

DAV-94-41

Blackwater

881050



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
212 Brooksbank Ave., North Vancouver  
British Columbia, Canada V7J 2C1  
PHONE: 604-984-0221

To: GRANGES INC.

2230 - 885 W. GEORGIA ST.  
VANCOUVER, BC  
V6C 3E8

Page Number 3-A  
Total Pages 4  
Certificate Date 04-JAN-95  
Invoice No. I-9433324  
P.O. Number :  
Account :

Project : 120  
Comments : ATTN: V.P.VAN DAMME CC: WARREN BATES

## CERTIFICATE OF ANALYSIS A9433324

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Nb ppm	Mo ppm
40170	205 294	< 5	2.11	184	90	< 0.5	< 2	0.54	< 0.5	11	86	78	3.78	< 10	< 1	0.97	< 10	0.79	275	23
40171	205 294	< 5	1.42	170	60	< 0.5	< 2	0.53	< 0.5	17	69	190	3.68	< 10	< 1	0.43	< 10	0.54	135	54
40172	205 294	15	1.33	260	50	< 0.5	2	0.60	< 0.5	14	70	176	2.70	< 10	< 1	0.19	< 10	0.54	95	2
40173	205 294	< 5	2.12	180	70	< 0.5	2	0.61	< 0.5	12	71	337	5.98	< 10	< 1	0.80	< 10	0.90	145	1
40174	205 294	< 5	1.93	36	80	< 0.5	2	0.62	< 0.5	11	81	325	5.39	< 10	< 1	0.72	< 10	0.81	140	< 1
40175	205 294	40	2.31	46	60	< 0.5	12	0.91	< 0.5	15	57	446	6.26	< 10	< 1	0.56	< 10	0.76	140	1
40176	205 294	< 5	2.80	304	90	< 0.5	2	1.08	< 0.5	16	82	392	5.13	< 10	< 1	0.57	< 10	0.92	140	< 1
40177	205 294	25	2.13	422	80	< 0.5	6	0.88	< 0.5	18	77	315	4.76	< 10	< 1	0.48	< 10	0.86	135	11
40178	205 294	< 5	1.34	398	110	< 0.5	< 2	0.48	< 0.5	26	51	128	3.21	< 10	< 1	0.46	< 10	0.37	95	8
40179	205 294	175	2.00	1160	170	< 0.5	28	0.69	< 0.5	20	73	161	2.97	< 10	< 1	0.64	< 10	0.79	120	8
40180	205 294	< 5	2.13	254	70	< 0.5	< 2	0.84	< 0.5	17	100	330	4.78	< 10	< 1	0.73	< 10	0.99	150	1
40181	205 294	< 5	2.47	56	30	< 0.5	2	0.90	< 0.5	18	88	424	5.68	< 10	< 1	0.90	< 10	1.08	180	1
40182	205 294	45	1.78	2	70	< 0.5	6	0.72	< 0.5	8	61	245	4.71	< 10	< 1	0.23	< 10	1.45	415	1
40183	205 294	20	1.89	12	100	< 0.5	6	0.86	0.5	10	55	204	4.47	< 10	< 1	0.32	< 10	1.41	390	3
40184	205 294	< 5	1.29	90	160	< 0.5	< 2	0.63	< 0.5	13	28	18	1.01	< 10	< 1	0.37	< 10	0.29	105	15
41019	205 294	< 5	1.56	6	30	< 0.5	< 2	0.25	0.5	4	36	9	3.04	< 10	< 1	0.91	10	0.17	2100	< 1
41022	205 294	35	1.16	42	30	0.5	< 2	0.10	25.0	6	42	25	2.59	< 10	< 1	0.70	10	0.10	645	1
41023	205 294	30	0.53	18	10	0.5	< 2	0.04	9.5	2	47	30	2.03	< 10	< 1	0.33	< 10	0.06	1035	1
41024	205 294	15	0.52	28	10	0.5	< 2	0.03	3.5	1	47	38	2.03	< 10	< 1	0.33	< 10	0.06	910	1
41025	205 294	60	0.46	28	10	0.5	2	0.01	5.5	2	49	60	1.43	< 10	< 1	0.29	< 10	0.02	350	2
41026 -Zns	205 294	70	0.46	338	10	0.5	2	0.03	4.0	2	57	78	2.29	< 10	< 1	0.29	10	0.06	825	2
41027	205 294	70	0.55	48	10	0.5	2	0.02	2.5	1	50	61	1.84	< 10	< 1	0.34	< 10	0.05	620	3
41028	205 294	60	0.68	48	10	0.5	< 2	0.02	6.0	3	62	56	1.52	< 10	< 1	0.40	10	0.04	355	3
41029	205 294	40	0.53	44	10	0.5	< 2	0.02	3.0	2	45	36	1.93	< 10	< 1	0.34	10	0.04	600	1
41030	205 294	50	0.51	46	10	0.5	< 2	0.03	8.0	1	50	33	2.02	< 10	< 1	0.31	10	0.04	700	2
41031	205 294	55	0.72	44	10	< 0.5	< 2	0.01	12.5	3	35	55	1.75	< 10	< 1	0.40	10	0.04	255	3
41032	205 294	25	0.41	46	10	< 0.5	< 2	< 0.01	7.5	2	41	74	1.41	< 10	< 1	0.26	10	< 0.01	40	2
41033	205 294	60	0.41	40	10	0.5	2	< 0.01	14.0	< 1	35	76	1.64	< 10	< 1	0.25	10	< 0.01	125	4
41034	205 294	40	0.35	464	10	< 0.5	< 2	< 0.01	10.0	1	45	61	1.35	< 10	< 1	0.24	< 10	< 0.01	95	1
41035	205 294	105	0.34	1190	10	< 0.5	2	< 0.01	16.0	1	46	56	1.36	< 10	< 1	0.22	< 10	< 0.01	75	2
41036	205 294	110	0.27	280	30	< 0.5	< 2	< 0.01	2.0	2	43	61	1.69	< 10	< 1	0.21	< 10	< 0.01	45	2
41037	205 294	140	0.30	302	20	< 0.5	< 2	< 0.01	5.5	1	49	42	0.96	< 10	< 1	0.23	< 10	< 0.01	40	1
41038	205 294	50	0.37	28	20	< 0.5	< 2	< 0.01	22.0	2	56	35	0.87	< 10	< 1	0.24	< 10	< 0.01	50	1
41039	205 294	60	0.44	22	20	< 0.5	< 2	0.01	13.5	1	46	34	0.61	< 10	< 1	0.27	10	0.01	130	2
41040	205 294	35	0.40	26	20	< 0.5	< 2	0.01	12.5	1	50	37	0.64	< 10	< 1	0.26	10	< 0.01	90	1
41041	205 294	45	0.46	74	40	< 0.5	< 2	< 0.01	13.0	1	47	89	0.91	< 10	< 1	0.27	10	< 0.01	65	1
41042	205 294	90	0.40	166	130	< 0.5	< 2	< 0.01	1.0	1	50	50	1.29	< 10	< 1	0.21	10	< 0.01	1020	1
41043	205 294	20	0.38	156	40	< 0.5	< 2	< 0.01	< 0.5	< 1	54	31	0.47	< 10	< 1	0.24	10	< 0.01	70	1
41044	205 294	10	0.45	86	50	< 0.5	< 2	0.01	< 0.5	1	60	45	1.08	< 10	< 1	0.26	10	0.01	380	5
41045	205 294	< 5	0.41	44	30	< 0.5	< 2	0.01	0.5	1	41	66	0.86	< 10	< 1	0.26	10	0.01	180	9

