

Datashare Table 1. Data Repository Item: Sample GPS Locations and Lithologic and Biostratigraphic Information for Samples Collected from the Taballar River Area

Sample	Latitude	Longitude	Age	Biostratigraphic Zonal Information	Lithology	In Situ?
Undolomitized Taballar Limestone Samples						
MTR01	01°45.70'N	117°52.10'E	Oligocene–Miocene	Td/Te–Oligocene–Miocene (Austrotrillina)	Fine wackestone and packstone	Yes
MTR02	01°42.16'N	117°59.57'E	Oligocene–Miocene, possibly younger	Te–probable lower Te–Te1-4	Fine- to medium-branching coral and imperforate foraminifera bioclastic packstone and floatstone	
MTR03	01°42.25'N	117°59.62'E	Probably Oligocene–Miocene	Probable Td/Te	Fine-branching coral and imperforate foraminifera bioclastic packstone and floatstone	
MTR04a	01°43.85'N	117°54.87'E	Probably late Oligocene	Probable Te1-4, (<i>Eulepidina</i> , but lacks <i>Nummulites</i> or <i>Miogypsina</i>)	Medium to coarse bioclastic packstone	Yes
MTR21	01°45.31'N	117°57.05'E	Probably Oligocene–Miocene	Probable Td/Te	Medium bioclastic packstone	Yes
MTR22a	01°45.38'N	117°56.85'E	Probably Oligocene–Miocene	Probable Td/Te	Medium to coarse bioclastic packstone	Yes
MTR22b	01°45.38'N	117°56.85'E	Probably Oligocene–Miocene	Probable Td/Te	Fine bioclastic wackestone and packstone	Yes
MTR26	01°44.79'N	117°55.98'E	Probably Oligocene–Miocene	Probable Td/Te	Fine bioclastic wackestone and packstone	Yes
MTR27	01°44.79'N	117°55.98'E	Probably Oligocene–Miocene	Probable Td/Te	Fine bioclastic wackestone and packstone	Yes
MTR28	01°44.93'N	117°55.88'E	Early Miocene or younger	Te5 or younger–section contains <i>Flosculinella</i>	Fine bioclastic wackestone and packstone	Yes
MTR29	01°44.93'N	117°55.85'E	Early Miocene or younger	Te5 or younger–section contains <i>Flosculinella</i>	Fine bioclastic mudstone and wackestone	Yes
MTR30	01°44.93'N	117°55.85'E	Early Miocene or younger	Te5 or younger–section contains <i>Flosculinella</i>	Dark-gray shale	Yes
MTR34	01°44.81'N	117°55.71'E	Probably Oligocene–Miocene	Probable Td/Te	Bioclastic wackestone and floatstone	Yes
MTR35	01°44.90'N	117°55.18'E	Probably Oligocene–Miocene	Probable Td/Te	Fine bioclastic wackestone and packstone	Yes
MTR44	01°45.03'N	117°53.80'E	Early Miocene	Top Te5 (along section from MTR41)	Carbonaceous laminated shale	Yes
MTR82	01°45.31'N	117°51.37'E	Probably Oligocene–Miocene	Probable Td/Te	Pale brown laminated siltstone	Yes
MTR83	01°45.31'N	117°51.37'E	Probably Oligocene–Miocene	Probable Td/Te	Fine to medium bioclastic packstone	Yes
MTR109	01°45.50'N	117°53.72'E	Probably late Oligocene	Td/e	Medium imperforate foraminifera bioclastic packstone	Yes
MTR110	01°45.50'N	117°53.72'E	Probably Oligocene–Miocene	–	Branching coral packstone and floatstone	Yes
MTR111	01°45.68'N	117°53.60'E	Probably Oligocene–Miocene	–	Coral floatstone	Yes
MTR112	01°45.68'N	117°53.60'E	Probably Oligocene–Miocene	–	Branching coral floatstone	Yes
MTR114	01°45.65'N	117°52.18'E	Probably Oligocene–Miocene	–	Medium imperforate foraminifera bioclastic packstone	Yes

