

PROJECT ACTION SHEET

RESOURCE EVALUATION BRANCH

PROJECT NUMBER: 9237-C4-2E

COMPANY: C/LEVRON CANADA RESOURCES

REPORT TITLE: 1987 N.W.T. GEOLOGICAL FIELD PROGRAM.

The following action has been taken:

Receipt acknowledged: JULY 27/88

Reports and maps date-stamped: ✓

Reports for review list edited: ✓

Inventory sheet made: ✓

Mylar: No

REVIEW AND APPROVAL MADE BY: _____

COMMENTS: 3 COPIES of REPORTS
AND MAPS.

PROGRAM NUMBER 9237-C4-2E

AREA FORT GOOD HOPE
AREA
N.W.T.

YEAR 1987

E.A. _____

FILED UNDER: SOME

REPORTS

OPERATIONS REPORT:

NUMBER 1

-1987 N.W.T. GEOLOGICAL FIELD PROGRAM

INTERPRETATION REPORT:

NUMBER _____

MAPS

SHOTPOINT MAPS

NUMBER 1

- LOCATION MAP

INTERPRETATION

NUMBER _____

OTHER

NUMBER 1

- SUMMARY of work conducted DURING
FIELD PROGRAM. (INSIDE REPORT)

SECTIONS

NUMBER _____

DATE: JULY	GEOLOGIST	LOCATION			INTERVAL EXAMINED (FORMATION)	TYPE OF WORK PERFORMED	TOTAL THICKNESS MEASURED	SECTION NAME
		LATITUDE	LONGITUDE	GENERAL AREA				
1	GRAF SMITH	GAYNA FLEXURE			HUME RAIL INDIAN RAMPARTS CANAL	RECONNAISSANCE		
2	GRAF	00°30'N	120°50'W	HUME S. TERTIARY	HUME	SECTION		0-07-1
	SMITH	00°27'30"N	120°54'W	STRATHGAPHER'S CLIFFS	RAMPARTS	SECTION	100.0 m (328 ft)	02-07-4
3	GRAF	00°30'N	120°50'W	HUME S. TERTIARY	HUME	SECTION	115 m (377 ft)	0-07-1
	SMITH	00°18'N	120°47'W	POWELL CR.	HUME	SECTION (POORLY EXPOSED)	95.5 m (313 ft)	0-07-2
	SMITH	00°27'30"N	120°54'W	STRATHGAPHER'S CLIFFS	RAMPARTS	SECTION	107.7 m (353 ft)	02-07-4
	SMITH	00°25'30"N	120°50'W	IMPERIAL HILLS	RAMPARTS	SECTION	44 m (144 ft)	02-07-5
4	GRAF	00°41'30"N	120°30'30"W	EAST MOUNTAIN	HUME	SECTION (POORLY EXPOSED)	40.1 m (132 ft)	0-07-3
	SMITH	00°41'N	120°30'30"W	EAST MOUNTAIN	RAMPARTS	SECTION	200 m (656 ft)	02-07-C
5	GRAF	00°30'N	120°10'W	IMPERIAL HILLS AT GAYNA S.	HUME	SECTION	100.7 m (330 ft)	0-07-4
	SMITH	00°30'N	120°07'30"W	IMPERIAL HILLS AT MOUNTAIN S.	RAMPARTS	SECTION	140.6 m (461 ft)	02-07-3
6	GRAF	00°30'30"N	120°14'30"W	MOUNTAIN SYNCLINE	RAMPARTS/RAIL INDIAN/HUME	MEASURED THICKNESS (POORLY EXPOSED)	81.1 m (266 ft)	0-07-5
	SMITH	00°18'N	120°30'W	GAYNA FLEX. AT MT. S.	HUME	MEASURED UPPER PART	12.9 m (42 ft)	0-07-6
	SMITH	00°27'N	120°42'W	IMPERIAL HILLS	RAMPARTS	SECTION	118.0 m (387 ft)	02-07-5
7	GRAF	IN NORMAN WELLS						
	SMITH	00°30'30"N	120°10'30"W	IMPERIAL HILLS AT GAYNA S.	RAMPARTS	SECTION	92.9 m (304 ft)	02-07-7
8	GRAF SMITH	07°30'N	127°44'W	CAMPBELL RIVER	HUME	EXAMINATION OF BUILDUPS		
9	GRAF	00°42'N	120°40'W	SAND SAULT RAPIDS	SAND SAULT	RECONNAISSANCE		0-07-7
	SMITH	00°30'15"N	120°40'40"W	STRATHGAPHER'S CLIFFS	RAMPARTS	SECTION	100.0 m (328 ft)	02-07-6
10	GRAF					RECONNAISSANCE OF NORTHERN PART OF LAND BLOCK		
	SMITH	00°11'N	120°40'W	STRATHGAPHER'S CLIFFS	RAMPARTS	SECTION	111.1 m (364 ft)	02-07-8
	SMITH	00°11'N	120°40'W	STRATHGAPHER'S CLIFFS	RAMPARTS	SECTION	111.1 m (364 ft)	02-07-8
11	GRAF	00°42'N	120°40'W	SAND SAULT RAPIDS	SAND SAULT	RECONNAISSANCE		0-07-7
	SMITH	00°30'30"N	120°30'40"W	IMPERIAL HILLS	DEAR ROCK	RECONNAISSANCE		0-07-8
	SMITH	00°27'N	120°30'40"W	IMPERIAL HILLS	RAMPARTS	SECTION	107.0 m (352 ft)	02-07-8
12	GRAF	00°10'40'N	120°40'W	STONY ANTICLINE AT POWELL CREEK	KATHERINE GROUP	SECTION	201.4 m (661 ft)	0-07-9
	SMITH	00°20'30'N	120°01'30"W	IMPERIAL HILLS	RAMPARTS	SECTION	100.0 m (328 ft)	02-07-9
	SMITH	00°30'N	120°32'30"W	WEST MOUNTAIN	RAMPARTS	SECTION	70.0 m (229 ft)	02-07-1
13	GRAF	00°30'N	127°07'W	LORETTA CANYON	KATHERINE GP./MT. CAP/BALINE S.	IN PART SECTION AND IN PART NOTES ADDED TO GSC SECTION U-11	40.7 m (134 ft)	0-07-10 U-11
	SMITH	00°30'N	120°31'W	IMPERIAL HILLS	RAMPARTS	SECTION	60.4 m (198 ft)	02-07-11
14	GRAF					OFFICE WORK		
15	GRAF	00°00'N	127°57'W	LORETTA CANYON	MOUNT CAP/BALINE RIVER	NOTES ADDED TO GSC SECTION U-11		U-11
	SMITH	00°42'N	120°40'W	SAND SAULT RAPIDS	SAND SAULT	WALKED THROUGH SECTION		0-07-7
16	GRAF	04°20'N	104°10'W	MOUNT CLARE	MOUNT CLARE/MOUNT CAP	NOTES ADDED TO GSC SECTION U-15		U-15
	SMITH	04°07'N	107°10'W	DODD CANYON	BB/MOUNT CAP	WALKED THROUGH GSC SECTION HQ-6 NO NOTES ADDED		HQ-6

TABLE 1 - SUMMARY OF WORK CONDUCTED DURING FIELD PROGRAM

1987 NORTHWEST TERRITORIES GEOLOGICAL FIELD PROGRAM
(Authorization Number 9237-C4-2E)

June 1988

Gary C. Graf
Gary P. Smith
Chevron Canada Resources
Exploration Department
Frontier Division
Territories District
Calgary, Alberta

TABLE OF CONTENTS

	<u>Page #</u>
Introduction	1
Descriptions of Locations Visited	1
G-87-1	1
G-87-2	6
G-87-3	7
G-87-4	9
G-87-5	16
G-87-6	18
G-87-7	19
G-87-8	20
G-87-9	20
G-87-10	22
U-11	24
U-15	25
MQ-6	26
KS-87-A	26
KS-87-B	29
KS-87-C	30
KS-87-D	33
KS-87-E	38
KS-87-F	43
KS-87-G	45
KS-87-H	49
KS-87-I	50
KS-87-J	51
KS-87-K	56
KS-87-L	61
KS-87-M	62

LIST OF ENCLOSURES

Figure 1 - Location Map

Table 1 - Summary of work conducted during field program

1987 NORTHWEST TERRITORIES GEOLOGICAL FIELD PROGRAM

Introduction

Chevron Canada Resources conducted a geological field program within the Northwest Territories from July 1 to July 16, 1987, with locations of sites visited shown in Figure 1.

The field party consisted of the following personnel:

Gary Graf	geologist	Chevron Canada Resources
Gary Smith	geologist	Chevron Canada Resources
Paul Johnston	geologist	Chevron Canada Resources
Bob Wellington	helicopter pilot	Okanagan Helicopters Ltd.
Art Dodson	cook	Norwel Developments
Mary Drybone	camp supervisor	Fort Good Hope
Chester Kakfwi	geological assistant	Fort Good Hope
John Masuzumi	geological assistant	Fort Good Hope

The program was initiated to improve our knowledge of the regional stratigraphy and provide thickness measurements of outcrop sections to tie into well data. Excellent exposures in certain localities warranted the construction of stratigraphic sections; in some localities, sections measured by Geological Survey of Canada geologists were used and additional observations were noted. Some localities were examined only in a cursory manner.

Gary Smith focussed on the Middle to Upper Devonian Kee Scarp/ Ramparts Formation while Gary Graf examined Proterozoic/Cambrian, Middle Devonian and Cretaceous sections. A chronological outline of the section, location, interval examined, type of work performed and thickness measured as well as the geologist responsible is presented in Table 1.

Descriptions of Locations Visited

The following are descriptions of the locations visited:

Section: G-87-1
Formation: Hume Formation
Date: 1987-07-02, 03
Location: 65° 20' N: 129° 58' W
Description:

Landry Fm. (upper part)

- unmeasured
- bed tops are sharp and planar to irregular
- symmetric ripples
- large hemispherical stromatolites
- asymmetric and starved ripples
- cycles (up to 1.6 m thick) of featureless lime mudstone overlain by irregular laminated cryptalgal mudstone which in turn overlain by an intraclastic (mud clasts) conglomerate bed

Hume Fm.