DAV-94-46  
↑  
Phreatic Bx  
24.3 - Abs  
41  
R.H.V.

Pyrobit.

CERTIFICATION: \_\_\_\_\_

UIC/UC/50 2:3/PM CHEMEX LABS VHA-TMX PAGE 06



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## CERTIFICATE OF ANALYSIS A9433324

SAMPLE DESCRIPTION	PREP CODE	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	Ag ppm	ppm Aqua R
40170	205 294	0.11	19	1000	8	< 2	14	49	0.15	< 10	< 10	160	< 10	46	< 0.2	
40171	205 294	0.09	40	710	4	< 2	7	73	0.08	< 10	< 10	96	< 10	28	< 0.2	
40172	205 294	0.09	29	810	2	< 2	4	61	0.04	< 10	< 10	72	< 10	20	< 0.2	
40173	205 294	0.13	16	1000	4	< 2	9	59	0.13	< 10	< 10	123	< 10	30	0.2	
40174	205 294	0.14	15	910	8	< 2	9	60	0.12	< 10	< 10	107	< 10	34	0.2	
40175	205 294	0.22	22	1100	2	< 2	8	107	0.09	< 10	< 10	114	< 10	34	0.3	
40176	205 294	0.26	18	1100	4	< 2	14	116	0.11	< 10	< 10	152	< 10	32	0.2	
40177	205 294	0.18	26	1270	4	< 2	11	89	0.09	< 10	< 10	131	< 10	32	0.2	
40178	205 294	0.13	42	710	4	< 2	3	70	0.07	< 10	< 10	56	< 10	20	< 0.2	
40179	205 294	0.17	33	970	2	< 2	11	98	0.10	< 10	< 10	109	10	26	< 0.2	
40180	205 294	0.13	21	1240	4	< 2	15	140	0.11	< 10	< 10	142	< 10	34	0.2	
40181	205 294	0.16	23	1320	4	< 2	23	103	0.14	< 10	< 10	192	< 10	40	0.2	
40182	205 294	0.04	17	1290	16	< 2	5	23	0.17	< 10	< 10	102	< 10	90	0.5	
40183	205 294	0.07	18	1260	24	< 2	5	74	0.15	< 10	< 10	97	< 10	152	0.7	
40184	205 294	0.13	29	400	4	< 2	1	88	0.05	< 10	< 10	28	< 10	76	< 0.2	
41019	205 294	< 0.01	15	1030	16	4	1	11	0.09	< 10	< 10	35	< 10	398	0.8	
41022	205 294	< 0.01	12	450	10	< 2	1	7	0.06	< 10	< 10	13	< 10	5630	0.8	
41023	205 294	< 0.01	3	120	14	< 2	< 1	3	< 0.01	< 10	< 10	1	< 10	2770	0.8	
41024	205 294	< 0.01	2	70	8	2	< 1	3	< 0.01	< 10	< 10	< 1	< 10	1390	0.6	
41025	205 294	< 0.01	4	70	18	4	< 1	2	< 0.01	< 10	< 10	< 1	< 10	2300	0.8	
41026-Zn5	205 294	< 0.01	1	60	12	< 2	< 1	3	< 0.01	< 10	< 10	< 1	< 10	1095	0.7	
41027	205 294	< 0.01	1	50	12	2	< 1	2	< 0.01	< 10	< 10	< 1	< 10	670	0.8	
41028	205 294	< 0.01	4	130	20	4	< 1	3	0.01	< 10	< 10	3	< 10	590	1.0	
41029	205 294	< 0.01	2	80	8	< 2	< 1	3	< 0.01	< 10	< 10	< 1	< 10	776	0.4	
41030	205 294	< 0.01	3	120	6	4	< 1	3	< 0.01	< 10	< 10	< 1	< 10	2060	0.8	
41031	205 294	< 0.01	5	100	10	2	< 1	2	< 0.01	< 10	< 10	< 1	< 10	3860	0.6	
41032	205 294	< 0.01	7	80	12	2	< 1	2	< 0.01	< 10	< 10	< 1	< 10	2920	1.0	
41033	205 294	< 0.01	7	80	8	2	< 1	2	< 0.01	< 10	< 10	< 1	< 10	3850	0.8	
41034	205 294	< 0.01	3	40	8	2	< 1	1	< 0.01	< 10	< 10	< 1	< 10	3410	0.7	
41035	205 294	< 0.01	3	60	20	6	< 1	1	< 0.01	< 10	< 10	< 1	< 10	4000	1.1	
41036	205 294	< 0.01	1	20	50	12	< 1	2	< 0.01	< 10	< 10	< 1	< 10	638	2.7	
41037	205 294	< 0.01	2	30	16	6	< 1	2	< 0.01	< 10	< 10	< 1	< 10	1205	1.6	
41038	205 294	< 0.01	2	70	10	2	< 1	2	< 0.01	< 10	< 10	< 1	< 10	3340	0.8	
41039	205 294	< 0.01	3	70	12	< 2	< 1	2	< 0.01	< 10	< 10	< 1	< 10	4430	0.5	
41040	205 294	< 0.01	2	80	12	2	< 1	2	< 0.01	< 10	< 10	< 1	< 10	1615	0.5	
41041	205 294	< 0.01	1	80	8	2	< 1	3	< 0.01	< 10	< 10	< 1	< 10	830	1.0	
41042	205 294	< 0.01	1	190	10	2	< 1	2	< 0.01	< 10	< 10	< 1	< 10	300	0.8	
41043	205 294	< 0.01	1	80	12	2	< 1	2	< 0.01	< 10	< 10	< 1	< 10	108	1.0	
41044	205 294	< 0.01	1	130	6	2	< 1	3	< 0.01	< 10	< 10	< 1	< 10	158	0.9	
41045	205 294	< 0.01	2	120	8	2	< 1	2	< 0.01	< 10	< 10	< 1	< 10	284	0.4	

