



**GEOLOGICAL COMPLETION REPORT
AND
DRILLING SUMMARY REPORT**

(WCR VOL 1)

PISCES NO.1

(W 772)

VICTORIA PERMIT 12, GIPPSLAND BASIN, AUSTRALIA



UNION TEXAS AUSTRALIA, INC.

OIL and GAS DIVISION

21 JUN 1982

BASIC

UNION TEXAS AUSTRALIA INCORPORATED

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VICTORIA PERMIT 12, OFFSHORE GIPPSLAND BASIN

GEOLOGICAL COMPLETION REPORT AND DRILLING SUMMARY REPORT

UNION TEXAS AUSTRALIA INC.
MELBOURNE
JUNE 1982

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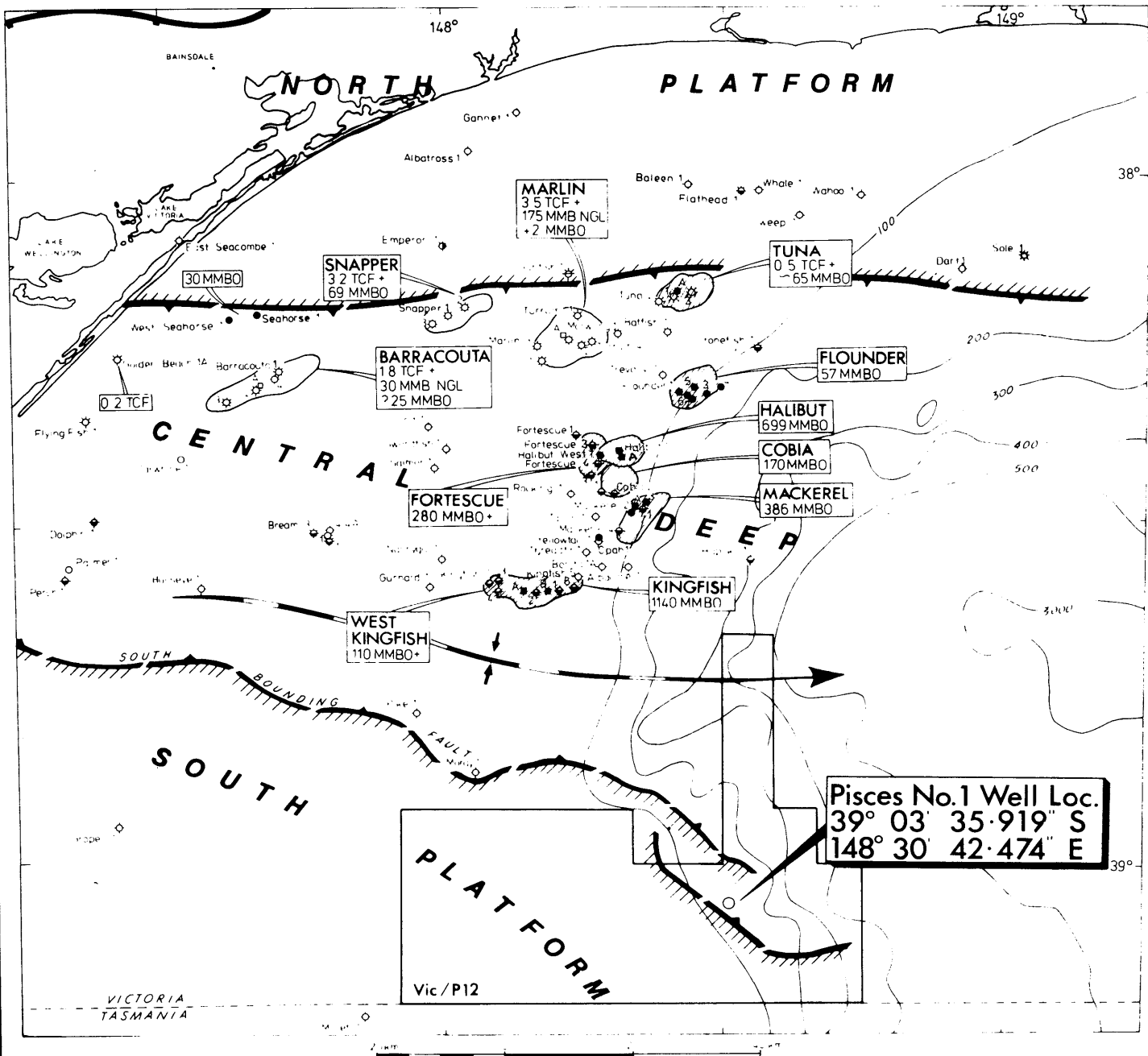


FIGURE 1
 GIPPSLAND BASIN
 LOCATION MAP

1. WELL DATA

Well Name : Pisces No. 1.

