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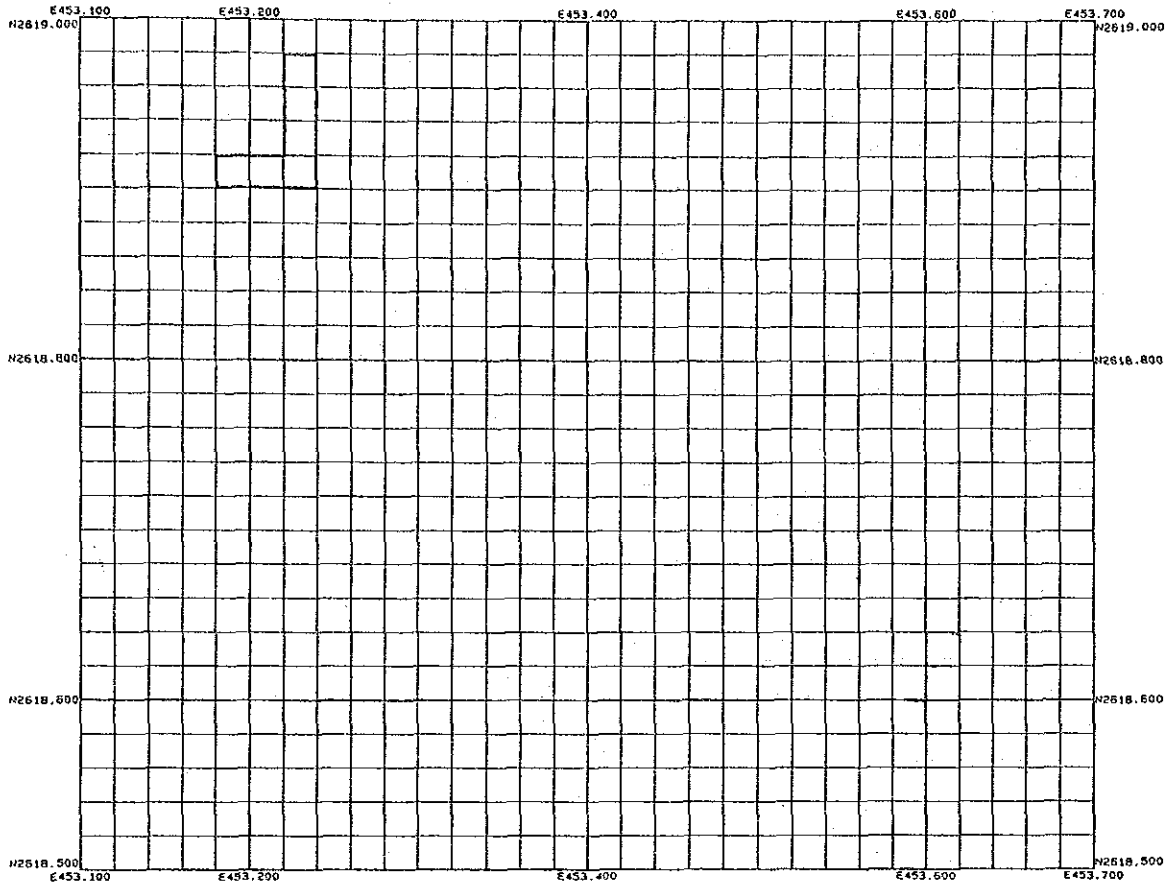
## **Appendix 1**

**Plan maps for each mining level of the Hayl as Safil deposit**

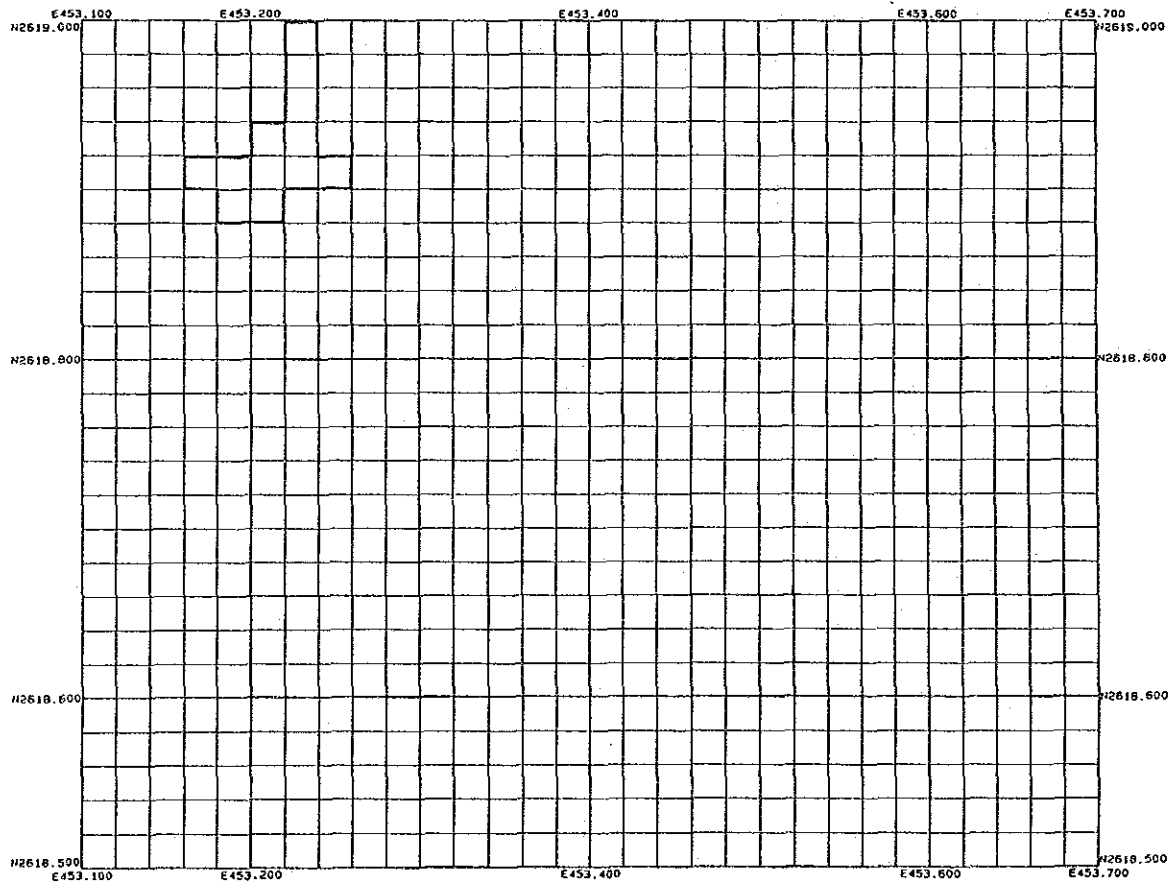




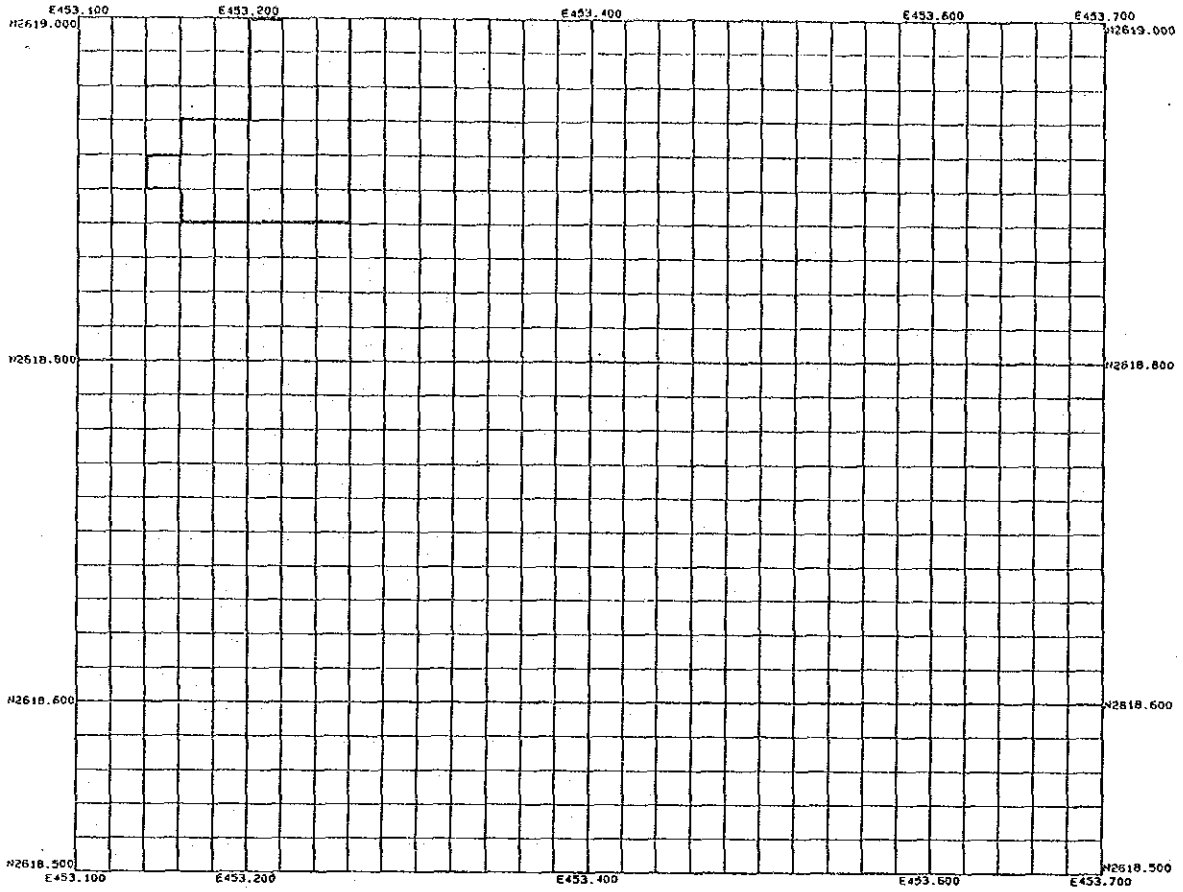
Hayl as Safil 780 mL



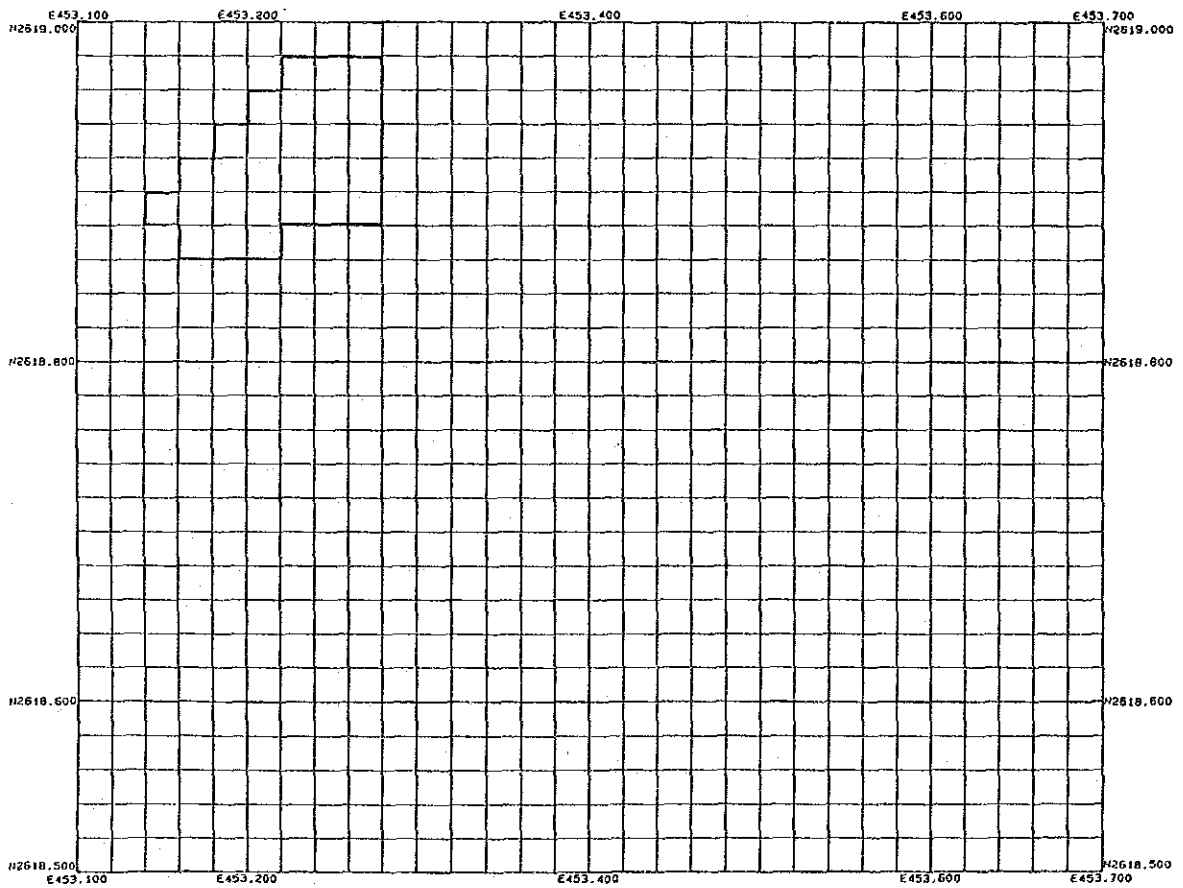
Hayl as Safil 770 mL



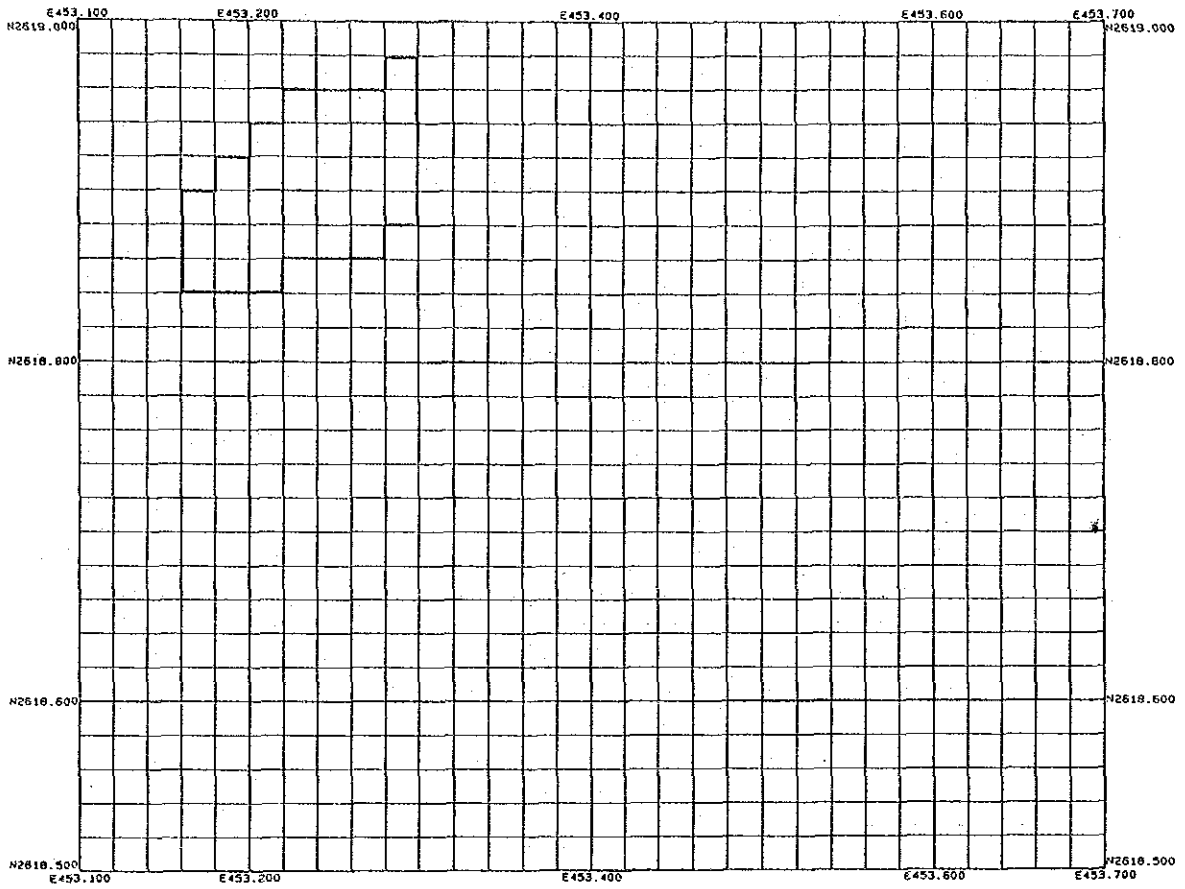
Hayl as Safil 760 mL



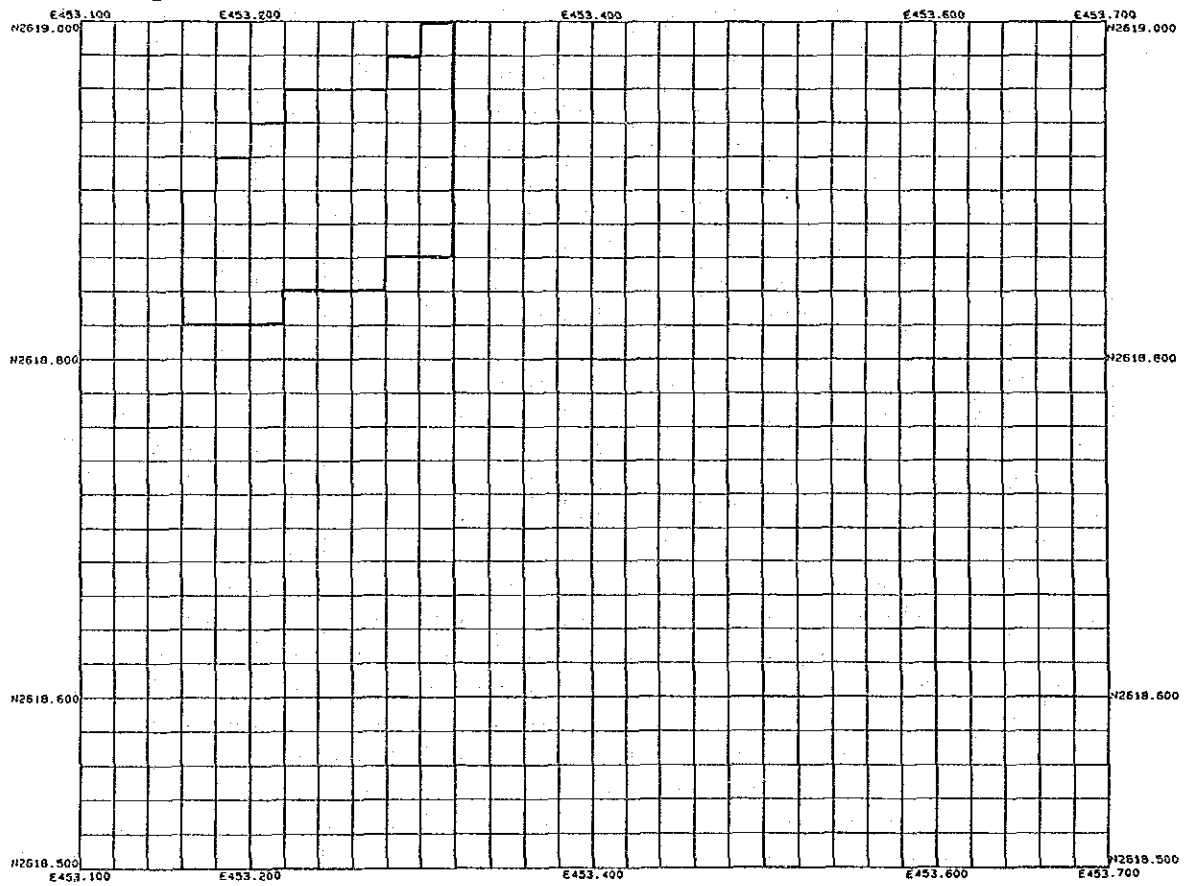
Hayl as Safil 750 mL



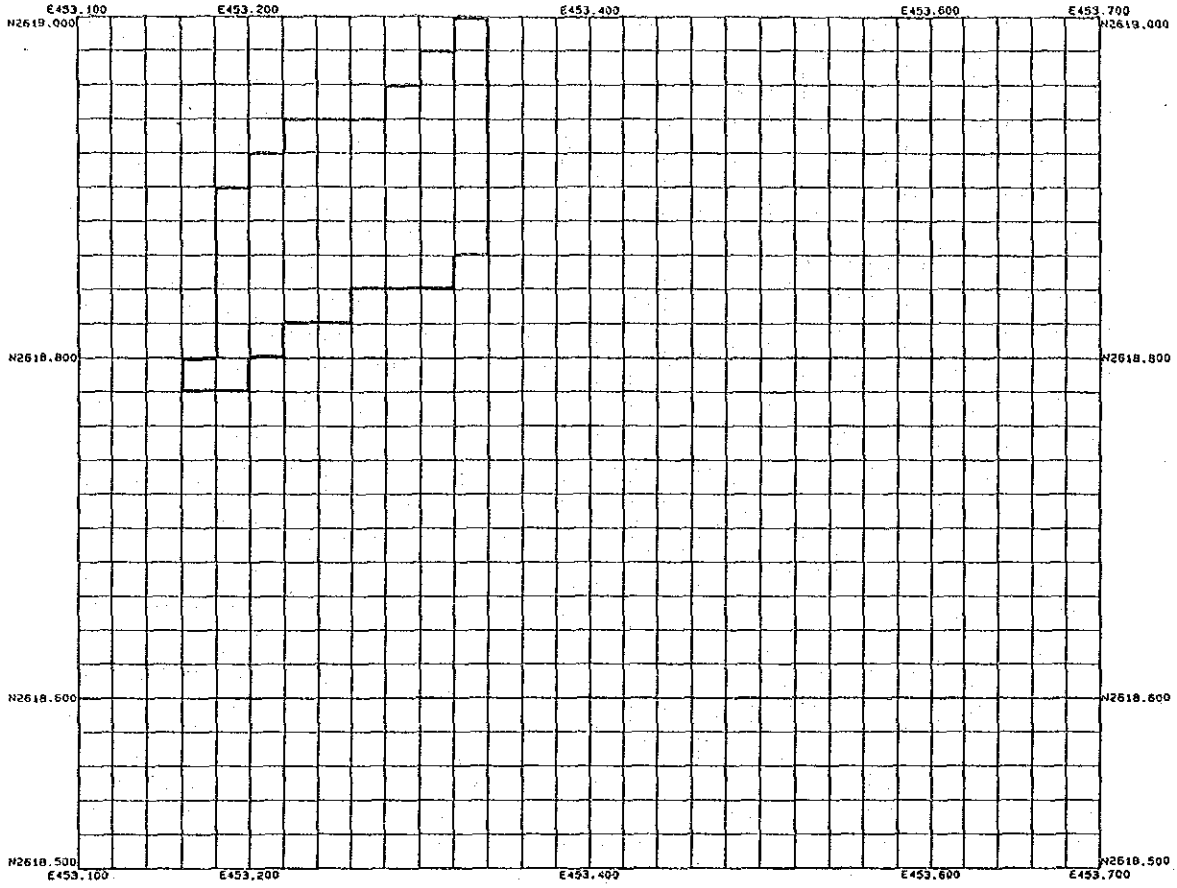
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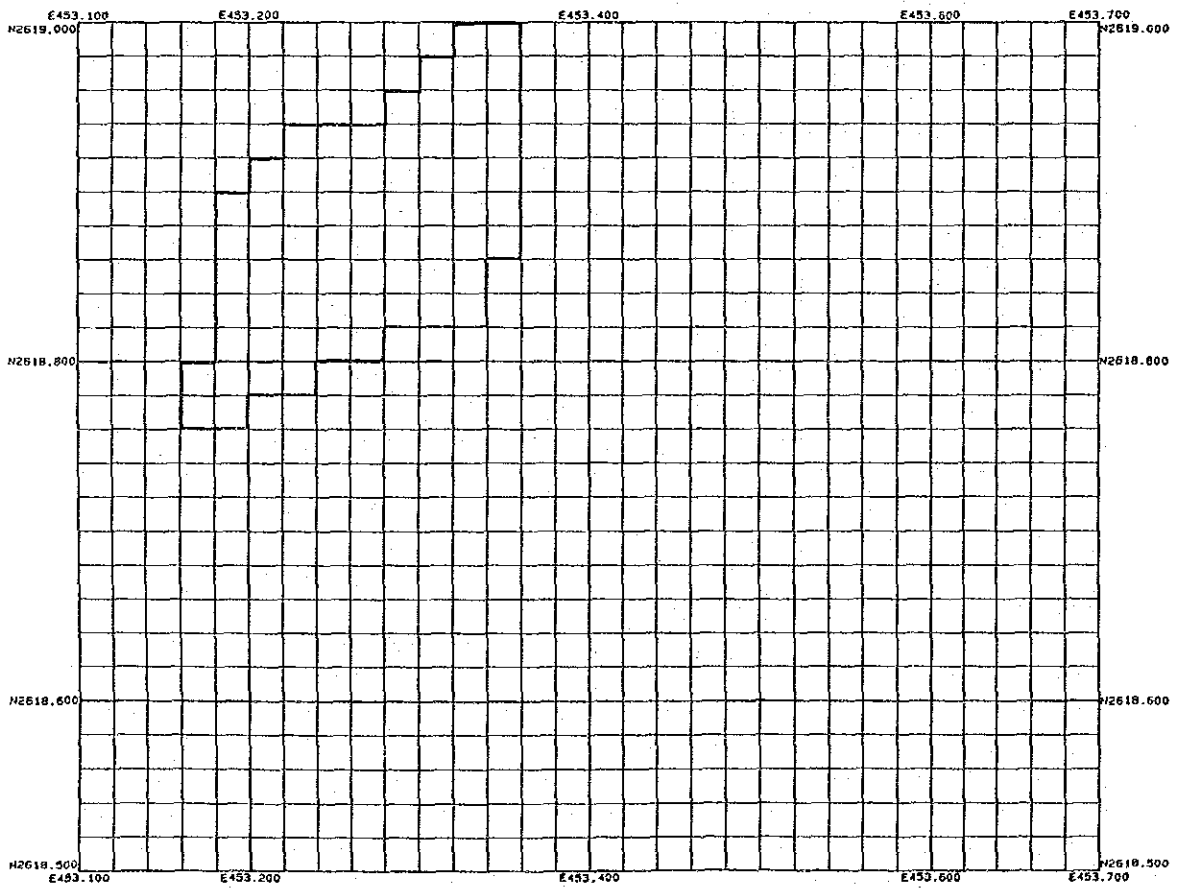
Hayl as Safil 730 mL