DAU-94-40

1

Phreatic  
 BX  
 243-185

DAU-94-41

RAY

pyrobit

CERTIFICATION: \_\_\_\_\_



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
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SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm
41046	205 294	10	0.43	82	80	< 0.5	< 2	0.01	4.0	2	60	74	1.34	< 10	< 1	0.27	10	0.01	625	1
41047	205 294	10	0.34	18	40	< 0.5	< 2	0.01	< 0.5	< 1	67	8	0.21	< 10	< 1	0.26	10	0.01	65	< 1
41048	205 294	20	0.40	260	60	< 0.5	< 2	0.01	0.5	2	66	9	0.50	< 10	< 1	0.30	10	0.01	125	1
41049	205 294	5	0.64	324	70	< 0.5	< 2	0.04	2.5	5	51	14	1.20	< 10	< 1	0.41	10	0.03	1250	6
41050	205 294	< 5	0.50	170	70	< 0.5	< 2	0.02	1.0	3	87	14	0.41	< 10	< 1	0.34	10	0.01	420	1
41051	205 294	10	0.83	152	70	< 0.5	< 2	0.06	2.0	3	70	15	0.70	< 10	< 1	0.45	10	0.08	555	1
41052	205 294	< 5	0.80	96	50	< 0.5	< 2	0.05	5.5	4	65	26	1.02	< 10	< 1	0.45	10	0.08	290	2
41053	205 294	< 5	2.52	58	70	1.0	< 2	0.47	0.5	8	53	10	2.74	< 10	< 1	1.08	10	0.43	1790	< 1
41054	205 294	< 5	2.58	34	80	1.0	< 2	0.35	< 0.5	15	56	18	3.79	< 10	< 1	1.28	10	0.46	2050	< 1
41055	205 294	< 5	2.18	22	70	1.0	< 2	0.22	< 0.5	9	39	7	2.48	< 10	< 1	1.01	10	0.37	1625	< 1
41056	205 294	< 5	2.65	36	70	1.0	< 2	0.29	1.0	8	57	2	2.37	< 10	< 1	0.91	10	0.50	2040	< 1
41057	205 294	< 5	3.18	18	70	1.5	< 2	0.72	3.0	8	61	15	2.63	< 10	< 1	0.63	10	0.48	1760	< 1
41060	205 294	10	0.81	6	60	< 0.5	< 2	0.07	1.0	6	63	5	0.73	< 10	< 1	0.43	10	0.10	715	4
41066	205 294	< 5	1.43	14	60	0.5	< 2	0.13	1.0	3	52	4	1.18	< 10	< 1	0.56	10	0.23	770	< 1
41069	205 294	< 5	2.24	4	60	1.0	< 2	0.56	< 0.5	2	54	1	1.65	< 10	< 1	0.26	< 10	0.45	1140	< 1
41072	205 294	< 5	1.65	78	60	0.5	< 2	0.23	1.5	4	41	2	1.97	< 10	< 1	0.67	10	0.26	985	< 1
41075	205 294	< 5	1.35	38	60	0.5	< 2	0.05	0.5	4	46	3	1.79	< 10	< 1	0.72	10	0.22	1295	< 1
41078	205 294	25	0.69	212	80	0.5	< 2	0.03	4.0	6	56	7	1.06	< 10	< 1	0.37	10	0.04	1405	1
41081	205 294	< 5	1.50	36	50	0.5	< 2	0.07	1.0	4	48	2	1.39	< 10	< 1	0.66	10	0.21	715	< 1
41084	205 294	< 5	0.88	50	80	0.5	< 2	0.06	2.0	3	45	13	1.45	< 10	< 1	0.29	10	0.03	700	< 1
41087	205 294	< 5	1.32	14	40	0.5	< 2	0.11	2.5	1	37	12	0.80	< 10	< 1	0.17	20	0.14	415	< 1
41090	205 294	< 5	1.76	2	90	1.0	< 2	0.26	< 0.5	< 1	58	1	1.45	< 10	< 1	0.23	10	0.29	2020	< 1
41093	205 294	15	1.01	8	60	0.5	< 2	0.18	< 0.5	1	61	5	0.76	< 10	< 1	0.22	10	0.10	510	< 1
41096	205 294	< 5	1.81	134	20	1.0	< 2	0.35	2.0	16	44	7	1.39	< 10	< 1	0.24	10	0.31	470	< 1
41099	205 294	< 5	1.10	30	40	0.5	< 2	0.06	8.5	3	47	17	0.93	< 10	< 1	0.54	10	0.07	120	2
41100	-- --	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.
41102	205 294	< 5	0.79	26	40	0.5	< 2	0.05	1.5	4	43	4	1.46	< 10	< 1	0.40	10	0.03	110	2
41103	-- --	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.
41105	205 294	15	0.91	12	30	< 0.5	< 2	0.09	0.5	3	51	16	1.38	< 10	< 1	0.54	10	0.10	270	2
41106	-- --	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.
41108	205 294	20	0.90	6	30	< 0.5	< 2	0.08	0.5	3	59	16	1.04	< 10	< 1	0.54	10	0.10	290	2
41109	-- --	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.
41111	205 294	< 5	1.39	16	40	0.5	< 2	0.09	1.5	2	55	8	2.03	< 10	< 1	0.82	10	0.20	800	1
41112	-- --	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.
41114	205 294	< 5	1.48	12	50	0.5	< 2	0.09	1.0	2	48	6	2.18	< 10	< 1	0.83	10	0.23	1145	1
41116	205 294	< 5	2.30	22	60	0.5	< 2	0.14	1.0	3	56	12	3.83	< 10	< 1	1.35	10	0.39	2360	1