Permit Area : Victoria Permit 12, Offshore Gippsland Basin, Bass Strait

Location : Shot-point 1157 on Seismic line GC 80-11A
Latitude : $39^{\circ} 03' 35.919''$ S
Longitude : $148^{\circ} 30' 42.474''$ E

Deviation from intended location : 33 m. at 224.614° azimuth

Water Depth : 122 m.

Rig Elevation (K.B.) : 22 m. above mean sea level
144 m. above sea bed

Rig Designation : Diamond M Epoch semi-submersible drilling unit.

Drilling Contractor : Diamond M Drilling Company, Houston, Texas, U.S.A.

Date rig on hire : 0530 hrs., 13th April 1982

Date Spudded : 1200 hrs., 15th April 1982

Date rig off hire : 1700 hrs., 15th May 1982

Total Depth : 2580 m. Driller's depth
2574 m. Schlumberger depth

Days to reach T.D. : 24

Days on Location : 34

Well Status : Plugged and abandoned

Estimated total cost : Aus\$8,770,000

Casing : 30" to 187 m.
20" to 353 m.
13 $\frac{3}{8}$ " to 1056 m.

Perforations : None

Abandonment Plugs : Plug No. 1 at 2572-2511 m.
Using 138 sacks of "N" neat.

Plug No. 2 at 1842-1750 m.
Using 209 sacks of "N" neat.

Plug No. 3 at 1102-1065 m.
Using 212 sacks of "N" neat.

Plug No. 4 at 1065-1010 m.
Using 128 sacks of "N" neat.

Plug No. 5 at 236-175 m.
Using 142 sacks of "N" neat.

Cores : i) No conventional full body cores
were attempted.

ii) A total of 141 sidewall core were
attempted during the second
logging suite (at 2580 m. = T.D.)
Of these 141 cores a total of
139 were recovered (99%), 1 bullet
was recovered empty and one bullet
was lost in the hole.

Electrical Logs : Two logging suites were run.

i) Suite No. 1
Run 1A : ISF/BHCS/GR/SP (354-917 m.)
GR to surface.
Run 1B : FDC/CNL/GR/Cal (354-921 m.)

ii) Suite No. 2
Run 2A : DLL/MSFL/GR (1057-2574 m.)
GR to 850 m.
Run 2B : FDC/CNL/GR/Cal. (1057-2571 m.)
CNL to 875 m.

Run 2C : BHCS/GR/SP (1057-2574 m.)

Run 2D : HDT (1600-2571 m.)

Run 2E : VSP

Run 2F : CST's (5 Guns)

Shows : Interval 510 - 520 m. : Fine grained sandstones give a dull golden yellow fluorescence and very slow pale white solvent fluorescence on crushing.

Interval 1170-1180 m. : 1% background gas from siltstones. All Cl.

Interval 1674-1760 m. : Traces of golden brown to bright yellow fluorescence from surface of quartz grains, grains of limestone and forams. Occasionally associated with a dull brown staining on the surface of the grains. No solvent cut or cut fluorescence.

Interval 2210-2250 m. : Traces of Bitumen giving a tar-like odour when heated. No sample fluorescence or cut.

Sidewall Cores at 2357 and 2377 m. : Trace golden yellow fluorescence from siltstones.

Interval 2358-2547 m. : Traces of brown oil staining on surface of quartz grains. Giving pinpoint bright gold to dull gold and dull orange sample fluorescence. Slow blooming yellow to very pale white solvent cut fluorescence.

2. LITHOLOGICAL DESCRIPTIONS

Interval Sea-Bed to 370 m.:

No sample returns were recovered while drilling this section. Samples recovered from drop cores obtained during the well site survey indicated that the sea-bed in the immediate area of the Pisces No. 1 well consisted of greenish grey, fine to medium grained, argillaceous SAND.

Interval 370 to 432 m.:

Predominantly SILTSTONE, very pale grey to occasionally greenish grey, blocky fragments, friable to firm, slightly to moderately calcareous, glauconitic, with rare foraminiferal and skeletal fragments. With trace SILTSTONE, brownish grey, blocky, firm, slightly calcareous.

