

LOCATION: 0+60W; 2+50S				Diamond Drill Record				HOLE NO 86 LS 11		Page 1 of 4	
AZIMUTH: 200°		DIPS ~ collar 45 °		CONTRACTOR: ARCTIC DIAMOND DRILLING				PROPERTY: LONE STAR - AOR/DEL			
ELEVATION:		~ m °		LOGGED BY: S. TOMLINSON				CLAIM NO. L409			
LENGTH: 368.5 FEET		~ m °		DATE: NOVEMBER 24, 1986				SECTION NO. LONE STAR LEASES			
CORE SIZE: N Q		~ m °						STARTED:			
PURPOSE: TO TEST ON INDUCED POLARIZATION ANOMALLY AND TO FURTHER SAMPLE A GOLD BEARING HORIZON.								COMPLETED:			
Section		ROCK DESCRIPTION	Interval		ALTERATION MINERALIZATION etc.	Thickness mm	Angle to core	VEINLETS			
from Rft	to Rft		from Rft	to Rft				minerals in decreasing abundance			
0	21	Casing						Recovery:			
21	68	Chloritic quartz muscovite schist. Well foliated, fine grained, medium green rock. Fairly competent with coarse fracturing parallel to foliation Composition layering consists of alternating white quartz rich layers (up to .5 cm, averaging .2 cm thick) and green chloritic muscovite layers (up to .7 cm, averaging .2 cm thick). Layers are consistent with weak to moderate distortion into open warps and minor folds. 1:1 ratio for quartz: muscovite layering.  Note foliaform, blebby concentrations of dark grey carbonate, 5 - 7% of section. Blebs average 2 mm across.  ∠ to C.A. = 60°	21	41	Weak Fe secondary staining and MnO along fracture surfaces. Plus minor clay alteration noted.			21 - 23.5 = 2.5 23.5 - 28.0 = 3.5 28.0 - 37.5 = 5.0 37.5 - 43.0 = 3.5 43.0 - 53.0 = 1.5 53.0 - 63.0 = 8.0 63.0 - 83.0 = 100%			
			21	68	Pyrite disseminated throughout, also occurs locally as fine foliaform stringers, 1% throughout with short, localized sections up to 3%. Quartz veinlets and lenses paralleling foliation, up to 2.5 cm thick, averaging 1.5 cm in thickness, comprise 3 - 5% of section. All appear barren, composed of white opaque quartz recrystallation of quartz noted on cut surface.						

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from Rft	to Rft		from Rft	to Rft		Thickness mm	Angle to core	minerals in decreasing abundance
68	105	<p>Quartz chlorite muscovite schist. Finely laminated quartz and muscovite/chlorite lamellae. Average width of layer is 2 mm. Minor small carbonate blebs. Schistosity to C.A.: 62°, moderately well developed, planar.</p> <p>Recovery:</p> <p>68 - 83 = 100% 83 - 93 = 7.5/10 93 - 105 = 11/12</p>			<p>Pyrite occurs as fine grained disseminations and short irregular foliaform stringers. Accounts for 3% of core, although may locally concentrate up to 10% over a 5 cm long section.</p> <p>Magnetite occurs as fine grained (1 - 2 mm) disseminations, accounts for approximately 1% of core, although not evenly distributed.</p> <p>Minor rusty iron oxidation, and black manganese staining along fracture surfaces.</p>			
105	123	<p>Maripositic quartz muscovite schist.</p> <p>Quartz and muscovite form irregular bands and lamellae up to 1 cm wide.</p> <p>Mariposite forms flakes up to 5 mm, accounts for 5% of core overall, but may locally account for 30%.</p> <p>None to very minor chlorite. Schistosity to C.A.: 57°, only moderately developed.</p> <p>Recovery: 100%.</p>			<p>Pyrite occurs as fine grained disseminations and as irregular foliaform stringers. Accounts for 3% of core, although it may concentrate up to 5% of core.</p>			

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from mft	to mft		from mft	to mft		Thickness mm	Angle to core	minerals in decreasing abundance
123	179	Quartz muscovite schist. Finely laminated quartz and muscovite lamellae. Minor chlorite within the muscovite lamellae. Schistosity to C.A.: 54°, moderately well developed, but often convoluted. Quartz also forms augens up to 2 cm wide. Occasionally, carbonate spots up to 5 mm accounting for 5% of core over a 1 foot section, but overall less than 1%.	123	150	Pyrite occurs mostly as fine grained disseminations but also as stringers. Overall, accounts for 1% of core, although may concentrate to 5%. Very minor (less than 1%) galena in quartz-rich bands as small specks with pyrite. Pyrite accounts for approximately 3% of section.			Recovery:  123 - 153 = 100% 153 - 158.5 = 4.5/5.5 158.5 - 168 = 2.5/9.5 168 - 173 = 100% 173 - 179 = 5.5/6
179	255.5	Quartzitic quartz muscovite schist. Both upper and lower contacts are very gradational. Quartz rich groundmass with 25% muscovite lamellae and pods. Quartz pure bands up to 5 cm. Very minor mariposite. Schistosity to C.A.: 61°, poorly developed due to large percentage of quartz, may be highly contorted. Core occasionally appears almost brecciated, due to foliation being contorted.			Pyrite accounts for less than 1% of core; occurs mostly as fine grained disseminations. Occasionally, very minor galena and chalcopyrite as small globules and specks. Seen at 191 feet, 192 feet and at 199 feet. Very minor rhodochrosite in small stringer.			179 - 191.5 = 100% 191.5 - 202 = 10/10.5 202 - 207.5 = 100% 207.5 - 218 = 9.5/10.5 218 - 227.5 = 100% 227.5 - 245 = 16/17.5 245 - 255.5 = 100%

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from mft	to mft		from mft	to mft		Thickness mm	Angle to core	minerals in decreasing abundance
255.5	368.5	<p>Quartzite. Very gradational contact. Mostly quartz with less than 10% muscovite plus minor chlorite bands and lamellae. Quartz often forms pods over 1 cm wide. Schistosity to C.A.: very variable, from subparallel to nearly vertical. Very poorly developed due to high quartz percentage, and extremely contorted.</p> <p>Note: Hole abandoned early due to core retriever breakage.</p>			Very minor (less than 1%) pyrite, mostly as disseminations to 2 mm.			<p>Recovery:</p> <p>255.5 - 365.5 = 100%</p> <p>365.6 - 368.5 = 2.5/3</p>