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PHREATIC  
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107-po

CERTIFICATION: \_\_\_\_\_

01/05/95 2:39PM CHEMEX LABS VAX-FAX

PAGE 08



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SAMPLE DESCRIPTION	PREP CODE	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	Ag ppm	ppm Aqua R
41046	205 294	0.01	2	180	8	2	< 1	5	< 0.01	< 10	< 10	< 1	< 10	370	0.5	
41047	205 294	< 0.01	1	60	4	< 2	< 1	4	< 0.01	< 10	< 10	< 1	< 10	66	0.3	
41048	205 294	< 0.01	1	110	8	< 2	< 1	4	< 0.01	< 10	< 10	1	< 10	112	0.4	
41049	205 294	0.01	4	300	34	2	< 1	9	< 0.01	< 10	< 10	4	< 10	410	1.4	
41050	205 294	0.01	2	130	6	< 2	< 1	6	< 0.01	< 10	< 10	1	< 10	142	0.5	
41051	205 294	0.01	4	280	6	< 2	< 1	8	0.01	< 10	< 10	7	< 10	330	0.4	
41052	205 294	0.01	5	250	6	4	< 1	7	0.01	< 10	< 10	7	< 10	226	0.3	
41053	205 294	0.06	19	910	4	< 2	2	23	0.11	< 10	< 10	39	< 10	1205	< 0.2	
41054	205 294	0.01	24	1370	6	< 2	2	21	0.14	< 10	< 10	53	< 10	1825	< 0.2	
41055	205 294	0.01	16	850	2	6	1	16	0.14	< 10	< 10	26	< 10	2300	< 0.2	
41056	205 294	0.02	14	800	6	< 2	2	21	0.11	< 10	< 10	37	< 10	1240	< 0.2	
41057	205 294	0.10	19	1070	6	2	4	36	0.10	< 10	< 10	66	< 10	1060	< 0.2	
41060	205 294	< 0.01	8	310	4	2	< 1	10	0.04	< 10	< 10	4	< 10	1325	< 0.2	
41066	205 294	0.02	7	290	4	< 2	< 1	12	0.06	< 10	< 10	8	< 10	494	< 0.2	
41069	205 294	0.06	6	480	4	< 2	2	26	0.06	< 10	< 10	26	< 10	588	< 0.2	
41072	205 294	0.03	8	510	6	4	1	17	0.05	< 10	< 10	16	< 10	724	< 0.2	
41075	205 294	0.01	8	200	2	2	1	7	0.06	< 10	< 10	14	< 10	738	< 0.2	
41078	205 294	< 0.01	4	240	32	4	< 1	8	< 0.01	< 10	< 10	3	< 10	586	1.3	
41081	205 294	0.01	5	280	2	< 2	1	8	0.04	< 10	< 10	12	< 10	470	0.2	
41084	205 294	< 0.01	4	430	8	2	1	6	< 0.01	< 10	< 10	15	< 10	634	0.5	
41087	205 294	0.01	6	240	2	2	2	10	< 0.01	< 10	< 10	15	< 10	412	< 0.2	
41090	205 294	0.04	4	160	4	< 2	1	34	0.02	< 10	< 10	10	< 10	548	< 0.2	
41093	205 294	0.01	2	210	2	< 2	1	13	< 0.01	< 10	< 10	7	< 10	358	< 0.2	
41096	205 294	< 0.01	10	880	16	2	4	13	< 0.01	< 10	< 10	44	< 10	696	< 0.2	
41099	205 294	0.01	6	280	6	4	< 1	7	0.01	< 10	< 10	7	< 10	792	0.2	
41100	-- --	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.
41102	205 294	0.01	6	410	4	4	< 1	6	< 0.01	< 10	< 10	6	< 10	1285	0.2	
41103	-- --	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.
41105	205 294	0.01	4	360	2	2	< 1	7	0.02	< 10	< 10	8	< 10	516	< 0.2	
41106	-- --	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.
41108	205 294	0.01	4	320	4	< 2	< 1	7	0.02	< 10	< 10	7	< 10	492	< 0.2	
41109	-- --	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.
41111	205 294	0.01	5	390	6	4	1	7	0.07	< 10	< 10	13	< 10	624	< 0.2	
41112	-- --	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.	miss.
41114	205 294	0.01	4	390	6	< 2	< 1	6	0.09	< 10	< 10	13	< 10	582	0.2	
41116	205 294	0.01	10	600	6	< 2	1	8	0.14	< 10	< 10	29	< 10	1120	< 0.2	

