</del>	<del>1.526</del>	<del>4</del>	<del>sediments; laminated clay, not soaked</del>
<del>29R3</del>	<del>105</del>	<del>11224241</del>	<del>29057</del>	<del>5.284</del>	<del>4.444</del>	<del>1.526</del>	<del>4</del>	<del>1.881 53% 2.828</del>
<del>29R3</del>	<del>105</del>	<del>11224241</del>	<del>29057</del>	<del>5.284</del>	<del>4.444</del>	<del>1.526</del>	<del>4</del>	<del>2.454 12% 2.856</del>
<del>29R3</del>	<del>105</del>	<del>11224241</del>	<del>29057</del>	<del>5.284</del>	<del>4.444</del>	<del>1.526</del>	<del>4</del>	<del>missing edges!</del>
<del>29R3</del>	<del>105</del>	<del>11224241</del>	<del>29057</del>	<del>5.284</del>	<del>4.444</del>	<del>1.526</del>	<del>4</del>	<del>2.527 19% 2.884 use method C</del>
<del>29R3</del>	<del>105</del>	<del>11224241</del>	<del>29057</del>	<del>5.284</del>	<del>4.444</del>	<del>1.526</del>	<del>4</del>	<del>hyaloclast., soaked</del>
<del>29R3</del>	<del>105</del>	<del>11224241</del>	<del>29057</del>	<del>5.284</del>	<del>4.444</del>	<del>1.526</del>	<del>4</del>	<del>2.403 25% 2.858</del>
<del>29R3</del>	<del>105</del>	<del>11224241</del>	<del>29057</del>	<del>5.284</del>	<del>4.444</del>	<del>1.526</del>	<del>4</del>	<del>glassy sample, top of chilled margin, soaked</del>
<del>29R3</del>	<del>105</del>	<del>11224241</del>	<del>29057</del>	<del>5.284</del>	<del>4.444</del>	<del>1.526</del>	<del>4</del>	<del>2.236 35% 2.978</del>



# MAD (Moisture and Density) Logsheets - Balance and pycnometer measurements

Exp. 396

September 28<sup>th</sup> 5

+ Sept 29<sup>th</sup> "

Site/Hole 1574A

Core/Section,	Offset	Text ID example: SHLF 3215071	container #	Mass Wet (g)	Mass dry (g)	Sample volume cm <sup>3</sup>	Pycnomet. cell #	Comments
19R1	$\frac{90}{92}$	Cube 11221431	0	22.346	21.872	7.76258	3	2.714 6% 2.818 2.795 1% 2.817 PMAG
20R1	$\frac{110}{112}$	Cube 11221451	0	22.905	22.463	7.70857	1	2.811 8% 2.915 2.875 2% 2.914
21R1	$\frac{79}{78}$	Cube 11222781	0	19.447	18.620	6.47590	4	2.676 11% 2.884 2.650 13% 2.883
22R4	$\frac{44}{46}$	Cube 11222891	0	21.680	21.231	7.7539	2	2.772 6% 2.879 2.797 4% 2.879
24R1	$\frac{102}{104}$	Cube 11222991	0	19.681	18.821	6.42880	6	corners of cube fall off 2.929 2.701 12% 2.927 2.663 14% 2.927
29R3	91	Cube 11224231	0	20.000				
29R2	$\frac{24}{26}$	Cube 11224201	0	19.666				
28R1	$\frac{76}{78}$	Cube 11224131	0	20.388				
27R1	$\frac{26}{28}$	Cube 11224091	0	20.790				
27R3	$\frac{13}{15}$	Cube 11224111	0	20.134				

See page 4

Σ  
K  
↑  
H


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

Sept. 29, 21

6

Exp. 396

Site/Hole 11574A

Core/Section,	Offset	Text ID example: SHLF 3215071	container	Mass Wet (g)	Mass dry (g)	Sample volume cm <sup>3</sup>	Pycnomet. cell #	 Comments
34R1	$\frac{25}{27}$	othr 11225341	29067	9.416	8.313	2.907	3	hydrotest. in vid, soaked 2.351 28% 2.837
35R1	$\frac{85}{87}$	cube 11225381	0	21.028 <del>21.046</del>	20.309 <del>20.286</del>	7.097 <del>7.084</del>	4	corner of the cube is off! the main piece was measured only! 2.710 re-measured again after paper- 2.8% 2.863
35R4	$\frac{51}{53}$	cube 11225421	0	20.261	19.142	6.592	1	2.628 15% 2.906 2.641 14% 2.909
36R2	$\frac{73}{75}$	cube 11225441	0	19.639	18.592	6.548	6	damaged corner! method C 2.587 14% 2.841
37R1	$\frac{77}{79}$	othr 11225471	29066	6.966	6.571	2.191	1	2.696 15% 3.001
37R2	$\frac{50}{52}$	cube 11225481	0	18.934	17.788	6.03	2	2.631 17% 2.950
37R3	$\frac{81}{85}$	othr 11225541	0	18.614	17.639	6.351	1	glass! Not a cube! Sample 2.542 broke into two pieces after 13% density. BOTH one measured. 2.259 not a cube.
37R4	$\frac{114}{116}$	othr 11225551	0	20.584	19.625	6.921	2	2.614 12% 2.837
38R1	$\frac{56}{58}$	cube 11225501	0	20.864	19.931	6.957	4	2.646 12% 2.866 2.721 8% 2.865
38R3	$\frac{91}{95}$	othr 11225571	0	13.171	12.132	4.137	6	not a cube! base of core barrel 2.547 20% 2.935