- base of formation placed where bedding decreases in thickness, units become recessive and decrease in thickness and the weathering colour changes from orange-brown to buff-brown

Unit 1

000.0-004.8 m
(4.8 m)

- recessive
- beds are laminated calcisiltite lime mudstone
- wavy bedded

Unit 2

004.8-007.6 m
(2.8 m)

- calcisiltite mudstone
- beds slightly more resistant and range from 2-10 cm in thickness
- bed tops are irregular and are covered with shale
- fossils include solitary rugosans (>1%)

Unit 3

007.6-010.0 m
(2.4 m)

- thinly bedded, finely laminated calcisiltite, mudstone and marl
- some mudstone beds are rubbly
- upper 0.8 m has dark grey, partially fossiliferous mudstone/wackestone beds up to 20 cm thick
- pyritized brachiopods and gastropods on some bed tops

Unit 4

010.0-015.7 m
(5.7 m)

- very recessive
- Unit consists of nodular to irregular bedded mudstone with interbeds of fissile marl
- marl/limestone: 50%/50%
- storm beds (brachiopod rudstone with valves in current stable orientation) throughout
- marl increases upward

Unit 5

015.7-016.4
(0.7 m)

- 0.2 m of resistant floatstone with bioclastic debris of crinoid ossicles and brachiopod and coral fragments
- some fossils are partially leached but most intrafossil porosity is occluded by spar
- 0.2 m of fissile marl
- upper 0.3 m is same as basal floatstone

Unit 6

016.4-021.1 m
(4.7 m)

- fissile marl/fossiliferous wackestone and floatstone/rubbly mottled mudstone: 50%/30%/20%
- abundant surface grazing traces on mudstone beds
- increase in frequency of storm deposits from underlying unit
- some large brachiopods up to 6 cm long

Unit 7

021.1-023.0 m
(1.9 m)

- resistant
- nodular mudstone and wackestone beds up to 0.3 m thick
- some large hemispherical but irregular alveolites (rare) up to 0.4 wide m
- nodules up to 0.4 m long and sheathed in up to 5 cm of black shale

Unit 8

023.0-029.2 m
(6.2 m)

- recessive
- lower part is thin bedded nodular wackestone and mudstone with storm beds of packstone (containing a diverse assemblage of brachiopods) interbedded with marl
- marl/limestone: 50%/50%
- storm deposits increase in thickness and abundance upwards

Unit 9

029.2-038.0 m
(3.8 m)

- resistant
- poorly fossiliferous mudstone beds up to 12 cm thick with marl interbeds

Unit 10

033.0-034.8 m
(1.8 m)

- recessive
- fissile marl

Unit 11

034.8-037.2 m
(2.4 m)

- recessive
- fissile marl
- a middle 1 m thick unit of resistant brachiopod wackestone and packstone

Unit 12

037.2-041.4 m
(4.2 m)

- resistant
- limestone/fissile marl: 70%/30%
- limestone is a mudstone and brachiopod wackestone
- isolated pods of brachiopod valves
- upper thicker beds are very fossiliferous and contain a diverse assemblage of brachiopods, small orthocones, and hemispherical alveolitids, solitary rugosans and gastropods
- alveolitids about 20% of rock

Unit 13

041.4-049.3 m
(7.9 m)

- covered along creek but above appears to be the last resistant limestone/marl unit
- upper contact appears gradational with a decrease in marl and a change from grey to orange brown weathering
- medium resistant

Unit 14
049.3-057.0 m
(7.7 m)

- resistant
- floatstone with a wackestone/packstone matrix
- thin shale/marl interbeds
- large hemispherical alveolitids up to 0.5 m wide and in life position
- large irregular colonies of colonial rugosans up to 0.6 m wide
- irregular to bulbous, overturned stromatoporoids up to 15 cm in diameter
- uppermost bed is 0.4 m thick and appears featureless except for faint 1 cm thick light coloured bands with thin (<1 mm thick) dark interbeds
- the uppermost bed is separated from the overlying Unit by a 2-3 cm marl interbed that grades from the underlying limestone unit

Unit 15
057.0-058.7 m
(1.7 m)

- base of Unit is undulatory
- laminated to crinkly laminated limestone

Unit 16
058.7-061.4
(2.7 m)

- upper 0.1 m contain stromatolites
- lower 0.6 m is a poorly fossiliferous carbonate mudstone with some irregular stromatoporoids

Unit 17
061.4-061.9 m
(0.5 m)

- medium grey shale containing small rhynchonellids

Unit 18
061.9-063.3 m
(1.4 m)

- poorly fossiliferous mudstone that is burrow mottled at the top
- brachiopods
- desiccation cracks

Unit 19
063.3-064.2 m
(0.9 m)

- fissile, dark grey shale

Unit 21
064.2-064.7 m
(0.5 m)

- unfossiliferous, laminated grey mudstone

Unit 21
064.7-064.9 m
(0.2 m)

- dark grey shale

Unit 22
064.9-098.5 m
(33.6 m)

- base of the Unit is marked by an overall colour change to a dark brown to orange-brown
- predominantly wackestone to mudstone

- 2.1 m from the base is a 0.7 m thick Unit of interbedded robust branching rugosan bafflestone with interbeds of the same coral but as rubble
- well bedded
- Unit is resistant
- abundant fossils (brachiopods, coral fragments on bed tops)
- corals include alveolit ds, robust branching rugosans
- some fragments of Coenites branches
- large overturned Favosites heads (< 45 cm diameter)
- some crinoid holdfast pods
- some burrow mottled mudstone
- within the mudstone/ wackestone beds are lenses of bioclastic debris which include orthoconic nautiloids, trilobite and brachiopod fragments
- upper part is not well exposed but upper contact appears gradational with limestone beds and grey shales

Unit 23

098.5-106.9 m
(8.4 m)

- fossiliferous limestone and grey calcareous and argillaceous shale
- bed tops covered with solitary rugosans averaging 3-4 cm long
- some hemispherical Favosites encrusted by solitary rugosans
- grey shales also contain abundant solitary rugosans as well as button corals

Unit 24

106.9-108.7 m
(1.8 m)

- grey rubbly limestone with shale interbeds
- fossils include: brachiopods, low spired smooth shelled gastropods and colonial rugosans

Unit 25

108.7-113.0 m
(4.3 m)

- bed contacts sharp but irregular
- brachiopod floatstone to wackestone with interbedded black shales
- brachiopods are common as well as solitary rugosans
- on bed tops are found irregular encrusting Alveolites and Favosites up to 20 cm long
- some are small (< 15 cm in diameter) and bulbous in nature

Hare Indian Fm. (Bluefish mb.)

Unit 26

113.0-119.1 m
(6.1 m)

- recessive, papery, fissile black shales
- no fibrous calcite beds
- tentaculitids on some bed tops
- a few possible rhynchonellids
- shale is very calcareous
- overlain by overburden

Section: G-87-2
Formation: Hume Formation
Date: 1987-07-03
Location: 65° 16' N: 128° 47' W (west side of Powell Creek)
Description:

- section started where resistant Bear Rock Formation is overlain by thin recessive mudstone beds

Unit 1
000.0-002.6 m (2.6 m)
- basal contact is sharp
- faintly bedded calcisiltite mudstone with marl interbeds

Unit 2
002.6-003.5 m (0.9 m)
- same as unit 1 but thicker bedded

Unit 3
003.5-005.7 m (2.2 m)
- change from medium grey of units 1 and 2 to a buff brown
- mudstone beds interbedded with marl

Unit 4
005.7-042.1 m (36.4 m)
- covered

Unit 5
042.1-043.3 m (1.2 m)
- laminated mudstone (cryptalgal?)

Unit 6
043.3-047.4 m (4.4 m)
- thicker bedded (up to 0.3 m)
- resistant
- floatstone with large colonial corals
- upper 0.3 m is mottled
- fossils include solitary corals

Unit 7
047.4-057.5 m (10.1 m)
- partially exposed
- floatstone containing solitary rugosans and irregular Alveolites

Unit 8
057.5-059.6 m (2.1 m)
- resistant
- massive
- fossiliferous mudstone containing branching colonial rugosans

Unit 9
059.6-060.7 m (1.1 m)
- same as Unit 8
- resistant

Unit 10
060.7-061.5 m (0.8 m)
- recessive rubbly limestone

- Unit 11
061.5-062.5 m - resistant
(1.0 m) - massive
- badly weathered but appears to have some corals
(Favosites) up to 10 cm wide
- Unit 12
062.5-063.0 m - recessive
(0.5 m) - coral floatstone
- some Thamnopora or Coenites fragments, bulbous to irregular Favosites, small solitary rugosans, tabular Alveolites
- Unit 13
063.0-066.7 m - resistant
(3.7 m) - badly weathered
- Unit 14
066.7-070.5 m - covered at creek level
(3.8 m)
- Unit 15
070.5-072.9 m - resistant
(2.4 m) - mudstone/ wackestone with isolated large fossils
- poorly fossiliferous but some Alveolites and Coenites
branches
- large colonies of colonial rugosans
- Unit 16
072.9-075.7 m - resistant
(2.8 m) - mudstone?
- Unit 17
075.7-089.5 m - covered
(13.8 m)
- Unit 18
089.5-091.5 - resistant
(2.0 m) - mudstone with marl interbeds
- fossils include gastropods and small brachiopods
- limestone/marl: 90%/10%
- Unit 19
091.5-092.5 m - mudstone/shale: 10%/90%
(1.0 m) - shales are grey with overlying Hare Indian Formation
(Bluefish member) black shales

Section G-87-3
Formation: Hume Formation
Date: 1987-07-04
Location: 65° 41' 20" N: 128° 39' 20" W (north side of East Mountain)
Description:

- Unit 1
000.0-004.0 m (4.0 m)
- recessive and poorly exposed
 - nodular, brachiopod wackestone with some brachiopod valves in current stable orientation
 - minor crinoid debris
 - 20% of Unit exposed
- Unit 2
004.0-007.3 m (3.3 m)
- resistant
 - rubbly floatstone
 - base is recessive but becomes more resistant upwards
 - many nodules are metazoans
 - Unit is biostromal and fossils include:
crinoidal holdfasts, irregular to domal Alveolites, domal stromatoporoids
 - many forms are encrusters
 - matrix appears to be a fine crinoidal/brachiopod wackestone/ floatstone
 - upper 1.5 m is rubbly and slightly less resistant but contains large Favosites and Alveolites
- Unit 3
007.3-012.9 m (5.6 m)
- covered
 - appears in part rubbly
- Unit 4
012.9-016.7 m (3.8 m)
- fossils include: bulbous corals, solitary rugosans, Coenites branches and brachiopods
 - resistant mudstone to poorly fossiliferous wackestone with marl interbeds
 - appears to be some faint orientation of bioclasts
- Unit 5
016.7-024.4 m (7.7 m)
- base is marked at a less resistant interval
 - very resistant
 - Unit becomes well bedded upwards
 - upper 2.1 m is covered
 - predominantly mudstone beds with <20% wackestone beds
- Unit 6
024.4-029.7 m (5.3 m)
- covered
- Unit 7
029.7 -030.9 m (1.2 m)
- medium resistant
 - rubbly mudstone? beds
- Unit 8
030.9-034.0 m (3.1 m)
- massive, resistant beds
 - badly weathered
- Unit 9
034.0-034.3 m (0.3 m)
- recessive, rubbly mudstone and wackestone beds (see unit 1)

- Unit 10
034.3-035.4 m - massive, resistant
(1.1 m) - badly weathered
- Unit 11
035.4-036.6 m - lower 0.5 m rubbly and recessive
(1.2 m) - upper 0.7 m massive and resistant
- Unit 12
036.6-037.1 m - less resistant
(0.5 m) - rubbly and badly weathered
- Unit 13
037.1-038.2 m - massive and resistant
(1.1 m) - badly weathered
- Unit 14
038.2-038.5 m - rubbly and recessive
(0.3 m) - badly weathered
- Unit 15
038.5-040.1 m - resistant and massive
(1.6 m) - may be massive limestone near top of Hume Formation
- covered interval above Unit is probably the upper recessive part of the Hume Formation and the Bluefish member of the Hare Indian Formation

Section G-87-4
Formation: Hume Formation
Date: 1987-07-05
Location: 65° 25' N: 129° 10' W

- Landry Formation and part of Hume Formation
- section started in the Landry Formation on the east side of the Gayna River

Landry Fm. (upper part)

- Unit 1
000.0-001.3 m - barren lime mudstone
(1.3 m)
- Unit 2
001.3-002.4 m - semiresistant
(1.1 m) - cryptalgal laminite
- sharp undulatory basal contact
- Unit 3
002.4-003.4 m - resistant
(1.0 m) - medium to dark grey, lime mudstone
- unfossiliferous

Unit 4

003.4-005.6 m
(2.2 m)

- resistant
- in places structureless, barren, lime mudstone but some areas exhibit cryptalgal? lamination
- one large domal stromatolite

Unit 5

005.6-006.5
(0.9 m)

- recessive
- lime mudstone same as unit 4 but all fractured up, some may in part be brecciated

Unit 6

006.5-007.7 m
(0.8 - 1.2 m)

- appears to be in part a cryptalgal laminite but is predominantly a solution breccia
- some domal structures form irregular cavities

Unit 7

007.7-010.1 m
(2.4 m)

- resistant
- dolomitized cryptalgal laminite and patches of solution breccia
- bitumen present

Unit 8

010.1-012.0 m
(1.9 m)

- medium to dark grey lime mudstone
- massive

Unit 9

012.0-012.7 m
(0.7 m)

- same as Unit 8

Unit 10

012.7-014.9 m
(2.2 m)

- recessive but becomes resistant upwards
- upper more resistant part appears to be a microcrystalline limestone
- some faint cryptalgal? lamination

Unit 11

014.9-020.5 m
(5.6 m)

- resistant
- massive
- in part crystalline limestone but predominantly black lime mudstone
- petroliferous odour

Unit 12

020.5-022.9 m
(2.4 m)

- resistant
- featureless black lime mudstone

Unit 13

022.9-029.4 m
(6.5 m)

- resistant
- inaccessible as the upper part of the Landry Formation forms a high ledge down to the river

Hume Fm.

