1974 Assessment Report

TITLE AUTHOR DATE COMMODITY

LOCATION-Area

- -Mining Division
- -Coordinates
- -NTS

LENNAC LAKE DRILL PROGRAM, March - April, 1974

C.J. Hodgson, P.Eng. (B.C.)

July, 1974

Cu

Babine Lake Omineca Latitude 54°45'N, Longitude 126°19'W 93 L 9, 16

AMAX VANCOUVER OFFICE

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ASSESSMENT REPORT

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#### INTRODUCTION

#### General Statement

This report presents the results of a diamond drilling program conducted on the Lennac Lake property in March and April, 1974, during which five holes were drilled for a total footage of 3017 feet. The program was carried out under a joint venture agreement between Amax Potash Limited, Standard Oil Company of British Columbia, and the LUC Syndicate of Vancouver.

#### Location and Access

The Lennac Lake property consists of 132 claims (Thezar 1-132) located in central British Columbia at latitude 54°45'N, longitude 126°19'W. It is readily accessible via the Babine Lake Road and by a four mile road constructed by AMAX in the fall of 1971 (Figures 1, 2).

#### History

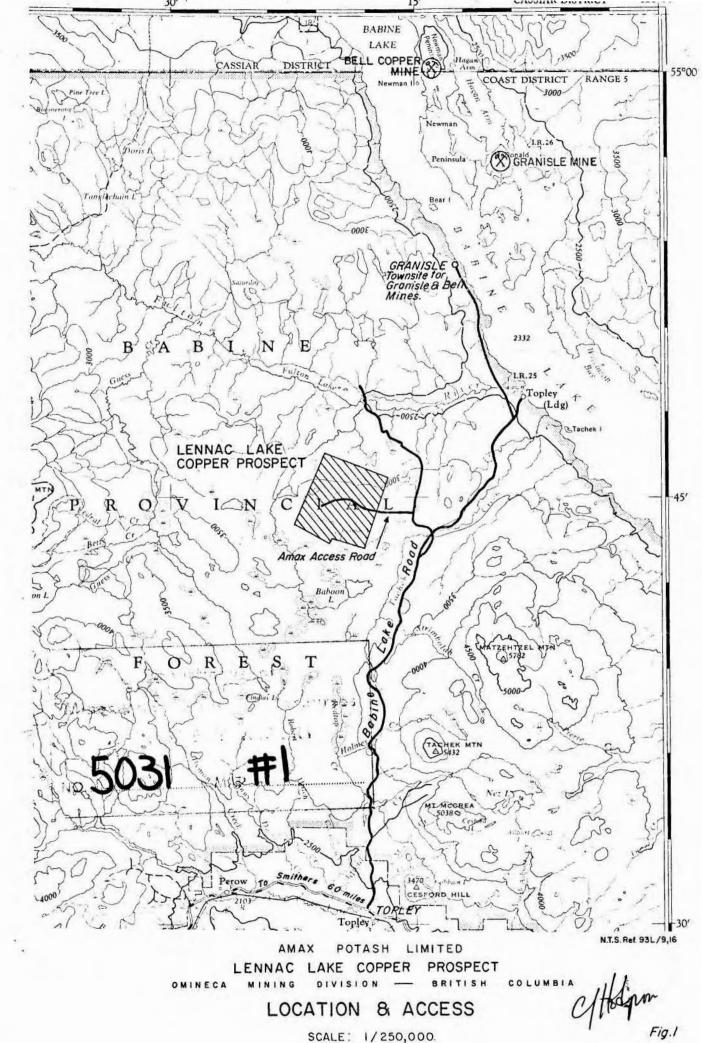
The prospect was discovered by AMAX prospecting crews in 1971. Detailed geological mapping, geochemical sampling and induced polarization surveys carried out in 1971 and 1972 indicated the presence of a porphyry copper-type target similar in gross aspects to the currently producing Granisle and Bell Copper Mines in the Babine Lake area. In 1973, 44 percussion holes totalling 11,360 feet were drilled on a grid basis in the West and East Zones.

Results in the West Zone were considered sufficiently encouraging to warrant additional testing in the form of BQ diamond drilling.

### DIAMOND DRILLING PROGRAM

# General Statement

The drill contract was let to D.W. Coates Enterprises Ltd. of Vancouver, who utilized a BQ wireline drill capable of a depth penetration of 1500 feet. Supervision was provided by the writer, assisted by Nick Sworyk of Houston, B.C. A total of



3017 feet were drilled in six holes between March 18 and April 7, 1974. Core from the project is being stored at the Amax warehouse in Smithers, B.C.

#### Results

Drill hole locations are indicated in Figure 2. Detailed drill logs are provided in Appendix II.

AMAX Vancouver

July, 1974

C.J. Hodgson, P.Eng. (B.C.)

TABLE I

STATUS OF THEZAR CLAIMS AS OF JULY 19, 1974

Claim	Number	Record Number	Anniversary Due Date	Rental Due	Group
Theza	1-10	100129-100138	July 27,1975	July 27,1975	No. 2
	11-22	100139-100150	July 27,1975	July 27,1975	No. 4
	23-25	100151-100153	July 27,1975	July 27,1975	No. 2
	26	100154	July 27,1981	July 27,1977	No. 2
	27	100155	July 27,1977	July 27,1975	No. 2
	28	100156	July 27,1981	July 27,1977	No. 2
	29	100157	July 27,1977	July 27,1975	No. 2
	30	100158	July 27,1981	July 27,1975	No. 1
	31	100159	July 27,1975	July 27,1975	No. 2
	32	100160	July 27,1981	July 27,1977	No. 1
	33	100161	July 27,1975	July 27,1975	No. 4
	34	100162	July 27,1981	July 27,1977	No. 1
	35	100163	July 27,1975	July 27,1975	No. 4
	36	100164	July 27,1981	July 27,1977	No. 1
	37	100165	July 27,1975	July 27,1975	No. 4
	38	100166	July 27,1981	July 27,1977	No. 1
	39	100167	July 27,1975	July 27,1975	No. 4
	40	100168	July 27,1981	July 27,1977	No. 1
	41	100169	July 27,1975	July 27,1975	No. 4
	42	100170	July 27,1976	July 27,1975	No. 3
	43	100171	July 27,1975	July 27,1975	No. 4
	44	100172	July 27,1976	July 27,1975	No. 3
	45	100173	July 27,1975	July 27,1975	No. 2
	46	100174	July 27, 1975	July 27,1975	No. 2
	47	100175	July 27,1981	July 27,1977	No. 2
	48	100176	July 27,1981	July 27,1977	No. 2
	49	100177	July 27,1983	July 27,1977	No. 1
	50	100178	July 27,1983	July 27,1977	No. 2
Case	51	100179	July 27,1983	July 27,1977	No. 1
100	52	100180	July 27,1983	July 27,1977	No. 2
	53	100181	July 27,1983	July 27,1977	No. 1
	54	100182	July 27,1984	July 27,1978	No. 1
	55-62	100183-100190	July 27,1983	July 27,1977	No. 1
	63-66	100191-100194	July 27,1976	July 27,1975	No. 3
	67	100195	July 27,1975	July 27,1975	No. 2
	68	100196	July 27,1975	July 27,1975	No. 2
	69	100197	July 27,1981	July 27,1977	No. 2
	70	100198	July 27,1981	July 27,1977	No. 2
	71	100199	July 27,1983	July 27,1977	No. 2
	72	100200	July 27,1983	July 27,1977	No. 3
	73	100201	July 27,1983	July 27,1977	No. 2

TABLE I - Continued

Claim	Number	Record Number	Anniversary Due Date	Rental Due	Group
Thezai	74-76	100202-100204	July 27,1983	July 27,1977	No. 3
4	77-84	100205-100212	July 27,1983	July 27,1977	No. 1
	85	100213	July 27,1980	July 27,1977	No. 1
	86	100214	July 27,1980	July 27,1977	No. 1
	87	100215	July 27,1976	July 27,1975	No. 3
	88	100216	July 27,1976	July 27,1975	No. 3
	89	100217	July 27,1975	July 27,1975	No. 2
	90	100218	July 27,1975	July 27,1975	No. 2
	91-94	100219-100222	July 27,1983	July 27,1977	No. 3
	95-104	100223-100232	July 27,1983	July 27,1977	No. 1
	105	100233	July 27,1981	July 27,1977	No. 1
	106	100234	July 27,1981	July 27,1977	No. 1
	107-110	100235-100238	July 27,1976	July 27,1975	No. 3
	111	100239	July 27,1975	July 27,1975	No. 2
	112	100240	July 27,1975	July 27,1975	No. 2
	113	100241	July 27,1976	July 27,1975	No. 3
	114	100242	July 27,1975	July 27,1975	No. 2
	115	100243	July 27,1976	July 27,1975	No. 3
	116	100244	July 27,1975	July 27,1975	No. 2
	117	100245	July 27,1976	July 27,1975	No. 3
	118	100246	July 27,1975	July 27,1975	No. 2
	119	100247	July 27,1976	July 27,1975	No. 3
	120	100248	July 27,1975	July 27,1975	No. 2
	121	100249	July 27,1976	July 27,1975	No. 3
	122	100250	July 27,1975	July 27,1975	No. 2
		100251-100260	July 27,1976	July 27,1975	No. 3