MTR115	01 °45.65'N	117 °52.18'E	Probably Oligocene – Miocene	–	Coarse and gravel bioclastic packstone	Yes
MTR116	01 °45.65'N	117 °52.18'E	Probably Oligocene – Miocene	–	Coarse and gravel bioclastic packstone and rudstone	Yes
MTR118	01 °45.80'N	117 °52.10'E	Probably late Oligocene	Probable Td/Te1-4	Coarse and gravel imperforate foraminifera bioclastic packstone	Yes
MTR119	01 °45.75'N	117 °52.05'E	Probably Oligocene – Miocene	–	Fine to medium imperforate foraminifera bioclastic packstone	Yes
Partially Dolomitized Taballar Limestone Samples						
MTR20	01 °45.19'N	117 °57.67'E	Probably Oligocene – Miocene	Probable Td/Te	Fine to medium bioclastic packstone; minor CD* and RD**	Yes
MTR04b	01 °43.85'N	117 °54.87'E	Probably late Oligocene	Probable Te1-4 (<i>Eulepidina</i> , but lacks <i>Nummulites</i> or <i>Miogypsina</i>)	Coarse bioclastic packstone; very minor RD	Yes
MTR23	01 °45.25'N	117 °56.65'E	Late Oligocene	Probable Te1-4	Larger foraminifera fine to medium bioclastic wackestone and packstone; minor RDa	Yes
MTR24	01 °45.08'N	117 °56.57'E	–	–	Silt-grade micritic mudstone; minor RDa	Yes
MTR25	01 °44.90'N	117 °56.11'E	Early Miocene – Te5	Te5 – (<i>Fosculinella</i> , <i>Miogypsina</i>)	Fine bioclastic packstone; minor CD and RD	Yes
MTR31	01 °44.93'N	117 °55.85'E	Early Miocene or younger	Te5 or younger – section contains <i>Fosculinella</i>	Silt-grade bioclastic wackestone; minor RDa and RD	Yes
MTR32	01 °44.93'N	117 °55.85'E	Early Miocene or younger	Te5 or younger – section contains <i>Fosculinella</i>	Fine bioclastic packstone; minor RDa and RD	Yes
MTR33	01 °44.93'N	117 °55.85'E	Early Miocene or younger	Te5 or younger – section contains <i>Fosculinella</i>	Medium recrystallized bioclastic packstone; minor RDa and RD	Yes
MTR36	01 °44.93'N	117 °55.22'E	Early Miocene	Top Te5 (<i>Fosculinella</i> and <i>Austrotrillina striata</i> and <i>howchini</i>)	Mollusk and imperforate foraminifera bioclastic packstone and floatstone; minor CD and RD	Yes
MTR37	01 °44.75'N	117 °54.84'E	Probably Oligocene – Miocene	Probable Td/Te	Fine to medium recrystallized bioclastic packstone; minor RDa and RD	Yes
MTR38	01 °44.90'N	117 °54.63'E	Probably Oligocene – Miocene	Probable Td/Te	Fine to medium bioclastic packstone; minor RDa and RD	Yes
MTR39	01 °45.04'N	117 °54.40'E	Probably Oligocene – Miocene	Probable Td/Te	Fine bioclastic packstone; minor RDa and RD	Yes
MTR40	01 °44.95'N	117 °54.20'E	Early Miocene	Top Te5 (<i>Miogypsina</i> and <i>Austrotrillina striata</i> and <i>howchini</i>)	Fine recrystallized bioclastic packstone; minor RDa and RD	Yes
MTR41	01 °44.93'N	117 °54.18'E	Early Miocene	Top Te5 (<i>Fosculinella</i> and <i>Austrotrillina striata</i> and <i>howchini</i>)	Fine to medium recrystallized bioclastic packstone; minor RDa	Yes

