



Dr. Joe Xie

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Lab Ref BT087647

Client Ref **1252-1340**

Project *

Cost Code

Status Final

Received 04/04/19

Reported 20/05/19

Samples 89

First Sample 1252

Last Sample 1340

Pages 11

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Notes

Authorised by

Wayne Taylor

Laboratory Manager

On behalf of:

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ANALYTICAL REPORT

Scheme	XRF75E	XRF75E	XRF75E	XRF75E	XRF75E	XRF75E
Units	%	%	%	%	%	%
Detection Limit	0.01	0.01	0.1	0.1	0.01	0.1
Upper Limit	90	90	90	90	20	50
	Sn	As	Fe	S	Mn	MgO
1252	<0.01	<0.01	13.7	8.6	0.10	2.0
1253	<0.01	<0.01	2.7	0.7	0.30	2.8
1254	<0.01	<0.01	27.8	0.5	6.84	3.3
1255	<0.01	<0.01	37.2	0.2	8.72	2.3
1256	<0.01	<0.01	34.3	1.0	9.05	2.2
1257	<0.01	<0.01	<0.1	<0.1	0.07	0.1
1258	<0.01	<0.01	34.6	0.3	10.25	2.8
1259	<0.01	<0.01	7.5	0.9	2.38	9.1
1260	<0.01	<0.01	23.0	0.2	7.34	5.0
1261	<0.01	<0.01	34.5	0.2	9.39	2.4
1262	<0.01	<0.01	35.9	0.1	8.86	2.2
1263	<0.01	<0.01	26.0	0.5	7.14	2.3
1264	<0.01	<0.01	2.9	1.0	0.14	0.6
1265	<0.01	<0.01	0.4	0.4	0.07	0.8
1266	<0.01	<0.01	0.6	0.1	0.02	1.0
1267	<0.01	<0.01	0.5	1.5	0.02	0.9
1268	<0.01	0.03	2.0	11.9	0.01	0.4
1269	<0.01	<0.01	1.8	21.8	<0.01	0.2
1270	<0.01	<0.01	20.7	6.3	0.37	0.4
1271	<0.01	<0.01	4.2	27.1	<0.01	<0.1
1272	<0.01	<0.01	2.5	30.6	0.02	<0.1
1273	<0.01	<0.01	0.5	0.3	<0.01	<0.1
1274	<0.01	<0.01	2.4	34.9	<0.01	<0.1
1275	<0.01	0.01	39.6	7.8	0.06	<0.1
1276	<0.01	0.01	12.8	9.4	0.10	1.9
1277	<0.01	<0.01	49.6	0.9	0.12	0.1
1278	<0.01	<0.01	24.7	4.6	0.15	0.4
1279	<0.01	<0.01	14.7	6.7	0.05	0.5
1280	<0.01	<0.01	31.3	3.1	0.16	0.2
1281	<0.01	<0.01	9.5	14.8	0.01	0.3
1282	<0.01	<0.01	2.2	23.1	<0.01	<0.1
1283	<0.01	<0.01	4.4	8.2	<0.01	1.0
1284	<0.01	<0.01	3.3	7.9	<0.01	1.0
1285	<0.01	<0.01	21.2	4.4	0.07	0.7
1286	0.02	0.02	34.4	0.5	0.15	0.6
1287	0.01	<0.01	41.9	0.6	0.11	0.5
1288	<0.01	<0.01	9.1	24.9	0.01	<0.1
1289	<0.01	<0.01	55.6	0.9	0.14	<0.1