*RHY,*

*PHREATIC BX, + to PY*

*RHY*

*PHREATIC BX*

CERTIFICATION: \_\_\_\_\_

01/05/95 2:40PM CHEMEX LABS VAX-FAX PAGE 09


**GRANGES EXPLORATION LTD.  
DIAMOND DRILL LOG**

ZONE:

Page 1-13

 Property DAVIDSON Project No. 120 Depth 167.64 Date Began DEC 15, 1994  
 Hole No. DM-94-41 Co ord. 16+10W Horizontal Length \_\_\_\_\_ Date Completed DEC 18, 1994  
 Claim No. PEM 9+00S Core Size NQ II Drilled By J.T. THOMAS  
 Grid No. \_\_\_\_\_ Angle & Grid Direction 331/-46° Elevation N205.2 Logged By V.P. VAN DAMME

INTERVAL FEET / METRES	MAJOR GEOLOGICAL CODE	DESCRIPTION	INTERVAL FEET / METRES	MINOR GEOLOGICAL CODE
0-15.85 (52')		CASING / OVERBURDEN		
15.85-22.83		PHREATIC BRECCIA - LIGHT-DK GRAY - 70/30 RHYOLITE/ANDESITE FRAGS - FRAGS 0.5-3.0 CM IN E-H GRAINED MTX OF MILLED COMPONENTS - MTX SUPPORT TO CLAST CONTACT - FRAGS SUBANGULAR - RHYOLITE MASSIVE LT GY, AND MASSIVE LT GY - UNFRACTURED - BROKEN INTERVALS AND CALCIATION OVER ENTIRE UNIT - LOWER CONTACT IN BROKEN MILLED CORE - NO APPARENT MINERALIZATION - FRACTURES 15°, 45°, 58°	ACID TESTS 250 51° MEAS 42° TRUE  550 49.5° MEAS 40.5° TRUE	
22.83-52.40		RHYOLITE MASSIVE - FLOW BANDED - BRECCIATED FLOW BANDED RHYOLITE IN SITU BX - ANGULAR FRAGS 0.5-7.5 CM MTX SUPPORT CLAST CONTACT - FRAGS ROTATED BODDING ANGLES NOT CONFIRMED - LIGHT GY-TAN GY / SIL TO CLAY ± SER ALT - 1/2-1% WUSPY DENDRITIC CRYSTL AND DKS BLK CHL - PYRITE OCCURS LOCALLY AS FINE GRAINED AGGREGATES, CONTAINED/ASSOCIATED WITH BLK CHL - MINOR ANDESITE FRAGS IN UPPER INTERVAL *NO SIGNIFICANT SX* 24.43 GL APTGR RESORBED AT FINE AGGREGATES WITH OUTCR HEXAGONAL SYMMETRY 26.01 SL WT P <sub>2</sub> REPLACING BANDS AND RIMMING FRAGS - MINOR GR CHLORITE, SER OFF FRACTURES IN UPPER INTERVAL - FRACTURES AT 48°, 30° 13° - PYROBITUMEN NOTED AT 42.10	410241 HS/TMS  410421 HS/TMS  410191 WR  410361 WR	
52.40-82.01		PHREATIC BRECCIA - UPPER CONTACT IN SIL HEATED FRAC/FRMLT 20 CM AT 60° - FRAGS ANGULAR - SUBROUNDED - 50/50 RHY/AND FRAGS MTX SUPPORT CLAST CONTACT - AND FRAGS MASSIVE UNALT RHY FRAGS NK SILICEOUS MINOR RHY FRAGS FLOW BANDED MINOR SER ALT OFF ALTIMING BANDS - ALL MINOR CHL - SER ALT OFF FRACTURES	410531 WR	

**GRANGES EXPLORATION LTD.**  
**DIAMOND DRILL LOG**

ZONE:

Page **2-13**

Property **DAVIDSON** Project No. **120** Depth ..... Date Began .....  
 Hole No. **DAV-94-41** Co ord. .... Horizontal Length ..... Date Completed .....  
 Claim No. .... Core Size ..... Drilled By .....  
 Grid No. .... Angle & Grid Direction ..... Elevation ..... Logged By .....

