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A Downhole PEM Probe and Diamond Drilling Report on the Property of

DAVID J. MEUNIER

Loveland Township Porcupine Mining Division Ontario

By

David J. Meunier

DAVID J. MEUNIER
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(705) 235-5426

July 1990

L-0002-90

OPAP Grant OP90-411

Two other Individuals, upon receiving government approval redirected parts of their grant monies to the Loveland Property. They are R.P. Bowen, OP90-406 and David Fenato, OP90-439.

LOCATION AND ACCESS

The property consists of seventy (70) claims, located in Loveland Township, (M-293), Porcupine Mining Division. Approximately 24 km northwest of the downtown area of the City of Timmins. Access is via the Kamiskotia Highway turning onto a gravel forest access road just before the old Kam-Kotia Mine. The property is approximately 7 km north of this turnoff and the road itself runs right through the claim group.

WORK PERFORMED

Initial work performed was manual in nature, consisting first of chaining a grid in preparation for a deep penetrating ground electromagnetic survey using the UTEM method. This time domain system, which is a step response (not a pulse system) was developed by Lamontagne Geophysics and is particularly good in looking for deep seated or blind conductors. The results of this survey were submitted under an earlier grant.

Since the unit is capable of measuring down over two thousand feet it is extremely important that the utmost care be taken when chaining survey lines to minimize the possibility of recording false conductors. To this end the slope chainage method was employed. See part IV of Daily Reports for specific days.

The second stage of manual work involved relocating old drill holes R-80-A-2 and R-81-A-3 so that a down-the-hole PEM survey could be performed. This was facilitated by reconstructing parts of the old Gulf Minerals Canada Ltd. baseline and more specifically line 76+00 south along which the two above mentioned drill holes were collared.

After locating these holes sand and debris was removed from around the collars and a dummy probe was lowered in the hole by means of a wire cable attached to one end of the probe and the other to a hand operated winch. This procedure is routinely followed prior to conducting the actual downhole survey to minimize the loss of the actual survey probe itself through debris falling into the hole or cave-in.

The third and final stage of manual labor involved assisting in the laying out of a large loop in preparation for the down hole PEM survey of holes R-80-A-2 and R-81-A-3. Finally, time was spent trying to locate the collar of hole R-80-A-1. This work was performed by the author and Mr. Harold Durham, please refer to Part IV of the Daily Report for specific days.

Results of the borehole PEM survey of drill holes R-80-A-2 and R-81-A-3 were conducted by Val D'or Geophysics Ltd. Both holes were surveyed along their entire lengths with no conductors detected. Since this survey technique is only capable of detecting conductors within a 500 foot radius of the probe's location, it follows that conductors could still be in the vicinity but just outside the detection limits. Included in this report are Figures 9 and 10 which are profiles of the survey data and Figure 11 which is a cross-section of the holes.

DIAMOND DRILLING

Finally, a one hole diamond drill program was initiated to test a weak, deep seated UTEM anomaly believed to be positioned at about 7+50 m east on line 10+00 south. Hole LDM-2-90 was drilled using BQ core, collared at 7+75 m east on line 10+00 south and drilled at an angle of -77° along the line at azimuth 246° to a depth of 1,306 feet.

The conductor, which we attempted to intersect was believed to be in close proximity to a very important altered and mineralized rhyolite-andesite contact. This same contact was intersected by Gulf Minerals hole R-80-A-2 and located approximately 600 feet north of LDM-2-90. The Gulf hole intersected significant alteration as evidenced by intense silicification with the rhyolite approaching 80% SiO₂ in places and low Na₂O with some sections having less than 0.1%. Additionally, anomalous values in Cu, Pb and Zn over 7.5 feet were reported at this same contact. This contact is interpreted to be the same horizon in which past producers Kam-Kotia, Canadian Jamieson and Jameland were located. Hence any conductors along this horizon deserve special attention.

Since the UTEM anomaly that was detected in an earlier program had a limited strike length of 150 meters and a width of ±15 meters and a depth of 150 meters it became much more difficult to predict it's precise location and therefore it may have been overshot by drill hole LDM-2-90.

CONCLUSIONS AND RECOMMENDATIONS

While the borehole PEM survey of holes R-81-A-3 and R-80-A-2 did not detect any conductors, the drilling of hole LDM-2-90 which was funded by this OPAP grant did meet with some success. For instance, a number of rhyolite-andesite contacts were intersected with much more Na₂O depletion recorded over greater widths within the rhyolites, along with higher SiO₂ counts than previously noted in earlier drilling further to the north. For example, 15 out of 32 samples analyzed had Na₂O counts lower than 1% with eight of those having less than 0.5% and 16 out of 32 samples had SiO₂ counts higher than 75% with 3 of those having values greater than 79%. Furthermore, a number of anomalous zones of Cu-Pb-Zn were encountered, i.e.:

5,000 PPM Zn from 1,030' to 1,031'

232 PPM Pb from 1,030' to 1,031'

535 PPM Cu from 337' to 339'

It is recommended that the entire contact area be surveyed using the deep penetrating and very successful UTEM instrument to search out and detail any blind conductors that may exist. Given that the types of EM survey equipment used by the previous owner and explorer of the property, Gulf Minerals Canada Ltd., did not have the depth penetration of the present generation of equipment, i.e. 150 m vs 800 m, it is quite possible that conductors exist but were out of range of the older equipment.

The survey should be performed over lines spaced 100 meters apart with readings taken every 50 meters along the line and every 25 meters when detailing areas that appear anomalous.

Depending on results diamond drilling may be contemplated.

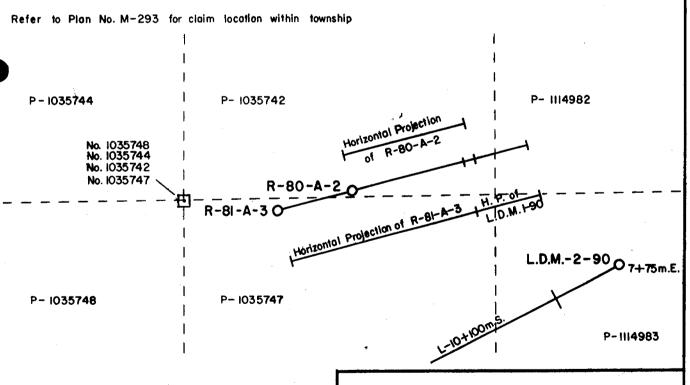
Alternatively one could systematically drill the entire contact, arriving first at the most efficient program vis a vis hole spacings and depths by studying the Kam-Kotia and Jamieson deposits that were formed only a few miles south of the property.

