DEPT. NAT. RES & ENV
PE600054

OG 31566

ERIC THE RED-1

BHP

WELL SUMMARY

PETROLEUM PERMIT: VIC/P31, OTWAY BASIN

SURFACE LOCATION

SEISMIC REFERENCE: LINE: OH91-186 SP:1188
LONGITUDE: 143 10 51.45"E; X: 688,829.7mE
LATITUDE: 39 00 45.44"S; Y: 5,679,544.8mN

PRIMARY TARGET:
SHIPWRECK GROUP FORMATION
DEPTH: 1043mRT, 1017mTVDSS

SECONDARY TARGET:
OTWAY AND SHERBROOK GROUPS

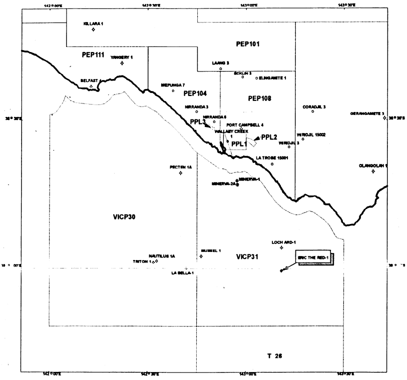
WELL STATUS: DRY HOLE - PLUGGED AND ABANDONED

ELEVATION: DATUM: MEAN SEA LEVEL
LOG REF.: RT, 25m ABOVE DATUM
SEA BED: 75m BELOW DATUM

DATES: ON LOCATION: 2236hrs, 15-FEB-1993
SPUDDED: 0700hrs, 17-FEB-1993
TOTAL DEPTH: 0600hrs, 26-FEB-1993
RIG RELEASED: 0330hrs, 06-MAR-1993

TOTAL DEPTH: 1875mRT 1849.9mTVDSS

DRILLED BY: BYFORD DOLPHIN
DOLPHIN DRILLING



WIRELINE SUMMARY

	Suite 1	Suite 2	Suite 3	Suite 4	Suite 5	Suite 6
Date	21-FEB-1993	26-FEB-1993				
First Reading	1008.0M	1866.0M				
Last Reading	335.0M	1007.0M				
CSG (Logger)	355.0M	1007.0M				
CSG (Driller)	355.0M	1007.0M				
Depth (Driller)	1017.0M	1875M				
Mud Type	KCL/PHPA	KCL/PHPA				
Mud Resistivity	0.120 ohmm at 18.0C	0.114 ohmm at 20.0C				
Rmf	0.116 ohmm at 18.0C	0.104 ohmm at 19.0C				
Rmc	0.170 ohmm at 15.0C	0.132 ohmm at 19.0C				
Max. Rec. Temp.	43.0 C	82.0C				
Bit Size	12 1/4"	8 1/2"				
Casing Size	13 3/8"	9 5/8"				
Wireline Logs	DLL-MSFL-SDT-GR-AMS	DLL-MSFL-SDT-GR-AMS				
	VSP	FMS-LDL-CNL-GR-AMS				
	CST-GR (30 shot)	RFT-HP-CR				
		VSP-CSAT				
		CST-GR (60 shot)				

LITHOLOGY AND ENGINEERING LEGEND

CLASTICS

- CONGLOMERATE
- SANDSTONE - COARSE
- SANDSTONE - MEDIUM
- SANDSTONE - FINE
- SILTSTONE
- CLAYSTONE

CARBONATES

- CALCARENITE
- CALCILUTITE
- CALCISILTITE
- LIMESTONE
- DOLOMITE
- ANHYDRITE

OTHERS

- BRECCIA
- CHERT
- VOLCANICS
- METASEDIMENTS
- IGNEOUS
- DOLERITE

ACCESSORIES

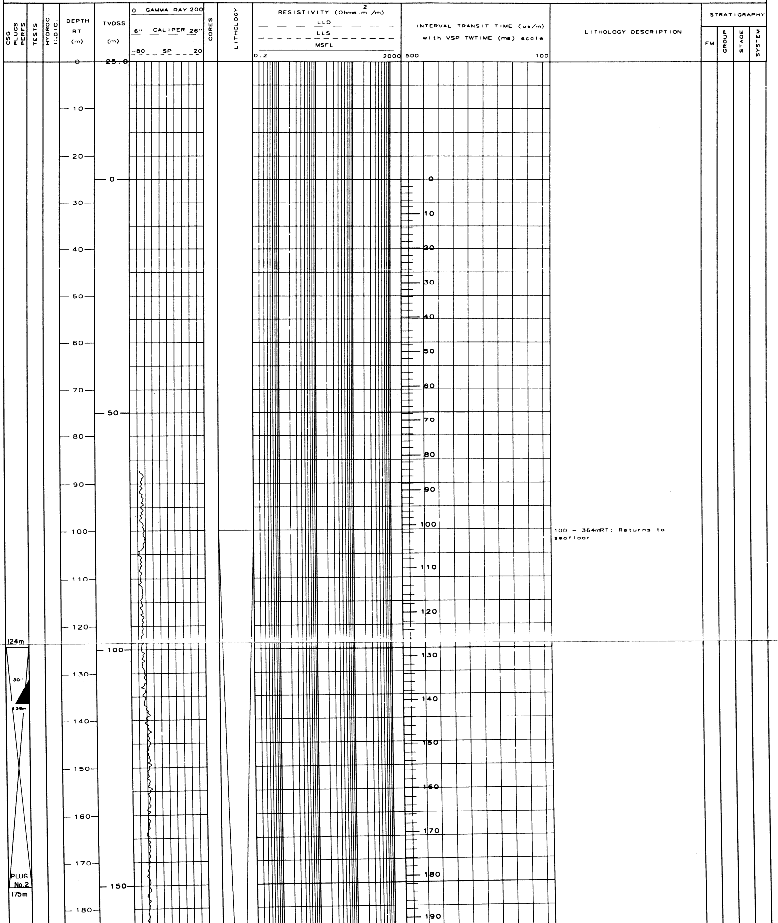
- ARGILLACEOUS
- CALCAREOUS
- DOLOMITIC
- F FOSSILIFEROUS
- FORAMINIF. A
- GASTROPODS
- O RADIOLARITES
- FELDSPATHIC
- FRACTURES
- X RECRYSTALLIZED
- 9 GLAUCONITIC
- S SIDERITIC