Interval 432 to 442 m.:

LIMESTONE, light grey, occasionally white, medium hard to hard, partly dolomitic cement and also dark grey, hard, dolomitic.

Interval 442 to 484 m.:

Interbedded SILTSTONE, very pale grey to greenish grey, blocky, friable to firm, slightly to moderately calcareous, glauconitic, with trace foraminiferal and skeletal debris; and SAND, medium to coarse grained, loose, unconsolidated, no visible cement, good visible porosity.

Interval 484 to 501 m.:

LIMESTONE, grey to off white, hard, dirty, sandy to silty, occasionally partly dolomitic.

Interval 501 to 541 m.:

Interbedded SILTSTONE, very pale grey to greenish grey, blocky, friable to firm, slightly to moderately calcareous, glauconitic, with trace foraminiferal and skeletal debris; and minor SAND, medium to coarse grained, loose, unconsolidated.

Interval 541 to 544 m.:

VOLCANIC TUFF, multicoloured from dark brown to mottled black, green and reddish brown, blocky, brittle.

Interval 544 to 583 m.:

SILTSTONE, very pale grey to occasional greenish grey, blocky, friable to firm, slightly to moderately calcareous, glauconitic, grading to minor SANDSTONE, very pale brown, very fine grained, friable to brittle, moderate carbonate cement, poor visible porosity.

Interval 583 to 675 m.:

Interbedded CLAY, light grey, soft, sticky, soluble, slightly calcareous; and SILTSTONE, pale grey to greenish grey, blocky, friable to firm, slightly to moderately calcareous, glauconitic. Siltstone grades in part to a minor SANDSTONE equivalent.

Interval 675 to 730 m.:

Interbedded CLAYSTONE, very light grey to light medium grey and brownish grey, blocky, firm, silty, glauconitic, slightly calcareous; CLAY, light grey, very soft, sticky, soluble, slightly calcareous; SAND, clear, colourless to milky, medium to coarse grained, subangular to subrounded, calcareous cement; and LIMESTONE, pale brown, blocky, brittle, microcrystalline.

Interval 730 to 1075 m.:

Predominantly CLAYSTONE, light medium grey to medium grey and becoming occasionally brownish grey in part, blocky, firm, variably silty to locally very silty, moderately calcareous, becoming in part brittle and subfissile, containing good trace foraminiferal and skeletal debris, pyrite and glauconite. With minor interbedded SILTSTONE, light grey to medium grey, friable, moderately calcareous to very calcareous in the lower part of the section, glauconitic, grading in part to a very fine grained SANDSTONE equivalent. Also minor interbedded SAND, opaque to colourless, coarse, subrounded, loose, unconsolidated and LIMESTONE, off white to pale grey and pale brown, brittle, microcrystalline.

Interval 1075 to 1150 m.:

Interbedded CLAYSTONE, light grey to medium grey, blocky, firm, occasionally subfissile, variably silty, variably calcareous, grading in part to a CLAYSTONE, light grey, very soft, globular, soluble, silty, glauconitic and pyritic; SILTSTONE, light grey to light medium and medium grey, occasionally brownish grey, blocky, friable to brittle, moderately to very calcareous, glauconitic; and LIMESTONE, pale beige, very hard, microcrystalline, dolomitic, becoming in part off white, moderately hard, silty and sucrosic. Section contains abundant trace pyrite, forams and glauconite throughout.

Interval 1150 to 1373 m.:

Predominantly interbedded CLAYSTONE, light grey, soft, sticky, amorphous texture, soluble and globular, variably silty, moderately calcareous becoming only slightly calcareous with depth, slightly glauconitic in part; and SILTSTONE, medium grey to occasionally brownish grey, blocky, moderately hard to firm, in part becoming subfissile, variably calcareous and glauconitic. With trace SAND, opaque to translucent, medium to coarse grained, subangular to subrounded, loose and unconsolidated. Abundant forams and skeletal fragments throughout the section.

Interval 1373 to 1448 m.:

Interbedded CLAYSTONE and SILTSTONE as over the interval 1150 to 1373 m., with interbedded LIMESTONE, off white to greyish brown, friable, finely sucrosic, containing disseminated grains of glauconite and pyrite. Also trace LIMESTONE, pale brown, hard, microcrystalline, mudstone texture.