#### APPENDIX I STATEMENT OF COSTS

Personnel		
C.J. Hodgson, P.Eng. (Staff Geologist); 3091 Plymore	outh Dri	Lve,
North Vancouver, B.C.		26 10 11 16 2
32 1/3 days @ \$84.50/day		\$2,733.69
Nickolas Sworyk, (Labourer); Box 235, Houston, B.	С.	
61 days @ \$35.00/day		2,134.00
Room & Board		
15 days @ \$20.00/day		300.00
Diamond Drilling		
3017 feet @ \$10.60/foot	+	31,977.05
Bulldozer Rental and Maintenance		2,820.94
Bulldozer Hauling		512.00
		•
Vehicle Maintenance & Repairs		
30 days @ \$20.00/day		600.00
Report Preparation & Drafting		200.00
	TOTAL	\$41,277.68

Work Period March 1 - April 30, 1974

# Work to be applied as follows:

4 Years - Thezar 54

3 Years - Thezar 26,28,30,32,34,36,38,40,47-53,55-62,69-86,91-106

1 Year - Thezar 27,29,42,44,63-66,87-88,107-110,113,115,117,119, 121.123-132

Declared before me at the

of

, in the

Province of British Columbia, this

VANCOUVER, B. C.

day of

Elizabet K. Sugal

A Commissioner for taking Affidavits within British Columbia or A Notary Public in and for the Province of British Columbia.

## APPENDIX II

# DRILL LOGS

LL-74-1

Company Mining Division Geograp Coordin	on On	nine	ca		/j	Prope	erty	#515 Lennac March 2 dMarch 2	25,1974	Bearing Incline Depth	gg ation9	90°	Coordinate 114+00 76+25	N .
Footage												Remark	s	
	Rec	Rec						Ţ		22				
	1			Omeo				1	Casir	ıg	- )			
				-	++		-	+	14-20	06.5			*	
								† .	Dull	grey-gre			e grained,	
								1					s (2mm. 5-15	
					1			4					re apparent	
					1			1					r epidote in	n disseminat
					-		4-	1		ots and q			Laur Waina	1 +- /-
	-				-		-	+					hout. Veins foot, predo	
			-		-		+	+	WIC	1e (av. )	0-10 t	core axi	s. Veins co	ontain ny
			988	-	1-1			1	CD	r mag m	olv. O	nertz-maon	etite veins	1-2 mm.
					1	-   -	1	†	Da.	rallel to	core a	xis are la	te-stage, cu	itting
					1	- -		†					z comprises	
					1.			†					and 5% of ro	
								†					have drusy o	
								1					th py/cpy ap	
								1		-			quartz veir	77
		O CONTRACTOR	Marks -		1000			1	di:	sseminati	ons		A 10 10 10 10 10 10 10 10 10 10 10 10 10	
		0.						Ι						
								I						*
								I	30	-40' mino	or magne	tite-cpy-p	y veins at	low angles
Pau was+								I	+:		lo°) to			
									40			in quartz		
									56	-61' weak	c sheari	ng and cal	cite veins	
						/1			3 T					

Footage	Core	%					Remarks
	Rec	Rec			$\Box$		
			+-	+	N.		145.5' Bleached andesite adjacent to quartz-
	-		+		1		ankerite vein
		-3/2011			1		158-168' Magnetite veinlets
			+		1		173-174' Bleached andesite
2			+				
					口		206.5-219 Biotite-Feldspar Porphyry (BFP)
		$\overline{}$	-			-	- Upper contact at 20° to CA. Rock consists of
			+		1		35% plagioclase phenocrysts to 1 cm. (av. 5 mm.)
			+		1		5% biotite phenocrysts (5 mm.)
0.000			1		1	77 2 2 2 2 2	1% amphibole phenocrysts (8 mm.)
			1		1		2% quartz phenocrysts
							57% fine grained groundmass
							- Predominant alteration is weak-moderate intensity
							apple green sericitization of plagioclase, with
							cloudy clay (?) alteration of plagioclase in pat-
					11		and adjacent to fractures
		E .	+	-			- Vein quartz is 5% of rock, Sulphides total approx
			+	_	+-+		3%, Py/cpy = 1-2/1. Rare moly (e.g. 215.5').
			+		-		Sulphides occur in quartz veins (25%), on micro
			+		+++		fractures (50%) and as disseminations (25%)
		-	+		1		Tractures (50%) and as disseminations (25%)
							219-224.5
			1				- Post-mineral biotite feldspar porphyry. Sharp u
							contact at 45°. Similar to main porphyry, but pl
							ioclase phenocrysts only 15-20%. Matrix 75-80%,
							darker grey, finer grained, much less altered th
					4-1		206.5 - 219.
\$1. W.1.*	-		-		+-+		No quartz veins. Traces disseminated py. cpy.
			10000				no quattz verns, mades disseminated py. cpy.

ootage	Core	%							Remarks
	Rec	Rec							
					-1	-			224.5 - 242.5 As 206.5-219, but grn. sericite
				+		-	-		alteration is more intense, with relict patches of
			-	+-		-	_	5.7.3	white clay alteration of plagioclase
			usi.						-quartz veins 5-7%, many at 0° to CA
						-	-		-minor barren quartz-carbonate (ankerite?) veins
									occur in this section and at 206.5-219, at 070° t
	vian.								These cut other quartz veins and are up to 1" wid
ė									234' - K-feldspar-quartz-moly vein
		-			-		+		242.5-269.5 Andesite
		500							Upper contact @ 45° to CA, lower at 30° to CA
								4	Quartz veins very abundant, about 10%. Py/cpy ap
									1-2/1. Total 3% sulphides. Rare late mag-quart
									veins.
									247.5'- 4" quartz vein with abundant pyrite
			_						
151			_	+			-		5-336 BFP
•			-			-	-		Alteration less than 224.5-242.5. Mainly white callettion.
			1		-				
									Py/cpy approx. 1/1-2. Total approx. 3% sulphide Quartz veins mainly 30-60 and 0° to CA, about 5%
									mainly < 1/2" (av. 1/4")
									327-336' - Schistose towards contact
					_	_ _	-		
			_	7.0	-		-		330' - 2" quartz vein with abundant py, no cpy
Fr. 2014			-			-			vuggy.
1			_				1-1		

Footage	Core	%							Remarks
	Rec	Rec					· ·		
						174			336-376 Andesite
			-						Upper contact at 45° to CA, lower at 35° to CA, 5%
			_						quartz veins
					-				Sulphides 3-4%, py/cpy approx. 1/1
				_	-				376-603 BFP
7		$\neg \neg$		-					-weak to moderate clay-sericite alteration of feldsp
13 <b>5</b> to									Lucal pinking adjacent to quartz veins @ 386', 397-
									403' is hematite.
									1/1
		-				_			-1% sulphides, py/cpy approx. 1/1
		-							-quartz veins 3% to 467, then about 1% between 467'
								į.	and 603'
		-							380-385' Finer grained lenses at 45 to CA
						_			(1-4" thick). Inclusions?
-		-			-	-	en (15)	+	395-407' White clay alteration increases towards
									fault zone
			-		-				407-422' Rock is gouged, sheared, rubbly
									422-426' 5% quartz veins, with 2% cpy
			-	= -		-		4	426-429' clay gouge
		$\dashv$	-			- -		-	422-575' predominant alteration is weak-intense
									apple green sericitization of plagiocla
				*					445' 6" clay gouge
\$1. mare			-					-	445' 6" clay gouge .
									450-455' Quartz-carbonte veins to 1" in
									sericitized BFP (healed fault zone?)

