Activation Laboratories Ltd.
Santa Clara, La Salada, Caliguey - Leach Tests

Organimax

Head Grade (4-acid digestion)
Report Number: A16-13646
Report Date: 2/2/2017

	Analyte Symbol	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	Pb	Sb	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
	Unit Symbol	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	Detection Limit	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	3	5	4	1	2	0.01	5	10	2	5	1	1	5
	Analysis Method	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
COMPOSITE A16-10795 (1-10)	Santa Clara	0.3	5.88	46	484	1	< 2	5.16	0.4	11	94	31	3.31	14	< 1	4.1	2.52	464	596	2	3.71	32	7	< 5	15	926	< 2	0.26	< 5	< 10	372	< 5	22	77	100
COMPOSITE A16-10795 (11-20)	La Salada	< 0.3	0.97	28	179	< 1	< 2	11.8	< 0.3	2	32	6	0.5	2	< 1	2.47	7.32	1460	136	6	3.36	7	< 3	< 5	< 4	2810	< 2	0.05	< 5	10	162	< 5	4	19	20
COMPOSITE A16-10795 (21-30)	Caliguey	< 0.3	4.24	41	304	1	< 2	8.43	< 0.3	8	39	20	2.09	9	< 1	3.84	4.58	1040	434	2	2.26	21	5	8	9	1170	< 2	0.21	< 5	< 10	236	< 5	17	46	69

Hot Water Leach (deionized water leach, 2 hours, 60°C)
Report Number: A16-13646
Report Date: 21/2/2017

	Analyte Symbol	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	Pb	Sb	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
	Unit Symbol	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
	Detection Limit	0.2	0.5	1	1	2	0.8	5	0.2	1	20	3	1	1	1	5	2	2	1	1	5	3	1	0.1	100	1	1	100	0.1	0.1	1	1	0.5	10	1
	Analysis Method	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS
COMPOSITE A16-10795 (1-10)	Santa Clara	< 2	41.7	19400	895	< 20	< 8	60	< 2	46	< 200	171	74	39	< 10	1710	174	22	< 10	871	19100	108	25	417	< 1000	3380	< 10	2000	3.1	181	50100	88	60.1	< 100	440
COMPOSITE A16-10795 (11-20)	La Salada	< 2	< 5	9350	< 10	< 20	< 8	< 50	< 2	< 10	< 200	43	< 10	< 10	< 10	7310	91	35	< 10	5470	25900	< 30	< 10	367	< 1000	1990	< 10	< 1000	3.2	2160	53200	131	< 5	< 100	106
COMPOSITE A16-10795 (21-30)	Caliguey	< 2	102	5910	1370	32	< 8	101	2.6	211	600	487	125	39	< 10	900	1550	60	< 10	213	5810	484	83	76.1	< 1000	2890	< 10	1700	2.7	268	13800	< 10	150	1490	145

Aqua Regia Leach (~0.34% aqua regia leach (1 part HNO^{3+}, 1part HCL. 1 part H_2O), 2 hours, 60°C)
Report Number: A16-13646
Report Date: 22/2/2017

	Analyte Symbol	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	Pb	Sb	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
	Unit Symbol	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
	Detection Limit	0.2	0.5	1	1	2	0.8	5	0.2	1	20	3	1	1	1	5	2	2	1	1	5	3	1	0.1	100	1	1	100	0.1	0.1	1	1	0.5	10	1
	Analysis Method	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS
COMPOSITE A16-10795 (1-10)	Santa Clara	67.7	19900	62900	173000	747	88.9	71200	286	10200	71900	29800	24000	12800	158	19700	25000	368	465	1930	43500	17300	8490	1900	7900	1060000	30	277000	266	2650	307000	193	20000	42100	63400
COMPOSITE A16-10795 (11-20)	La Salada	31.4	5380	31600	73600	314	28.3	155000	118	1500	7840	5040	5260	2490	30	20300	91000	1250	106	5860	35300	5270	3730	1390	2200	3810000	29	229000	96.8	7430	157000	179	3260	17800	10100
COMPOSITE A16-10795 (21-30)	Caliguey	44.8	11200	55000	12700	588	61.8	101000	165	6850	40700	18000	15600	8680	23	15500	49400	1010	375	2090	17200	13600	4040	6810	6300	1380000	25	403000	148	6330	215000	139	14300	34400	31200