ENGINEERING

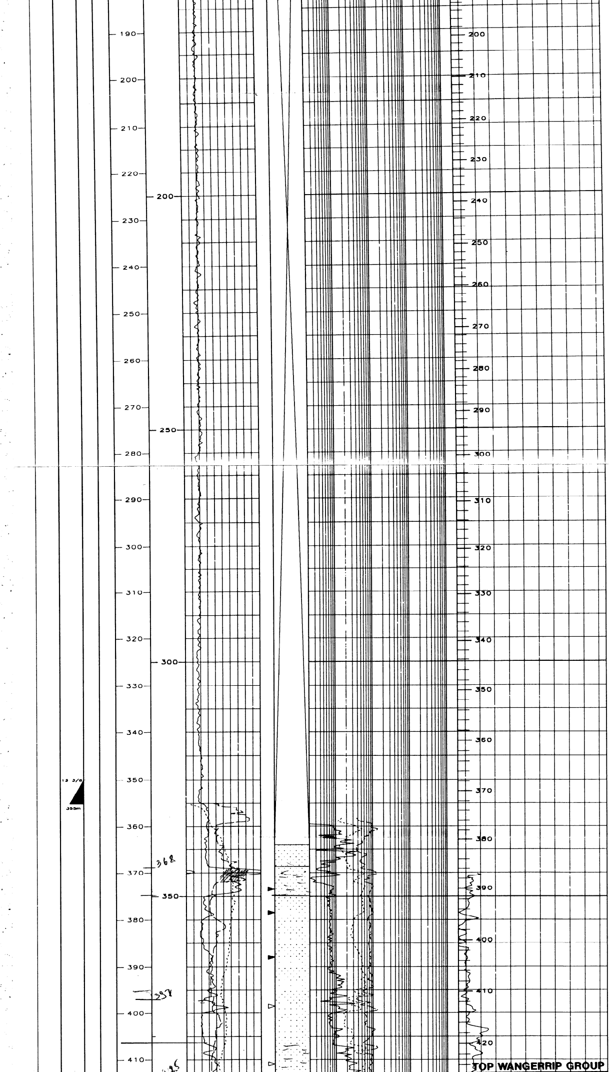
- ◢ CASING SHOE
- ◥ CASING HANGER
- ○ RFT PRETEST
- ● RFT SAMPLE
- ■ HYDROCARBON SHOW
- ≢ PERFORATIONS

- ▦ CALCAREOUS CLAYSTONE
- ▤ SHALE
- ■ COAL
- ▨ GYPSUM
- ▦ HALITE
- ▦ MARL
- ☐ INDETERMINATE
- ☐ PLANT REMAINS
- ☐ BIVALVE
- ☐ BRYOZOA
- ⊕ CORAL
- ☐ INOCERAMUS
- ☐ SILICEOUS
- ☐ CARBONACEOUS
- m MICACEOUS
- ◇ LITHIC FRAGMENTS
- ◆ PYRITE
- ■ CORED INTERVAL
- ☒ CORE LOSS
- ▶ SIDEWALL CORE
- ▷ SIDEWALL CORE NO RECOVERY
- ⧗ PLUGGED INTERVAL

INTERPRETATION BY: S.HORAN/D.WONG
COMPILED BY: M.LEMAIRE
DRAWN BY:
SCALE: 1:500



100 - 364mRT: Returns to seafloor



370 – 413mRT: SANDSTONE INTERBEDDED WITH MINOR CLAYSTONE

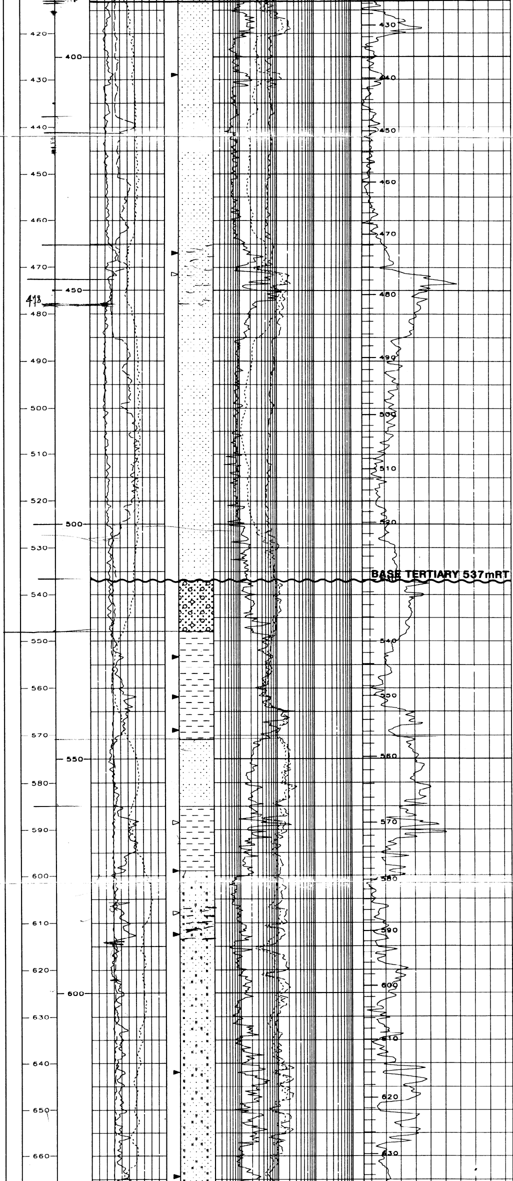
SANDSTONE: (70–100%) greyish brown to light grey, brownish black in part, friable with abundant loose grains, medium to coarse grains, occasionally fine and very coarse grains, subrounded to rounded, poorly sorted quartz, dominantly iron stained, trace to occasionally common greyish brown argillaceous matrix, trace to common iron oxide pellets, rare mica, good to very good visual porosity. No shows. Interbedded minor:

CLAYSTONE: (0–30%) medium dark grey, becoming brownish grey to olive black, soft to firm, blocky where firm, dispersive in part, trace silt, trace very fine grained quartz, trace carbonaceous flecks, trace micromica, non calcareous.

MEPUNGA

NIRRANDA

LATE EOCENE



413 – 466mRT: SANDSTONE INTERBEDDED WITH CLAYSTONE:
SANDSTONE: (70–100%) greyish brown to light grey, occasionally brownish grey, friable with abundant loose grains, medium to coarse, occasional to abundant fine and very coarse grains, subrounded to rounded, occasionally subangular, moderately to well sorted quartz, occasionally iron stained in part, trace to occasional greyish brown argillaceous matrix, trace to common iron oxide pellets at depth, trace mica, good to occasionally very good visual porosity. No shows. Interbedded with:
CLAYSTONE: (0–30%) brownish grey to olive black, becoming dusky brown with depth, soft to very soft, dispersive, slightly to commonly silty, trace very fine sand grains, trace carbonaceous flecks, trace micromica, rare pyrite, non calcareous.

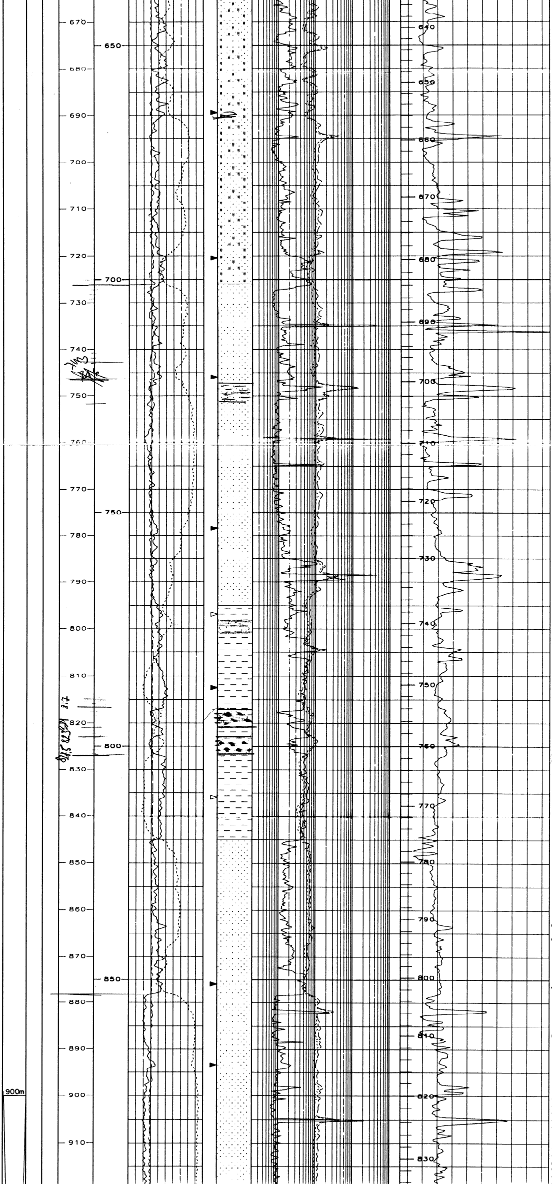
466 – 537mRT: SANDSTONE INTERBEDDED WITH MINOR CLAYSTONE
SANDSTONE: (70–100%) very light grey to light brownish grey, friable with abundant loose grains, medium to coarse, occasionally very coarse, rarely fine grained, subrounded to rounded, occasionally subangular, poorly to occasionally moderately sorted quartz, rarely iron stained, trace brownish grey argillaceous matrix, trace pyrite, rare mica, good to very good visual porosity. No shows. Interbedded with minor:
CLAYSTONE: (0–30%) light brownish grey to dusky brown, soft, dispersive, slightly silty, trace very fine quartz sand grains, trace micromica, non calcareous.

537 – 570mRT: SANDSTONE GRADING TO CLAYSTONE
SANDSTONE (0–100%): generally as above, grading to:
CLAYSTONE: (0–100%) dusky brown to greyish brown, occasionally light brown, soft, dispersive, slightly silty, trace very fine quartz sand grains, non calcareous.

570 – 600mRT: CONGLOMERATIC CLAYSTONE GRADING to ARGILLACEOUS CONGLOMERATE
CONGLOMERATTC CLAYSTONE: (0–100%) medium to dark brownish grey and grey, occasionally medium to dark greenish grey, soft, dispersive, abundant very coarse to granule, occasionally coarse, subrounded to rounded quartz and lithic pebbles, iron stained in part, trace fine to medium grained glauconite pellets, rare fine carbonaceous detritus, rare medium to coarse iron oxide pellets, rare mica, rare weathered limonitic clay/cement, with depth grading to:
ARGILLACEOUS CONGLOMERATE: (0–100%) generally as above, friable with abundant loose grains, poorly sorted, poor visual porosity. No show

600 – 795mRT: SANDSTONE INTERBEDDED WITH MINOR CLAYSTONE
SANDSTONE: (30–100%) light grey to translucent, clear in part, friable with common to abundant loose grains, occasionally hard, fine to very coarse, occasionally granule, subangular to subrounded, rarely rounded, poorly sorted quartz and common grey, green and brown metamorphic(?) lithics and chert, common light grey to light brownish grey dispersive argillaceous matrix(washed away), trace to rare pyrite cement and nodules, rare mica, poor to fair visual porosity. No shows. Interbedded with minor:
CLAYSTONE: (0–70%) medium dark grey and greenish grey, soft, dispersive, common glauconite, slightly silty, trace dispersed organic matter, occasional fragments of calcite cemented very fine quartz, rare pyrite.