* 3 1	and the same of th								¥		
- Andrews	1										(LL-74-1
ootage		VALUE OF THE PARTY		are excess	<del></del>						Remarks
<i>y</i>	Rec	Rec							1		
								1		36	456.5' Minor moly disseminated in 3" quartz vein
						二		士			467-603' Quartz veins decrease to approx, 1%,
	-									7	sulphides 1/2-1% (cpy > py). Green sericit
											alteration continues strong to 575',
	-					-				+	weakens thereafter
										İ	476-476.5' sericite-clay gouge
	-		_			1	-	+-			507.5-508' Sericitized shear zones @ approx. 45°
7								1			513-514' to CA "
								1	1		518-519' "
							- ; -		ĺ .	1	523-527'
							-	1	l.		528-531'
								+	l.	1	533-534,5' " "
	-						+	+-	r		333-334,3
										ļ	543.5-545' clay and sericite shear
-	-				-			1-	ĺ	200	566.5 4" andesite inclusion with 5% quartz veins
	-					-	-	1	1	+	most of which terminate at edges of
2 12 2 2 2 3	$\vdash$		<u> </u>		-	-		-		-	
-	-			-	1	-		+-			inclusion
								+			584-603' Last box of core. Generally fresher-
											looking, fewer sulphides and quartz veins
										•	
			-	-	_						603 END OF HOLE
											1
											C Hodgen P Gy
											+
											Shee
1	W.114				-						[6
											50
	AMERICAN POLICE										10

LL-74-2

Company AMAX Potash Limited	Project #515	Bearing	Sheet 1 of 4 Hole No.
Mining	Property Lennac Lake Started March 27,1974	Inclination -90°	Coordinates
Geographic	Completed March 31,1974 Logged by C.J. Hodgson	Depth 606'	80+00E Altitude 15' above lake

Cootage Core %		Remarks
Rec Rec		
		2.26 Casing
	+++++++++++++++++++++++++++++++++++++++	26-298 Dull grey andesite, variable texture from
		fine grained equigranular to porphyritic. For
		the most part fragmental (flow breccia - no
		foreign fragments).
		- Well fractured, with quartz veins (+ py, ep,
		trace mag, trace cpy) and pyrite veinlets.
		Pyrite and epidote also occurs in disseminated
		grains and clots.
		- Quartz veins 1%, 1 mm - 2 cm.average 1-3 mm.
		Commonly drusy. Commonly low angles to CA.
		Py 3-5%, Py/cpy > 5/1, epidote 2%
		Rock is reasonably competent to 150'
		28' looks like K-feldspar associated with
		py-ep vein
		32.5' traces moly in 1/2" quartz vein
		38.5-39' chloritized plagioclase porphyry
		fragments (dyke?) at 75° to CA
		43-48 Blocky. Calcite veins on fractures.

ootage	Core	%				Remarks
	Rec					
					_	
			+			59.5' Quartz vein with K-feldspar
			*			66.5' Quartz vein with cpy, trace moly, 3 mm.
						K-feldspar selvage
						73.5-97' Light to dark green fragmental structur
						108-120' Shear zone, blocky
						108-112' 2.5' ground (1.5' recovered)
						112-118' 5.5' ground (0.5' recovered)
						150-209' Major shear zone at 20°(?) to CA
			+	+	_	Core very blocky throughout. Gouge inter- mittently 172-198'. Core recovery between
						160-168 (5'); 168-172 (2'); 172-174 (1');
						174-178 (6'); 178-185.5 (7.5'); 185.5-
						190 (4.5'); 190-194 (1'); 194-198 (4');
_				1		198-200 (1')
						198-202' BFP dyke
						298-323 BFP, grey chloritized, 1/2% disseminated epido
-	+				$\dashv$	Upper contact at 30° to CA
						1-2% quartz veins
		74				2% sulphides, pyrite >> chalcopyrite
						Numerous andesite inclusions towards base.
	we e	100	-		-	
						, Pee
\$1. M/214						
			1 1	1 1		1 1 1

otage Core	e   %	•						Remarks
	Re	2C						
	1				-			
	+		1		11	1		323-370 Andesite, with BFP dykes
+	+	+	-	-		++		Blocky and chloritized, with minor shears at
1	+	-	+	-	-	+++	-	324.5', 328-330', 342.5'.
1	+-	+	1	7		1		324.5 , 320-330 , 342.5 .
								BFP dykes at 325.5 (6"); 332-333 (lower contact
								45° to CA); 342.5-347; 351.5-353; 355.5-359.
								1% quartz veins with epidote, pyrite, minor
								magnetite. Pyrite 1-3%
	1		1	_	-	1-1		South and W. Saldanan anidate numita wai
	1	-	1-1		-	++		354' 2" quartz-K-feldspar-epidote-pyrite veit
	+-	-	1		-	+	-	OU EU CA
	-	-			+-	1		368-370' Gouge zone at lower contact
		1			1			1
								370-384 BFP, dark grey weakly chloritized
	1							1% quartz veins
1.			-	-				1/2 - 1% sulphides, pyrite >> chalcopyrite
	-	-		-		-		374' 3/8" quartz vein 20° to CA, with selva
	-		1	-		++	-	of moly, minor chalcopyrite
<del> </del>	-	+	++	-	-	+++	-	OI mory, minor charcopy rec
1			1		+		-	384-408 Andesite
								$\frac{364-406}{3\%} \frac{\text{Andesite}}{\text{sulphides (py/cpy = 5/1), 1% quartz vein, 1/2}}$
								epidote, 396-401'- Cpy, py in 1/2" quartz vein a
								0° to CA. 403'-1/2" quartz vein with moly.
						-		
	-				1-			408-415.5 BFP, fresh
-	-	_	-	-7 -	-	-	$\rightarrow$	1% sulphides (pyrite >> chalcopyrite)
-	-	-	+-+		+	-		Upper contact 35° to CA
		-			+	-	-	
* D.L. 49***	-			Tec. 51		-		

Footage	Core	%	 	Remarks
		Rec		
				415.5-521 Andesite breccia. med-dark grey mottled.
				1-3% quartz veins with pyr, cpy, epidote, some
4				with minor moly (e.g. 429',483',489'). Many of
				the larger quartz veins (> 1/4") are 0-20° to C.
				Sulphides approx. 3% (py/cpy approx. 3/1)
				440' - 1/4" cpy seam 10 to CA.
				521-534 - BFP
				Pale green clay-sericite alteration of feldspar
				Rare quartz veins
		a		528' 1/2" vuggy quartz vein with moly.
				534-606 - Andesite tuff breccia, greywacke, dull gre
				green
				1-2% quartz veins, 2-3% sulphides, pyrite >> cp
	200			538-547' Fine grained, volcanic greywacke,
				locally banded at 80° to CA
				547-590' Andesite breccia (flow breccia?) same
				415.5-521
				590-606' Andesitic tuff-breccia with greywacke
				matrix. Some banding at 75° to CA
				1/2% disseminated epidote throughout.
				Chloritized throughout. Black chlorite
				especially apparent adjacent to hairli
				quartz seams.
				606 END OF HOLE
				C Hopen 1 by
Par wort				
			The second second	

LL-74

Company AMAX Potash Limited	Project #515	Bearing	303°	Sheet lof 6 Nole No.
Mining	Property Lennac Lake	Inclination	-46	Coordinates
Division Omineca	Started March 31,1974			112+00N
Cooperable	Completed April 2,1974			74+64E
Geographic	Logged by C.J.Hodgson	Depth	613'	Altitude Lake elevation

Foc	tage	Core	%		2 2 10 10 10 10 10 10 10 10 10 10 10 10 10	e manage.		Remarks
		The state of the s	Rec			% Cu	% Mo	
								Casing
0	60						/	
60	70							60-82 BFP
<u> </u>	10	1		+++-		+	1	-Fairly fresh - plagioclase is translucent to pal
70	82			+++-			1	green, in brownish-grey very fine grained to
10	0_			1				aphanitic matrix
82	98							-Quartz veins about 3-4%, up to 1" wide, some
<u> </u>								drusy. Stockwork with numerous attitudes
98	110							-Sulphides approx. 3%, py/cpy approx. 1/1. Minor
								magnetite (<1%), associated with sulphides in
110	120					279.2	prof. Shear a	narrower quartz veins
								Sulphides in quartz veins (75%) and disseminated
120	130							(25).
	1							-Rare K-feldspar veins (e.g. 74')
130	140			$\bot$			4	
	4'	1		+++			-	60-90' Quite blocky, with several clay gouge zones at 73-77', 79-80', 84-90'. There-
140	150			4-1-1-1				zones at /3-//, /0-80', 84-90', Inere-
'	4			4-1-1-		-	-	after, down to at least 345', very
150	160			1-1-		-	4	competent.
160	170	-		+++		1		82-98 Grey, unaltered post-mineral porphyry (PM
1,00	1						4	Contacts at approx. 45 to CA
170	180					-03U/A		Very minor py. cpy. (1/4% total) in rare 1 mm.
b								quartz veins
180								
			7					
	,							