These past producers fall into a larger family of orebodies known as volcano-clastic massive sulfide deposits whose characteristics are well known thereby making such a study easier.

Once having determined the spacing and depth of each hole, they would then be routinely surveyed with a downhole PEM unit looking for any conductors existing either off to the sides or below each hole. Additionally lithogeochem analysis would be done on selected sections of drill core to detect any alteration haloes extending out from nearby orebodies and thereby assist in zeroing in on the orebody proper.

HORIZONTAL PROJECTION OF DDH'S





DAVID J. MEUNIER LOVELAND PROPERTY

Location of Diamond Drill Holes R-81-A-3 R-80-A-2

Surveyed by Borehole PEM Survey

SCALE = 1:4800





A Diamond Drill Report on the Property of

DAVID J. MEUNIER

Loveland Township Porcupine Mining Division Ontario

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R.P. Bowen, P.Eng.

R.P. BOWEN ENGINEERING INC. P.O. Box 5010, PMS, South Porcupine, Ontario PON 1KO

(705) 235-5139

15 November 1990

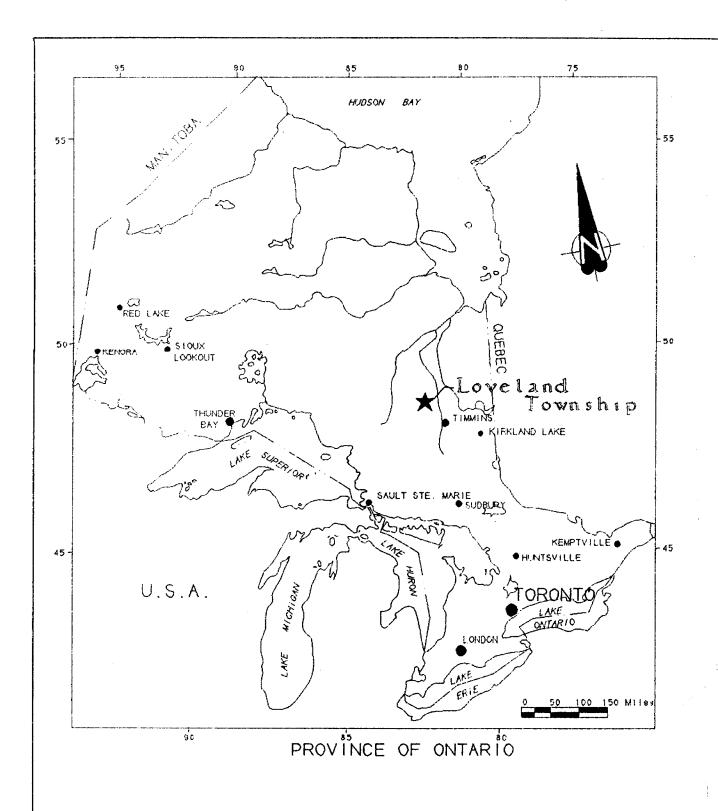
L-0002-90

SUMMARY

This report describes the results of a diamond drill hole drilled in Loveland Township under OPAP Grant Registration No. OP90-411 allotted to David J. Meunier. In addition, grant money from OPAP Grant No. OPG90-334 and OPG90-257 was transferred to this program. The hole was drilled on claim P-1114983, see claim map attached. The hole was drilled with BQ size core and to a depth of 1,306 feet. Overburden was 130 feet deep.

Thirty two whole rock and trace element analyses were done on drill core from this hole by Barringer Laboratories using the ICAP (inductively coupled argon plasma) method. Assay results are appended at the end of this report.

In general, no highly anomalous values were obtained and no massive sulfide zones encountered, however, alteration was noted in several places. The alternating mafic and felsic units indicate that the area is a favorable setting for massive sulfide mineralization.



R.P. BOWEN ENGINEERING INC.

CITEGORY

DAVID J. MEUNIER

TITLE:

REGIONAL LOCATION MAP

Dote: SEP 1990 Scote: 1**150 ml N.T.S.: 42A

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₽Ŧ	AMP	NR.PRIA	* * *	F*****	**** ***	****	****	*****	****	****	***	***	****	***:	****	*** *	****	***	
DRILL	HOLE NO.	LDM-2-90	COMP	PANY David	J. Meunier		P1	ROPERTY Lo	veland				NTS	42A]	PAGB 1 of	f 5	
		******								* * * *				***	****				
		S (m) - L 3280.8 S *********	DEPARTURE 7+										. 1,306'	- L - L - L - L - L	باي بإن بإن اساك		ATION 960		
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DRPTH	0 ' A	AZIMUTH 246° DIP -7	7° DEPTH 200	; AZIMUTH	246' DIP -	-75° DB	PTH 600'	AZIMUTH	246' D	IP -75°	DBPTH	1,306'	AZIMUTH 2	246	DIP -75	• DEPTI	il /	AZIMUTH	DIF
	****	********	******	*****	k*****	****	****	*****	****	* * * *	***	***	****	***	****	****	****	***	
	DBY R.P.		CLAIM NO. P-					Porcupine		J L L L L L L L			6 Nov.					Nov. 1990	
		************* NY Dominik Drilling			******* G In hole	****	****		CARRAR CORESTOI					***	****	****	****	****	
***	****	*******	*****			****	****	*****	****	****	***	****	****	***	****	****	****	****	
FOOT	TAGE	ROCK TYPE AND DE	SCRIPTION				CORE	PERCE	NT	SAI	1PLB			ANAL	YTICAL E	ESULTS			
From	<u>To</u> 130	Overburden, glac	oial till can	d and drava			ANGLE	SULFIDES	Number	Fron	<u>fo</u>	Length	<u>Au</u>	Ag (lu Pb	Zn	As Sb		
ν	140	overpuruen, grac	iai biliy sanc	I anu grave	I			_											
130	185	Intermediate pyr fractures, Mediu 134' veinlet 1" q	um gray - browi	mish cast	e alteration	n along	50°	±1% =	S-22	176.0	178.0	2	(3 8	80	118			
186	227	Pelsic to interm contacts. 186's 191' po frags			phyritic nea	ir ,	20°		S-1	188.5	193.5	5		3 27	110	53			
227	238	Mafic zone, gree 232-234 quartz ve							S-23 S-24		228.0 234.0			(3 75 (3 296		1150 630			
238	258	Pelsic pyroclast Medium gray - bro Last 2' good bx p	ownish cast	s, streaks:	and frags		50°		S-3	256.7	258.3	1.6	,	(3 93	120	20	ı		
258	277	Mafic metavolcar lower contact	aic - massive	to porphyri	tic, 30° at				S-4	267.4 2	73.0	5.6		(3 49	60	102			
277	300	Pelsic pyrociast	ties - etz at :	contact ± p	o, contact as	ngle 45°			8-5	288.0 2	93.0	5	(3 133	130	77			:
300	321	Intermediate to cast, fragments of 311' qv & po 315' 0.5" qv 320' 0.5" qv		canic - qui	te altered,	brownish			8-25	309.0	310.0	1		(3 6	8 (30	97			