MTR42	01° 44.98'N	117° 54.00'E	Early Miocene	Top Te5 (along section from MTR41)	Fine recrystallized bioclastic wackestone and packstone; minor RDa	Yes
MTR43	01° 45.03'N	117° 53.80'E	Early Miocene	Top Te5 (along section from MTR41)	Fine recrystallized bioclastic wackestone and packstone; minor RDa	Yes
MTR45	01° 45.10'N	117° 53.45'E	Early Miocene	Top Te5 (along section from MTR41)	Dolomitized fine <i>Heterostegina</i> bioclastic wackestone and packstone; common RDa	Yes
MTR67	01° 43.70'N	117° 45.71'E	Probably Oligocene–Miocene	Probable Td/Te	Fine to medium recrystallized bioclastic packstone; minor CD and RD	Float
MTR81	01° 45.31'N	117° 51.37'E	Probably Oligocene–Miocene	Probable Td/Te	Coral, shell, and imperforate foraminifera bioclastic packstone and floatstone; minor RDa, RDb, and CD	Yes
MTR84	01° 45.31'N	117° 51.37'E	Probably Oligocene–Miocene	Probable Td/Te	Medium bioclastic wackestone and packstone; minor CD	Yes
MTR100	01° 45.45'N	117° 53.25'E	Late Oligocene	Td–Te1-4 (probable Te1-4)	Coarse- to gravel-grade bioclastic packstone; common RDa	Yes
MTR101	01° 45.45'N	117° 53.25'E	Probably late Oligocene	Td/e	Coarse- to gravel-grade bioclastic packstone; minor RDa	Yes
MTR102	01° 45.45'N	117° 53.25'E	Probably late Oligocene	Td/e	Coarse- to medium-grade bioclastic packstone; minor RDa	Yes
MTR103	01° 45.45'N	117° 53.25'E	Probably late Oligocene	Td/e	Coarse- to gravel-grade bioclastic packstone; minor RDa	Yes
MTR104	01° 45.55'N	117° 53.00'E	Late Oligocene	Td–Te1-4 (probable Te1-4)	Coarse- to gravel-grade bioclastic packstone; common RDa	Yes
MTR105	01° 45.55'N	117° 53.00'E	Probably late Oligocene	Td/e	Coarse- to gravel-grade bioclastic packstone; minor RDa	Yes
MTR117	01° 45.55'N	117° 52.15'E	Probably late Oligocene	Probable Td/Te1-4	Coarse to gravel bioclastic packstone; minor RDa and RD	Yes
MTR121	01° 45.65'N	117° 51.82'E	Probably Oligocene–Miocene	Td/Te	Fine to medium bioclastic packstone; minor RDa and RD	Yes
MTR122	01° 45.65'N	117° 51.82'E	Probably Oligocene–Miocene	Probable Td/Te	Fine bioclastic wackestone and packstone; minor RDa	Yes
MTR123	01° 45.65'N	117° 51.82'E	Probably Oligocene–Miocene	Probable Td/Te	Fine bioclastic wackestone and packstone; minor RDa	Yes

Completely Dolomitized Taballar Limestone Samples

MTR05	01° 45.29'N	117° 52.04'E	–	–	Medium to coarse fractured RDb and CD dolomite	Yes
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MTR10	01 ° 45.90'N	117 ° 51.69'E	-	-	Fractured medium to coarse RDb and CD dolomite; minor fracturing and NC	Yes
MTR11	01 ° 45.90'N	117 ° 51.69'E	-	-	Fractured medium to coarse RDb and CD dolomite; minor fracturing	Yes
MTR12	01 ° 45.90'N	117 ° 51.69'E	-	-	Fractured medium to coarse RDb and CD dolomite; minor fracturing	Yes
MTR80	01 ° 45.27'N	117 ° 51.37'E	-	-	Fractured fine- to medium-crystalline dolomite; common RDb and CD; minor NC	Yes
MTR85	01 ° 45.65'N	117 ° 51.60'E	-	-	Fractured fine- to medium-crystalline dolomite; common RDb and CD	Yes
MTR87	01 ° 45.70'N	117 ° 51.65'E	-	-	Fractured medium- to coarse-crystalline dolomite; common RDb and CD; minor fracturing	Yes
MTR88	01 ° 45.70'N	117 ° 51.70'E	-	-	Fractured medium- to coarse-crystalline dolomite; common RDb and CD; minor fracturing	Yes
MTR89	01 ° 45.70'N	117 ° 51.85'E	-	-	Fractured fine-crystalline dolomite; common RDb and CD; minor fracturing	Yes
MTR90	01 ° 45.70'N	117 ° 51.85'E	-	-	Fractured medium-crystalline dolomite; common RDb and CD; minor fracturing	Yes
MTR106	01 ° 45.30'N	117 ° 52.90'E	-	-	Fine- to medium-crystalline dolomite; common RDb; minor bioclasts, echinoid plate	Yes
MTR107	01 ° 45.30'N	117 ° 52.90'E	-	-	Fine- to medium-crystalline dolomite; common RDb	Yes
MTR108	01 ° 45.35'N	117 ° 52.84'E	-	-	Fine- to medium-crystalline dolomite; common RDb	Yes
MTR113	01 ° 45.30'N	117 ° 52.30'E	-	-	Fine- to medium-crystalline dolomite; common RDb; minor CD and NC	Yes
MTR120	01 ° 45.45'N	117 ° 51.90'E	-	-	Fractured medium-crystalline dolomite; common RDb and CD; minor bioclasts, echinoid plates	Yes

