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L A M P I R A N

Foto Sampel

1. Sampel 1

Koordinat : 4º57’19,16” LS - 119º37’5,12” BT

Warna Segar : Hitam keabu-abuan

Warna Lapuk : Hitam kelam

Tekstur : Afanitik (berbutir sangat halus)

Kandungan Mineral : *Calcite Magnesian, Diopside, Quartz*

Senyawa Kimia : $(Ca,Mg)CO_3$, $CaMgSi_2O_6$, SiO_2

2. Sampel 2

Koordinat : 4º57’19,02” LS - 119º37’5,68” BT

Warna Segar : Putih kecoklatan

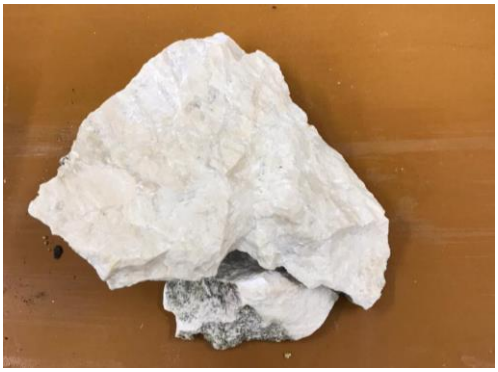
Warna Lapuk : Krem

Tekstur : Non-klastik

Kandungan Mineral : *Quartz, Calcite Magnesian, Corundum, Chalcopyrite*

Senyawa Kimia : SiO_2, $(Ca,Mg)CO_3$, Al_2O_3, $CuFeS_2$

3. Sampel 3



Koordinat : 4º57’18,43” LS - 119º37’6,73” BT

Warna Segar : Putih keabuan

Warna Lapuk : Abu-abu

Tekstur : Non-klastik

Kandungan Mineral : *Calcite, Quartz, Wustite*

Senyawa Kimia : $CaCO_3$, SiO_4, FeO

Measurement Conditions: (Bookmark 1)

Dataset Name:	Batuan 1
File name:	F:\DEWI SHAFIRA\Kuliah\TUGAS AKHIR\Data XRD\Geof#B1\batuan 1.XRDML
Sample Identification:	serbuk
Measurement Date / Time:	11/11/2020 2:47:20 PM
Operator:	MUH. FARID WAJEDY
Raw Data Origin:	XRD measurement (*.XRDML)
Scan Axis:	Gonio
Start Position [°2Th.]:	15.0000
End Position [°2Th.]:	65.0000
Step Size [°2Th.]:	0.0200
Scan Step Time [s]:	0.6000
Scan Type:	Pre-set time
Offset [°2Th.]:	0.0000
Divergence Slit Type:	Fixed
Divergence Slit Size [°]:	1.0000
Specimen Length [mm]:	10.00
Receiving Slit Size [mm]:	0.3000
Measurement Temperature [°C]:	25.00
Anode Material:	Cu
K-Alpha1 [Å]:	1.54060
K-Alpha2 [Å]:	1.54443
K-Beta [Å]:	1.39225
K-A2 / K-A1 Ratio:	0.50000
Generator Settings:	30 mA, 40 kV
Diffractometer Number:	0
Goniometer Radius [mm]:	240.00
Dist. Focus-Diverg. Slit [mm]:	91.00
Incident Beam Monochromator:	No
Spinning:	No

Peak List: (Bookmark 2)

Pos. [°2Th.]	Height [cts]	FWHM Left [°2Th.]	d-spacing [Å]	Rel. Int. [%]
21.0089	62.10	0.3149	4.22868	2.08
23.3328	200.05	0.3149	3.81251	6.70
26.8234	663.46	0.4723	3.32378	22.22
29.6246	2985.30	0.1968	3.01556	100.00
35.7490	166.07	0.2755	2.51174	5.56
36.2650	459.14	0.2362	2.47718	15.38
39.6736	706.00	0.3149	2.27186	23.65
43.3695	512.53	0.2362	2.08643	17.17
47.7562	583.10	0.3149	1.90452	19.53
48.6990	699.28	0.2755	1.86984	23.42
51.6079	64.89	0.3149	1.77107	2.17