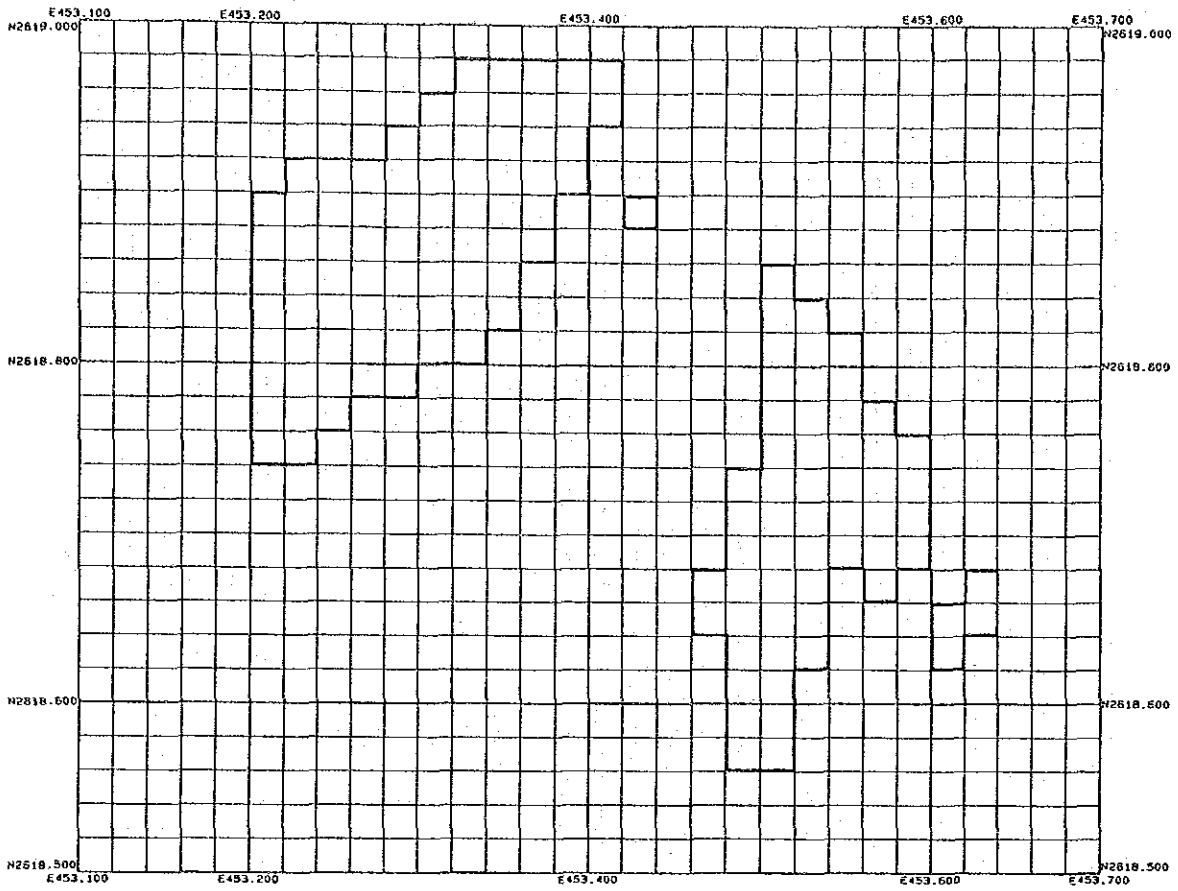
Hayl as Safil 720 mL



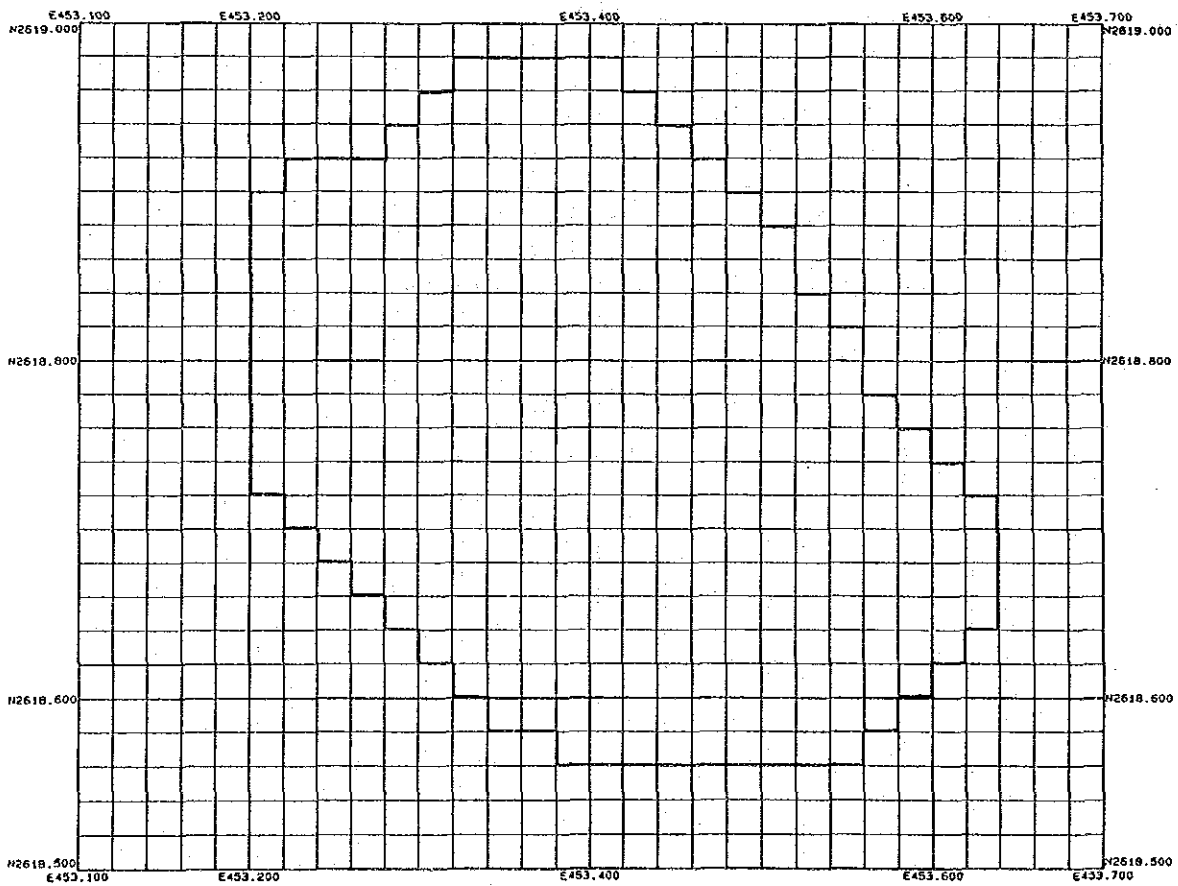
Hayl AS Safil 710 mL



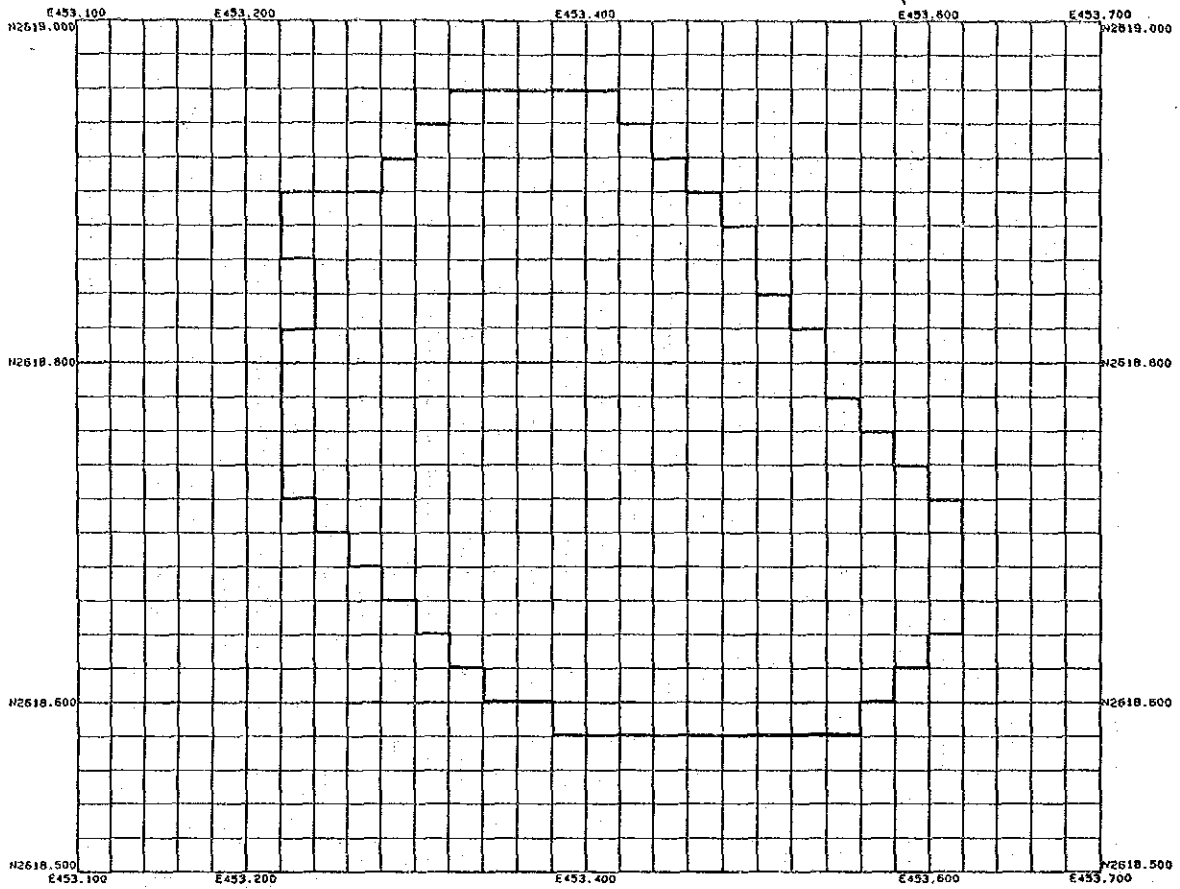
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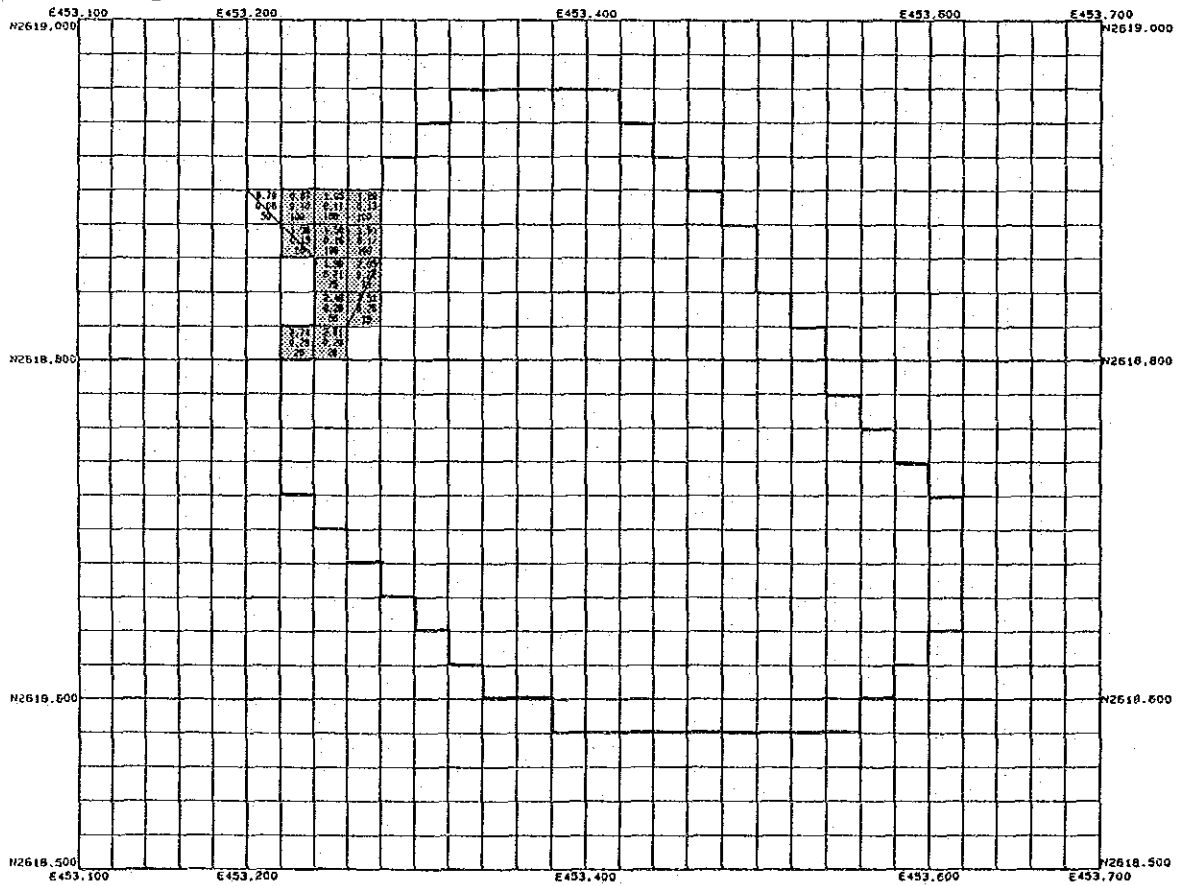
Hayl as Safil 690 mL



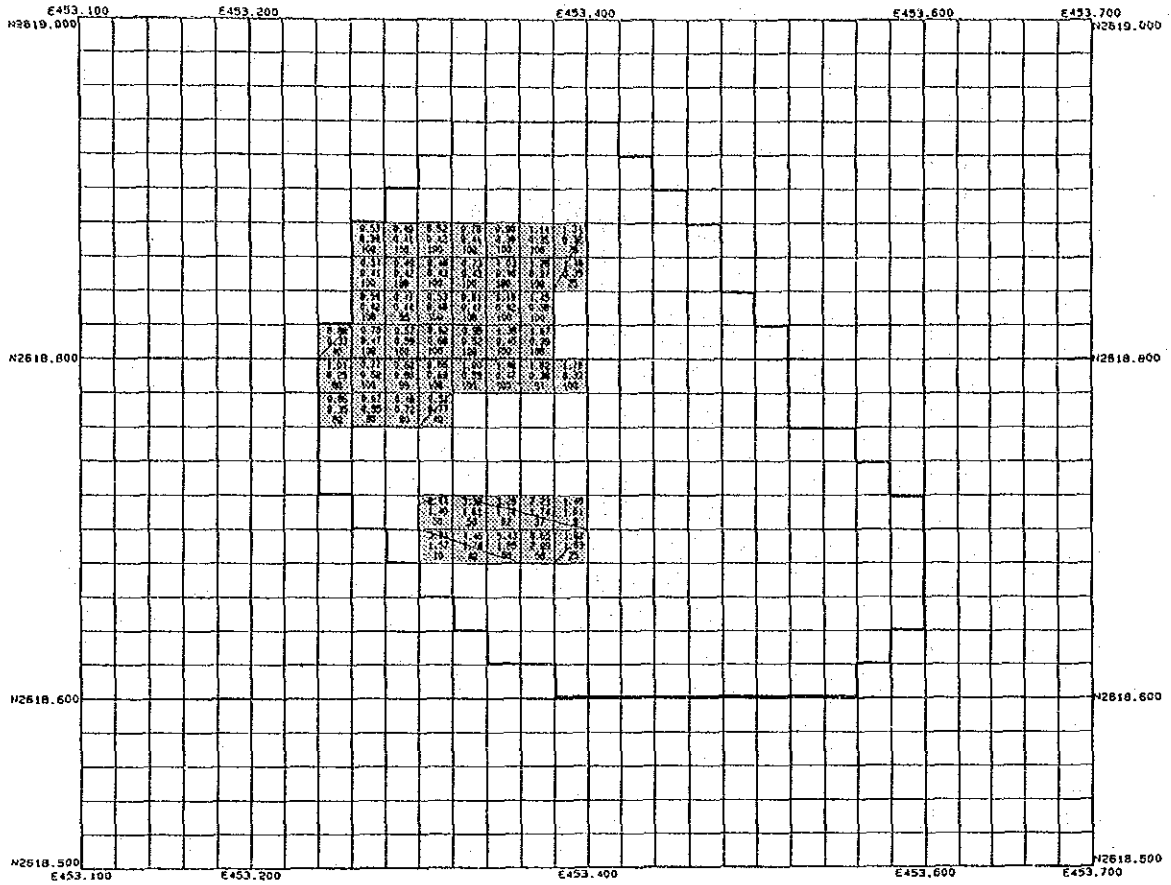
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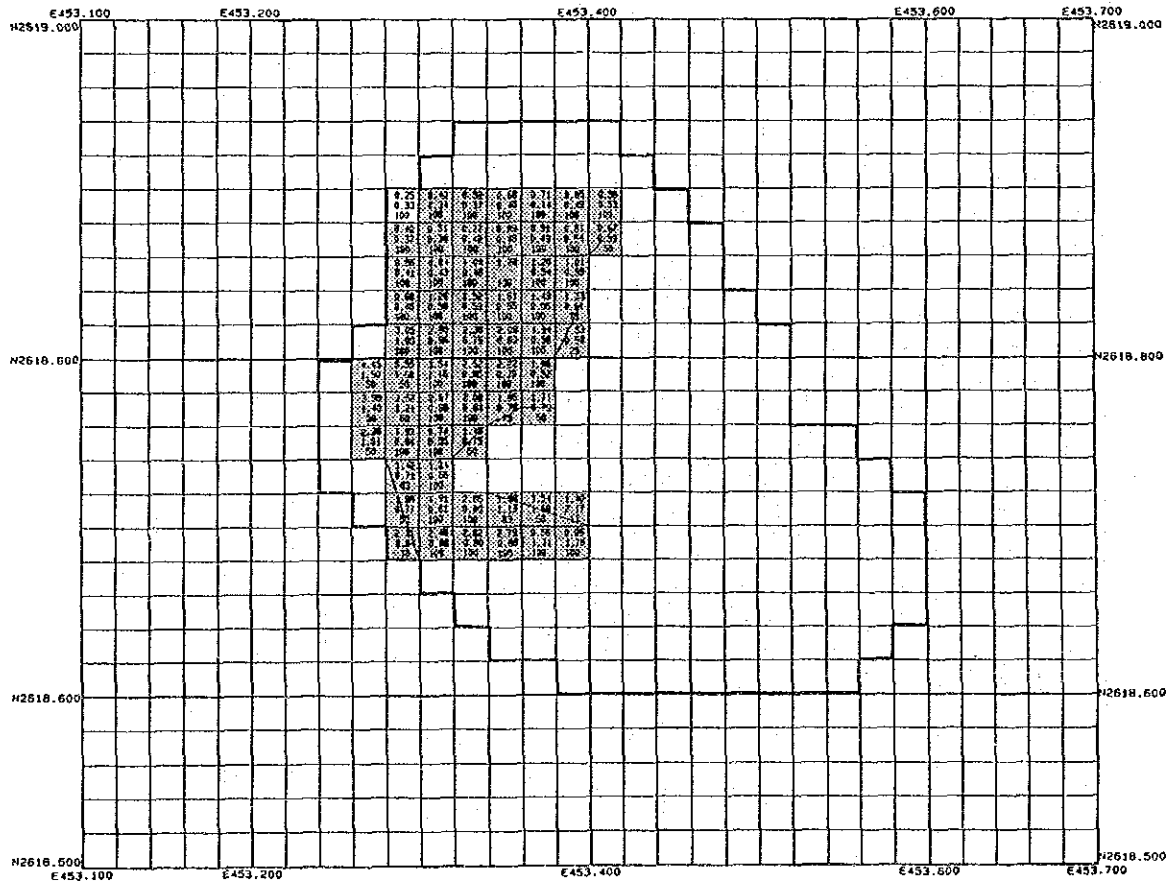
Hayl as Safil 670 mL



