

**BRINEX**  
BRITISH NEWFOUNDLAND  
EXPLORATION LIMITED

ONE WESTMOUNT SQUARE, MONTREAL, QUEBEC, CANADA, H3Z 2X5

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120 (211)

December 8, 1977

Mr. J.M. Fleming  
Assistant Deputy Minister of Mines  
Government of Newfoundland and Labrador  
95 Bonaventure Ave.  
St. John's, Nfld.  
A1C 5T7

Dear John,

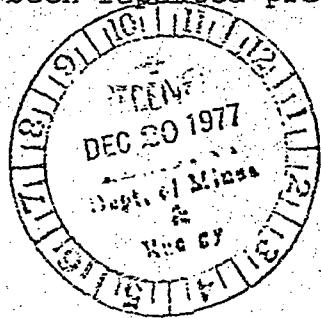
I refer back to your letter of May 31st, 1977 concerning report submissions. Having now received the Cominco report, I herewith enclose it, together with several other reports which I don't think you have copies of. They are:

P 76012 Initial Results of IP Surveying at Indian Pond -  
G 77007 Petrographic Study of the Indian Pond Volcanics -  
P 76013 HEM and Magnetometer Survey, Indian Pond Project -  
G 75078 Drill Hole Logs, Port au Port Peninsula -  
G 76031 Cominco-Ramah Reconnaissance.

You will note in the Cominco report a Statement of Expenditures of \$40,598. I don't think this had been reported previously.

Yours sincerely,

G. Harper  
Regional Geologist  
Newfoundland and Labrador



120 (21)

DRILL HOLE LOGS

PORt AU PORT PENINSULA, NEWFOUNDLAND

by Craig Saunders & Jenna Hardy

Thirty-six diamond drill holes were completed in 1973 and 1974 on the Port au Port Peninsula, Southwest Newfoundland, during a programme by Lehigh Cement and Brinex, to test the suitability of the sedimentary sequence as raw material for a cement plant. The cores were logged in detail in 1975 during the Brinex/Freeport programme for lead and zinc in the carbonate rocks. The cores are now stored in the Brinex base camp at Springdale, Newfoundland.

The stratigraphic terminology is defined in the Brinex/Freeport report on exploration in 1975 and basically follows that introduced by David Besaw in his reports. Accurate locations of the drill holes can be found in the Lehigh report, while a general location map is included with the logs.



## D. D. HOLE No. 1-3

LOCATION UTM Grid 5577300 MN

349900 ME

HOLE STARTED

HOLE COMPLETED

CORE RECOVERY 100 %

DRILLED BY

SURVEY		
Depth	Dip	Azimuth

COLLAR LAT.  
 DEP.  
 ELEV.  
 AZIMUTH  
 DIP.  
 LENGTH  
 HGT. PROJ. VERT. PROJ.

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
0	5.0	Overturden <u>PIGEON HEAD</u>				
5.0	10.2"	Grey limy mudstone local pellets, sparse fine fossils, some irregular calcite patches (less than 1/5") and veins (less than 1/10") 9.0-10.0' limonite-stained fractures, irregular pellet areas.				
10.2"	19.0	grey limy mudstone, local calcite s/s (less than 1/10"-1"); limonite in fractures and along bedding planes throughout; 14.5'-15.0' elongate pelleted cherty biotitic debris with layers of non-fossiliferous chert up to 1/2" thick; 15'10": elongate clasts in vaguely bioturbated zone from 15.0-19.0.				
19.0	27.8"	grey limy mudstone, locally laminated. Calcite patches throughout 26'2" - 1" x 1". hematite on bedding planes throughout.; 23.0-25 2": pelleted, finely fossil. chert.				
27.8"	34.2"	Grey limy mudstone, vaguely to distinctly bioturbated; 28.9"-brownish white (fract.) sandy and limy mudstone; 32.2": chert w/ pellets; hematite stain throughout.				
34.2"	38.4"	Grey-tan limy mudstone; hematite coated stylolites and splotches; limonitic green shaly partings; sandy; fine calcite filled fractures.				

FOOTAGE		PROPERTY	PORT AU PORT	SAMPLING			
FROM	TO			SPL. NO.	FROM	TO	FEET
38.4"	42.0		Grey limy mudstone, bioturbated, oval cherts and pellets; hematite coating some clasts and stylolites; fine fossil fragments; number of pellets, fossils and clasts decreasing downwards; shaly partings and patches; calcite patches increases downwards.				
42.0	50.0		Grey-grey tan limy mudstone; hematite and calcite filled cavities and fine fractures; vague bioturbation with limy infill increasing in definition downward; chert at 42.2", 45.4", 44.8", 45.1"; 45.3"-46.6" - irregular? yellowish veins (soft) and calcite; 47.2": yellow brown sandy and limy mudstone.				
50.0	57.8"		Grey limy mudstone, distinctly bioturbated locally pelleted - packstone or more often wackestone; limestone and hematite infill, fine fossil debris (bivalves, crinoids); sparse angular limestone coated clasts burrows infilled with coarser, lighter (yellow to white) limy mudstone; 56.0-57.6": laminated, lighter and darker layers on 1" scale.				
57.8"	65.0		Grey limy mudstone, vaguely to distinctly bioturbated; fossil fragments recrystallised to white sparry calcite (crinoids?); limonite infill; irregular calcite fractures and vugs.				
65.0	74.6"		Grey-tan limy mudstone; sandy textured; hematite veinlets and stylolites with bleached white area surrounding; limonite stained, green shaly beds: 66.10", 69.5", 71.0				
74.6	81.6"		Pink-grey limy mudstone; hematite and limonite on bedding planes and disseminations throughout, sometimes coating oval pellets in normal limy matrix i.e. local wackestone areas; sparse calcite veinlets.				
81.6"	86.1"		Pink-grey limy bioturbated mudstone with hematite and limonite disseminations throughout; burrow infill coarse whitish grey mudstone; hematite defines some pellets (less than 10%) and sparse splotches in burrows; limonite increases downwards.				
86.1"	90.10"		Pink-grey limy mudstone; sandy textures; hematite veinlets (sometimes cross cutting) and stylolites with bleached white area around; some 1/5" veins with calcite-limonite-hematite outward; green hematite and limonite stained shaly patches.				

FOOTAGE	FROM	TO	DESCRIPTION	SAMPLING			SP. NO.	FROM	TO	FEET
				SP. NO.	FROM	TO				
90.10"	100.11"		Grey limy mudstone with limonite and lesser hematite stained green shaly bands disseminated throughout; local pellets, interclasts; fine fossil debris-wackestone to packstone (e.g. 91.5"-91.8") algal sets, bivalves, gastropods (?); again calcite-limonite-hematite outward, much bioturbation - disruption of shaly bands - burrows coarser limy yellow mudstone often pelleted; hematite and limonite coats some clasts and pellets.							
			<u>LOWER COVE</u>							
100.11"	105.11"		Grey tan limy mudstone with limonite stained green shaly portions; local grainstones (pellets, clasts and interclasts) gradational into mudstone (e.g. 102.1"-102.3")							
105.11"	114.6"		Pink-grey bioturbated limy mudstone with pinkish hematite and limonite stained, slightly coarser patches in grey matrix; hematite stained stylolites; calcite veins and patches (less than 1/16"); below 110.4" limonite and hematite stained shaly bands and no disrupted coarser patches; sparry calcite parallel to these bands 1/5" thick at 113.1".							
114.6"	118.8"		Grey to tan limy mudstone with some pink grey patches; hematite and limonite splotches and veinlets; calcite veinlets and patches outward to limonite and hematite; local laminations into vague grey and tan bands; cross cut by hematite splotches; some tan bands, limy shales; rest just normal mudstone.							
118.8"	132.5"		Grey limy mudstone with limonite and lesser hematite stained green shaly partings; local packstone grades to mudstone; local calcite filled vugs elongated parallel to shaly partings.							
132.5"	135.0		Pink-grey sandy textures mudstone.							
133.0	136.8"		Pink to grey limy mudstone; bioturbated, infill limonite stained; coarse grained, sandy with some interclasts and pellets; local wackestone with limonite stained fragments; darkening in colour downward, 135.10"-136.8": grainstone to packstone oolites, pellets and gastropods, bryozoans.							

## PROPERTY PORT AU PORT

FOOTAGE		DESCRIPTION	SAMPLING			FAC	FAC
FROM	TO		SPI. NO.	FROM	TO		
136.8"	140.9"	Grey limy mudstone, sandy textures; fine laminations less than 1/10" defined by hematite and limonite staining.					
140.9"	146.0	Grey limy mudstone, bioturbated with local sparry calcite infill; rest coarser grained, more sandy with more hematite than matrix; some hematite stained shale partings decreasing downward, sparse local pellets; hematite may coat outside edges of burrows and pellets (pseudo-oolites).					
146.0	149.7"	Grey to tan limy mudstone, sandy textures; alternating grey and tan bands; 147.9"-149.0 - alternating pink and grey bands.					
149.7"	152.0	Grey limy bioturbated mudstone; infill sandy limonitic; often grainstone.					
152.0	163.3"	Grey limy mudstone; often laminated with hematite or limonite stained beds alternating with grey; some shaly partings less than 1/10" wide; limonitic to 155.0; rest hematite; sandy textured; fine hematitic fractures may cross cut laminae; beyond 161.0 - laminae sparse.					
163.3"	177.8"	Grey limy mudstone; fine calcite fractures (up to 1" across; again with calcite-limonite-hematite outward) cut sub-parallel and sub-perpendicular to length of core; limy shale partings throughout; locally bioturbated with pellet packstone and sparse, recrystallised fossil debris; 174.0-175.0: grey to grey-tan mudstone with diffuse laminae and almost sandy texture.					
177.8"	181.0	Pink to grey to grey tan limy mudstone; finely laminated; pink-grey colour decreasing downward; 177.9": cavity infill, wackestone with hematite coated clasts.					
181.0	185.2"	Grey limy mudstone with irregular or limonitic shale partings; infill wackestone with interclasts, pebbles and pellets, each often coated by sparry calcite; infill coarser grained, more sandy and brownish than matrix.					
185.2"	192.10"	Grey to tan to grey-pink finely laminated limy mudstone; below 185.0 number of laminae decreases as does amount of grey-pink colour.					

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
192.10"	202.5"	Dark grey limy mudstone; many limonitic (lesser hematitic stained) shaly partings; sparry calcite filled vugs less than 1" across (201.7" to 1" x 1") 201.3"-202.5": bioturbated with infill coarser and darker than matrix.				
202.5"	203.5"	Grey to pink limy mudstone; hematite stained bands alternating with normal grey mudstone, sandy textures; hematite coated partings and stylolites: 202.3" to 203.5" - good burrows with coarse, lighter infill; hematite coating outside of burrows.				
203.5"	204.5"	Dark grey to pink limy mudstone; intensely bioturbated; infill coarse grained grey-pink.				
204.5"	208.4"	Grey to pink limy mudstone; sandy textured; hematite stained shaly partings; intensely bioturbated with lighter infill; partly recrystallised burrows; hematite coating outside of burrows.				
208.4"	210.3"	Grey limy mudstone; shaly hematite stained partings, some with calcite filled fractures and length (gas escape); wavy bioturbation; infill sandy textures; coarser and darker in colour.				
210.3"	211.10"	Pink to grey limy mudstone; sandy textures; diffusely laminated with hematite stained layers (1 to 1/10").				
211.10"	219.0	Dark grey limy mudstone; intensely bioturbated; coarser dark grey-brown infill; recrystallised matrix; hematite coated shaly partings especially near 216.6"-217.2".				
219.0	220.6"	(SHARP CONTACT); light grey-tan sandstone; limonite and hematite stained patches; fine calcite fractures (less than 1/10") throughout.				
220.6"	228.1"	Dark grey limy mudstone; bioturbated with infill coarser-grained, darker, sometimes hematite stained; quartz filled vugs: 231.4", 226.4", 227.1", 227.5". Calcite filled vugs and veins and shaly partings throughout.				