Head Grade (4-acid digestion)
Report Number: A16-13646
Report Date: 2/2/2017

	Analyte Symbol	P	S
	Unit Symbol	%	%
	Detection Limit	0.001	0.01
	Analysis Method	TD-ICP	TD-ICP
COMPOSITE A16-10795 (1-10)	Santa Clara	0.049	0.35
COMPOSITE A16-10795 (11-20)	La Salada	0.012	0.36
COMPOSITE A16-10795 (21-30)	Caliguey	0.034	0.22

Hot Water Leach (deionized water leach, 2 hours, 60°C)
Report Number: A16-13646
Report Date: 21/2/2017

	Analyte Symbol	Ce	Cs	Dy	Er	Eu	Gd	Ge	Hf	Ho	I	In	La	Lu	Nb	Nd	Os	Pd	Pr	Rb	Re	Se	Sm	Sn	Ta	Tb	Th	Tm	Yb
	Unit Symbol	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
	Detection Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.1	0.1	2	0.1	0.1	0.1	1	0.1	1	1	0.1	1	0.01	5	0.1	0.8	0.1	0.1	0.1	0.1	0.1
	Analysis Method	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS
COMPOSITE A16-10795 (1-10)	Santa Clara	136	4.9	10.2	2.4	2.8	13.8	5.2	14.3	2.3	5610	< 1	49.4	< 1	16	56.3	< 10	< 10	15	504	5.35	126	13.9	21.6	< 1	2.2	24.5	< 1	6.2
COMPOSITE A16-10795 (11-20)	La Salada	3.6	4.6	< 1	< 1	< 1	< 1	< 5	2.1	< 1	10500	< 1	1.5	< 1	< 10	1.2	< 10	< 10	< 1	3120	39.5	452	< 1	31.3	< 1	< 1	3.6	< 1	< 1
COMPOSITE A16-10795 (21-30)	Caliguey	238	22.6	23.6	11	5.4	26.6	33.9	3.2	5.2	1950	< 1	104	2.7	< 10	112	< 10	< 10	30.6	1300	1.86	156	24.9	13.9	< 1	4.5	50.3	2.4	17.5

Aqua Regia Leach (~0.34% aqua regia leach (1 part HNO^{3+}, 1part HCL. 1 part H_2O), 2 hours, 60°C)
Report Number: A16-13646
Report Date: 22/2/2017

	Analyte Symbol	Ce	Cs	Dy	Er	Eu	Gd	Ge	Hf	Ho	I	In	La	Lu	Nb	Nd	Os	Pd	Pr	Rb	Re	Se	Sm	Sn	Ta	Tb	Th	Tm	Yb
	Unit Symbol	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
	Detection Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.1	0.1	2	0.1	0.1	0.1	1	0.1	1	1	0.1	1	0.01	5	0.1	0.8	0.1	0.1	0.1	0.1	0.1
	Analysis Method	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS
COMPOSITE A16-10795 (1-10)	Santa Clara	47700	6060	3730	1150	561	4690	302	1590	457	1040000	30.9	19000	167	191	20200	< 10	< 10	3220	35600	5.67	3120	4870	724	< 1	440	9400	177	1180
COMPOSITE A16-10795 (11-20)	La Salada	12100	1550	563	277	126	738	266	198	125	115000	8.1	5220	42.6	344	3710	< 10	< 10	1020	43400	49.6	1190	812	267	< 1	123	996	48.3	310
COMPOSITE A16-10795 (21-30)	Caliguey	31100	20200	2540	1080	438	3180	467	894	426	1110000	21.2	12600	163	302	13200	< 10	< 10	2660	74700	3.51	2420	3140	579	1.2	387	6650	172	1150