Footage	Core	%					Remarks
	Rec	Rec					
							98-116 BFP, as 60-82
					)		Quartz veins up to 5-7%; pyrite z cpy. About
							0.5% Cu ?
							100.5- 102.5' Andesite inclusion
						1200	116-133.5 Andesite. Contacts at 45-60° to CA
						× .	Vein quartz up to approx. 10%
							Sulfides 3% (py ~ cpy). Cpy locally in coarse
							splashes (e.g. 132')
1 12 27							K-feldspar locally in quartz veins
							Magnetite 1/2% 1 mm, veins
							133.5-226.5. BFP
			1_1				-Quartz veins approx. 10%, mainly subparallel at
							approx. 60° to CA. Py/cpy approx. 1/1, total 3%
		_		_		-	at least half the sulphides are on hairline
							fractures at 60-70° to CA, which appear to cut
							quartz veins or move out from them. Minor mag.
							(1/4%), trace moly. Veins are <1/4" wide, 20/ft
							rarely 2-3" wide with green sericitized plagioc
							-Alteration generally is minor-weak local bleach
				_			of plagioclase and weak K-feldspar adjacent to
							quartz veins
	-			_			1/21 1/21 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
+-+		_	+-+				142' 1/2" bleached (kaolinized)vein with
			+-+	-			sulphides, sooty secondary biotite
_	940	_	+-+	-			Minor moly in quartz veins at 159,162,
			+-+				172-175' Croop corioita alteration an aither ai
-		-	-		-		172-175' Green sericite alteration on either si
		-	-	-		1	of qtzankerite vein at 174'
			+			<del></del>	177 Trace purple fluorite on joint
	-	1 1 1 1	-	-		<del>                                     </del>	Trace parpre fractite on joint
1 200			-	- $ +$ $  +$ $  +$ $  +$ $  +$ $            -$			Opaque white clay alteration gradually
-			-				increases in intensity below 150'
			1000				183-185 Quartz vein at 10° to CA, approx. 4" wide

	(				
Footage					Remarks
	Rec	Rec			
					182-191' Moderately sericitized .
				1	
					187-191' Andesite inclusion. Fine grained
					secondary biotite, 10% quartz veins
			1		226-227.5 Biotitized breccia with BFP andesite
					fragments. Felted biotite, py, cpy disseminated
					in matrix. Intrusive breccia, marginal to late-
					stage porphyry dyke
					227.5-456 Post-mineral porphyry (PMP)
					227.5-234' Intense green sericite alteration of
					plagioclase
					234-235' BFP inclusion with quartz veins
					P MP is typically unaltered, darker gre
					that BFP with 25% plagioclase phenocry
					to 1 cm, 3% biotite phenocrysts to 1 cm.
					in 65% dull grey aphanitic matrix.
					Alteration is minor white kaolinization
					of plagioclase adjacent to fractures,
					green sericitized zones adjacent to
	1				shear zones .Minor quartz-K-feldspar ve
					are present.
					Rare inclusions of BFP andesite
					≤ 1/2% sulphides, py '= cpy. Disseminat
					and on fractures
					335' 2" quartz vein with K-feldspar, minor
					moly
2					370.5-372.5' Weak shear zone - kaolinized
					Note of the state

o c c c c	Core	%				Remarks	
	Rec	Rec					
			+	+	+++	375' 6" BFP inclusion	•
			+	1		373 6 BFF INCIUSION	
						395' 8" Andesite inclusion	
							## E
			-	++	+	388-407 Calcite filled fractures about 1 per	
+			1		+++	foot	
						408-456' Variably sericitized, with several ma	ijo
						gouge zones at 417-418,428-437,441-44	
+			+	-	+	455-456.	
			+		+	456-477 Andesite	
						Upper contact is shear zone	
-			4			458-461.5' -	
			-			Skarn-type mineralization with abundant	
-				1		mag, py, cpy, tapering off at depth towards 461	
						Sulphides are particularly abundant between 458	.5
					+++	-459.5' (10% cpy, 15% py).	
						Section is very blocky. Gouge at 472.5-473.5'.	-
						God quartz vein stockwork, 5-8% quartz; sulphid	es
						amprox. 2% outside skarn section (py/cpy approx	
						2-3/1.	-
						Section is quite bleached	
-				-		477-506 PMP, as above, Minor BFP inclusions.	
						Minor quarta voine <1/2% and this is a	
		Carried States			+	Minor quartz veins. ≤1/2% sulphides (py ≃ cpy).  quartz veins, hairline seams, disseminated	In
					+++	quartz verns, narrine seams, disseminated	
						476.5-482' Gouge	
+-+	-+					/02 /00! W. 1	
10.0					<del>       </del>	482-488' Moderately sericitized	1
-				-			-

ootage					Remarks
	Rec	Rec			
					506-509 BFP
					5% quartz veins, 2% sulphides (py = cpy)
		-			
			*	$\leftarrow$	509-519.5 PMP, as above
					BFP inclusions at 515.5', 517.5'
-		-	-		
-					519.5-523 Andesite, porphyritic, blocky, 5% quartz ve
		-	-		
-		-	-		 523-534 BFP
		-			5% quartz veins to 1/2", mainly 70-80° to CA
				$\rightarrow$	 commonly with K-feldspar selvages
-					 524-524.5'Sericitized shear zone
-			-	+++	 1-2% sulphides py > cpy
-				++	 FOX 505 5 A 1 2 1 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
1-1			-	++	 534-585.5 Andesite, dark grey
		1	+	-	 534-542' Veryfine grained (greywacke?)
					542-585.5' More normal fine grained subporphyri
					andesite
					Quartz veins 2-3%; sulphides, 3% (py/c
					approx. 5/1)
					Epidote up to 5%. Irregularly distrib
	-				in patches, quartz veins, and with
+					pyrite along seams.
+		-	++		 E71 E71 E1 DVD date 25° to CA 1, 2% discominate
-		-	+++		 571-571.5' PMP dyke 25° to CA, 1-2% disseminate
	-		+-+	1	 epidote
			1		585.5-608.5 BFP, moderate clay-sericite alteratio
					throughout. Upper contact 30° to CA. Quartz
					veins 2-3%, K-feldspar selvages common.
					Sulphides 1-2%, py ~ cpy, trace moly.
Fig. 30					
	-2		- CO. ST. ST. ST. ST. ST. ST. ST. ST. ST. ST	Service Control	597-598' Sericitized skarn.

Footage	Core	%									Remarks
	Rec	Rec		1	7	T	I			T	
			-112			1					608.5-613 Andesite, dark grey, quartz veins 2%, mine
										1000	K-feldspar selvages, sulphides approx. 3%, py/
											608.5-613 Andesite, dark grey, quartz veins 2%, mine K-feldspar selvages, sulphides approx. 3%, py/cpy approx. 2-3/1.
					-						
			_		-	-	_				
			-	-	+	-	<u></u>	<u> </u>		-	613 END OF HOLE
				-	+	-	-			-	67111 : 67
			_	-	-	-	├—		-	-	C) Hodgeni PGry
					+-	-	-				
			_	+-	-	-			-	-	
				+-	+-	-	-	-		-	
		-		+-	-	-		-			
				+		-	-	_	-	-	
				_	+-	-	$\vdash$	-			
			$\neg \vdash$				/				
				1			-			V-	
										<b>†</b>	
		æ							11		
	-1022										
		20 2		-						-	
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-							Lessans				
			-	-	-						
				-							
			1	1	1	1.0		3 73	U.	1	

Company AMAX Potash Limited Mining Division Omineca	Project #515 PropertyLennac Lake Started April 2, 1974	Bearing 300° Inclination -46.5° at collar, -48° at 597'	LL-74-4 Sheet 1 of 4 Hole No. Coordinates 108+00N,
Division Omineca  Geographic Coordinates	Completed April 4, 1974 Logged by C.J.Hodgson	Depth 597'	73+93E Altitude Lake elevation

Footage Cor	e	%	5		200			Remarks	
Re	c I	Rec							
							4		
								0-46 CASING	
								46-504 BFP	
	+		+	-				46-100' Alteration: K-feldspar veins 5-6/ft,	1 mm
	1							Local sericitized plagioclase at 65'	,
								79', 90', 92', 96' adjacent to quar	tz-
							-	calcite, pyrite veins, 20° to CA.	
								Quartz veins rare (<1%), <1/ft avera	
								Sulphides approx, 1%, cpy-py, mainly	
								disseminated. Rare hairline magneti	te
	+	-	+					seams, some with cpy.	
						•		100-200' Pretty much the same as above, with s	
	_							rather prominent silicified zones, a	ind
	_					 		more abundant sericite alteration.	
	_		1					Traces disseminated epidote, less	-
	1			1.	$\sqcup$			K-feldspar veining.	
	_					_		110-115' - 4' recovered in 2' quartz	<u>;-</u>
	_						v	calcite-pyrite shear vein 112-114',	
	_					_		at 30° to CA, with peripheral serici	tiz
	4					_		BFP. Sericite alteration continues	to
_	_			_		_		125'	3.
	1			-		_			
	+			-		$\dashv$	-	Main sericitized pyrite veins at 123	3,
						=			