PROPERTY PORT AU PORT

FOOTAGE		DESCRIPTION	SAMPLING		
FROM	TO		SPL. NO.	FROM	TO
228.1	232.4"	Light grey limy mudstone, sandy, limonitic and hematitic bands; 228.1" to 228.7"; darker grey bioturbated decreasing in amount of bioturbation downwards and trend to lighter colour; fine pellets and fossil debris throughout to 231.10"			
232.4"	233.4"	Grey limy mudstone; bioturbated; hematite stained and limonite coated shaly partings.			
233.4"	236.1"	Grey limy mudstone; sandy textures; calcite veinlets (1/16"-1") extend from 233.4" to 235.7"; slightly to distinctly bioturbated; recrystallised fossil debris; splotchy hematite and limonite staining.			
236.1"	246.11"	From previous unit gradational transition with colour darkening and fining of grain size. Medium-dark grey limy mudstone; variable bioturbation; shaly partings and stylolites distributed throughout; local wackestone (clasts, pellets, oolites, bivalve fragments); 240.1"-242.10" - calcite veinlet (1/10") surrounded by hematite; 245.9" - pyrite. 247.10" - dolomitic mudstone; quartz filled vug 244.2" (1/2" x 1").			
246.11"	257.0	Pink to grey mottled limy mudstone; 246.11"-248.4": green limonite stained shaly partings, variable bioturbation; wackestone to packstone (oolites and pellets) 249.2" to end; calcite-filled fracture (1") 247.0-248.1".			

PROJECT

LEHIGH CEMENT

Page 1 of 5

D. D. HOLE No. DDH 2-73.

LOCATION UTM Grid 5379600 MN

350600 ME

HOLE STARTED

HOLE COMPLETED

CORE RECOVERY 100 %

DRILLED BY

SURVEY		
Depth	Dip	Azimuth

COLLAR LAT.

DEP.

ELEV.

AZIMUTH

DIP.

LENGTH

HOR. PROJ.

VERT. PROJ.

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
0.0	12.0	Overburden				
12.0		Pine Tree: pink-grey mottled dolomitic sucrosic mudstone; ht-stained, vuggy, porosity partly occluded by sparry dlmnt., vugs not inter-connected rare green clay patches throughout up to 3" across. 12'5": bleached clay layer $\frac{1}{2}$ " thick.				
		Sparry calcite vug infill				
		Sparry calcite vug infill; coarse except for bottom $\frac{1}{2}$ " of finer greenish-brown.				
		Green shale, ht stained.				

PROPERTY Port au Port

HOLE NO. DDH 2-7

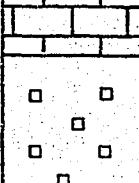
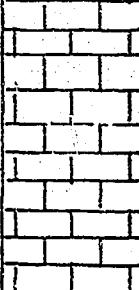
SHEET NO. 2

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
		Coarse sparry calcite vug infill with Ht stained lst. and dlt. clasts. Collapse breccia? angular clasts, interclasts, rotated				
		Geopetals: grey fine grained limy mud below white finer grained limy mud. Max size - $\frac{1}{4}$ " across, not less than $\frac{1}{8}$ ".				
		Grey chert.				
		Green to red, ht-stained shale with pocket of white limy clay?.				
		White chert, pelleted.				
78.0	80.0	Interbedded red sucrosic dlt. with greenish to reddish clay pockets giving almost a pox-like appearance with typical sucrosic mudstone.				
		dlmt filled cavity				
		Grey chert. dlmt. filled cav., grey, finer grained layered				
		Grey Chert. (several generations).				
		Green to grey, somewhat ht-stained clay.				
		Green, ht-stained clay.				
		Grey chert.				

HOLE NO. DCH 2-73

SHEET NO. 3

PROPERTY Port au Port

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL NO.	FROM	TO	FEET
119.6"	142.5"	 <p>dolomitic mudst. Rx, limonite and Ht. stained fragments and matrix; sparry calcite cement; fragments somewhat rounded; homogen.; circles of concentric limonite stain. Grey-pink, coarse grained dolomitic mudst., highly mottled, likely bioturbated with coarse dolomite infilling burrows, also some white clay infill</p> <p>Grey-tan limy bioturbated wackestone to mudst. (pellets, interclasts, fossil frags.) limonite-stained stylolites.</p> <p>Sparry calcite filled vug.</p> <p>PIGEON HEAD: mottled, med.-grey-tan limy mudst. to packestone bioturbated with infill, sucrosic grey-brown plus matrix, lithographic bed with pellets, interclasts and fossil fragments, infill patchy, dolomitised with rare dolomite bands; sporadic stylolites. 120.0-121.0 - green limy mudstone bands within grey limestone.</p> <p>Homog. grey-tan sucrosic dolomitic mudstone.</p>				
142.5"	161.5"	 <p>As above but with infill more often pale green.</p> <p>142.5"-149.9": series of large (interconnected?), sparry calcite filled vugs with pyrite. Lesser galena floating in the sparry calcite forming a layer with the outside of the vug up to 1" across; locally green mudstone patches and vugs may be centrally filled by green limey mudstone; several calcite generations.</p>				
161.5"	177.9"	 <p>158.3-159.3": sparry calcite filled vug with pyrite and galena in diffuse elongate clumps.</p> <p>As above but with infill limonite stained; sporadic beds of limestone conglomerate with clasts elongated subparallel to bedding and matrix packed into wackestone with calcite generally in areas where larger numbers of shaly partings and bioturbation minimal. Conglomerate contains pellets, clasts and interclasts and generally is med. grey in colour.</p>				

**PROPERTY** PORT AU POR

HOLE NO. 2-73  
SHEET NO. -4-

DRA 2-77

HOLE NO. 2-73  
SHEET NO. -5-

PROPERTY PORT AU PORT

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL NO.	FROM	TO	FEET
265.8"	274.0"	Green mudstone band.				
274.0	353.0"	<p>Med. grey to grey tan mottled limy mudstone; bioturbated with infill limonite stained to green-grey sporadic packstone with pellets, interclasts and gastropod fragments, sporadic stylolites. Pyrite vein up to 1" across, with calcite, green limy mudstone.</p> <p>LOWER COVE</p> <p>Med. to dk. grey mottled limy mudstone; bioturbated with infill darker grey-brown, more sucrosic; frequent but irregularly distributed siltstone partings; common stylolites. Pyrite with green limy mud infill, sporadically dolomitised.</p> <p>Green limy siltstone pocket within typical limy mudstone. Pyrite crystals, sporadic in vugs.</p>				
		Pyrite with grey-brown siltstone; gastropod clasts and oncolites? where calcite locally surrounds globular to collaform, indicating coating sides of vugs.				
		Pyrite here in vein with calcite, along 2 sides, again radiating.				
		Galena with green limy mudstone				
		Galena with sparry calcite and limy mudstone.				
		Pyrite and calcite in veinlet 1" wide.				



## D. D. HOLE No. 3-73

LOCATION UTM Grid 5381100 M.N.

351300 M.E.

HOLE STARTED

HOLE COMPLETED

CORE RECOVERY 100 %

DRILLED BY

SURVEY		
Depth	Dip	Azimuth

COLLAR LAT.

DEP.

LEV.

AZIMUTH

DIP

LENGTH

HOR. PROJ.

VERT. PROJ.

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SP. NO.	FROM	TO	FEET
0.0	6.0	Overburden PORT AU PORT				
6.0	22.0	Light grey to white, limy to dolomitic mudstone; sandy to fine textured limy bands generally fine textured; dolomitic sandy textures; series of dolomitic to limy sequences (9"-3' and 4"-4' respectively in width). Generally with contacts sharply defined. Lst. commonly having wackestone and pocketstone patches; dolomite often laminated with sparse limestone beds or patches; fine shaly partings throughout.				
22.0	55.0	Light to medium grey, limy to dolomitic mudstone. Dolostone generally laminated and sandy textures; may be locally vuggy (36.-37.0 sparsely so) 22.0-23.8: green-grey mottled dolomite; dolomite also locally mottled and may contain limestone patches of wackestone and pocketstone (pellets and interclasts). 28.5-30.0: bioturbated limestone with dolomitised burrows, limestone zones commonly mottled, less prominently, but all contain some wackestone; fine shaly partings and stylolites throughout; calcite patches up to 1" across throughout.				
55.0	60.9	Medium to light grey limy wackestone and pocketstone with some mudstone and dolomitised bands, green shale partings at 55'8"-60.0'				
60.9	78.75	White to grey, white to grey-tan limy to dolomitic mudstone; limonitic and lesser hematite stained stylolites and partings throughout, sandy textured - glauconitic clay at 77.75-78.0 and 78.6 to 78.9, intermixed				

## PROPERTY

FOOTAGE		DESCRIPTION	SAMPLING		
FROM	TO		SL. NO.	FROM	TO
		with calcite. Fine calcite veinlets and patches throughout. 60 9-63.5: finer grained bioturbated wacke-tonne patches; 63.5 - downward mostly dolomite, rest mixture of limestone and dolostone			
78.75	93.0	Medium grey limy to dolomitic mudstone; dolostone and limestone intimately interbedded and gradational; shaly partings and stylolites sparse throughout. Above 82.0 local pocketstone to wackestone. 81'5"-81'7", 89'4" - glauconitic clay with calcite. 82'4"-92'8" - banded limestone and dolostone; irregular calcite veinlets and beds up to 1" across.			
		<u>WHITE HILLS</u>			
93.0	107.5"	grey to grey-tan limy mudstone to wackestone-pocketstone partings throughout - almost laminated appearance especially near 97'8"-98.0 (limonitic) 93'4"-94'8" (hematite, non-limonitic)			
107.5"	113.0	white to grey-white limy mudstone, shaly partings throughout especially near 107'8" to 108'2", 111.0-113.0 - vaguely mottled.			
113.0	140.0	white to grey limy mudstone grading to wackestone -pocketstone(pellets, inter-clasts), fine grained, porcellaneous partings and stylolites throughout especially near 118'3"-119'2", poorly mottled -local bioturbation?			
140.0	160.0	white to light grey limy mudstone, green shaly partings throughout especially near 140.0-142'3"; many calcite veins and vugs concentrated in diffuse patches- mottled bioturbated appearance.			
160.0	204.5"	White limy mudstone, tight extremely fine grained almost porcellaneous; pale green shaly stylolites and partings throughout, finely pelleted; locally pocketstone and wackestone, local mottles-some bioturbation? commonly bands locally laminated with fine coarser layers interspersed with normal porcellaneous material resembling algal laminates, after pelleted.			

## PROPERTY

FOOTAGE		DESCRIPTION	SAMPLING		
FROM	TO		SPL. NO.	FROM	TO
304.5"	352.0	<u>PINE TREE</u> Light grey, dolomitic mudstone, massive, ruggy coarse textured; almost totally recrystallised; local porosity partly to completely occluded by dolomite crystals or sparry calcite? or white, powdery, soft, non-effervescent material; white chert at 159'8"-159'9" and 159'11"; vugs often not interconnected; bioturbation to slightly mottled texture. Vugs may be original burrows and and <del>shells</del> of greatest vugs are not mottled; 300'9"-301'10"; finer grained almost porcellaneous. 286'8"-286'10": coarse calcite. 229'7"-230'7": limy and powdery black giving slight reaction to Zn test - upper contact sharp over 1-2".			

## D. D. HOLE No. D.D.H. 1

LOCATION Upper end Harry, S Brook

HOLE STARTED

HOLE COMPLETED

CORE RECOVERY Full %

DRILLED BY

SURVEY		
Depth	Dip	Azimuth

COLLAR LAT.

DEP.

ELEV.

AZIMUTH

DIP

LENGTH

HOR. PROJ.

VERT. PROJ.