************	*************************	
DIAMOND DRIL	I TOG	· * * * * * * * * * * * * * * * * * * *
*******	T.O.C. **********************************	
DA A MAT OR GIOR TITAL	**************************************	• ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~

	HOLE NO. K****	LDM-2-90 COMPANY David J. Meunier *************** ROCK TYPE AND DESCRIPTION	****	OPBRTY Love	****	****	***	****	NTS * * * *		***			***	2 of 5 <****
	aor OT	ROOM TIPE AND DESCRIPTION	CORB ANGLE	PERCEN			MPLB	t	,			[CAL R]			
21	337	Mafic metavolcanic 325' qv po & K-feldspar, py cubes to 0.05" Contact angle roughly perpendicular to core	ANGUA	SULFIDES	S-6		326.5		AU	_ Ag ⟨3		<u>Pb</u> ⟨30	<u>2n</u> 93	<u> </u>	Sb
37	362	Felsic pyroclastics - bleaching common, more extensive down hole, becomes lighter and more orange.	the		S-26 S-7 S-8 S-2?	337.0 343.5 355.5 360.0	348.5 360.0	2 5 4.5 2		<3 <3 <3 <3	535 29 20 6	50 120 50 (30	39 25 26 27		
62	366.5	Mafic metavolcanics 364' qv-cal ± 6"													
66.5	368	Mafic metavolcanics - Pyrrhotite vein about 6", sericite alteration. Brownish cast		٦,	S-28	366.5	368.0	1.5		(3 .	. 95	40	75		
68	371	Mafic metavolcanics silicified breccia, sericite, po-cp 368-369 mafic material			8-29	369.0	371.0	2	•	(3	29	80	60		
71	379	Mafic to intermediate metavolcanic - silicified, brownish sericitic alteration	50'		•										
79	403	Mafic metavolcanics - minor alteration Greensih gray, banded contact 55°													
3	417	Pelsic metavolcanics - pyroclastics below 417' Silicified, sericitized, brownish cast, po,cp		1 - 3 %	S-30 S-9	403.0 406.5	405.0 411.5	2 5		<3 <3	7 4 2 4	160 100	43 98	,	
17	505	Pelsic pyroclastics, lapilli tuff Becomes gray below 450° Silicified zone, some fragments altered brownish, sericite?			S-31 S-10	421.0 449.0	423.0 454.0			(3 (3	29 15	80 80	95 74		
)5	833	Mafic metavolcanics, massive, feldspar porphyritic in places Appears zones, possible pillow selvages, more massive to media down hole Medium greenish gray 524' qv, 1' + K-feldspar 532' qtz-cal vein 2"	l n		8-11	512.3	517.3	5		(3	33	(30	77		

951 952

Diabase

***	*****	TO THE TITE TO CE *********************************													
FOOT From	,,,,,,	wood titl and Deconition	COKR	PRECRI	ΥT	SAF	(PLB			AM	IALYT	ICAL R	RSULTS		
11211		552' qv 1"	<u> </u>	SULFIDES	Number	From	<u>To</u>	Length	<u>Au</u>	Ag	Cu	<u>Pb</u>	2n	_ <u> </u>	Sb
		580' qv, blebs cp 1" 585' 6" qv ± cal, narrow (1" bleached zones indicate hydrothermal aiteration along fractures			8-12	574.8	579.1	4.3		(3	5 3	50	85		
		610-611' medium gray zone	40												
		621' some breccia and qts-cal veins	30												
		634' 1' qv i cal 659' 2" cal vein	30°											•	
		667' bleached zone about 1'	40												
		671-681' calcite veins, minor epidote alteration 722' contact between fine grained and medium grained portions 35' 725.5' contact 30' to 727.5, black with narrow calcite veins, top? Transition into greenish gray basalt, similar to material above 72	25.5†	٦,	S-1 3	703.7	708.5	4.8		⟨3	48	40	76		
		760' Breccia, calcite about 4" 763' 2" bleached zone	40'												
833	841	Felsic pyroclastics, py Medium gray to black, some bleached and silicified zones	90°	1-3%	S-14	833.3	838.3	5		⟨3	43	90	53		
841	852	Mafic metavolcanics, contact almost transitional													
852	940	Pelsic pyroclastics - ash to lapilli textures			8-15	861.4	886.4	5		⟨3	39	110	91		
		Contact 70', gradational over 4'			8-16	880.5		1.6			15		96		
		887' 6" bleached zone becomes volcanic breccia 895-900' py		1-3%	8-17	913.4	918.4	5			22		70		
940	941	Diabase, very fine grained, contact to core, clearly intrusive													
941	943	Felsic pyroclastic breccia													
943	945.5	Diabase, upper contact to core, lower contact 1 to core													
	951	Felsic pyroclastics - tuff, lapilli tuff													

R.P. BOWEN	ENGINEERING	INC.
************	**************	**********************
DIAMOND DE	TIT TOO	***************************************