- Unit 14
029.4-030.2 m
(0.8 m)
- resistant
 - massive
 - black unfossiliferous lime mudstone
 - sharp basal contact
- Unit 15
030.2-031.3 m
(1.1 m)
- recessive
 - beds are featureless lime mudstone
 - interbedded with fissile marl
 - bedding planes are sharp but almost hummocky
- Unit 16
031.3-031.6 m
(0.3 m)
- recessive
 - black laminated shale
- Unit 17
031.6-032.2 m
(0.6 m)
- resistant
 - light to medium grey lime mudstone
- Unit 18
032.2-032.3 m
(0.1 m)
- very recessive and badly weathered
- Unit 19
032.3-033.5 m
(1.2 m)
- resistant
 - poorly fossiliferous wackestone
 - fossils <10% and include crinoid debris and brachiopod fragments
- Unit 20
033.5-037.3 m
(3.8 m)
- resistant at base to recessive near top
 - wackestone
 - fossiliferous and fossils include brachiopods
 - sharp bed tops and form small 10-15 cm hummocks
 - the upper mudstone beds consist of fining upward sequences up to 1 cm thick
 - beds are separated by up to 3 cm of buff-brown to grey marl that sheath the hummocky bed tops
- Unit 21
037.3-039.7 m
(2.4 m)
- recessive
 - rubbly argillaceous limestone
 - fossiliferous wackestone to floatstone
 - very fossiliferous and fossils include brachiopods and gastropods
 - abundant surface traces
 - upper 0.8 m consists of unfossiliferous planar to nodular calcisiltite mudstone interbedded with grey green shale
- Unit 22
039.7-042.1 m
(2.4 m)
- covered

Unit 23
042.1-047.7 m
(5.6 m)

- resistant and recessive intervals
- fossils include: brachiopods, crinoid ossicles and orthocones
- rubbly and mottled wackestone/packstone with marl interbeds

Unit 24
047.7-048.9 m
(1.2 m)

- less resistant
- fossils include: Alveolites, Favosites, colonial rugosans, abundant crinoid debris and holdfasts
- corals tend to be bulbous to hemispherical and up to 0.2 m wide
- rubbly mottled limestone

Unit 25
048.9-050.5 m
(1.6 m)

- resistant
- same as Unit 24

Unit 26
050.5-054.6 m
(4.1 m)

- recessive
- same as Unit 25 but more marl
- very fossiliferous rubbly limestone
- corals have very irregular forms

Unit 27
054.6-067.6 m
(3.0 m)

- resistant
- boundstone
- biostromal
- abundant coral heads
- branching bryozoan? thickets

Unit 28
057.6-059.8 m
(2.2 m)

- slightly more recessive than underlying biostrome
- less fossiliferous, more marl interbeds
- some branching Coenites/Thamnopora
- upper resistant wackestone bed is 0.3 m thick

Unit 29
059.8-061.8 m
(2.0 m)

- recessive
- partially covered
- planar to poorly nodular bedded calcisiltite mudstone with fissile marl interbeds
- marl/limestone: 50%/50%

Unit 30
061.8-062.3 m
(0.5 m)

- resistant
- same as Unit 29 but higher proportion of limestone

Unit 31
062.3-064.2 m
(1.9 m)

- resistant
- mottled wackestone
- fossils include crinoid debris and colonial rugosans

Unit 32

064.2-072.5 m
(8.3 m)

- recessive
- nodular to rubbly, fossiliferous limestone with marl interbeds
- matrix is finely bioclastic wackestone
- abundant bulbous to irregular corals
- basal part - marl/limestone: 60%/40%
- upper part - marl/limestone: 30%/70%

Unit 33

072.5-077.3 m
(4.8 m)

- moderately resistant
- same as Unit 32 but more resistant

Unit 34

077.3-079.1 m
(1.8 m)

- resistant
- well bedded wackestone with marl interbeds
- coral heads on bed tops

Unit 35

079.1-080.1 m
(1.0 m)

- moderately recessive
- cryptalgal laminite
- large mud cracks
- vertical burrows
- sharp and abrupt contact with underlying unit
- some of the laminite sheaths coral heads on the bed tops of the underlying unit

Unit 36

080.1-080.6 m
(0.5 m)

- resistant to recessive
- pale yellow to grey mottled mudstone
- no apparent fossils but badly weathered

Unit 37

080.6-081.8 m
(1.2 m)

- resistant to recessive
- cryptalgal laminite

Unit 38

081.8-082.5 m
(0.7 m)

- resistant
- vertically burrowed calcisiltite mudstone
- some horizontal traces
- 0.1 m recessive grey fissile shale in middle of unit

Unit 39

082.5-083.6 m
(1.1 m)

- recessive
- wackestone beds interbedded with shale and marl
- beds planar to irregular
- 15 cm shale overlying Unit 38
- fossils include colonial coral, solitary rugosans and bioclastic debris (crinoid and brachiopod)

- Unit 40
083.6-084.0 m
(0.4 m)
- resistant
 - coral/stromatoporoid floatstone
 - wackestone matrix
 - fossils include: small irregular stromatoporoids, thin lamellar encrusting stromatoporoids and solitary rugosans
 - corals and stromatoporoids cover 10-15% of rock
- Unit 41
084.0-084.3 m
(0.3 m)
- resistant
 - cryptalgal laminite
 - some vertical burrows
 - sharp to gradational base
 - top shows ripple marks
- Unit 42
084.3-084.4 m
(0.1 m)
- recessive
 - predominantly black but underlain by a thin grey shale
 - fossils include: large tabular to hemispherical corals
- Unit 43
084.4-084.8 m
(0.4 m)
- resistant
 - massive wackestone
 - some irregular to branching stromatoporoids (Stachyodes?)
- Unit 44
084.8-085.2 m
(0.4 m)
- resistant
 - cryptalgal laminite
- Unit 44a
085.2-088.8 m
(3.6 m)
- covered
- Unit 45
088.8-089.5 m
(0.7 m)
- semi-resistant
 - rubbly limestone
 - fossiliferous with some irregular corals
- Unit 46
089.5-090.8 m
(1.3 m)
- resistant to recessive at top
 - rubbly wackestone
 - some solitary rugosans and auloporid corals
- Unit 47
090.8-091.5 m
(0.7 m)
- resistant
 - massive
 - fossiliferous wackestone to packstone
 - fossils include: crinoid debris, gastropods, brachiopod valves and fragments
- Unit 48
091.5-091.7 m
(0.2 m)
- very recessive
 - fissile grey marl with nodular limestone

Unit 49

- 091.7-092.3 m - resistant
(0.6 m) - massive
- same as Unit 47

Unit 50

- 092.3-092.5 m - moderately resistant
(0.2 m) - fossiliferous rubbly wackestone with marl interbeds
- some colonial rugosans

Unit 51

- 092.5-095.9 m - resistant
(3.4 m) - massive
- this Unit dips into the Gayna River in the northern part
of the section
- continued section on west side of the river

Unit 52

- ? - may be a covered interval to tie in the east and west
parts of the section

Unit 53

- 095.9-097.4 m - resistant
(1.5 m) - massive
- wackestone/packstone possibly with zones of floatstone
- fossils include: gastropods, orthocones, crinoid debris,
hemispherical corals, brachiopod valves

Unit 54

- 097.4-098.6 m - massive
(1.2 m) - same as Unit 53 but more fossiliferous

Unit 55

- 098.6-099.8 m - resistant
(1.2 m) - massive
- fossiliferous wackestone
- sharp basal contact
- fossils include: gastropods, brachiopods, bivalves,
crinoid ossicles, Thamnopora
- large brachiopods on bed surfaces

Unit 56

- 099.8-102.2 m - covered
(2.4 m)

Unit 57

- 102.2-106.0 m - resistant
(3.8 m) - massive
- appears similar to Units 54 and 55

Unit 58

106.0-107.1 m
(1.1 m)

- resistant
- beds are fossiliferous wackestone with shaly interbeds
- fossils include: crinoid debris, Coenites/Thamnopora, brachiopods and hemispherical Favosites
- limestone/shale: 95%/5%

Unit 59

107.1-107.6 m
(0.5 m)

- semi-recessive
- same as Unit 58 but more shale
- limestone/shale: 60-70%/30-40%

Unit 60

107.6-108.9 m
(1.3 m)

- resistant
- similar to Unit 58
- gastropods present
- very fine bioclastic debris

Unit 61

108.0-109.7 m
(0.8 m)

- covered

Section G-87-5

Formation:

Hume, Hare Indian and Ramparts Formations

Date:

1987-07-06

Location:

65° 03' 30" N: 129° 14' 22" W

Description:

- located on a south flowing creek just east of Houdini Lake on the north side of Houdini Syncline

Ramparts Fm.

Unit 1

000.0-021.0 m
(21.6 m)

- resistant
- upper and lower contact not exposed
- rocks appear to be fossiliferous wackestone and float-stone
- fossils include gastropods, brachiopods
- stromatoporoids conspicuously absent

Unit 2

021.6-041.6 m
(20.0 m)

- covered interval
- Hume Fm. (from top to bottom)

Unit 3

041.6-048.6 m
(7.0 m)

- semi-resistant
- rubbly weathering
- beds appear to be made up of 1 cm fining upward calcisiltite mudstone
- upper rubbly beds do not appear to be fossiliferous

- Unit 4
048.6-062.8 m - resistant
(14.2 m) - massive mudstone?
- no apparent fossils
- Unit 5
062.8-064.1 m - semi-resistant
(1.2 m) - cryptalgal laminite?
- Unit 6
064.1-064.3 m - semi-recessive
(0.2 m) - large weathered hemispherical nodules sheathed in black shale
- Unit 7
064.3-067.1 m - resistant
(2.8 m) - mudstone/wackestone?
- three dolomite beds up to 0.2 m thick
- crinoid ossicles
- Unit 8
067.1-067.2 m - recessive
(0.1 m) - black shale
- Unit 9
067.2-071.2 m - resistant
(4.0 m) - badly weathered
- micritic
- Unit 10
071.2-073.4 m - resistant
(2.2 m)
- Unit 11
073.4-076.1 m - resistant
(2.7 m) - massive
- Unit 12
076.1-078.8 m - resistant
(2.7 m) - rubbly
- Unit 13
078.8-079.9 m - semi-recessive
(1.1 m) - covered at base of cliff
- black mudstone
- Unit 14
079.9-081.1 m - semi-resistant
(1.2 m) - same as Unit 13 but slightly more resistant

Section: G-87-6
Formation: Hume Formation
Date: 1987-07-06
Location: 65° 15': 128° 35' W
Description:

- at GSC section MN-2-69
- base of section placed at prominent bedding that forms north facing cliff
- the underlying Hume Fm. is very resistant while the overlying Hume Fm. is rubbly and semi-resistant
- the bedding plane is very irregular and displays abundant, large (up to 0.3 m) hemispherical coral heads
- corals locally cover 20-30% of surface

Unit 1
000.0-000.7 m
(0.7 m)

- semi-resistant
- fossiliferous
- bed tops are completely covered with hemispherical corals that include Alveolites and Favosites
- some irregular forms
- abundant brachiopods, solitary corals
- bioclastic debris and fossils cover 70% of bed surfaces