Footage	Core	%					Remarks
	Rec	Rec					
				LI.			
							143-145' Quartz-pyrite shear veins 05° to CA,
							BFP is sericitized l'either side
		7					
							164-174 Large quartz vein or silicified zone
					+		with sericitized BFP inclusions with
THE STATE OF THE S	-						secondary biotite. Minor pyrite in
-	-					<del></del>	this zone.
-							Moderate-intense sericitization exte
							down to about 203'
							down to about 203
_					-		179-180' Bleached feldenare adjacent to purity
-							179-180' Bleached feldspars adjacent to pyrite quartz-calcite veins @ 20° to CA
				-			quartz-carcite verns @ 20 to ca
				1			100 000
				-			200-300' Same as 100-200
							Sulphides uniform, at approx. 1/2%
							(cpy > py) dissem and fractures
							Minor quartz veins, quartz & K-felds
							veins,K-feldspar veins (total <1%),
							averaging may be 1/ft (1/4-1/2" wide
							220.5' 3" PMP dyke - 70° to CA
							221.5' Sericitized quartz-pyrite-hematite
							221.5' Sericitized quartz-pyrite-hematite shear vein 1" at 20°, Same at 213'
					1000		
							263' 6" PMP dyke
				-			
	A.KO-1102						264' 6" sericitized pyritic shear zone
				1			300-400 Continuing very weak K-feldspar and
							quartz veining, ≤ 1/2% sulphides.
			_	-			Several shear zones with peripheral
En alor							sericitized BFP
			_				BELLETER DIT
-							

	1			•					
Footage	Core	%				 Remarks			
	Rec			T					
						319.5-320' Sericitized shear			
				7		339-341' Sericitized shear gouge			
						348-348.5' Sericitized shear gouge			
						070 070! 0 ! !!! 1 -1			
						374' 3" Sericitized shear gouge 374' 2" pyrite shear zone at 40° to CA			
						389' 2" pyrite shear zone at 40° to CA			
		-				The section 372-404 is throughout quite blocky, with			
		-				 numerous shears in addition to the larger ones menti-			
						Green sericite alteration throughout.			
						Officer desiration and a second secon			
						400-504' Continuing fresh looking BFP with			
						minor quartz and quartz-K-feldspar			
						veins 1/4" (up to 3/ft, but total <1%			
						Sulphides 1/2 - 1%, cpy ≥ py			
						458-466.5' Sericitized zone			
						493-504' Increasing sericite alteration towards			
•						contact, with minor pyritic fractures			
						at 502.5'			
			-		_	 504-505 Dark grey, fine grained, andesite			
				+		505-584 Medium to dark grey chloritized BFP or PMP (			
						Tone is non-uniform, with alternating medium and			
e un la companya de l						dark grey sections. Unit is not as convincingl			
						PMP as in LL-14-3. This is more of a tonal than			
						a textural difference. Quartz veins plus quartz			
						K-feldspar veins are just as numerous than above			
						if not more so (1-4/ft, 1-2%). Sulphides appear			
,						to be about equally abundant to above unit at			
						approx. 1/2% (cpy ≥ py).			
8 3.4 M/date		-		-		Carbonate veins are common at 10-60° to CA			
						THE PERSON NAMED IN COLUMN TO THE PE			

	(									LL-74-4 (
ootage	A Charles Programme 2	% Rec		_	_			$\overline{T}$		Remarks
							一	丰		571-572' Shear zone, bleached and sericitized.
			#	+	+	34	$\exists$	+		505-552 Biotite phenocrysts are not present.  Apparently completely gone to chlorite
					E			1	$\equiv$	552-577 Much less altered, almost same as above 504'. Biotite phenocrysts unchloritized
			+	+	=				#	577-584 Intensely chloritized, with 30% green sericitized plagioclases in a black chloritic matrix
										584-589 Blocky, highly chloritized fine grained andesite with quartz veins, 2% py, minor cpy.
			1	土			1	1		589-597 Breccia, with BFP, andesite fragments. Some interstitial carbonate, minor disseminated
							1	1		sulphides (< 1/2%, cpy = py), along with traces disseminated epidote.
			$\pm$	=				=	士	Can not tell whether intrusive or diatreme brecci May herald approach of PMP as in LL-74-3. Last
				-				-		d" appears to be non brecciated BFP
		#	#							597 END OF HOLE
		#	#	:				+		C) Hodgen PGy.
								丰		
			=				#	+		
\$1. WAL	-	-		_	-	-	-			

•	•		_		
		-	•	4-	
/ B			•		12.

Company AMAX Potsh Limited	Project #515	Bearing	Sheet 1 of 3 Hole No.
Mining	Property Lennac Lake	Inclination -90°	Coordinates
Division Omineca	Started April 5,1974		108+00N
	Completed April 7, 1974		78+00E
Geographic	Logged by C.J. Hodgson	Depth 598'	Altitude 12' above
Coordinates		-	Lake

Footage	Core	%				Remarks
	Rec					
	S TE HEN W					
						0-40 CASING
						le cos e l'il l'alla de cambanata
						40-295 Grey andesite breccia, chlorite-carbonate
						alteration. Calcite mainly on stringers.
						Quartz veins approx. 1-2%, about 3/ft.
						Sulphides approx. 3%, Py/cpy = 3-5/1, 1/2% epidot
			<del>  </del>		4-1	mainly on fractures with pyrite. Rare moly in
						quartz veins at 99',146',156', generally in quart
						veins wider than 1/4", commonly with drusy quarts
		-				Rare magnetite veinlets.
						40-43' Sheared, with calcite and chlorite
						171-203' Very blocky about 29' of core recovered 219-230' Splash of cpy with py, magnetite
						219-230' Splash of cpy with py, magnetite
						228' 6" cave
						233' 6" chloritized shear
						282.5-285.5' chloritized shear zone
						288' 4" chloritized shear
						291.5' 4" chloritized shear
						The section 280-295' is heavily chloritized and
						sheared throughout
		_				205 206 REP dyke
k. 43*					+	Upper contact 25° to CA, lower about 30° to CA
		-		-1	++-+	
						Weakly chloritized, quartz veins approx. 1%. Sulphides approx. 1-2% py > cpv.

Footage	Core	%			Remarks
	Rec	Rec			
					306-365 Andesite breccia
					Same as 40-295'
		(4)			
					cpy approx. 3/1
					1/2% disseminated epidote
					318-326' Blocky, chlorite slips, esp. 6" at 322
					365-494.5 Fine-grained foliated quartz diorite, unl
	¥				any phases seen in other holes.
					3% subparallel biotite phenocrysts to 5 mm. 70-9
					to CA.
	0.00				10-25% plagioclase phenocrysts to 8 mm.
7					
					Texturally this unit is very in-homogeneous.
A					Locally it resembles BFP, but grades from that
					to a very fine-grained porphyry with no sharp
					contact between the two. Included fragments of
					pinkish BFP are common. On the other hand, this
					unit is unlike the PMP in that it is quartz-vein
					and has a low but constant sulphide content.
					Unit is fairly fresh, but shows kaolinite altera
					of plagioclase where more coarsely porphyritic.
					Quartz veins 1% with sericite selvages, possibly
					some K-feldspar.
					Sulphides ≤ 1/2% py ~/cpy
		1.00			365-369 looks like pretty good BFP
			15.		384' 2" quartz veins and moly 30° to CA
					395' 2" quartz veins and moly 30° to CA
1 miles					
				7	

		) T-							LL-74-5	(		
ootage							Remarks					
	Rec	Rec										
							396.5	<b>-</b> 494.5' (	Good fine gra	ined phase		
					10		with	h BFP inclu	ısions			
									cite gouge z			
										artz veinsin adjace		
							fine	e grained p	hase			
									vith pinkish			
									veins, traces	sulphides except i		
					-		major shear zone					
							Traces disseminated epidote					
							510-528' shear zone, blocky, local gouge, green					
					sericite alteration throughout. Pyritic shea							
							vein 0° to CA @ 510-513'. Gouge at 522-524'					
							536-598 Fi	ne-grained	quartz diori	te with 15-20% BFP		
-	-						inclusio	onstessenti	ally on intr	usive breccia.		
					-	1	Foliation	on very var	ciable - main	aly at approx. 45° t		
							CA Out	artz veins	1% to 1" wid	le, some with		
-					-		K-felds	par rims.	270,00 220	,		
									y/cpy > 1/1)			
								disseminate				
							Minor calcite veins					
-							500 5 5	061 6 : :				
							390.3-3	96 Serici	tized shear	zone		
							598 END 0	F HOLE				
						- in		01111	-			
	-+				-			C. Hodgin	- Pay.			
1 - W.O.								<del> </del>				
-				-			ļ					

# APPENDIX III

CONTRACTOR'S AGREEMENT & INVOICES

#### AGREEMENT

This Agreement made this 2/ day of March, 1974

BETWEEN

AMAX POTASH LIMITED

601-535 Thurlow Street

Vancouver, B.C.

V6E 3L6

(hereinafter referred to as the "COMPANY")

AND

D.W. ATES ENTERPRISES LTD.

. 1668 West 1st Ave.,

Vancouver, B.C.

V6J 1G1

(hereinafter referred to as the "CONTRACTOR")

WHEREAS the COMPANY hereby requests that the CONTRACTOR carry out certain surface diamond drilling and other services, on the COMPANY'S Lennac Lake Property located 20 miles north of Topley, British Columbia.