Interval 1448 to 1460 m.:

LIMESTONE, pale brown to light grey, angular, splintery, very hard, microcrystalline, dolomitic in part, occasionally containing disseminated grains of glauconite and pyrite.

Interval 1460 to 1557 m.:

Predominantly CLAYSTONE, light grey, soft, soluble, amorphous, sticky, moderately calcareous, silty, glauconitic; grading to and interbedded with SILTSTONE, medium grey, firm, occasionally subfissile, moderately calcareous, occasionally glauconitic and pyritic. With minor SAND, colourless to milky, medium to coarse, subangular, loose, unconsolidated and trace LIMESTONE, off white, soft, silty and pale brown, hard, microcrystalline.

Interval 1557 to 1605 m.:

Predominantly SILTSTONE, medium grey to greenish grey, blocky, firm, occasionally becoming subfissile, moderately calcareous, glauconitic, occasionally pyritic. With interbedded CLAYSTONE, light grey, soft, soluble, globular, silty, moderately calcareous, occasionally glauconitic; and minor interbedded SAND, medium to coarse grained, loose and unconsolidated.

Interval 1605 to 1683 m.:

Interbedded SILTSTONE and CLAYSTONE as over the interval 1557 to 1605 m. but with the section becoming markedly firmer than previously. The siltstone becomes increasingly subfissile with depth.

Interval 1683 to 1757 m.:

Predominantly SILTSTONE, medium grey to dark medium grey, firm to brittle, blocky to subfissile, moderately calcareous; grading to SHALE, dark medium grey, subfissile to fissile, platy, silty. With interbedded CLAYSTONE, light medium grey, soft becoming firm and blocky, moderately calcareous, glauconitic; and SANDSTONE, off white, fine grained, subrounded, well sorted, white calcite cement, wackestone texture.

Interval 1757 to 1772 m.:

Interbedded SILTSTONE grading to SHALE, and CLAYSTONE as over the interval 1683 to 1757 m. with the interbedded SANDSTONE decreasing to become a minor constituent.

Interval 1772 to 1785 m.:

CLAYSTONE, light medium grey, soft, globular, becoming firm and blocky, moderately calcareous, glauconitic; grading to LIMESTONE, off white, soft, glauconitic, mudstone texture.

Interval 1785 to 1796.5 m.:

CLAYSTONE, light medium grey, soft, globular, becoming firm and blocky, moderately calcareous, glauconitic, pyritic with minor SANDSTONE, off white, fine grained, subrounded, well sorted.

Interval 1796.5 to 1807.5 m.:

SANDSTONE, varicoloured from green to orange-brown and red-brown, fine to very coarse grained, dominantly medium to coarse grained, subangular to subrounded, moderately to well sorted, packstone texture, very glauconitic and pyritic. Fine grained variety grades to SILTSTONE, pale green to light greyish green, very glauconitic and friable. Common granules of glauconite break down in part to a reddish-brown, iron-oxide stained argillaceous matrix. Also minor SANDSTONE, pale brown, very fine grained, argillaceous, cemented with a calcareous cement.

Interval 1807.5 to 1818.5 m.:

SANDSTONE, pale brown to reddish brown, oxide stained, fine grained to very coarse grained, dominantly medium to coarse grained, subangular to subrounded, moderately well sorted becoming less well sorted with depth, packstone texture, very glauconitic and pyritic, with an orange-brown iron-oxide stained argillaceous matrix.

Interval 1818.5 to 1826.5 m.:

CLAYSTONE, very dark green, massive, soft, very silty, glauconitic, slightly calcareous; grading with depth to SILTSTONE, dark green, friable, very argillaceous, very glauconitic and micaceous.

Interval 1826.5 to 1880 m.:

Predominantly SAND, colourless, milky, translucent to opaque, dominantly medium to coarse grained, locally very coarse to granular, dominantly subangular but becoming occasionally subrounded, subspherical, poorly sorted, loose, unconsolidated, very clean, grainstone texture, locally pyritic, with abundant flakes of mica and kaolin. With interbedded SILTSTONE, medium grey to dark grey, firm, moderately calcareous, variably pyritic, occasionally micaceous and kaolinitic.

Interval 1880 to 1902 m.:

SAND, colourless to milky, medium to coarse and granular, subangular, poorly sorted, kaolinitic. Kaolin content increases with depth as sand grain size decreases to an equivalent SILTSTONE, light grey, friable and CLAYSTONE at base of the interval. Claystone is white, soft, kaolinitic, silty and contains abundant inclusions of mica.