Hayl as Safil 660 mL

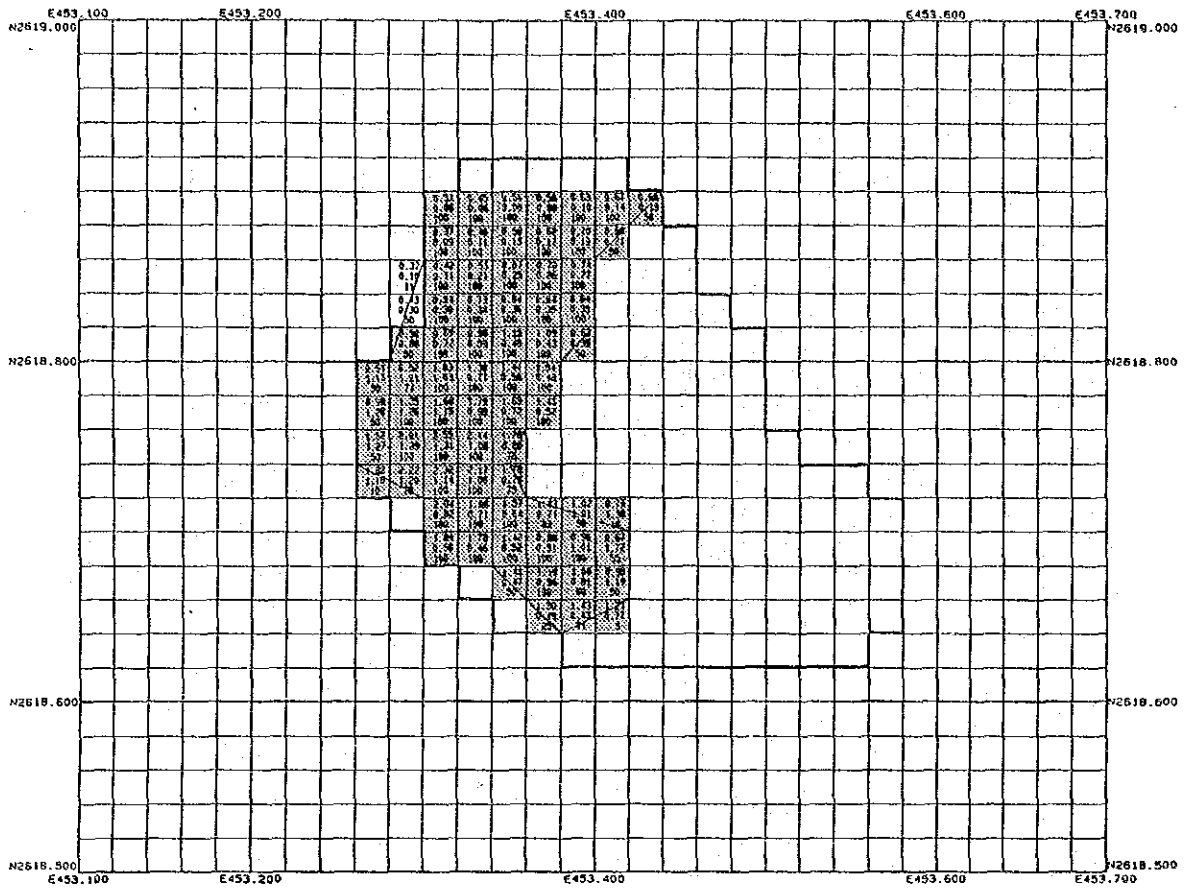


Hayl as Safil 650 mL

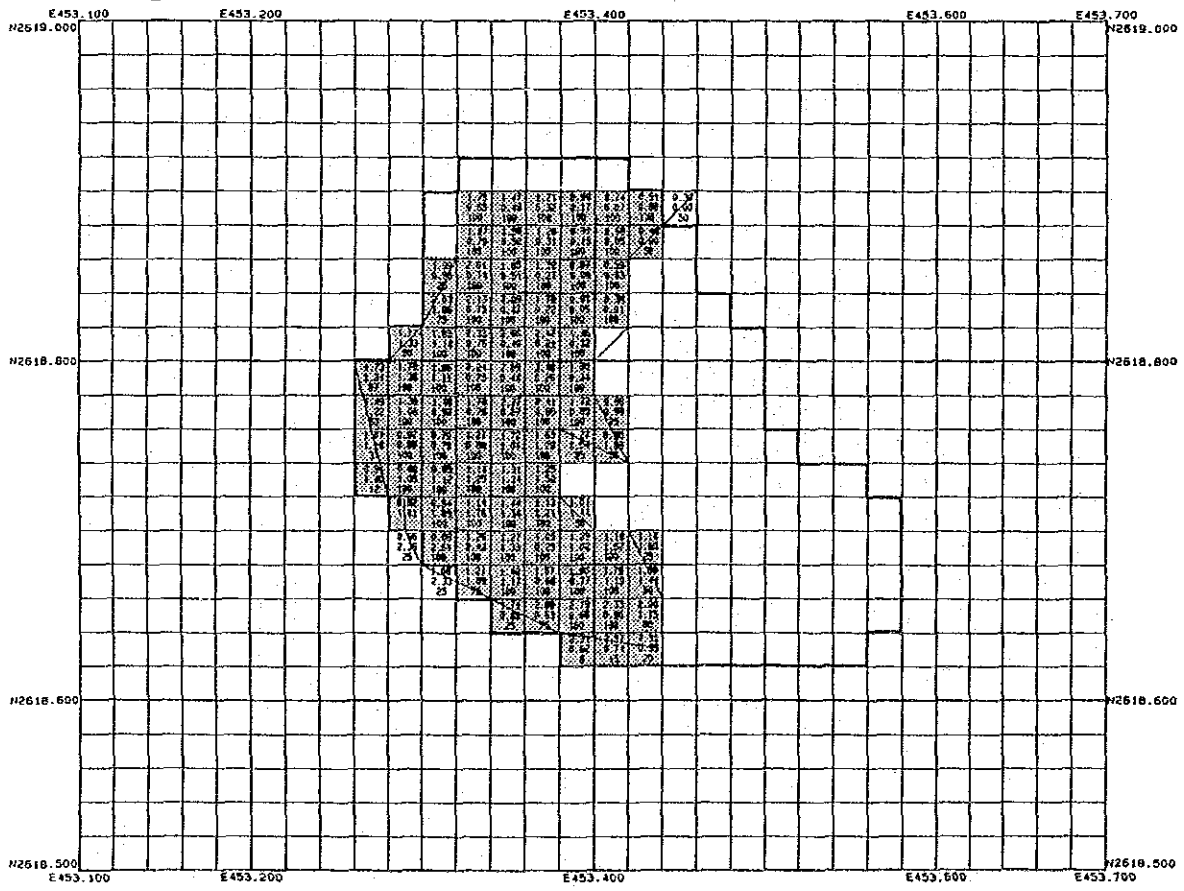




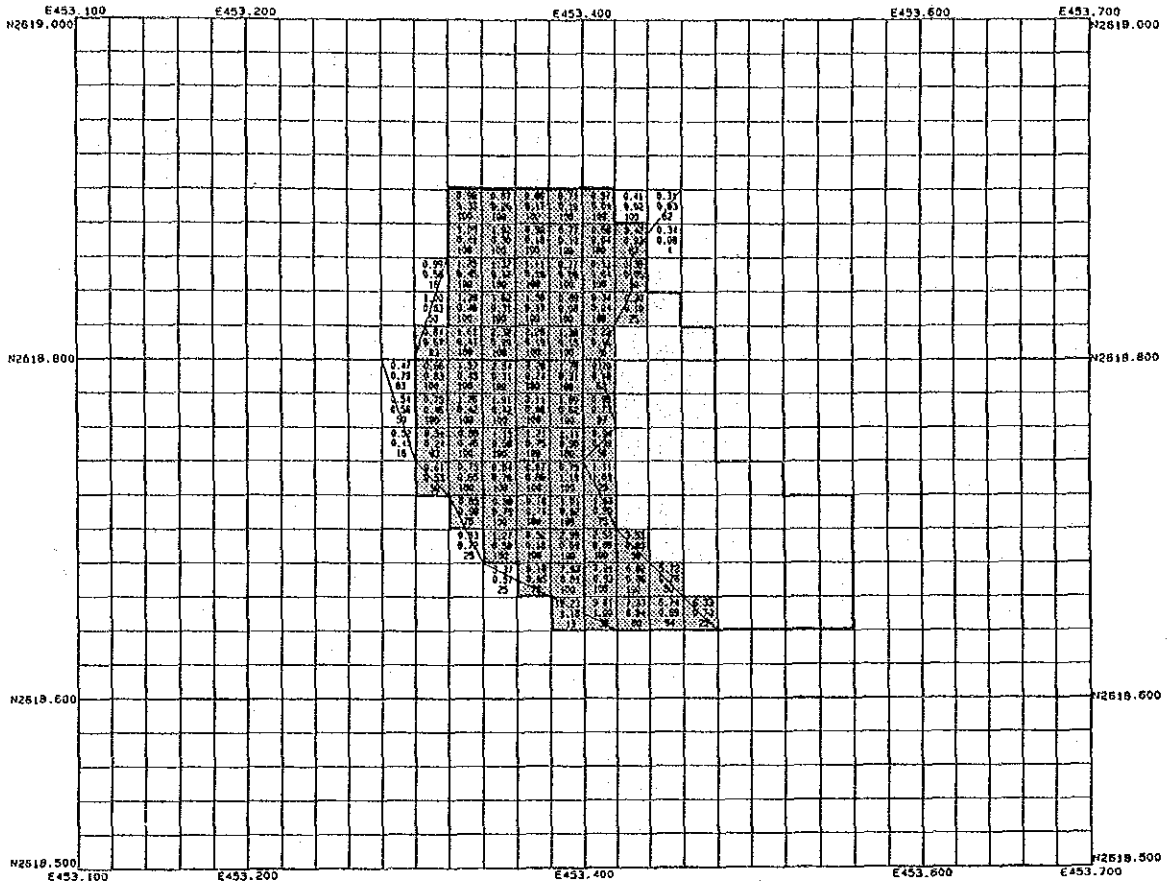
Hayl as Safil 640 mL



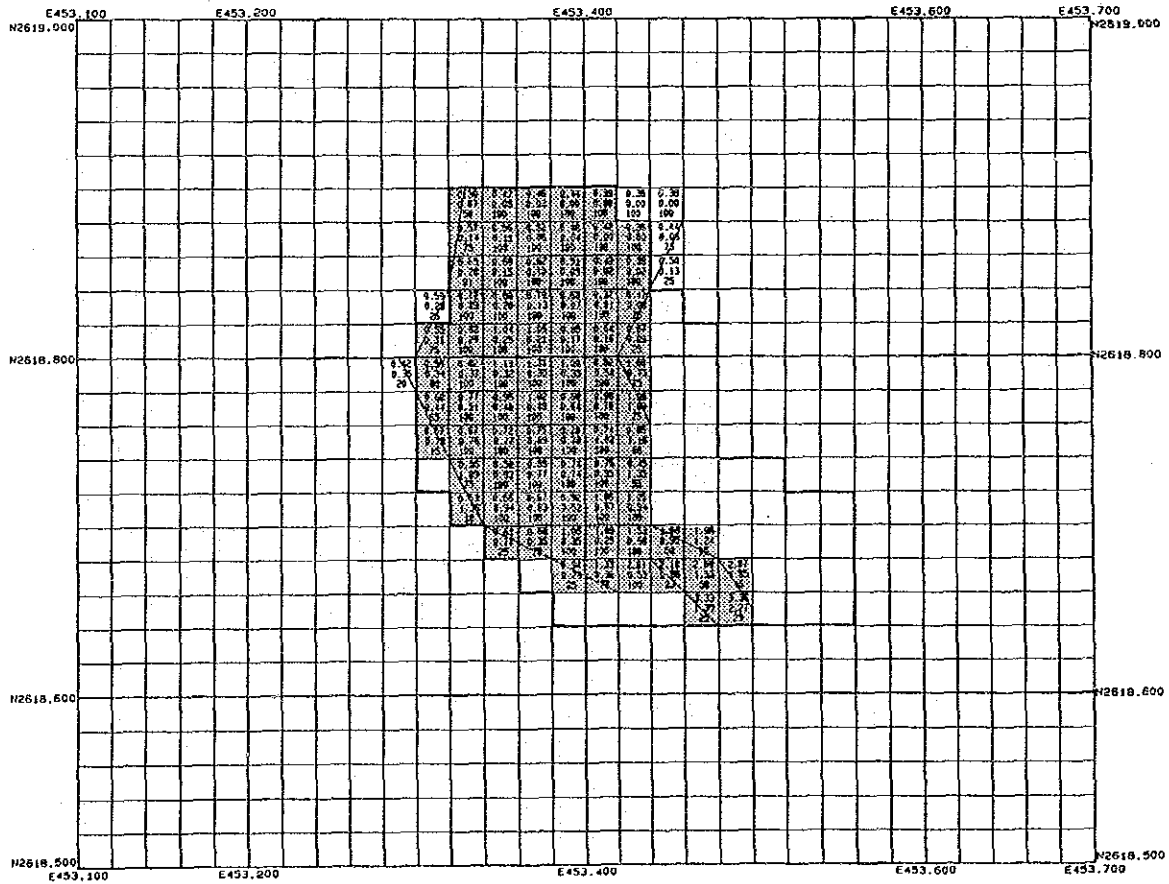
Hayl as Safil 630 mL



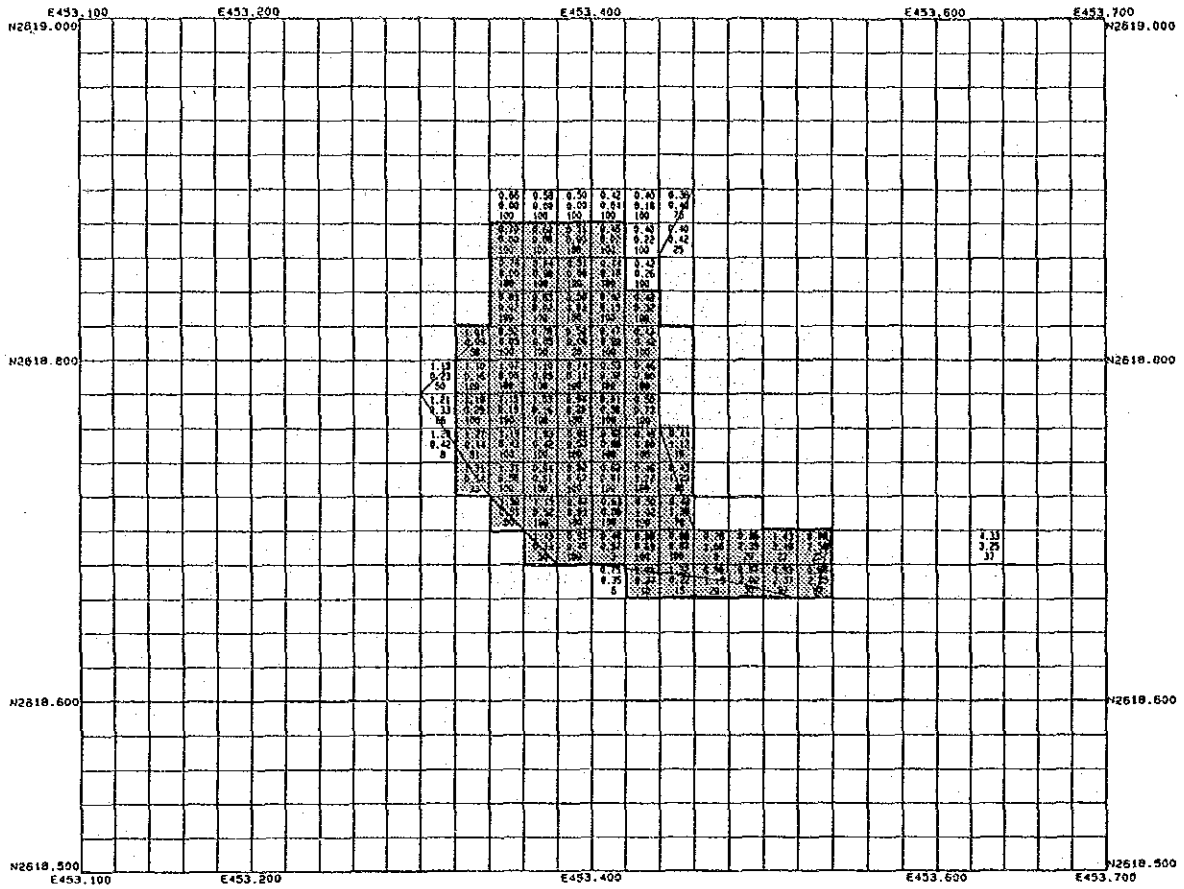
Hayl as Safil 620 mL



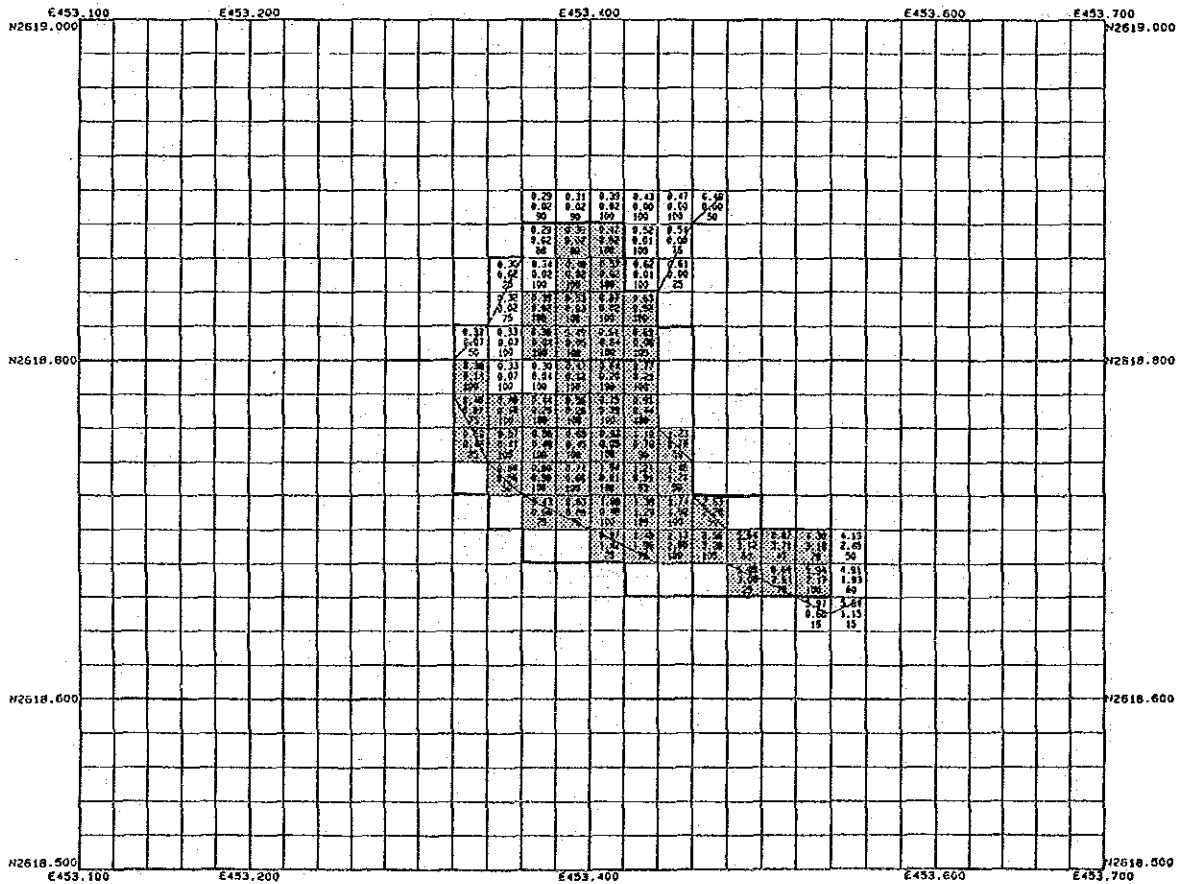
Hayl as Safil 610 mL



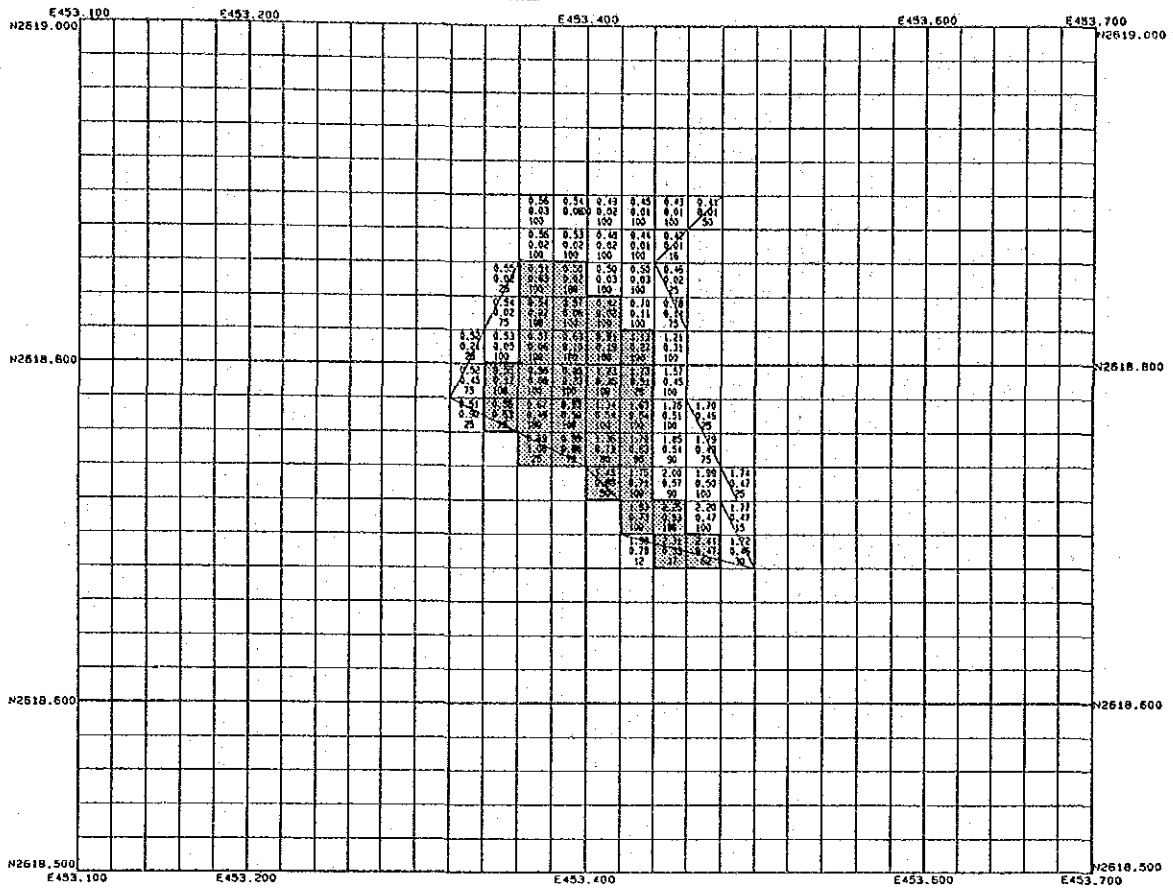
# Hayl as Safil 600 mL



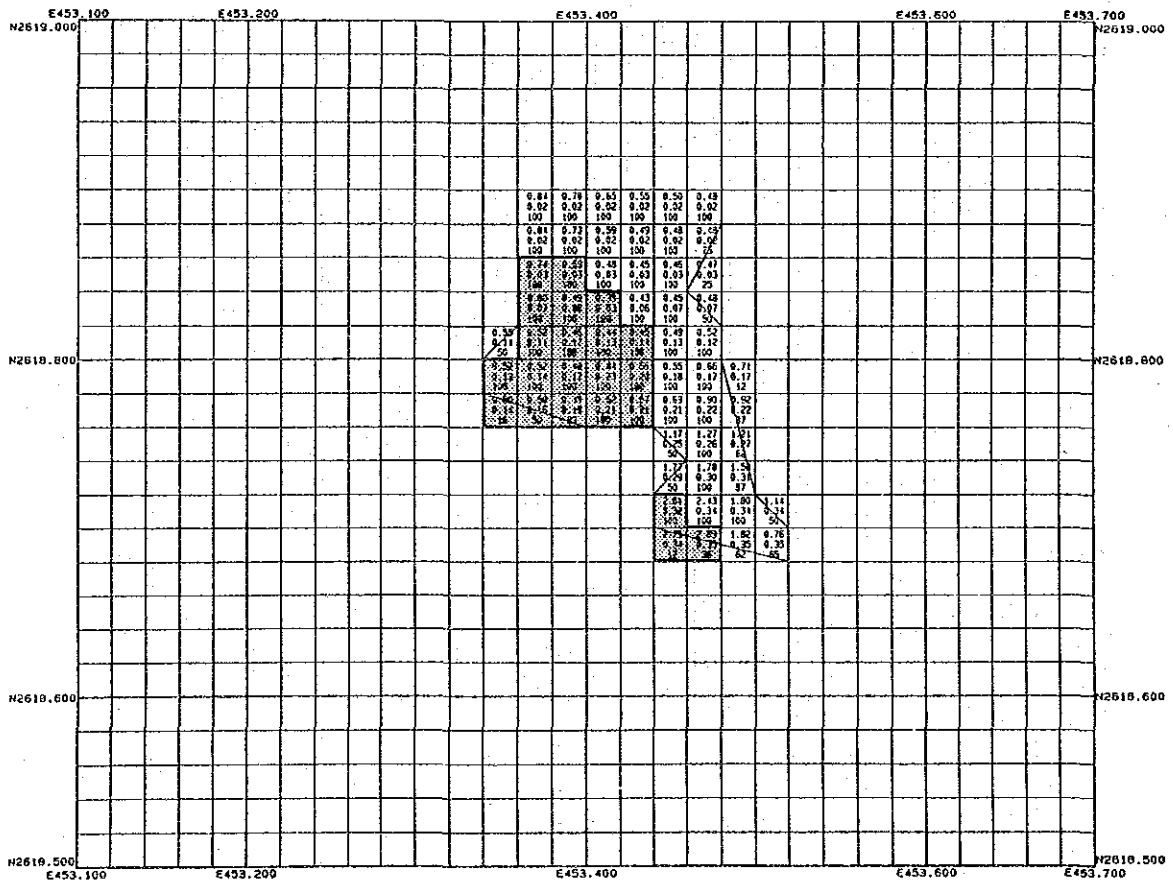
# Hayl as Safil 590 mL



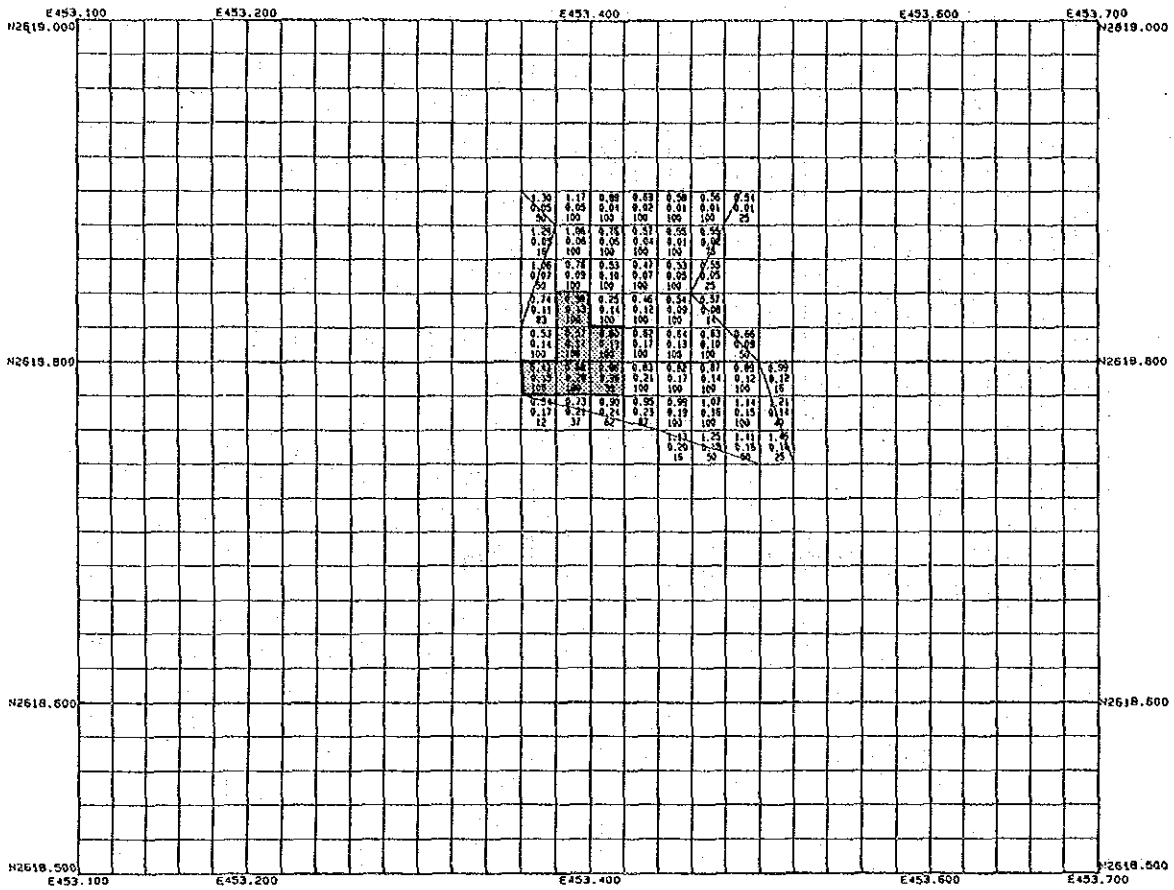
Hayl as Safil 580 mL



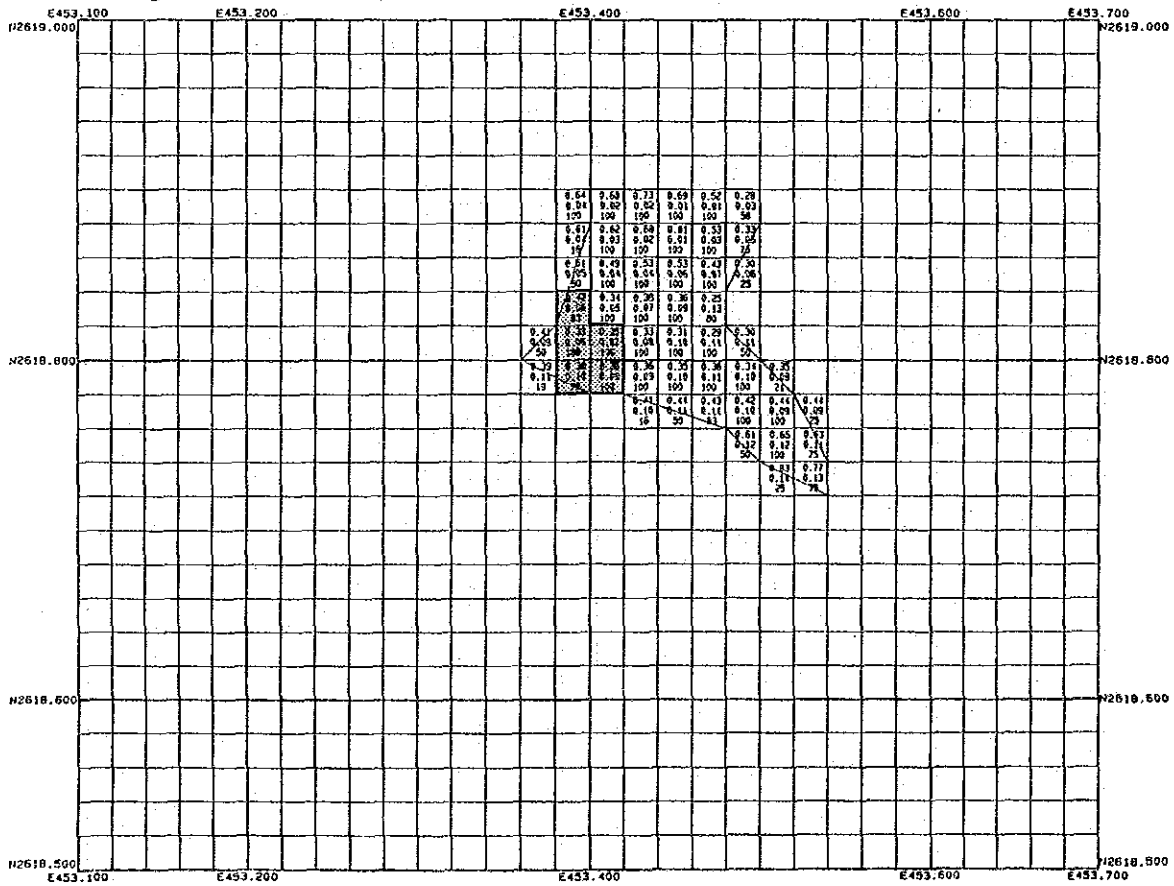
