



ALS Laboratuvar Hizmetleri Ltd. Sti.
Fatih Mah. Ege Cad. No:7/B
Sarnic / Gaziemir - Izmir IZMIR
Phone: +90 232 281 7110 Fax: +90 232 281 7120
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To: HAKKI M. NOGAY

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Finalized Date: 26-APR-2013
Account: HAKKIM

QC CERTIFICATE IZ13073053

Project:
P.O. No.: T113-2415
This report is for 5 Rock samples submitted to our lab in Izmir, IZMIR, Turkey on 23-APR-2013.
The following have access to data associated with this certificate:
HAKKI M. NOGAY

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
CRU-QC	Crushing QC Test
LOG-22	Sample login - Rcd w/o BarCode
PUL-QC	Pulverizing QC Test
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-32	Pulverize 1000g to 85% < 75 um

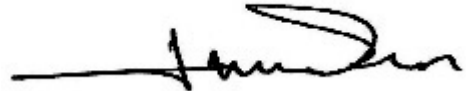
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Pb-AA46	Ore grade Pb - aqua regia/AA	AAS
Zn-AA46	Ore grade Zn - aqua regia/AA	AAS
Au-AA24	Au 50g FA AA finish	AAS
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES

To: HAKKI M. NOGAY
ATTN: HAKKI M. NOGAY

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 
Huseyin Galan, Izmir Laboratory Manager



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QC CERTIFICATE OF ANALYSIS IZ13073053

Sample Description	Method Analyte Units LOR	Au-AA24 Au ppm	ME-ICP41 Ag ppm	ME-ICP41 Al %	ME-ICP41 As ppm	ME-ICP41 B ppm	ME-ICP41 Ba ppm	ME-ICP41 Be ppm	ME-ICP41 Bi ppm	ME-ICP41 Ca %	ME-ICP41 Cd ppm	ME-ICP41 Co ppm	ME-ICP41 Cr ppm	ME-ICP41 Cu ppm	ME-ICP41 Fe %	ME-ICP41 Ga ppm
		0.005	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01	10
STANDARDS																
CDN-GS- 1P5		1.440														
Target Range - Lower Bound		1.425														
Upper Bound		1.615														
GBM908-5			55.8	1.13	4	<10	200	<0.5	<2	0.66	<0.5	10	18	478	2.21	<10
Target Range - Lower Bound			51.8	1.02	3	<10	150	<0.5	<2	0.63	<0.5	8	15	462	2.13	<10
Upper Bound			63.8	1.26	11	30	230	1.4	6	0.79	1.5	13	20	534	2.62	30
MRGeo08			4.3	2.97	29	<10	480	1.0	<2	1.16	1.9	19	91	621	3.49	10
Target Range - Lower Bound			3.8	2.44	27	<10	370	<0.5	<2	1.00	1.1	17	81	586	3.22	<10
Upper Bound			5.1	3.00	38	30	530	1.8	5	1.24	3.4	22	102	676	3.96	30
MRGeo08																
Target Range - Lower Bound																
Upper Bound																
OGGeo08																
Target Range - Lower Bound																
Upper Bound																
OxC109		0.199														
Target Range - Lower Bound		0.184														
Upper Bound		0.218														
BLANKS																
BLANK		<0.005														
BLANK		<0.005														
Target Range - Lower Bound		<0.005														
Upper Bound		0.010														
BLANK			<0.2	<0.01	<2	<10	<10	<0.5	<2	<0.01	<0.5	<1	<1	<1	<0.01	<10
Target Range - Lower Bound			<0.2	<0.01	<2	<10	<10	<0.5	<2	<0.01	<0.5	<1	<1	<1	<0.01	<10
Upper Bound			0.4	0.02	4	20	20	1.0	4	0.02	1.0	2	2	2	0.02	20
BLANK																
Target Range - Lower Bound																
Upper Bound																



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QC CERTIFICATE OF ANALYSIS IZ13073053

Sample Description	Method Analyte Units LOR	ME-ICP41 Hg ppm	ME-ICP41 K %	ME-ICP41 La ppm	ME-ICP41 Mg %	ME-ICP41 Mn ppm	ME-ICP41 Mo ppm	ME-ICP41 Na %	ME-ICP41 Ni ppm	ME-ICP41 P ppm	ME-ICP41 Pb ppm	ME-ICP41 S %	ME-ICP41 Sb ppm	ME-ICP41 Sc ppm	ME-ICP41 Sr ppm	ME-ICP41 Th ppm	
		1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1	1	20	
STANDARDS																	
CDN-GS- 1P5	Target Range - Lower Bound																
	Upper Bound																
GBM908-5	Target Range - Lower Bound	<1	0.80	90	0.76	318	49	0.01	409	1210	368	0.16	<2	1	49	40	
	Upper Bound	3	0.91	130	0.86	396	62	0.05	461	1410	418	0.20	6	3	62	80	
MRGeo08	Target Range - Lower Bound	<1	1.37	30	1.15	401	13	0.41	662	990	1050	0.30	<2	6	91	20	
	Upper Bound	2	1.40	60	1.29	473	17	0.39	761	1130	1175	0.36	8	10	91	60	
MRGeo08	Target Range - Lower Bound																
	Upper Bound																
OGGeo08	Target Range - Lower Bound																
	Upper Bound																
OxC109	Target Range - Lower Bound																
	Upper Bound																
BLANKS																	
BLANK	Target Range - Lower Bound																
	Upper Bound																
BLANK	Target Range - Lower Bound	<1	<0.01	<10	<0.01	<5	<1	<0.01	<1	<10	<2	<0.01	<2	<1	<1	<20	
	Upper Bound	2	0.02	20	0.02	10	2	0.02	2	20	4	0.02	4	2	2	40	
BLANK	Target Range - Lower Bound																
	Upper Bound																