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
0.0	2.0	OVERBURDEN <u>PORT AU PORT UNIT</u>				
2.0	4.5	Dolostone, upper 6" medium grey, medium grained, sucrosic vuggy, calcite lined, remainder silty, buff, with 6" interbed of claystone.				
4.5	20.5	Interbedded limestone & dolostone; medium grey aphanitic mottled (light tan flakes) regular & irregular bedding marked by shale stringers (1 - 1/2") apart, stylolites-dolostone; upper fine grained, light grey stylolites, stromatolitic, lower coarser grained, light grey, greenish tinge calcite veins-FI stained darker interc. Limestone, medium-dark grey, fine grained, burrowed - replaced by coarse dark material.				
20.5	24.0					
24.0	31.0	Dolostone, calcic, med. grey, mottled brown, burrowed pellets, stylolites grading into buff dolos., very fine grained calcite veins, mottling less easily detected. Limestone, med. gray, fine grained, no bedding, apparent mottled in last 2' with coarser material.				
31.0	34.5	Dolostone, buff-medium grey, very fine grained stylolites mottled stromatolitic horizon, burrowed.				

FOOTAGE		DESCRIPTION	SAMPLING					
FROM	TO		SPL. NO.	FROM	TO	FEET		
40.0	42.0	Limestone, med. grey, very fine grained, grading into thin bedding, shale Dolostone, medium to light grey, very fine grained, shaly chertified layer (4"), mic. stromatol., burrowed upper sequence, last 6" irregular bedding.						
42.0	61.0	Limestone, med. grey, aphan., irregular bedding, styl. interbed of dolostone, buff with blk. mottling.						
61.0	65.0	Dolostone, buff-tan, slight green staining, dark mottling, pyrite, 6" vuggy dolostone, partially calcite filled, fine grained.						
65.0	76.0	Limestone, some beds dolomite, light grey (1' med. grey) variable bedded, bedding marked by glauconitic shale, aphanitic, very fine grained stylolites.						
76.0	87.0	Interbedded dolostone and limestone, dolostone lt.-med. grey, shaly thin interbedded vertical stylolites, medium grained limestone, dolomitic, med. grey, fine grained, same appear- ance as dolostone.						
87.0	100.0	WHITE HILLS UNIT Limestone, med. grey, weathers white aphanitic stylolites, abundant 6" bed of glauconitic claystone.						
		CORE MISSING						

PROPERTY 3 LETHIG CEMENT

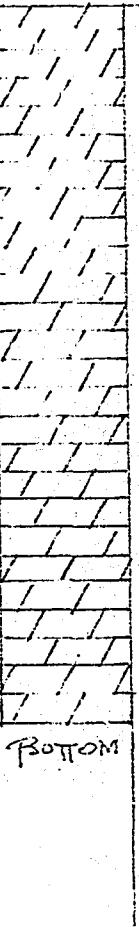
FOOTAGE		DESCRIPTION	SAMPLING		
FROM	TO		SP. NO.	FROM	TO
100.0	140.0	CORE MISSING			
		Limestone, medium grained, aphanitic, very fine grained int. glauc. shale towards bottom, stylolites abundant.			
140.0	160.0				
		- glauconitic			
160.0	200.0	CORE MISSING			

PROPERTY

LITHIC CEMENT

FOOTAGE		DESCRIPTION	SAMPLING					
FROM	TO		SPL. NO.	FROM	TO			
160.0	300.0	CORE MISSING						
200.0	205.5	Limestone, light tan-grey. PT						
206.5		<u>PINETREE UNIT</u>						
		Dolostone, light grey, medium grained, coarser towards bottom, sucrosic, vuggy, fenestral porosity, some fossils recog. pelecypods, gastropods, calcite infilling, porosity and fractures burrowed.						

FOOTAGE		DESCRIPTION	SAMPLING				
FROM	TO		SIL. NO.	FROM	TO	FEET	
240.0							
291.0		Dolostone, as described on preceding page, coarsening down section with increase in vuggy porosity.					



## D. D. HOLE No. DRILL 5-73

LOCATION ... White Hills UTM Grid

..... 5380500 NN, 349100 ME

HOLE STARTED

HOLE COMPLETED 0-30' at Allentown, Logged  
CORE RECOVERY from drill log 100%

DRILLED BY Inspiration Drilling.

SURVEY		
Depth	Dip	Azimuth

COLLAR. LAT. \_\_\_\_\_  
 DEP. \_\_\_\_\_  
 ELEV. \_\_\_\_\_  
 AZIMUTH \_\_\_\_\_  
 DIP. \_\_\_\_\_  
 LENGTH. \_\_\_\_\_  
 HOR. PROJ. ..... VERT. PROJ. \_\_\_\_\_

FOOTAGE		DESCRIPTION	SAMPLING		
FROM	TO		SPL. NO.	FROM	TO
0'	42'9"	WHITE HILLS: white lithographic to percellaceous limy mudstone (green) stylolites and bands sporadic throughout, sparse ^ stylolites; locally finely laminated (algal) organic			
		Glauconitic mudstone and stylolites.			
42'9"	52'	Glauconitic mudstone & stylolites with pyrite, also coarse grained sparry calcite vugs.			
		As above but with patchy limestone stain, grey-tan colour.			
		PINE TREE: light grey, mottled dolomitic mudstone; vuggy with porosity partly occluded by dolomite; sparry calcite; rare stylolites.			
52'	78'	As above but med. grey with mottling more pronounced & increased vugs which increase in number where mottling is greatest (preferential dolomitisation?), local texture like a pseudobreccia; vugs may be hematite stained - grey pink.			
78'	120'	As above but less vuggy and generally lacking hematite stain.			

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
120'	138'5"	medium grey mottled dolomitic mudstone; vuggy porosity partly occluded by sparry calcite and dolomite crystals				
138'5"	159'3"	pink bleached calcite in vug White chert.				
		medium grey mottled dolomitic mudstone & scant vuggy porosity partly occluded by dolomite crystals, less often calcite or quartz; sucrosic, decreasing in grain size downward. White cherty cavity infill with quartz crystals at top.				
159'5"	181'4"	Very coarse calcite crystals up to 1" across in vug. Calcite, bitumen stained. As above but with increased mottling and vugginess.				
181'4"	200'	As above but with only scant vuggy porosity White quartz (sparry) White chert vug infill				
200'						

## D. D. HOLE No. D.D.H. 6

LOCATION White Hills

HOLE STARTED Aug. 1, 1973

HOLE COMPLETED Aug. 1, 1973

CORE RECOVERY FULL %

DRILLED BY Inspiration Drilling

SURVEY		
Depth	Dip	Azimuth

COLLAR LAT.  
DEP.  
ELEV.  
AZIMUTH  
DIP  
LENGTH  
HOR. PROJ. VERT. PROJ.

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
0.0	14.0	<u>WHITE HILLS</u> Limestone, light-medium grey, aphanitic stylolites, coarsens and becomes burrowed at bottom.				
14.0	25.5	<u>PINE TREE</u> Dolostone, medium grey, brown and reddish mottling, medium grained, burrows.				
25.5	68.0	Dolostone, light grey, medium grained, spherulitic, calcite filled vugs, fenestral porosity.				





## PROPERTY PORT AU PORT

HOLE NO. 7-73

7-73

SHEET NO. -2-

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
91	113.2"	Med.grey to grey white (more locally grey tan to grey pink) dolomitic mudst., sucrosic, sporadic lim. stained stylolites, mottled.  Limy packstone, med.grey.	variably			
113.2"	131.3"	Med.grey limy to dolom. mudst., lim. stained green arg. partings and stylolites.  Dolomite, massive, mottled, sucrosic.				
131.3"	139.4"	Limestone: mudst., local packstones & wackestones, bioturbated to locally finely laminated. (algal?)  oolite marker: white to pink, series of beds within packstone.  Med. to dk.grey., limy to dolom. mudst., sporadic greenshale partings sucrosic with fine calcite veinlets.				
139.4"	142.0"	Galena - green mudst. - calcite in vein +ve Zn test.  Lt.grey dolom.mudst., sucrosic, sparse green shale partings.				
142.0"	152.6"	Med. grey dolom. mudst., sucrosic, green shaly partings.  Py - galena - calcite - sph. (+ve Zn test) in vein.				
152.6"	160.0"	Lt. grey laminated dolomitic mudst.; sporadic green argillite patches.				
160.0"	167.2"	Med-grey limy mudst. to wackestone, lithographic calcite veins up to 1" across  Green argillite partings.				
167.2"	179.4"	As above with numerous limonite stained argillite partings and stylolites giving grey-tan colour, very mottled, likely bioturbated. 163.5" - glauconitic argillite.				
179.4"	192.2"	Med. grey, massive limy mudst., sucrosic, only very fine green argillite partings.				
192.2"	201.0"	Med. grey limy mudst., to granst. with abundant Ht-stained green argillite partings lending local grey-pink colour.				
201.0"	320.0"	WHITE HILLS: lt. grey to white limy mudst. to packest., fine Ht. or limonite stained green shaly partings throughout and fine sparry calcite blebs numerous throughout.; local areas with fine sparry calcite bands like algal laminae; sporadic local finely laminated mudstone - algal?				

HOLE NO. 7-73 7 73.  
SHEET NO. -3-

## PROPERTY PORT AU PORT

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
		Pyrite and galena with calcite in veins. Medium grey limy mudstone to packstone with sparry calcite vugs with bitumen?				
		Wavy irregular limonite stained argillite partings.				
		Wavy irregular limonite stained argillite.				
320.0"	350.0"	PINE TREE: Med grey sucrosic dolomit. mudst.; variable vuggy porosity, partly occluded by sparry dolomite or calcite; mottled; likely originally bioturbated preferentially dolomitised. Stylolites and fine shaly partings. Rare limy mudstone patches and bands.				

PROJECT

LEHIGH CEMENT

D. D. HOLE No. 8

LOCATION White Hills

HOLE STARTED

HOLE COMPLETED

CORE RECOVERY 100 %

DRILLED BY Inspiration Drilling

SURVEY		
Depth	Dip	Azimuth

COLLAR LAT.

DEP.

ELEV.

AZIMUTH

DIP.

LENGTH

HOR. PROJ. VERT. PROJ.

## FOOTAGE

FROM

TO

## DESCRIPTION

## SAMPLING

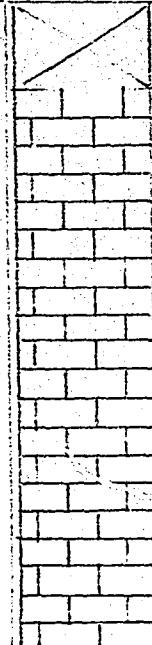
SPL. NO.

FROM

TO

FEET

0.0



WHITE HILLS UNIT  
 Limestone, light grey, aphanitic, very fine grained  
 stylolites, calcite filled cavities, red staining along  
 bedding planes, glauconitic claystone interbeds.

WH

-glauconitic claystone

- " "

- " "

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
64.0		Limestone, cont.				
		Limestone, dolomitic, light grey, very fine grained, red stained burrowed pellets (transition into Pine Tree).				
		PT				
		<u>PINETREE UNIT</u> Dolostone, medium grained, light grey, calcite filled vugs, red stained.				

## PROJECT

LIMESTONE CEMENT

D. D. HOLE No. D.D.H. 9

LOCATION White Hills

HOLE STARTED Aug. 23, 1973

HOLE COMPLETED Aug. 24, 1973

CORE RECOVERY 100 %

DRILLED BY Inspiration Drilling

COLLAR LAT.

DEP.

ELEV.

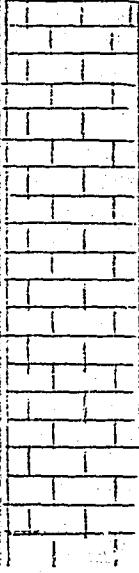
AZIMUTH

DIP.

LENGTH

HOR. PROJ. VERT. PROJ.

SURVEY		
Depth	Dip	Azimuth

FOOTAGE	FROM	TO	DESCRIPTION	SAMPLING			
				SPL. NO.	FROM	TO	FEET
0.0	56.0		<p><u>WHITE HILLS UNIT</u></p> <p>Limestone, light grey, crystalline, aphanitic, stylolites, iron stained stringers.</p> 				



## PROJECT

## LEHIGH CEMENT

Page 1 of 2

D. D. HOLE No. 10-73

LOCATION.....White Hills.....

----- UTM Grid 5380000MN 345600ME -----

HOLE STARTED.....August, 1973.

HOLE COMPLETED.....August, 1973.....