Hayl as Safil 570 mL



# Hayl as Safil 560 mL



# Hayl as Safil 550 mL



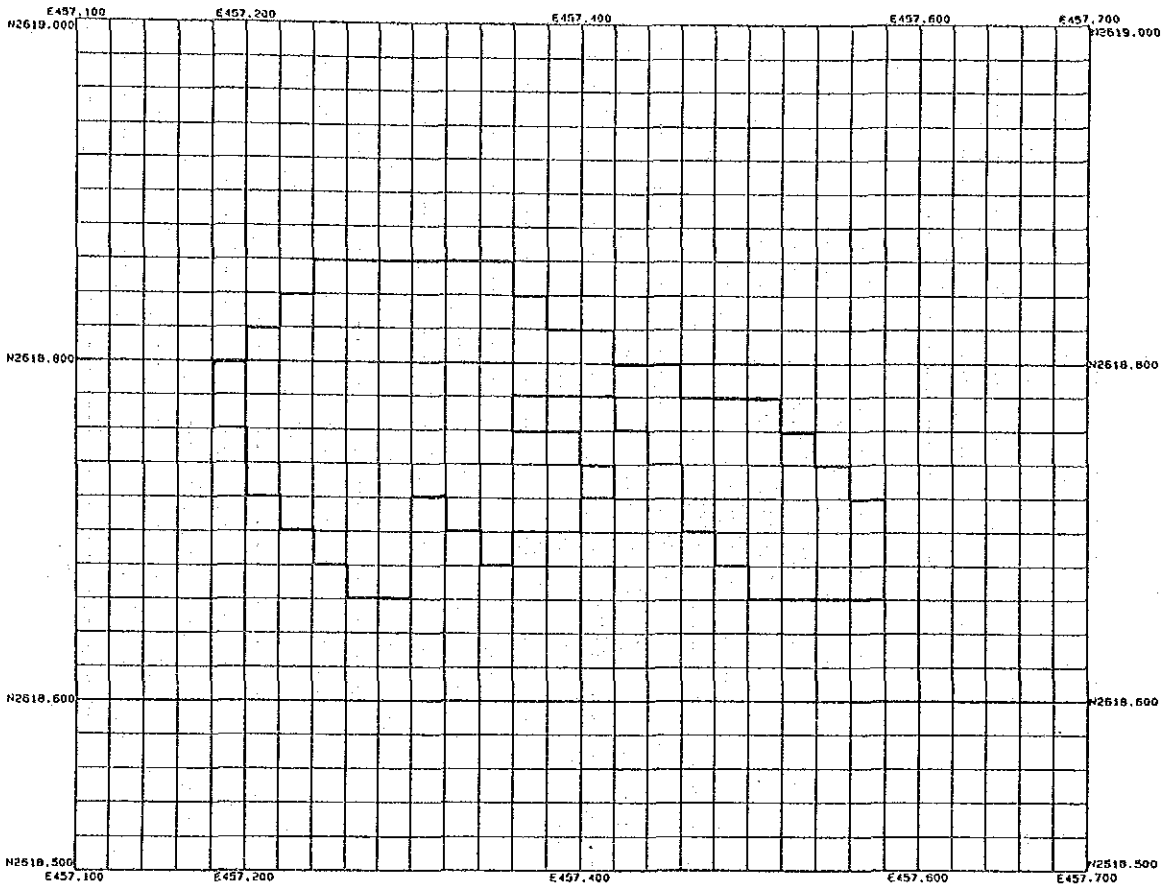
## **Appendix 2**

**Plan maps for each mining level of the Rakah deposit**



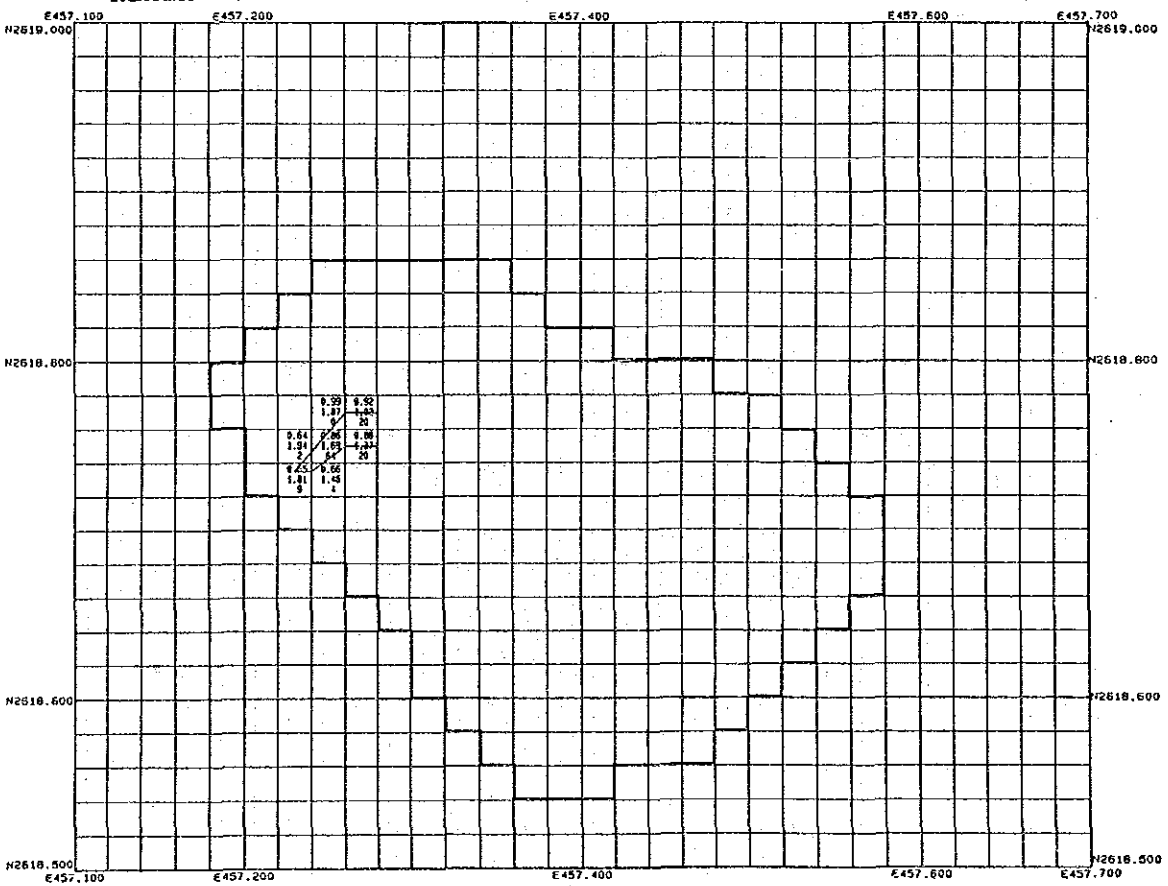
Rakah

670 mL



Rakah

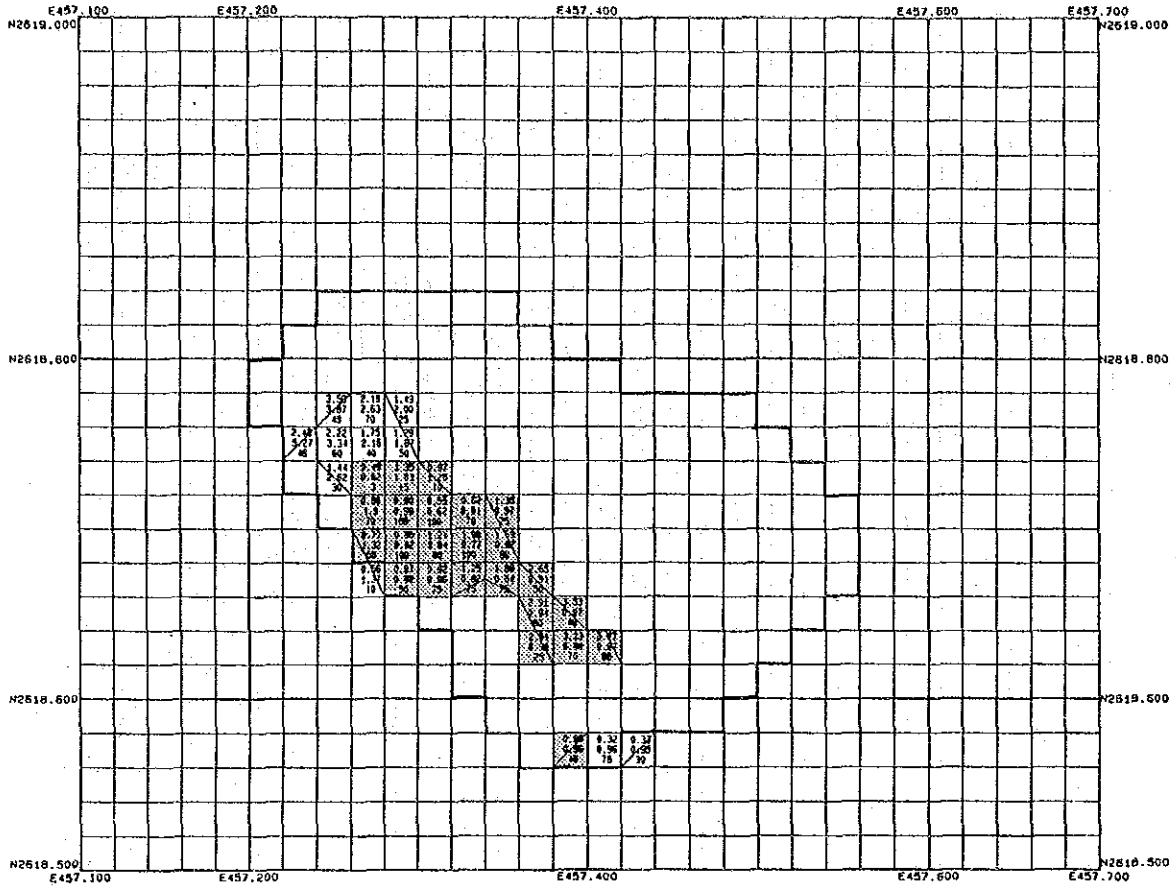
660 mL





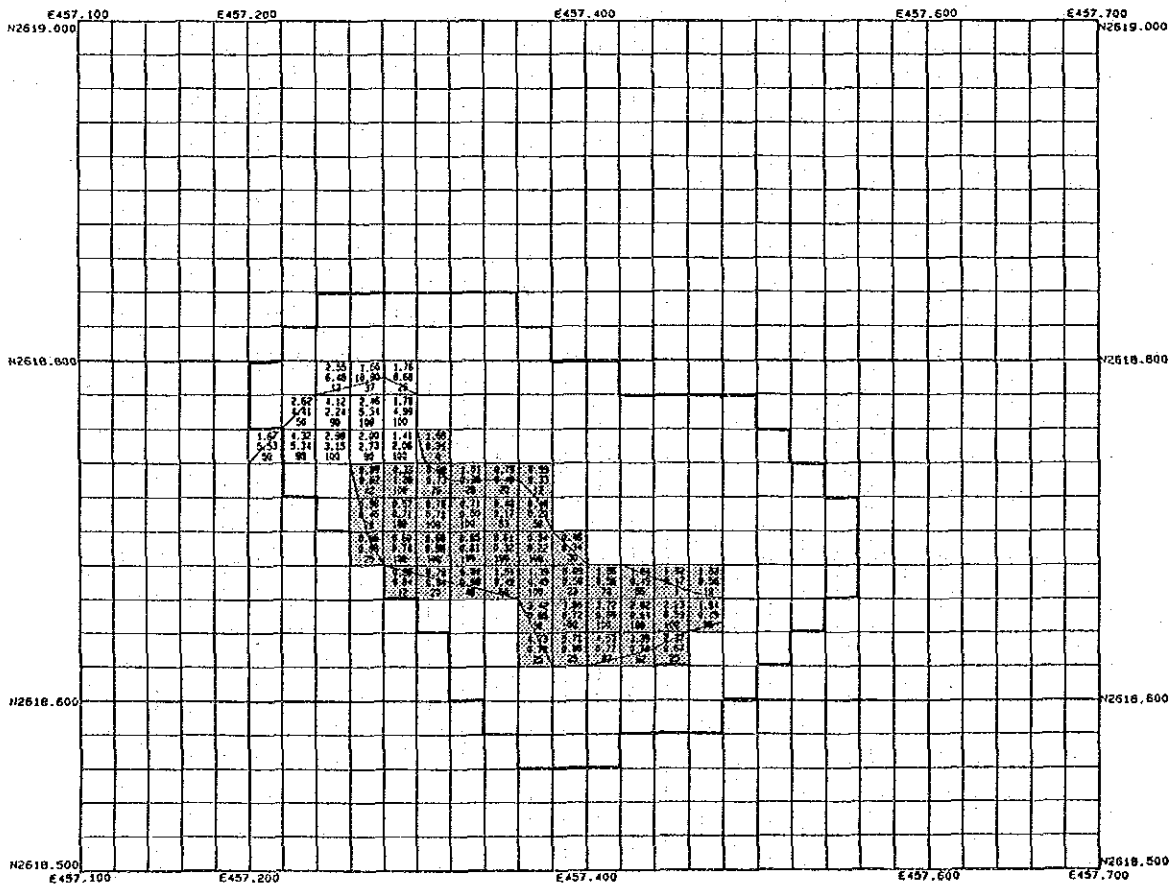
Rakah

650 mL



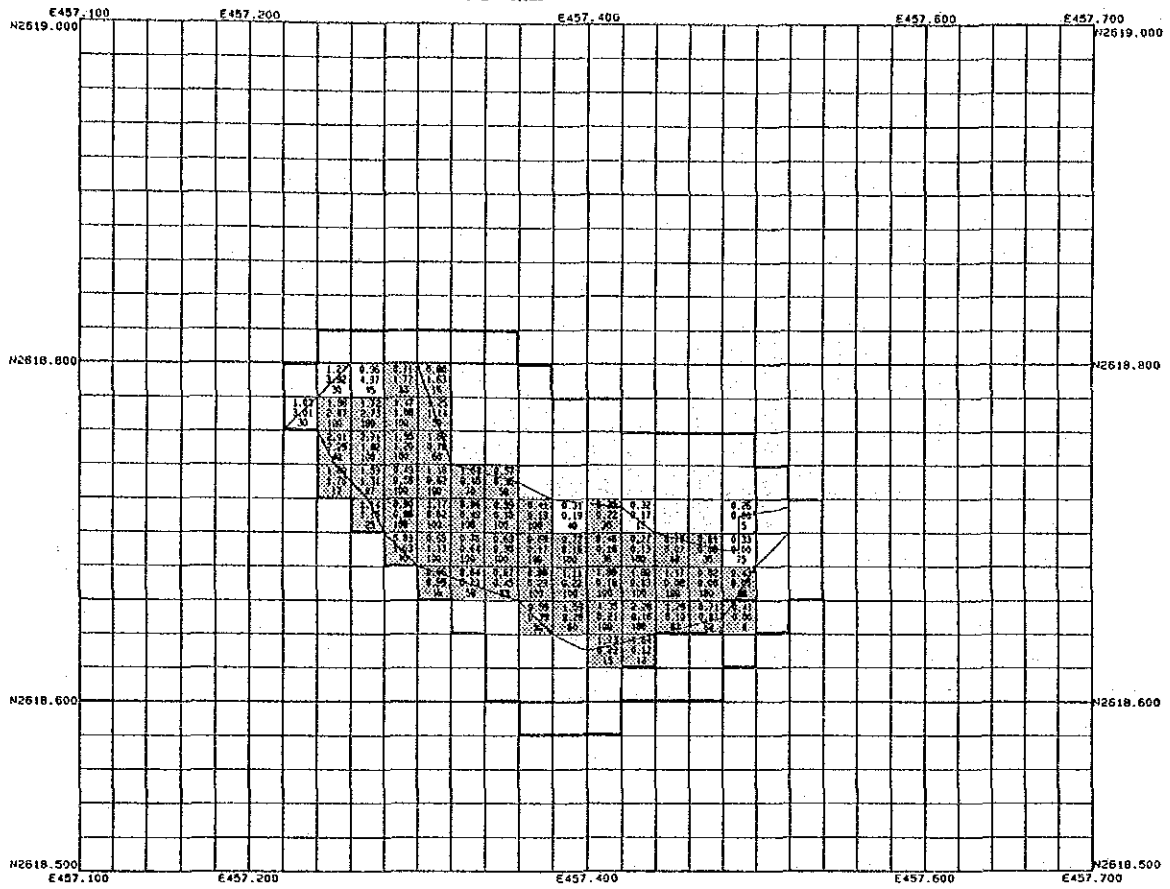
Rakah

640 mL



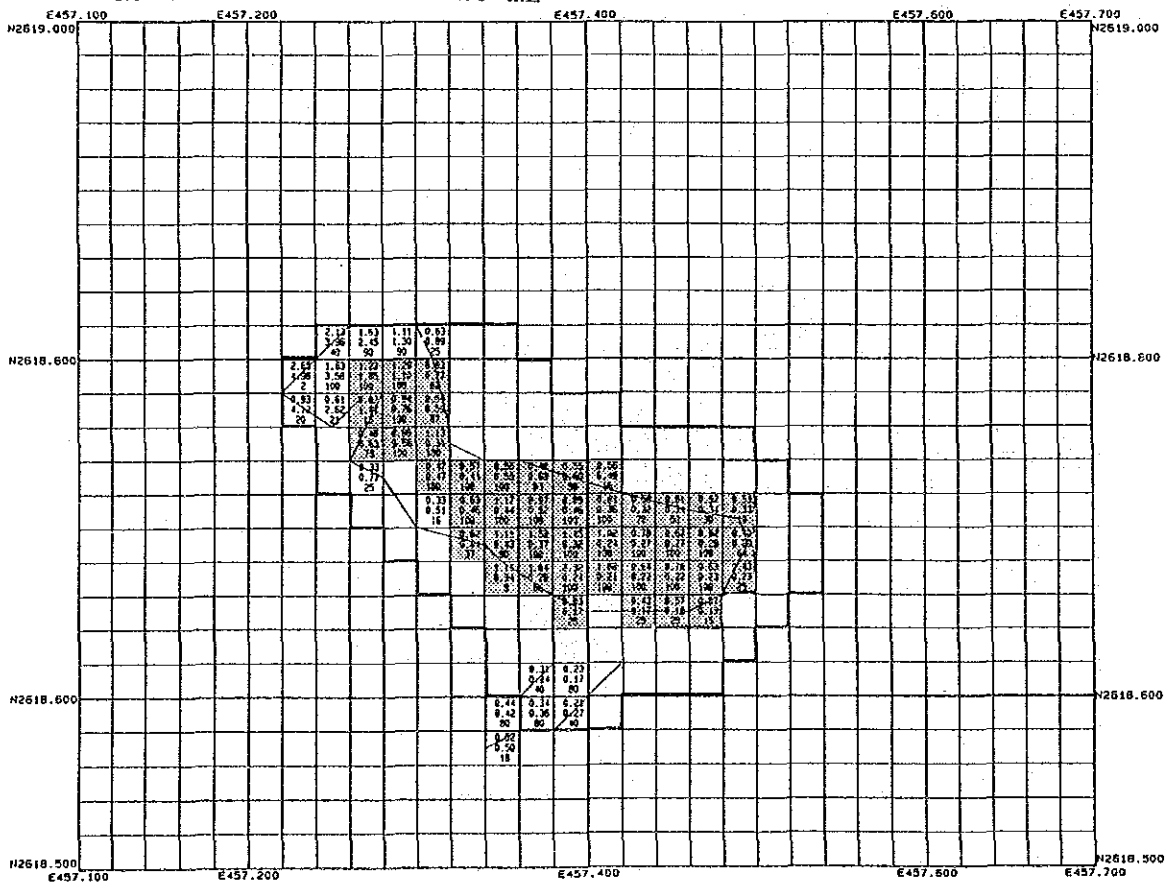
Rakah

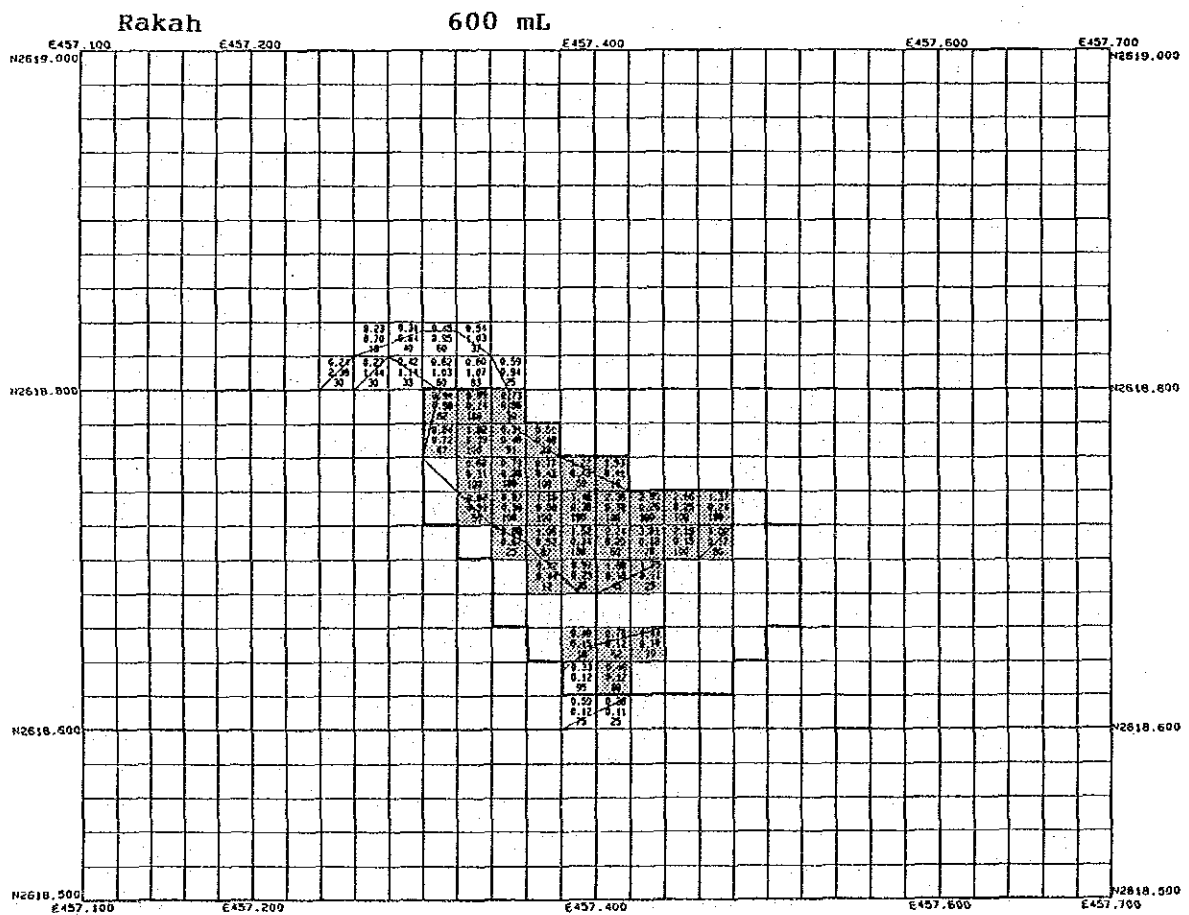
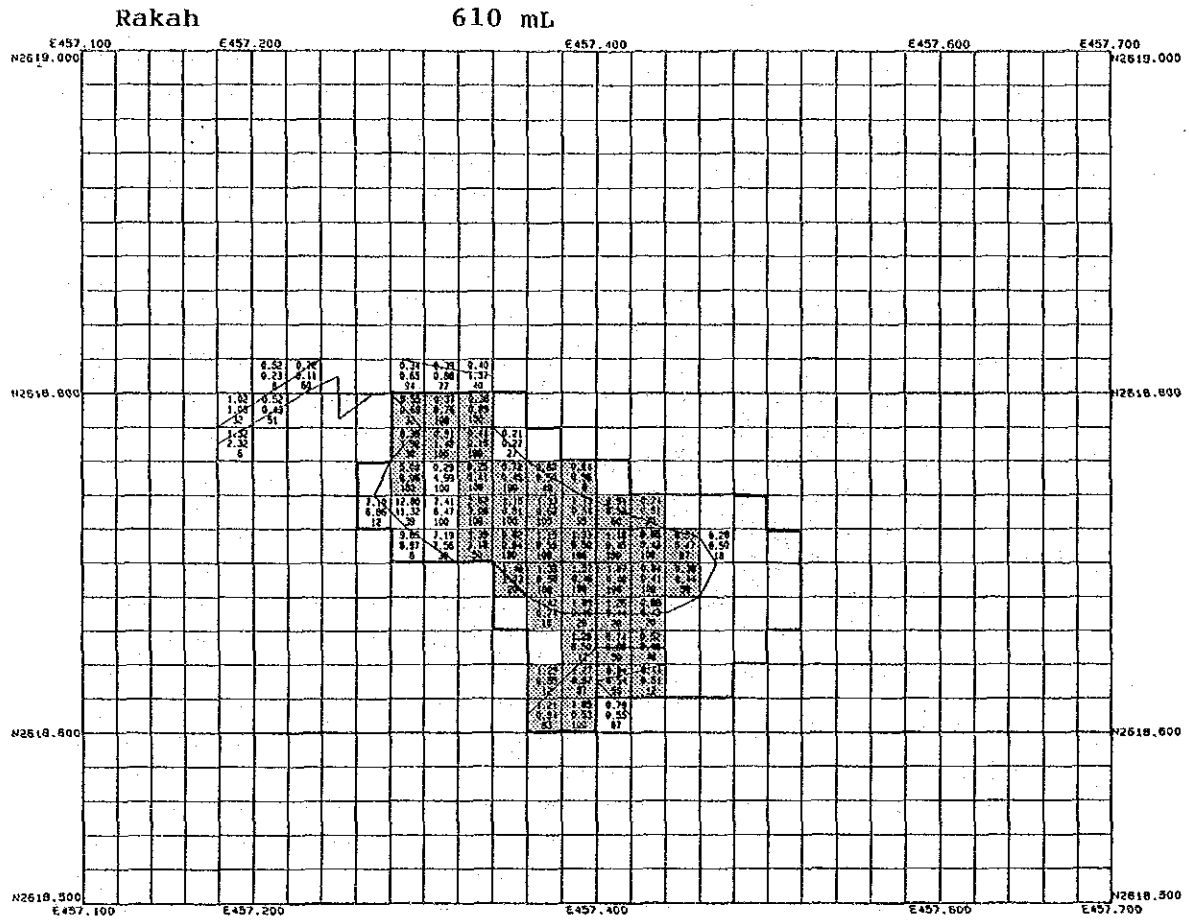
630 mL

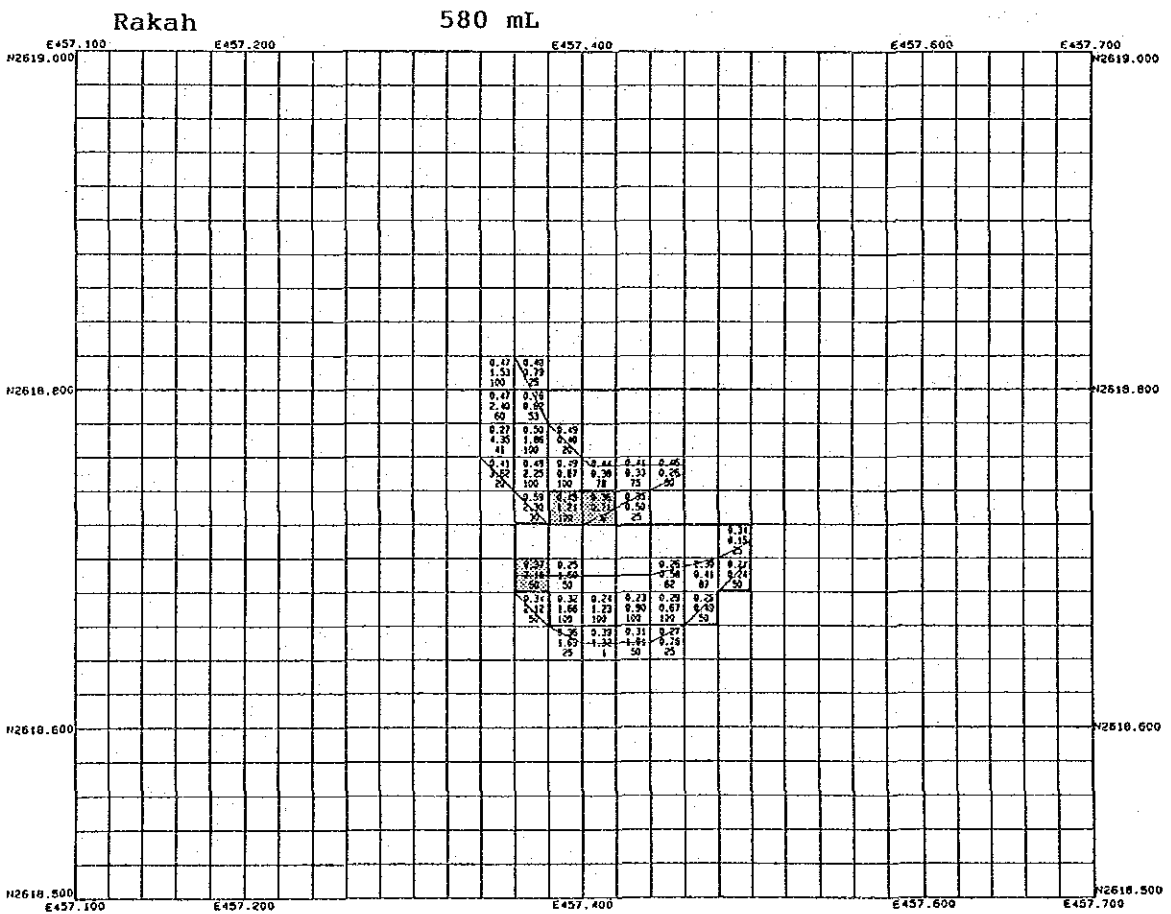
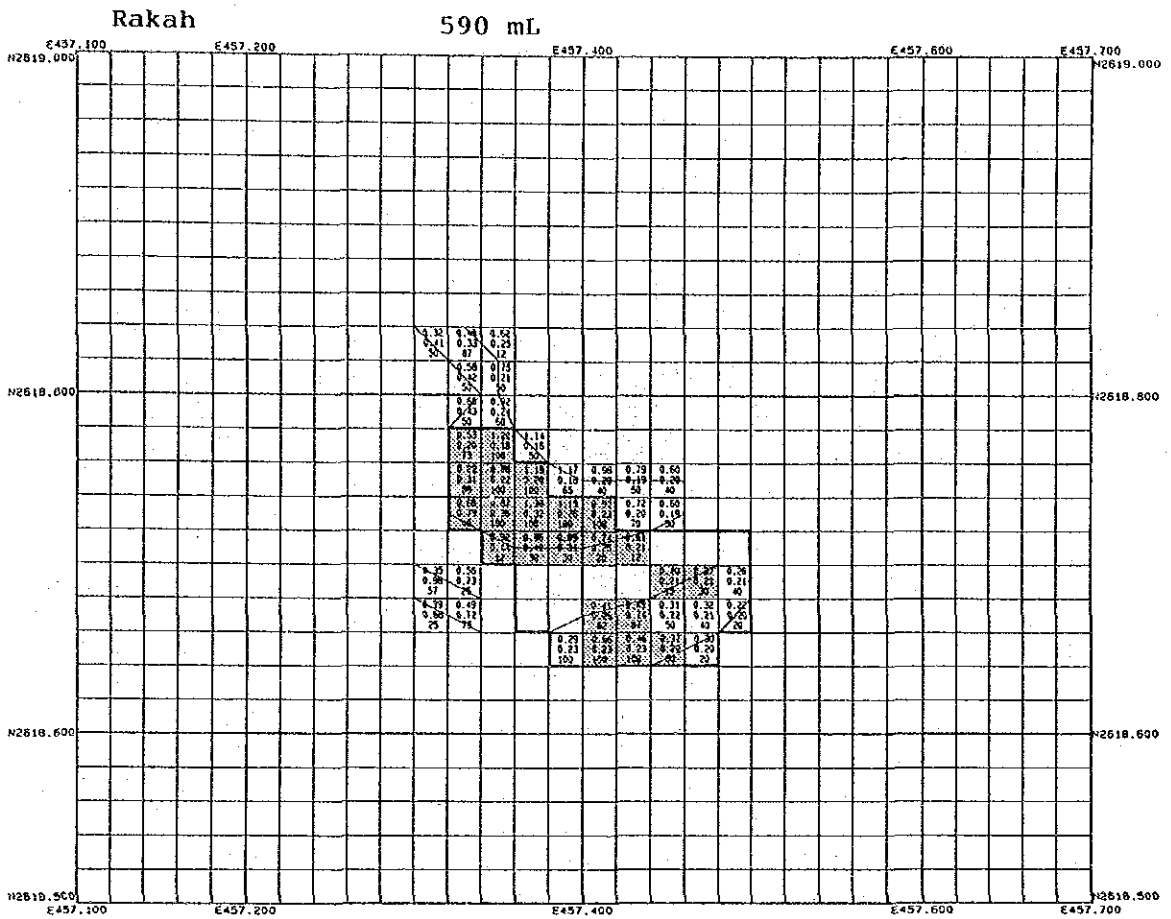