Unit 2
000.7-003.1 m
(2.4 m)

- semi-resistant
- siltite mudstone

Unit 3
003.1-007.9 m
(4.8 m)

- resistant
- siltite mudstone with marl interbeds
- bed tops are irregular to hummocky
- poorly fossiliferous
- some large brachiopods observed on surfaces
- marly interbeds up to 3-4 cm thick

Unit 4
007.9-010.1 m
(2.2 m)

- semi-resistant
- black limestone

Unit 5
010.1-010.9 m
(0.8 m)

- resistant
- beds of robust branching colonial rugosans and large solitary rugosans

Unit 6
010.9-012.9 m
(2.0 m)

- semi-resistant
- sharp upper contact with overlying Bluefish member
- mudstone/shale: 50%/50%
- some of the limestone beds grade up into shale/marl
- abundant lenses of brachiopods and isolated brachiopods on bed tops
- hemispherical to tabular Favosites
- predominantly poorly fossiliferous mudstone with lenses of wackestone and floatstone

Section: Hume Formation buildups on the Carnwath River
Formation: Hume Formation
Date: 1987-07-08
Location: C-2521 - 67° 23' N; 127° 44' W
C-2522 - 67° 32' N; 127° 56' 30" W
Description:

- locations from Cook and Aitken, 1971;
- see Cook and Aitken, 1971 (GSC Paper 70-12) for faunal listings and Cook and Aitken, 1975 (GSC Paper 74-17) for additional description
- location C-2521
- coral buildups constructed of a variety of corals
- rubbly weathering
- occur on an up to 0.3 m thick, packstone storm deposit
- flanking beds based on scree is a mottled, poorly fossiliferous, rubbly to irregular bedded mudstone/wackestone
- fossils are partially silicified
- in the mounds there are some large crinoidal/brachiopod packstone lenses
- some of the buildups are underlain by packstone lenses
- these in turn are underlain by rubbly mudstone/wackestone beds containing brachiopods
- location C-2522
- description of basal rubbly limestone beds
- abundant brachiopods on bed tops
- limestone is a mudstone but abundant, irregular to platy and encrusting Alveolites and Favosites
- thin (< 5 cm up to 20 cm) storm deposits (wackestone/packstone) consisting predominantly of brachiopod valves in current stable position
- encrusting, irregular and hemispherical corals (more diversity) on some storm bed tops
- more interbeds

Section G-87-7

Formation: Sans Sault Formation
Date: 1987-07-09, 11 and 15
Location: 65° 42' N; 128° 48' W (type locality)
Description:

- walked through section
- no detailed notes made
- consists of fine grained sandstones, mudstones and some shale
- sandstones are faintly laminated and trace fossils are present on some bed surfaces

Section: G-87-8
Formation: Bear Rock Formation
Date: 1987-07-11
Location: 65° 28' 28" N: 128° 32' 48" W
Description:

- Bear Rock Fm. occurs within a fold
- no bedding evident
- massive mega-breccia with some clasts in the order of 0.3-0.4 m
- some of the clasts exhibit mudstone/siltstone lamination, others are massive micrite
- these large clasts are within a matrix of breccia with smaller clasts
- some stylolites within large clasts contain bitumen
- vertical bitumen and calcite filled fractures
- bitumen also tends to surround some of the large clasts

Section: G-87-9
Formation: Katherine Group
Date: 1987-07-12
Location: 65° 15' 40" N: 128° 33' W (Powell Creek)
Description:

Katherine Group

Unit 1
000.0-002.9 m
(2.9 m)

- recessive
- fissile red and green shale
- thin quartz sandstone beds that pinch out and exhibit wavy lamination

Unit 2
002.9-005.1 m
(2.2 m)

- resistant
- basal contact is sharp and erosional with abundant channels scoured out of the underlying shale
- upper surface is sharp and planar
- quartz sandstone
- series of channel deposits and sheet sandstones

Unit 3
005.1-007.7 m
(2.6 m)

- same as Unit 1

Unit 4
007.7-012.1 m
(4.4 m)

- resistant
- quartz sandstone/green siltstone/green shale: 70%/20%/10%
- sandstone beds have undulatory basal contacts and sharp upper contacts

- Unit 5
012.1-013.6 m
(1.5 m)
- partially resistant
 - the Unit consists of elongate lenses of sandstone surrounded by red and green shale
 - upper part is predominantly sandstone
- Unit 6
013.6-015.3 m
(1.7 m)
- recessive
 - red and green shale
 - minor thin discontinuous sandstone beds
 - minor thin siltstone lentils
 - some horizontal burrows
- Unit 7
015.3-023.1 m
(7.8 m)
- resistant
 - sandstones are massive, planar bedded and cross bedded
 - cross bedded units pinch out and are overlain by planar bedded quartz sandstone
- Unit 8
023.1-032.5 m
(9.4 m)
- recessive
 - predominantly sandstone beds
 - upper 2.2 m consists red and green shales
- Unit 9
032.5-042.1 m
(9.6 m)
- resistant
 - predominantly planar bedded to laminated fine sandstone
 - in part micaceous with some green clay flakes
 - sandstone is red and buff to light green
- Unit 10
042.1-051.7 m
(9.6 m)
- resistant
 - same as Unit 9 but with some red and green shales
 - also some low angle cross stratified beds
- Unit 11
051.7-058.3 m
(6.6 m)
- resistant
 - red and green shale at base
 - overlying sandstone
 - upper 1.5 m recessive with green and red shale and thin sandstone beds
 - this Unit is the uppermost Unit of the basal red sandstone/shale sequence
- Unit 12
058.3-060.7 m
(2.4 m)
- resistant
 - lower contact is sharp and rests on red and green shales
 - basal conglomerate with clasts of red and green mudstone
 - fine to coarse sandstone
 - beds that are recessive are either black or green micaceous sandstone
 - conglomerate, sandstone, micaceous sandstone 40%/40%/20%

Unit 13
060.7-070.3 m
(9.6 m)

- resistant
- buff-brown quartz sandstone
- faintly laminated
- some bed tops show black lithographic texture
- some planar beds overlain by thin (<20 cm) beds with low angle foresets
- units appear lens shaped

Unit 14
070.3-072.0 m
(1.7 m)

- recessive
- green and red micaceous siltstone

Unit 15
072.0-080.4 m
(8.4 m)

- resistant
- cross bedded sandstone with cross beds
- some beds appear to pinch and swell
- some paleodepressions? filled with a friable sandstone (clay rich?)

Unit 16
080.4-085.2 m
(4.8 m)

- Unit contains thick massive sandstone beds and thinner bedded sandstone with foresets

Unit 17
085.2-092.4 m
(7.2 m)

- covered

Unit 18
092.4-151.4 m
(59 m)

- not described but resistant
- taken to base of recessive interval (Saline River Fm.)

Unit 19
141.4-201.4 m
(50 m)

- estimate 50 m of Saline River Formation

Section: G-87-10
Formation: Katherine Group/Mount Cap
Date: 1987-07-13 and 15
Location: 65° 06' N: 127° 57' W (Loretta Canyon)
Description:

Katherine Group

Unit 1
000.0-005.2 m
(5.2 m)

- rubbly and resistant
- recessive weathering conglomerate
- clasts are unsorted and irregular in shape
- little to no imbrication
- conglomerate beds up to 1... m thick
- massive sandstone beds up to 0.5 m thick
- appears to be a well sorted quartz sandstone
- some planar lamination and some show low angle cross stratification
- possible thin (<10 cm) reddish soil horizon on top

Unit 2

005.2-008.7 m
(3.5 m)

- recessive
- first of upper buff coloured units
- massive sandstone beds up to 0.5 m thick
- in part conglomeratic with well rounded red sandstone clasts
- show light and dark banding

Unit 3

008.7-009.9 m
(1.2 m)

- recessive
- laminated green clay

Unit 4

009.9-012.4 m
(2.5 m)

- resistant
- white to light grey partially banded quartzite

Unit 5

012.4-014.0 m
(1.6 m)

- partially resistant
- coarse sandstone and conglomerate

Unit 6

014.0-017.6 m
(3.6 m)

- resistant
- massive to thick bedded buff to light pink coloured fine sandstone

Unit 7

(5 cm)

- recessive
- light to medium grey fissile shale

Unit 8

017.6-018.3
(0.7 m)

- resistant
- mottled sandstone

Unit 9

018.3-018.5 m
(0.2 m)

- resistant
- buff to light green sandstone

Unit 10

018.5-023.9 m
(5.4 m)

- resistant
- sandstone

Unit 11

023.9-028.7 m
(4.8 m)

- resistant
- medium to dark grey dolomitic mudstone to siltstone beds
- mudstone, siltstone, black shale

Mount Cap Fm.

Unit 12

028.7-031.8 m
(3.1 m)

- predominantly resistant
- well laminated dolomitic mudstone beds
- intercalated dark grey to black shale
- also contains up to two intervals of stromatolites
- the stromatolites are hemispherical in shape and up to 1.0 m wide and 0.6 m thick
- these stromatolites form a lense about 10 m wide

Unit 13

031.8-037.8 m
(6.0 m)

- very recessive
- lithologies are quite variable
- grey shale, laminated microdolomite and glauconitic, quartz sandstone
- partially covered

Unit 14

037.8-042.9 m
(5.1 m)

- recessive
- partially covered
- similar to Unit 13 but with greater frequency of glauconitic sandstone beds

Unit 15

042.9-043.7 m
(0.8 m)

- poorly resistant
- poorly sorted fine quartz sandstone with calcite cement

Section:

U-11

Formation:

Mount Cap and Saline River Formations

Date:

1987-07-15

Location:

65° 06' N: 127° 57' W (Loretta Canyon)

Description:

- walked through Section U-11 of Aitken et al., 1973
- observations were made from the following units:

Saline River Fm.

Unit 12

- chloritic, mud cracks, uneven bedding (compaction?)
- green shales are pyritic and laced with pebbles
- some dolomitic pebble conglomerate
- minor ripple laminae in basal part of shale

Unit 11

- dolomite is petroliferous

Unit 8

- presence of solution collapse features

Unit 5

- brecciated
- ripple laminated
- oscillation ripples, micro-ripples
- lenticular bedding

Mount Cap Fm.

Unit 5

- stromatolite Unit (Unit 12 of G-87-10)

Unit 4

- glauconitic sandstone
- Thalassinoides and Paleophycus present

Unit 3

- Conistiknus?
- contorted bedding in one bed
- also minor drag folds
- thick bioturbated sandstone interbedded with black shale

Section: U-15
Formation: Mount Clark and Mount Cap Formations
Date: 1987-07-16
Location: 64° 26' N: 124° 15" W
Description:

Mount Clark Fm.

Unit 1
000.0-004.6 m
(4.6 m)

- massive to thick bedded quartzitic sandstone
- thin zones of pebbles and granules
- silica cement
- blocky fractures
- trough cross bedding
- high angle regular bedding
- on scree block - sets of bidirectional cross beds
- ripple lamination
- large (up to 0.4 m) wide trough cross bedding
- walked through section U-15 of Aitken et al., 1973 (GSC Paper 73-9)
- observations were made from the following units

Mount Cap Fm.

Unit 20

- lingulids?