DILWYN
PEMBER MUDSTONE
PEBBLE POINT
WANGERRIP
MID EOCENE
TERTIARY



795 – 845mRT: CLAYSTONE INTERBEDDED WITH MINOR SANDSTONE
CLAYSTONE: (80–100%) medium to dark brownish grey to medium to dark greenish grey, soft, occasionally firm to hard, occasionally dispersive, moderately silty, trace fine carbonaceous flecks, trace very fine quartz sand grains, rare glauconite, rare mica, non calcareous. Interbedded with minor:
SANDSTONE: (0–20%) light grey to translucent and commonly opaque, friable with abundant loose grains, fine to very coarse grained, angular to subrounded, moderately sorted quartz, common dispersive medium grey argillaceous matrix, common moderately weak calcareous cement, rare pyrite cement, trace mica, poor visual porosity. No shows.

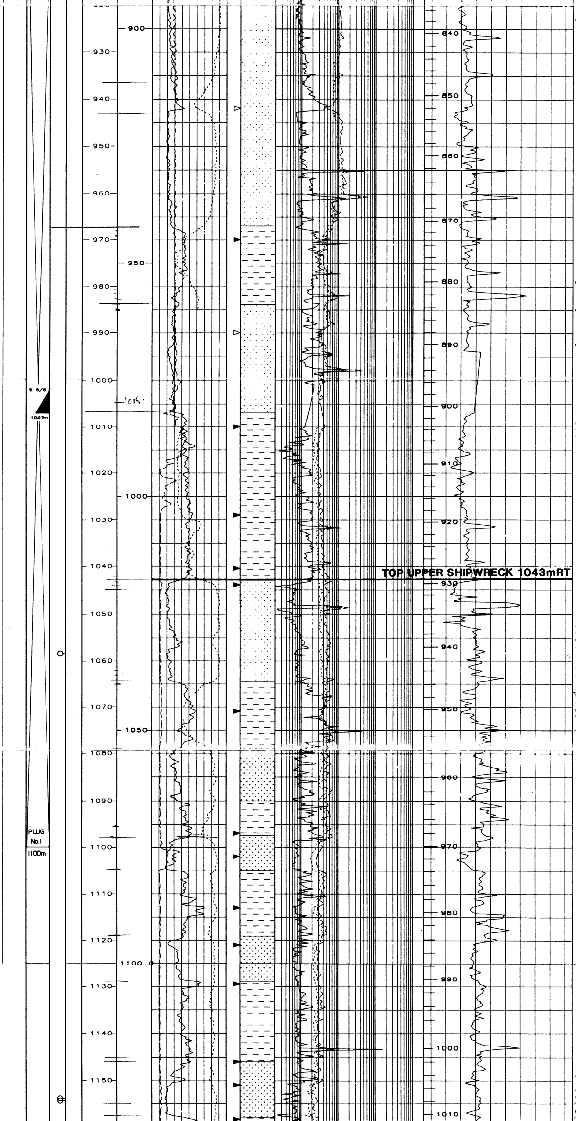
845 – 877mRT: SANDSTONE WITH INTERBEDDED CLAYSTONE
SANDSTONE: (80–100%) medium greenish grey, medium grey in part, friable with abundant loose grains, fine to medium, subangular to dominantly subrounded, moderately to well sorted quartz, trace to common dispersive medium grey to green argillaceous matrix, rare weak calcareous cement, rare moderately strong pyrite cement, rare lithics, rare mica, good visual porosity. No shows. Interbedded with:
CLAYSTONE: (0–20%) medium to dark brownish grey to medium to dark greenish grey, soft, occasionally firm to hard, occasionally dispersive, moderately silty, trace fine carbonaceous flecks, trace very fine quartz sand grains, rare glauconite, rare mica, non calcareous.

877 – 967mRT: SANDSTONE WITH MINOR INTERBEDDED CLAYSTONE
SANDSTONE: (80–100%) light greenish grey, clear in part, friable with abundant loose grains, medium to very coarse, dominantly coarse, subangular to rounded, dominantly subrounded, moderately sorted quartz, trace to occasionally common very dispersive light greenish grey to light grey argillaceous matrix (washed away), trace to rare grey, green and light brown lithics, rare glauconite pellets, rare to occasionally trace coarse to very coarse quartz overgrowths, good to very good visual porosity. No shows.
CLAYSTONE: (0–20%) medium to dark brownish grey to medium to dark greenish grey, soft

SHERBROOK

MID SANTONIAN TO MAASTRICHTIAN

CRETACEOUS



occasionally firm to hard, occasionally dispersive, moderately silty, trace fine carbonaceous flecks, trace very fine quartz sand grains, rare glauconite, rare mica, non calcareous.