	HOLE NO.	TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	Pi	ROPRRTY La	haelava				UTC	5 49 L				DAGD	1 . 0 .
F00	TAGE	ROCK TYPE AND DESCRIPTION	CORE	PERCE	₹T	SA	MPLB	****	****				***; BSULTS	***	*****
<u>Prom</u> 952	992	Felsic pyroclastic breccia, minor diabase 975'sp bleb 988-990'cherty, silicified zone, contact 40°	ANGLB	SULFIDES	Number S-18			Length 4.5	<u>Au</u>	<u>Ag</u> (3	<u>Cu</u> 9		<u>Zn.</u> 106	As	Sb
992	998	Mafic metavolcanics, basalt, contact 60°										•			
998	1002	Pelsic pyroclastics, transitional to basalt													
1002	1009	Mafic metavolcanics, basalt, contact 20°													
1009	1031	Contact with another basalt, lower contact 50°				1019.4 1		5		(3	8	80	118		
1031	1058	Felsic pyroclastics, lapilli to breccia Occassional py-cp blebs, contact 40°				1030.0 1 1046.6 1		1 4.7		(3 (3	352 27	230 110	5040 53		
1058	1089	Diabase, contact 75°				٠									
1089	1093	Bleached felsic pyroclastics, contact 40°													
1093	1219	Diabase, 126' thick, lower contact 20'													
1219	1223	Bleaached (about 1') felsic pyroclastics 1224-1226 part of core diabase, lower contact 40°	•		S-21	1218.1 1	222.8	4.7		₹3	83	60	48		
1223	1231	Mafic metavolcanics 1228' 6" diabase		·											
1231	1233	Felsic zone, silicified, sericitized?													
1233	1281	Mafic metavolcanics, possibly pillowed, selvages and hyaloclastite, core overdrilled													

******	. LDM-2-90		ROPERTY Loveland **********	k*****	******	/TM * * * *	S# 42 <i>1</i> k***	\ k * * *	***	* * *	PAGB ***	5 of 5 *****
FOOTAGE	ROCK TYPE AND DESCRIPTION	CORE	PERCENT	SAMPLI				NALYTI				****
From To		ANGLB	SULFIDES Number	Prom T	o Length	Au	Ag	Cu	Ph	Zn	As	Sb
1281 1301	Pelsic pyroclastics, tuff-lapilli tuff ± breccia 1283' 6" bleached zone 1295' ± qtz breccia, sphalerite alteration, contact 50'								6.5			
1301 1306	Mafic metavolcanics, minor otz-carh veinlets											

T.D. 1306'

BARRINGER LABORATORIES

5735 McADAM ROAD MISSISSAUGA, ONTARIO CANADA L4Z 1N9 PHONE: (416) 890-8566 FAX: (416) 890-8575

19-Dec-90

R.P.BOWEN ENGINEERING INC P.O.Box 5010 PMS South Porcupine, Ontario PON 1K0

Page: 1 Copy: 1 of 2 Set: 1

Attn: P.Bowen

Received: 12-Dec-90 12:26

Project:

PO #:

Job:	901384							Stat	us:	<u>Final</u>
<u>Sample</u>	SiO2 ICAP %	Al203 ICAP	Fe2O3 ICAP	MgO ICAP %	CaO ICAP %	Na2O ICAP	K2O ICAP	TiO2 ICAP	P2O5 ICAP	LOI FURN
S-1	75.7	11.1	3.66	0.68	3.41	0.81	3.01	0.200	0.07	2.10
S-2	77.8	10.8	2.52	0.19	1.39	2.64	3.30	0.134	<0.02	
S-3	76.1	11.1	4.49	0.39	2.62	3.91	1.16	0.120	<0.02	
S-4	56.0	16.4	8.55	3.80	, 6.76	4.58	0.75	0.816	0.16	
S-5	75.7	11.9	3.66	0.29	3.57	0.96	3.59	0.157	<0.02	
S-6	57.9	16.4	7.74	3.63	5.39	4.68	1.42	0.847	0.16	
-7	74.0	11.7	3.20	0.36	5.47	0.58	2.01	0.150	0.07	0.75
S-8	61.6	17.6	2.14	0.13	2.83	0.34	14.2	0.175	<0.02	1.05
S-9	77.0	11.7	2.99	0.27	1.44	0.47	4.36	0.146	<0.02	1.65
S-10	79.1	10.5	2.09	0.13	2.25	0.36	5.02	0.120	<0.02	0.75
S-11	55.6	16.1	9.35	5.75	6.02	3.73	1.52	0.819	0.14	1.75
S-12	55.1	16.1	9.32	5.45	7.44	4.11	0.33	0.831	0.16	1.75
S-13	54.5	15.6	8.55	5.04	8.32	2.99	0.51	0.791	0.16	1.50
S-14	79.1	10.8	2.30	0.57	1.33	4.33	1.51	0.132	<0.02	0.65
S-15	76.3	10.2	2.95	0.61	4.14	0.63	3.30	0.131	<0.02	2.40
S-16	75.9	11.2	2.37	0.60	3.44	0.24	4.39	0.137	<0.02	2.35
S-17	76.3	11.5	2.52	0.83	2.55	0.59	3.99	0.135	<0.02	1.95
S-18	77.8	10.8	2.82	0.58	2.06	0.80	3.83	0.125	<0.02	1.80
S-19	74.8	10.8	2.62	0.57	2.04	0.78	3.77	0.125	<0.02	3.50
S-20	76.5	11.0	2.39	0.51	1.34	3.64	1.72	0.128	<0.02	1.35
S-21	72.3	11.0	4.42	1.38	3.22	3.91	1.72	0.410	0.07	2.20
S-22	75.0	13.2	2.32	0.76	0.16	0.11	4.33	0.260	<0.02	2.15
S-23	56.0	16.0	8.45	3.35	7.53	3.81	0.99	1.10	0.18	
S-24	69.7	2.85	2.82	0.59	12.3	0.49	1.11	0.128	0.07	7.60
S-25	59.6	12.8	10.1	3.88	8.13	1.85	0.98	1.03	0.18	
S-26	78.5	10.1	4.35	0.32	1.36	4.80	0.24	0.119	<0.02	0.70
S-27	59.6	17.2	0.84	0.22	5.20	1.06	12.4	0.235	0.07	3.65

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5735 McADAM ROAD MISSISSAUGA, ONTARIO CANADA L4Z 1N9 PHONE: (416) 890-8566 FAX: (416) 890-8575

19-Dec-90

R.P.BOWEN ENGINEERING INC P.O.Box 5010 PMS South Porcupine, Ontario PON 1K0

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1

Attn: P.Bowen

Received: 12-Dec-90 12:26

Project:

PO #:

Job:	901384	·									Statu	s:	Final
	SiO2	Ala	203	Fe203	MgO	Ca	aO	Na20	K20	Ti)2	P205	LOI
	ICAP	ICA	AΡ	ICAP	ICAP	ICA	AΡ	ICAP	ICAP	ICA	ΑP	ICAP	FURN
<u>Sample</u>	<u> </u>	9	<u> </u>	<u>%</u>	%_		<u> </u>	%	%		<u> </u>	<u> </u>	_ %
S-28	54.9	1.2	7.4	9.15	2.2) F	3.93	2.64	7.5	:c 0	614	0.11	2.00
S-29	67.8).4	3.66	1.1		5.81	1.82	2.1		203	0.11	
S-30	79.7		9.07	3.33	0.4		2.13	0.31	3.1			<0.07	3.75
S-31	76.7		1.6	2.82	0.1		3.88	0.34	3.5		115 139		
S-32	52.8		5.6	9.80	1.2							<0.02	
3-32	32.0	1 i	,.0	9.00	1.2	i9 (6.69	5.90	0.9	99 0.	954	0.14	3.85
	Ag	Ba	Cd	Co	\mathtt{Cr}	Cu	Mn	Ni	Pb	Sr	V	Zn	Zr
	ICAP	ICAP	ICAF	ICAP	ICAP	ICAP	ICAF	ICAP	ICAP	ICAP	ICAP	ICAP	ICAP
Sample	_ppm_	ppm	_ppm	ppm	ppm	_ppm_	ppm	<u>ppm</u>	_ppm	<u>ppm</u>	_ppm	<u>ppm</u>	ppm
S-1	<3	257	<5	<30	172	21	351	<30	80	36	9	91	310
S-2	<3	736	< 5	<30	335	16	295		100	57	<5		340
S-3	<3	363	<5	₹30	337	93	257		120	92	<5		330
S-4	<3	186	< 5	₹30	138	49	980		60	145	153		140
S-5	<3	574	<5	<30	227	133	319		130	96	<5		420
S-6	<3	268	<5	<30	71	19	954		<30	168	147		160
S-7	<3	358	<5	<30	240	29	344		120	167	9		410
S-8	<3	1660	<5	<30	89	20	726		50	83	27		480
S-9	<3	831	<5	<30	113	24	201		100	27	<5		380
S-10	<3	1000	<5	<30	200	15	299		80	132	<5		320
S-11	<3	350	<5	30	145	33	1000	80	<30	123	170	77	130
S-12	<3	68	<5		158	53	1030		50	154	169		130
S-13	<3	109	<5		143	48	988		40	158	165	76	130
S-14	<3	311	<5		266	43	171	<30	90	48	<5		310
S-15	<3	471	<5		181	39	411	<30	110	41	<5		340
S-16	<3	715	<5		185	15	353		70	35	< 5		370
S-17	<3	702	6		170	22	294	<30	80	72	<5		360
S-18	<3	486	<5		206	9	383	<30	80	57	₹5		330

BARRINGER LABORATORIES

5735 McADAM ROAD MISSISSAUGA, ONTARIO CANADA L4Z 1N9 PHONE: (416) 890-8566 FAX: (416) 890-8575

19-Dec-90

R.P.BOWEN ENGINEERING INC P.O.Box 5010 PMS South Porcupine, Ontario PON 1KO

Page: Copy: 3

Received: 12-Dec-90 12:26

2 1 of

Set:

1

Attn: P.Bowen

Project:

S-32

<3

208

13

<30

174

352

917

90

230

117

163

5040

130

PO #:

901384 Job: Status: Final Ag Ba CdCo CrCu Ni Pb ٧ Mn SrZn Zr ICAP ICAP ICAP ICAP ICAP ICAP ICAP ICAP **ICAP** ICAP ICAP ICAP ICAP ppm ppm S-19 <3 488 <5 <30 209 8 350 <30 80 59 <5 118 340 S-20 <3 261 <5 <30 200 27 240 <30 110 41 <5 53 340 S-21 <3 353 137 <5 <30 83 502 <30 60 82 55 48 270 S-22 <3 508 ₹5 <30 75 21. 115 <30 30 8 7 26 340 S-23 ₹3 146 < 5 <30 197 75 1820 100 30 131 188 1150 130 S-24 <3 157 13 40 214 296 823 100 90 26 630 30 15 -25 <3 293 <5 <30 134 68 1250 30 129 <30 161 97 190 S-26 <3 50 <5 <30 311 535 155 <30 50 70 <5 39 310 S-27 <3 1460 <5 <30 56 6 186 <30 <30 88 46 27 570 S-28 <3 1420 <5 30 107 95 657 50 40 100 102 75 420 S-29 <3 644 <5 <30 104 29 455 30 80 61 19 60 290 S-30 <3 660 <5 <30 132 74 214 <30 160 18 <5 43 280 S-31 <3 459 <5 <30 171 29 319 <30 138 95 80 <5 380



5735 McADAM ROAD MISSISSAUGA, ONTARIO CANADA L4Z 1N9 PHONE: (416) 890-8566

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19-Dec-90

R.P.BOWEN ENGINEERING INC

P.O.Box 5010 PMS

South Porcupine, Ontario

PON 1KO

Page:

4

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y: 1 of :

Set:

1

Attn: P. Bowen

Received: 12-Dec-90 12:26

Project:

PO #:

Job: 901384

Status: Fi

Final

Abbreviations:

Parameters:

SiO2 : Silica Al2O3 : Alumina

Fe203 : Ferric Oxide
MgO : Magnesium Oxide
CaO : Calcium Oxide
Na20 : Sodium Monoxide

Na20 : Sodium Monoxide
K20 : Potassium Monoxide
TiO2 : Titanium dioxide
P205 : Phosphorus Pentoxide

LOI : Loss on Ignition

Ag : Silver
Ba : Barium
Cd : Cadmium
Co : Cobalt
Cr : Chromium

Cr : Chromium
Cu : Copper
Mn : Manganese
Ni : Nickel
Pb : Lead
Sr : Strontium
V : Vanadium
Zn : Zinc

Zr

ICAP : Inductively coupled argon plasma

: Zirconium

FURN : Furnace

Units:

Methods:

% : percent



5735 McADAM ROAD MISSISSAUGA, ONTARIO CANADA L4Z 1N9 - PHONE: (416) 890-8566 (416) 890-8575 FAX:

19-Dec-90

R.P.BOWEN ENGINEERING INC P.O.Box 5010 PMS South Porcupine, Ontario PON 1KO

Page: Copy: Set:

1 of 2

Attn: P. Bowen

Received: 12-Dec-90 12:26

Project:

PO #:

Job: 901384

Status:

Final

ppm

: parts per million .