Unit 19

- greenish in colour

Unit 15

- Paleophycus

Unit 14

- Paleophycus

Unit 4

- Paleophycus

Unit 3

- beds of thin glauconitic sandstone with pebbles
- ironstone banding - recessive at base, more ironstone and thick towards the top

Unit 2

- wedge shaped traces

Section: MQ-6
Formation: H5 Unit and Mount Cap Formation
Date: 1987-07-16
Location: 64° 57' N: 127° 16' W
Description:

- walked through Section MQ-6 of Aitken et al., 1973 (GSC Paper 73-9)
- no additional descriptions

Section: KS-87-A
Formation: Ramparts Formation
Date: 1987-07-02, 03
Location: 65° 27' 30"N: 128° 54' W
Description:

Unit 1
000.0-018.2 m - medium brown *Thamnopora*/solitary rugosan floatstone (60%)
(18.2 m) - interbedded black calcareous shale (40%)

Unit 2
018.2-019.1 m - dark brown black calcareous shale
(0.9 m)

Unit 3
019.1-027.5 m - medium brown stromatoporoid floatstone
(8.4 m) - some rugosan and tabulate corals

Unit 4
027.5-028.0 m - light brown poorly fossiliferous lime mudstone
(0.5 m) - rare ostracods

Unit 5
028.0-028.1 m - black calcareous shale
(0.1 m)

Unit 6
028.1-035.1 m - medium to light brown stromatoporoid bafflestone
(7.0 m) - small cylindrical stromatoporoids abundant

Unit 7
035.1-036.6 m - light brown stromatoporoid bafflestone
(1.5 m) - grainy matrix

Unit 8
036.6-046.1 m - medium brown cylindrical stromatoporoid bafflestone
(9.5 m) - mud matrix

Unit 9
046.1-046.9 m - light brown lime mudstone
(0.8 m) - unfossiliferous

- Unit 10
046.9-051.1 m - medium to dark brown lime mudstone
(4.2 m) - thinly bedded
- Unit 11
051.1-053.9 m - light brown cylindrical stromatoporoid floatstone
(2.8 m) - mud matrix
- Unit 12
053.9-056.7 m - light brown grainstone
(2.8 m)
- Unit 13
056.7-062.3 m - dark brown lime mudstone
(5.6 m) - thinly bedded
- Unit 14
062.3-062.7 m - light brown lime mudstone
(0.4 m)
- Unit 15
062.7-071.1 m - medium brown cylindrical stromatoporoid floatstone
(8.4 m)
- Unit 16
071.1-072.5 m - light brown small cylindrical stromatoporoid mudstone
(1.4 m) - grainy matrix
- Unit 17
072.5-085.1 m - as Unit 15
(12.6 m)
- Unit 18
085.1-086.1 m - medium brown stromatoporoid mudstone
(1.0 m) - mud matrix
- Unit 19
086.1-088.9 m - medium to light brown Amphipora floatstone/mudstone
(2.8 m)
- Unit 20
088.9-095.9 m - medium brown grainstone
(7.0 m) - scattered Amphipora
- Unit 21
095.9-100.1 m - medium to light brown lime mudstone
(4.2 m)
- Unit 22
100.1-109.9 m - medium to light brown stromatoporoid floatstone
(9.8 m) - Amphipora and bulbous stromatoporoids

- Unit 23
109.9-126.7 m -- medium to light brown stromatoporoid floatstone
(16.8 m) - scattered Amphipora
- Unit 24
126.7-132.1 m - medium brown stromatoporoid floatstone
(5.4 m) - many large hemispherical stromatoporoids
- Unit 25
132.1-137.7 m - dark brown-black Amphipora floatstone/mudstone
(5.6 m)
- Unit 26
137.7-138.2 m - medium to light brown Amphipora floatstone
(0.5 m)
- Unit 27
138.2-143.8 m - light coloured stromatoporoid floatstone
(5.6 m)
- Unit 28
143.8-148.0 m - dark to light brown Amphipora floatstone
(4.2 m) - shallowing upwards cycles
- Unit 29
148.0-160.6 m - medium brown stromatoporoid floatstone
(12.6 m) - mud matrix
- Unit 30
160.6-171.8 m - medium to dark brown Amphipora floatstone/mudstone
(11.2 m)
- Unit 31
171.8-176.8 m - light brown Amphipora floatstone
(5.0 m)
- Unit 32
176.8-185.2 m - medium to dark brown Amphipora floatstone
(8.4 m)
- Unit 33
185.2-186.7 m - dark brown Amphipora floatstone to light brown fenestral
(1.5 m) lime mudstone
- shallowing upwards cycles
- Unit 34
186.7-188.2 m - alternating light brown Amphipora floatstone and dark
(1.5 m) brown Amphipora floatstone
- Unit 35
188.2-192.4 m - dark brown Amphipora floatstone
(4.2 m)

- Unit 36
192.4-194.4 m - light brown Amphipora floatstone
(2.0 m)
- Unit 37
194.4-199.4 m - medium to dark brown Amphipora floatstone
(5.0 m)
- Unit 38
199.4-206.4 m - medium to dark brown stromatoporoid floatstone
(7.0 m) - Stachyodes and Amphipora
- Unit 39
206.4-213.4 m - Stachyodes floatstone
(7.0 m) - thin bedded
- Unit 40
213.4-217.6 m - covered interval
(4.2 m)
- Unit 41
217.6- - grey shales/siltstones

Section: KS-87-B
Formation: Ramparts Formation
Date: 1987-07-03
Location: 65° 23' 30" N: 129° 25' W
Description:

- Unit 1
000.0-04.2 m - argillaceous fossiliferous wackestone
(4.2 m) - brachiopods, crinoids, burrows
- interbedded calcareous shales
- Unit 2
004.2-012.6 m - covered
(8.4 m)
- Unit 3
012.6-014.1 m - dark brown black argillaceous wackestone
(1.5 m) - Thamnopora, solitary rugosans
- interbedded calcareous shales
- Unit 4
014.1-015.1 m - medium brown brachiopod wackestone
(1.0 m)
- Unit 5
015.1-018.9 m - covered interval
(3.8 m)

- Unit 6
018.9-021.4 m - medium brown wackestone
(2.5 m) - crinoids, brachiopods
- interbedded calcareous shale
- Unit 7
021.4-023.0 m - medium brown stromatoporoid/coral floatstone
(1.6 m) - Stachyodes, Thamnopora
- shale interbeds
- Unit 8
023.0-027.2 m - medium brown Stachyodes/Thamnopora mudstone
(4.2 m)
- Unit 9
027.2-028.1 m - calcareous shale
(0.9 m)
- Unit 10
028.1-029.5 m - medium to dark brown Stachyodes/Thamnopora floatstone
(1.4 m)
- Unit 11
029.5-043.5 m - medium brown Thamnopora floatstone
(14.0 m) - massive
- Unit 12
043.5-043.9 m - Thamnopora floatstone
(0.4 m) - very thin bedded
- Unit 13
043.9-044.9 m - Thamnopora floatstone
(1.0 m) - thin bedded
- Unit 14
044.9-046.2 m - medium brown Thamnopora floatstone

Section: KS-87-C
Formation: Ramparts Formation
Date: 1987-07-04
Location: 65° 41' N: 128° 30" W
Description:

- Unit 1
000.0-004.2 m - medium to dark brown argillaceous lime mudstone
(4.2 m) - interbedded calcareous shale
- Unit 2
004.2-004.4 m - dark brown argillaceous wackestone
(0.2 m)

- Unit 3
004.4-009.6 m - similar to Unit 1
(5.2 m)
- Unit 4
009.6-039.0 m - covered interval
(29.4 m)
- Unit 5
039.0-040.4 m - light brown lime mudstone
(1.4 m)
- Unit 6
040.4-043.2 m - light brown Stachyodes floatstone
(2.8 m)
- Unit 7
043.2-047.4 m - light brown stromatoporoid floatstone
(4.2 m)
- Unit 8
047.4-050.2 m - light brown Stachyodes floatstone
(2.8 m)
- Unit 9
050.2-051.6 m - light brown Amphipora floatstone
(1.4 m)
- Unit 10
051.6-060.0 m - medium brown lime mudstone
(8.4 m)
- Unit 11
060.0-061.0 m - Amphipora floatstone
(1.0 m) - recessive
- Unit 12
061.0-065.2 m - light brown Amphipora floatstone
(4.2 m)
- Unit 13
065.2-069.4 m - as Unit 12, interbedded calcareous shales
(4.2 m)
- Unit 14
069.4-078.8 m - medium brown Amphipora floatstone
(9.4 m)
- Unit 15
078.8-079.8 m - light brown silty lime mudstone
(1.0 m)

- Unit 16
079.8-109.2 m - covered interval
(29.4 m)
- Unit 17
109.2-113.8 m - medium brown Amphipora floatstone
(4.6 m)
- Unit 18
113.8-113.9 m - shaly recessive unit
(0.1 m)
- Unit 19
113.9-142.9 m - medium to light brown Amphipora floatstone
(29.0 m)
- Unit 20
142.9-147.7 m - medium to dark brown Amphipora floatstone
(4.8 m) - interbedded calcareous shale
- Unit 21
147.7-148.2 m - medium brown Amphipora floatstone
(0.5 m)
- Unit 22
148.2-149.7 m - bulbous/walnut stromatoporoid mudstone
(1.5 m)
- Unit 23
149.7-152.8 m - medium brown Amphipora floatstone
(3.1 m)
- Unit 24
152.8-153.1 m - walnut stromatoporoid mudstone
(0.3 m)
- Unit 25
153.1-155.9 m - as Unit 23
(2.8 m)
- Unit 26
155.9-157.4 m - light brown lime mudstone
(1.5 m) - cryptalgal lamination
- Unit 27
157.4-159.4 m - medium to dark brown Amphipora floatstone
(2.0 m)
- Unit 28
159.4-162.4 m - light brown lime mudstone
(3.0 m) - cryptalgal lamination

- Unit 29
162.4-168.0 m - as Unit 23
(5.6 m)
- Unit 30
168.0-171.0 m - light brown Amhipora floatstone
(3.0 m)
- Unit 31
171.0-173.0 m - medium to dark brown Thamnopora floatstone
(2.0 m)
- Unit 32
173.0-175.5 m - medium brown Amhipora floatstone
(2.5 m)
- Unit 33
175.5-179.9 m - brown Amhipora floatstone
(4.4 m)
- Unit 34
179.9-185.5 m - light brown Amhipora floatstone
(5.6 m)
- Unit 35
185.5-186.2 m - cryptalgal laminite
(0.7 m)
- Unit 36
186.2-187.7 m - light brown fenestral lime mudstone
(1.5 m)
- Unit 37
187.7-189.2 m - cryptalgal laminite
(1.5 m)
- Unit 38
189.2-196.2 m - light to medium brown Amhipora floatstone
(7.0 m)
- Unit 39
196.2-205.2 m - light brown lime mudstone
(9.0 m) - rare Amhipora

Section: KS-87-D
Formation: Ramparts Formation
Date: 1987-07-05
Location: 65° 26' N: 129° 07' 30" W
Description:

- Unit 1
000.0-000.7 m - medium brown stromatoporoid floatstone/mudstone
(0.7 m) - some Thamnopora
- Unit 2
000.7-001.2 m - dark brown-black argillaceous lime mudstone
(0.5 m) - interbedded calcareous shale
- Unit 3
001.2-001.4 m - dark brown argillaceous fossiliferous packstone/rudstone
(0.2 m) - crinoids, brachiopods, corals
- Unit 4
001.4-007.0 m - dark brown black argillaceous lime mudstone
(5.6 m) - interbedded calcareous shale
- Unit 5
007.0-009.0 m - medium brown packstone
(2.0 m) - brachiopods, crinoids, corals
- Unit 6
009.0-010.0 m - covered interval
(1.0 m)
- Unit 7
010.0-012.0 m - dark black Thamnopora floatstone/mudstone
(2.0 m)
- Unit 8
012.0-012.5 m - dark black Stachyodes/stromatoporoid floatstone/bindstone
(0.5 m) - recessive
- Unit 9
012.5-015.5 m - medium brown stromatoporoid floatstone
(3.0 m) - scattered corals
- Unit 10
015.5-019.0 m - dark brown-black stromatoporoid floatstone
(3.5 m)
- Unit 11
019.0-021.0 - medium to dark brown Thamnopora floatstone
(2.0 m)
- Unit 12
021.0-022.5 m - medium to light brown Stachyodes mudstone
(1.5 m)
- Unit 13
022.5-025.3 m - medium brown lime mudstone
(2.8 m)
- Unit 14
025.3-029.5 m - medium brown Stachyodes floatstone
(4.2 m)