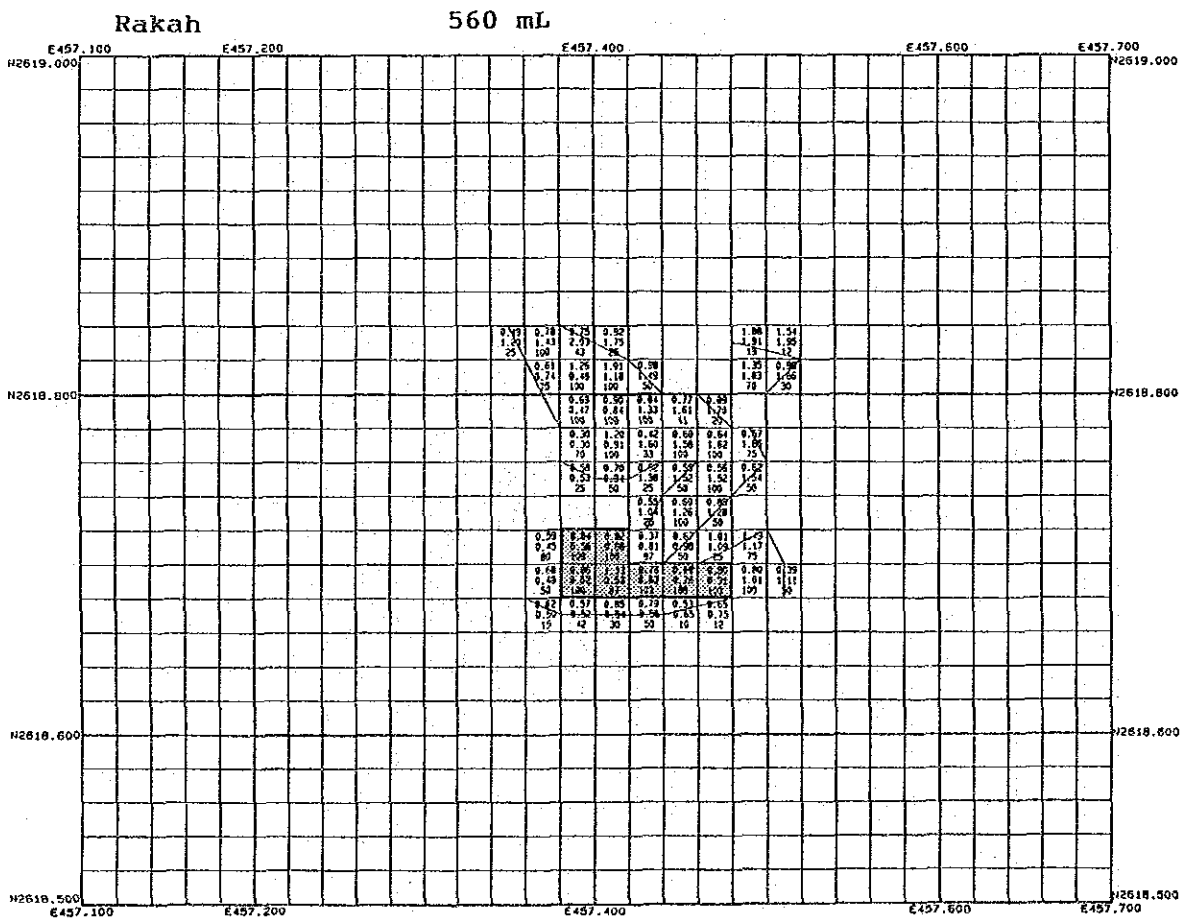
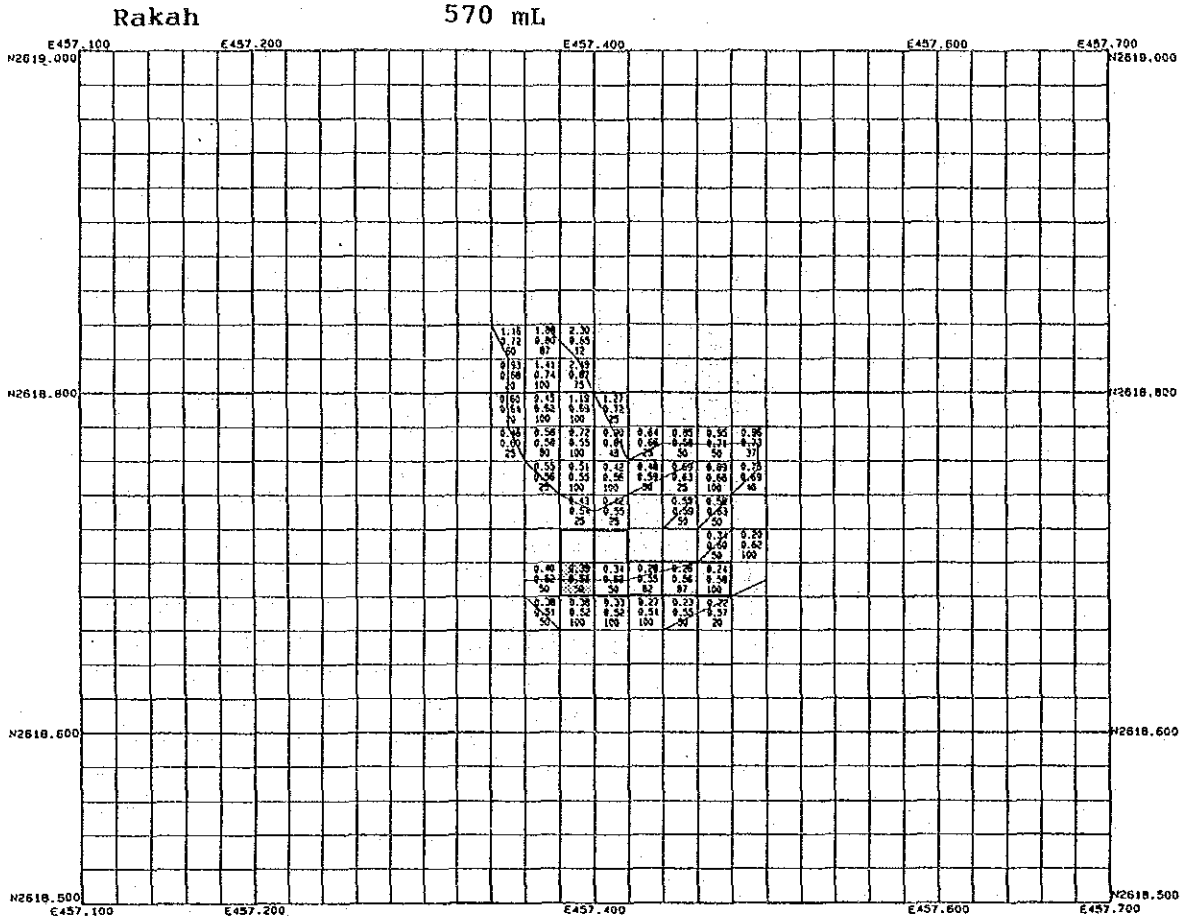
Rakah

620 mL









## **Appendix 3**

**List of minable ore reserves for each ore block  
in the Hayl as Safil deposit**



Hayl As Safil : 670 m  
Cut-off grade : 0.35 Cu

No	X (E)	Y (N)	Volume (m3)	S.G. (t/m3)	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade (%)	content (ton)	grade (%)	content (ton)	grade (g/t)	content (kg)	grade (g/t)	content (kg)
1	453230	2618810	800	3.30	2640	2.74	72.34	.01	.26	.29	.77	2.57	6.78
2	453230	2618870	2000	3.12	6240	1.36	84.86	.01	.62	.15	.94	1.28	7.99
3	453230	2618890	4000	3.05	12200	.87	106.14	.01	1.22	.10	1.22	.81	9.88
4	453250	2618810	800	3.31	2648	2.81	74.41	.01	.26	.29	.77	2.64	6.99
5	453250	2618830	2000	3.27	6540	2.49	162.85	.01	.65	.26	1.70	2.33	15.24
6	453250	2618850	3000	3.20	9600	1.98	190.08	.01	.96	.21	2.02	1.85	17.76
7	453250	2618870	4000	3.14	12560	1.50	188.40	.01	1.26	.16	2.01	1.41	17.71
8	453250	2618890	4000	3.08	12320	1.05	129.36	.01	1.23	.11	1.36	.98	12.07
9	453270	2618830	600	3.27	1962	2.51	49.25	.01	.20	.26	.51	2.35	4.61
10	453270	2618850	3000	3.21	9630	2.05	197.41	.01	.96	.22	2.12	1.92	18.49
11	453270	2618870	4000	3.15	12600	1.61	202.86	.01	1.26	.17	2.14	1.51	19.03
12	453270	2618890	4000	3.10	12400	1.20	148.80	.01	1.24	.13	1.61	1.12	13.89
			32200		101340		1606.76		10.12		17.17		150.44

Hayl As Safil : 660 m  
Cut-off grade : 0.35 Cu

No	X (E)	Y (N)	Volume (m3)	S.G. (t/m3)	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade (%)	content (ton)	grade (%)	content (ton)	grade (g/t)	content (kg)	grade (g/t)	content (kg)
1	453250	2618770	3200	3.03	9696	.86	83.39	.03	2.91	.35	3.39	4.88	47.32
2	453250	2618790	3200	3.05	9760	1.01	98.58	.01	.98	.25	2.44	5.86	57.19
3	453250	2618810	1600	3.03	4848	.86	41.69	.09	4.36	.33	1.60	4.89	23.71
4	453270	2618770	3200	3.00	9500	.67	64.32	.07	6.72	.55	5.28	3.40	32.64
5	453270	2618790	4000	3.01	12040	.77	92.71	.09	10.84	.52	6.26	3.86	46.47
6	453270	2618810	4000	3.00	12000	.70	84.00	.15	18.00	.47	5.64	3.73	44.76
7	453270	2618830	4000	2.99	11960	.59	70.56	.22	26.31	.42	5.02	3.38	40.42
8	453270	2618850	4000	2.98	11920	.54	64.37	.25	29.80	.41	4.89	3.22	38.38
9	453270	2618870	4000	2.98	11920	.53	63.18	.25	29.80	.39	4.65	3.32	39.57
10	453290	2618770	3200	2.97	9504	.46	43.72	.10	9.50	.72	6.84	1.73	16.44
11	453290	2618790	3960	2.99	11840	.60	71.04	.15	17.76	.80	9.47	2.13	25.22
12	453290	2618810	4000	2.98	11920	.57	67.94	.21	25.03	.59	7.03	2.69	32.06
13	453290	2618830	2228	2.97	6617	.47	31.10	.29	19.19	.44	2.91	2.75	18.20
14	453290	2618850	4000	2.97	11880	.49	58.21	.28	33.26	.42	4.99	2.97	35.28
15	453290	2618870	4000	2.97	11880	.49	58.21	.28	33.26	.41	4.87	3.03	36.00
16	453310	2618690	400	3.32	1328	3.31	43.96	.05	.66	1.57	2.08	8.53	11.33
17	453310	2618710	2000	3.21	6420	2.44	156.65	.06	3.85	1.40	8.99	6.25	40.13
18	453310	2618770	1600	2.97	4752	.51	24.24	.10	4.75	.77	3.66	1.22	5.80
19	453310	2618790	4000	3.00	12000	.66	79.20	.15	18.00	.69	8.28	1.98	23.76
20	453310	2618810	4000	2.99	11960	.62	74.15	.22	26.31	.60	7.18	2.41	28.82
21	453310	2618830	4000	2.98	11920	.53	63.18	.27	32.18	.48	5.72	2.67	31.83
22	453310	2618850	4000	2.97	11880	.48	57.02	.29	34.45	.43	5.11	2.80	33.26
23	453310	2618870	4000	2.98	11920	.52	61.98	.28	33.38	.42	5.01	2.84	33.85
24	453330	2618690	1600	3.46	5536	4.46	246.91	.05	2.77	1.78	9.85	11.72	64.88
25	453330	2618710	2000	3.32	6640	3.32	220.45	.06	3.98	1.61	10.69	8.80	58.43
26	453330	2618790	4000	3.05	12200	1.00	122.00	.13	15.86	.59	7.20	2.32	28.30
27	453330	2618810	4000	3.04	12160	.95	115.52	.17	20.67	.52	6.32	2.49	30.28
28	453330	2618830	4000	3.02	12080	.81	97.85	.22	26.58	.47	5.68	2.70	32.62
29	453330	2618850	4000	3.01	12040	.73	87.89	.25	30.10	.43	5.18	2.73	32.87
30	453330	2618870	4000	3.00	12000	.70	84.00	.25	30.00	.41	4.92	2.72	32.64
31	453350	2618690	2000	3.58	7160	5.43	388.79	.04	2.86	1.85	13.25	14.10	100.96
32	453350	2618710	2500	3.32	8300	3.28	272.24	.08	6.64	1.72	14.28	10.37	86.07
33	453350	2618790	4000	3.12	12480	1.46	182.21	.09	11.23	.47	5.87	2.93	36.57
34	453350	2618810	4000	3.10	12400	1.38	171.12	.12	14.88	.45	5.58	2.88	35.71
35	453350	2618830	4000	3.08	12320	1.19	146.61	.16	19.71	.42	5.17	2.81	34.62
36	453350	2618850	4000	3.05	12200	1.03	125.66	.20	24.40	.40	4.88	2.67	32.57
37	453350	2618870	4000	3.03	12120	.90	109.08	.22	26.66	.38	4.61	2.59	31.39
38	453370	2618690	2000	2.99	5980	.65	38.67	.03	1.79	2.09	12.50	8.05	48.14
39	453370	2618710	1500	3.19	4785	2.23	106.71	.15	7.18	1.74	8.33	10.70	51.20
40	453370	2618790	3880	3.17	12300	1.82	223.85	.06	7.38	.38	4.67	3.08	37.88



No	X (E)	Y (N)	Volume (m <sup>3</sup> )	S.G. (t/m <sup>3</sup> )	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade (%)	content (ton)	grade (%)	content (ton)	grade (g/t)	content (kg)	grade (g/t)	content (kg)
41	453370	2618810	4000	3.15	12600	1.67	210.42	.08	10.08	.39	4.91	2.99	37.67
42	453370	2618830	4000	3.12	12480	1.45	180.96	.12	14.98	.38	4.74	2.82	35.19
43	453370	2618850	4000	3.09	12360	1.28	158.21	.15	18.54	.37	4.57	2.67	33.00
44	453370	2618870	4000	3.07	12280	1.14	139.99	.18	22.10	.35	4.30	2.46	30.21
45	453390	2618690	1000	3.04	3040	1.01	30.70	.18	5.47	1.83	5.56	10.07	30.61
46	453390	2618710	356	3.10	1104	1.40	15.45	.31	3.42	1.61	1.78	11.85	13.08
47	453390	2618790	4000	3.16	12640	1.78	224.99	.07	8.85	.39	4.93	3.14	39.69
48	453390	2618850	1000	3.12	3120	1.48	46.18	.12	3.74	.35	1.09	2.70	8.42
49	453390	2618870	3000	3.10	9300	1.34	124.62	.15	13.95	.32	2.98	2.45	22.79
			157424		481190		5424.68		775.12		285.15		1768.23

Hayl As Safil : 650 m  
Cut-off grade : 0.35 Cu

No	X (E)	Y (N)	Volume (m <sup>3</sup> )	S.G. (t/m <sup>3</sup> )	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade (%)	content (ton)	grade (%)	content (ton)	grade (g/t)	content (kg)	grade (g/t)	content (kg)
1	453270	2618750	2000	3.23	6460	2.38	153.75	.03	1.94	1.01	6.52	4.40	28.42
2	453270	2618770	2000	3.45	6900	3.98	274.62	.03	2.07	1.40	9.66	5.79	39.95
3	453270	2618790	2000	3.51	7020	4.45	312.39	.06	4.21	1.50	10.53	6.26	43.95
4	453290	2618690	668	3.23	2158	2.31	49.84	.04	.86	.84	1.81	8.49	18.32
5	453290	2618710	2000	3.17	6340	1.86	117.92	.04	2.54	.77	4.88	6.49	41.15
6	453290	2618730	3332	3.10	10329	1.42	146.67	.03	3.10	.71	7.33	3.93	40.59
7	453290	2618750	4000	3.17	12680	1.93	244.72	.03	3.80	.84	10.65	3.49	44.25
8	453290	2618770	2400	3.39	8136	3.52	286.39	.03	2.44	1.21	9.84	5.00	40.68
9	453290	2618790	2000	3.66	7320	5.55	406.26	.03	2.20	1.68	12.30	7.04	51.53
10	453290	2618810	4000	3.32	13280	3.05	405.04	.14	18.59	1.05	13.94	4.47	59.36
11	453290	2618830	4000	3.00	12000	.69	82.80	.24	28.80	.45	5.40	1.98	23.76
12	453290	2618850	4000	2.98	11920	.56	66.75	.24	28.61	.41	4.89	1.81	21.58
13	453290	2618870	4000	2.96	11840	.40	47.36	.23	27.23	.37	4.38	1.63	19.30
14	453310	2618690	4000	3.26	13040	2.48	323.39	.05	6.52	.88	11.48	9.96	129.88
15	453310	2618710	4000	3.18	12720	1.91	242.95	.05	6.36	.81	10.30	8.01	101.89
16	453310	2618730	4000	3.08	12320	1.24	152.77	.04	4.93	.66	8.13	4.32	53.22
17	453310	2618750	4000	3.01	12040	.74	89.10	.03	3.61	.55	6.62	2.31	27.81
18	453310	2618770	4000	3.27	13080	2.67	349.24	.04	5.23	.98	12.82	4.45	58.21
19	453310	2618790	4000	3.39	13560	3.54	480.02	.07	9.49	1.16	15.73	5.23	70.92
20	453310	2618810	4000	3.29	13160	2.80	368.48	.14	18.42	.96	12.63	4.24	55.80
21	453310	2618830	4000	3.08	12320	1.26	155.23	.21	25.87	.58	7.15	2.56	31.54
22	453310	2618850	4000	2.99	11960	.64	76.54	.24	28.70	.43	5.14	1.90	22.72
23	453310	2618870	4000	2.98	11920	.51	60.79	.24	28.61	.38	4.53	1.71	20.38
24	453310	2618890	4000	2.96	11840	.40	47.36	.23	27.23	.34	4.03	1.54	18.23
25	453330	2618690	4000	3.28	13120	2.62	343.74	.05	6.56	.90	11.81	10.85	142.35
26	453330	2618710	4000	3.20	12800	2.06	263.68	.06	7.68	.89	11.39	10.40	133.12
27	453330	2618750	2000	3.11	6220	1.46	90.81	.06	3.73	.75	4.67	5.37	33.40
28	453330	2618770	4000	3.20	12800	2.08	266.24	.07	8.96	.84	10.75	5.24	67.07
29	453330	2618790	4000	3.25	13000	2.52	327.60	.10	13.00	.85	11.05	4.67	60.71
30	453330	2618810	4000	3.22	12880	2.30	296.24	.14	18.03	.76	9.79	3.86	49.72
31	453330	2618830	4000	3.12	12480	1.52	189.70	.19	23.71	.59	7.36	2.93	36.57
32	453330	2618850	4000	3.05	12200	1.04	126.88	.21	25.62	.48	5.86	2.33	28.43
33	453330	2618870	4000	3.01	12040	.77	92.71	.22	26.49	.42	5.06	1.96	23.60
34	453330	2618890	4000	2.98	11920	.52	61.98	.22	26.22	.37	4.41	1.65	19.67
35	453350	2618690	4000	3.31	13240	2.79	369.40	.04	5.30	.89	11.78	11.07	146.57
36	453350	2618710	3332	3.18	10596	1.89	200.26	.11	11.66	1.13	11.97	14.01	148.45
37	453350	2618770	3000	3.18	9540	1.96	186.98	.09	8.59	.78	7.44	6.35	60.58
38	453350	2618790	4000	3.22	12980	2.22	285.94	.11	14.17	.70	9.02	4.82	62.08
39	453350	2618810	4000	3.20	12800	2.09	267.52	.13	16.64	.63	8.06	3.86	49.41
40	453350	2618830	4000	3.13	12520	1.61	201.57	.16	20.03	.55	6.89	3.13	39.19
41	453350	2618850	4000	3.08	12320	1.22	150.30	.18	22.18	.51	6.28	2.61	32.16
42	453350	2618870	4000	3.03	12120	.89	107.87	.20	24.24	.46	5.58	2.14	25.94
43	453350	2618890	4000	3.00	12000	.68	81.60	.21	25.20	.40	4.80	1.76	21.12
44	453370	2618690	4000	2.98	11920	.56	66.75	.22	26.22	1.31	15.62	7.33	87.37
45	453370	2618710	2000	3.13	6260	1.54	96.40	.19	11.89	1.68	10.52	25.04	156.75

No	X (E)	Y (N)	Volume (m <sup>3</sup> )	S.G. (t/m <sup>3</sup> )	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade (%)	content (ton)	grade (%)	content (ton)	grade (g/t)	content (kg)	grade (g/t)	content (kg)
46	453370	2618770	2000	3.15	6300	1.71	107.73	.12	7.56	.79	4.98	7.65	48.20
47	453370	2618790	4000	3.19	12760	1.98	252.65	.11	14.04	.52	6.64	3.97	50.66
48	453370	2618810	4000	3.18	12720	1.94	246.77	.12	15.26	.56	7.12	3.88	49.35
49	453370	2618830	4000	3.12	12480	1.49	185.95	.14	17.47	.56	6.99	3.31	41.31
50	453370	2618850	4000	3.07	12280	1.20	147.36	.16	19.65	.54	6.63	2.77	34.02
51	453370	2618870	4000	3.03	12120	.91	110.29	.17	20.60	.49	5.94	2.25	27.27
52	453370	2618890	4000	3.00	12000	.71	85.20	.18	21.60	.44	5.28	1.79	21.48
53	453390	2618690	4000	3.04	12160	.96	116.74	.24	29.18	1.76	21.40	18.90	229.82
54	453390	2618710	520	3.11	1617	1.40	22.64	.27	4.37	2.17	3.51	28.84	46.64
55	453390	2618810	1000	3.12	3120	1.53	47.74	.11	3.43	.59	1.84	3.83	11.95
56	453390	2618830	3000	3.09	9270	1.33	123.29	.11	10.20	.61	5.65	3.51	32.54
57	453390	2618850	4000	3.05	12200	1.01	123.22	.13	15.86	.59	7.20	2.91	35.50
58	453390	2618870	4000	3.02	12080	.81	97.85	.15	18.12	.54	6.52	2.33	28.15
59	453390	2618890	4000	3.00	12000	.65	78.00	.16	19.20	.49	5.88	1.75	21.00
60	453410	2618870	2000	3.00	6000	.67	40.20	.12	7.20	.59	3.54	2.35	14.10
61	453410	2618890	4000	2.98	11920	.56	66.75	.14	16.69	.53	6.32	1.70	20.26
			211252		661026		10866.93		877.91		486.24		3199.95

Hayl As Safil : 640 m  
Cut-off grade : 0.35 Cu

No	X (E)	Y (N)	Volume (m <sup>3</sup> )	S.G. (t/m <sup>3</sup> )	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade (%)	content (ton)	grade (%)	content (ton)	grade (g/t)	content (kg)	grade (g/t)	content (kg)
1	453270	2618730	400	3.16	1264	1.82	23.00	.08	1.01	1.16	1.47	9.45	11.94
2	453270	2618750	2000	3.13	6260	1.62	101.41	.05	3.13	1.27	7.95	8.67	54.27
3	453270	2618770	2000	3.04	6080	.98	59.58	.03	1.82	1.26	7.66	5.56	33.80
4	453270	2618790	2000	2.97	5940	.54	32.08	.02	1.19	1.13	6.71	3.23	19.19
5	453290	2618730	3000	3.22	9660	2.22	214.45	.08	7.73	1.20	11.59	10.66	102.98
6	453290	2618750	4000	3.19	12760	2.01	256.48	.06	7.66	1.29	16.46	9.89	126.20
7	453290	2618770	4000	3.09	12360	1.35	166.86	.04	4.94	1.26	15.57	6.90	85.28
8	453290	2618790	2960	2.97	8791	.52	45.71	.01	.88	1.21	10.64	3.15	27.69
9	453290	2618810	2400	2.97	7128	.50	35.64	.03	2.14	.80	5.70	2.44	17.39
10	453310	2618690	4000	3.17	12680	1.84	233.31	.16	20.29	.59	7.48	7.53	95.48
11	453310	2618710	4000	3.20	12800	2.04	261.12	.13	16.64	.82	10.50	8.79	112.51
12	453310	2618730	4000	3.24	12960	2.32	300.67	.09	11.66	1.14	14.77	10.67	138.28
13	453310	2618750	4000	3.27	13080	2.55	333.54	.07	9.16	1.31	17.13	12.09	158.14
14	453310	2618770	4000	3.14	12560	1.68	211.01	.07	8.79	1.18	14.82	7.94	99.73
15	453310	2618790	4000	3.05	12200	1.03	125.66	.06	7.32	1.03	12.57	4.84	59.05
16	453310	2618810	4000	3.00	12000	.69	82.80	.06	7.20	.72	8.64	3.01	36.12
17	453310	2618830	4000	2.97	11880	.54	64.15	.06	7.13	.30	3.56	1.82	21.62
18	453310	2618850	4000	2.96	11840	.42	49.73	.06	7.10	.11	1.30	1.02	12.08
19	453310	2618870	4000	2.95	11800	.37	43.66	.06	7.08	.09	1.06	.79	9.32
20	453310	2618890	4000	2.95	11800	.37	43.66	.06	7.08	.06	.71	.70	8.26
21	453330	2618690	4000	3.16	12640	1.78	224.99	.18	22.75	.46	5.81	7.01	88.61
22	453330	2618710	4000	3.17	12680	1.88	238.38	.15	19.02	.71	9.00	7.44	94.34
23	453330	2618730	4000	3.22	12880	2.17	279.50	.12	15.46	1.00	12.88	9.29	119.66
24	453330	2618750	4000	3.21	12840	2.14	274.78	.11	14.12	1.08	13.87	9.41	120.82
25	453330	2618770	4000	3.16	12640	1.79	226.26	.12	15.17	.99	12.51	7.65	96.70
26	453330	2618790	4000	3.09	12360	1.30	160.68	.13	16.07	.77	9.52	5.16	63.78
27	453330	2618810	4000	3.04	12160	.98	119.17	.12	14.59	.59	7.17	3.56	43.29
28	453330	2618830	4000	3.00	12000	.73	87.60	.10	12.00	.34	4.08	2.24	26.88
29	453330	2618850	4000	2.98	11920	.55	65.56	.08	9.54	.21	2.50	1.36	16.21
30	453330	2618870	4000	2.96	11840	.46	54.46	.06	7.10	.11	1.30	.93	11.01
31	453330	2618890	4000	2.96	11840	.45	53.28	.06	7.10	.06	.71	.68	8.05
32	453350	2618670	2000	3.11	6220	1.41	87.70	.17	10.57	.47	2.92	4.41	27.43
33	453350	2618690	4000	3.11	12440	1.42	176.65	.16	19.90	.52	6.47	4.49	55.86
34	453350	2618710	4000	3.13	12520	1.57	196.56	.15	18.78	.64	8.01	4.99	62.47
35	453350	2618730	3000	3.16	9480	1.78	168.74	.14	13.27	.79	7.49	6.34	60.10

No	X (E)	Y (N)	Volume (m3)	S. G. (t/m3)	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade (%)	content (ton)	grade (%)	content (ton)	grade (g/t)	content (kg)	grade (g/t)	content (kg)
36	453350	2618750	3000	3.16	9480	1.78	168.74	.15	14.22	.80	7.58	6.92	65.60
37	453350	2618770	4000	3.14	12560	1.69	212.26	.18	22.61	.72	9.04	6.38	80.13
38	453350	2618790	4000	3.11	12440	1.44	179.14	.21	26.12	.58	7.22	5.01	62.32
39	453350	2618810	4000	3.06	12240	1.15	140.76	.18	22.03	.48	5.88	3.70	45.29
40	453350	2618830	4000	3.02	12080	.84	101.47	.12	14.50	.36	4.35	2.38	28.75
41	453350	2618850	4000	2.99	11960	.67	80.13	.09	10.76	.25	2.99	1.59	19.02
42	453350	2618870	4000	2.98	11920	.56	66.75	.06	7.15	.15	1.79	.94	11.20
43	453350	2618890	4000	2.97	11880	.51	60.59	.06	7.13	.08	.95	.62	7.37
44	453370	2618650	1000	3.12	3120	1.50	46.80	.18	5.62	.49	1.53	4.01	12.51
45	453370	2618670	4000	3.07	12280	1.19	146.13	.15	18.42	.56	6.88	4.02	49.37
46	453370	2618690	4000	3.03	12120	.89	107.87	.15	18.18	.51	6.18	1.94	23.51
47	453370	2618710	3332	3.11	10363	1.43	148.18	.14	14.51	.71	7.36	3.36	34.82
48	453370	2618770	4000	3.10	12400	1.41	174.84	.20	24.80	.52	6.45	5.55	68.82
49	453370	2618790	4000	3.13	12520	1.61	201.57	.28	35.06	.42	5.26	5.17	64.73
50	453370	2618810	4000	3.05	12200	1.09	132.98	.18	21.96	.43	5.25	3.66	44.65
51	453370	2618830	4000	3.02	12080	.84	101.47	.12	14.50	.35	4.23	2.14	25.85
52	453370	2618850	4000	3.00	12000	.70	84.00	.07	8.40	.26	3.12	1.23	14.76
53	453370	2618870	4000	2.99	11960	.62	74.15	.06	7.18	.17	2.03	.80	9.57
54	453370	2618890	4000	2.98	11920	.58	69.14	.05	5.96	.08	.95	.46	5.48
55	453390	2618650	840	3.11	2612	1.43	37.36	.14	3.66	.43	1.12	3.27	8.54
56	453390	2618670	3600	3.06	11016	1.08	118.97	.14	15.42	.81	8.92	6.55	72.15
57	453390	2618690	4000	3.04	12160	.96	116.74	.14	17.02	1.01	12.28	7.94	96.55
58	453390	2618710	2000	3.05	6100	1.02	62.22	.13	7.93	1.01	6.16	7.77	47.40
59	453390	2618810	2000	2.99	5980	.63	37.67	.10	5.98	.39	2.33	2.66	15.91
60	453390	2618830	4000	2.99	11960	.64	76.54	.07	8.37	.35	4.19	1.38	16.50
61	453390	2618850	4000	3.00	12000	.74	88.80	.06	7.20	.27	3.24	.87	10.44
62	453390	2618870	4000	3.00	12000	.70	84.00	.05	6.00	.19	2.28	.71	8.52
63	453390	2618890	4000	2.99	11960	.63	75.35	.04	4.78	.10	1.20	.29	3.47
64	453410	2618650	200	3.08	616	1.23	7.58	.14	.86	.77	.47	6.78	4.18
65	453410	2618670	2000	3.04	6080	.96	58.37	.13	7.90	1.19	7.24	10.94	66.52
66	453410	2618690	2200	3.00	6600	.67	44.22	.13	8.58	1.72	11.35	16.46	108.64
67	453410	2618710	400	3.01	1204	.76	9.15	.12	1.44	1.38	1.66	12.53	15.09
68	453410	2618870	2000	2.99	5980	.68	40.66	.03	1.79	.21	1.26	.31	1.85
69	453410	2618890	4000	2.99	11960	.67	80.13	.04	4.78	.14	1.67	.14	1.87
70	453430	2618890	2000	2.99	5980	.65	38.87	.02	1.20	.18	1.08	.00	.00