Interval 1902 to 1925 m.:

Interbedded SAND, colourless to milky, medium to very coarse and granular, subangular, poorly sorted, loose, unconsolidated, grainstone texture, locally kaolinitic; and SILTSTONE, medium grey to light grey and brownish grey, blocky to subfissile, friable to soft, kaolinitic, micaceous, slightly calcareous.

Interval 1925 to 1945 m.:

CLAYSTONE, dark green to dark brownish grey, soft, carbonaceous, micaceous, glauconitic, silty, slightly calcareous, grading to SILTSTONE, dark brown to dark greenish brown, friable, micaceous, glauconitic.

Interval 1945 to 2052 m.:

Interbedded SAND, clear, colourless to milky, fine to very coarse and granular, subangular to angular, poorly sorted, grainstone texture, pyrite overgrowths to quartz grains, micaceous, kaolinitic, with inclusions of lignite and coal; and SILTSTONE, light grey, friable, very kaolinitic, micaceous, lignitic, non-calcareous. With minor trace CLAYSTONE, medium brownish grey, soft to firm, silty, earthy, occasionally carbonaceous.

Interval 2052 to 2113 m. :

SILTSTONE, medium grey to medium brown and dark brownish grey, friable to soft, argillaceous, micaceous, carbonaceous, non-calcareous to slightly calcareous, occasionally containing fine grained quartz inclusions. Grading with depth to CLAYSTONE, dark grey to dark brown and dark brownish grey, friable, soft to firm, very silty, micromicaceous, lignitic, earthy, non-calcareous to moderately calcareous.

Interval 2113 to 2197 m. :

Predominantly SILTSTONE, dark medium grey, brownish grey, friable, soft to firm, argillaceous, micaceous, locally carbonaceous, kaolinitic, grading to CLAYSTONE, dark brown, firm, micaceous. Interbedded with SANDSTONE, clear, colourless to milky, fine to very coarse and granular, subangular to angular, poorly sorted, micaceous, kaolinitic.

Interval 2197 to 2250m. :

SANDSTONE, light grey, fine to coarse, poorly sorted, very kaolinitic, pyritic, containing abundant trace bitumen in the upper part. Grading to SILTSTONE, light grey, soft to friable, kaolinitic, very argillaceous. With occasional SILTSTONE, very dark brownish grey, soft, very argillaceous, earthy, micropyrritic.

Interval 2250 to 2288m. :

SILTSTONE, medium grey, friable to firm, very argillaceous, micaceous, earthy, micaceous, grading to CLAYSTONE, light grey to light medium grey, soft, soluble, very kaolinitic, very silty, slightly calcareous.

Interval 2288 to 2348m. :

Interbedded SANDSTONE, clear, colourless to milky, fine to very coarse grained, angular to subrounded, poorly sorted, kaolinitic, containing abundant inclusions of mica and coal; and SILTSTONE, light grey to medium grey, friable to firm, argillaceous, micaceous, kaolinitic and carbonaceous to lignitic. SILTSTONE grades to CLAYSTONE, light medium grey, soft, soluble, kaolinitic, micaceous, non-calcareous.

Interval 2348 to 2458m. :

Predominantly interbedded SILTSTONE, light grey to medium grey, friable to firm, argillaceous, kaolinitic, micaceous, becoming dark brownish grey, lignitic, earthy, locally containing fragments of coal and containing fine grains of quartz. Grading to CLAYSTONE, brownish grey, soft, soluble, micaceous, earthy, carbonaceous. With interbedded SANDSTONE, clear, colourless to milky, fine to very coarse grained and occasionally granular, subangular to angular, poorly sorted, kaolinitic and micaceous, containing trace pyrite.

Interval 2458 to 2500 m.:

Interbedded SANDSTONE, white to light grey, very fine to medium grained, kaolinitic matrix, very poorly sorted, containing abundant inclusions of mica, wackestone texture; and SILTSTONE, very light grey to medium grey becoming dark brownish grey, friable, argillaceous, micaceous and lignitic. Siltstone grades to an equivalent CLAYSTONE, light greyish brown, soft, soluble, slightly calcareous. Section contains abundant mica and kaolin throughout with trace coal and pyrite.

Interval 2500 to 2580 m. (T.D.)