- Unit 15
029.5-030.9 m - medium brown lime mudstone
(1.4 m)
- Unit 16
030.9-035.1 m - medium to dark brown stromatoporoid floatstone
(4.2 m) - shaly interbeds
- Unit 17
035.1-037.0 m - covered interval
(1.9 m)
- Unit 18
037.0-038.2 m - black argillaceous lime mudstone
(1.2 m) - interbedded calcareous shale
- Unit 19
038.2-047.2 m - inaccessible
(9.0 m)
- Unit 20
047.2-048.6 m - medium brown Amphipora floatstone
- Unit 21
048.6-049.5 m - light brown Amphipora floatstone
- Unit 22
049.5-049.7 m - light brown fenestral lime mudstone
(0.2 m)
- Unit 23
049.7-051.7 m - as Unit 21
(2.0 m)
- Unit 24
051.7-053.8 m - dark brown black Amphipora floatstone
(2.1 m) - shaly interbeds
- Unit 25
053.8-058.8 m - medium brown stromatoporoid floatstone
(5.0 m)
- Unit 26
058.8-060.3 m - as Unit 25
(1.5 m) - thinner bedded
- Unit 27
060.3-063.3 m - medium to light brown Amphipora floatstone
(3.0 m) - shaly
- Unit 28
063.3-068.8 m - medium to dark brown Amphipora floatstone
(5.5 m)

- Unit 29
068.8-077.2 m - covered interval
(8.4 m)
- Unit 30
077.2-078.7 m - dark brown Amphipora floatstone
(1.5 m)
- Unit 31
078.7-082.9 m - cream Amphipora grainstone/rudstone
(4.2 m)
- Unit 32
082.9-083.9 m - medium brown Stachyodes/Amphipora floatstone
(1.0 m)
- Unit 33
083.9-084.9 m - covered interval
(1.0 m)
- Unit 34
084.9-087.7 m - medium brown Amphipora floatstone
(2.8 m)
- Unit 35
087.7-088.1 m - light brown lime mudstone
(0.4 m) - birdseye texture
- Unit 36
088.1-089.5 m - medium brown Amphipora floatstone
(1.4 m)
- Unit 37
089.5-091.0 m - medium to light brown Stachyodes floatstone
(1.5 m)
- Unit 38
091.0-092.5 m - cream Stachyodes mudstone
(1.5 m) - grainy matrix
- Unit 39
092.5-092.9 m - light brown lime mudstone
(0.4 m) - birdseye texture
- Unit 40
092.9-095.7 m - covered interval
(2.8 m)
- Unit 41
095.7-098.5 m - cream stromatoporoid grainstone/mudstone
(2.8 m)

- Unit 42
098.5-099.9 m - medium brown stromatoporoid mudstone
(1.4 m)
- Unit 43
099.9-104.9 m - light brown Stachyodes floatstone
(5.0 m) - graining matrix
- Unit 44
104.9-106.3 m - medium to dark brown argillaceous lime mudstone
(1.4 m)
- Unit 45
106.3-110.5 m - cream Stachyodes mudstone
(4.2 m) - grainy matrix
- Unit 46
110.5-112.5 m - medium to dark brown lime mudstone
(2.0 m)
- Unit 47
112.5-114.0 m - cream Stachyodes mudstone
(1.5 m) - grainy matrix
- Unit 48
114.0-116.5 m - medium brown Amphipora floatstone
(2.5 m)
- Unit 49
116.5-117.0 m - light brown cryptalgal laminite
(0.5 m)
- Unit 50
117.0-119.8 m - medium brown Amphipora floatstone
(2.8 m)
- Unit 51
119.8-121.8 m - covered interval
(2.0 m)
- Unit 52
121.8-124.6 m - medium brown Amphipora floatstone
(2.8 m)
- Unit 53
124.6-125.6 m - covered interval
(1.0 m)
- Unit 54
125.6-127.6 m - medium to dark brown lime mudstone
(2.0 m)

- Unit 55
127.6-129.6 m - covered interval
(2.0 m)
- Unit 56
129.6-136.6 m - medium to dark brown Amphipora floatstone
(7.0 m)
- Unit 57
136.6-143.6 m - covered interval
(7.0 m)
- Unit 58
143.6-145.6 m - dark brown noncalcareous shale
(2.0 m)

Section: KS-87-E
Formation: Ramparts Formation
Date: 1987-07-06
Location: 65° 27' N: 128° 42' W
Description:

- Unit 1
000.0-005.0 m - medium brown wackestone
(5.0 m) - crinoids, brachiopods
- thin shale interbeds
- Unit 2
005.0-006.5 m - covered interval
(1.5 m)
- Unit 3
006.5-006.8 m - as Unit 1
(0.3 m)
- Unit 4
006.8-008.8 m - medium brown stromatoporoid/coral floatstone
(2.0 m)
- Unit 5
008.8-009.1 m - as Unit 4
(0.3 m) - thin to very thin bedded
- Unit 6
009.1-010.5 m - covered interval
(1.4 m)
- Unit 7
010.5-010.8 m - medium brown crinoid wackestone
(0.3 m)

- Unit 8
010.8-011.8 m - covered interval
(1.0 m)
- Unit 9
011.8-014.6 m - medium brown bulbous stromatoporoid floatstone
(2.8 m) - Stachyodes
- Unit 10
014.6-017.1 m - dark brown-black calcareous shale
(2.5 m)
- Unit 11
017.1-017.5 m - medium to dark brown Amphipora/Thamnopora floatstone
(0.4 m)
- Unit 12
017.5-018.9 m - covered interval
(1.4 m)
- Unit 13
018.9-020.1 m - medium brown crinoid/Thamnopora floatstone
(1.2 m)
- Unit 14
020.1-020.3 m - black calcareous shale
(0.2 m)
- Unit 15
020.3-021.9 m - as Unit 13
(1.6 m)
- Unit 16
021.9-022.9 m - covered interval
(1.0 m)
- Unit 17
022.9-023.9 m - medium brown Thamnopora/horn coral floatstone
(1.0 m)
- Unit 18
023.9-026.7 m - covered interval
(2.8 m)
- Unit 19
026.7-032.3 m - medium brown Thamnopora/Stromatoporoid floatstone
(5.6 m)
- Unit 20
032.3-035.3 m - medium brown Thamnopora/horn coral floatstone
(3.0 m) - shaly interbeds

- Unit 21
035.3-040.9 m - covered interval
(5.6 m)
- Unit 22
040.9-041.5 m - black calcareous shale
(0.6 m)
- Unit 23
041.5-044.3 m - medium brown Thamnopora floatstone/mudstone
(2.8 m)
- Unit 24
044.3-052.7 m - covered interval
(8.4 m)
- Unit 25
052.7-054.1 m - dark brown black Amphipora floatstone
(1.4 m)
- Unit 26
054.1-055.7 m - covered interval
(1.6 m)
- Unit 27
055.7-057.2 m - medium brown Amphipora floatstone
(1.5 m)
- Unit 28
057.2-060.0 m - covered interval
(2.8 m)
- Unit 29
060.0-061.0 m - light brown peloidal grainstone
(1.0 m)
- Unit 30
061.0-061.8 m - medium to dark brown stromatoporoid floatstone
(0.8 m)
- Unit 31
061.8-062.4 m - medium brown lime mudstone
(0.6 m)
- Unit 32
062.4-062.8 m - as Unit 30
(0.4 m)
- Unit 33
062.8-064.2 m - covered interval
(1.4 m)

- Unit 34
064.2-065.1 m - medium brown stromatoporoid floatstone
(0.9 m)
- Unit 35
065.1-068.1 m - covered interval
(3.0 m)
- Unit 36
068.1-069.9 m - medium brown Amphipora floatstone/mudstone
(1.8 m)
- Unit 37
069.9-070.4 m - medium to light brown lime mudstone
(0.5 m)
- Unit 38
070.4-073.2 m - dark brown black Amphipora floatstone/mudstone
(2.8 m)
- Unit 39
073.2-073.7 m - cream lime mudstone
(0.5 m)
- Unit 40
073.7-074.2 m - as Unit 38
(0.5 m)
- Unit 41
074.2-076.6 m - covered interval
(2.4 m)
- Unit 42
076.6-078.1 m - cream stromatoporoid framestone
(1.5 m) - grainy matrix
- Unit 43
078.1-080.0 m - cream Amphipora floatstone
(1.9 m)
- Unit 44
080.0-081.5 m - covered interval
(1.5 m)
- Unit 45
081.5-085.1 m - light to medium brown lime mudstone
(3.6 m)
- Unit 46
085.1-086.6 m - covered interval
(1.5 m)
- Unit 47
086.6-088.4 m - medium brown lime mudstone
(1.8 m)

- Unit 48
088.4-090.1 m - medium brown Amphipora floatstone
(1.7 m)
- Unit 49
090.1-090.4 m - covered interval
(0.3 m)
- Unit 50
090.4-091.0 m - dark brown lime mudstone
(0.6 m)
- Unit 51
091.0-092.4 m - covered interval
(1.4 m)
- Unit 51a
092.4-093.8 m - as Unit 50
(1.4 m)
- Unit 52
093.8-095.5 m - covered interval
(1.7 m)
- Unit 53
095.5-097.1 m - medium brown lime mudstone
(1.6 m) - scattered Amphipora
- Unit 54
097.1-101.7 m - medium brown Amphipora floatstone
(4.6 m)
- Unit 55
101.7-104.5 m - covered interval
(2.8 m)
- Unit 56
104.5-106.0 m - medium brown Amphipora floatstone
(1.5 m) - very thin bedded
- Unit 57
106.0-107.5 m - medium brown Amphipora floatstone
(1.5 m) - very thin bedded
- Unit 58
107.5-108.8 m - medium brown Stromatoporoid floatstone
(1.3 m)
- Unit 59
108.8-110.5 m - as Unit 58
(1.7 m)

Unit 60
110.5-112.3 m - as Unit 58
(1.8 m)

Unit 61
112.3-113.3 m - covered interval
(1.0 m)

Unit 62
113.3-118.8 m - as Unit 58
(5.5 m)

Section: KS-87-F
Formation: Ramparts Formation
Date: 1987-07-07
Location: 65° 25' 30" N: 129° 10' 30" W
Description:

Unit 1
000.0-002.2 m - medium brown crinoid wackestone
- interbedded calcareous shale
(2.2 m)

Unit 2
002.2-006.7 m - covered interval
(4.5 m)

Unit 3
006.7-010.9 m - medium brown Stachyodes bafflestone
(4.2 m)

Unit 4
010.9-012.3 m - covered interval
(1.4 m)

Unit 5
012.3-015.1 m - dark brown lime mudstone
(2.8 m)

Unit 6
015.1-016.5 m - medium to dark brown Stachyodes floatstone/mudstone
(1.4 m)

Unit 7
016.5-017.9 m - medium brown Stachyodes mudstone
(1.4 m)

Unit 8
017.9-022.1 m - cream Stachyodes mudstone
(4.2 m)