INTERVAL FEET / METRES	MAJOR GEOLOGICAL CODE	DESCRIPTION	INTERVAL FEET / METRES	MINOR GEOLOGICAL CODE
52.40-82.01		FRACTURES AT 30°, 60°, IRREGULAR AT 15 - MINOR P <sub>1</sub> AS DISSEMINATIONS IN AND. FRAGS (LOZ 5%) - MINOR P <sub>2</sub> IN AND. FRAGS (LOZ 7%) WITH SILICA RIMS - TOTAL SK CONTENT 42% IN INTERVAL 52.40-57.80 - 57.80-58.50 PARTIAL GOLDS ZONE 60°, 15° - 58.50-82.01 - NO SIL MINZIN - 65.70 LARGE RHY (FW BND) FRAG - INTACT WALL ROCK? 20° - COMP UNCHANGED BELOW GOLDS ZONE - FREQUENT OXIDATION ZONE LIMONITE GOETHITE - PARTIALLY HEALED LOW ANGLE FAULT ZONE 73.76-79.25 - LOWER CONTACT SHARP IRREGULAR - FRACTURES IN LOWER INTERVAL 60°, 30° ~ 15°	410721 WR	
82.01-93.47		RHYOLITE - IN SITU BRECCIATED RHYOLITE FLOW BANDS - MATSIVE - LT GY - MOD GY SILICEOUS - 82.01-88.39 SERICITIZED ALONG AND OFF OF FRACTURES - FRAGS 0.5-5.0 CM - OXIDIZED ALONG FRACTURES LIMONITE GOETHITE - 88.39-93.47 CHL ALONG FRACTURES - NO APPARENT MINERALIZATION - 92.01 BLACK AMORPHOUS CARBONACEOUS INFILL - FRACTURES AT 32° 54° ~ 15° - LOWER CONTACT IN GOLDS	410871 WR  410921 HS	
93.47-127.60		PNEUMATIC BRECCIA - 50/50 RHY - AND FRAGS AS DESCRIBED IN PREVIOUS INTERVALS - PARTIAL ALTERATION SEGMENTS OF PALE GY - GREEN SIL OYOTR CHL? ; SEGMENTS OF DK GY WR UNALTERED MOD GY SEGMENTS WITH SILICEOUS FILL AND MINOR CHL 25GR MT OFF FRACTURES - 93.47-108.30 ALT AS DESCRIBED ABOVE CONTACT GRADATIONAL - NO APPARENT MIN WT ONE EXCEPTION BLKTS OF P <sub>2</sub> OBSERVED AT 107.18		

**GRANGES EXPLORATION LTD.**  
**DIAMOND DRILL LOG**

ZONE:

Page **3-13**

Property WINDSON Project No. 120 Depth ..... Date Began .....  
 Hole No. DMV-94-41 Co ord. .... Horizontal Length ..... Date Completed .....  
 Claim No. .... Core Size ..... Drilled By .....  
 Grid No. .... Angle & Grid Direction ..... Elevation ..... Logged By .....

INTERVAL FEET / METRES	MAJOR GEOLOGICAL CODE	DESCRIPTION	INTERVAL FEET / METRES	MINOR GEOLOGICAL CODE
93.47-127.60	X	<p><u>FRACTURES AT 50.60, 15.30</u>            - OCCASIONAL WHITE SPHERULITIC FRAG. PIMMING AND FR LINING GROWTH  <u>108.30 - 127.60</u>            - RELATIVELY UNALT MINOR SPHERULITES WITH SX (Py, Pb) CORES</p>	411021 WR	
127.60-131.37		<p>PHYOLITE MX - FLOW BANNED            - UPPER CONTACT IN GULGE AND BROKEN CORE            - LOWER CONTACT IN BROKEN MILLED (DRILL) CORE            - MASSIVE TO FLOW BANDED; RARE SUBHORIZONTAL QZ XALS            - REGULAR FINE MM LAMINAE PALE LT GRAY - HARD UNALTERED            - BROKEN AND OXIDIZED            - NO SIGNIFICANT SX OCCASIONAL Py ON FR SURFACES            - FRACTURES AT 60, 12-18°</p>	411221 WR  411281 WR	
131.37-152.33		<p>ANORTIC BX            - 70/30 - AND IRMY FRAGS WT AND INCREASING DOWN HOLE            - REL UNALT FRAGS; MINOR SPHERULITIC WHITE GROWTHS AS MENTIONED IN PREVIOUS LIKE INTERVAL            - NO APP SX            - FRACTURES AT 60, 30, 18 LOW ANGLE GULGE AT 138.48            - LOWER CONTACT SHARP IRREGULAR; OBRUPT AT 30°</p>	411471 WR	
152.33-156.45		<p>ANDESITE MX FLOW            - NO INTERNAL FLOW CONTACTS            - 5-7% FSP (PLAG) FINER; LOCALLY ANITGDALOIDAL (SIL FILLED) CONCENTRIC VESICULAR UNALT            - NO APP SX            - 40° GULGE AT 154.48 FOR 20CM            - FRACTURES 15°, 26°, 54°            - BRACIATED ISOLATED 154.48            - GULGE AT 156.45 AT LOW ANGLE (PARTIALLY HEALED) ~15°</p>	411531 WR	



# GRANGES EXPLORATION LTD. DIAMOND DRILL LOG

ZONE:

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Property DAVIDSON Project No. 120 Depth ..... Date Began .....

Hole No. DAV-94-41 Co. ord. .... Horizontal Length ..... Date Completed .....

Claim No. .... Core Size ..... Drilled By .....

Grid No. .... Angle & Grid Direction ..... Elevation ..... Logged By .....