Interbedded CLAYSTONE, very dark grey to grey black, firm, blocky, silty, micaceous, earthy, lignitic, occasionally subfissile, containing fragments of coal; SILTSTONE, very dark grey to medium brownish grey, soft to friable, micaceous, kaolinitic, argillaceous, lignitic in part; and thinly interbedded SANDSTONE, clear, colourless, fine to coarse grained, predominantly medium grained, subangular to angular, poorly sorted, quartz grains are commonly shattered, containing abundant kaolin and mica. Section contains abundant fragments of COAL, black brittle, vitreous.

PISCES-1.

I. Sidewall Cores as shown in the Geological Completion Report and Drilling Summary Report.

II. Sidewall Cores as shown on the Schlumberger Sample Jars.

	I	DEPTH	II	I	DEPTH	II	I	DEPTH	II
	1	2564.5	1	48	2218.0	112	95	1834.0	128
	2	2559.5	82	49	2207.5	28	96	1287.0	44
**	3	2554.0	2	50	2191.5	102	97	1825.0	57
	4	2545.5	3	51	2183.0	113	98	1823.0	129
	5	2535.0	83	52	2179.0	29	99	1820.5	58
	6	2530.5	4	53	2173.0	30	100	1816.5	130
	7	2524.5	84	* 54	2168.0	31	101	1812.5	45
	8	2514.0	5	55	2161.0	103	102	1808.5	131
	9	2512.5	85	56	2157.0	104	103	1803.0	46
	10	2509.0	6	57	2133.0	32	104	1799.0	47
	11	2505.0	86	58	2112.5	105	105	1796.5	132
	12	2502.0	7	59	2107.0	52	106	1794.5	59
	13	2496.5	87	60	2097.0	53	107	1792.5	133
	14	2490.0	8	61	2084.0	114	108	1791.0	60
	15	2487.5	88	62	2081.0	54	109	1769.5	61
	16	2484.5	9	63	2068.5	106	110	1745.5	62
	17	2473.0	10	64	2060.0	33	111	1722.5	63
	18	2466.5	89	65	2057.0	107	112	1696.5	134
	19	2462.5	11	66	2053.5	34	113	1687.0	135
	20	2459.0	12	67	2049.0	108	114	1684.5	136
	21	2451.5	90	68	2045.5	109	115	1681.5	137
	22	2444.5	13	69	2039.0	35	116	1679.5	64
	23	2441.5	14	70	2029.5	110	117	1668.5	65
	24	2439.5	91	71	2012.5	36	118	1643.0	66
	25	2435.5	15	72	2004.0	111	119	1633.0	67
	26	2432.5	16	73	1985.5	115	120	1620.0	68
**	27	2429.0	92	* 74	1982.0	-	121	1604.0	69
	28	2420.0	17	75	1968.5	116	122	1589.5	48
	29	2400.5	18	76	1964.5	117	123	1575.5	49
	30	2391.0	93	77	1954.0	38	124	1564.5	50
	31	2388.0	19	78	1944.0	118	125	1553.0	51
**	32	2379.5	94	79	1940.0	55	126	1541.0	70
	33	2377.0	20	80	1936.0	119	** 127	1527.5	71
	34	2360.5	95	81	1932.0	56	128	1514.0	72
	35	2357.0	21	82	1927.0	120	129	1498.5	73
	36	2343.0	96	83	1919.3	39	130	1487.0	138
	37	2320.0	22	84	1911.0	121	131	1475.0	74
	38	2305.5	97	85	1906.0	122	132	1464.0	139
	39	2301.0	23	86	1901.5	40	133	1454.0	75
	40	2295.5	98	87	1899.0	123	134	1398.0	76
	41	2287.5	24	88	1895.0	124	135	1351.5	77
	42	2284.5	99	89	1886.5	41	136	1293.0	78
	43	2281.5	25	90	1881.0	125	137	1251.0	79
	44	2274.5	100	91	1863.0	42	138	1198.5	80
	45	2260.0	26	92	1858.0	126	139	1155.0	140
	46	2249.0	101	93	1850.0	127	140	1127.0	81
	47	2230.5	27	94	** 1843.5	43	141	1075.0	141

ALL DEPTHS IN METRES.

* = No Recovery

** = Discrepancy of .5 metres between depth as shown in Geological Completion Report and depth as shown on Schlumberger Sample Jar. The depth on this list is what is shown on Schlumberger Sample Jar.