- Unit 9
022.1-029.1 m - medium brown crinoid wackestone
(7.0 m)
- Unit 10
029.1-030.6 m - light brown coral/stromatoporoid framestone
(1.5 m)
- Unit 11
030.6-036.2 m - cream stromatoporoid mudstone
(5.6 m) - grainy matrix
- Unit 12
036.2-037.6 m - medium brown Stachyodes mudstone
(1.4 m)
- Unit 13
037.6-043.2 m - cream Stachyodes mudstone
(5.6 m) - grainy matrix
- Unit 14
043.2-047.4 m - as Unit 12
(4.2 m)
- Unit 15
047.4-051.6 m - medium brown to cream lime mudstone
(4.2 m)
- Unit 16
051.6-053.0 m - medium brown lime mudstone
(1.4 m)
- Unit 17
053.0-054.4 m - cream lime mudstone
(1.4 m) - birdseye fabric
- Unit 18
054.4-057.2 m - as Unit 16
(2.8 m)
- Unit 19
057.2-058.7 m - as Unit 17
(1.5 m)
- Unit 20
058.7-064.5 m - medium to light brown stromatoporoid floatstone
(5.8 m)
- Unit 21
064.5-065.9 m - light brown grainstone
(1.4 m) - crinoids

Unit 22
065.9-077.1 m - light brown lime mudstone
(11.2 m)

Unit 23
077.1-081.3 m - as Unit 21
(4.2 m)

Unit 24
081.3-086.9 m - cream Stachyodes mudstone
(5.6 m) - grainy matrix

Unit 25
086.9-087.9 m - cream grainstone
(1.0 m)

Unit 26
087.9-093.9 m - cream Stachyodes mudstone
(6.0 m) - grainy matrix

Section: KS-87-G
Formation: Ramparts Formation
Date: 1987-07-09, 10
Location: 65° 28' 15" N: 128° 46' 45" W
Description:

Unit 1
000.0-005.6 m - medium to dark brown wackestone
(5.6 m) - brachiopods, crinoids
- interbedded calcareous shale

Unit 2
005.6-009.4 m - medium brown crinoidal packstone
(3.8 m) - interbedded calcareous shale

Unit 3
009.4-011.4 m - medium brown coral floatstone
(2.0 m)

Unit 4
011.4-012.8 m - medium brown Stachyodes floatstone
(1.4 m)

Unit 5
012.8-014.2 m - medium brown crinoid wackestone
(1.4 m)

Unit 6
014.2-017.0 m - medium to light brown grainstone
(2.8 m)

- Unit 7
017.0-019.8 m - medium brown crinoid wackestone/packstone
(2.8 m) - slightly argillaceous
- Unit 8
019.8-020.8 m - light brown crinoid grainstone
(1.0 m)
- Unit 9
020.8-030.6 m - covered interval
(9.8 m)
- Unit 10
030.6-032.0 m - covered interval
(1.4 m)
- Unit 11
032.0-036.2 m - medium-dark brown coral floatstone/mudstone
(4.2 m) - Thamnopora, brown corals
- Unit 12
036.2-039.2 m - medium-dark brown Stachyodes floatstone
(3.0 m)
- Unit 13
039.2-40.6 m - covered interval
(1.4 m)
- Unit 14
040.6-042.1 m - dark brown-black calcareous shale
(1.5 m) - scattered Thamnopora
- Unit 15
042.1-051.9 m - covered interval
(9.9 m)
- Unit 16
051.9-059.3 m - medium brown coral/stromatoporoid floatstone
(7.4 m) - interbedded black calcareous shale
- Unit 17
059.3-060.8 m - medium-dark brown lime mudstone
(1.5 m) - interbedded black calcareous shale
- Unit 18
060.8-063.6 m - medium-light brown Stachyodes floatstone
(2.8 m) - bulbous stromatoporoids
- Unit 19
063.6-068.6 m - medium-light brown Stachyodes floatstone
(5.0 m)
- Unit 20
068.6-070.1 m - as Unit 18
(1.5 m)

- Unit 21
070.1-072.2 m - as Unit 19
(2.1 m)
- Unit 22
072.2-076.0 m - medium-dark brown lime mudstone
(3.8 m) - recessive
- Unit 23
076.0-080.0 m - cream lime mudstone
(4.0 m)
- Unit 24
080.0-081.4 m - light brown lime mudstone
(1.4 m) - massive
- Unit 25
081.4-086.8 m - medium brown Stachyodes floatstone
(5.4 m) - bulbous/walnut stromatoporoids
- Unit 26
086.8-091.0 m - light brown lime mudstone
(4.2 m)
- Unit 27
091.0-099.4 m - medium-light brown stromatoporoid floatstone
(8.4 m)
- Unit 28
099.4-107.8 m - medium brown Stachyodes floatstone
(8.4 m)
- Unit 29
107.8-110.8 m - covered interval
(3.0 m)
- Unit 30
110.8-112.2 m - as Unit 28
(1.4 m)
- Unit 31
112.2-113.2 m - medium brown stromatoporoid floatstone/mudstone
(1.0 m)
- Unit 32
113.2-116.0 m - medium brown lime mudstone
(2.8 m) - shaly interbeds
- Unit 33
116.0-130.0 m - medium brown stromatoporoid floatstone
(14.0 m)

- Unit 34
130.0-132.4 m - medium-light brown Stachyodes floatstone
(2.4 m)
- Unit 35
132.4-134.6 m - medium brown stromatoporoid floatstone/mudstone
(2.2 m)
- Unit 36
134.6-141.2 m - covered interval
(6.6 m)
- Unit 37
141.2-142.6 m - medium brown lime mudstone
(1.4 m) - scattered Amphipora
- Unit 38
142.6-149.6 m - medium brown stromatoporoid mudstone
(7.0 m)
- Unit 39
149.6-152.6 m - covered interval
(3.0 m)
- Unit 40
152.6-159.6 m - medium-dark brown Amphipora floatstone
(7.0 m) - scattered bulbous stromatoporoids
- Unit 41
159.6-162.6 m - covered interval
(3.0 m)
- Unit 42
162.6-167.1 m - medium brown Amphipora floatstone
(4.5 m)
- Unit 43
167.1-170.1 m - medium brown stromatoporoid floatstone/mudstone
(3.0 m)
- Unit 44
170.1-171.5 m - as Unit 42
(1.4 m)
- Unit 45
171.5-174.5 m - as Unit 43
(3.0 m)
- Unit 46
174.5-181.0 m - dark brown Amphipora floatstone/mudstone
(6.5 m)

- Unit 47
181.0-182.4 m - covered interval
(1.4 m)
- Unit 48
182.4-183.4 m - as Unit 46
(1.0 m)
- Unit 49
183.4-184.6 m - dark brown Amphipora floatstone
(1.2 m)
- Unit 50
184.6-185.1 m - medium brown Amphipora mudstone
(0.5 m)
- Unit 51
185.1-189.3 m - medium brown Amphipora floatstone
(4.2 m) - recessive
- Unit 52
189.3-189.8 m - medium brown Amphipora floatstone
(0.5 m) - medium bedded
- Unit 53
189.8-191.3 m - covered interval
(1.5 m)
- Unit 54
191.3-194.3 m - as Unit 51
(3.0 m)
- Unit 55
194.3-194.8 m - as Unit 52
(0.5 m)

Section: KS-87-H
Formation: Ramparts Formation
Date: 1987-07-10
Location: 65° 27' 30" N: 128° 13' W
Description:

- Unit 1
000.0-001.1 m
(1.1 m) - medium brown Stachyodes floatstone
- shaly interbeds
- Unit 2
001.0-001.5 m - cream lime mudstone
(0.4 m) - birdseye fabric

- Unit 3
001.5-001.8 m - medium-dark brown Thamnopora mudstone
(0.3 m) - very thin bedded
- Unit 4
001.9-002.6 m - medium brown Stachyodes/Thamnopora floatstone
(0.8 m)
- Unit 5
002.6-003.6 m - cryptalgal laminite
(1.0 m)
- Unit 6
003.6-003.8 m - medium brown Stachyodes floatstone
(0.2 m) - shaly
- Unit 7
003.8-007.2 m - light brown lime mudstone
(3.4 m)
- Unit 8
007.2-008.0 m - light-medium brown lime mudstone
(0.8 m) - thin bedded
- Unit 9
008.0-008.7 m - as Unit 8
(0.7 m) - medium bedded
- Unit 10
008.7-010.1 m - covered interval
(1.4 m)
- Unit 11
010.1-010.8 m - light brown lime mudstone
(0.7 m)
- Unit 12
010.8-017.8 m - light brown lime mudstone
(7.0 m) - massive

Section: KS-87-I
Formation: Ramparts Formation
Date: 1987-07-10
Location: 65° 38' N; 128° 15' 30" W
Description:

- Unit 1
000.0-009.8 m - medium-light brown lime mudstone
(9.8 m) - interbedded calcareous shale

- Unit 2
009.8-012.6 m - as Unit 1
(2.8 m) - less shale interbeds
- Unit 3
012.6-015.4 m - medium brown Thamnopora floatstone
(2.8 m) - crinoids
- Unit 4
015.4-017.9 m - covered interval
(2.5 m)
- Unit 5
017.9-020.7 m - as Unit 3
(2.8 m)
- Unit 6
020.7-022.2 m - medium brown Stachyodes floatstone
(1.5 m)
- Unit 7
022.2-023.4 m - covered interval
(1.2 m)
- Unit 8
023.4-026.2 m - medium brown lime mudstone
(2.8 m)
- Unit 9
026.2-034.2 m - covered interval
(8.0 m)
- Unit 10
034.2-037.0 m - medium brown Stachyodes stromatoporoid floatstone
(2.8 m) - Thamnopora
- Unit 11
037.0-040.0 m - dark brown-black crinoid/Amphipora floatstone
(3.0 m)
- Unit 12
040.0-040.5 m - dark brown-black lime mudstone
(0.5 m) - interbedded shale

Section: KS-87-J
Formation: Ramparts Formation
Date: 1987-07-11
Location: 65° 27' W: 128° 36' 45" W
Description:

- Unit 1
000.0-000.5 m - light medium brown lime mudstone
(0.5 m) - interbedded calcareous shale

- Unit 2
000.5-001.5 m - medium-dark brown Thamnopora floatstone
(1.0 m) - recessive
- Unit 3
001.5-004.0 m - medium-dark brown lime mudstone
(2.5 m) - shale interbeds
- Unit 4
004.0-006.3 m - medium brown Stachyodes floatstone
(2.3 m) - massive
- Unit 5
006.3-009.1 m - as Unit 2
(2.8 m)
- Unit 6
009.1-015.9 m - covered interval
(6.8 m)
- Unit 7
015.9-016.9 m - medium brown Thamnopora floatstone
(1.0 m)
- Unit 8
016.9-018.3 m - medium brown Stachyodes floatstone
(1.4 m)
- Unit 9
018.3-021.5 m - light brown brachiopod grainstone/packstone
(3.2 m)
- Unit 10
021.5-024.5 m - medium brown lime mudstone
(3.0 m) - recessive
- Unit 11
024.5-026.5 m - medium-dark brown stromatoporoid floatstone
(2.0 m) - recessive
- Unit 12
026.5-029.3 m - medium brown Thamnopora bafflestone/mudstone
(2.8 m) - massive
- Unit 13
029.3-030.3 m - dark brown black Thamnopora bafflestone
(1.0 m)
- Unit 14
030.3-037.3 m - as Unit 12
(7.0 m) - recessive

- Unit 15
037.3-041.5 m - as Unit 12
(4.2 m)
- Unit 16
041.5-051.3 m - light brown stromatoporoid floatstone
(9.8 m)
- Unit 17
051.3-055.1 m - as Unit 16
(3.8 m)
- Unit 18
055.1-058.1 m - medium brown Stachyodes floatstone
(3.0 m)
- Unit 19
058.1-059.5 m - medium-light brown Stachyodes floatstone
(1.4 m)
- Unit 20
059.5-060.9 m - cream Stachyodes mudstone
(1.4 m) - grainy matrix
- Unit 21
060.9-066.9 m - as Unit 18
(6.0 m)
- Unit 22
066.9-071.1 m - light brown Amphipora floatstone
(4.2 m)
- Unit 23
071.1-073.1 m - light brown lime mudstone
(2.0 m) - cryptalgal lamination
- Unit 24
073.1-073.9 m - dark brown black Amphipora floatstone
(0.8 m)
- Unit 25
073.9-074.7 m - as Unit 23
(0.8 m)
- Unit 26
074.7--76.5 m - medium brown Amphipora/Stachyodes floatstone
(1.8 m) - thick bedded
- Unit 27
076.5-077.9 m - medium brown Stachyodes floatstone
(1.4 m)