967 – 1043mRT: CLAYSTONE INTERBEDDED WITH MINOR SANDSTONE

SANDSTONE: (10–90%) light greenish grey to light grey, clear in part, friable with abundant loose grains, predominantly medium grained, medium to coarse grained in part with occasional very coarse grains, subangular to rounded, dominantly subrounded, moderately to well sorted quartz, weak calcite cement throughout, trace to common light greenish grey to light grey dispersive argillaceous matrix (washed away in part), rare grey green and light brown lithics, rare glauconite pellet, trace to occasional quartz overgrowth, moderate to good visual porosity. No shows.

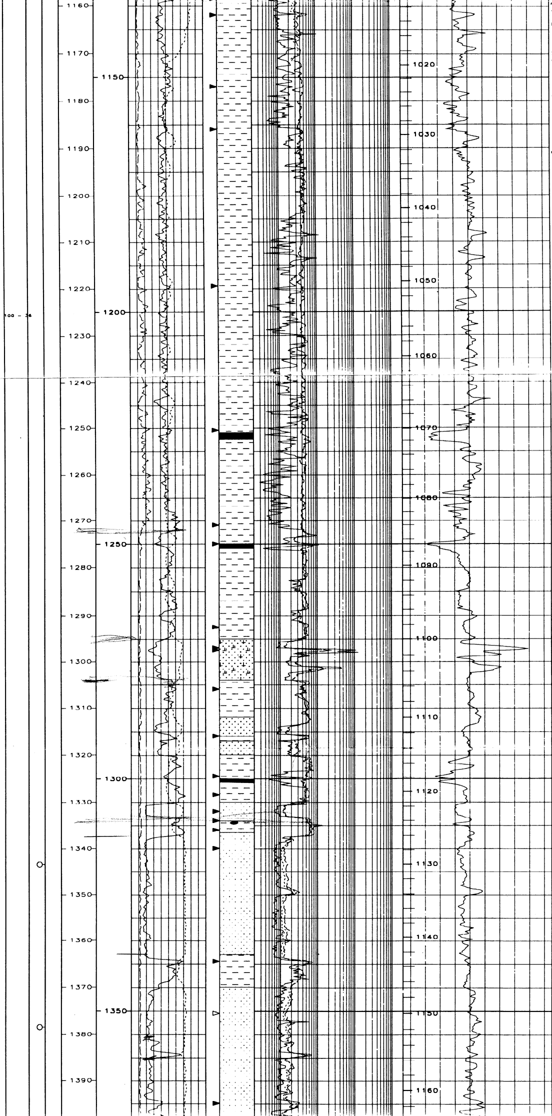
CLAYSTONE: (10–90%) brownish grey to medium dark grey, occasionally light grey and greenish grey, soft, slightly dispersive, moderately firm in part, trace silt to very fine quartz, rare disseminated organic matter, non calcareous.

1043 – 1146mRT: SANDSTONE INTERBEDDED WITH CLAYSTONE

SANDSTONE: (10–100%) very light grey to light grey, friable with abundant loose grains, medium to coarse grained, occasional fine and very coarse grains, subangular to subrounded, moderately sorted quartz, trace light grey dispersive argillaceous matrix, trace moderately weak calcareous cement, occasional greyish black lithics, trace glauconite, good visual porosity. No shows.

CLAYSTONE: (0–90%) medium grey to medium dark grey, soft to moderately firm, dispersive, trace glauconite, trace very fine quartz sand, trace coaly fragments, rare mica, non calcareous.

1146 – 1158mRT: SANDSTONE: (100%) very light grey to light grey, clear to translucent, friable with abundant loose grains, fine to very coarse grained, predominantly fine to medium, angular to subrounded, poorly sorted quartz, trace medium dark grey argillaceous



matrix, trace weak calcareous cement, trace greyish black lithics, good visual porosity. No shows.

1158 - 1330mRT: CLAYSTONE INTERBEDDED WITH MINOR SANDSTONE

CLAYSTONE: (60-100%) medium light grey to medium grey, light to medium brownish grey in part, soft, dispersive, trace to occasional carbonaceous flecks and coal fragments, trace silt, non calcareous.

SANDSTONE: (0-40%) very light grey, very fine, friable with abundant loose grains, subangular to subrounded, well sorted quartz, no apparent matrix, fair to good visual porosity. No shows.

1330 - 1412mRT: SANDSTONE WITH MINOR CLAYSTONE

SANDSTONE: (50-100%) clear to light grey, friable with abundant loose grains, medium to very coarse, dominantly medium to coarse, subangular to subrounded, occasionally angular (fresh angular grains appear to be the product of bit), poorly to moderately sorted quartz, common light grey to off-white dispersive argillaceous matrix (almost all washed away), trace to rare medium to dark grey lithics, common coal fragments, rare mica, rare pyrite nodules, rare to occasional quartz overgrowths, trace to rare rock flour, good to occasionally very good visual porosity. No shows.

CLAYSTONE: (0-50%) light grey to light brownish grey, rarely off-white in part, slightly silty in part, trace to common fine carbonaceous flecks and minor laminae, trace coal fragments, non calcareous.