**CORE RECOVERY..... 100 %**

DRILLED BY..

COLLAR. LAT. ....

DEP. \_\_\_\_\_

ELEV. \_\_\_\_\_

AZIMUTH.....

DIP.....

LENGTH.....

HOR. PROJ. .... VERT. PROJ. ....

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
0	2	OVERBURDEN				
2	7	Port au Port: grey - pink dol. mudstone, mottled with hem. & limestone stain, calcite vug infill.				
7	21	Interbedded med. grey, limy to dolomitic mudstone. limestone: mudstone to wackestone, lithographic to sucrosic, bioturbated dolomite: grey to grey-tan, hematite and limestone stained mottled, small - fine grey argillite partings and stylolites & calcite vugs throughout.				
21	26	Med. grey-tan dol. mudstone, laminated by limonite stained bands.				
26	39	Medium grey limy mudstone to packstone, green arg. partings, stylolites, veins with tr. of pyrite.				
39	46.3"	Med. grey(tan) limy mudstone to packstone, many limon. stained green shaly partings & stylolites, way bedding; also sporadic Ht. stains & local areas with sparry calcite resembling algal laminites.				
46.3"	61.8"	Med. grey-grey pink limy mudstone to packstone with abundant green argillite partings. Some Ht. stained and stylolites, veinlets.				
61.8"	66.8"	As above, but argillite partings Ht stained, closer spaced and forming wavy banding, leading to grey-pink color.				
66.8"	71.7"	Med. grey limy mudstone to wackestone; last 1" interval abundant, fine wavy green argillite partings. White hills: white-1.grey limy mudstone to packstone; fine green (ht stained) argillite partings; locally layered sparry calcite to algal				
71.7"	181	laminates, fine sparry calcite filled vugs.				

PROPERTY PORT AU PORT

HOLE NO. 10-73  
SHEET NO. -2-

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
		Green argillite patch with galena and calcite parallel to core length.				
		Limonite stained shaly partings and mottles.				
		Pyrite Pyrite plus green shale on stylolite surface. Dark green to red argillite with limy mudstone; interbedded; some pyrite.				
181	222	Green argillite at nearly parallel core length. Pyrite Pine Tree: med. grey mottled dol. mudstone; scant vuggy porosity partly occluded by dlt. crystals; sparry ct (completely); py often in crystals in vugs - some of highly mottled areas limy mudstone to packstone. Pref. dolom. likely. Pyrite supported by general bioturbated nature.				
		Py - Ga - Ct in vug Py - Ga - Ct in vug				
		Ct - pseudomorphic often halite(?), cubic mosaic, very fine along fracture.				

## PROJECT

PORT AU PORT

D. D. HOLE No. D.D.H. 11-73

LOCATION: M.N. Grid 5585000 Min  
350100 NE

HOLE STARTED

HOLE COMPLETED

CORE RECOVERY 80 to 90 ft. hopelessly shattered  
very badly broken %

DRILLED BY

SURVEY		
Depth	Dip	Azimuth

COLLAR. LAT.  
 DEP.  
 ELEV.  
 AZIMUTH.  
 DIP.  
 LENGTH  
 HOR. PROJ. VERT. PROJ.

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FLST
0.0	8.0	Overburden <u>HUMBER AREA</u>				
8.0	119.0	Light grey shales to limy shales, rare limy mudstone interbeds; 91'1"-3", 105'5"-12", 106'7"-107'7".				
119.0	147.0	<u>TABLE HEAD</u>  Dark grey limy mudstone to pochesstones, grainstone, 244'1"-4", bio- turbated near 147.0, glauconitic shale layer, fine grey-brown shaly partings throughout.				

D. D. HOLE No. 12-73

LOCATION: Victor Brook

UTM Grid 5384500 MN, 350100 ME

HOLE STARTED September 5, 1973

HOLE COMPLETED September 5, 1973

0-25' badly broken up

CORE RECOVERY 20-40 Allentown 100 %

DRILLED BY Inspiration Drilling

SURVEY		
Depth	Dip	Azimuth

COLLAR LAT.

DEP.

ELEV.

AZIMUTH

DIP.

LENGTH

HOR. PROJ.

VERT. PROJ.

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
0'	10'	OVERBURDEN				
10'	20'	HUMBER ARM; grey - brown to grey argillite, badly broken up.				
20'	40'					
40'	42.5'	Sampled Dk. grey argillite, badly broken up.				
42.5"	52.6"	Drk. grey argillite, less broken up, many white to grey somewhat rounded lenticular clasts. rubby fracture surface, complete size gradation from matrix up to 1/2"				
		Ex. incast Table Rock dk grey. limy mudstone: 55-60': fine argillite partings & infill Ex-like texture unusual burrow infill?) prod. mottling.				

## PROJECT

D. D. HOLE No. 13-73

LOCATION White Hills - UTM Grid  
5379200 MN, 344600 ME

HOLE STARTED August 16, 1973.

HOLE COMPLETED August 21, 1973.

CORE RECOVERY 100 %

DRILLED BY Inspiration Drilling

SURVEY		
Depth	Dip	Azimuth

COLLAR. LAT. ....

DEP. ....

ELEV. ....

AZIMUTH. ....

DIP. ....

LENGTH. ....

HOR. PROJ. .... VERT. PROJ. ....

FOOTAGE	FROM	TO	DESCRIPTION	SAMPLING			
				SPL. NO.	FROM	TO	FEET
0'	7'		OVERBURDEN				
7'	23'		PCRT AU PORT cycle: gry tan to gry pink dolomitic (rarely limy) mudst; finely sucrosic; locally laminated & mottled; goes to lt. gry limy mudst to packstone; bioturbated, sporadic stylolites & fine arg. ptngs. some lim. stained.				
23'	37'10"		Cycle: as above but freq. finely laminated alternating tan & pink stromatolitic (?) with indications of gas escape channels (?) at angle to core length.				
37'10"	63'		Cycle: grey tan dolomitic mudst. fnly. sucrosic; geos to lt. to med. gry. limy mudst. to grainstone; var. bioturb. to lamm. infill coarser & darker, - grainstones - v. well-sorted, packstones- poorly so.				
63'	77'		lt. gray to gray pink dolomitic mudst. finely to coarsely sucrosic; laminated to bioturbated w. fossil frag. & sparry at. infill.				

PROJECT

PORT AU PORT

D. D. HOLE No. 15-53

LOCATION UTM 5385300 MN  
550700 NE

HOLE STARTED

HOLE COMPLETED

CORE RECOVERY 100 %

DRILLED BY

SURVEY		
Depth	Dip	Azimuth

COLLAR LAT.

DEP.

SLEV.

AZIMUTH

DIP

LENGTH

HOR. PROJ.

VERT. PROJ.

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
0.0	4.0	OVERBURDEN				
4.0	175.5	TABLE HEAD Dark to med. grey limy wackstone and packstone to mudstone; first two especially in lighter coloured areas (pellets, bivalves, gastropods?, crinoids, rectid bivalves) pellet infilled shells, clasts, interclasts) bioturbated, infill again coarse grained and darker in colour; fine grained, brown stylolites and shaly partings interspersed throughout, irregularly producing variable mottling; 60-140' - rare. 20-60' - many, above 10.5' many limonite stained partings give yellow brown colour, white to pale green calcareous clay. 114'5"-114'9"; 132'2"-132'10"; 133'6"-133'11"; 135'10"-136'4"; calcite filled vugs less than 1" across, sporadic throughout, pyrite plus calcium plus shale plus calcite: 93'2"-93'8", 95'5"; 55'6"-56'1", 59'6"-59'9" in veins up to 1" across.				
175.5	197.0	PORT AU PORT Light grey dolomitic mudstone, homogeneous massive to mottles bioturbated to laminates with green shale bands throughout, fine green shaly partings, white to grey pelleted chert, 190'2"-190'4"; 190'7"-190'9", 189'6"-190'; 185'3"-185'9"; 179'8"-180'.				

FOOTAGE		DESCRIPTION	SAMPLING							
FROM	TO		SPL. NO.	FROM	TO	FEET				
197.0	220.0	Grey to grey-brown dolomitic mudstone, bioturbated with different dolomite generations infilling burrows; stylolites often highly irregular, sparse throughout as they are sparry calcite up to 1" across, pyrite at 219'5", 219'7".								
220.0	350.0	Light to medium grey, limy to dolomitic mudstone, dolomite: massive to finely laminated to bioturbated; generally almost sandy textures, darkens in colour upwards to 240', laminated: 313'2"-314'; 312'10"-314'6", 215'-252'; 342'2"-343'8", 257'2"-258'. Some with green shale bands, sparry calcite bands, then limestone beds, layers of biotite  Mottled dolomite: 282'5"-315'4", 244'9"-246'5".  Limestone: light brownish grey to grey mudstone to Wackestone-pocket-stone (pellets oolites, <i>bioclasts</i> ) locally almost lithographic, bioturbated with infill again, fine grey-brown to green shaly partings especially near 266'4"-267'6", 276'8", 269'6"-270', 305'2"-305'3", 306'3"-307'4", 315'5"-315'7", 317'2"-317'8", 326'6". Bitumen in stylolites: 293'5", 283'9" concentrically banded circular structure - stromatolites?. Calcite, -brown coarse grained: 296'4", 296', pyrite <i>as stromatolites</i> : 238"-251'2"-251'4", quartz in ovoids in green shaly bands: -256'9"-257'4" similar structures but here with porosity only partly occluded. White chert bands 286'4", 254'1", 345'1"-346'5". Bluish quartz infill in 347"-347'5". Brown chert nodules at 224'3"-5", 263'11". Fossiliferous bluish chert at 320'3"-320'8".  Limestone-dolostone contact: sharp texturally but generally gradational through limy dolomite phase.								

## D. D. HOLE No. D.D.H. 16

LOCATION. South of Brinex Telegraph

Tracts Boundary

HOLE STARTED Sept. 15, 1975

HOLE COMPLETED Sept. 17, 1975

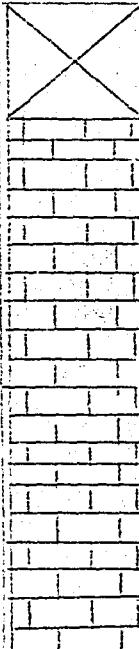
CORE RECOVERY Full %

DRILLED BY Inspiration Drilling

SURVEY		
Depth	Dip	Azimuth

COLLAR. LAT.  
 DEP.  
 ELEV.  
 AZIMUTH.  
 DIP.  
 LENGTH.  
 HOR. PROJ. VERT. PROJ.

FOOTAGE	FROM	TO	DESCRIPTION	SAMPLING			
				SPL. NO.	FROM	TO	FEET
0.0.	3.0.		OVERBURDEN				
3.0.	27.0		<u>PIGEON HEAD</u> Limestone, dark grey, aphanitic, burrowed, filled with silt/clay or coarser material, Fe staining along veinlets which are usually darker than matrix.				
27.0.	54.0		Limestone as above but infilling of burrows (?) is brown silt and greenish-grey calcite veins (2" thick).				
54.0.	62.0		Limestone as described in first occurrence.				



PROPERTY LIMESTONE

FOOTAGE		DESCRIPTION	SAMPLING		
FROM	TO		SPL. NO.	FROM.	TO
54.0	62.0	See preceding page.			
62.0	65.0	Claystone, red-tan, calcite veins and interclasts.			
65.0	78.0	Limestone, dark grey, very fine grained, petiots and interclasts floating (bio(pel)micrite) in fine matrix irregular veinlets (Burrowed ?).			
78.0	92.0	Limestone, dark grey-brown, aphanitic, silty, mottled irregular shale partings. (        intersect).			
92.0	122.0	Limestone, medium gray with mottled brown dilty veinlets (1/8 to 1" thick), very fine grained, silty, red staining.			