Quality control:

<

: Less than quoted detection limit

Signed:

Margaret E. Dancziger

Supervisor Geochemistry/Fire Assay Services



PEM TECHNICAL SPECIFICATIONS

BOREHOLE READINGS

Client: DAVE MEUNIER

Project: BEARCREEK

Method: CRONE Pulse E.M., Axed loop, Time Base: 16.66 ms, Ramp Time: 1.5 ms

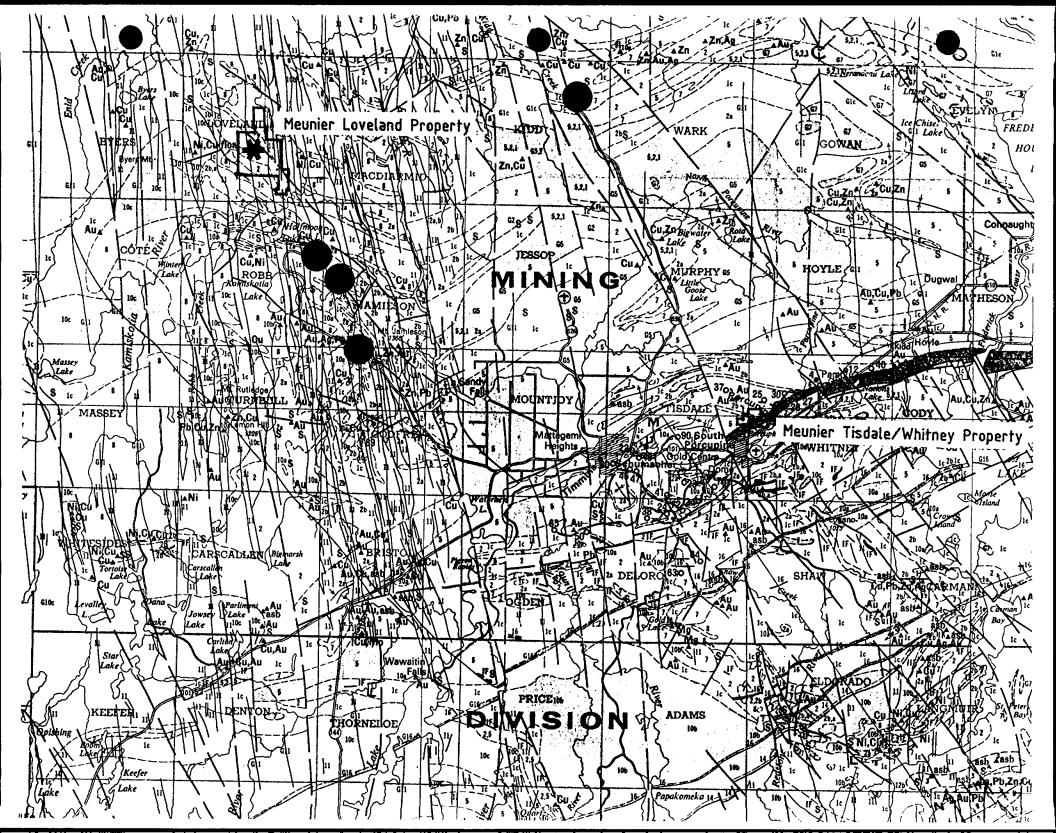
Channels measured: 20

Component measured: Axial, along hole

Tx power: 2.0 kw

]	HOLE			*					LOOP				*		
NO.	*	TOTAL	*	LENGHT	*	NO.	*	COUP.	*	DIMENSIONS	*	Ţ		*	DATE *	
		LENGHT	*	READ	*	<u> </u>	*	<u> </u>	*	DIMENDIONS	*			*	DAIL	<u>.</u>
	*		*		*		*		*		*			*		_
<u>83 A 3</u>	*	1912'	*	1902'	*	1-C	*	MAX	*	1300' x 1300'	*	6.0		-,-	r k00\30\3	k
	*		*		*		*		*	1000 X 1000	*	0.0	3	*	* OC 7 OU 7	_
83 A 2	*	826'	*	823'	*	1-C	*	MAX	*	1300' x 1300'	*	6.0	Δ :	*17	k06/30/1	k
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Interpreted	by: G. Lam	bert, Ing.	Operator	(s):	Jean-Guy	Brisson
comments:	No conductor	detected from	the holes	•		······································