INTERVAL FEET / METRES	MAJOR GEOLOGICAL CODE	DESCRIPTION	INTERVAL FEET / METRES	MINOR GEOLOGICAL CODE
<b>156.45-167.64</b>		<b>PARBATIK BX</b>		
		<b>- VERY GRADUAL INFLUX OF FELSIC FRAGS BETWEEN</b>	<b>411651</b>	
		<b>156.45 - 159.08 - 70/30 FELSIC / MARL RECOVERED</b>	<b>WR</b>	
		<b>- 159.08 - 167.64 ZONE OF MUD SILICIFICATION</b>		
		<b>AND FRAGS BLEACHED CLAY M/T RMT FRAGS FLEW ONDD, M/</b>		
		<b>UNILT OCL CHL7 SOLR M/T CURTAGE RHY FRAGS</b>		
		<b>- NO APP SX</b>		
		<b>- FRACTURES AT 60°/32°</b>	<b>411631</b>	
		<b>- 163.14 - 163.50 BECCRIATED (TIGSOM) MX ANDESITE</b>	<b>HS</b>	
		<b>WELL ROCK WATER CONTACT IRREGULAR HIGH ANGLE</b>		
		<b>LOWER CONTACT IRREGULAR 60°</b>		
		<b>- 163.52 PROBITUMEN WITH SL</b>		






**GRANGES EXPLORATION LTD.  
DIAMOND DRILL RECORD**

Property VALLEYVIEW Project No. 120 Depth ..... Date Began .....

Hole No. DIV-94-41 Co ord. .... Horizontal Length ..... Date Completed .....

Claim No. .... Core Size ..... Drilled By .....

6-13 Grid No. .... Angle & Direction ..... Elevation ..... Logged By .....

INTERVAL FEET/METRES	NUMBER	WIDTH	Au.	Ag.	Cu.	Zn.	WIDTH X ASSAY					AVERAGES								
							WIDTH	Au.	Ag.	Cu.	Zn.	WIDTH	Au.	Ag.	Cu.	Zn.				
56.00 - 57.00	41056	100*																		
57 - 58	57	'																		
58 - 59	58	'																		
59 - 60	59	' *																		
60 - 61	60	'																		
61 - 62	61	'																		
62 - 63	62	'																		
63 - 64	63	' *																		
64 - 65	64	'																		
65 - 66	65	'																		
66 - 67	66	' *																		
67 - 68	67	'																		
68 - 69	68	'																		
69 - 70	69	' *																		
70 - 71	70	'																		
71 - 72	71	'																		
72 - 73	72	' *																		
73 - 74	73	'																		
74 - 75	74	'																		
75 - 76	75	' *																		
76 - 77	76	'																		
77 - 78	77	'																		
78 - 79	78	' ↑																		
79 - 80	79	'																		
80 - 81	80	'																		
81.00 - 82.01	81	101*																		
82.01 - 83.00	82	99																		
83 - 84	83	100																		
84 - 85	84	' *																		
85 - 86	85	'																		
86 - 87	86	'																		
87 - 88	87	' *																		
88 - 89	88	'																		
89 - 90	89	'																		
90 - 91	90	' *																		
91 - 92	91	'																		
92.00 - 93.47	92	147																		
93.47 - 94.00	93	53*																		
94 - 95	94	100																		
95 - 96	95	'																		



**GRANGES EXPLORATION LTD.**  
**DIAMOND DRILL RECORD**

Property MTV IDSON Project No. 120 Depth ..... Date Began .....  
 Hole No. DMV-94-41 Co ord. .... Horizontal Length ..... Date Completed .....  
 Claim No. .... Core Size ..... Drilled By .....  
 Grid No. .... Angle & Direction ..... Elevation ..... Logged By .....

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INTERVAL FEET/METRES	NUMBER	WIDTH	Au.	Ag.	Cu.	Zn.	WIDTH X ASSAY					AVERAGES								
							WIDTH	Au.	Ag.	Cu.	Zn.	WIDTH	Au.	Ag.	Cu.	Zn.				
96.00 - 97.00	41096*	100																		
97 - 98	97	'																		
98 - 99	98	'																		
99 - 100	99*	'																		
100 - 101	100	'																		
101 - 102	101	'																		
102 - 103	102*	'																		
103 - 104	103*	'																		
104 - 105	104	'																		
105 - 106	105	'																		
106 - 107	106*	'																		
107 - 108	107	'																		
108 - 109	108	'																		
109 - 110	109*	'																		
110 - 111	110	'																		
111 - 112	41	'																		
112 - 113	112*	'																		
113 - 114	113	'																		
114 - 115	114*	'																		
115 - 116	115	'																		
116 - 117	116*	'																		
117 - 118	117	'																		
118 - 119	118	'																		
119 - 120	119*	'																		
120 - 121	120	'																		
121 - 122	121	'																		
122 - 123	122*	'																		
123 - 124	123	'																		
124 - 125	124	'																		
125 - 126	125*	'																		
126 - 127	126	'																		
127.00 - 127.60	127	60																		
127.60 - 129.00	128*	140																		
129 - 130	129	100																		
130 - 131.37	130*	137																		
131.37 - 132.00	131	63																		
132 - 133	132	100																		
133 - 134	133*	'																		
134 - 135	134	'																		
135 - 136	135	'																		



**GRANGES EXPLORATION LTD.**  
**DIAMOND DRILL RECORD**

Property WINDYBUSH Project No. 120 Depth ..... Date Began .....

Hole No. DAV-94-41 Co ord. .... Horizontal Length ..... Date Completed .....

Claim No. .... Core Size ..... Drilled By .....

Grid No. .... Angle & Direction ..... Elevation ..... Logged By .....