FORAGE		DESCRIPTION	SAMPLING					
FROM	TO		SPL. NO.	FROM	TO	FEET		
92.0	122.0							
122.0	123.0	Limestone, Medium-dark grey, coarse grained (grainstone) abundant pellets, highly burrowed.						
123.0	137.0	Limestone, dark grey, aphanitic-silty, mottled, darker gray on weathered surface (Burrows) veinlets (1 to 1" thick)						
137.0	142.0	Limestone, dark grey, aphanitic, stylolites to shale stringers, irregular (1" to 2' apart).						
142.0	155.0	Limestone, silty, very fine grained, dark grey, brown veinlets, some coarser beds.						
155.0		Limestone, silty, dark gray with veinlets, irregular parallel lenses of coarse grainstone, 60inch bed of brown claystone.  Coarse Lens  Claystone Coarse Lens.						

FOOTAGE		DESCRIPTION	SAMPLING					
FROM	TO		SPL. NO.	FROM	TO	FEET		
192.0		Coarse Lenses Coarse Lenses						
193.0	211.0	Coarse Lenses  Limestone, medium grey, light grey mottled with purple stain, fine grained with coarse interbeds, even bedding (distinguishing from rest) 6" of brown calc. siltstone towards bottom.						
211.0	221.0	Limestone, dark grey, aphanitic-silty, irregular veinlets, darker grey, coarser lenses.						
221.0	227.0	Limestone, and interbedded shale, variegated grey, gr.gry, purple-brown, fine grained, silty.						
227.0	231.0	Limestone, light grey-tan, irregular bedding.						
231.0	257.0	<u>LOWER COVE</u> Limestone, fine to medium grained, burrowed, biot. sc. stringers mark bedding, iron staining.						

## PROPERTY LIMESTONE

FOOTAGE		DESCRIPTION	SAMPLING			SPL. NO.	FROM	TO	FEET
FROM	TO								
251.0	277.5	Limestone, medium-dark grey, fine to medium grained, mottled brown, iron stained, interbedded dolostone, fine grained pelecypods.  (gradation contact to lower core)							
277.5	285.0								
285.0	295.0	Interbedded dolostone and limestone-dolostone, fine grained light grey calcite veins-limestone; silty, dark grey, regular sh. layers, dolostone, medium, mottled tan, medium grained calcite veins, burrowed, filled in by clay claystone; tan, calcite veins, fossil fragments.							
295.0	300.0								
300.0	325.0	Limestone, very fine grained, medium grey, burrowed with coarse lenses, iron staining fossil fragments.							

PROPERTY LITHOLOGY

FOOTAGE	FROM	TO	DESCRIPTION	SAMPLING		
				SPL. NO.	FROM	TO
525.0	340.0		Dolostone, medium grey, fine grained, regular bedded, interbeds of well burrowed silty limestone, chert layer.			FEET

D. D. HOLE No. 15LOCATION South of Reid telegraph tracts  
boundaryHOLE STARTED Sept. 19, 1975HOLE COMPLETED Sept. 20, 1975CORE RECOVERY 95DRILLED BY Inspiration Drilling

SURVEY		
Depth	Dip	Azimuth

COLLAR. LAT. \_\_\_\_\_  
 DEP. \_\_\_\_\_  
 ELEV. \_\_\_\_\_  
 AZIMUTH. \_\_\_\_\_  
 DIP. \_\_\_\_\_  
 LENGTH. \_\_\_\_\_  
 HOR. PROJ. \_\_\_\_\_ VERT. PROJ. \_\_\_\_\_

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
0.0	0.4	OVERBURDEN				
4.0	18.0	<u>PIGEON HEAD UNIT</u> Limestone, dark grey, fine grained, irregular shale stringers some burrowing.				
18.0	30.5	Limestone, medium grey, fine grained with veinlets of yellow brown siltstone (burrows).				
30.5	69.0	Limestone, dark grey, fine grained with veinlets of darker sand (burrows) grades into very fine grained limestone with shaly bands.				

FOOTAGE		DESCRIPTION	SAMPLING					
FROM	TO		SP. NO.	FROM	TO	FEET		
69.0								
69.0	110.5	Limestone, dark grey, shaly, fine grained with wavy bands interbeds of coarse calc. grainstone.						

PROPERTY LEBIGH CIMEN.

FOOTAGE		DESCRIPTION	SAMPLING					
FROM	TO		SPL NO.	FROM	TO	FEET		
111.5	112.0	* Claystone, yellow-brown, grades back into limestone.						
112.0	130.0	Limestone, medium to dark grey, fine grained irregular wave shale bands.						
120.0	125.0	Limestone, dark grey, shaly.						
125.0	129.0	Limestone, light grey, very fine grained, wavy shaly stringers.						
129.0	144.5	Limestone, dark grey, fine-medium grained, irregular veinlets, lenses of grainstone, burrowing throughout.						
144.5	145.5	* Claystone, tan with purple stain.						
145.5	180.0	Limestone, as above with shaly intervals.						



FOOTAGE		DESCRIPTION	SAMPLING		
FROM	TO		SPL. NO.	FROM	TO
257.5	272.0	Limestone, dark grey, dolomitic, very fine grained burrowed chert, burrows filled with coarser material.			
272.0	284.0	Interbedded dolostone and dolomite limestone - dolostone, tan buff, fine grained, burrowed calcite filled vugs. Limestone - dark grey, dol., silty shale stringers.			
293.5	305.0	Dolostone, tan-buff, fine grained, isolated burrows, calcite veins, stylolites, brown bands.			
304.0	305.0	Petrolierous shale			
305.0	350.0	Interbedded dolostone and limestone, dolostone - fine grained, light grey, even black bands, calcite vugs. Limestone - dolomitic, dark grey, shaly, burrowed, silty, very fine grained with lenses of coarser sand. (304.0-305.0 - slightly petrolierous shale).			



## PROJECT

## LENIGH CEMENT

Page 1 of 3

D. D. HOLE No. 18-73 18-73

LOCATION S. of Reid - Telegraph Tracts  
UTM Grid 5378300 MN  
353000 ME

HOLE STARTED.....

HOLE COMPLETED.....

CORE RECOVERY 100 %

DRILLED BY Inspiration

COLLAR. LAT. \_\_\_\_\_

DEP. \_\_\_\_\_

**ELEV.** *Indicates the elevation of the various points on the line. The points are to be established in a line to connect the line with the hill or mountain.*

AZIMUTH.....

**BIP.**.....

LENGTH.....

HOR. PROJ. \_\_\_\_\_ VERT. PROJ. \_\_\_\_\_

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
0'	6'	OVERBURDEN				
6'	10'					
10'	18'					
18	30.6"					
30.6"	38.4"	PIGEON HEAD: dark gr. limy mudstone to packstone; biotubated U. infill darker, sucrosic; fine lim. stained argillite partings. grading into dark grey bioturbated limy mudstone to packstone; grey-brown argillite partings. abundant locally. Cycle as above				
38.4"	60	Lower Cove Transitional: cycle med.grey to dk.gr.pink, limy to dol. mudstone, sucrosic, locally laminated w.limon.&ht. stained limy argillite layers. Going to med.grey limy mudst. to packs. bioturbated w. coarser & darker infill. Local ht. stained, wavy partings.				
60	74.3"	cycle: med.grey to grey pink dolomit., rarely limy mudst., sucrosic, locally lam.w. ht. or limy bands; argillitic stylolites throughout, elsewhere mottled; goes to med.grey bioturb. limy mudst. to wakest. w. ht. stained partings and stylolites.				
74.3"	92.3"	Lower Cove: cycle: med.grey to dol.mudst, sucrosic, ht.stained, mottled, ht.stylolites, goes to med.-dk.grey limy mudst. to wakest.; bioturb.infill coarser and darker. Chert in laminated bands & nodules (sometimes pelleted). Cycle: med.grey dolom. mudst., sucrosic, commonly mottled, lim.& ht., stylolites, partings and local laminations. Going to med.grey, limy mudstone to wackest., bioturbated w. infill darker and coarser, sometimes lim. stained, abundant grey argillite partings - local wavy bands. Ht. stained fracture cut dolom. mudst.				

HOLE NO. 18-73

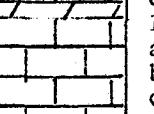
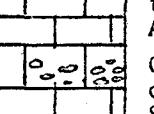
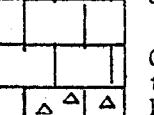
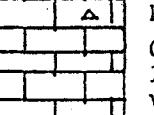
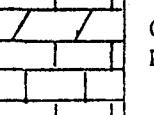
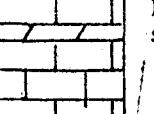
SHEET NO. -2-

PROPERTY PORT AU PORT

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL NO.	FROM	TO	FEET
92.3"	99.10"	/ / / / cycle as above but dol. mudst grey-tan & non-mottled.				
99.10"	128	/ / / / cycle: med.grey-tan dolo. mudst., sucrosic; goes to med. grey mudst. to packst. var. bioturb., abundant lim. stained argillite partings to local wavy banding. 110-113'L infill- limy impure silt, non-lithified. heterog, fragments.				
128	144	/ / / / <input checked="" type="checkbox"/> Pyrite as vug infill in packst .				
144	164	/ / / / cycle: grey tan-med. grey dol. mudst.: laminated & mottled, sucrosic; ht. and lim. stained, dark grey limy mudstone to packst., abundant fine grey-brown argillite, wavy banding, but also bioturbated.				
164	193	/ / / / cycle: dol. grey-med. grey, rest as above, some lim. stained partings. Lst. locally laminated without bioturbation.				
193	234.4"	/ / / / cycle: grey-tan-white very fine regained laminated, do. mudst, sucrosic, local pellets preserved, goes to med.grey limy mudstone-wackest., var. bioturb., fragments lim. stained, argillite partings-wavy banded nature, many pellets, interclasts etc. lim.stained.  Layer with limy sand fragments up to 8", angular, red-brown.				
		/ / / / cycle: 1-med.grey, dolomit.mudst.,well laminated grades to dk.grey limy mudst.to packst. var. bioturb. (mottled) to laminated (like dolom.) abund. grey-brown arg. partings - local wavy banding, local green arg.infill (across bands ) sporadic stylolites. <small>across bands</small>				
		/ / / / Grainstone: clasts, pellets, interclasts, fossil frgments- Storm Layer.				

PROPERTY PORT AU PORT

HOLE NO. 18-73  
SHEET NO. -3

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
234.4"	247	 cycle: 1. grey dolomitic to rarely limy mudst., sucrosic, local lim.stain, goes to med.grey limy mudst. to packst., vat. bioturb, abundant argillite partings w.local lim.stain - local wavy bands and large infill areas. Qt.in vug. surrounding calcite. cycle: med.grey limy mudst.,mass; goes to med.grey to grey tan limy mudst.to packst., var, bioturb.;infill lim. stained. Abundant fine calcite veinlets -pseudobreccia.				
247	270.5"					
270.5"	287.6"	 Grainstone: clasts,interclasts, pellets & fossil debris, often lim.stained or rimmed. Storm Layer.				
287.6"	298	 Cycle: red or limy mudst.;massice goes to med.grey limy mudst. to wackest., var.bioturb;infill lim.stained,to locally laminated. Blue to grey chert. Red-brown chert.				
298	316.4"	 Cycle: light grey dol.mudst. massive, sucrosic goes to med. to light grey limy mudst.Ograinstone, abundant green arg. partings, var.bioturb.				
316.4"	332.4"	 Cycle: as above but 1st.more abundant. Ht.stained argillite partings, inc. a number of grainstones.				
332.4"	350	 Light grey to grey pink to med. grey dolom.mudst.,massive, sucrosic, -sporadic Ht.stained fractures, locally laminated  Pelleted Chert.				