54.5704	38.95	0.7872	1.68173	1.30
56.7916	111.91	0.3149	1.62112	3.75
57.5540	235.94	0.2755	1.60144	7.90
60.8720	146.83	0.3936	1.52186	4.92

Pattern List: (Bookmark 3)

Visible	Ref. Code	Score	Compound Name	Displacement [°2Th.]	Scale Factor	Chemical Formula
*	01-086-2335	77	Magnesium Calcium Carbonate	0.000	0.796	(Mg.064 Ca.936) (C O3)
*	01-078-1254	53	Silicon Oxide	0.000	0.236	Si O2
*	01-072-1497	27	Calcium Magnesium Silicate	0.000	0.098	Ca Mg Si2 O6

Document History: (Bookmark 4)

Insert Measurement:
- File name = "batuan 1.XRDML"
- Modification time = "1/24/2021 9:50:53 PM"
- Modification editor = "ASUS"

Default properties:
- Sample name = ""
- Sample prepared by = ""
- Measurement step axis = "None"
- Internal wavelengths used from anode material: Copper (Cu)
- Original K-Alpha1 wavelength = "1.54060"
- Used K-Alpha1 wavelength = "1.54060"
- Original K-Alpha2 wavelength = "1.54443"
- Used K-Alpha2 wavelength = "1.54443"
- Original K-Beta wavelength = "1.39225"
- Used K-Beta wavelength = "1.39225"
- Dist. focus to div. slit = "91.00000"
- Irradiated length = "10.00000"
- Spinner used = "No"
- Linear detector mode = "None"
- Length linear detector = "2"
- Diffractometer = ""
- Step axis value = "0.00000"
- Offset = "0.00000"
- Sample length = "10.00000"
- Modification time = "1/24/2021 9:50:53 PM"
- Modification editor = "ASUS"

Subtract Background:
- Add to net scan = "Nothing"
- User defined intensity = "-5"
- Correction method = "Automatic"

- Bending factor = "5"
- Minimum significance = "0.7"
- Minimum tip width = "0"
- Maximum tip width = "1"
- Peak base width = "2"
- Use smoothed input data = "Yes"
- Granularity = "20"
- Modification time = "1/24/2021 1:16:03 PM"
- Modification editor = "ASUS"

Search Peaks:
- Minimum significance = "20"
- Minimum tip width = "0.01"
- Maximum tip width = "1"
- Peak base width = "2"
- Method = "Minimum 2nd derivative"
- Modification time = "1/24/2021 9:52:09 PM"
- Modification editor = "ASUS"

Search & Match:
- Allow pattern shift = "No"
- Auto residue = "Yes"
- Data source = "Profile and peak list"
- Demote unmatched strong = "Yes"
- Multi phase = "Yes"
- Restriction set = "Minerals"
- Restriction = "Restriction set"
- Subset name = ""
- Match intensity = "Yes"
- Two theta shift = "0"
- Identify = "No"
- Max. no. of accepted patterns = "5"
- Minimum score = "50"
- Min. new lines / total lines = "60"
- Search depth = "10"
- Minimum new lines = "5"
- Minimum scale factor = "0.1"
- Intensity threshold = "0"
- Use line clustering = "Yes"
- Line cluster range = "1.5"
- Search sensitivity = "1.8"
- Use adaptive smoothing = "Yes"
- Smoothing range = "1.5"
- Threshold factor = "3"
- Modification time = "1/24/2021 9:54:37 PM"
- Modification editor = "ASUS"

Measurement Conditions: (Bookmark 1)

Dataset Name:	Geof#Batuan 2
File name:	F:\DEWI SHAFIRA\Kuliah\TUGAS AKHIR\Data XRD\Geof#B2\Geof#B2.RAW
Sample Identification:	serbuk
Raw Data Origin:	Shimadzu-binary (.RAW)
Scan Axis:	Gonio
Start Position [°2Th.]:	15.0000
End Position [°2Th.]:	65.0000