236332 724034 8372.43 757.41 436.02 3275.72

Hayi As Safil : 630 m  
Cut-off grade : 0.35 Cu

No	X (E)	Y (N)	Volume (m3)	S. G. (t/m3)	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade (%)	content (ton)	grade (%)	content (ton)	grade (g/t)	content (kg)	grade (g/t)	content (kg)
1	453270	2618730	500	3.03	1515	.91	13.79	.06	.91	1.40	2.12	6.66	10.09
2	453270	2618750	1500	3.05	4575	1.07	48.95	.06	2.74	1.18	5.40	8.89	40.67
3	453270	2618770	2500	3.12	7800	1.49	116.22	.05	3.90	1.22	9.52	14.04	109.51
4	453270	2618790	3500	3.15	11025	1.73	190.73	.04	4.41	1.34	14.77	17.20	189.63
5	453290	2618710	2000	3.02	6040	.82	49.53	.06	3.62	1.81	10.93	4.71	28.45
6	453290	2618730	4000	3.02	12080	.80	96.64	.08	9.66	1.09	13.17	4.81	58.10
7	453290	2618750	4000	3.04	12160	.97	117.95	.08	9.73	.88	10.70	6.98	84.88
8	453290	2618770	4000	3.10	12400	1.38	171.12	.06	7.44	1.08	13.39	11.87	147.19
9	453290	2618790	4000	3.16	12640	1.79	226.26	.04	5.06	1.38	17.44	17.77	224.61
10	453290	2618810	2000	3.16	6320	1.77	111.86	.04	2.53	1.33	8.41	17.19	108.64
11	453310	2618690	4000	3.03	12120	.86	104.23	.04	4.85	2.51	30.42	4.75	57.57
12	453310	2618710	4000	3.04	12160	.94	114.30	.10	12.16	1.89	22.98	4.90	59.58
13	453310	2618730	4000	3.02	12080	.85	102.68	.11	13.29	1.12	13.53	4.21	50.86
14	453310	2618750	4000	3.00	12000	.70	84.00	.09	10.80	.70	8.40	3.46	41.52
15	453310	2618770	4000	3.10	12400	1.40	173.60	.07	8.68	.92	11.41	9.17	113.71
16	453310	2618790	4000	3.17	12680	1.86	235.85	.05	6.34	1.11	14.07	13.71	173.84
17	453310	2618810	4000	3.18	12720	1.93	245.50	.04	5.09	1.14	14.50	14.94	190.04
18	453310	2618830	3000	3.20	9600	2.03	194.88	.04	3.84	1.06	10.18	14.22	136.51
19	453310	2618850	1000	3.19	3190	1.99	63.48	.04	1.28	.98	3.13	13.65	43.54
20	453330	2618670	3000	3.08	9240	1.27	117.35	.14	12.94	1.89	17.46	5.90	54.52

No	X (E)	Y (N)	Volume S. G.		Tonnage	Cu		Zn		Au		Ag	
			(m <sup>3</sup> )	(t/m <sup>3</sup> )		(%)	(ton)	(%)	(ton)	(g/t)	(kg)	(g/t)	(kg)
21	453330	2618690	4000	3.08	12320	1.26	155.23	.13	16.02	2.43	29.94	7.68	94.62
22	453330	2618710	4000	3.07	12280	1.14	139.99	.19	23.33	1.78	21.86	4.82	59.19
23	453330	2618730	4000	3.06	12240	1.11	135.86	.18	22.03	1.25	15.30	3.83	46.88
24	453330	2618750	4000	3.08	12320	1.27	156.46	.13	16.02	.88	10.84	4.63	57.04
25	453330	2618770	4000	3.16	12640	1.78	224.99	.09	11.38	.76	9.61	6.69	84.56
26	453330	2618790	4000	3.23	12920	2.24	289.41	.07	9.04	.75	9.69	9.04	116.80
27	453330	2618810	4000	3.24	12960	2.33	301.97	.05	6.48	.76	9.85	10.08	130.64
28	453330	2618830	4000	3.21	12840	2.13	273.49	.04	5.14	.75	9.63	10.34	132.77
29	453330	2618850	4000	3.20	12800	2.01	257.28	.04	5.12	.74	9.47	10.60	135.68
30	453330	2618870	4000	3.17	12680	1.87	237.12	.03	3.80	.70	8.88	10.54	133.65
31	453330	2618890	4000	3.16	12640	1.75	221.20	.03	3.79	.65	8.22	10.36	130.95
32	453350	2618650	1000	3.15	3150	1.71	53.86	.23	7.24	.85	2.68	4.84	15.25
33	453350	2618670	4000	3.10	12400	1.40	173.60	.20	24.80	1.17	14.51	4.78	59.27
34	453350	2618690	4000	3.08	12320	1.27	156.46	.22	27.10	1.33	16.39	4.35	53.59
35	453350	2618710	4000	3.11	12440	1.44	179.14	.36	44.78	1.34	16.67	3.55	44.16
36	453350	2618730	4000	3.09	12360	1.31	161.92	.22	27.19	1.34	16.56	3.90	48.20
37	453350	2618750	4000	3.15	12600	1.72	216.72	.14	17.64	1.01	12.73	4.23	53.30
38	453350	2618770	4000	3.25	13000	2.37	308.10	.10	13.00	.67	8.71	5.11	66.43
39	453350	2618790	4000	3.32	13280	2.89	383.79	.07	9.30	.44	5.84	5.32	70.65
40	453350	2618810	4000	3.29	13160	2.68	352.69	.06	7.90	.40	5.26	5.78	76.06
41	453350	2618830	4000	3.21	12840	2.09	268.36	.04	5.14	.47	6.03	6.88	88.34
42	453350	2618850	4000	3.17	12680	1.85	234.58	.03	3.80	.51	6.47	7.46	94.59
43	453350	2618870	4000	3.13	12520	1.58	197.82	.03	3.76	.50	6.26	7.47	93.52
44	453350	2618890	4000	3.12	12480	1.47	183.46	.03	3.74	.49	6.12	7.66	95.60
45	453370	2618650	3000	3.18	9540	2.00	190.80	.33	31.48	.63	6.01	4.90	46.75
46	453370	2618670	4000	3.14	12560	1.67	209.75	.31	38.94	.68	8.54	4.41	55.39
47	453370	2618690	4000	3.05	12260	1.05	128.10	.19	23.18	.25	3.05	1.49	18.18
48	453370	2618710	4000	3.07	12280	1.13	138.76	.22	27.02	1.21	14.86	3.41	41.87
49	453370	2618730	4000	3.08	12320	1.25	154.00	.18	22.18	1.50	18.48	3.72	45.83
50	453370	2618750	4000	3.14	12560	1.63	204.73	.12	15.07	1.29	16.20	3.87	48.61
51	453370	2618770	4000	3.26	13040	2.41	314.26	.09	11.74	.69	9.00	3.83	49.94
52	453370	2618790	4000	3.40	13600	3.40	462.40	.07	9.52	.26	3.54	3.84	52.22
53	453370	2618810	4000	3.26	13040	2.42	315.57	.05	6.52	.21	2.74	3.27	42.64
54	453370	2618830	4000	3.16	12640	1.78	224.99	.04	5.06	.22	2.78	3.56	45.00
55	453370	2618850	4000	3.11	12440	1.39	172.92	.03	3.73	.27	3.36	3.92	48.76
56	453370	2618870	4000	3.09	12360	1.26	155.74	.02	2.47	.31	3.83	4.64	57.35
57	453370	2618890	4000	3.08	12320	1.21	149.07	.02	2.46	.32	3.94	4.97	61.23
58	453390	2618630	332	3.23	1072	2.31	24.77	.41	4.40	.62	.66	5.51	5.91
59	453390	2618650	4000	3.29	13160	2.79	367.16	.56	73.70	.69	9.08	6.18	81.33
60	453390	2618670	4000	3.16	12640	1.85	233.84	.40	50.56	.77	9.73	6.32	79.88
61	453390	2618690	4000	3.08	12320	1.29	158.93	.30	36.96	1.02	12.57	6.18	76.14
62	453390	2618710	2000	3.05	6100	1.01	61.61	.19	11.59	1.44	8.78	5.23	31.90
63	453390	2618750	1000	3.09	3090	1.27	39.24	.08	2.47	1.54	4.76	3.67	11.34
64	453390	2618770	4000	3.15	12600	1.72	216.72	.07	8.82	.89	11.21	3.39	42.71
65	453390	2618790	4000	3.16	12640	1.80	227.52	.05	6.32	.34	4.30	2.79	35.27
66	453390	2618810	4000	3.10	12400	1.36	168.64	.03	3.72	.12	1.49	1.84	22.82
67	453390	2618830	4000	3.04	12160	.91	110.66	.02	2.43	.06	.73	1.09	13.25
68	453390	2618850	4000	3.03	12120	.87	105.44	.02	2.42	.08	.97	1.17	14.18
69	453390	2618870	4000	3.05	12200	.97	118.34	.02	2.44	.15	1.83	2.16	26.35
70	453390	2618890	4000	3.05	12200	.99	120.78	.02	2.44	.17	2.07	2.82	34.40
71	453410	2618630	600	3.26	1956	2.57	50.27	.51	9.98	.74	1.45	6.51	12.73
72	453410	2618650	4000	3.23	12920	2.33	301.04	.50	64.60	.90	11.63	7.51	97.03
73	453410	2618670	4000	3.15	12600	1.78	224.28	.44	55.44	1.19	14.99	9.14	115.16
74	453410	2618690	4000	3.07	12280	1.18	144.90	.38	46.66	1.57	19.28	11.44	140.48
75	453410	2618750	1200	3.02	3624	.80	29.99	.06	2.17	1.63	5.91	3.82	13.84
76	453410	2618770	1000	3.03	3030	.86	26.06	.04	1.21	.99	3.00	2.87	8.70
77	453410	2618830	4000	2.96	11840	.38	44.99	.01	1.18	.01	.12	.10	1.18
78	453410	2618850	4000	2.99	11960	.59	70.56	.01	1.20	.03	.36	.34	4.07
79	453410	2618870	4000	3.00	12000	.68	81.60	.02	2.40	.05	.60	.77	9.24
80	453410	2618890	4000	3.01	12040	.74	89.10	.01	1.20	.07	.84	1.34	16.13
81	453430	2618630	828	3.22	2666	2.31	61.59	.50	13.33	.95	2.53	7.90	21.06
82	453430	2618650	3200	3.18	10176	2.00	203.52	.47	47.83	1.15	11.70	9.04	91.99
83	453430	2618670	2400	3.11	7464	1.50	111.96	.42	31.35	1.44	10.75	10.53	78.60
84	453430	2618690	1000	3.07	3070	1.18	36.23	.35	10.74	1.65	5.07	10.53	32.33
85	453430	2618870	2000	2.97	5940	.48	28.51	.01	.59	.00	.00	.04	.24
86	453430	2618890	4000	2.98	11920	.51	60.79	.01	1.19	.00	.00	.28	3.34

294560

919703

14181.55

1145.52

772.19

5640.57

Hayl As Safil : 620 m  
 Cut-off grade : 0.35 Cu

No	X (E)	Y (N)	Volume (m3)	S. G. (t/m3)	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade (%)	content (ton)	grade (%)	content (ton)	grade (g/t)	content (kg)	grade (g/t)	content (kg)
1	453310	2618730	2000	2.99	5980	.61	36.48	.45	26.91	.53	3.17	5.00	29.90
2	453310	2618750	3720	2.98	11086	.51	56.54	.22	24.39	.24	2.66	2.11	23.39
3	453310	2618770	4000	3.01	12040	.75	90.30	.24	28.90	.46	5.54	3.50	42.14
4	453310	2618790	4000	3.03	12120	.86	104.23	.24	29.09	.63	7.64	4.45	53.93
5	453310	2618810	3332	3.02	10063	.84	84.53	.24	24.15	.67	6.74	4.58	46.09
6	453330	2618710	3000	3.03	9090	.85	77.26	.92	83.63	.90	8.18	9.78	88.90
7	453330	2618730	4000	3.02	12080	.75	90.60	.58	70.06	.65	7.85	6.53	78.88
8	453330	2618750	4000	3.03	12120	.88	106.66	.35	42.42	.46	5.58	4.22	51.15
9	453330	2618770	4000	3.09	12360	1.26	155.74	.22	27.19	.42	5.19	3.63	44.87
10	453330	2618790	4000	3.13	12520	1.57	196.56	.17	21.28	.45	5.63	3.83	47.95
11	453330	2618810	4000	3.14	12560	1.61	202.22	.15	18.84	.47	5.90	3.89	48.86
12	453330	2618830	4000	3.10	12400	1.39	172.36	.15	18.60	.46	5.70	3.59	44.52
13	453330	2618850	4000	3.08	12320	1.25	154.00	.15	18.48	.45	5.54	3.40	41.89
14	453330	2618870	4000	3.06	12240	1.09	133.42	.15	18.36	.41	5.02	2.93	35.86
15	453330	2618890	4000	3.04	12160	.96	116.74	.14	17.02	.37	4.50	2.44	29.67
16	453350	2618690	4000	3.05	12200	1.27	154.94	.52	63.44	.58	7.08	5.84	71.25
17	453350	2618710	4000	3.05	12200	.98	119.56	.86	104.92	.79	9.64	9.54	116.39
18	453350	2618730	4000	3.03	12120	.84	101.81	.60	72.72	.76	9.21	7.08	85.81
19	453350	2618750	4000	3.07	12280	1.15	141.22	.33	40.52	.59	7.25	4.86	59.68
20	453350	2618770	4000	3.18	12720	1.91	242.95	.18	22.90	.42	5.34	4.05	51.52
21	453350	2618790	4000	3.27	13080	2.54	332.23	.09	11.77	.31	4.05	3.64	47.61
22	453350	2618810	4000	3.24	12960	2.32	300.67	.07	9.07	.29	3.76	3.27	42.38
23	453350	2618830	4000	3.14	12560	1.62	203.47	.09	11.30	.31	3.89	2.87	36.05
24	453350	2618850	4000	3.09	12360	1.32	163.15	.10	12.36	.32	3.96	2.59	32.01
25	453350	2618870	4000	3.05	12200	1.02	124.44	.11	13.42	.30	3.66	2.17	26.47
26	453350	2618890	4000	3.03	12120	.87	105.44	.11	13.33	.26	3.15	1.73	20.97
27	453370	2618670	3000	3.42	10260	6.18	634.07	.50	51.30	.65	6.67	5.48	56.22
28	453370	2618690	4000	2.97	11880	.50	59.40	.15	17.82	.18	2.14	1.26	14.97
29	453370	2618710	4000	3.01	12040	.78	93.91	.46	55.38	.71	8.55	6.00	72.24
30	453370	2618730	4000	3.00	12000	.67	80.40	.40	48.00	.86	10.32	5.66	67.92
31	453370	2618750	4000	3.08	12320	1.21	149.07	.35	43.12	.75	9.24	5.86	72.20
32	453370	2618770	4000	3.21	12840	2.11	270.92	.16	20.54	.46	5.91	4.39	56.37
33	453370	2618790	4000	3.37	13480	3.20	431.36	.03	4.04	.24	3.24	3.65	49.20
34	453370	2618810	4000	3.23	12920	2.28	294.58	.03	3.88	.19	2.45	2.68	34.63
35	453370	2618830	4000	3.13	12520	1.56	195.31	.05	6.26	.17	2.13	1.93	24.16
36	453370	2618850	4000	3.06	12240	1.11	135.86	.07	8.57	.18	2.20	1.60	19.58
37	453370	2618870	4000	3.03	12120	.90	109.08	.08	9.70	.18	2.18	1.35	16.36
38	453370	2618890	4000	3.02	12080	.80	96.64	.08	9.66	.17	2.05	1.13	13.65
39	453390	2618650	520	4.12	2142	12.23	262.02	.91	19.50	1.18	2.53	9.58	20.52
40	453390	2618670	4000	3.57	14280	7.63	1089.56	.50	71.40	.81	11.57	6.65	94.96
41	453390	2618690	4000	3.22	12880	2.99	385.11	.31	39.93	.69	8.89	5.58	71.87
42	453390	2618710	4000	3.06	12240	1.01	123.62	.31	37.94	.82	10.04	6.09	74.54
43	453390	2618730	4000	3.01	12040	.75	90.30	.47	56.59	1.19	14.33	8.36	100.65
44	453390	2618750	4000	3.06	12240	1.11	135.86	.33	40.39	.90	11.02	6.76	82.74
45	453390	2618770	4000	3.14	12560	1.60	200.96	.18	22.61	.62	7.79	5.46	68.58
46	453390	2618790	4000	3.16	12640	1.79	226.26	.06	7.58	.31	3.92	3.48	43.99
47	453390	2618810	4000	3.10	12400	1.38	171.12	.02	2.48	.15	1.86	1.95	24.18
48	453390	2618830	4000	3.03	12120	.89	107.87	.03	3.64	.08	.97	.90	10.91
49	453390	2618850	4000	3.01	12040	.77	92.71	.04	4.82	.08	.96	.65	7.83
50	453390	2618870	4000	3.01	12040	.77	92.71	.06	7.22	.10	1.20	.71	8.55
51	453390	2618890	4000	3.01	12040	.73	87.89	.06	7.22	.10	1.20	.58	6.98
52	453410	2618650	1400	3.90	5460	9.81	535.63	.61	33.31	1.00	5.46	7.88	43.02
53	453410	2618670	4000	3.62	14480	7.21	1044.01	.44	63.71	.93	13.47	7.58	109.76
54	453410	2618690	4000	3.27	13080	2.52	329.62	.24	31.39	.89	11.64	7.73	101.11
55	453410	2618710	3000	3.14	9420	1.63	153.55	.30	28.26	.95	8.95	7.49	70.56
56	453410	2618730	1000	3.07	3070	1.11	34.08	.34	10.44	1.03	3.16	7.87	24.16
57	453410	2618750	2000	3.04	6080	.94	57.15	.30	18.24	.99	6.02	7.77	47.24
58	453410	2618770	3500	3.05	10675	.99	105.68	.17	18.15	.73	7.79	6.21	66.29
59	453410	2618790	2500	3.00	7500	.70	52.50	.06	4.50	.48	3.60	4.42	33.15
60	453410	2618850	4000	2.98	11920	.53	63.18	.04	4.77	.04	.48	.24	2.86
61	453410	2618870	4000	2.98	11920	.58	69.14	.04	4.77	.04	.48	.20	2.38
62	453410	2618890	4000	2.98	11920	.57	67.94	.05	5.96	.04	.48	.15	1.79
63	453430	2618650	3200	3.83	12256	7.33	898.36	.36	44.12	.84	10.30	6.14	75.25
64	453430	2618670	4000	3.63	14520	6.02	874.10	.30	43.56	.86	12.49	6.66	96.70
65	453430	2618690	2000	3.38	6760	3.53	238.63	.25	16.90	.89	6.02	7.25	49.01

No	X (E)	Y (N)	Volume		S. G.	Tonnage	Cu		Zn		Au		Ag	
			(m3)	(t/m3)			(ton)	grade content (%)	grade content (ton)	grade content (%)	grade content (ton)	grade content (g/t)	grade content (kg)	grade content (g/t)
66	453430	2618850	2000	2.96		5920	.38	22.50	.04	2.37	.05	.30	.18	1.07
67	453430	2618870	3332	2.96		9863	.42	41.42	.04	3.95	.03	.30	.02	.20
68	453450	2618650	3760	3.86		14514	6.74	978.22	.17	24.67	.69	10.01	4.40	63.86
69	453450	2618670	2000	3.70		7400	5.72	423.28	.20	14.80	.76	5.62	5.44	40.26
70	453470	2618650	1000	3.82		3820	6.33	241.81	.17	6.49	.70	2.67	4.56	17.42
			250264			786879		15614.91		1825.02		388.43		3258.03

Hayl As Safil : 610 m  
 Cut-off grade : 0.35 Cu

No	X (E)	Y (N)	Volume		S. G.	Tonnage	Cu		Zn		Au		Ag	
			(m3)	(t/m3)			(ton)	grade content (%)	grade content (ton)	grade content (%)	grade content (ton)	grade content (g/t)	grade content (kg)	grade content (g/t)
1	453310	2618750	600	2.98		1788	.57	10.19	.86	15.38	.75	1.34	4.50	8.05
2	453310	2618770	2600	2.99		7774	.60	46.64	.54	41.98	.44	3.42	3.17	24.64
3	453310	2618790	3200	2.98		9536	.58	55.31	.44	41.96	.34	3.24	2.67	25.46
4	453310	2618810	3000	2.98		8940	.55	49.17	.42	37.55	.31	2.77	2.50	22.35
5	453330	2618710	744	2.98		2217	.53	11.75	1.62	35.92	1.36	3.02	7.89	17.49
6	453330	2618730	3000	2.98		8940	.56	50.06	1.14	101.92	1.09	9.74	5.60	50.06
7	453330	2618750	4000	3.00		12000	.67	80.40	.75	90.00	.76	9.12	4.18	50.16
8	453330	2618770	4000	3.01		12040	.77	92.71	.50	60.20	.51	6.14	3.43	41.30
9	453330	2618790	4000	3.02		12080	.82	99.06	.40	48.32	.37	4.47	3.17	38.29
10	453330	2618810	4000	3.02		12080	.82	99.06	.33	39.86	.29	3.50	2.87	34.67
11	453330	2618830	4000	3.00		12000	.72	86.40	.30	36.00	.23	2.76	2.40	28.80
12	453330	2618850	3668	3.00		11004	.65	71.53	.28	30.81	.20	2.20	2.09	23.00
13	453330	2618870	3000	2.98		8940	.57	50.96	.26	23.24	.14	1.25	1.56	13.95
14	453330	2618890	2332	2.97		6926	.50	34.63	.23	15.93	.07	.48	1.01	7.00
15	453350	2618690	1000	2.99		2990	.61	18.24	.71	21.23	.77	2.30	3.81	11.39
16	453350	2618710	4000	2.98		11920	.56	66.75	.80	95.36	.94	11.20	3.91	46.61
17	453350	2618730	4000	2.99		11960	.58	69.37	.70	83.72	.93	11.12	3.37	40.31
18	453350	2618750	4000	3.00		12000	.72	86.40	.50	60.00	.72	8.64	2.96	35.52
19	453350	2618770	4000	3.04		12160	.96	116.74	.38	46.21	.48	5.84	3.36	40.86
20	453350	2618790	4000	3.06		12240	1.13	138.31	.25	30.60	.32	3.92	3.49	42.72
21	453350	2618810	4000	3.05		12200	1.04	126.88	.22	26.84	.25	3.05	3.06	37.33
22	453350	2618830	4000	3.02		12080	.80	96.64	.22	26.58	.20	2.42	2.30	27.78
23	453350	2618850	4000	3.00		12000	.68	81.60	.21	25.20	.15	1.80	1.82	21.84
24	453350	2618870	4000	2.98		11920	.56	66.75	.20	23.84	.11	1.31	1.25	14.90
25	453350	2618890	4000	2.97		11880	.47	55.84	.19	22.57	.05	.59	.72	8.55
26	453370	2618690	3000	3.00		9000	.68	61.20	.13	11.70	.35	3.15	1.26	11.34
27	453370	2618710	4000	3.00		12000	.67	80.40	.30	36.00	.63	7.56	1.77	21.24
28	453370	2618730	4000	2.98		11920	.56	66.75	.14	16.69	.77	9.18	.30	3.58
29	453370	2618750	4000	3.01		12040	.75	90.30	.27	32.51	.69	8.31	2.01	24.20
30	453370	2618770	4000	3.05		12200	1.02	124.44	.24	29.28	.49	5.98	3.00	36.60
31	453370	2618790	4000	3.09		12360	1.31	161.92	.19	23.48	.30	3.71	3.80	46.97
32	453370	2618810	4000	3.05		12200	1.06	129.32	.15	18.30	.21	2.56	2.76	33.67
33	453370	2618830	4000	3.02		12080	.79	95.43	.13	15.70	.13	1.57	1.80	21.74
34	453370	2618850	4000	2.99		11960	.62	74.15	.13	15.55	.10	1.20	1.28	15.31
35	453370	2618870	4000	2.98		11920	.52	61.98	.14	16.69	.06	.72	.85	10.13
36	453370	2618890	4000	2.97		11880	.46	54.65	.14	16.63	.03	.36	.51	6.06
37	453390	2618670	1000	3.04		3040	.94	28.58	.07	2.13	.28	.85	1.93	5.87
38	453390	2618690	4000	3.05		12200	1.05	128.10	.11	13.42	.35	4.27	1.78	21.72
39	453390	2618710	4000	3.04		12160	.92	111.87	.11	13.38	.52	6.32	1.54	18.73
40	453390	2618730	4000	3.01		12040	.74	89.10	.13	15.65	.74	8.91	1.79	21.55
41	453390	2618750	4000	3.01		12040	.78	93.91	.13	15.65	.78	9.39	2.53	30.46
42	453390	2618770	4000	3.03		12120	.92	111.50	.14	16.97	.64	7.76	2.87	34.78
43	453390	2618790	4000	3.04		12160	1.00	121.60	.12	14.59	.35	4.26	2.63	31.98
44	453390	2618810	4000	3.02		12080	.85	102.68	.08	9.66	.17	2.05	1.73	20.90
45	453390	2618830	4000	2.99		11960	.62	74.15	.06	7.18	.07	.84	.95	11.36
46	453390	2618850	4000	2.98		11920	.51	60.79	.06	7.15	.05	.60	.64	7.63
47	453390	2618870	4000	2.97		11880	.48	57.02	.08	9.50	.04	.48	.53	6.30
48	453390	2618890	4000	2.97		11880	.44	52.27	.09	10.69	.00	.00	.26	3.09
49	453410	2618670	3000	3.10		9300	1.33	123.69	.12	11.16	.36	3.35	2.87	26.69
50	453410	2618690	4000	3.15		12600	1.69	212.94	.14	17.64	.25	3.15	2.44	30.74

No	X (E)	Y (N)	Volume (m3)	S. G. (t/m3)	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade (%)	content (ton)	grade (%)	content (ton)	grade (g/t)	content (kg)	grade (g/t)	content (kg)
51	453410	2618710	4000	3.06	12240	1.06	129.74	.12	14.69	.67	8.20	2.55	31.21
52	453410	2618730	4000	3.01	12040	.76	91.50	.09	10.84	.95	11.44	3.12	37.56
53	453410	2618750	4000	3.01	12040	.74	89.10	.09	10.84	1.02	12.28	4.02	48.40
54	453410	2618770	4000	3.03	12120	.90	109.08	.09	10.91	.78	9.45	4.24	51.39
55	453410	2618790	4000	3.02	12080	.82	99.06	.06	7.25	.54	6.52	2.55	30.80
56	453410	2618810	4000	2.99	11960	.64	76.54	.03	3.59	.16	1.91	.75	8.97
57	453410	2618830	4000	2.96	11840	.37	43.81	.02	2.37	.01	.12	.08	.95
58	453410	2618850	4000	2.97	11880	.42	49.90	.03	3.56	.02	.24	.25	2.97
59	453410	2618870	4000	2.97	11880	.42	49.90	.04	4.75	.00	.00	.18	2.14
60	453410	2618890	4000	2.96	11840	.39	46.18	.05	5.92	.00	.00	.01	.12
61	453430	2618670	4000	3.20	12800	2.01	257.28	.23	29.44	.53	6.78	3.86	49.41
62	453430	2618690	4000	3.13	12520	1.53	191.56	.21	26.29	.68	8.51	3.60	45.07
63	453430	2618710	4000	3.06	12240	1.05	128.52	.13	15.91	.94	11.51	3.65	44.68
64	453430	2618730	2200	2.97	6534	.45	29.40	.06	3.92	1.35	8.82	3.89	25.42
65	453430	2618750	2400	3.03	7272	.85	61.81	.08	5.82	1.18	8.58	6.06	44.07
66	453430	2618770	3000	3.06	9180	1.06	97.31	.09	8.26	1.03	9.46	6.95	63.80
67	453430	2618790	1000	3.05	3050	1.00	30.50	.07	2.13	.73	2.23	5.34	16.29
68	453430	2618810	1000	3.00	3000	.67	20.10	.04	1.20	.29	.87	2.15	6.45
69	453430	2618830	3000	2.97	8910	.47	41.88	.02	1.78	.09	.80	.72	6.42
70	453430	2618850	4000	2.96	11840	.39	46.18	.02	2.37	.02	.24	.26	3.08
71	453430	2618870	4000	2.96	11840	.38	44.99	.02	2.37	.00	.00	.06	.71
72	453450	2618670	948	3.22	3053	2.18	66.55	.45	13.74	.89	2.72	5.26	16.06
73	453450	2618690	2000	3.15	6300	1.68	105.84	.30	18.90	.95	5.99	4.91	30.93
74	453470	2618650	1000	3.39	3390	3.33	112.89	.36	12.20	1.39	4.71	11.33	38.41
75	453470	2618670	2000	3.29	6580	2.69	177.00	.38	25.00	1.33	8.75	9.63	63.37
76	453470	2618690	600	3.19	1914	1.95	37.32	.35	6.70	1.24	2.37	7.47	14.30
77	453490	2618650	1192	3.39	4041	3.36	135.77	.39	15.76	2.27	9.17	19.00	76.78
78	453490	2618670	600	3.32	1992	2.87	57.17	.38	7.57	1.85	3.69	14.42	28.72
			259084		782931		6557.01		1752.60		347.53		2004.15