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	XRF75E % 0.01 90 Sn	XRF75E % 0.01 90 As	XRF75E % 0.1 90 Fe	XRF75E % 0.1 90 S	XRF75E % 0.01 20 Mn	XRF75E % 0.1 50 MgO
1290	<0.01	<0.01	58.3	<0.1	0.17	<0.1
1291	<0.01	<0.01	12.8	2.9	0.01	1.1
1292	<0.01	<0.01	3.3	3.9	<0.01	1.1
1293	<0.01	<0.01	3.1	3.4	<0.01	1.3
1294	<0.01	<0.01	6.0	2.8	1.99	1.0
1295	<0.01	<0.01	21.7	1.3	5.19	0.7
1296	<0.01	<0.01	26.2	1.1	5.42	0.6
1297	<0.01	0.02	32.6	0.8	5.79	0.5
1298	<0.01	<0.01	14.2	8.6	0.16	1.9
1299	<0.01	<0.01	29.2	1.2	4.56	0.5
1300	<0.01	<0.01	0.6	0.2	<0.01	<0.1
1301	<0.01	<0.01	24.1	1.4	3.88	0.8
1302	<0.01	0.01	26.2	1.5	4.10	0.7
1303	<0.01	<0.01	35.3	1.5	5.96	0.3
1304	<0.01	<0.01	34.3	1.4	7.41	0.2
1305	<0.01	<0.01	4.9	8.8	0.25	1.0
1306	<0.01	<0.01	2.6	5.9	0.17	1.0
1307	<0.01	<0.01	2.5	11.8	0.08	0.9
1308	<0.01	<0.01	2.6	5.3	0.01	1.2
1309	<0.01	<0.01	2.2	6.0	0.02	0.9
1310	<0.01	<0.01	2.1	3.4	0.02	1.1
1311	<0.01	<0.01	1.6	3.2	<0.01	1.1
1312	<0.01	<0.01	1.1	1.6	0.01	0.7
1313	<0.01	0.04	29.6	25.0	1.80	3.6
1314	0.02	0.04	29.0	33.0	0.56	0.3
1315	<0.01	0.05	21.4	23.8	3.28	8.6
1316	<0.01	0.07	14.5	15.4	1.89	9.9
1317	<0.01	0.04	22.9	16.2	1.04	16.9
1318	<0.01	0.09	19.8	25.3	0.22	4.4
1319	<0.01	0.10	17.7	32.9	0.42	1.0
1320	0.02	0.34	32.2	42.1	0.04	<0.1
1321	0.03	0.35	28.6	43.9	0.23	<0.1
1322	<0.01	0.14	21.3	22.3	0.14	2.6
1323	<0.01	<0.01	7.1	2.6	1.27	14.4
1324	<0.01	0.12	7.4	2.8	1.95	12.1
1325	<0.01	0.08	16.8	16.3	1.91	7.4
1326	<0.01	0.05	27.6	30.8	0.09	4.4
1327	<0.01	0.02	16.0	13.9	0.53	14.6
1328	<0.01	0.03	4.9	2.4	1.24	10.5

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	XRF75E % 0.01 90 Sn	XRF75E % 0.01 90 As	XRF75E % 0.1 90 Fe	XRF75E % 0.1 90 S	XRF75E % 0.01 20 Mn	XRF75E % 0.1 50 MgO
1329	<0.01	0.06	36.8	26.0	1.19	2.7
1330	<0.01	0.02	28.5	20.6	0.82	2.1
1331	<0.01	0.01	14.3	9.1	4.09	6.1
1332	<0.01	0.19	26.2	29.4	0.28	3.8
1333	<0.01	0.12	27.0	28.6	0.58	5.6
1334	<0.01	0.01	13.4	13.4	0.89	3.1
1335	<0.01	0.01	4.1	1.1	0.78	13.1
1336	<0.01	0.06	37.4	39.6	0.47	1.1
1337	<0.01	0.06	36.6	30.7	0.48	0.5
1338	<0.01	0.05	10.6	7.6	1.02	10.5
1339	<0.01	0.02	13.2	6.3	1.74	9.1
1340	<0.01	0.02	10.2	5.0	1.78	11.9

