

CORRELATION OF THE BOLIVIAN DEVONIAN ROCKS

PREVIOUS		INTERPRETATIONS										NEIGHBORING REGIONS				SECTIONS PRESENTED IN THIS PAPER									
STEINMANN-ULRICH (1892) DEPTO. CHUQUISACA	STEINMANN-KNOD (1908) DEPTO. CHUQUISACA	KOZLOWSKI (1923) ICLA, SICASICA	BRANIŠA (1960) BELÉN	BRANIŠA (1960) ICLA	FRICKE & OTHERS (1964) SICASICA	DAVILA & RODRIGUEZ (1967) ALTIPLANO	WOLFART & VOGES (1968) BELÉN	LIZARAZU (1969) ALTIPLANO	CHAMOT manuscript ICLA AREA	BARBOSA (1948) Chiquitos area EASTERN BOLIVIA	HARRINGTON (1956) WOLFART (1961) PARAGUAYAN CHACO	PADULA, et al. (1967) SALTA PROVINCE N.W. ARGENTINA	NEWELL (1949) TITICACA REGION PERU	HINCHAKA - HUAKO 1	AYO AYO 2	BELÉN 3	PRESTO 4	ICLA-CHA-KJERI 5	POJO 6	QUILCO 7	LAJAS 9	GAMONEDA 8	LOS MONOS 10		
Huamampampa	Sandstones	Upper unfossiliferous sands and shales Shales with <i>Homalonotus dekeyi</i> (20m.) Fossiliferous shales (10 m.) Sandy shales with <i>Vitulina</i> (20m.)	? <i>Tropidoleptus carinatus</i> zone <i>D. dekeyi</i> and <i>Vitulina</i> zone	(600m.) <i>Vitulina pustulosa</i> <i>Derbyina jamesiana</i>	Collpacuchu Upper (770m.) Lower Fm. (500m.) Santari Sandstone (100m.) Cruz Loma Sandstone (80m.) <i>Metacryphaeus caffer</i> Zone (80m.) <i>Chonetes convexa</i> Zone (70m.) <i>Lichas ballivani</i> Zone (190m.) "Asteropyge" <i>unisipina</i> Zone (148m.)	Upper Collpacuchu Fm. (770m.) Santari Sandstone (100m.) Lower Collpacuchu Fm. (500m.) SICASICA Fm. (100m.) Cruz Loma Sandstone (80m.)	Sicasica Formation (650m.)	Sporadoceras (not in situ) Agoniatites Santari Sandstone <i>Tropidoleptus</i> zone <i>Panenka sudamericana</i> zone (500m.) Cruz Loma Sandstone (60m.) <i>Metacryphaeus caffer</i> zone (1000m.) Condoriquina Qtzite. (120 m.)	Purple Sand (60-100m.) Track Shale (227m.) Orcko Capilla (113 m.) Catarata Sand (110 m.) Carinatus Shale (135 m.) Siete Hermanos Sand (140m.) Salteri Shale (220m.)	?	?	Sicasica Fm. (approx. 3000m.)	Hatched	Hatched	Hatched	Hatched	Hatched	Hatched	Hatched	Hatched	Hatched	Hatched	Hatched		
Conularia	Sandstones	Lower Fossiliferous Shales (15 m.) Huamampampa Sandstone	SICASICA <i>Metacryphaeus caffer</i> zone (200 m.) <i>Lichas balliviani</i> zone "Asteropyge" <i>unisipina</i> zone	SICASICA SANDSTONES (600m.) <i>Phacops orurensis</i> <i>Ambocoelia pseudambonata</i>	SICASICA <i>Dipleura dekeyi bolivianensis</i> (100m.) Cruz Loma Sandstone (80m.)	Sicasica Formation (650m.)	SICASICA F.M. <i>Panenka sudamericana</i> zone (500m.) Cruz Loma Sandstone (60m.) <i>Metacryphaeus caffer</i> zone (1000m.) Condoriquina Qtzite. (120 m.)	Sicasica Formation (650m.)	Sicasica Fm. (approx. 3000m.)	Shales	?	Sicasica Fm.	Hatched	Hatched	Hatched	Hatched	Hatched	Hatched	Hatched	Hatched	Hatched	Hatched	Hatched		
Shales	Shales	unfossiliferous sandstone (60m.) sandstones with <i>Vitulina</i> (40m.) sandstones with <i>Actinopteria</i> (50m.) sandstones with <i>Phacops</i> (50m.) sandstone with <i>Spirophyton</i> (40 m.) Upper <i>Conularia</i> Shales (40m.) sandstone (30m.) Lower <i>Conularia</i> Shales (120m.)	(250m.) Condoriquiña Quartzite (50m.) <i>Francovichia</i> zone (80m.) <i>Platyceras</i> zone (100m.) <i>Receptaculites</i> zone (80-100m.) Icla Shales (200m.) Sandstones with <i>Scaphioecelia</i> and <i>Pleurothyrella</i> (170 m.)	HUAMAMPAMPA SANDSTONES (460m.) <i>Taanurus (Spirophyton) caudagalli</i> Zone <i>Digonos clarkei</i> Zone <i>Francovichia francovichii</i> Zone <i>Metaplasia</i> Zone <i>Conularia</i> Zone <i>Scaphioecelia</i> zone (100m.) Cordillera Real Slates	Condoriquiña Qtzite. (30m.) <i>Francovichia</i> Zone (100m.) <i>Platyceras</i> Zone (170m.) <i>Receptaculites</i> Zone (185m.) <i>Scaphioecelia</i> Zone (290m.)	Catavi Formation (1500m.)	UPPER BELÉN SHALES <i>Phacopina aspera</i> beds (490m.) <i>M. cornutus</i> (148m.) Condoriquiña Qtzite. (30m.) <i>O. bran-isi</i> (100m.) <i>M. giganteus</i> beds (270m.) LOWER BELÉN SHALES <i>Phacopina lacustera</i> beds (450m.) <i>Scaphioecelia</i> and <i>Acostoides</i> beds (290m.) Vila Vila Fm. (1900m.) Catavi Sandstone (<i>Phacopina chojinacotensis</i>) (1200 m.)	Francovichia zone <i>Scaphioecelia</i> zone Vila Vila Fm. (800-1000m.) Catavi Fm.	Cangalli Siltstone (50m.) <i>Taanurus cauda-galli</i> Upper Shales Niagara Mbr. Lower Shales Chiporo Fm.	La Torre Fm. (200m.) Limoncito Fm. (100m.) El Carmen Fm. (200m.)	Cerro Piedras Mbr. Baritú Sandstone Mbr.	Icla Fm. base not exposed	Hatched	Hatched	Hatched	Hatched	Hatched	Hatched	Hatched	Hatched	Hatched	Hatched	Hatched		
calcareous-sandy beds	ICLA SANDSTONE (170 m.)	marly sandstones with <i>Scaphioecelia</i> (90m.) unfossiliferous sandstone (80m.)	(Silurian or Lower Devonian)	Santa Rosa Sandstones (170m.)	Vila Vila Fm.	Kirusilla Formation	Pampa Shale (2100m.)	Pampa Formation	Tarabuco Formation	Ordovician	?	?	base not exposed	Vila Vila Fm.	Vila Vila Fm.	Santa Rosa Fm.	Chiporo Fm.	Santa Rosa Fm.	not exposed	not exposed	Santa Rosa Fm.	not exposed			