Hayl As Safil : 600 m  
Cut-off grade : 0.35 Cu

No	X (E)	Y (N)	Volume (m3)	S. G. (t/m3)	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade (%)	content (ton)	grade (%)	content (ton)	grade (g/t)	content (kg)	grade (g/t)	content (kg)
1	453330	2618730	1332	3.09	4116	1.31	53.92	.68	27.99	.54	2.22	3.00	12.35
2	453330	2618750	3668	3.08	11297	1.27	143.48	.56	63.27	.44	4.97	2.67	30.16
3	453330	2618770	4000	3.07	12280	1.19	146.13	.38	46.66	.29	3.56	2.18	26.77
4	453330	2618790	4000	3.06	12240	1.10	134.64	.21	25.70	.16	1.96	1.69	20.69
5	453330	2618810	2000	3.05	6100	1.01	61.61	.12	7.32	.09	.55	1.37	8.36
6	453350	2618710	2000	3.09	6180	1.30	80.34	.60	37.08	.51	3.15	2.83	17.49
7	453350	2618730	4000	3.09	12360	1.31	161.92	.72	88.99	.58	7.17	3.10	38.32
8	453350	2618750	4000	3.07	12280	1.19	146.13	.53	65.08	.43	5.28	2.60	31.93
9	453350	2618770	4000	3.07	12280	1.15	141.22	.24	29.47	.19	2.33	1.89	23.21
10	453350	2618790	4000	3.05	12200	1.07	130.54	.10	12.20	.08	.98	1.50	18.30
11	453350	2618810	4000	3.03	12120	.92	111.50	.05	6.06	.05	.61	1.17	14.18
12	453350	2618830	4000	3.02	12080	.83	100.26	.05	6.04	.02	.24	.91	10.99
13	453350	2618850	4000	3.01	12040	.78	93.91	.04	4.82	.00	.00	.75	9.03
14	453350	2618870	4000	3.00	12000	.70	84.00	.03	3.60	.00	.00	.47	5.64
15	453370	2618690	2000	3.11	6220	1.43	88.95	.41	25.50	.34	2.11	2.39	14.87
16	453370	2618710	4000	3.07	12280	1.16	141.22	.49	60.17	.52	6.39	2.70	33.16
17	453370	2618730	4000	3.04	12160	.94	114.30	.57	69.31	.61	7.42	2.81	34.17
18	453370	2618750	4000	3.05	12200	1.03	125.66	.44	53.68	.42	5.12	2.60	31.72
19	453370	2618770	4000	3.05	12200	1.03	125.66	.23	28.06	.16	1.95	1.99	24.28
20	453370	2618790	4000	3.06	12240	1.10	134.64	.06	7.34	.05	.61	1.45	17.75
21	453370	2618810	4000	3.01	12040	.78	93.91	.04	4.82	.05	.60	1.04	12.52
22	453370	2618830	4000	2.99	11960	.63	75.35	.04	4.78	.02	.24	.68	8.13
23	453370	2618850	4000	2.99	11960	.64	76.54	.05	5.99	.00	.00	.56	6.70
24	453370	2618870	4000	2.99	11960	.60	71.76	.03	3.59	.00	.00	.31	3.71
25	453390	2618690	4000	3.03	12120	.91	110.29	.23	27.88	.45	5.45	1.90	23.03

No	X (E)	Y (N)	Volume (m3)	S. G. (t/m3)	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade (%)	content (ton)	grade (%)	content (ton)	grade (g/t)	content (kg)	grade (g/t)	content (kg)
26	453390	2618710	4000	3.03	12120	.87	105.44	.32	38.78	.61	7.39	2.54	30.78
27	453390	2618730	4000	3.02	12080	.82	99.06	.38	45.90	.67	8.09	3.25	39.26
28	453390	2618750	4000	3.02	12080	.81	97.85	.32	38.66	.53	6.40	3.25	39.26
29	453390	2618770	4000	3.02	12080	.84	101.47	.19	22.95	.26	3.14	2.49	30.08
30	453390	2618790	4000	3.01	12040	.74	89.10	.08	9.63	.11	1.32	1.47	17.70
31	453390	2618810	800	2.97	2376	.50	11.88	.04	.95	.06	.14	.74	1.76
32	453390	2618830	4000	2.97	11880	.50	59.40	.04	4.75	.03	.36	.38	4.51
33	453390	2618850	4000	2.97	11880	.51	60.59	.04	4.75	.00	.00	.31	3.68
34	453390	2618870	4000	2.97	11880	.51	60.59	.03	3.56	.00	.00	.17	2.02
35	453410	2618690	140	2.97	416	.48	2.00	.05	.21	.57	.24	.90	.37
36	453410	2618710	4000	2.99	11960	.63	75.35	.19	22.72	.80	9.57	3.22	38.51
37	453410	2618730	4000	2.99	11960	.62	74.15	.24	28.70	.91	10.88	4.49	53.70
38	453410	2618750	4000	2.99	11960	.62	74.15	.23	27.51	.80	9.57	4.54	54.30
39	453410	2618770	4000	2.99	11960	.61	72.96	.15	17.94	.56	6.70	3.17	37.91
40	453410	2618790	4000	2.98	11920	.53	63.18	.07	8.34	.32	3.81	1.80	21.46
41	453410	2618810	4000	2.97	11880	.47	55.84	.03	3.56	.20	2.38	.36	4.28
42	453410	2618830	4000	2.96	11840	.42	49.73	.02	2.37	.15	1.78	.07	.83
43	453410	2618850	4000	2.96	11840	.44	52.10	.02	2.37	.10	1.18	.13	1.54
44	453410	2618870	4000	2.96	11840	.45	53.28	.03	3.55	.07	.83	.02	.24
45	453430	2618670	400	3.03	1212	.91	11.03	.13	1.58	.37	.45	3.26	3.95
46	453430	2618690	4000	3.00	12000	.69	82.80	.12	14.40	.69	8.28	3.64	43.68
47	453430	2618710	4000	2.97	11880	.50	59.40	.13	15.44	1.02	12.12	4.77	56.67
48	453430	2618730	4000	2.97	11880	.46	54.65	.17	20.20	1.23	14.61	6.60	78.41
49	453430	2618750	4000	2.97	11880	.49	58.21	.18	21.38	1.00	11.88	5.46	64.86
50	453430	2618770	4000	2.97	11880	.50	59.40	.14	16.63	.73	8.67	3.73	44.31
51	453430	2618790	4000	2.97	11880	.46	54.65	.07	8.32	.60	7.13	2.04	24.24
52	453430	2618810	4000	2.96	11840	.43	50.91	.03	3.55	.42	4.97	.49	5.80
53	453430	2618830	4000	2.96	11840	.42	49.73	.02	2.37	.32	3.79	.04	.47
54	453450	2618670	612	3.09	1891	1.32	24.96	.21	3.97	.22	.42	4.54	8.59
55	453450	2618690	4000	3.00	12000	.68	81.60	.15	18.00	.97	11.64	5.94	71.28
56	453450	2618710	2800	2.96	8288	.42	34.81	.14	11.60	1.30	10.77	6.89	57.10
57	453450	2618730	1600	2.96	4736	.43	20.36	.15	7.10	1.25	5.92	6.60	31.26
58	453450	2618750	668	2.97	1984	.44	8.73	.15	2.98	1.12	2.22	5.93	11.76
59	453470	2618670	800	3.02	2416	.86	20.78	.17	4.11	1.19	2.88	6.58	15.90
60	453490	2618670	1200	3.03	3636	.87	31.63	.18	6.54	2.02	7.34	7.75	28.18
61	453490	2618690	800	3.03	2424	.86	20.85	.18	4.36	2.39	5.79	9.60	23.27
62	453510	2618670	3500	3.04	10640	.93	98.95	.19	20.22	2.37	25.22	7.66	81.50
63	453510	2618690	1080	3.11	3359	1.43	48.03	.24	8.06	3.49	11.72	12.02	40.37
64	453530	2618670	2500	3.03	7575	.88	66.66	.19	14.39	2.25	17.04	7.07	53.56
65	453530	2618690	1016	3.03	3078	.88	27.09	.16	4.93	2.58	7.94	11.00	33.86
			212916		641224		4971.23		1212.72		317.49		1638.67



Hayl As Safil : 590 m  
 Cut-off grade : 0.35 Cu

No	X (E)	Y (N)	Volume (m3)	S. G. (t/m3)	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade (%)	content (ton)	grade (%)	content (ton)	grade (g/t)	content (kg)	grade (g/t)	content (kg)
1	453330	2618750	1000	2.99	2990	.59	17.64	.53	15.85	.42	1.26	2.07	6.19
2	453330	2618770	3000	2.97	8910	.48	42.77	.36	32.08	.27	2.41	1.52	13.54
3	453330	2618790	4000	2.95	11600	.38	44.84	.21	24.78	.14	1.65	1.04	12.27
4	453350	2618730	2000	3.00	6000	.66	40.80	.67	40.20	.56	3.36	2.60	15.60
5	453350	2618750	4000	2.98	11920	.57	67.94	.48	57.22	.41	4.89	2.14	25.51
6	453350	2618770	4000	2.96	11840	.40	47.36	.22	26.05	.18	2.13	1.30	15.39
7	453370	2618710	1000	2.96	2960	.43	12.73	.33	9.77	.68	2.01	3.74	11.07
8	453370	2618730	4000	2.99	11960	.60	71.76	.44	52.62	.58	6.94	3.20	38.27
9	453370	2618750	4000	2.98	11920	.56	66.75	.37	44.10	.40	4.77	2.44	29.08
10	453370	2618770	4000	2.96	11840	.44	52.10	.19	22.50	.20	2.37	1.53	18.12
11	453370	2618810	4000	2.95	11800	.38	44.84	.06	7.08	.04	.47	.67	7.91
12	453370	2618830	4000	2.95	11800	.39	46.02	.05	5.90	.02	.24	.41	4.84
13	453390	2618710	3000	2.99	8970	.63	56.51	.25	22.42	.86	7.71	5.25	47.09
14	453390	2618730	4000	3.01	12040	.74	89.10	.31	37.32	.65	7.95	4.39	52.86
15	453390	2618750	4000	3.00	12000	.69	82.80	.26	31.20	.46	5.52	3.37	40.44
16	453390	2618770	4000	2.98	11920	.56	66.75	.18	21.46	.28	3.34	2.21	26.34
17	453390	2618790	4000	2.97	11880	.47	55.84	.09	10.69	.12	1.43	1.21	14.37
18	453390	2618810	4000	2.97	11880	.49	58.21	.05	5.94	.05	.59	.64	7.60
19	453390	2618830	4000	2.98	11920	.53	63.18	.05	5.96	.03	.36	.40	4.77
20	453390	2618850	4000	2.97	11880	.46	54.65	.05	5.94	.02	.24	.29	3.45
21	453390	2618870	3200	2.95	9440	.36	33.98	.06	5.66	.02	.19	.29	2.74
22	453410	2618690	1000	3.04	3040	.97	29.49	.18	5.47	1.42	4.32	7.96	24.20
23	453410	2618710	4000	3.05	12200	1.00	122.00	.22	26.84	.98	11.96	6.57	80.15
24	453410	2618730	4000	3.05	12200	1.04	126.88	.24	29.28	.81	9.88	5.93	72.35
25	453410	2618750	4000	3.04	12160	.93	113.09	.23	27.97	.65	7.90	4.91	59.71
26	453410	2618770	4000	3.01	12040	.75	90.30	.16	19.26	.39	4.70	3.17	38.17
27	453410	2618790	4000	2.99	11960	.64	76.54	.09	10.76	.20	2.39	1.73	20.69
28	453410	2618810	4000	2.99	11960	.61	72.96	.04	4.78	.04	.48	.47	5.62
29	453410	2618830	4000	3.00	12000	.67	80.40	.03	3.60	.02	.24	.24	2.88
30	453410	2618850	4000	2.98	11920	.57	67.94	.04	4.77	.02	.24	.26	3.10
31	453410	2618870	4000	2.97	11880	.47	55.84	.05	5.94	.02	.24	.25	2.97
32	453430	2618690	3000	3.12	9360	1.48	138.53	.17	15.91	1.96	18.35	10.44	97.72
33	453430	2618710	4000	3.10	12400	1.38	171.12	.19	23.56	1.29	16.00	8.13	100.81
34	453430	2618730	3720	3.08	11458	1.21	138.54	.20	22.92	.91	10.43	6.99	80.09
35	453430	2618750	3600	3.06	11016	1.10	121.18	.19	20.93	.78	8.59	5.93	65.32
36	453430	2618770	4000	3.04	12160	.91	110.66	.14	17.02	.44	5.35	3.50	42.56
37	453430	2618790	4000	3.01	12040	.77	92.71	.09	10.84	.21	2.53	1.84	22.15
38	453430	2618810	4000	3.00	12000	.69	82.80	.04	4.80	.06	.72	.58	6.96
39	453430	2618830	4000	3.00	12000	.65	78.00	.03	3.60	.02	.24	.22	2.64
40	453450	2618690	4000	3.21	12840	2.13	273.49	.18	23.11	2.80	33.38	13.08	167.95
41	453450	2618710	4000	3.16	12640	1.74	219.94	.18	22.75	1.92	24.27	10.36	130.95
42	453450	2618730	2000	3.12	6240	1.48	92.35	.19	11.86	1.21	7.55	7.61	47.49
43	453450	2618750	2000	3.08	6160	1.23	75.77	.18	11.09	.78	4.80	5.66	34.87
44	453470	2618690	4000	3.27	13080	2.56	334.85	.17	22.24	3.28	42.90	15.67	204.96
45	453470	2618710	2000	3.26	6520	2.63	171.48	.18	11.74	2.28	14.87	12.02	78.37
46	453490	2618670	1000	3.60	3600	5.89	212.04	.22	7.92	3.08	11.09	18.54	66.74
47	453490	2618690	2400	3.56	8544	5.64	481.88	.20	17.09	3.12	26.66	18.65	159.35
48	453510	2618670	3000	3.69	11070	6.69	740.58	.29	32.10	2.64	29.22	17.48	193.50
49	453510	2618690	1600	3.95	6320	8.67	547.94	.23	14.54	3.71	23.45	26.09	164.89
50	453530	2618670	4000	3.64	14560	5.94	864.86	.35	50.96	2.17	31.60	14.50	211.12
51	453530	2618690	2800	3.53	9884	4.30	425.01	.40	39.54	3.18	31.43	18.07	178.60
			173320		532922		7325.84		1007.93		445.61		2764.33

Hayl As Safil : 580 m  
 Cut-off grade : 0.35 Cu

No	X (E)	Y (N)	Volume (m3)	S.G.	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade (%)	content (ton)	grade (%)	content (ton)	grade (g/t)	content (kg)	grade (g/t)	content (kg)
1	453350	2618770	3000	2.98	8940	.56	50.06	.30	26.82	.53	4.74	1.66	14.84
2	453350	2618790	4000	2.98	11920	.55	65.56	.13	15.50	.17	2.03	1.20	14.30
3	453370	2618750	1000	3.00	3000	.69	20.70	.55	16.50	1.08	3.24	2.35	7.05
4	453370	2618770	4000	3.00	12000	.67	80.40	.27	32.40	.49	5.88	1.66	19.92
5	453370	2618790	4000	2.98	11920	.56	66.75	.08	9.54	.06	.72	1.11	13.23
6	453370	2618810	4000	2.98	11920	.57	67.94	.07	8.34	.06	.72	.90	10.73
7	453370	2618830	4000	2.98	11920	.54	64.37	.05	5.96	.02	.24	.59	7.03
8	453370	2618850	4000	2.98	11920	.54	64.37	.05	5.96	.03	.36	.41	4.89
9	453390	2618750	3000	3.04	9120	.99	90.29	.42	38.30	.88	8.03	2.25	20.52
10	453390	2618770	4000	3.03	12120	.93	112.72	.22	26.66	.50	6.06	1.75	21.21
11	453390	2618790	4000	3.02	12080	.85	102.68	.10	12.08	.23	2.78	1.30	15.70
12	453390	2618810	4000	3.00	12000	.69	82.80	.05	6.00	.10	1.20	.86	10.32
13	453390	2618830	4000	2.98	11920	.57	67.94	.05	5.96	.06	.72	.54	6.44
14	453390	2618850	4000	2.97	11880	.50	59.40	.04	4.75	.02	.24	.34	4.04
15	453410	2618730	2000	3.11	6220	1.45	90.19	.47	29.23	.88	5.47	2.57	15.99
16	453410	2618750	3200	3.10	9920	1.36	134.91	.32	31.74	.73	7.24	2.25	22.32
17	453410	2618770	4000	3.09	12360	1.34	165.62	.17	21.01	.54	6.67	1.94	23.98
18	453410	2618790	4000	3.08	12320	1.23	151.54	.07	8.62	.35	4.31	1.54	18.97
19	453410	2618810	4000	3.03	12120	.91	110.29	.04	4.85	.19	2.30	.98	11.88
20	453410	2618830	4000	2.97	11880	.47	55.84	.03	3.56	.02	.24	.27	3.21
21	453430	2618710	4000	3.18	12720	1.93	245.50	.50	63.60	.73	9.29	2.74	34.85
22	453430	2618730	4000	3.15	12600	1.75	220.50	.40	50.40	.71	8.95	2.53	31.88
23	453430	2618750	3200	3.15	10080	1.70	171.36	.26	26.21	.63	6.35	2.30	23.18
24	453430	2618770	4000	3.14	12560	1.63	204.73	.10	12.56	.54	6.78	2.04	25.62
25	453430	2618790	1128	3.15	3553	1.73	61.47	.03	1.07	.51	1.81	2.00	7.11
26	453430	2618810	4000	3.06	12240	1.13	138.31	.03	3.67	.27	3.30	1.19	14.57
27	453450	2618690	1500	3.24	4860	2.31	112.27	.52	25.27	.53	2.58	2.81	13.66
28	453450	2618710	4000	3.23	12920	2.25	290.70	.47	60.72	.53	6.85	2.74	35.40
29	453470	2618690	2500	3.25	8125	2.41	195.81	.52	42.25	.47	3.82	2.82	22.91
			100528	307138		3345.02		599.53		112.92		475.75	

Hayl As Safil : 570 m  
 Cut-off grade : 0.35 Cu

No	X (E)	Y (N)	Volume (m3)	S.G.	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade (%)	content (ton)	grade (%)	content (ton)	grade (g/t)	content (kg)	grade (g/t)	content (kg)
1	453350	2618770	668	2.98	1991	.50	9.95	.16	3.19	.14	.28	1.25	2.49
2	453350	2618790	4000	2.98	11920	.52	61.98	.15	17.88	.13	1.55	1.20	14.30
3	453370	2618770	2000	2.98	5960	.50	29.80	.16	9.54	.16	.95	1.25	7.45
4	453370	2618790	4000	2.98	11920	.52	61.98	.16	19.07	.14	1.67	1.25	14.90
5	453370	2618810	4000	2.98	11920	.52	61.98	.12	14.30	.11	1.31	.96	11.44
6	453370	2618830	4000	2.99	11960	.60	71.76	.09	10.76	.07	.84	.63	7.53
7	453370	2618850	4000	3.01	12040	.74	89.10	.06	7.22	.03	.36	.41	4.94
8	453390	2618770	3332	2.98	9929	.49	48.65	.15	14.89	.19	1.89	1.22	12.11
9	453390	2618790	4000	2.97	11880	.48	57.02	.14	16.63	.17	2.02	1.12	13.31
10	453390	2618810	4000	2.97	11880	.46	54.65	.10	11.88	.12	1.43	.81	9.62
11	453390	2618830	4000	2.97	11880	.49	58.21	.07	8.32	.06	.71	.47	5.58
12	453390	2618850	4000	2.99	11960	.59	70.56	.05	5.98	.03	.36	.30	3.59
13	453410	2618770	4000	2.98	11920	.52	61.98	.14	16.69	.21	2.50	1.13	13.47
14	453410	2618790	4000	2.97	11880	.44	52.27	.13	15.44	.23	2.73	1.16	13.78
15	453410	2618810	4000	2.97	11880	.44	52.27	.09	10.69	.13	1.54	.71	8.43
16	453410	2618830	4000	2.95	11800	.35	41.30	.03	3.54	.03	.35	.14	1.65
17	453430	2618770	4000	2.98	11920	.57	67.94	.14	16.69	.21	2.50	1.04	12.40
18	453430	2618790	4000	2.98	11920	.56	66.75	.13	15.50	.20	2.38	.98	11.68
19	453430	2618810	4000	2.97	11880	.45	53.46	.09	10.69	.14	1.66	.87	7.96
20	453450	2618690	500	3.30	1650	2.75	45.38	.54	8.91	.34	.56	2.57	4.24
21	453450	2618710	4000	3.27	13080	2.51	328.31	.50	65.40	.32	4.19	2.41	31.52
22	453470	2618690	1472	3.32	4887	2.89	141.24	.57	27.86	.35	1.71	2.68	13.10
			75972	228057		1586.54		331.07		33.49		225.49	

Hayl As Safil : 560 m  
 Cut-off grade : 0.35 Cu

No	X (E)	Y (N)	Volume (m3)	S. G. (t/m3)	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade (%)	content (ton)	grade (%)	content (ton)	grade (g/t)	content (kg)	grade (g/t)	content (kg)
1	453370	2618790	4000	2.97	11880	.43	51.08	.16	19.01	.15	1.78	1.33	15.80
2	453390	2618790	4000	3.00	12000	.68	81.60	.11	13.20	.20	2.40	2.01	24.12
3	453390	2618810	4000	2.99	11960	.57	68.17	.10	11.96	.17	2.03	1.40	16.74
4	453390	2618830	4000	2.99	11960	.56	66.98	.10	11.96	.13	1.55	.76	9.09
5	453410	2618790	1332	3.04	4049	.98	39.68	.07	2.83	.26	1.05	3.00	12.15
6	453410	2618810	4000	2.99	11960	.60	71.76	.07	8.37	.19	2.27	1.52	18.18
			21332		63809		379.27		67.33		11.08		96.08

Hayl As Safil : 550 m  
 Cut-off grade : 0.35 Cu

No	X (E)	Y (N)	Volume (m3)	S. G. (t/m3)	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade (%)	content (ton)	grade (%)	content (ton)	grade (g/t)	content (kg)	grade (g/t)	content (kg)
1	453390	2618790	3000	2.96	8880	.38	33.74	.15	13.32	.10	.89	.90	7.99
2	453390	2618810	4000	2.96	11840	.38	44.99	.13	15.39	.08	.95	.63	7.46
3	453390	2618830	3332	2.96	9863	.42	41.42	.12	11.84	.06	.59	.39	3.85
4	453410	2618790	4000	2.95	11800	.36	42.48	.11	12.98	.09	1.06	.63	7.43
5	453410	2618810	4000	2.95	11800	.35	41.30	.08	9.44	.07	.83	.39	4.60
			18332		54183		203.93		62.97		4.32		31.33

## **Appendix 4**

**List of minable ore reserves for each ore block  
in the Rakah deposit**



Rakah : 650 m  
Cut-off grade : 0.35 Cu

No	X (E)	Y (N)	Volume (m3)	S.G. (t/m3)	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade (%)	content (ton)	grade (%)	content (ton)	grade (g/t)	content (kg)	grade (g/t)	content (kg)
1	457270	2618690	2000	2.86	5719	.77	44.04	.12	6.86	1.32	7.55	6.00	34.31
2	457270	2618710	2800	2.88	8060	.88	70.93	.08	6.45	1.25	10.07	4.86	39.17
3	457270	2618730	152	2.82	429	.49	2.10	.04	.17	.62	.27	4.95	2.12
4	457290	2618670	2000	2.85	5700	.67	38.19	.19	10.83	.92	5.24	4.47	25.48
5	457290	2618690	4000	2.88	11514	.90	103.63	.22	25.33	.92	10.59	3.52	40.53
6	457290	2618710	4000	2.88	11514	.90	103.63	.12	13.82	.99	11.40	2.62	30.17
7	457290	2618730	628	2.94	1849	1.35	24.97	.02	.37	1.83	3.38	2.18	4.03
8	457310	2618670	3000	2.89	8664	.92	79.71	.27	23.39	.86	7.45	3.11	26.95
9	457310	2618690	3204	2.93	9375	1.21	113.44	.40	37.50	.84	7.87	2.44	22.87
10	457310	2618710	4000	2.83	11324	.55	62.28	.02	2.26	.62	7.02	2.06	23.33
11	457310	2618730	400	2.89	1155	.97	11.21	.02	.23	1.28	1.48	2.62	3.03
12	457330	2618670	3000	2.94	8807	1.25	110.08	.31	27.30	.82	7.22	2.49	21.93
13	457330	2618690	4000	2.90	11590	1.00	115.90	.25	28.97	.77	8.92	2.30	26.66
14	457330	2618710	2800	2.87	8033	.82	65.87	.10	8.03	.81	6.51	2.30	18.48
15	457350	2618670	3000	3.01	9035	1.88	169.85	.23	20.78	.84	7.59	2.25	20.33
16	457350	2618690	2400	2.97	7136	1.59	113.47	.19	13.56	.82	5.85	2.27	16.20
17	457350	2618710	1000	2.94	2945	1.38	40.64	.13	3.83	.97	2.86	2.53	7.45
18	457370	2618630	1000	3.15	3154	2.91	91.78	.15	4.73	.96	3.03	2.48	7.82
19	457370	2618650	2400	3.15	7570	2.91	220.28	.17	12.87	.94	7.12	2.34	17.71
20	457370	2618670	2000	3.13	6251	2.65	165.65	.18	11.25	.91	5.69	2.24	14.00
21	457390	2618570	1600	2.84	4545	.65	29.54	.06	2.73	.96	4.36	2.46	11.18
22	457390	2618630	2800	3.18	8911	3.13	278.91	.13	11.58	.98	8.73	2.45	21.83
23	457390	2618650	1600	3.24	5183	3.53	182.97	.15	7.77	.97	5.03	2.38	12.34
24	457410	2618630	2400	3.17	7615	3.07	233.79	.13	9.90	.97	7.39	2.45	16.66
			56184		166078		2472.86		290.51		152.62		466.58

Rakah : 640 m  
Cut-off grade : 0.35 Cu

No	X (E)	Y (N)	Volume (m3)	S.G. (t/m3)	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade (%)	content (ton)	grade (%)	content (ton)	grade (g/t)	content (kg)	grade (g/t)	content (kg)
1	457270	2618690	1000	2.84	2841	.66	18.75	.28	7.95	.83	2.36	6.05	17.19
2	457270	2618710	1136	2.83	3216	.56	18.01	.13	4.18	.46	1.48	6.25	20.10
3	457270	2618730	1688	2.88	4859	.89	43.24	.06	2.92	.62	3.01	6.44	31.29
4	457290	2618670	500	2.84	1420	.65	9.23	.55	7.81	.84	1.19	4.45	6.32
5	457290	2618690	4000	2.84	11362	.60	68.17	.47	53.40	.74	8.41	4.45	50.56
6	457290	2618710	4000	2.83	11324	.57	64.55	.28	31.71	.71	8.04	4.94	55.94
7	457310	2618670	800	2.85	2280	.70	15.96	.61	13.91	.84	1.92	3.26	7.43
8	457310	2618690	4000	2.85	11400	.69	78.66	.72	82.08	.99	11.29	3.09	35.23
9	457310	2618710	4000	2.86	11438	.76	86.93	.40	45.75	.71	8.12	3.66	41.86
10	457310	2618730	2800	2.89	8086	.96	77.63	.18	14.56	.73	5.90	5.32	43.02
11	457310	2618750	36	2.99	108	1.68	1.81	.11	.12	.31	.03	7.94	.86
12	457330	2618670	1600	2.89	4621	.94	43.44	.49	22.64	.69	3.19	2.38	11.00
13	457330	2618690	4000	2.84	11362	.65	73.85	.44	49.99	.61	6.93	1.90	21.59
14	457330	2618710	4000	2.85	11400	.71	80.94	.31	35.34	.50	5.70	2.14	24.40
15	457330	2618730	800	2.90	2318	1.01	23.41	.20	4.64	.38	.88	3.40	7.88
16	457350	2618670	2400	2.96	7114	1.51	107.42	.29	20.63	.49	3.49	1.93	13.73
17	457350	2618690	4000	2.84	11362	.61	69.31	.25	28.40	.32	3.64	1.38	15.68
18	457350	2618710	2120	2.82	5982	.48	28.71	.16	9.57	.17	1.02	1.08	6.46
19	457350	2618730	800	2.87	2295	.79	18.13	.17	3.90	.40	.92	2.35	5.39
20	457370	2618630	1000	3.49	3487	4.73	164.91	.21	7.32	.78	2.72	3.37	11.75
21	457370	2618650	2000	3.23	6460	3.42	220.93	.16	10.34	.65	4.20	2.92	18.86
22	457370	2618670	4000	2.94	11780	1.39	163.74	.14	16.49	.49	5.77	2.24	26.39
23	457370	2618690	4000	2.83	11324	.54	61.15	.18	20.38	.22	2.49	1.37	15.51
24	457370	2618710	2000	2.82	5643	.48	27.09	.20	11.29	.20	1.13	1.45	8.18
25	457370	2618730	500	2.84	1420	.59	8.38	.18	2.56	.33	.47	2.09	2.97
26	457390	2618630	1000	3.64	3639	5.71	207.76	.20	7.28	.80	2.91	3.67	13.35
27	457390	2618650	4000	3.26	13034	3.60	469.22	.19	24.76	.72	9.38	3.29	42.88
28	457390	2618670	924	2.88	2660	.89	23.67	.07	1.86	.50	1.33	2.53	6.73
29	457390	2618690	1200	2.82	3386	.48	16.25	.23	7.79	.34	1.15	1.99	6.74
30	457410	2618630	3500	3.38	11837	4.53	536.22	.26	30.78	.77	9.11	3.57	42.26