AND WHEREAS the CONTRACTOR hereby agrees to perform said diamond drilling and other services requested, under the terms and conditions hereinafter contained.

#### 1. SCOPE OF WORK

The work is to consist of a series of drill holes, drilled at locations specified by the COMPANY. A total minimum footage of 3000 feet shall be drilled, but total footage may be extended beyond that amount, by mutual consent. Holes shall be drilled with BQWL tools producing 1 7/16" diameter core, as far as is reasonably practical. Maximum depth of any hole shall not exceed 1,500 feet, and minimum depth shall be 300 feet. Angles of holes shall be from minus 45 to minus 90 degrees.

#### 2. COMMENCEMENT AND EXECUTION OF WORK

Work shall be commenced within the time limits specified by the COMPANY. Drilling operations shall be carried out 24 hours per day for seven days per week or as near that schedule as can reasonably be maintained.

#### 3. THE CONTRACTOR HEREBY COVENANTS AND AGREES:

- a) To provide all of the required drilling machinery and associated tools including, but not limited to, one skid mounted model 38 drill capable of drilling BQ core to a depth of 1500 feet.
- b) That drilling crews will follow good drilling practice and shall use due care and diligence as shall enable them to recover as high a percentage of core as the nature of the ground being drilled shall permit. All cores shall be delivered to the COMPANY, in boxes provided by the CONTRACTOR at the drill sites.
- c) That it shall be responsible for, and will pay promptly all costs and charges, incurred by itself for labour, machinery, tools and supplies used in completing the work hereunder so that no lien or other such charge relative to the CONTRACTOR, may be registered against the COMPANY or the property. The CONTRACTOR shall be responsible for the payment of all assessments for Workmen's Compensation, Holiday Pay, Canada Pension, Unemployment Insurance, Sales Taxes, or other such applicable charges relative to its own labour and supplies purchased.
- d) The CONTRACTOR shall, at all times, enforce strict discipline and maintain good order among its employees and shall not retain on the work any unfit person or anyone not skilled in the work assigned to him. Any employee who is objectionable or unsatisfactory to the COMPANY shall be removed from the work and replaced by an employee satisfactory to the COMPANY.
- e) The CONTRACTOR shall keep his camp and drill sites free from waste and rubbish, and at the completion of his work he shall leave the camp area and all drill sites as nearly as possible in the condition such as it was prior to the commencement of the work (see Section 6f).
- f) The CONTRACTOR and its employees shall not disclose any information obtained in the course of the work performed or show cores or other samples procured in connection to third parties.

#### 4. THE COMPANY HEREBY AGREES:

- a) Should cavities, loose or caving ground or excessive water flows be encountered in a hole so that further drilling in that hole is deemed impracticable, that hole may, by mutual consent, be abandoned, and, the CONTRACTOR be paid at rates so specified herein for all footage completed in that hole. However, should the COMPANY request that further work be carried out in the hole beyond this point, then the CONTRACTOR shall continue work in the hole, but such continuing work shall be at Field Cost rates.
- b) That it will provide access roads and prepare drill sites.

- c) The COMPANY shall provide, at no cost to the CONTRACTOR, all rights of way of ingress and egress to all lands that may be required to enable the CONTRACTOR to carry out the work as specified. The CONTRACTOR shall be permitted to cut and fell any timber on the COMPANY's property as may be required in the course of the work hereunder, and the COMPANY SHALL INDEMNIFY AND SAVE HARMLESS THE CONTRACTOR from any assessment for stumpage or other charges of every kind and nature.
- d) The COMPANY will have a representative on site to approve COMPANY charges subject always to final approval by Vancouver Office.
- 5. THE COMPANY HEREBY AGREES to pay the CONTRACTOR for footage drilled and other services performed as follows:
- a) Mobilization of men and equipment to truck unload point and demobilization from truck load point ..... \$ 800.00
- b) Drilling: BQ Core in Bedrock 0 to 500 feet .... \$ 9.07 per foot 500 to 1,000 feet .... \$ 9.69 per foot 1,000 to 1,500 feet .... \$10.60 per foot
- c) Overburden penetration: 0 to 50 feet ...... \$11.40 per foot over 50 feet ....FIELD COST + .60 per foot
- d) Reaming casing into bedrock, if required, at FIELD COST, plus \$0.60 per foot reamed for wear and tear of the casing.
- e) Casing of hole, if required, at FIELD COST. Casing left in holes at request of COMPANY will be charged at replacement cost. Casing lost in holes by CONTRACTOR at 50% of replacement cost.
- f) Dip Testing performed at the rate of \$28.00 per hour.
- g) Cementing of drill holes and redrilling of cemented section of hole, at FIELD COST. Only 8 man hours will be allowed for setting time (See 5(o))
- h) Water supply: The CONTRACTOR shall provide, install, maintain, heat and remove up to 1200 feet of waterline for a maximum lift of 200 feet. Additional expense incurred in providing waterline or lift in excess of these maximums shall be charged to the COMPANY at FIELD COST.
- i) Moving of drill from site to site. The first 40 man hours are for the CONTRACTOR'S account. Time in excess of 40 man hours to be charged 50% to the CONTRACTOR and 50% to the COMPANY.
- j) Drilling mud and additives, if required, shall be for the COMPANY'S Account, at cost on job site plus 12%. Mud mixing time shall be for the CONTRACTOR'S account.

- k) Truck Rental: CONTRACTOR shall provide crew transportation and service at no cost to the COMPANY.
- 1) Core boxes shall be furnished by CONTRACTOR at \$3.60 per tray.
- m) Camp: CONTRACTOR will furnish room and board for its personnel. The erection and teardown of a suitable camp for the CONTRACTOR'S crew would be performed on a FIELD COST basis. If possible the CONTRACTOR will board COMPANY personnel at a cost of \$3.50 per meal.
- n) Field Costs where applicable shall be:

i) Labour \$9.45 per hour

ii) Drill with Tower 7.30 per hour

Pump .75 per hour

Coil Stove(if applicable).50 per hour plus fuel

Truck (6 x 6 water) 8.00 per hour

Truck - pickup 6.50 per hour (if ever applicable)

- iii) Supplies consumed or lost in borehole at field replacement cost plus 15%, except for casing 5(e).
- o) Standby Time: for convenience of Amax Potash, waiting for cement to set, etc.

Labour (max. 8 hrs) \$8.60 per man hour Equipment (max. 8 hrs/day) 5.00 per hour

- p) The CONTRACTOR will supply a model 450 John Deere Tractor at a monthly cost of \$1200, prorated for shorter period, plus the cost of transporting the tractor between Smithers and the job site.
- 6. INSURANCE AND GENERAL
- a) The CONTRACTOR, at its own cost, shall maintain insurance to the following limits: Liability and Property Damage \$500,000.00, Automobile Insurance coverage \$500,000.00. CONTRACTOR shall furnish the COMPANY on demand, insurer's certificates evidencing the existence of such insurance, which certificates shall specifically state that the policy covers the above mentioned requirements and stipulates that the policy shall not be modified or cancelled unless ten (10) days prior written notice thereof is furnished to the COMPANY.
- b) The CONTRACTOR agrees to indemnify AMAX, and its directors, employees and agent from all loss and expense including any court costs and other legal expenses arising out of all claims, demands, actions, processes and suits of every nature and kind whatsoever incident to or resulting from the operations of CONTRACTOR or of any subcontractor or agent or employee of the CONTRACTOR or any of them.

- The CONTRACTOR shall comply with all applicable municipal, provincial, territorial and federal legislation and regulations dealing with forest fires (by bringing in the necessary fire fighting equipment), pollution or similar matters and will be responsible for any violations of such legislation and regulations by him, his sub-contractors, and his employees, while providing services to the COMPANY hereunder.
- The CONTRACTOR shall not be held liable for any loss or damage suffered by reason of any cause beyond its active control such as riots, strikes, lockouts, Acts of God, or failure of transportation.
- e) Under the foregoing terms and conditions the CONTRACTOR does not guarantee to drill any hole to any specified depth. The CONTRACTOR will nowever, expend every reasonable effort to complete all holes to the satisfaction of the COMPANY.
- f) The CONTRACTOR shall invoice the COMPANY semi-monthly for footage drilled and other services performed. Such invoices shall be due and payable within 30 days of invoice date. The COMPANY shall withold \$2,000.00 from the last invoice until the drill sites have been cleaned up to the satisfaction of the COMPANY'S representative.

IN WITNESS WHEREOF the parties hereunto affixed their corporate seals in the presence of their respective proper officers first duly qualified in that behalf as of the day and year first above written.

The Corporate Seal of D.W. COATES ENTERPRISES LTD. was hereunto affixed in the presence of

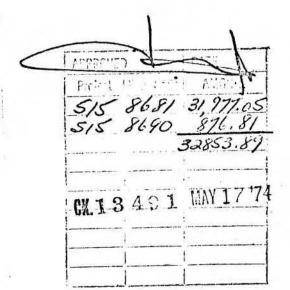
The Corporate Seal of AMAX POTASH LIMITED

was hereunto affixed in the

presence of Attest:

Pile

1527512 + 105117 + 1736625 + 83865 -3285389 T



Amax Potash Ltd., 601 - 535 Thurlow Street, Vancouver, B.C.