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ANALYTICAL REPORT

Scheme	XRF75E	XRF75E	XRF75E	XRF75E	XRF75E	AAS40Q
Units	%	%	%	%	%	PPM
Detection Limit	0.1	0.01	0.01	0.01	0.01	2
Upper Limit	50	5	50	5	5	200
	Ca	WO3	Cu	Pb	Zn	Ag
1252	4.2	<0.01	0.26	1.15	2.53	26
1253	33.3	<0.01	<0.01	0.08	0.09	<2
1254	9.2	<0.01	0.02	0.92	0.08	28
1255	2.5	<0.01	<0.01	0.82	0.16	10
1256	1.1	<0.01	0.01	>5.00	0.09	60
1257	0.1	<0.01	<0.01	0.03	<0.01	<2
1258	2.1	<0.01	<0.01	1.24	0.05	10
1259	15.9	<0.01	<0.01	1.05	0.34	5
1260	11.2	<0.01	<0.01	0.29	0.11	<2
1261	2.6	<0.01	<0.01	0.82	0.08	3
1262	1.8	0.01	<0.01	0.29	0.05	<2
1263	9.1	<0.01	<0.01	1.51	0.14	11
1264	0.2	<0.01	<0.01	0.47	0.05	7
1265	0.2	<0.01	<0.01	0.81	0.06	4
1266	<0.1	<0.01	<0.01	0.42	0.07	3
1267	<0.1	<0.01	<0.01	1.44	2.07	10
1268	<0.1	0.03	<0.01	>5.00	>5.00	47
1269	<0.1	0.03	0.04	>5.00	>5.00	114
1270	1.0	<0.01	0.05	>5.00	>5.00	
1271	<0.1	0.05	0.09	>5.00	>5.00	
1272	<0.1	0.06	0.09	>5.00	>5.00	
1273	<0.1	<0.01	<0.01	0.01	0.02	<2
1274	<0.1	0.05	0.11	>5.00	>5.00	
1275	<0.1	0.02	0.03	>5.00	>5.00	75
1276	4.0	<0.01	0.26	1.19	2.58	28
1277	<0.1	<0.01	0.01	3.77	1.29	41
1278	<0.1	<0.01	0.02	>5.00	1.60	93
1279	<0.1	<0.01	0.03	>5.00	2.51	134
1280	<0.1	<0.01	0.06	>5.00	0.75	
1281	<0.1	<0.01	0.08	>5.00	4.65	
1282	<0.1	0.04	0.05	>5.00	>5.00	130
1283	<0.1	<0.01	0.03	>5.00	4.38	79
1284	0.2	<0.01	0.06	>5.00	1.24	183
1285	<0.1	<0.01	0.04	>5.00	0.91	118
1286	<0.1	<0.01	0.04	4.63	0.94	70
1287	<0.1	<0.01	0.05	4.53	1.69	
1288	<0.1	0.05	0.08	>5.00	>5.00	
1289	<0.1	<0.01	<0.01	4.08	2.02	60

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	XRF75E % 0.1 50 Ca	XRF75E % 0.01 5 WO3	XRF75E % 0.01 50 Cu	XRF75E % 0.01 5 Pb	XRF75E % 0.01 5 Zn	AAS40Q PPM 2 200 Ag
1290	<0.1	<0.01	0.01	1.77	0.90	40
1291	<0.1	<0.01	<0.01	>5.00	1.06	22
1292	<0.1	<0.01	<0.01	>5.00	0.67	39
1293	<0.1	<0.01	<0.01	4.46	0.06	<2
1294	0.2	<0.01	<0.01	>5.00	0.25	2
1295	0.8	<0.01	<0.01	0.72	1.39	<2
1296	0.8	<0.01	<0.01	0.53	1.46	2
1297	1.0	<0.01	<0.01	0.34	1.21	<2
1298	4.3	<0.01	0.26	1.16	2.53	26
1299	0.7	<0.01	<0.01	0.59	1.41	4
1300	<0.1	<0.01	<0.01	0.02	0.02	<2
1301	0.8	<0.01	<0.01	0.06	0.86	<2
1302	0.9	<0.01	<0.01	0.08	0.77	<2
1303	1.2	<0.01	0.02	0.36	1.43	<2
1304	1.3	<0.01	<0.01	0.44	1.73	<2
1305	0.2	<0.01	<0.01	1.03	4.50	3
1306	<0.1	<0.01	0.01	0.72	4.97	7
1307	<0.1	0.02	0.04	>5.00	>5.00	55
1308	<0.1	<0.01	<0.01	0.31	1.74	13
1309	<0.1	<0.01	0.01	0.92	4.23	18
1310	0.2	<0.01	<0.01	0.17	1.15	8
1311	0.2	<0.01	<0.01	0.16	1.23	4
1312	<0.1	0.01	<0.01	0.12	1.36	5
1313	0.3	<0.01	0.03	1.27	1.22	21
1314	0.2	<0.01	0.04	>5.00	>5.00	57
1315	5.0	<0.01	0.04	0.31	0.35	17
1316	13.8	<0.01	0.02	1.81	0.13	27
1317	0.1	<0.01	0.01	0.64	0.18	13
1318	0.4	<0.01	0.01	1.37	3.58	22
1319	0.1	0.01	0.02	>5.00	>5.00	
1320	<0.1	<0.01	<0.01	1.99	0.04	19
1321	<0.1	<0.01	0.03	>5.00	>5.00	80
1322	<0.1	<0.01	<0.01	1.41	0.44	25
1323	19.8	<0.01	<0.01	1.41	0.02	11
1324	21.7	<0.01	<0.01	0.11	0.02	<2
1325	14.1	<0.01	0.02	2.65	0.28	37
1326	0.3	<0.01	0.07	0.57	0.73	21
1327	0.3	<0.01	0.03	0.59	2.01	13
1328	12.5	<0.01	0.01	0.95	0.93	6