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INTERVAL FEET/METRES	NUMBER	WIDTH	Au.	Ag.	Cu.	Zn.	WIDTH X ASSAY						AVERAGES							
							WIDTH	Au.	Ag.	Cu.	Zn.	WIDTH	Au.	Ag.	Cu.	Zn.				
136.00-137.00	41136																			
137-138	137*																			
138-139	138																			
139-140	139																			
140-141	140*																			
141-142	141																			
142-143	142																			
143-144	143*																			
144-145	144																			
145-146	145																			
146-147	146																			
147-148	147*																			
148-149	148																			
149-150	149																			
150-151	150*																			
151.00-152.33	151																			
152.33-153.00	152																			
153-154	153*																			
154-155	154																			
155.00-156.45	155																			
156.45-157.00	156*																			
157-158	157																			
158-159	158																			
159-160	159*																			
160-161	160																			
161-162	161																			
162-163	162*																			
163-164	163																			
164-165	164																			
165-166	165*																			
166-167	166*																			
167-167.64	167*																			



GRANGES EXPLORATION LTD.

## DIAMOND DRILL LOG

9-13

PROPERTY: DAVIDSON

PROJECT NO. 120

HOLE NO. DAV-94-41

DEPTH.

CORE SIZE

FROM	TO	INTERVAL	MEASURED	RECOVERY	>100mm	RQD
15.85(52')	17.68	183	97	53.0	12	6.6
	18.59	91	91	100	37	40.7
	19.51	92	82	89.1	∅	∅
	20.73	122	91	74.6	27	22.1
	21.34	61	41	67.2	∅	∅
	22.86	152	100	65.8	15	9.9
	24.38	152	152	100.0	121	79.6
	25.76	138	126	91.3	69	50
	27.43	167	167	100	140	83.8
	28.65	122	97	79.5	36	29.5
	28.96	31	27	87.1	∅	∅
	30.48	152	152	100	108	71.1
	32.61	213	213	100	154	72.3
	35.66	305	305	100	217	71.1
	38.71	305	300	98.4	266	87.2
	41.15	244	208	85.2	162	66.4
	42.67	152	146	96.1	110	72.4
	45.72	305	294	96.4	239	78.4
	47.24	252	249	98.8	137	54.4
	49.99	275	275	100	210	76.4
	51.21	132	75	56.8	∅	∅
	54.25	304	252	82.9	110	36.2
	57.00	275	242	80.8	164	59.6
	59.44	244	232	95.1	69	28.3
	61.57	213	213	100	171	80.3
	62.79	122	122	100	98	80.3
	64.31	162	139	85.8	81	50.0
	66.75	244	232	95.1	121	49.6
	68.28	153	122	79.7	92	60.1
	70.10	182	153	84.1	70	38.5
	71.02	92	92	100	49	53.3
	73.76	274	269	98.2	178	65.0
	75.59	183	146	79.8	64	35.0
	76.50	101	73	72.3	∅	∅
	79.25	275	273	99.3	171	62.2
	81.08	183	161	88.0	67	36.6
	82.91	183	183	100	80	43.7
	85.96	304	242	79.6	142	46.7





GRANGES EXPLORATION LTD.  
DIAMOND DRILL LOG

11-13

PROPERTY DAVIDSON  
PROJECT NO. 120  
HOLE NO. DAV-94-44  
DATE:

LENGTH  
CORE SIZE

FROM	TO	ROCK	MSU	FROM	TO	ROCK	MSU	FROM	TO	ROCK	MSU
15.85	19.51		0.29	59.44	61.57		0.05	99.06	102.11		0.04
	20.73		0.19		62.79		0.14		105.16		0.04
	21.34		∅		64.31		0.06		108.20		0.11
	22.86		0.17		66.75		0.15		109.73		0.17
	25.76		0.21		68.28		0.09		112.78		0.18
	27.43		0.28		71.02		0.10		114.91		0.32
	28.65		0.10		73.76		0.10		117.96		0.35
	30.48		0.26		75.59		0.07		120.40		0.22
	32.61		0.18		76.50		0.06		123.44		0.32
	35.66		0.07		79.25		0.05		126.19		0.20
	38.71		0.02		81.09		0.09		129.24		0.11
	41.15		0.02		82.91		0.14		131.37		0.03
	42.67		0.03		85.96		0.03		134.11		0.26
	45.72		0.03		88.39		0.03		135.64		0.13
	47.24		0.01		91.44		0.07		138.38		0.27
	49.99		0.07		92.66		0.03		140.51		0.26
	51.21		0.03		93.27		0.05		142.65		0.17
	54.25		0.07		94.49		0.04		145.08		0.22
	57.00		0.21		97.54		0.04		148.13		0.23
	59.44		0.14		99.06		0.04		149.96		0.15







GRANGES EXPLORATION LTD.  
**DIAMOND DRILL LOG**  
 13-13

PROPERTY DAVIDSON  
 PROJECT NO 120  
 HOLE NO DAV-94-44  
 DATE

DEPTH  
 CORE SIZE

BOX #	FROM	TO	BOX #	FROM	TO	BOX #	FROM	TO
1	15.85	20.73	21	119.80	124.22	41		
2		26.30	22		129.48	42		
3		31.65	23		133.93	43		
4		37.10	24		139.03	44		
5		42.69	25		143.88	45		
6		48.10	26		149.25	46		
7		53.18	27		154.48	47		
8		58.68	28		158.92	48		
9		63.67	29		164.15	49		
10		68.68	30		167.64	50		
11		73.69	31			51		
12		78.54	32			52		
13		83.87	33			53		
14		88.67	34			54		
15		93.52	35			55		
16		98.10	36			56		
17		103.30	37			57		
18		108.50	38			58		
19		113.62	39			59		
20		119.80	40			60		

DDH