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

Exp. 396

Site/Hole 11574 A/C

September 30

7

Core/Section, PMA6	Offset cubes	Text ID example: SHLF 3215071	container #	Mass Wet (g)	Mass dry (g)	Sample volume cm <sup>3</sup>	Pycnomet. cell #	Comments
27R2	$\frac{108}{110}$	cube 11224101	0	20.079	18.557	6.436	4	2.525 19% 2.856 2.554 18% 2.883
28R2	$\frac{43}{45}$	cube 11224151	0	20.427	18.744	6.55	6	2.483 21% 2.864 2.530 18% 2.861
29R1	$\frac{36}{38}$	cube 11224161	0	20.385	18.857	6.624	1	2.503 19% 2.849 2.550 16% 2.846
35R3	$\frac{102}{104}$	cube 11225411	0	20.989	20.250	<del>7.131</del> 7.062	5	2.668 10% 2.841 2.684 9% 2.840
36R3	$\frac{63}{65}$	cube 11225451	0	20.490	19.77106	6.767	2	2.738 10% 2.923 2.748 9% 2.922
38R2	$\frac{83}{85}$	cube 11225521	0	20.639	19.385	6.562	3	2.616 17% 2.944 2.581 19% 2.942
4H6	$\frac{78}{80}$	11232801	29064	6.808	2.647	0.966	6	1.333 82% 2.780
2H6	67	11231071	29072	10.590	7.394	2.655	4	1.814 55% 2.796
3H4	63	11231931	29050	10.081	7.343	2.588	2	1.897 52% 2.848
SH4	72	11233571	29073	9.023	3.642	1.278	3	1.360 82% 2.897
IHS	110	11230201	29048	15.569	11.718	4.318	3	1.910 48% 2.721
IH4	38	11230191	29045	19.227	13.816	4.97	4	1.854 53% 2.790

6HS

92

11235011

29090

14,746 7.023

2.586

1

1.449

75% 2.740

11574A

11574C

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

Oct 1st

Exp. 396

Site/Hole 574C

Core/Section,	Offset	Text ID example: SHLF 3215071	container #	Mass Wet (g)	Mass dry (g)	Sample volume cm <sup>3</sup>	Pycnomet. cell #	Comments
7H4	86	Cyl 11236081	29075	13.056	5.714	2.089	2	1.389 79% 2.767
8H1	92 94	Cyl 11236571	29059	13.740	6.883	2.470	1	greenish claystone 1.478 75% 2.814
9H3	75 77	Cyl 11236611	29077	11.592	7.075	2.482	3	greenish claystone with minor bioturb. 1.661 65% 2.870
9H5	70 72	Cyl 11236621	29044	11.424	6.484	2.341	4	1.574 69% 2.789
10H2	55 57	Cyl 11236681	29055	10.708	5.530	2.017	6	1.493 73% 2.765
10H5	61 63	Cyl 11236691	29056	10.978	6.054	2.216	1	1.542 70% 2.751
11H5	35 37	Cyl 11236721	29081	10.560	5.628	2.008	2	1.526 72% 2.827
12H3	58 60	Cyl 11236751	29098	10.192	5.619	2.002	4	1.555 71% 2.829
13H5	78 80	Cyl 11236771	29083	11.714	7.317	2.659	6	1.665 63% 2.767
14H4	78 80	Cyl 11236791	29084	12.025	7.705	2.783	1	1.697 62% 2.783
16H5	79 81	Cyl 11236801	29085	8.736	5.785	2.073	2	1.743 60% 2.809
17H5	67 69	Cyl 11236831	29086	12.455	8.538	3.024	3	1.800 57% 2.836



A hand-drawn diagram of a cell. It consists of a large, roughly oval outer boundary. Inside this boundary is a smaller, more circular structure representing the nucleus. Within the nucleus is a small, dense, dark oval shape representing the nucleolus.

Oct. 02, 2021

Exp. 396

Site/Hole 1574C

[illegible]

**Exp.**

[illegible]