D. D. HOLE No. 19LOCATION North of road between Sheaves  
Cove and lower Cove.HOLE STARTED Oct. 2, 1973HOLE COMPLETED Oct. 4, 1973CORE RECOVERY 100 %DRILLED BY Inspiration Drilling

SURVEY		
Depth	Dip	Azimuth

COLLAR LAT \_\_\_\_\_  
 DEP. \_\_\_\_\_  
 ELEV. \_\_\_\_\_  
 AZIMUTH \_\_\_\_\_  
 DIP. \_\_\_\_\_  
 LENGTH \_\_\_\_\_  
 HOR. PROJ. \_\_\_\_\_ VERT. PROJ. \_\_\_\_\_

FOOTAGE	FROM	TO	DESCRIPTION	SAMPLING			
				SPL. NO.	FROM	TO	FEET
0.0.	6.0		OVERBURDEN				
6.0	20.0		* Dolostone, argillaceous, buff-tan calcite veins. <u>LOWER COVE</u>  Limestone, medium-dark grey, fine to coarse grained, burrowed calcite veins (pink and white).				
20.0	29.0		Limestone, dark grey, silty, very fine grained, brown shale partings.				
29.0	33.0		Dolostone, buff to pink, fine grained.				
33.0	39.5		Limestone, dark grey, very fine grained, mottled red, tan very burrowed.				
39.5							

## PROPERTY

## LITHOLOGY

FOOTAGE		DESCRIPTION	SAMPLING					
FROM	TO		SPL. NO.	FROM	TO	FEET		
52.0	52.0	Dolostone, calcic, pink, fine grained, calcite filled fractures.						
52.0	100.0	Limestone, medium-dark grey, fine grained, burrowed, replaced by lighter coloured material, pellets, 1/2" cross cutting calcite veins, red staining.						
100.0	102.0	Dolostone, tan-pinkish, silty; cross cutting the calcite veins.						
102.0	127.0	Limestone, as described above, many more calcite veins, interclasts.						



## PROPERTY

LIMESTONE

FOOTAGE		DESCRIPTION	SAMPLING		
FROM	TO		SPL. NO.	FROM	TO
181.5					
182.5	225.5	Interbedded limestone & dolostone -  Limestone: medium to dark grey, with red shale stringers very fine to medium grained, laminations (isolated may be strong) common calcite veins, glauconitic.  Dolostone: pinkish grey-light grey, mottled, yellow calcite veins, fine grained.			
182.5	252.0	Dolostone, light grey with pink mottling, argillaceous to very fine grained veins, partially filled by bladed calcite.			

PROJECT LEHIGH CEMENTD. D. HOLE No. 29LOCATION Southeast of Victor Brook

Headwaters.

HOLE STARTED Oct. 15, 1975HOLE COMPLETED Oct. 17, 1975CORE RECOVERY 100 %DRILLED BY Inspiration Drilling

SURVEY		
Depth	Dip	Azimuth

COLLAR LAT.

DEP.

ELEV.

AZIMUTH

DIP

LENGTH

HOR. PROJ. VERT. PROJ.

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
0.0	5.0	OVERBRUDEN				
		Limestone, medium grey, aphantic, stylolites, abundant dark shale stringers, isolated calcite veins.				
5.0	37.0					
37.0	40.5	Limestone, dark grey, very fine grained, shale stringers, <sup>7/8"</sup> layer lying on contact with calcite cement and clay infilling.				

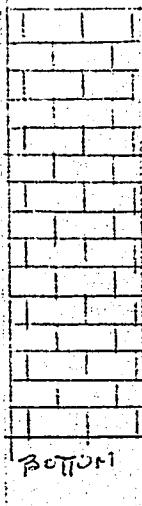


FOOTAGE	DESCRIPTION	SAMPLING			% Pb	Zn	
		SP. NO.	FROM	TO	FEET		
108.5 - 125.0	Dolostone, light to medium grey, aphanitic, thin bedded (regular and irregular) crossbedding, burrowed vugs and cavities calcite filled with galena common.	110	120	10	1.53	0.55	
125.0 - 137.0	Limestone, medium grey, very fine grained, burrowed, thin bedded, collapse breccia zone (151.0-155.0) galena, and traces of <u>spalerite</u> , partings at shaly layers.	126	130	10	4.00	0.53	
157.0 - 157.0	Interbedded limestone, fine grained, medium grey, pyrite stromatolitic horizons, irregular lamination, and dolostone fine grained, medium grey, calcic, burrowed, calcite veins.	130	140	10	0.15	1.65	
157.0 - 177.5	Limestone, medium grey, fine grained, aphanitic shales stringers, irregular bedded interclasts.						



FOOTAGE		DESCRIPTION	SAMPLING					
FROM	TO		SP. NO.	FROM	TO	FEET		
	260.0							
260.0	277.0	Limestone, dolomitic, fine grained, shales stringers, calcite veins containing <u>galena</u> and traces of <u>sphalerite</u>						
277.0	290.0	Dolostone, calcic, very fine grained, medium grey stylolites shale stringers, stromatolitic beds, grade into limestone.						
290.0	293.0	Limestone, aphanitic, fine grained, medium grey, weathers buff with coarse texture, stylolites, calcite veins.						
298.0	312.5	Dolostone, calcic, white-light grey, fine grained calcite veins with <u>galena</u> and <u>sphalerite</u> lining veins. PP WH						
312.5	350.0	Limestone, light to medium grey, aphanitic, fine grained shaly partings, glauconitic clay veins, fine grained with calcite veins.						

FOOTAGE	DESCRIPTION			SAMPLING		
	FROM	TO	SPL. NO.	FROM	TO	FEET
350.0						



## D. D. HOLE No. 1

LOCATION UTM Grid 5385200 North

3511400 N East

HOLE STARTED June 19, 1974

HOLE COMPLETED June 22, 1974

CORE RECOVERY some shale not recovered

DRILLED BY Eastern Exploration Ltd.

SURVEY		
Depth	Dip	Azimuth

COLLAR. LAT.

DEP.

ELEV.

AZIMUTH

DIP.

LENGTH

HOR. PROJ.

VERT. PROJ.

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
0'	8'	OVERBURDEN				
8'	32'	<u>HUMBER ARM</u>				
32'	55'	GREYWACKE; green-grey, fine-grained, grades finer into siltstone.				
		SILTSTONE (shale), thinly bedded, greywacke/black streaks, some greywacke interbeds, some beds limy.				

PROPERTY DEHICHE CEMENT

FOOTAGE		DESCRIPTION	SAMPLING					
FROM	TO		SPL. NO.	FROM	TO	FEET		
	56'	40'						
56'	60'	MISSING						
60'	62'	62'	Same as siltstone above. Greywacke, dark grey, fine-grained, limy.					
			Argillite (clay-silt shale) med.-dark grey, very thin bedded, interbedded claystone - siltstone.					
101'	107'	107'	Greywacke, dark grey, fine-grained.					
107'	120'	120'	Greywacke, dark-grey, med. grey with larger (tectonic) pebbles. slickensides.					

PROPERTY LIPYKIL CEMENT

FOOTAGE		DESCRIPTION	SAMPLING					
FROM	TO		SL. NO.	FROM	TO			
120'	139'	Siltstone, dark grey (shale), thin bedded.						
139'	154'	*Brecchia, claystone with large (1" - 1") angular limestone fragments, dark grey, fragments lt. grey.						
154'	300'	Argillite. dark grey.						
154'	300'	Interbedded red, brown and grey (grn.) claystone fissile, vitreous luster.						

FOOTAGE		PROPERTY	LEHIGH CEMENT	SAMPLING			
FROM	TO			SPI. NO.	FROM	TO	FEET
300'			INTERBEDDED CLAYSHALEs Cont.				

PROPERTY LITCHI CEMENT

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
300'		INTERBEDDED CLAY-SHALES cont.				

BOTTOM

D. D. HOLE No. 21

LOCATION UTM Grid 5385200 MM,

351900 NE

HOLE STARTED June 24/74

HOLE COMPLETED June 26/74

CORE RECOVERY 100 %

DRILLED BY Eastern Exploration Ltd.

SURVEY		
Depth	Dip	Azimuth

COLLAR LAT. \_\_\_\_\_  
 DEP. \_\_\_\_\_  
 ELEV. \_\_\_\_\_  
 AZIMUTH \_\_\_\_\_  
 DIP. \_\_\_\_\_  
 LENGTH \_\_\_\_\_  
 HOR. PROJ. \_\_\_\_\_ VERT. PROJ. \_\_\_\_\_

FOOTAGE	DESCRIPTION		SAMPLING			
	FROM	TO	SPL. NO.	FROM	TO	FEET
0' 35'						
35' 88"6"						

0' 35' No core; assume most of top 35' too soft to core.

35' 88"6" HUMBER ARM: Dk. grey to green argillite with interbeds of shiny lustrous siltstone; graptolites throughout, local Pyr. but hard to locate core so broken up - sporadic dark grey (br) limy mudstone interbeds (max 3")

PROPERTY LEHIGH CEMENT.

FOOTAGE		DESCRIPTION	SAMPLING					
FROM	TO		SPL. NO.	FROM	TO			
88'6"	105'	Dark green argillites with interbeds lustrous black to green argillite. intermixed with lithic greywackes: frag. ang. argillites; matrix dk. grey, granular to locally fine slightly dolomitic to limy, wave banded - long axes of clasts sub-parallel, complete size variation; local clast-free bands; clasts up to 1".						
105'	213'4"	Interbedded green & red siltstones (less indurated than before) abund. lustrous patches, green to 117', 126'-128' Green						
213'4"	277'6"	Dark grey 1st. Ex. ang. limy clasts (med. grey) in dk gry matrix; max. size 1" down to matrix size; interbedded argillites. Sometimes finely lam. max. contain sporadic clasts.	OCOO					

PROPERTY LIMON CEMENT

FOOTAGE		DESCRIPTION	SAMPLING					
FROM	TO		SPL NO.	FROM	TO			
227'6"	230'	CCC Dark grey argillite, sporadic (graptolites?); further down interbedded argillite & less blocky beds --- siltsstones; sporadic finely diss. Py.						
298'	300'	TABLE HEAD TRANSITIONAL downward into limy argillite, still dark-grey, finely laminated, good large graptolites & ostracods apparent. Py sporadic throughout.  Med. grey limy mudstone to packstone; large sparry lt. vug with sphalerite & pyrite.						

## PROJECT

## LEHIGH CEMENT

Page 1 of 2

D. D. HOLE No. 23

LOCATION UTM Grid 5385000 MN

350300 ME

HOLE STARTED July 3/74

HOLE COMPLETED July 3/74

CORE RECOVERY 100 %

DRILLED BY: Eastern Exploration Ltd.

COLLAR. LAT

DEP

ELE

AZI

DIP.

### LENGTH

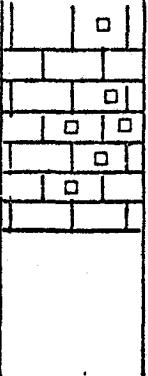
HOR. PRO.

....VERT. PRO.

HOLE NO. 23

SHEET NO. 2

PROPERTY Port au Port

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
		 <p>Pyrite - (colloform) plus calcite in vein.  Pyrite plus calcite in vein</p> <p>Pyrite plus very coarse sparry calcite plus <sup>+ve</sup> Zn test,  some of veins contain mudstone fragments - brecciated  texture.</p>				

D. D. HOLE No. 24

LOCATION (W.M. 5585600 MN  
550309 MR)

HOLE STARTED July 5, 1974

HOLE COMPLETED July 5, 1974

CORE RECOVERY 100 %

DRILLED BY Eastern Exploration Services

SURVEY		
Depth	Dip	Azimuth

COLLAR. LAT.

DEP.

ELEV.

AZIMUTH

DIP

LENGTH

HOR. PROJ.

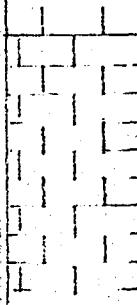
VERT. PROJ.

FOOTAGE	DESCRIPTION		SAMPLING			
	FROM	TO	SPL. NO.	FROM	TO	FEET
0.0 6.0		OVERBRUDEN				
6.0 60.0		<u>TABLE HEAD</u> Limestone, medium grey, silty, fine grained, anastomosing darker veins (hackly) calcite veins.  (Lower Table Head)				

HOLE NO.  
SHEET NO.