1412 - 1436mRT: CLAYSTONE INTERBEDDED WITH MINOR SANDSTONE

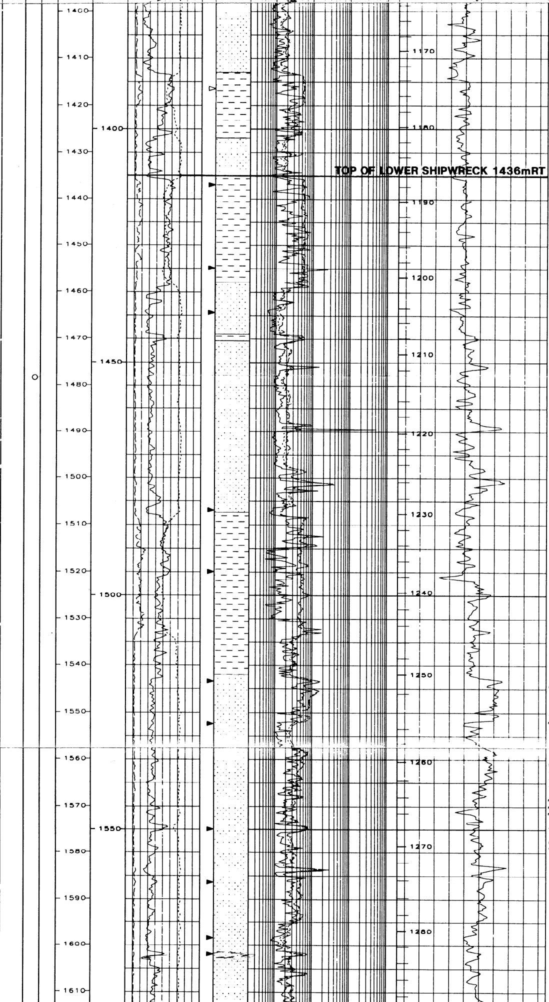
CLAYSTONE: (50-100%) predominantly medium grey to medium dark grey, light grey to light brownish grey in part, soft to moderately firm, trace dispersed carbonaceous matter and coal fragments, trace silt, non calcareous.

SANDSTONE: (0-50%) clear to

UPPER SHIPWRECK

CONIACIAN TO MID SANTONIAN

LATE CRETACEOUS

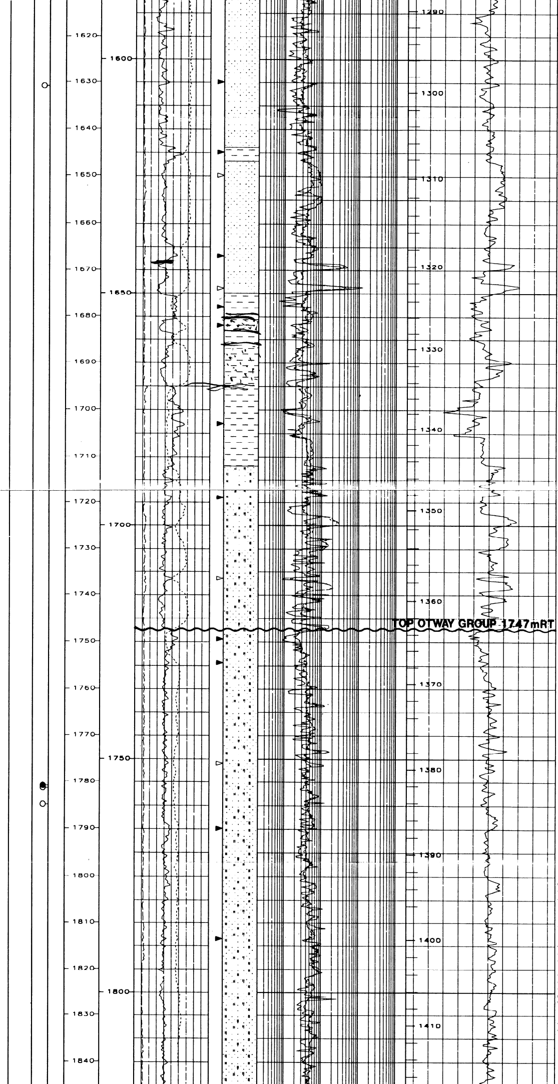


abundant loose grains, moderately hard in part, medium to very coarse, dominantly medium to coarse, subangular to subrounded, poorly to moderately sorted quartz, common light grey to off-white dispersive argillaceous matrix, trace to rare medium to dark grey lithics, common coal fragments, rare mica, rare pyrite nodules, rare to occasional quartz overgrowths, good to occasionally very good visual porosity. No shows.

1436 – 1509mRT: SANDSTONE: (100%) clear to light grey, friable with abundant loose grains, medium to very coarse, dominantly medium to coarse, subangular to subrounded, occasionally angular (fresh angular grains appear to be the product of bit), moderately sorted quartz, common light grey to off-white dispersive argillaceous matrix (almost all washed away), trace to rare medium to dark grey lithics, rare coal fragments, rare mica, rare to occasional quartz overgrowths, trace to rare rock flour, good to occasionally very good visual porosity. No shows.

1509 – 1543mRT: CLAYSTONE: (100%) medium grey to brownish grey, soft, occasional to common coal fragments, trace very fine quartz grains, non calcareous

1543 – 1665mRT: SANDSTONE WITH MINOR CLAYSTONE
SANDSTONE: (60–100%) very light grey to light grey, clear to translucent grains, friable with abundant loose grains, medium to very coarse grained, occasional granule sized grains, medium to coarse grains subangular to subrounded, larger grains predominantly very angular (possibly due to bit action), poorly sorted quartz, trace very light grey argillaceous matrix (Washed away), trace to rare moderately strong pyrite cement, common medium dark grey, light green, moderate reddish orange metamorphic(?) and cherty lithics, trace quartz overgrowths, trace coal fragments, fair visual porosity. No shows.
CLAYSTONE: (0–40%) medium light grey to medium grey, soft, dispersive in part, trace to occasional carbonaceous laminae, non calcareous.



1665 – 1695mRT: ARGILLACEOUS LITHIC SANDSTONE
ARGILLACEOUS LITHIC SANDSTONE: (50–90%) off-white to light grey, speckled, friable, fine to dominantly medium, subangular to subrounded, well sorted grey with occasional green and brown lithics and quartz, abundant off-white to light grey argillaceous matrix, In part grading to Arenaceous Claystone, rare to occasionally trace partially altered feldspar, trace to rare carbonaceous detritus, poor visual porosity. No shows.