3. SIDEWALL CORE DESCRIPTIONS , DEPTH VARIES WITH THAT SHOWN ON SCHLUMBERGER SAMPLE BOTTLES.

SWC Number 1. Depth 2564.5m. Recovery 20mm.

SILTSTONE, medium greyish brown, friable, non-calcareous, kaolinitic, micaceous, argillaceous. No show.

SWC Number 2. Depth 2559.5m. Recovery 22mm.

CLAYSTONE, very dark grey, firm, blocky, silty, earthy, micaceous. No show.

SWC Number 3. Depth 2554.5m. Recovery 20mm.

SILTSTONE, medium brown, friable, subfissile, slightly calcareous, very kaolinitic and micaceous, argillaceous. No show.

SWC Number 4. Depth 2545.5m. Recovery 20mm.

CLAYSTONE, very dark grey, soft to friable, very silty, carbonaceous, micaceous, non-calcareous. No show.

SWC Number 5. Depth 2535m. Recovery 20mm.

CLAYSTONE, very dark grey, moderately firm, blocky, micaceous, lignitic, earthy. No show.

SWC Number 6. Depth 2530.5m. Recovery 22mm.

SILTSTONE, very dark grey, soft to friable, very micaceous, argillaceous, lignitic, non-calcareous.
Show: Contains a few very fine grained quartz grains which exhibit a yellow-white sample fluorescence. No cut.

SWC Number 7. Depth 2524.5m. Recovery 20mm.

CLAYSTONE, very dark grey, moderately firm, blocky, silty, micaceous, lignitic, earthy. No show.

SWC Number 8. Depth 2514m. Recovery 17mm.

SILTSTONE, medium brownish grey, friable, very micaceous, argillaceous, non-calcareous. No show.

SWC Number 9. Depth 2512.5m. Recovery 20mm.

CLAYSTONE, grey black, moderately firm, subfissile, silty, micaceous, very lignitic, earthy. No show.

SWC Number 10. Depth 2509m. Recovery 13mm.

CLAYSTONE, very dark grey, soft, massive, carbonaceous, silty, earthy, containing fragments of COAL, black, brittle. No show.

SWC Number 11. Depth 2505m. Recovery 20mm.

CLAYSTONE, grey black, moderately firm, subfissile, micaceous, very lignitic, earthy. With a few grains of SILTSTONE, brown stained.
Show: Dull golden yellow sample fluorescence, no cut.
Tarry stain?

SWC Number 12. Depth 2502m. Recovery 15mm.

SANDSTONE, white, very fine to fine grained, friable, silty, containing 60% kaolinitic matrix and common inclusions of dark mica.
No show.

SWC Number 13. Depth 2496.5m. Recovery 20mm.

SILTSTONE, light brownish grey, friable to soft, very micaceous, argillaceous. No show.

SWC Number 14. Depth 2490m. Recovery 17mm.

SANDSTONE, white, very fine to fine grained, friable, silty, kaolinitic matrix, with common inclusions of dark mica. Mica often appears chloritised. No show.

SWC Number 15. Depth 2487.5m. Recovery 25mm.

SILTSTONE, grading to SANDSTONE, light grey, friable, very fine grained, micaceous, kaolinitic matrix. No show.

SWC Number 16. Depth 2484.5m. Recovery 15mm.

SANDSTONE, white, very fine to medium grained, very poorly sorted, silty, kaolinitic, with common inclusions of dark mica. No show.

SWC Number 17. Depth 2473m. Recovery 15mm.

MICACEOUS CLAYSTONE, very dark brown, friable, containing very minor silt-sized grains of quartz, with a very minor argillaceous matrix, laminated. Containing minor laminations of white kaolin. No show.