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QC CERTIFICATE OF ANALYSIS IZ13073053

Sample Description	Method Analyte Units LOR	ME-ICP41 Ti %	ME-ICP41 TI ppm	ME-ICP41 U ppm	ME-ICP41 V ppm	ME-ICP41 W ppm	ME-ICP41 Zn ppm	Pb-AA46 Pb %	Zn-AA46 Zn %
		0.01	10	10	1	10	2	0.001	0.001
STANDARDS									
CDN-GS- 1P5	Target Range - Lower Bound								
	Upper Bound								
GBM908-5		0.15	<10	<10	25	<10	213		
	Target Range - Lower Bound	0.14	<10	<10	22	<10	207		
	Upper Bound	0.20	30	30	30	30	257		
MRGeo08		0.38	<10	10	100	<10	751		
	Target Range - Lower Bound	0.35	<10	<10	90	<10	708		
	Upper Bound	0.44	20	30	112	20	870		
MRGeo08								0.104	0.082
	Target Range - Lower Bound							0.102	0.075
	Upper Bound							0.111	0.083
OGGeo08								0.728	0.721
	Target Range - Lower Bound							0.698	0.696
	Upper Bound							0.751	0.749
OxC109									
	Target Range - Lower Bound								
	Upper Bound								
BLANKS									
BLANK									
BLANK									
	Target Range - Lower Bound								
	Upper Bound								
BLANK		<0.01	<10	<10	<1	<10	<2		
	Target Range - Lower Bound	<0.01	<10	<10	<1	<10	<2		
	Upper Bound	0.02	20	20	2	20	4		
BLANK								<0.001	<0.001
	Target Range - Lower Bound							<0.001	<0.001
	Upper Bound							0.002	0.002



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		0.005	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01	10
DUPLICATES																
ORIGINAL		2.92														
DUP		2.87														
Target Range - Lower Bound		2.75														
Upper Bound		3.04														
ORIGINAL		<0.2	0.72	16	<10	760	0.8	<2	4.50	<0.5	4	1	1	3.63	<10	
DUP		<0.2	0.74	16	<10	760	0.8	<2	4.39	<0.5	5	1	1	3.68	<10	
Target Range - Lower Bound		<0.2	0.68	13	<10	690	<0.5	<2	4.21	<0.5	3	<1	<1	3.46	<10	
Upper Bound		0.4	0.78	19	20	830	1.0	4	4.68	1.0	6	2	2	3.85	20	
HN-4																
DUP																
Target Range - Lower Bound																
Upper Bound																
HN-5		0.068														
DUP		0.069														
Target Range - Lower Bound		0.060														
Upper Bound		0.077														



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		1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1	1	20
ORIGINAL DUP Target Range - Lower Bound Upper Bound	DUPLICATES															
ORIGINAL DUP Target Range - Lower Bound Upper Bound	<1 <1 <1 2	0.09 0.09 0.08 0.10	30 30 20 40	0.23 0.24 0.21 0.26	2830 2740 2640 2930	1 1 <1 2	<0.01 <0.01 <0.01 0.02	14 14 12 16	2990 3060 2860 3190	3 <2 <2 4	0.01 0.01 <0.01 0.02	<2 <2 <2 4	3 3 2 4	35 35 32 38	<20 <20 <20 40	
HN-4 DUP Target Range - Lower Bound Upper Bound																
HN-5 DUP Target Range - Lower Bound Upper Bound																



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		0.01	10	10	1	10	2	0.001	0.001
DUPLICATES									
ORIGINAL DUP Target Range - Lower Bound Upper Bound									
ORIGINAL DUP Target Range - Lower Bound Upper Bound		0.01 0.01 <0.01 0.02	<10 <10 <10 20	<10 <10 <10 20	35 35 32 38	<10 <10 <10 20	9 9 7 11		
HN-4 DUP Target Range - Lower Bound Upper Bound								2.30 2.32 2.25 2.37	3.73 3.78 3.66 3.85
HN-5 DUP Target Range - Lower Bound Upper Bound									

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CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Applies to Method:	Processed at ALS Izmir located at Fatih Mah. Ege Cad. No:7/B, Sarnic / Gaziemir - Izmir, IZMIR, Turkey.		
	Au-AA24	CRU-31	CRU-QC
	ME-ICP41	Pb-AA46	PUL-32
	SPL-21	WEI-21	Zn-AA46
		LOG-22	PUL-QC