CRONE GEOPHYSICS LTD. VAL D'OR GEOPHYSIQUE LTD. BOREHOLE PEM

Client: MEUNIER
Grid: BEARCREEK
Time Base: 16.66 ms
Ramp Time: 1.50 ms

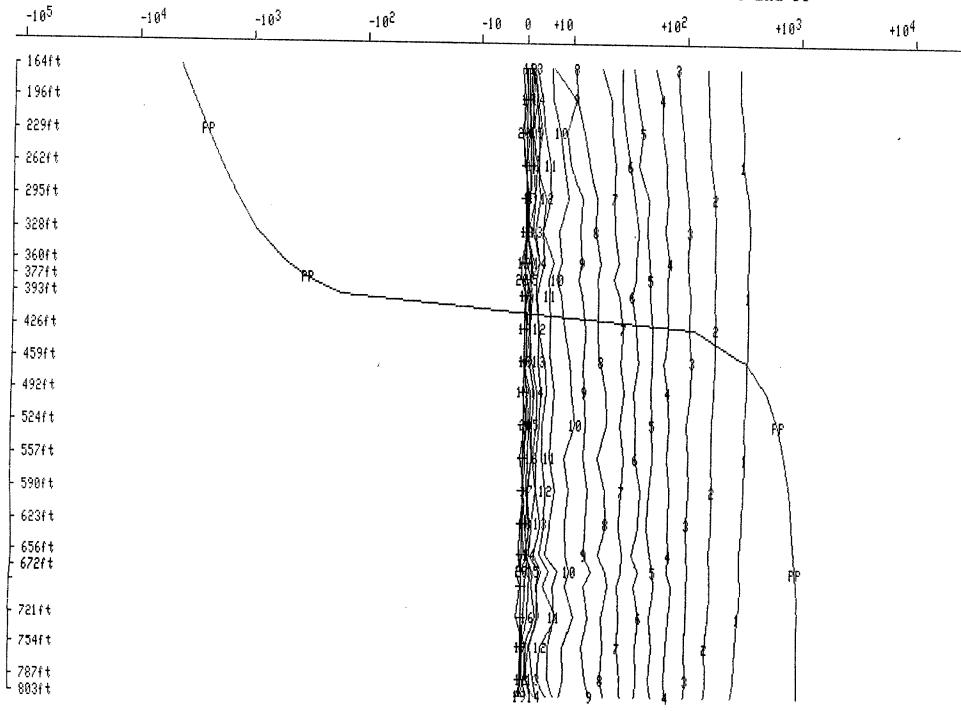
: 1in = 100 ft

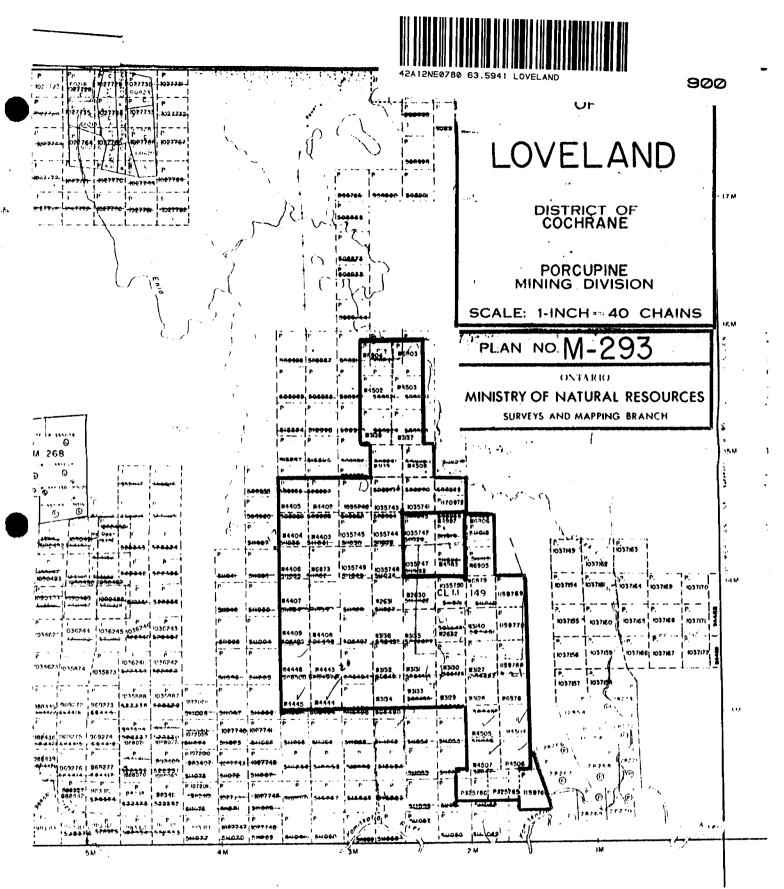
Scale

Hole : 80\(\lambda\)2
Tx Loop : 1C
Date : 17/06

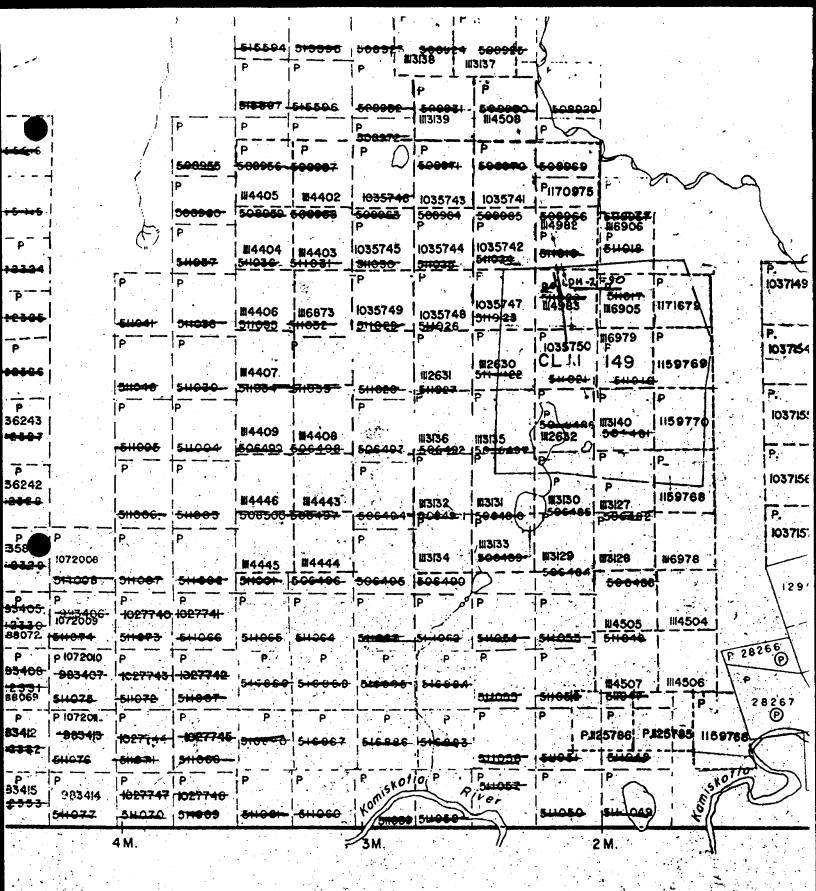
Date : 17/06/90 File : 80A2T1.RX

AXIAL COMPONENT dBa/dt (nanoTesla/sec) - 20 channels and PP



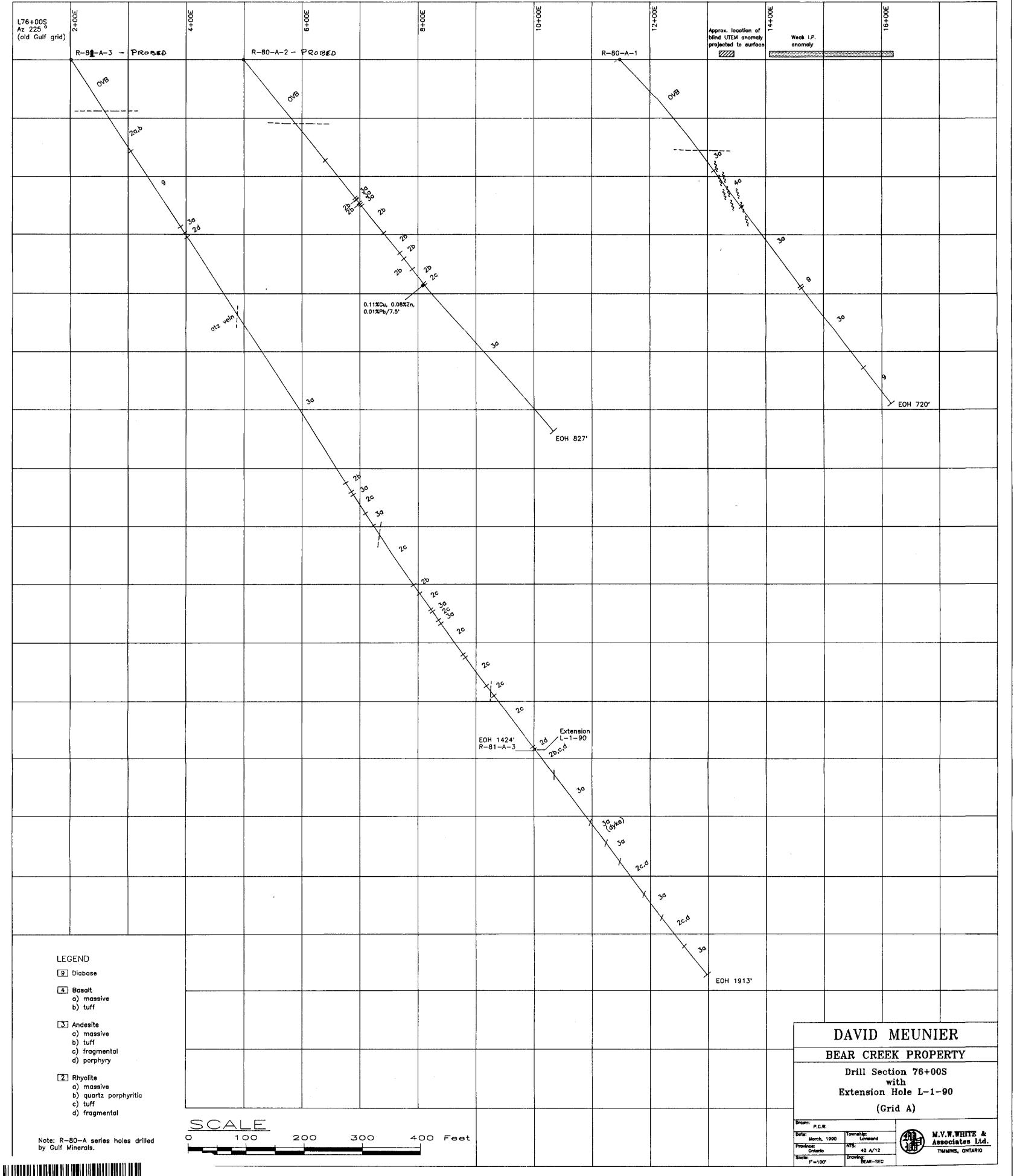


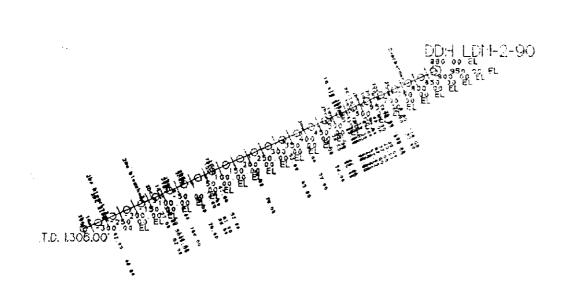
Robb Twp. (M.309)



Robb Twp. (M.309)

LOVELAND TOWNSHIP DRILL HOLE LOCATION MAP





-3350 00Nsec



PLAN VIEW

SECTION VIEW FACING NORTH

DRILL HOLE LDM-2-90

Grid is metric, hole Impreial

LIOS (3280.80S) / 7+50E (2460.60E)

Azimuth 246?
Dip -77° at collar
Total depth 1306.00
Claim P-114983

LEGEND

EARLY TO MIDDLE PRECAMBRIAN Mafic Intrusive Rocks

7 Diabase

EARLY PRECAMBRIAN
Felsic to Intermediate Metavolcanic Rocks

2a Massive to foliated lava

2b Porphysitic tuff