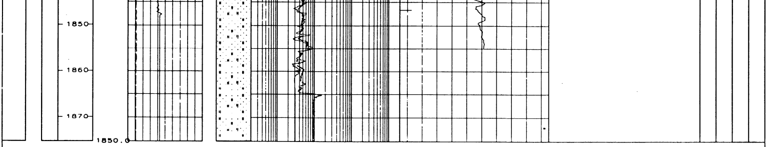
1695 – 1710mRT: CLAYSTONE: (90–100%) medium grey to medium dark grey, occasionally light brownish grey, soft to moderately firm, trace silt, trace carbonaceous flecks, non calcareous.

1710 – 1747mRT: INTERBEDDED ARGILLACEOUS LITHIC SANDSTONE AND SANDSTONE
ARGILLACEOUS LITHIC SANDSTONE: (20–90%) off-white to light grey, speckled, friable, fine to dominantly medium, subangular to subrounded, well sorted grey with occasional green and brown lithics and quartz, abundant off-white to light grey argillaceous matrix, in part grading to Arenaceous Claystone, rare to occasionally trace partially altered feldspar, trace to rare carbonaceous detritus, poor visual porosity. No shows
[illegible]
SANDSTONE. (10–70%) light grey to very light grey, friable with abundant loose grains, medium to coarse grained, common very coarse to granule sized light green, dark grey, moderate pink, reddish orange and clear lithic and quartz grains, subangular to subrounded, larger grains very angular, common light grey argillaceous matrix, trace to occasional strong silica and moderately strong pyrite cement, occasional pyrite nodule, good visual porosity. No shows

1747 – 1875mRT: ARGILLACEOUS QUARTZOSE/LITHIC SANDSTONE AND CLAYSTONE
ARGILLACEOUS QUARTZOSE/LITHIC SANDSTONE: (80–100%) very light grey to light grey, friable, fine to medium grained, subangular to subrounded, moderately to well sorted black, light green and white lithic and feldspathic grains, clear to translucent quartz grains, abundant very light grey argillaceous matrix, occasional to common weak calcareous cement, grading to arenaceous claystone in part, poor visual porosity. No shows
CLAYSTONE: (0–20%) medium light grey to light grey, soft, trace silt, trace to rare carbonaceous flecks, non calcareous.

LOWER SHIPWRECK
CENOMANIAN TO TURONIAN
LATE CRETACEOUS

EUMERALLA
OTWAY
? ALBIAN
EARLY CRETACEOUS



ERIC THE RED-1 - RFT DATA

Test No.	Depth mRT	Depth mTVDSS	Time hh:mm	Initial Hydrostatic Pressure psig	Formation Pressure psig	Temperature Deg C AMS	Temperature Deg C Strain	Final Hydrostatic Pressure psig	Mobility mD/cp	Permeability* mD	Comments
1	1058.5	1033.5	05:20	1679.2	1496.8	50.2	51.8	1677.8	3164	1600	Good Test
2	1154.0	1129.0	05:35	1820.0	.....	.....	.....	.....			Lost Seal
3	1343.5	1318.5	06:05	2129.5	1897.8	57.7	59.3	2123.5	340	170	Good Test
4	1378.5	1353.5	06:17	2178.0	1947.2	58.3	60.1	2178.2	60	30	Good Test
5	1478.5	1453.5	06:30	2334.0	2088.8	60.4	61.8	2339.7	8	10 **	Good Test
6	1631.5	1606.5	06:55	2573.4	2306.6	65.1	66.0	2573.7	7	10 **	Good Test
7	1781.0	1756.0	07:25	2806.5	.....	70.0	71.4	.....	.....		Tight
8											
9	1154.5	1129.5	05:40	1820.3	1631.1	52.4	54.4	1820.2	1095	550	Good Test
10	1781.5	1756.5	07:30	2807.0	.....	.....	.....	.....	.....		Tight
11	1785.0	1760.0	07:35	2812.7	.....	.....	.....	.....	.....		Tight

Witness: James Boorman

Date: 27th January 1993

Well KB: 25.0 m above MSL

Rig: Byford Dolphin

* Permeabilities rounded to nearest 10 mD for <1000 mD, and nearest 100 mD for >1000 mD.

** Qualitative log inspection indicates permeabilities far greater than those indicated here.

Filtrate Viscosity = 0.5 cP
k(rw) = 1.0
k(v)/k(h) = 1.0

ERIC THE RED-1 - SIDEWALL CORE SUMMARY

Suite	Run	Bullets	Depth From	Depth To	No. Fired	No. Misfires	No. Empty	No. Lost	No. Recovered
1	1	30	1010.5	373.5	24	6	0	3	21
2	2	60	1831.5	1029.0	60	0	3	4	53
	TOTAL	90	1831.5	373.5	84	6	3	7	74