PROPERTY

FOOTAGE	DESCRIPTION			SAMPLING							
	FROM	TO	SPL. NO.	FROM	TO	FEET					



D. D. HOLE No. \_\_\_\_\_

LOCATION UTM Grid 5386200 N North

350300 M East

HOLE STARTED July 7, 1974

HOLE COMPLETED July 7, 1974

CORE RECOVERY Incomplete %

DRILLED BY Eastern Exploration Services

SURVEY		
Depth	Dip	Azimuth

COLLAR. LAT. \_\_\_\_\_  
 DEP. \_\_\_\_\_  
 ELEV. \_\_\_\_\_  
 AZIMUTH. \_\_\_\_\_  
 DIP. \_\_\_\_\_  
 LENGTH. \_\_\_\_\_  
 HOR. PROJ. \_\_\_\_\_ VERT. PROJ. \_\_\_\_\_

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
0	45'	Shale Initial shale was too soft to core.				
	45'					
45'	56'	45' very close to HA boundary. <u>TABLE HEAD</u> Clay-shale (fissile uncompact) grn-gry.				
	56'					
56'	79'	Siltstone (shalc); dk. gry. intercalation 1/8' off sandy limestone ostracbds, uniserial & biserial grapholites.				
	79'					
79'		Limestone (debris bed) see next page.				

PROPERTY: LEHIGH CEMENT

FOOTAGE		DESCRIPTION	SAMPLING		
FROM	TO		SPL. NO.	FROM	TO
	80'				
61'	91'6"	Limestone; breccia; dk. gry. in the clay (limy) matrix fragments angular - subangular - heterogenous			
91'6"	129'	Limestone; dk. gry. silty, fine-irregular bedding, vein filled with coarse sand, some <u>pyrite</u> .			
		Limestone; med. gry. silty with anastomosing darker veins, calcite veins with <u>pyrite</u> , orthoconic cephalopod, crude oil in fracture.			
		Newfie crude oil			
129'	BOTTOM				

## PROJECT

## LEHIGH CURRENT

Page 1 of 1

D. D. HOLE No. 1000000

LOCATION: USN Grid 5384400, MN

350300 NE

HOLE STARTED July 9, 1974

HOLE COMPLETED July 9, 1974

CORE RECOVERY 100 %

DRILLED BY Eastern Exploration Ltd.

COLLAR, LAT. ....

DEP.....

ELEV. \_\_\_\_\_

AZIMUTH.....

DIP.....

LENGTH.....

VERT. PROJ.

PROJECT

LEHIGH CEMENT

D. D. HOLE No. DDI- 74-27

LOCATION UTM Grid 5385600 North  
350900 East

HOLE STARTED July 11, 1974

HOLE COMPLETED July 16, 1974

CORE RECOVERY %

DRILLED BY

SURVEY		
Depth	Dip	Azimuth

COLLAR LAT.

DEP.

ELEV.

AZIMUTH

DIP.

LENGTH.

HOR. PROJ.

VERT. PROJ.

FOOTAGE	DESCRIPTION		SAMPLING					
			SPL. NO.	FROM	TO			
FROM	TO							
0.0	30.0	Overburden						
30.0	59.0	<u>HUMBER ARM</u> Clay, uncompacted - light grey to dark grey, (mottled)						

FOOTAGE		DESCRIPTION	SAMPLING			SPL. NO.	FROM	TO	FEET
FROM	TO								
	40.0								
59.0	93.0	claystone, interbedded, dark grey and reddish (shale) brown, grey shale, often not compacted.							
		HA							
93.0	95.0	Core missing.	(TH) <u>TABLE HEAD</u>						
95.0	97.0	Siltstone, Dk.gr. w/limestone, lt-med. grey clasts.							
97.0		Siltstone, (shale), dk. gr. (shale), interbeds of limestone, dk gr, fn grained; shale is graptolitic towards the middle, grading to more limy at base, calcite veins with pyrite.							

## FOOTAGE

FROM TO

110.0

## DESCRIPTION

## SAMPLING

SPL. NO.

FROM

TO

FEET

149.0

149.0 151.0 | | | limestone, dk gr, silty, v.f.gr thin bedded calcite veins with pyrite.

151.0 200.0 | | | limestone, med grey, f gr anastomosing dk. veins, pellets calcite veins continue for 30' with lining of pyrite.

## PROPERTY LITHIC CEMENT

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
200.0						

BOTTOM

D. D. HOLE No. DDI-71-28

LOCATION UTM GRID 53S5300 North  
350900 East

HOLE STARTED July 20, 1974

HOLE COMPLETED July 20, 1974

CORE RECOVERY 100 %

DRILLED BY Eastern Exploration Services

SURVEY		
Depth	Dip	Azimuth

COLLAR LAT. \_\_\_\_\_  
DEP. \_\_\_\_\_  
ELEV. \_\_\_\_\_  
AZIMUTH \_\_\_\_\_  
DIP \_\_\_\_\_  
LENGTH \_\_\_\_\_  
HOR. PROJ. \_\_\_\_\_ VERT. PROJ. \_\_\_\_\_

FOOTAGE	FROM	TO	DESCRIPTION	SAMPLING			
				SPL. NO.	FROM	TO	FEET
0.0	15.0		Overburden				
15.0	115.5		<u>HUMBER ARM</u> Interbedded, brown and green to dark grey claystone (shale) some of grey shale is only unlithified clay, brown claystone tends to be carbonaceous.				

PROPERTY UNION CEMENT

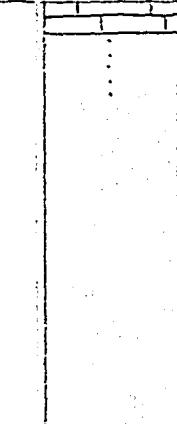
FOOTAGE		DESCRIPTION	SAMPLING						
FROM	TO		SPL. NO.	FROM	TO				
		as described on previous sheet							

FOOTAGE		DESCRIPTION	SAMPLING					
FROM	TO		SPL. NO.	FROM	TO			
115.5								
115.5	120.5	limestone, dark grey, high terrigenous content, fine grained with lenses of breccia material.						
120.5	148.0	claystone (shale), dark grey, carbonaceous very fissile.						
148.0	171.0	limestone, medium grey, fine grained, cross bedded intercalations of claystone						
171.0	174.0	claystone (shale), dark grey to black, carbonaceous, fissile						
174.0	184.0	as above with no visible bedding.						

## PROPERTY DEBRIS CEMENT

FOOTAGE		DESCRIPTION	SAMPLING		
FROM	TO		SP. NO.	FROM	TO
184.0	184.0				
184.0	205.0	claystone (shale), black with interbeds of limestone, medium grey, fine grained and limestone breccia is in clay matrix. Cavity 6" interbed of limestone is filled with same as breccia-clay material.			
208.0	208.5	HA: limestone medium grey, coarse grained.			
208.0	208.0	clay, dark grey and light grey, uncompacted.			
208.5	241.0	<u>TABLE HEAD</u> siltstone, dark grey (shale), graptolitic, ostracods becoming limy in last 20 feet, calcite veins, interbedded fine grained limestone (6')			
241.0	280.0	limestone, medium grey, silty, anastomosing veins.			

FOOTAGE FROM	TO	DESCRIPTION	SAMPLING			TEST NO.	TEST NO.	TEST NO.
			SPL. NO.	FROM	TO			
250.0								



D. D. HOLE No. 26

LOCATION UTM Grid 5384700 NM

350900 MM

HOLE STARTED.

**HOLE COMPLETED**

CORE RECOVERY 94%

DRILLED BY Eastern Exploration Ltd

COLLAR LAT. \_\_\_\_\_  
DEP. \_\_\_\_\_  
ELEV. \_\_\_\_\_  
AZIMUTH \_\_\_\_\_  
DIP \_\_\_\_\_  
LENGTH \_\_\_\_\_  
HOR. PROJ. \_\_\_\_\_ VERT. PROJ. \_\_\_\_\_

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
0	15	OVERBURDEN				
15	55	HUMBER ARM interbedded dark grey to green siltstones & lesser argillites; abundance lustrous patches; graptolites, Py finely disseminated to nodular throughout.				
55'	65'	Py				
65'	75'	LOST CORE				
75'	85'	Dk. green siltstone with abundant lustrous patches.				

FOOTAGE		DESCRIPTION	SAMPLING		
FROM	TO		SPL. NO.	FROM	TO
85'	136'	LOST CORE			
		Dark grey to dark green siltstone; badly broken up.			
136'	136' 10"				
138' 10"	186'	Dark grey argillites & fine-grained greywackes.			
		Dark grey argillites with lesser siltstones; abundant finely-disseminated Py, lustrous patches still abundant.			
186'	187'				
187'	221'	Lithic greywacke: clasts - very ang. green argillite to grey argillite, lustrous & not; matrix dk. gry. argillite, may show patches of wavy banding; some frag. attenuated.			
		Dk. gry to green siltstones with lesser argillites; again fine Py throughout.			

FOOTAGE		PROPERTY	LEHIGH CEMENT	SAMPLING			
FROM	TO	DESCRIPTION		SP. NO.	FROM	TO	FEET
231'	237'	Dark grey limy argillite, finely laminated, many grapholites, some oysters.					
237'	240'	TRANSITIONAL TABLE HEAD: abrupt change to coarse-grained apparently partly limy mudstone to packstone, med. gray with fine argillite (limy) interbeds. med. gry. limy mudstone to packstone with typical lensoid development created by infill; fine shaly partings & stylolites; much fossil debris - gast, bivalves, pellets.					

D. D. HOLE No. 1981-24-30

LOCATION UTM Grid 5385900 North  
350300 East

HOLE STARTED.....

HOLE COMPLETED.....

CORE RECOVERY..... %

DRILLED BY Eastern Exploration Services

SURVEY		
Depth	Dip	Azimuth

COLLAR LAT.

DEP.

ELEV.

AZIMUTH.

DIP.

LENGTH.....

HOR. PROJ.....

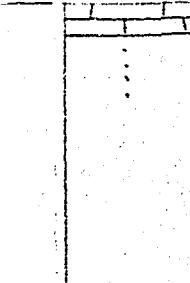
VERT. PROJ.....

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
0.0	5.0	Overburden				
5.0	17.0	TABLE HEAD (lower) Limestone (shale); dark grey, silty				
17.0	60.0	Limestone, medium grey, fine grained, anastomosing veins, calcite veins.				

PROPERTY

LEHIGH CEMENT

FOOTAGE	FROM	TO	DESCRIPTION	SAMPLING			SPL. NO.	FROM	TO	FEET
				SPL. NO.	FROM	TO				



BOTTOM

D. D. HOLE No. 1000-3

LOCATION UTM 5385300 NW

350300 ME

HOLE STARTED AUGUST 4, 1974

HOLE COMPLETED AUGUST 4, 1975

CORE RECOVERY 100 %

DRILLED BY Eastern Exploration Ltd.

COLLAR. LAT. \_\_\_\_\_  
DEP. \_\_\_\_\_  
ELEV. \_\_\_\_\_  
AZIMUTH \_\_\_\_\_  
DIP. \_\_\_\_\_  
LENGTH. \_\_\_\_\_  
HOR. PROJ. \_\_\_\_\_ VERT. PROJ. \_\_\_\_\_

## D. D. HOLE No. 32

LOCATION UTM Grid 43847 MN

350300 ME

HOLE STARTED Aug. 4, 1974

HOLE COMPLETED Aug. 4, 1974

CORE RECOVERY 100 %

DRILLED BY Eastern Exploration Limited

SURVEY		
Depth	Dip	Azimuth

COLLAR LAT.

DEP.

ELEV.

AZIMUTH

DIP

LENGTH

HOR. PROJ. VERT. PROJ.

FOOTAGE		DESCRIPTION	SAMPLING		
FROM	TO		SPL. NO.	FROM	TO
0.0	7.0				
7.0	15.0	TH: dark grey, argillaceous, finely laminated, limey mud. interbeds up to 1" wide. Bitumen staining pyrite and calcite in infill.			
15.0	60.0	TABLE HEAD: med. grey, limy mud st. to wackstone, var. bioturb. lensoid texture, pine mudstone partings & sylolites throughout; gnost, bivalvos. Pyrite in matrix. Py. in matrix. Green mudst. (limy) now red to powder (2") Py. in matrix.			

## D. D. HOLE No. ddh-53-74

LOCATION UTM Grid 5383200 N

343400 E

HOLE STARTED

HOLE COMPLETED

CORE RECOVERY Partial %

DRILLED BY Eastern Exploration Services

SURVEY		
Depth	Dip	Azimuth

COLLAR LAT.