No	X (E)	Y (N)	Volume (m3)	S.G. (t/m3)	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade (%)	content (ton)	grade (%)	content (ton)	grade (g/t)	content (kg)	grade (g/t)	content (kg)
31	457410	2618650	4000	3.27	13072	3.72	486.28	.35	45.75	.69	9.02	3.33	43.53
32	457410	2618670	2800	2.98	8352	1.66	138.66	.29	24.22	.56	4.68	2.85	23.80
33	457430	2618630	2500	3.22	8051	3.39	272.94	.28	22.54	.70	5.64	3.48	28.02
34	457430	2618650	4000	3.14	12578	2.82	354.70	.32	40.25	.64	8.05	3.25	40.88
35	457430	2618670	2200	3.01	6625	1.84	121.91	.34	22.53	.49	3.25	2.99	19.81
36	457450	2618630	1000	3.09	3087	2.37	73.17	.26	8.03	.67	2.07	3.36	10.37
37	457450	2618650	4000	3.06	12236	2.23	272.86	.29	35.48	.59	7.22	3.22	39.40
38	457450	2618670	56	3.02	169	1.92	3.25	.28	.47	.47	.08	3.07	.52
39	457470	2618650	3400	3.02	10271	1.94	199.27	.28	28.76	.49	5.03	3.14	32.25
40	457470	2618670	400	3.01	1205	1.82	21.92	.28	3.37	.56	.67	3.10	3.73
			92160		275104		4772.42		811.75		163.89		853.86

Rakah : 530 m  
Cut-off grade : 0.35 Cu

No	X (E)	Y (N)	Volume (m3)	S.G. (t/m3)	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade (%)	content (ton)	grade (%)	content (ton)	grade (g/t)	content (kg)	grade (g/t)	content (kg)
1	457250	2618730	500	3.00	1501	1.80	27.02	.09	1.35	1.78	2.67	3.65	5.48
2	457250	2618750	1600	3.04	4854	2.01	97.77	.11	5.35	2.29	11.14	4.22	20.53
3	457250	2618770	4000	3.03	12122	1.96	237.59	.11	13.33	2.87	34.79	4.38	53.09
4	457270	2618710	1000	2.92	2916	1.14	33.25	.08	2.33	1.15	3.35	3.01	8.78
5	457270	2618730	3500	2.97	10407	1.59	165.48	.08	8.33	1.31	13.63	3.28	34.14
6	457270	2618750	4000	3.13	12540	2.71	339.83	.08	10.03	1.82	22.82	3.90	48.91
7	457270	2618770	4000	3.00	12008	1.72	205.54	.23	27.62	2.73	32.78	4.90	58.84
8	457290	2618690	1600	2.87	4590	.83	38.10	.10	4.59	1.03	4.73	2.46	11.29
9	457290	2618710	4000	2.88	11514	.90	103.63	.09	10.36	.85	9.79	2.66	30.63
10	457290	2618730	4000	2.82	11286	.49	55.30	.08	9.03	.59	6.66	2.80	31.60
11	457290	2618750	4000	2.97	11894	1.55	184.36	.15	17.84	1.20	14.27	3.69	43.89
12	457290	2618770	4000	2.96	11856	1.47	174.28	.29	34.38	1.88	22.29	4.98	59.04
13	457290	2618790	1348	2.86	3855	.71	27.37	.48	18.50	1.77	6.82	5.60	21.59
14	457310	2618670	668	2.85	1904	.66	12.57	.11	2.09	.99	1.88	2.00	3.81
15	457310	2618690	4000	2.85	11400	.65	74.10	.10	11.40	1.13	12.88	2.10	23.94
16	457310	2618710	4000	2.92	11666	1.17	136.49	.12	14.00	.62	7.23	2.28	26.60
17	457310	2618730	4000	2.91	11628	1.10	127.91	.12	13.95	.62	7.21	2.73	31.74
18	457310	2618750	2400	2.98	7159	1.62	115.98	.15	10.74	.70	5.01	3.38	24.20
19	457310	2618770	2000	2.94	5871	1.25	73.39	.29	17.03	1.14	6.69	4.21	24.72
20	457310	2618790	668	2.88	1923	.88	16.92	.43	8.27	1.63	3.13	5.02	9.65
21	457330	2618670	2000	2.85	5700	.64	36.48	.13	7.41	.73	4.16	1.70	9.69
22	457330	2618690	4000	2.86	11438	.76	86.93	.14	16.01	.64	7.32	1.69	19.33
23	457330	2618710	4000	2.88	11514	.86	99.02	.14	16.12	.49	5.64	1.81	20.84
24	457330	2618730	2800	2.90	8113	1.03	83.56	.15	12.17	.48	3.89	2.23	18.09
25	457350	2618670	3332	2.85	9496	.67	63.62	.16	15.19	.45	4.27	1.49	14.15
26	457350	2618690	4000	2.85	11400	.69	78.66	.16	18.24	.30	3.42	1.43	16.30
27	457350	2618710	4000	2.84	11362	.59	67.04	.18	20.45	.16	1.82	1.37	15.57
28	457350	2618730	2000	2.83	5662	.57	32.27	.16	9.06	.36	2.04	1.80	10.19
29	457370	2618650	2000	2.83	5662	.59	33.41	.17	9.63	.39	2.21	1.37	7.76
30	457370	2618670	4000	2.87	11476	.88	100.99	.17	19.51	.29	3.33	1.35	15.49
31	457370	2618690	4000	2.86	11438	.69	78.92	.16	18.30	.17	1.94	1.35	15.44
32	457370	2618710	4000	2.81	11248	.41	46.12	.15	16.87	.19	2.14	1.46	16.42
33	457390	2618650	2400	2.88	6908	1.59	109.84	.16	11.05	.28	1.93	1.27	8.77
34	457390	2618670	4000	2.91	11628	1.11	129.07	.17	19.77	.22	2.56	1.31	15.23
35	457390	2618690	4000	2.85	11400	.72	82.08	.12	13.68	.16	1.82	1.38	15.73
36	457410	2618630	600	2.86	1716	1.73	29.68	.14	2.40	.23	.39	1.11	1.90
37	457410	2618650	4000	3.02	12084	4.35	525.65	.14	16.92	.21	2.54	1.20	14.50
38	457410	2618670	4000	2.92	11666	1.88	219.32	.13	15.17	.16	1.87	1.27	14.82
39	457410	2618690	1440	2.82	4063	.46	18.69	.05	2.03	.16	.65	1.36	5.53
40	457410	2618710	1200	2.81	3374	.35	11.81	.10	3.37	.22	.74	1.56	5.26

No	X (E)	Y (N)	Volume (m <sup>3</sup> )	S. G. (t/m <sup>3</sup> )	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade content (%)	(ton)	grade content (%)	(ton)	grade content (g/t)	(kg)	grade content (g/t)	(kg)
41	457430	2618630	500	2.85	1425	1.64	23.37	.12	1.71	.17	.24	1.04	1.48
42	457430	2618650	4000	2.93	11704	2.28	266.85	.15	17.56	.16	1.87	1.14	13.34
43	457430	2618670	4000	2.92	11666	1.80	209.99	.14	16.33	.13	1.62	1.23	14.35
44	457430	2618690	4000	2.85	11400	.77	87.78	.12	13.68	.13	1.48	1.33	15.16
45	457450	2618650	3500	2.88	10075	1.29	129.96	.16	16.12	.10	1.01	1.08	10.88
46	457450	2618670	4000	2.92	11666	1.17	136.49	.22	25.67	.08	.93	1.16	13.53
47	457450	2618690	1600	2.86	4575	.78	35.69	.15	6.86	.07	.32	1.25	5.72
48	457470	2618650	2500	2.84	7101	.71	50.42	.15	10.65	.01	.07	.99	7.03
49	457470	2618670	4000	2.87	11476	.82	94.10	.16	18.36	.00	.00	1.05	12.05
50	457470	2618690	1200	2.84	3409	.61	20.79	.13	4.43	.00	.00	1.15	3.92
51	457490	2618670	2668	2.81	7502	.43	32.26	.11	8.25	.00	.00	.85	6.38
			149024		432251		5268.74		643.49		291.89		937.32

Rakah : 620 m  
Cut-off grade : 0.35 Cu

No	X (E)	Y (N)	Volume (m <sup>3</sup> )	S. G. (t/m <sup>3</sup> )	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade content (%)	(ton)	grade content (%)	(ton)	grade content (g/t)	(kg)	grade content (g/t)	(kg)
1	457270	2618750	3000	2.82	8465	.48	40.63	.23	19.47	.63	5.33	6.65	56.29
2	457270	2618770	600	2.88	1727	.87	15.03	.20	3.45	1.41	2.44	6.38	11.02
3	457270	2618790	4000	2.93	11704	1.22	142.79	.20	23.41	1.85	21.65	6.14	71.86
4	457290	2618750	4000	2.85	11400	.66	75.24	.16	18.24	.58	6.61	4.49	51.19
5	457290	2618770	4000	2.89	11552	.94	108.59	.21	24.26	.76	8.78	4.00	46.21
6	457290	2618790	4000	2.94	11742	1.29	151.47	.26	30.53	1.10	12.92	3.49	40.98
7	457310	2618730	4000	2.82	11286	.47	53.04	.12	13.54	.47	5.30	3.33	37.58
8	457310	2618750	4000	2.92	11666	1.13	131.83	.13	15.17	.31	3.62	3.38	39.43
9	457310	2618770	3500	2.85	9975	.69	68.83	.20	19.95	.69	5.89	3.26	32.52
10	457310	2618790	2500	2.84	7101	.63	44.74	.24	17.04	.77	5.47	3.37	23.93
11	457330	2618690	1500	2.84	4261	.62	26.42	.12	5.11	.44	1.87	2.28	9.71
12	457330	2618710	4000	2.84	11362	.63	71.58	.14	15.91	.46	5.23	2.36	26.81
13	457330	2618730	4000	2.83	11324	.57	64.55	.15	16.99	.44	4.98	2.52	28.54
14	457350	2618670	332	2.91	965	1.11	10.71	.20	1.93	.34	.33	1.79	1.73
15	457350	2618690	2000	2.91	5814	1.11	64.54	.17	9.88	.43	2.50	1.98	11.51
16	457350	2618710	4000	2.92	11666	1.17	136.49	.18	21.00	.44	5.13	2.14	24.97
17	457350	2618730	4000	2.83	11324	.56	63.41	.17	19.25	.53	6.00	2.28	25.82
18	457370	2618670	2668	2.98	7959	1.64	130.52	.24	19.10	.28	2.23	1.45	11.54
19	457370	2618690	4000	2.96	11856	1.52	180.21	.20	23.71	.37	4.39	1.76	20.87
20	457370	2618710	4000	2.89	11552	.97	112.05	.17	19.64	.52	6.01	2.00	23.10
21	457370	2618730	3332	2.82	9401	.48	45.13	.16	15.04	.69	6.49	2.16	20.31
22	457390	2618650	1000	2.89	2888	.93	26.86	.24	6.93	.17	.49	.99	2.86
23	457390	2618670	4000	3.08	12312	2.32	285.64	.26	32.01	.24	2.95	1.28	15.76
24	457390	2618690	4000	2.95	11818	1.45	171.36	.19	22.45	.32	3.78	1.51	17.85
25	457390	2618710	4000	2.88	11514	.89	102.47	.15	17.27	.46	5.30	1.74	20.03
26	457390	2618730	2000	2.83	5662	.55	31.14	.15	8.49	.60	3.40	1.93	10.93
27	457410	2618670	4000	2.90	11590	1.02	118.22	.18	20.86	.21	2.43	1.22	14.14
28	457410	2618690	4000	2.90	11590	1.02	118.22	.13	15.07	.24	2.78	1.36	15.76
29	457410	2618710	4000	2.87	11476	.81	92.96	.13	14.92	.36	4.13	1.54	17.67
30	457410	2618730	668	2.83	1891	.56	10.59	.13	2.46	.49	.93	1.78	3.37
31	457430	2618650	1000	2.81	2812	.43	12.09	.21	5.91	.17	.48	1.02	2.87
32	457430	2618670	4000	2.84	11362	.64	72.72	.20	22.72	.22	2.50	1.25	14.20
33	457430	2618690	4000	2.86	11438	.78	89.22	.16	18.30	.27	3.09	1.38	15.78
34	457430	2618710	2800	2.83	7927	.58	45.98	.10	7.93	.32	2.54	1.49	11.81
35	457450	2618650	1000	2.83	2831	.57	16.14	.25	7.08	.18	.51	1.07	3.03
36	457450	2618670	4000	2.86	11438	.76	86.93	.30	34.31	.22	2.52	1.23	14.07
37	457450	2618690	4000	2.85	11400	.67	76.38	.18	20.52	.27	3.08	1.39	15.85
38	457450	2618710	2000	2.84	5681	.61	34.65	.12	6.82	.34	1.93	1.49	8.46
39	457470	2618650	600	2.83	1699	.57	9.68	.24	4.08	.19	.32	1.12	1.90
40	457470	2618670	4000	2.84	11362	.63	71.58	.22	25.00	.23	2.61	1.23	13.98



No	X (E)	Y (N)	Volume (m3)	S.G. (t/m3)	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade (%)	content (ton)	grade (%)	content (ton)	grade (g/t)	content (kg)	grade (g/t)	content (kg)
41	457470	2618690	4000	2.84	11362	.62	70.44	.15	17.04	.28	3.18	1.33	15.11
42	457470	2618710	1200	2.83	3397	.57	19.36	.08	2.72	.34	1.16	1.47	4.99
43	457490	2618670	1000	2.81	2812	.43	12.09	.15	4.22	.23	.65	1.18	3.32
44	457490	2618690	2584	2.81	7266	.40	29.06	.09	6.54	.28	2.03	1.30	9.45
45	457490	2618710	420	2.83	1189	.53	6.30	.04	.48	.33	.39	1.38	1.64
			131704		378819		3347.88		676.75		176.35		870.75

Rakah : 610 m  
Cut-off grade : 0.35 Cu

No	X (E)	Y (N)	Volume (m3)	S.G. (t/m3)	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade (%)	content (ton)	grade (%)	content (ton)	grade (g/t)	content (kg)	grade (g/t)	content (kg)
1	457290	2618750	4000	3.06	12236	5.00	611.80	.98	119.91	6.06	74.15	15.29	187.09
2	457290	2618770	1200	2.81	3374	.39	13.16	.32	10.80	1.92	6.48	10.86	36.65
3	457290	2618790	1300	2.83	3680	.55	20.24	.33	12.14	.69	2.54	7.97	29.33
4	457310	2618770	4000	2.81	11248	.51	57.36	.22	24.75	1.42	15.97	5.79	65.13
5	457310	2618790	4000	2.81	11248	.37	41.62	.28	31.49	.76	8.55	4.19	47.13
6	457330	2618710	2000	3.00	6004	3.39	203.54	.73	43.83	3.18	19.09	6.95	41.73
7	457330	2618730	4000	2.94	11780	2.62	308.64	.53	62.43	3.08	36.28	6.68	78.69
8	457330	2618770	4000	2.81	11248	.41	46.12	.13	14.62	.10	1.12	1.40	15.75
9	457330	2618790	4000	2.81	11248	.38	42.74	.26	29.24	.69	7.76	2.63	29.58
10	457350	2618690	800	2.92	2333	1.46	34.06	.42	9.80	1.03	2.40	3.01	7.02
11	457350	2618710	4000	2.87	11476	.82	94.10	.42	48.20	.64	7.34	2.19	25.13
12	457350	2618730	4000	2.89	11552	1.15	132.05	.31	35.81	.81	9.36	2.50	28.88
13	457350	2618750	4000	2.84	11362	.72	81.81	.18	20.45	.45	5.11	1.73	19.66
14	457370	2618610	3356	2.93	9820	1.21	118.82	.14	13.75	.54	5.30	1.51	14.83
15	457370	2618630	500	2.93	1463	1.25	18.29	.12	1.76	.55	.80	1.15	1.68
16	457370	2618670	400	2.96	1186	1.47	17.43	.24	2.85	.74	.88	1.91	2.26
17	457370	2618690	4000	2.94	11780	1.32	155.50	.28	32.98	.50	5.89	1.78	20.97
18	457370	2618710	4000	2.92	11666	1.15	134.16	.28	32.66	.55	6.42	1.81	21.12
19	457370	2618730	4000	2.94	11742	1.33	156.17	.23	27.01	.62	7.28	1.59	18.67
20	457370	2618750	1600	2.87	4590	.82	37.64	.19	8.72	.50	2.30	1.28	5.88
21	457390	2618610	4000	2.90	11590	1.05	121.69	.11	12.75	.53	6.14	1.12	12.98
22	457390	2618630	3500	2.93	10241	1.27	130.06	.04	4.10	.57	5.84	.74	7.58
23	457390	2618650	500	2.94	1468	1.28	18.79	.14	2.05	.50	.73	1.05	1.54
24	457390	2618670	800	3.02	2417	1.89	45.68	.23	5.56	.46	1.11	1.38	3.34
25	457390	2618690	4000	2.97	11894	1.57	186.74	.19	22.60	.46	5.47	1.61	19.15
26	457390	2618710	4000	2.94	11742	1.33	156.17	.19	22.31	.50	5.87	1.69	19.84
27	457390	2618730	3800	2.91	11047	1.13	124.83	.20	22.09	.54	5.97	1.34	14.80
28	457390	2618750	332	2.87	953	.84	8.00	.18	1.71	.56	.53	1.03	.98
29	457410	2618630	2000	2.87	5738	.84	48.20	.09	5.15	.54	3.10	.88	5.05
30	457410	2618650	2000	2.86	5719	.74	42.32	.16	9.15	.50	2.86	1.07	6.12
31	457410	2618670	800	2.93	2341	1.26	29.49	.14	3.28	.44	1.03	1.38	3.23
32	457410	2618690	4000	2.98	11932	1.67	199.26	.09	10.74	.40	4.77	1.56	18.61
33	457410	2618710	4000	2.92	11666	1.18	137.66	.13	15.17	.45	5.25	1.60	18.67
34	457410	2618730	2400	2.88	6908	.91	62.87	.16	11.05	.53	3.66	1.41	9.74
35	457430	2618630	500	2.81	1406	.44	6.19	.09	1.27	.51	.72	.98	1.38
36	457430	2618650	1600	2.82	4514	.52	23.47	.09	4.06	.48	2.17	1.15	5.19
37	457430	2618670	800	2.85	2280	.68	15.50	.08	1.82	.43	.98	1.42	3.24
38	457430	2618690	4000	2.87	11476	.84	96.40	.08	9.18	.41	4.71	1.57	18.02
39	457430	2618710	4000	2.84	11362	.65	73.85	.12	13.63	.43	4.89	1.58	17.95
40	457430	2618730	800	2.85	2280	.74	16.87	.13	2.96	.51	1.16	1.42	3.24
41	457450	2618690	2000	2.80	5605	.38	21.30	.06	3.36	.44	2.47	1.54	8.63
42	457450	2618710	3500	2.82	9875	.51	50.36	.09	8.89	.47	4.64	1.55	15.31
			112488		325490		3941.75		776.09		299.09		911.77

Rakah : 600 m  
 Cut-off grade : 0.35 Cu

No	X (E)	Y (N)	Volume (m3)	S. G. (t/m3)	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade (%)	content (ton)	grade (%)	content (ton)	grade (g/t)	content (kg)	grade (g/t)	content (kg)
1	457310	2618770	3500	2.87	10042	.84	84.35	.15	15.06	.72	7.23	3.56	35.75
2	457310	2618790	2500	2.89	7220	.94	67.87	.22	15.88	.98	7.08	2.62	18.92
3	457330	2618730	2000	2.84	5681	.62	35.22	.25	14.20	.51	2.90	2.04	11.59
4	457330	2618750	4000	2.84	11362	.62	70.44	.08	9.09	.31	3.52	2.26	25.68
5	457330	2618770	4000	3.01	12046	1.82	219.24	.19	22.89	.39	4.70	2.45	29.51
6	457330	2618790	4000	2.90	11590	.99	114.74	.21	24.34	.74	8.58	2.25	26.08
7	457350	2618710	1000	2.88	2879	.88	25.33	.44	12.67	.67	1.93	1.24	3.57
8	457350	2618730	4000	2.88	11514	.87	100.17	.40	46.06	.50	5.76	1.55	17.85
9	457350	2618750	4000	2.87	11476	.79	90.66	.30	34.43	.39	4.48	2.07	23.76
10	457350	2618790	2000	2.86	5719	.73	41.75	.22	12.58	.66	3.77	2.25	12.87
11	457370	2618690	500	2.85	1425	.72	10.26	.31	4.42	.44	.63	.95	1.35
12	457370	2618710	3500	2.90	10141	1.06	107.50	.45	45.64	.52	5.27	1.18	11.97
13	457370	2618730	4000	2.92	11666	1.18	137.66	.63	73.50	.50	5.83	1.43	16.68
14	457370	2618750	4000	2.86	11438	.77	88.07	.44	50.33	.43	4.92	1.69	19.33
15	457370	2618770	1332	2.83	3771	.51	19.23	.29	10.94	.48	1.81	1.93	7.28
16	457390	2618650	668	2.80	1872	.40	7.49	.10	1.87	.15	.28	.42	.79
17	457390	2618690	1400	2.89	4043	.97	39.22	.20	8.09	.25	1.01	.75	3.03
18	457390	2618710	4000	2.96	11856	1.52	180.21	.33	39.12	.34	4.03	.98	11.62
19	457390	2618730	4000	2.95	11818	1.46	172.54	.47	55.54	.38	4.49	1.22	14.42
20	457390	2618750	2000	2.93	5852	1.22	71.39	.43	25.16	.43	2.52	1.38	8.08
21	457410	2618630	3200	2.81	8998	.46	41.39	.04	3.60	.12	1.08	.33	2.97
22	457410	2618650	2500	2.86	7149	.78	55.76	.05	3.57	.12	.86	.43	3.07
23	457410	2618690	1800	2.97	5352	1.60	85.64	.06	3.21	.10	.54	.60	3.21
24	457410	2618710	2400	3.07	7364	2.24	164.96	.19	13.99	.20	1.47	.79	5.82
25	457410	2618730	4000	3.09	12350	2.38	293.93	.29	35.81	.32	3.95	1.06	13.09
26	457410	2618750	600	3.02	1813	1.93	34.98	.30	5.44	.41	.74	1.24	2.25
27	457430	2618650	2800	2.80	7847	.44	34.53	.04	3.14	.10	.78	.45	3.53
28	457430	2618690	1000	2.99	2993	1.75	52.37	.07	2.09	.11	.33	.64	1.92
29	457430	2618710	3180	3.26	10362	3.61	374.07	.11	11.40	.16	1.66	.74	7.67
30	457430	2618730	4000	3.16	12654	2.95	373.29	.16	20.25	.26	3.29	.93	11.77
31	457450	2618710	4000	3.06	12236	2.19	267.97	.09	11.01	.15	1.84	.80	9.79
32	457450	2618730	4000	3.13	12502	2.66	332.55	.12	15.00	.25	3.13	.91	11.38
33	457470	2618710	2000	2.89	5776	1.00	57.76	.09	5.20	.17	.98	.80	4.62
34	457470	2618730	4000	2.94	11780	1.37	161.39	.10	11.78	.24	2.83	.88	10.37
			95880		282587		4013.93		667.30		104.22		391.59

Rakah : 590 m  
 Cut-off grade : 0.35 Cu

No	X (E)	Y (N)	Volume (m3)	S. G. (t/m3)	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade (%)	content (ton)	grade (%)	content (ton)	grade (g/t)	content (kg)	grade (g/t)	content (kg)
1	457330	2618730	1600	2.84	4545	.65	30.00	.18	8.18	.79	3.59	1.67	7.59
2	457330	2618770	2920	2.83	8267	.53	43.81	.07	5.79	.20	1.65	1.60	13.23
3	457350	2618710	480	2.88	1382	.92	12.71	.20	2.76	.44	.61	1.24	1.71
4	457350	2618730	4000	2.88	11514	.87	100.17	.27	31.09	.36	4.15	1.25	14.39
5	457350	2618750	4000	2.88	11514	.88	101.32	.21	24.18	.22	2.53	1.43	16.47
6	457350	2618770	4000	2.93	11704	1.20	140.45	.11	12.87	.18	2.11	1.72	20.13
7	457370	2618710	1200	2.89	3466	.96	33.27	.33	11.44	.40	1.39	1.20	4.16
8	457370	2618730	4000	2.94	11780	1.38	162.56	.45	53.01	.32	3.77	1.25	14.73
9	457370	2618750	4000	2.92	11666	1.18	137.66	.29	33.83	.20	2.33	1.32	15.40
10	457390	2618710	1200	2.88	3454	.89	30.74	.35	12.09	.31	1.07	1.09	3.77
11	457390	2618730	4000	2.92	11666	1.15	134.16	.37	43.16	.26	3.03	1.26	14.70
12	457410	2618650	4000	2.85	11400	.66	75.24	.03	3.42	.23	2.62	.55	6.27
13	457410	2618670	2500	2.81	7030	.41	28.82	.21	14.76	.26	1.83	.74	5.20
14	457410	2618710	800	2.86	2288	.74	16.93	.30	6.86	.25	.57	1.08	2.47
15	457410	2618730	4000	2.88	11514	.90	103.63	.31	35.69	.23	2.65	1.22	14.05
16	457430	2618650	4000	2.82	11286	.46	51.92	.12	13.54	.23	2.60	.63	7.11
17	457430	2618670	3500	2.81	9842	.45	44.29	.17	16.73	.24	2.36	.78	7.68
18	457430	2618710	500	2.84	1420	.61	8.66	.24	3.41	.21	.30	1.06	1.51
19	457450	2618650	2400	2.80	6726	.37	24.89	.16	10.76	.22	1.48	.71	4.78
20	457450	2618690	600	2.80	1682	.40	6.73	.19	3.19	.21	.35	.97	1.63
21	457470	2618690	1200	2.80	3363	.37	12.44	.14	4.71	.21	.71	1.05	3.53
			54900		157509		1300.40		351.47		41.70		180.51

Rakah : 580 m  
Cut-off grade : 0.35 Cu

No	X (E)	Y (N)	Volume (m3)	S. G. (t/m3)	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade content (%)	grade content (ton)	grade content (%)	grade content (ton)	grade content (g/t)	grade content (kg)	grade content (g/t)	grade content (kg)
1	457370	2618690	2000	2.81	5624	.37	20.81	.20	11.25	2.16	12.15	1.25	7.03
2	457390	2618730	4000	2.82	11286	.45	50.79	.13	14.67	1.21	13.66	1.25	14.11
3	457410	2618730	1600	2.80	4484	.36	16.14	.14	6.28	.71	3.18	1.25	5.61
			7600		21394		87.74		32.20		28.99		26.75

Rakah : 570 m  
Cut-off grade : 0.35 Cu

No	X (E)	Y (N)	Volume (m3)	S. G. (t/m3)	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade content (%)	grade content (ton)	grade content (%)	grade content (ton)	grade content (g/t)	grade content (kg)	grade content (g/t)	grade content (kg)
1	457390	2618690	2000	2.80	5605	.39	21.86	.19	10.65	.53	2.97	1.50	8.41
			2000		5605		21.86		10.65		2.97		8.41

Rakah : 560 m  
Cut-off grade : 0.35 Cu

No	X (E)	Y (N)	Volume (m3)	S. G. (t/m3)	Tonnage (ton)	Cu		Zn		Au		Ag	
						grade content (%)	grade content (ton)	grade content (%)	grade content (ton)	grade content (g/t)	grade content (kg)	grade content (g/t)	grade content (kg)
1	457390	2618690	4000	2.87	11476	.86	98.69	.12	13.77	.52	5.97	.98	11.25
2	457390	2618710	4000	2.87	11476	.84	96.40	.09	10.33	.56	6.43	.93	10.67
3	457410	2618690	3480	2.94	10216	1.33	135.87	.05	5.11	.53	5.41	1.01	10.32
4	457410	2618710	4000	2.87	11476	.82	94.10	.08	9.18	.66	7.57	1.02	11.71
5	457430	2618690	4000	2.86	11438	.78	89.22	.06	6.86	.63	7.21	1.05	12.01
6	457450	2618690	4000	2.85	11400	.69	78.66	.06	6.84	.78	8.89	1.11	12.65
7	457470	2618690	4000	2.88	11514	.90	103.63	.06	6.91	.91	10.48	1.17	13.47
			27480		78996		696.57		59.00		51.96		82.08

## **Appendix 5**

### **X-ray diffraction pattern of head samples**