Sample Number	Depth mRT	Recovery (mm)	Lithology	Sample Number	Depth mRT	Recovery (mm)	Lithology
1	1010	50	MASSIVE CLAYSTONE WITH MINOR SANDSTONE INTERBED	46	1602	35	MASSIVE CLAYSTONE
2	990	0	NO RECOVERY. Bullet lost.	47	1598.5	55	MASSIVE SANDSTONE
3	970	50	SANDY CLAYSTONE/ARGILLACEOUS SANDSTONE	48	1586.5	30	QUARTZOSE/LITHIC SANDSTONE INTERBEDDED WITH QUARTZOSE SANDSTONE
4	942	0	NO RECOVERY. Misfire.	49	1575	35	ARGILLACEOUS SANDSTONE INTERLAMINATED WITH COAL
5	893.5	50	SANDY CLAYSTONE/ARGILLACEOUS SANDSTONE	50	1552.5	25	PEBBLY SANDSTONE
6	876	50	SANDY CLAYSTONE/ARGILLACEOUS SANDSTONE	51	1543.5	30	PEBBLY CLAYSTONE/PEBBLY SANDSTONE
7	836	0	NO RECOVERY. Misfire.	52	1520	35	MASSIVE CLAYSTONE
8	812.5	50	MASSIVE CLAYSTONE	53	1507	50	MASSIVE SANDSTONE
9	797	0	NO RECOVERY. Bullet lost.	54	1464.5	50	MASSIVE SANDSTONE
10	778.5	50	ARGILLACEOUS SANDSTONE	55	1455	40	MASSIVE CLAYSTONE
11	746	45	CLAYSTONE WITH MINOR INTERLAMINATED SANDSTONE	56	1437	40	CLAYSTONE INTERLAMINATED WITH MINOR SANDSTONE
12	720.5	50	SANDY CLAYSTONE/ARGILLACEOUS SANDSTONE	57	1416.5	0	NO RECOVERY (Bullet Lost)
13	689.5	35	CLAYSTONE WITH INTERBEDDED SANDSTONE	58	1395	40	ARGILLACEOUS SANDSTONE
14	664.5	50	CLAYSTONE WITH INTERBEDDED QUARTZOSE/LITHIC SANDSTONE	59	1375.5	0	NO RECOVERY (Bullet Empty)
15	642	50	CLAYSTONE WITH INTERBEDDED QUARTZOSE SANDSTONE	60	1364.5	40	CARBONACEOUS CLAYSTONE INTERLAMINATED WITH MINOR SANDSTONE
16	612.5	50	ARGILLACEOUS SANDSTONE	61	1340	40	MASSIVE SANDSTONE
17	608	0	NO RECOVERY. Misfire.	62	1336	30	MASSIVE CLAYSTONE
18	599	50	ARGILLACEOUS SANDSTONE	63	1334	45	CLAYSTONE INTERLAMINATED WITH MINOR COAL
19	588.5	0	NO RECOVERY. Misfire.	64	1332	40	MASSIVE SANDSTONE
20	569	50	ARGILLACEOUS SANDSTONE	65	1328.5	40	MASSIVE CLAYSTONE
21	562	50	ARGILLACEOUS SANDSTONE & INTERBEDDED/INTERLAMINATED CLAYSTONE	66	1324.5	0	NO RECOVERY (Bullet Lost)
22	553.5	50	ARENACEOUS CLAYSTONE	67	1316	30	CLAYSTONE INTERLAMINATED WITH MINOR SILTSTONE
23	471.5	0	NO RECOVERY. Misfire	68	1306	25	CLAYSTONE INTERLAMINATED WITH MINOR SILTSTONE
24	467	50	ARGILLACEOUS SANDSTONE	69	1297.5	20	ARGILLACEOUS SANDSTONE
25	429	50	ARGILLACEOUS SANDSTONE	70	1297	20	ARGILLACEOUS SANDSTONE
26	411	0	NO RECOVERY. Bullet lost.	71	1292.5	35	SILTY CLAYSTONE INTERLAMINATED WITH MINOR SILTSTONE
27	398.5	0	NO RECOVERY. Misfire.	72	1275	15	COAL
28	388	45	ARGILLACEOUS SANDSTONE	73	1271	30	MASSIVE CLAYSTONE
29	378.5	50	ARGILLACEOUS SANDSTONE	74	1250.5	40	INTERLAMINATED ARGILLACEOUS SILTSTONE
30	373.5	50	ARGILLACEOUS SANDSTONE	75	1219.5	35	MASSIVE ARGILLACEOUS SILTSTONE
31	1831.5	40	ARGILLACEOUS LITHIC/QUARTZOSE SANDSTONE	76	1186	35	SILTSTONE INTERLAMINATED WITH MINOR SANDSTONE
32	1790	35	ARGILLACEOUS LITHIC/QUARTZOSE SANDSTONE	77	1177	39	SANDSTONE INTERLAMINATED WITH MINOR CARBONACEOUS CLAYSTONE
33	1776.5	0	NO RECOVERY (Bullet Lost)	78	1162	55	MASSIVE SANDSTONE
34	1754.5	45	ARGILLACEOUS LITHIC/QUARTZOSE SANDSTONE	79	1158.5	51	INTERLAMINATED SANDSTONE
35	1749.5	40	MASSIVE CLAYSTONE	80	1151	45	SANDSTONE INTERLAMINATED WITH MINOR COAL
36	1736.5	0	NO RECOVERY (Bullet Lost)	81	1146	37	MASSIVE SANDSTONE
37	1719	40	ARGILLACEOUS LITHIC/QUARTZOSE SANDSTONE	82	1129.5	40	MASSIVE SANDSTONE
38	1703	50	MASSIVE CLAYSTONE	83	1121	35	MASSIVE SANDSTONE
39	1682	40	INTERLAMINATED ARGILLACEOUS QUARTZOSE/LITHIC SANDSTONE	84	1113	40	MASSIVE SANDSTONE
40	1678	25	MASSIVE CLAYSTONE	85	1102	55	MASSIVE SANDSTONE
41	1674	0	NO RECOVERY (Bullet Empty)	86	1097	40	SANDSTONE INTERLAMINATED WITH SILTSTONE
42	1667	35	ARGILLACEOUS LITHIC/QUARTZOSE SANDSTONE	87	1071	45	MASSIVE CLAYSTONE
43	1650	0	NO RECOVERY (Bullet Empty)	88	1044	35	MASSIVE SANDSTONE
44	1645	35	ARGILLACEOUS LITHIC/QUARTZOSE SANDSTONE	89	1040.5	65	SILTSTONE INTERLAMINATED WITH SANDSTONE
45	1630	18	MASSIVE CLAYSTONE	90	1029	50	ARENACEOUS CLAYSTONE