2c. Tuff aggiomenate volcanic brecala

Mafic to Intermediate Metavoicania Rocks

la Massive to pillowed lava

RP BOWEN ENGINEERING INC.

Client:

DAVID J. MEUNIER

Drawing

DRILL HOLE SECTION AND PLAN

DATE: DEC 1990	SCALE. 11,000	N.T.S. 42A
DRAWN BY RPB	FILE L-0002-90	FIG 3



T.D. 1.306.001

-3400 00Nsec

CRONE GEOPHYSICS LTD. VAL D'OR GEOPHYSIQUE LTD. BOREHOLE PEM

Client : MEUNIER

Grid : BEARCREEK

Time Base: 16.66 ms

Ramp Time: 1.50 ms

Scale : lin = 100 ft

: 83A3T1.RX : lin = 100 ft Scale AXIAL COMPONENT dBa/dt (nanoTesla/sec) - 20 channels and PP +105 +104 +19³ +10² -10 0 +10 -10² -103 -104 -10⁵ r 196ft 229fit 262ft 295ft 328ft 360ft 393f t 426ft 459ft 492ft · 524ft 557ft 574ft 623ft 656ft 688ft 721ft 754ft 787ft 820ft 852ft 885£t 918ft 951ft 984ft 1016ft 1049ft 082ft - 1115ft 1148ft 1180ft - 1213ft -1246ft 1279ft 1312ft -1344ft - 1377ft 1410ft - 1443ft 1476ft 1508ft 154111 117411 1607ft - 1640ft - 1673ft - 1689ft -1738ft 1771ft -1804ft 1837ft

-1869ft

l 1982ft