Step Size [°2Th.]:	0.0200
Scan Step Time [s]:	0.6000
Scan Type:	Pre-set time
Offset [°2Th.]:	0.0000
Divergence Slit Type:	Fixed
Divergence Slit Size [°]:	1.0000
Specimen Length [mm]:	10.00
Receiving Slit Size [mm]:	0.3000
Measurement Temperature [°C]:	25.00
Anode Material:	Cu
K-Alpha1 [Å]:	1.54060
K-Alpha2 [Å]:	1.54443
K-Beta [Å]:	1.39225
K-A2 / K-A1 Ratio:	0.50000
Generator Settings:	30 mA, 40 kV
Diffractometer Number:	0
Goniometer Radius [mm]:	240.00
Dist. Focus-Diverg. Slit [mm]:	91.00
Incident Beam Monochromator:	No
Spinning:	No

Peak List: (Bookmark 2)

Pos.[°2Th.]	Height [cts]	FWHMLeft[°2Th.]	d-spacing [Å]	Rel. Int. [%]
23.5904	156.71	0.3149	3.77145	6.61
27.0024	585.75	0.2755	3.30214	24.69
29.9162	2372.53	0.3149	2.98683	100.00
36.4743	364.77	0.2755	2.46344	15.37
39.9196	505.57	0.3542	2.25842	21.31
43.6728	511.78	0.2362	2.07265	21.57
48.0244	503.80	0.3149	1.89451	21.23
48.9348	604.75	0.3149	1.86138	25.49
57.0319	97.51	0.3936	1.61485	4.11
57.8699	310.99	0.3936	1.59345	13.11
61.1765	522.49	0.3149	1.51501	22.02
63.4778	60.75	0.6298	1.46552	2.56

Pattern List: (Bookmark 3)

Visible	Ref.Code	Score	Compound Name	Displ.[°2Th]	Scale Fac.	Chem. Formula
*	01-083-2469	29	Silicon Oxide	0.000	0.221	Si O2
*	01-075-0783	3	Aluminum Oxide	0.000	0.195	Al2 O3
*	01-086-2336	70	Magnesium Calcium ..	0.000	0.826	(Mg.129 Ca.871) ..
*	01-083-0984	29	Copper Iron Sulfide	0.000	0.177	Cu Fe S2

Document History: (Bookmark 4)

Insert Measurement:
- File name = Geof#Batuan2.RAW
- Modification time = "1/24/2021 4:50:14 PM"
- Modification editor = "ASUS"

Subtract Background:
- Add to net scan = "Nothing"
- User defined intensity = "-5"
- Correction method = "Automatic"
- Bending factor = "5"
- Minimum significance = "0.7"
- Minimum tip width = "0"
- Maximum tip width = "1"
- Peak base width = "2"
- Use smoothed input data = "Yes"
- Granularity = "20"
- Modification time = "1/24/2021 1:16:03 PM"
- Modification editor = "ASUS"

Search & Match:
- Allow pattern shift = "No"
- Auto residue = "Yes"
- Data source = "Profile and peak list"
- Demote unmatched strong = "Yes"
- Multi phase = "Yes"
- Restriction set = "Minerals"
- Restriction = "Restriction set"
- Subset name = ""
- Match intensity = "Yes"
- Two theta shift = "0"
- Identify = "No"
- Max. no. of accepted patterns = "5"
- Minimum score = "50"
- Min. new lines / total lines = "60"
- Search depth = "10"
- Minimum new lines = "5"
- Minimum scale factor = "0.1"
- Intensity threshold = "0"
- Use line clustering = "Yes"
- Line cluster range = "1.5"
- Search sensitivity = "1.8"
- Use adaptive smoothing = "Yes"

- Smoothing range = "1.5"
- Threshold factor = "3"
- Modification time = "1/24/2021 8:06:04 PM"
- Modification editor = "ASUS"