- 077.9-079.3 m - light brown lime mudstone
(1.4 m)
- Unit 29
079.3-081.3 m - medium-dark brown Amphipora floatstone
(2.0 m)
- Unit 30
081.3-082.7 m - light brown Amphipora floatstone
(1.4 m)
- Unit 31
082.7-083.5 m - as Unit 27
(0.8 m)
- Unit 32
083.5-084.9 m - light brown lime mudstone
(1.4 m)
- Unit 33
084.9-085.6 m - light brown lime mudstone
(0.7 m) - birdseye fabric
- Unit 34
085.6-086.6 m - medium brown Stachyodes floatstone
(1.0 m)
- Unit 35
086.6-090.4 m - light brown Stachyodes floatstone
(3.8 m)
- Unit 36
090.4-091.4 m - cream Stachyodes floatstone
(1.0 m) - grainy matrix
- Unit 37
091.4-092.4 m - light brown Stachyodes floatstone
(1.0 m) - grainy matrix
- Unit 38
092.4-093.8 m - covered interval
(1.4 m)
- Unit 39
093.8-096.6 m - light-medium brown Stachyodes floatstone
(2.3 m) - thin bedded
- Unit 40
096.6-100.6 m - medium light brown lime mudstone
(4.0 m)
- Unit 41
100.6-102.0 m - light brown Amphipora floatstone

- Unit 42
102.0-114.6 m - covered interval
(12.6 m)
- Unit 43
114.6-116.1 m - medium-dark brown Amphipora floatstone
(1.5 m) - medium bedded
- Unit 44
116.1-116.6 m - as Unit 43
(0.5 m) - very thin bedded
- Unit 45
116.6-118.0 m - light brown lime mudstone
(1.4 m) - birdseye texture
- Unit 46
118.0-120.5 m - covered interval
(2.5 m)
- Unit 47
120.5-123.5 m - as Unit 45
(3.0 m)
- Unit 48
123.5-126.5 m - covered interval
(3.0 m)
- Unit 49
126.5-128.9 m - light-medium brown stromatoporoid mudstone
(2.4 m)
- Unit 50
128.9-129.4 m - light brown lime mudstone
(0.5 m)
- Unit 51
129.4-129.9 m - medium-light brown Amphipora floatstone
(0.5 m)
- Unit 52
129.9-130.4 m - medium-light brown lime mudstone
(0.5 m)
- Unit 53
130.4-131.3 m - as Unit 49
(0.9 m)
- Unit 54
131.3-132.7 m - as Unit 51
(1.4 m)

- Unit 55
132.7-135.1 m - medium brown wackestone
(2.4 m) - crinoids, brachiopods
- Unit 56
135.1-136.5 m - covered interval
(1.4 m)
- Unit 57
136.5-137.9 m - medium brown lime mudstone
(1.4 m) - thin bedded

Section: KS-87-K
Formation: Ramparts Formation
Date: 1987-07-12
Location: 65° 25' 30" N: 129° 01' 30" W
Description:

- Unit 1
000.0-004.0 m - dark brown argillaceous lime mudstone
(4.0 m) - scattered crinoids, brachiopods
- interbedded calcareous shale
- Unit 2
004.0-006.4 m - medium brown wackestone
(2.4 m) - crinoids, brachiopods, Thamnopora
- interbedded calcareous shale
- Unit 3
006.4-007.6 m - as Unit 2
(1.2 m) - recessive
- Unit 4
007.6-011.4 m - dark brown black Thamnopora/brown coral floatstone
(3.8 m)
- Unit 5
011.4-013.2 m - dark brown lime mudstone
(1.8 m) - interbedded calcareous shale
- Unit 6
013.2-013.5 m - medium-dark brown Thamnopora mudstone
(0.3 m)
- Unit 7
013.5-014.3 m - medium brown stromatoporoid floatstone
(0.8 m)
- Unit 8
014.3-026.9 m - covered interval
(12.6 m)

- Unit 9
026.9-029.6 m - medium brown coral/stromatoporoid floatstone
(2.7 m) - argillaceous
- Unit 10
029.6-030.1 m - dark brown black coral/stromatoporoid floatstone
(0.5 m) - recessive
- Unit 11
030.1-032.9 m - as Unit 9
(2.8 m)
- Unit 12
032.9-034.3 m - medium-dark brown Thamnpora floatstone
(1.4 m) - interbedded calcareous shale
- Unit 13
034.3-035.7 m - medium-dark brown lime mudstone
(1.4 m)
- Unit 14
035.7-036.7 m - medium brown lime mudstone
(1.0 m)
- Unit 15
036.7-037.7 m - medium brown Stachyodes floatstone
(1.0 m)
- Unit 16
037.7-038.7 m - as Unit 15
(1.0 m)
- Unit 17
038.7-039.7 m - medium brown Stachyodes floatstone
(1.0 m)
- Unit 18
039.7-041.5 m - as Unit 15
(1.8 m)
- Unit 19
041.5-042.0 m - as Unit 17
(0.5 m)
- Unit 20
042.0-043.5 m - light-medium brown Stachyodes floatstone
(1.5 m)
- Unit 21
043.5-047.7 m - covered interval
(4.2 m)

- Unit 22
047.7-050.9 m - dark brown-black Stachyodes floatstone
(3.2 m)
- Unit 23
050.9-051.9 m - dark brown-black stromatoporoid floatstone
(1.0 m) - shaly
- Unit 24
051.9-054.5 m - as Unit 23
(2.6 m) - non-shaly
- Unit 25
054.5-055.5 m - medium-dark brown Stachyodes floatstone
(1.0 m)
- Unit 26
055.5-056.0 m - medium brown bulbous stromatoporoid floatstone
(0.5 m)
- Unit 27
056.0-061.6 m - medium brown Stachyodes floatstone
(5.6 m)
- Unit 28
061.6-068.4 m - covered interval
(6.8 m)
- Unit 29
068.4-071.2 m - medium-dark brown bulbous stromatoporoid floatstone
(2.8 m) - shaly
- Unit 30
071.2-074.0 m - medium-dark brown Stachyodes floatstone
(2.8 m)
- Unit 31
074.0-075.6 m - covered interval
(1.6 m)
- Unit 32
075.6-078.2 - medium brown Stachyodes floatstone/mudstone
(2.6 m)
- Unit 33
078.2-080.0 - light brown stromatoporoid mudstone
(1.8 m)
- Unit 34
080.0-084.5 m - medium-dark brown Stachyodes floatstone
(4.5 m)

- Unit 35
084.5-086.5 m - covered interval
(2.0 m)
- Unit 36
086.5-087.9 m - medium brown lime mudstone
(1.4 m)
- Unit 37
087.9-095.3 m - medium-dark brown stromatoporoid floatstone
(7.4 m)
- Unit 38
095.3-097.5 - medium-light brown stromatoporoid floatstone
(2.2 m)
- Unit 39
097.5-100.3 m - covered interval
(2.8 m)
- Unit 40
100.3-103.8 m - medium brown Amphipora floatstone
(3.5 m)
- Unit 41
103.8-105.3 m - covered interval
(1.5 m)
- Unit 42
105.3-106.0 m - medium brown lime mudstone
(0.7 m) - thin bedded
- Unit 43
106.0-106.8 m - medium brown Amphipora floatstone
(0.8 m)
- Unit 44
106.8-112.8 m - covered interval
(6.0 m)
- Unit 45
112.8-115.2 m - medium brown Amphipora floatstone
(2.4 m)
- Unit 46
115.2-119.4 m - covered interval
(4.2 m)
- Unit 47
119.4-120.4 m - medium-light brown Amphipora floatstone
(1.0 m)

- Unit 48
120.4-121.9 m - covered interval
(1.5 m)
- Unit 49
121.9-123.5 m - medium brown Amphipora floatstone
(1.6 m)
- Unit 50
123.5-126.3 m - medium brown lime mudstone
(2.8 m)
- Unit 51
126.3-126.7 m - dark brown calcareous shale
(0.4 m) - recessive
- Unit 52
126.7-130.9 m - medium-dark brown Amphipora floatstone
(4.2 m)
- Unit 53
130.9-132.3 m - light-medium brown lime mudstone
(1.4 m)
- Unit 54
132.3-133.3 m - medium brown Amphipora floatstone
(1.0 m)
- Unit 55
133.3-134.5 m - light-medium brown Amphipora floatstone
(1.2 m)
- Unit 56
134.5-138.7 m - covered interval
(4.2 m)
- Unit 57
138.7-148.5 m - medium brown Amphipora/Stachyodes floatstone
(9.8 m)
- Unit 58
148.5-152.7 m - covered interval
(4.2 m)
- Unit 59
152.7-154.2 m - medium brown lime mudstone
(1.5 m)
- Unit 60
154.2-158.4 m - medium brown lime mudstone
(4.2 m) - birdseye fabric

Unit 61
158.4-162.6 m -- medium brown Amphipora floatstone
(4.2 m)

Unit 62
162.6-164.6 m - covered interval
(2.0 m)

Unit 63
164.0-165.6 m - medium brown lime mudstone
(1.0 m)

Unit 64
165.6-166.9 m - medium brown Amphipora floatstone
(1.3 m)

Unit 65
166.9-167.4 m - light brown lime mudstone
(0.5 m)

Unit 66
167.4-168.9 m - medium brown Amphipora floatstone
(1.5 m)

Unit 67
168.9-171.7 m - cream Amphipora floatstone
(2.8 m)

Unit 68
171.7-177.3 m - medium brown Amphipora floatstone
(5.6 m)

Unit 69
177.3-178.8 m - covered interval
(1.5 m)

Unit 70
178.8-183.8 m - as Unit 68
(5.0 m)

Section: KS-97-L
Formation: Ramparts Formation
Date: 1987-07-12
Location: 65° 38' N: 128° 53' 30" W
Description:

Unit 1
000.0-003.0 m - dark brown Stachyodes floatstone
(3.0 m)

Unit 2
003.0-011.4 m - covered interval
(8.4 m)

- Unit 3
011.4-019.8 m - as Unit 1
(8.4 m)
- Unit 4
019.8-028.2 m - dark brown Stachyodes floatstone/mudstone
(8.4 m)
- Unit 5
028.2-029.7 m - medium brown lime mudstone
(1.5 m)
- Unit 6
029.7-039.5 m - medium brown Stachyodes floatstone
(9.8 m)
- Unit 7
039.5-045.1 m - as Unit 5
(5.6 m)
- Unit 8
045.1-064.7 m - medium brown Amphipora floatstone
(19.6 m)
- Unit 9
064.7-065.7 m - medium brown lime mudstone
(1.0 m) - birdseye fabric
- Unit 10
065.7-076.9 m - as Unit 8
(11.2 m)

Section: KS-87-M
Formation: Ramparts Formation
Date: 1987-07-13
Location: 65° 29' N: 128° 31' W
Description:

- Unit 1
000.0-009.6 m - medium brown lime mudstone
(9.6 m)
- Unit 2
009.6-012.4 m - covered interval
(2.8 m)
- Unit 3
012.4-015.2 m - as Unit 1
(2.8 m)

Unit 4
015.2-024.8 m - light brown lime mudstone
(9.6 m)

Unit 5
024.8-027.6 m - medium-dark brown Amphipora floatstone
(2.8 m)

Unit 6
027.6-030.4 m - as Unit 1
(2.8 m)

Unit 7
030.4-072.4 m - medium-dark brown Amphipora floatstone
(42.0 m)

Unit 8
072.4-086.4 m - medium brown Stachyodes floatstone
(14.0 m)