Maliu Mudstone Samples

MTR06	01 ° 44.00'N	117 ° 51.49'E	Middle Eocene	P14	Dark-gray clays	Yes
MTR07	01 ° 43.19'N	117 ° 51.33'E	Middle Eocene	P14 (<i>Globorotlia rohiri</i> , <i>Globorotlia bullbrookii</i> , <i>Globorotlia nana</i>)	Dark-gray clays	Yes

MTR08a	01 ° 42.32'N	117 ° 50.92'E	Middle Eocene	P14	Fine siltstone (graywacke)	Yes
MTR08b	01 ° 42.32'N	117 ° 50.92'E	Middle Eocene	P14	Dark-gray clay	Yes
MTR9	01 ° 41.53'N	117 ° 48.57'E	Middle Eocene	P14	Dark-gray clay	Yes
MTR50	01 ° 44.85'N	117 ° 51.56'E	Middle Eocene	P14	Dark-gray clay	Yes
MTR51	01 ° 44.85'N	117 ° 51.56'E	Middle Eocene	P14	Iron oxide nodules	Yes
MTR52	01 ° 44.54'N	117 ° 51.55'E	Middle Eocene	P14	Dark-gray clay	Yes
MTR53	01 ° 44.85'N	117 ° 51.70'E	Middle Eocene	P14	Dark-gray clay	Yes
MTR54	01 ° 44.74'N	117 ° 50.56'E	Middle Eocene	P14	Dark-gray clay	Yes
MTR55a	01 ° 44.56'N	117 ° 50.19'E	Middle Eocene	P14	Dark-gray clay	Yes
MTR55b	01 ° 44.56'N	117 ° 50.19'E	Middle Eocene	P14	Dark-gray clay	Yes
MTR56	01 ° 43.78'N	117 ° 49.43'E	Middle Eocene	P14	Dark-gray clay	Yes
MTR57	01 ° 43.14'N	117 ° 50.08'E	Middle Eocene	P14	Dark-gray clay	Yes
MTR58	01 ° 42.45'N	117 ° 49.43'E	Middle Eocene	P14	Dark-gray clay	Yes
MTR60	01 ° 42.98'N	117 ° 46.60'E	Middle Eocene	P14	Dark-gray clay	Yes
MTR61	01 ° 42.98'N	117 ° 46.60'E	Middle Eocene?		Altered (epidotized) olivine(?) basalt	Yes
MTR62	01 ° 43.13'N	117 ° 46.43'E	Middle Eocene	P14	Dark-gray clay	Yes
MTR63b	01 ° 43.60'N	117 ° 45.71'E	Middle Eocene	P14	Fine sandstone and siltstone (graywacke)	Yes
MTR64	01 ° 43.60'N	117 ° 45.71'E	Middle Eocene	P14	Dark-gray clay	Yes
MTR65	01 ° 43.70'N	117 ° 45.71'E	Middle Eocene	P14	Fine sandstone and siltstone (graywacke)	Yes
MTR66	01 ° 43.70'N	117 ° 45.71'E	Middle Eocene	P14	Dark-gray clay	Yes
MTR68	01 ° 44.01'N	117 ° 45.35'E	Middle Eocene	P14	Dark-gray clay; some carbonate cementation	Yes
MTR74	01 ° 45.25'N	117 ° 44.77'E	Middle Eocene	P14	Dark-gray clay	Yes
MTR75	01 ° 42.57'N	117 ° 46.86'E	Middle Eocene?		Altered (epidotized) olivine(?) basalt	Yes
MTR76	01 ° 42.57'N	117 ° 46.86'E	Middle Eocene	P14	Dark-gray clay	Yes
MTR77	01 ° 42.57'N	117 ° 46.86'E	Middle Eocene	P14	Dark-gray clay	Yes
MTR78	01 ° 42.38'N	117 ° 47.48'E	Middle Eocene	P14	Dark-gray clay	Yes
MTR79	01 ° 42.38'N	117 ° 47.48'E	Middle Eocene	P14	Fine sandstone (graywacke)	Yes

*CD = cemented dolomite.

**RD = replacive dolomite.