Convert Ref. Pattern to Phase:
- Modification time = "1/24/2021 8:34:20 PM"
- Modification editor = "ASUS"

Search & Match:
- Allow pattern shift = "No"
- Auto residue = "Yes"
- Data source = "Profile and peak list"
- Demote unmatched strong = "Yes"
- Multi phase = "Yes"
- Restriction set = "Untitled"
- Restriction = "Restriction set"
- Subset name = ""
- Match intensity = "Yes"
- Two theta shift = "0"
- Identify = "No"
- Max. no. of accepted patterns = "5"
- Minimum score = "50"
- Min. new lines / total lines = "60"
- Search depth = "10"
- Minimum new lines = "5"
- Minimum scale factor = "0.1"
- Intensity threshold = "0"
- Use line clustering = "Yes"
- Line cluster range = "1.5"
- Search sensitivity = "1.8"
- Use adaptive smoothing = "Yes"
- Smoothing range = "1.5"
- Threshold factor = "3"
- Modification time = "1/24/2021 11:31:56 PM"
- Modification editor = "ASUS"

Search & Match:
- Allow pattern shift = "No"
- Auto residue = "Yes"
- Data source = "Profile and peak list"
- Demote unmatched strong = "Yes"
- Multi phase = "Yes"
- Restriction set = "Minerals"
- Restriction = "Restriction set"
- Subset name = ""
- Match intensity = "Yes"
- Two theta shift = "0"
- Identify = "No"
- Max. no. of accepted patterns = "5"
- Minimum score = "50"
- Min. new lines / total lines = "60"
- Search depth = "10"
- Minimum new lines = "5"
- Minimum scale factor = "0.1"
- Intensity threshold = "0"
- Use line clustering = "Yes"
- Line cluster range = "1.5"
- Search sensitivity = "1.8"

- Use adaptive smoothing = "Yes"
- Smoothing range = "1.5"
- Threshold factor = "3"
- Modification time = "1/24/2021 11:45:15 PM"
- Modification editor = "ASUS"

Search Peaks:
- Minimum significance = "25"
- Minimum tip width = "0.01"
- Maximum tip width = "1"
- Peak base width = "2"
- Method = "Minimum 2nd derivative"
- Modification time = "1/25/2021 12:07:56 AM"
- Modification editor = "ASUS"

Change Quartz Use Flag:
- Old Value = "True"
- Modification time = "1/25/2021 12:10:11 AM"
- Modification editor = "ASUS"

Change Calcite magnesian Use Flag:
- Old Value = "True"
- Modification time = "1/25/2021 12:10:12 AM"
- Modification editor = "ASUS"

Change Corundum Use Flag:
- Old Value = "True"
- Modification time = "1/25/2021 12:10:17 AM"
- Modification editor = "ASUS"

Change Chalcopyrite Use Flag:
- Old Value = "True"
- Modification time = "1/25/2021 12:10:18 AM"
- Modification editor = "ASUS"

Convert Ref. Pattern to Phase:
- Modification time = "1/25/2021 12:10:30 AM"
- Modification editor = "ASUS"

Measurement Conditions: (Bookmark 1)

Dataset Name:	Geof#Batuan 3
File name:	F:\DEWI SHAFIRA\Kuliah\TUGAS AKHIR\Data XRD\Geof#B3\Geof#B3.RAW
Sample Identification:	serbuk
Raw Data Origin:	Shimadzu-binary (.RAW)
Scan Axis:	Gonio
Start Position [°2Th.]:	15.0000
End Position [°2Th.]:	65.0000
Step Size [°2Th.]:	0.0200
Scan Step Time [s]:	0.6000
Scan Type:	Pre-set time
Offset [°2Th.]:	0.0000
Divergence Slit Type:	Fixed
Divergence Slit Size [°]:	1.0000
Specimen Length [mm]:	10.00
Receiving Slit Size [mm]:	0.3000
Measurement Temperature [°C]:	25.00