INVOICE

INVOICE NO.: 710

JOB NO.:

221

D.W. COATES ENTERPRISES LTD.

1668 - 1st AVENUE WEST VANCOUVER 9, B.C.

MAY 14 1874

Date: May 8th, 1974.

Adjustments to Inv. #696, 697 & 701 TOUVER OFFICE

Your letter dated May 1, 1974.

#### CREDIT NOTE

Inv. #696

CRIOD:

Delete Other Charges \$44.40 Labour Credit: 36 hrs. @ 9.45/hr

340.20

Inv. #697

Labour Credit: 41 hrs. @ 9.45/hr

387.45

\$ 384.60

<u>v. #701</u>

Delete Other Charges

66.60 V

TOTAL CREDIT:

5158681 (838.85 SE 18 4 0 1 MAY 17 74

1994 - 1997 (1994<mark>44</mark>

INVOICE

AMAX नग गाना होता APR 1 1 1974

Amax Potash Limited, 35 Thurlow Street, uver, B.C. 6

D.W. COATES ENTERPRISES LTD NCOUVER OFFICE

1668 - 1st AVENUE WEST VANCOUVER 9, B.C.

Date: April 9, 1974.

Tractor mobilization - Topley Area.

D: March 20 - 29, 1974.

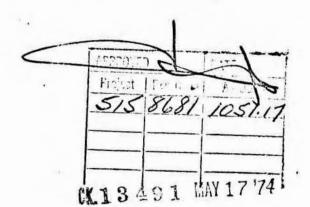
Mobilization of John Deere 350

\$1,051.17

697

221

\$1,051.17



- -- Marine to a large to the contract of the



### obil tion of Tractor:

#### a) Labour & Equipment

Date		Memo	Man Hours	Truck
Mar.	20	To job site with tractor	_5	-
"	24	Attempt to pull Tractor out		
		at Lake	8	156 miles
11	28	Blast ice & Winch Tractor	18	156 miles
11	29	Pulled tractor out of lake	42	156 miles
			73	468

#### Calculation:

			@ \$9.45/hour @ .20/mi	\$ 689.85 /	\$ 783.45 V
Truck	:	468 miles	@ .20/ml	93.00	Ψ 703.13 ₽

#### b) Material & Other Charges:

1 5/8 x 65 Hoisting Cable Madigan Equip. Inv. #277 Athers Transport Ltd. #26450	53.25 123.47 91.00	\$ 267.72 V
Total Mobilization of Tractor:		\$ 1,051.17

Labour 1

CK.13491 MAY 17174

INVOICE

: Amax Potash Limited, 601-535 Thurlow Street, Vancouver, B.C. V6E 3L6

D.W. COATES ENTERPRISES LTD. VANCOUVER OFFICE

INVOICE NO .:

696 221

Date: April 9, 1974.

1668 - 1st AVENUE WEST VANCOUVER 9, B.C.

Topley Area Drilling.

March 20 - 31, 1974. RIOD:

Drilling Detail

Overburden

Transportation

Mud & Additives

Reaming & Casing

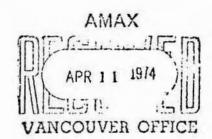
Tractor Rental

Other Charges

\$12,622.14 47.55 1 1,761.00 2 313.42 \$ 60.80 / 425.81 44.40

\$15,275.12

515 8690 M.13 491



#### rili\_g Detail

ole #	Size	From	To	Footage	Rate/Foot	Amount
74-1	BQ	0	13	13 /	\$11.40 /	\$ 148.20 1
"	BQ	13	500	487 /	9.07 ✓	4,417.09
**	BQ	500	603	103 √	9.69 V	998.07
74-2	BQ	0	24	24 /	11.40 V	273.60
**	BQ	24	500	476 J	9.07 ✓	4,317.32
	BQ	500	606	106 √	9.69 1	1,027.14
74-3	BQ	0	50	50 🗸	11.40 /	570.00 V
"	BQ	50	60	10 /	Field Cost	
11	BQ	60	156	96 🗸	9.07 🗸	8 770.72
47						
				1365'		\$ 12,622.14 V

#### verburden:

#### a) Labour & Equipment

Memo

					12 <del>1111 012311 2</del> 7		
ar.	31N Tri	icone 50'- 60	',B casing to 60	)' 3	11/2		
	Calculation:		/		10, "		
	Labour:	3 hrs. @ \$9.	45/hr	\$ 28.35 /			
	Drill: Pump:	3 hrs. @ \$9. 1½ hrs @ 7. 1½ hrs @ (.7	30/hr 5x2)/hr	10.95 / 2.25 /		\$	41.55 🗸
ь)	Materials:		<i>y</i>				
	Hole #	<u>Item</u>	Amount				
	74-3	Casing charge	10 feet @ .6	60/foot √			6.00 V
otal	l Overburden:					ė	47.55 V

Man Hours

CK.13491 MAY 17'74



#### Transportation

Lump Sum:

50% x \$800.00

400.00

#### (b) Labour & Equipment:

Dat	<u>e</u>			Memo				Man Hou	ırs	Truck
Mar	21	D	Haul	Camp Gea	ar		.+	28		2
Mar	22	D	Build	d Camp &	Hau?	1 Equ	uip.	33		-
Mar	23	D	Haul	Equipmen	nt		-	32		-
Mar	24	D	i.	ii	&	Set	up	32		1
Mar	25	D	***	11	&	11	"	_16		_1_
								141		4

#### Calculation:

Labour Truck (6x6):

ton:

141 hrs. @ \$9.45/hr

2 hrs. @ 8.00/hr v 2 hrs. @ 6.50/hr . \$ 1,332.00

16.00 13.00

1,361.00

Total Transportation:

\$ 1,761.00

#### Mud & Additives:

#### Material

Date	2	•		Hole #	Quick Gel	Quick Tro	1
Mar	28	D		74 -2	6 bags		
11	28	N		II.	3	3 bags	
**	29	D		11	2	4	
11	29	N	.05	11	1	2	
11	30			11	1	10	
11	30			11	N <del>=</del> //	9	
11	31			74-3	2	11 <del>8-4</del> 1	
11	31	N		11	_3	_	
					18	28 ✓	

#### Calculation:

18 50# bags Quick Gel @ \$5.80/bag 28 2# bags Quick Trol @ \$4.90/bag / Freight: 956 lbs. @ \$4.00/cwt /

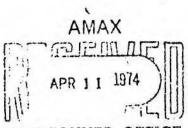
Plus 12%:

\$ 104.40 137.20 ✓ 38.24 ✓

279.84 ✓ 33.58 /

Total Mud & Additives:

W.I. 3 40 7 MAY 17 74



#### Rea ig & Casing: 🗡

VANCOUVER OFFICE

#### (a) Labour & Equipment

Dat	<u>e</u>		1	Memo		Man Hours	<u>Drill</u>
Mar	25 25		Ream	Casing	13'-16' 16'-22'	2	1
	23	N			10 -22	4/	2/

#### Calculation:

Labour:	4 hrs. @ \$9.45	\$ 37.80 V
Drill:	2 hrs. @ 7.30 ✓ /	14.60
Pump:	2 hrs. @ (.75x2) √	3.00

#### 55.40 √

5.40 V

#### (b) Material:

Cocina	Charges	100	0	foot	a	.60/foot	/	
Casing	Charges	127	9	reer	a	.00/1001	V	i

Total Reaming:	\$

#### Tractor Rental:

	W- 177000				400000000000000000000000000000000000000
John Deere	450:	Mar 20-31,	11 days	0	\$1200/mo

#### \$ 425.81 /

#### Other Charges:

#### Labour & Equipment

Da	ate	Memo	Man Hours	Drill
Ma	ar 26 N	Wait for Geologist	4	2
Ca	alculation:		/	
2	Labour:	4 hrs. @ \$8.60/hr	\$ 34.40	

\$ 44.40

\$13491 MAY 17'74

Amax Potash Limited, 601-535 Thurlow Street, D.W. COATES ENTERPRISES LTD. Vancouver, B. C. V6F ~16

RIOD:

AMAX

INVOICE NO .: 701

Пров но.: 221

Pate: April 19, 1974

1668 - 1st AVENUE WEST VANCOUVER 9, B.C.