DEP.

ELEV.

AZIMUTH

DIP.

LENGTH

HOR. PROJ.

VERT. PROJ.

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL NO.	FROM	TO	FEET
		Overburden				
12.0	13.0	<u>HUMBER ARM</u>				
13.0	15.5	-Limestone, tan-lt. grey, aphanitic with brown clay stringers				
15.5	17.0	-Greywache; medium to dark grey, med. grained, silt & copper to homogenous siltstone, dark grey, thin bedded (shale)				
17.0	19.5	-Core missing.				
19.5	28.0	-Interbedded siltstone and mudstone (shale), dark grey, some interbeds of very fine greywache.				
28.0	32.5	-Greywache, dark grey, limy (calcite cement), coarse grained				
32.5	37.0	-Greywache, dark grey, fine grained grading to medium grained.				
37.0	53.0					

FOOTAGE		PROPERTY	LIMESTONE	SAMPLING				
FROM	TO			SPL. NO.	FROM	TO		
	40.0		DESCRIPTION					
57.0			Mudstone, dark grey (shale) with one-foot interbeds of fine grained greywache.					
57.0	61.0		Greywache, dark grey ( ) fine grained.					
61.0	63.0	<del>XX</del>	Core missing.					
63.0	69.0		Midstone , dark grey (shale).					
63.0	100.5		Greywache, medium grained ( ), coarse grained clacite veins.					
100.5	117.5		Slitstone, dark grey with interbeds of medium grained greywache.					

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
110.0	110.0					
117.5	117.5					
117.5	137.0	Greywache, medium grained, calcite veins, coarse grained with interbedded claystone and siltstone, dark grey.				
137.0	194.0	Greywache, medium grey, coarse cement grading to medium and fine grained, limy with thin interbeds of claystone.				

PROPERTY LIMESTONE

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL NO.	FROM	TO	FEET
194.0	180.0					
194.0	218.0	Claystone (shale); dark grey and interbedded siltstone				
218.0	278.0	Greywache, dark grey, limy cement, fine to medium grained with interbeds of siltstone.				

PROPERTY LURCH CEMENT

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
	250.0	Core missing.				
278.0		Core missing.				
		(Greywacke getting coarser).				
278.0	300.0	Claystone (shale), dark grey interbedded siltstone.				
300.0		(ALL HUMBER ARM).				
		BOTTOM				

## D. D. HOLE No. 34

LOCATION UTM Grid 538400 MN

346200 ME

HOLE STARTED August 27/74

HOLE COMPLETED August 30/74

CORE RECOVERY Badly broken up 97%

DRILLED BY Eastern Exploration Ltd.

SURVEY		
Depth	Dip	Azimuth

COLLAR LAT.  
 DEP.  
 ELEV.  
 AZIMUTH  
 DIP.  
 LENGTH  
 HOR. PROJ. VERT. PROJ.

FOOTAGE		DESCRIPTION	SAMPLING		
FROM	TO		SPL. NO.	FROM	TO
0	14'	Overburden			
14	15'	<u>HUMBER ARM</u>			
15	20'	Med. grey limey mudst. to wackestone, fossil fragments Dark grey argillite with lesser siltstone, limy mudstone interbeds up to 2" wide.			
21	25'	Lost Core.			
25	35'	Dark grey argillite; limy beds to 4" wide, comp. limy cement clasts heterog. from limy mudstone to siltstones & argillites poorly sorted, sub-angular.			
35	39'	Lost Core.			
39	85	Dark grey limy argillite with limy mudstone to limy lithic greywacke interbeds up to 5" wide. Sporadic throughout; med. grained, dark pink clasts heterog. from arg. (green to gray) to mudstone; grades to fine grained limy greywacke in which clasts mostly limy.			
85	153	Dark grey limy arg. with good blocky fractures grading sporadically to dk. grey. greywacke, finely lam., sporadic fine diss. py.			

FOOTAGE		DESCRIPTION	SAMPLING				
FROM	TO		SPL. NO.	FROM	TO	FEET	
		apparent cross beds in some greywacke					
155	212'5"	Dark grey siltstone with lustrous patches.					
155	212'5"	Dark grey greywacke, fine grained, interbedded with dark grey argillites. Again apparent cross beds in greywacke; argillite decreases in importance downwards; fine, sparry calcite veins cut greywacke - a local "vein Bx".					
212'5"	240'7"	Dk. grey greywacke, fn.-cr. grained, homog in general but dark grey arg. locally larger & may be concentrated locally/diffus. laminated appearance; sporadic dk grey arg. interbeds to 1" wide. Fine calcite veins cut greywacke - local "vein Bx".					

PROPERTY PORT ALBERT

HOLE NO. 54

SHEET NO. 5

FOOTAGE		DESCRIPTION	SAMPLING		
FROM	TO		SPL. NO.	FROM	TO
240'7"	261'	Dark grey argillite interbedded (& grading into) dark grey greywacke, fine grained.			
261'	290'	Dark grey argillite with grapt. interbedded with mod. grey greywackes (coarse grained, angular, subangular clasts; lithic with large limy mudstone clasts, limy matrix) and dark grey to green wavy banded argillite often with abundant to sparse angular fragments, sparse, grey brn. limy mudstone to dark grey to green siltstone bands.			
290'	300'	Dark grey argillite with sporadic interbeds up to 6" wide. Grey-brown limy mudstone.			

PROJECT

LEHIGH CEMENT

D. D. HOLE No. DDH-35-74

LOCATION UTM 5581100 m N  
341800 E

HOLE STARTED Sept. 5, 1974

HOLE COMPLETED Sept. 6, 1974

CORE RECOVERY Partial %

DRILLED BY Eastern Exploration Services

SURVEY		
Depth	Dip	Azimuth

COLLAR LAT. \_\_\_\_\_  
 DEP. \_\_\_\_\_  
 ELEV. \_\_\_\_\_  
 AZIMUTH \_\_\_\_\_  
 DIP \_\_\_\_\_  
 LENGTH \_\_\_\_\_  
 HOP. PROJ. \_\_\_\_\_ VERT. PROJ. \_\_\_\_\_

FOOTAGE		DESCRIPTION	SAMPLING					
FROM	TO		SPL. NO.	FROM	TO			
0.0	4.0	Overburden						
4.0	38.0	<u>HUMBER ARM</u>  Greywacke, grey-tan, fine grained grading to coarse, interbedded siltstone.						
38.0	82.0							

## PROPERTY LIBRARY CEMENT

FOOTAGE		DESCRIPTION	SAMPLING		
FROM	TO		SPL. NO.	FROM	TO
	40.0	Claystone (shale); dark grey interbeds (6-8'), fine grained greywacke, medium grey, calcite veins.			FEET
		Missing core.			
82.0	117.0	Greywacke; medium to dark grey, very fine grained regular bedding, intercalations of dark claystone.			

## PROPERTY LIMEST CEMENT

FOOTAGE		DESCRIPTION	SAMPLING		
FROM	TO		SPL. NO.	FROM	TO
	110.0				
112.0	117.5	greywache; medium grey, coarse grained, limestone fragments			
117.5	130.5	Siltstone, (shale); medium to dark grey with very fine grained greywache intercalations.			
130.5	148.0	Greywache; medium grey, fine grained grading to coarse limestone fragments, last 5' contains intercalated claystone, dark grey.			
148.0	171.0	Greywacke; medium grey, fine grained, limy intercalated claystone (5"), thin bedding.			
		Greywache; light grey, coarse grained, limy			

FOOTAGE		DESCRIPTION	SAMPLING		
FROM	TO		SPL NO.	FROM	TO
	180.0				
192.6	—				
192.5	204.0	interbedded mudstone (shale) dark grey and greywacke; medium grey fine grained, limy, thin bedded			
204.0	251.0	Mudstone, dark grey with interbedded (6-8") greywacke, medium grey, coarse grained in last 20'.			

FOOTAGE		DESCRIPTION	SAMPLING		
FROM	TO		SPL. NO.	FROM	TO
	250.0				
250.0	253.0	Greywache, medium grey (salt and pepper), very coarse grained limestone fragments, veins of calcite lined with pyrite.			
253.0	284.0	Claystone - siltstone (shale) dark grey.			
284.0	2' 0.0	Greywache; medium to dark grey, fine grained with interbedded dark claystone.			
		BOTTOM			

PROJECT LEHIGH CEMENTD. D. HOLE No. DDH-36-74LOCATION UTM GRID 53R12200.MN340600 MEHOLE STARTED Sept. 8, 1974HOLE COMPLETED Sept. 10, 1974CORE RECOVERY 100 %DRILLED BY Eastern Exploration Services

SURVEY		
Depth	Dip	Azimuth

COLLAR. LAT.

DEP.

ELEV.

AZIMUTH.

DIP.

LENGTH

HOR. PROJ.

VERT. PROJ.

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
0.0	10.0	Overbruden				
10.0	13.0	Humber Arm.				
13.0	67.0	Dark grey greywacke, clasts, Qt, limy mudstone, argillite, fine grain size, homogenous matrix frequently limy, local elongate black argillaceous clast up to 4" long, salt and pepper colour, sporadic black argillite lenses or beds up to 8" wide.				
67.0	85.0					
85.0	99.2"	Dark grey argillite; graptolites, ostracods sporadic throughout.				
		Dark grey greywacke as before but has a laminated appearance due to slight colour diff. local conc. white clasts - speckled appearance.				

PROPERTY PORT AU PORT

36-74  
HOLE NO. 36-74  
SHEET NO. -2-

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL. NO.	FROM	TO	FEET
99.2"	105.3"	Dk. grey argillite with graptolites sporadic.				
105.3"	115.8"	Dk. grey greywacke, med. grained, clasts most often quartz or argillite also feldspar plus limy mudst.; interbedded with dark grey argillite; locally diffuse lamination due to bands of inc. argillite fragments in greywacke; sporadic calcite veins.				
115.8"	118.0"	Dark grey argillite with graptolites; finely laminated.				
118.0	146.4"	Dark grey greywacke; med. grained clasts; quartz plus argillite with lesser feldspar and limy mudstone. Homog. in general but locally larger argillites and higher argillite diffuse lamination, matrix limy, calcite veins sporadic.				
146.4"	152.3"	Dark grey argillite interbedded with dk. gr. greywacke, med. grained.				
152.3"	165.0"	dark grey greywacke, med. grained, diffusely laminated.				
165.0"	171.9"	Dk. grey argillite with rare graptolites and finely diss. pyrite (+ calcite) in veins.				
171.9"	184.2"	Dk. grey greywacke as above, med. grained with dark grey argillite interbeds up to 4" wide, calcite veining.				
184.2"	186.2"	Dark grey argillite.				
186.2"	208.3"	Dark grey greywacke, med. grained as above with dark grey argillite interbeds up to 5" across, locally fine calcite veining.				
208.3"	213.9"	Dark grey argillite locally coarsening to fine grey greywacke.				
213.9"	234.6"	Dark grey greywacke, grain size from fine to coarse, grading into dark grey argillite interbeds; fine calcite veins in true greywacke.				

PROPERTY PORT AU PORT

HOLE NO. 36-74  
SHEET NO. -3-

FOOTAGE		DESCRIPTION	SAMPLING			
FROM	TO		SPL NO.	FROM	TO	FEET
243.6"	255.0"	Dk. grey argillite grading to fine grained greywacke with interbeds of true greywacke up to 13" thick.				
255.0"	260.0"	Dk. grey greywacke, coarse grained, one lone limy clast 1.5" long (lens?) Pyrite plus calcite in vein.				
260.0"	267.0"	Dk. grey argillite grading to fine grained greywacke but with abrupt transition to zone below.				
267.0"	293.0"	Dk. grey greywacke, med. to fine grained with dk. grey argillite interbeds up to 8" across; local diffuse lamination and/or white clasts (- speckled appearance) - sporadic calcite veins with fine pyrite.				
293.0"	300.0"	Dark grey argillite with greywacke interbeds (often white speckled) up to 3" wide.				