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	XRF75E % 0.1 50 Ca	XRF75E % 0.01 5 WO3	XRF75E % 0.01 50 Cu	XRF75E % 0.01 5 Pb	XRF75E % 0.01 5 Zn	AAS40Q PPM 2 200 Ag
1329	2.0	<0.01	0.12	3.91	0.87	36
1330	11.3	<0.01	0.06	1.53	0.27	24
1331	8.6	<0.01	0.02	0.31	3.46	9
1332	0.5	<0.01	0.02	1.08	0.58	31
1333	0.7	<0.01	0.04	3.11	2.06	41
1334	11.7	0.03	0.10	4.55	0.28	49
1335	19.8	<0.01	<0.01	0.28	0.19	11
1336	1.8	<0.01	0.02	0.85	0.40	14
1337	0.2	<0.01	0.04	3.22	0.90	25
1338	16.9	<0.01	0.05	0.71	1.22	26
1339	11.5	<0.01	0.01	0.29	0.42	12
1340	15.0	<0.01	<0.01	0.16	0.36	9

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Scheme	AAS40Q	AAS43B	AAS43B	AAS43B
Units	PPM	%	%	PPM
Detection Limit	2	0.01	0.01	50
Upper Limit	200	40	100	40000
	Ag(R)	Pb	Zn	Ag
1252				
1253				
1254				
1255				
1256		4.21		
1257				
1258				
1259				
1260				
1261				
1262				
1263				
1264				
1265				
1266				
1267				
1268	51	8.80	14.4	
1269		35.9	21.3	120
1270		9.25	8.25	210
1271		19.9	40.3	210
1272		30.0	38.2	240
1273				
1274		17.9	46.0	210
1275		7.27	10.8	
1276				
1277				
1278		17.2		
1279		24.1		160
1280		20.9		470
1281		>40.0	4.32	260
1282		30.9	24.4	120
1283		17.3	4.34	
1284		32.5		200
1285		17.6		100
1286				
1287				610
1288		11.5	41.1	400
1289				

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	AAS40Q PPM 2 200 Ag(R)	AAS43B % 0.01 40 Pb	AAS43B % 0.01 100 Zn	AAS43B PPM 50 40000 Ag
1290				
1291		4.80		
1292		6.84		
1293				
1294		4.57		
1295				
1296				
1297				
1298				
1299				
1300				
1301				
1302				
1303				
1304				
1305				
1306				
1307		5.92	12.4	
1308				
1309				
1310				
1311				
1312				
1313				
1314		4.17	9.90	
1315				
1316				
1317	14			
1318				
1319		12.6	14.1	240
1320				
1321		7.65	7.07	
1322				
1323				
1324				
1325				
1326				
1327	11			
1328				

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	AAS40Q PPM 2 200 Ag(R)	AAS43B % 0.01 40 Pb	AAS43B % 0.01 100 Zn	AAS43B PPM 50 40000 Ag
1329				
1330				
1331				
1332				
1333				
1334				
1335				
1336				
1337				
1338				
1339				
1340				

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DESCRIPTION

AAS40Q : AAS after DIG40Q
AAS43B : AAS after DIG43B
CRU20 : Coarse Crushing, 6mm
CRU22 : Crush >3.5kg, 10 Mesh (2mm), Per kg
DIG40Q : 4 Acid Digest 0.2g-20ml
DIG43B : 4 Acid Digest 0.25g-500ml
DRY10 : Sample Drying, 105°C, <3.5kg
PUL45 : Pulv, Cr Steel, 75µm, 250g
SPL26 : Riffle Splitting, Per kg
XRF75E : Pressed Powder XRF (2g+12g diluent)