Project | Frp. Onio 1 AMOUR 515 8681 16 915.25

CK. 13491 MAY 17'74

APR 22 1974 3(4) 1511 1/ 151

VANCOUVER OFFICE

Topley Area Drilling

April 1 - 9, 1974

Drilling Detail

Transportation

Acid Tests

Mud & Additives

Tractor Rental 8690

Core Boxes

Other Charges

\$ ~15,374.98

78.62

451.00/

482.40

66.60

17,366.25

64.18 49 I WAY 17 '74



#### Drilling Detail

Hole #	Size	From	To	Footage	Rate/Foot	Amount
74-3	BQ	156	500	344	\$ 9.07 /	\$ 3,120.08 V
74-3	BQ	500	613	113	9.69 /	1,094.97 √
74-4	BQ	0	46	46	11.40 /	524.40 V
74-4	BQ	46	500	454	9.07 /	4,117.78
74-4	BQ	500	597	97	9.69 /	939.93 🗸
74-5	BQ	0	40	40	11.40 /	456.00 √
74-5	BQ	40	500	460	9.07 /	4,172,20 ✓
74-5	BQ	500	598	98	9.69 🗸	949.62 ✓
			59	1652 V		\$15,374.98

#### Transportation

(a) Lump Sum: 50% x \$ 800.00

400.00 /

#### (b Labour & Equipment

Date				Memo			Man Hou	urs	6x6	½ton
April	7 D	Moving	to	road		*	24		2	4
11	8D	"	11	11			8		1	1
"	9D	11	11	11			15		-	-
							47		1	5

#### Calculation:

47 hours @ \$ 9.45/hr /
1 hour @ 8.00/hr /
5 hours @ 6.50/hr / 444.15 / 8.00 / 32.50 / Labour: Truck-6x6: aton: Total Transportation

484.65 884.65

#### Acid Tests

Hole # 74-4 Test @ 597 feet

CX 13 49 1 MAY 17 '74

28.00

#### Mud & Additives:

#### -Material

Date		Hole #	Quick Gel	Quick Trol
April	1D 3D	74-3 74- <b>3</b>	1 bags	-
11	5D	74-4	4	¥
÷.			9	

#### Cal ulation:

9	50# bags Freight:	Quick Gel 6 450 lbs 6 \$	\$ 5.80/bag 5 4.00/cwt	1	\$ 52.20 18.00	1
			Plus 1	2% /	70 c 20 8 · 42	1

Cotal Mud & Additives

\$ 78.62 ✓

#### ractor Rental

hn	D				,	
~ 1111	Deere 4	50:	April 1 - ,	9 days @ \$1200.00 /mo.	\$ 360.00	
			Transpo tation	to Smithers	91.00	\$ 451.00
			Labour	15 hours	1	
				,	hill	

ore Boxes

134 Boxes @ \$ 3.60 per box /

\$ 482.40 /

#### ther charges

#### Labour & Materials

Date	Memo	Man Hours	<u>Drill</u>
April 6N	Wait for Geologist	6	3

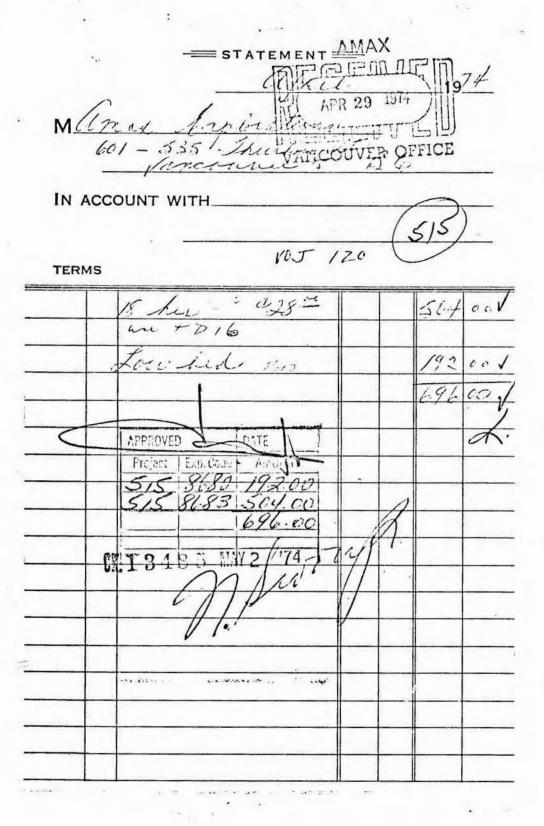
#### Calculation

Labour: Drill:	6 hours @ \$ 8.60 /hr / 3 hours @ \$ 5.00 /hr /	\$ 51.60

Total Other Charges

CK 13491 MAY 17'74

\$ 66.60 /



#### C.C.S. CONTRACTING LTP

P.O.Box 135, Houston, B.C. Telephone 645-2358

1 100	
Location for social for fifty	
Equipment No. A Date (A	19.4
Day Shift	
Area Night Shift	- 4 - 4 - 4 - 4 - 4
	Hours
Operator's Hours	
Operator's Hours	
Hours Idle	
Service	
Repairs	
REMARKS	
Malking but out to how	th
No. of Loads or Trips	
Operator's Signature	n M
Foreman's Sign	nature/

## C.C.S. CONTRACTING LT

P.O.Box 135, Houston, B.C. Telephone 845-2358

Location	
Equipment No. 14 0/16 Date more L	. 39 19.14
Area Night Shift	101 112 101 1 1 1 1
[	Hours
Operator's Hours	*********
Machine Hours	
Hours Idle	9 hour
Service	
Repairs	or to the total t
REMARKS	
Bullecohop for John &	cue
All of the Boundaries of the Control	
No. of Loads or Trips	
Type of Work Operator's Signature	ion
1022 Foreman's Sign	nature /

#### C.C.S. CONTRACTING LTD

P.O.Box 135, Houston, B.C. Telephone o45-2358

#### OPERATORS DAILY EQUIPMENT REPORT

Location Fouttone Lake	h
Equipment No Date Appears.	. Ý 19. Ý
Day Shift	
Area Night Shift	
[	Hours
Operator's Hours	
Machine Hours	6
Hours Idle	
Service	Ka + a + a + a
Repairs	
REMARKS	
Romany J.D. 450. Butch	of drill
No. of Loads or Trips	
Type of Work  Operator's Signature	ml
Foreman's Sign	J

1021

1974 C.C.S. CONTRACTING. IN ACCOUNT WITH\_ TERMS C\$39 " 501 1150 320 1/2 50

#### C.C.S. CONTRACTION LTD.

P.O.Box 135, Houston, B.C. Telephone 845-2358

Location	e agrani en processo en en
Equipment No. 22 Date	1977 C. 1977
i	Day Shift
Area Ni	ght Shift
	Hours
Operator's Hours	
Machine Hours	62
Hours Idle	
Service	D.
Repairs	
REMARKS	
Many lowing .	Rena C
	to the state of the see the pre-
No. of Loads or Trips	
Type of Work	( )
1002	Surrya
Fo	reman's Signafure

#### C.C.S. CONTRACT ; LTD.

P.O.Box 135, Houston, B.C. Telephone 845-2358

Location	
Equipment No. (1921 Date Almost	19 ? 4
Day Shift	
Area Night Shift	
	Hours
Operator's Hours	
Machine Hours	. Them
Hours Idle	
Service	
Repairs	
REMARKS	<i>(</i>
No. of Loads or Trips	1.174
Type of Work  Conc C Scyle A 6	stry A
1003	ting Kin

#### C.C.S. CONTRACT! LTD.

P.O.Box 135, Houston, B.C. Telephone 845-2358

Location
Equipment No. 14/22/ Date 1974 1974
Day Shift
Area Night Shift
Hours
Operator's Hours
Machine Hours
Hours Idle
Service
Repairs
REMARKS
No. of Loads or Trips
No. of Loads or Trips  Type of Work  Operator's Signature  3
1 0 0 4 Foreman's Signature

#### C.C.S. CONTRACT 1 LTD.

P.O.Box 135, Houston, B.C. Telephone 845-2358

Location	
Equipment No. 1777	Date 1
	Day Shift
Area	Night Shift
	Hours
Operator's Hours	
Machine Hours	8. 2 hours
Hours Idle	
Service	
Repairs	. 404 104 104 404 404 504 514 104 104 104 104 104
	MARKS
	/ 
No. of Loads or Trips	
Operator's Signature	1897 A-craya
1005	Foreman's Signature

## **DELIVERY SLIP**

Nº 0955

# Bulkley Valley Transport

TD

Bonded Carriers Serving Burns Lake, Topley, Houston and areas

Houston 845-2465 Radio: 1R34; 1R21; 1R48 P.O.Box 277, Houston, B.C.

Date : 1129. 7	Truck No.:	Ζ
	Haus Olson	
Customer's Name :	oul Billie	
Address:	Haiston	
.,		
	Customer's Order No.:	
Description of Load :	02/	********
Picked up at :	19 mile To	
Destination :	19 Mill Tople	Zd
all & Per	. 53 - 2335/1	8
		:
Weight of Load :	AUTON PROPERTY	
1.77	AUTON PROPERTY	per Hr/l
Weight of Load:	AUTON PROPERTY	per Hr/l
No. of Ho rs:	AUTON PROPERTY	per Hr/N