Anode Material:	Cu
K-Alpha1 [Å]:	1.54060
K-Alpha2 [Å]:	1.54443
K-Beta [Å]:	1.39225
K-A2 / K-A1 Ratio:	0.50000
Generator Settings:	30 mA, 40 kV
Diffractometer Number:	0
Goniometer Radius [mm]:	240.00
Dist. Focus-Diverg. Slit [mm]:	91.00
Incident Beam Monochromator:	No
Spinning:	No

Peak List: (Bookmark 2)

Pos.[°2Th.]	Height [cts]	FWHMLeft[°2Th.]	d-spacing [Å]	Rel. Int. [%]
23.3569	359.84	0.2362	3.80861	5.37
26.8322	1547.70	0.2755	3.32270	23.10
29.7356	6699.68	0.1771	3.00455	100.00
36.2628	518.36	0.2362	2.47732	7.74
39.7140	894.48	0.2755	2.26964	13.35
43.4568	753.65	0.2362	2.08245	11.25
47.8660	662.77	0.3149	1.90041	9.89
48.8202	779.27	0.3149	1.86548	11.63
57.7417	391.91	0.3936	1.59668	5.85
60.9967	196.02	0.4723	1.51905	2.93

Pattern List: (Bookmark 3)

Visible	Ref.Code	Score	Compound Name	Displ.[°2Th]	Scale Fac.	Chem. Formula
*	01-078-1254	37	Silicon Oxide	0.000	0.219	Si O2
*	01-072-1650	41	Calcium Carbonate	0.000	0.285	Ca C O3
*	01-074-1881	21	Iron Oxide	0.000	0.100	Fe.9570 O

Document History: (Bookmark 4)

Insert Measurement:
- File name = Geof#Batuan3.RAW
- Modification time = "1/24/2021 8:39:20 PM"

- Modification editor = "ASUS"

Subtract Background:
- Add to net scan = "Nothing"
- User defined intensity = "-5"
- Correction method = "Automatic"
- Bending factor = "5"
- Minimum significance = "0.7"
- Minimum tip width = "0"
- Maximum tip width = "1"
- Peak base width = "2"
- Use smoothed input data = "Yes"
- Granularity = "20"
- Modification time = "1/24/2021 1:16:03 PM"
- Modification editor = "ASUS"

Search Peaks:
- Minimum significance = "40"
- Minimum tip width = "0.01"
- Maximum tip width = "1"
- Peak base width = "2"
- Method = "Minimum 2nd derivative"
- Modification time = "1/24/2021 8:50:01 PM"
- Modification editor = "ASUS"

Search & Match:
- Allow pattern shift = "No"
- Auto residue = "Yes"
- Data source = "Profile and peak list"
- Demote unmatched strong = "Yes"
- Multi phase = "Yes"
- Restriction set = "Untitled"
- Restriction = "Restriction set"
- Subset name = ""
- Match intensity = "Yes"
- Two theta shift = "0"
- Identify = "No"
- Max. no. of accepted patterns = "5"
- Minimum score = "50"
- Min. new lines / total lines = "60"
- Search depth = "10"
- Minimum new lines = "5"
- Minimum scale factor = "0.1"
- Intensity threshold = "0"
- Use line clustering = "Yes"
- Line cluster range = "1.5"
- Search sensitivity = "1.8"
- Use adaptive smoothing = "Yes"
- Smoothing range = "1.5"
- Threshold factor = "3"
- Modification time = "1/24/2021 9:26:01 PM"
- Modification editor = "ASUS"

Shift/Change PeakNo.: 2:
- Old position = "36.29153"
- Modification time = "1/24/2021 9:28:22 PM"
- Modification editor = "ASUS"

Shift/Change PeakNo.: 3:

- Old position = "36.27202"
- Modification time = "1/24/2021 9:28:28 PM"
- Modification editor = "ASUS"

Change Wustite Use Flag:
- Old Value = "True"
- Modification time = "1/24/2021 9:37:07 PM"
- Modification editor = "ASUS"