- SWC Number 18. Depth 2466.5m. Recovery 27mm.
SILTSTONE, medium grey, very friable, argillaceous, micaceous, lignitic.
No show.
- SWC Number 19. Depth 2462.5m. Recovery 18mm.
SILTSTONE, medium brown, friable, very argillaceous, micaceous, slightly
calcareous, sulphurous. No show.
- SWC Number 20. Depth 2459m. Recovery 22mm.
SANDSTONE, light grey, silt to medium sized quartz grains, very poor
sorting, very micaceous, laminated with up to 50% kaolin
matrix. Micas are partly chloritised. No show.
- SWC Number 21. Depth 2451.5m. Recovery 22mm.
SILTSTONE, very light grey, friable, mostly consisting of a kaolinitic
matrix containing minor silt sized quartz grains, minor
dark mica as inclusions. No show.
- SWC Number 22. Depth 2444.5m. Recovery 20mm.
SANDSTONE, light grey, very fine to medium, predominantly very fine
grained, moderately well sorted, with a kaolinitic matrix
and common inclusions of partly chloritised mica. No show.
- SWC Number 23. Depth 2441.5m. Recovery 15mm.
SILTSTONE, medium brownish grey, friable, very slightly calcareous,
argillaceous, micaceous, containing rare medium sized grains
of quartz as inclusions. No show.
- SWC Number 24. Depth 2439.5m. Recovery 30mm.
SILTSTONE, light grey, friable, dominantly quartzose with minor amounts
of kaolin, mica and abundant fragments of coal, black, brittle.
No show.
- SWC Number 25. Depth 2435.5m. Recovery 12mm.
SILTSTONE, medium grey, friable, very argillaceous, sticky, micaceous.
No show.
- SWC Number 26. Depth 2432.5m. Recovery 17mm.
SILTSTONE, medium grey, friable, very argillaceous, sticky, micaceous.
No show.

SWC Number 27. Depth 2429m. Recovery 12mm.

SILTSTONE, dark brownish grey, firm to friable, blocky, very argillaceous, micaceous. No show.

SWC Number 28. Depth 2420m. Recovery 20mm.

SILTSTONE, very light grey, soft, highly kaolinitic, very micaceous, slightly calcareous. No show.

SWC Number 29. Depth 2400.5m. Recovery 22mm.

SILTSTONE, very light grey, grading to a very fine grained SANDSTONE, soft, very micaceous, partly chloritised, with a highly kaolinitic matrix, containing fragments of COAL, black, brittle. No show:

SWC Number 30. Depth 2391m. Recovery 25mm.

SILTSTONE, medium grey, firm to friable, very argillaceous, micaceous. No show.

SWC Number 31. Depth 2388m. Recovery 17mm.

SILTSTONE, medium brownish grey, soft, argillaceous, very micaceous, non calcareous. No show.

SWC Number 32. Depth 2379.5m. Recovery 30mm.

SILTSTONE, medium grey, firm to friable, very kaolinitic, micaceous, lignitic. No show.

SWC Number 33. Depth 2377m. Recovery 15mm.

SILTSTONE, medium brownish grey, soft, argillaceous, very micaceous, non-calcareous. Containing fragments of COAL, black, brittle. Show: Trace dull gold fluorescence. No cut.

SWC Number 34. Depth 2360.5m. Recovery 25mm.

SILTSTONE, light grey, friable to firm, kaolinitic, micaceous, lignitic. No show.

SWC Number 35. Depth 2357m. Recovery 20mm.

SILTSTONE, medium brownish grey, soft, argillaceous, very micaceous, non-calcareous. Containing fragments of COAL, black, brittle. Show: Trace dull gold fluorescence. No cut.

- SWC Number 36. Depth 2343m. Recovery 20mm
SILTSTONE, light grey, friable to firm, kaolinitic, micaceous, lignitic.
No show.
- SWC Number 37. Depth 2320m. Recovery 15mm.
SILTSTONE, medium grey, grading to a very fine grained SANDSTONE,
friable, argillaceous, very micaceous. No show.
- SWC Number 38. Depth 2305.5m. Recovery 18mm.
SILTSTONE, medium grey, friable to firm, very argillaceous, kaolinitic,
micaceous, lignitic. No show.
- SWC Number 39. Depth 2301m. Recovery 22mm.
SANDSTONE, very light grey, friable, silt to very fine grained, quartzose,
kaolinitic and micaceous. Containing abundant fragments
of COAL, black, brittle. No show.
- SWC Number 40. Depth 2295.5m, Recovery 20mm.
SILTSTONE, light grey, friable, argillaceous, kaolinitic, micaceous.
No show.
- SWC Number 41. Depth 2287.5m. Recovery 18mm.
SILTSTONE, medium grey, friable, very argillaceous, micaceous. No show.
- SWC Number 42. Depth 2284.5m. Recovery 30mm.
SILTSTONE, medium grey, friable, very argillaceous, micaceous. No show.
- SWC Number 43. Depth 2281.5m. Recovery 15mm.
SILTSTONE, medium grey, friable to firm, very argillaceous, micromicaceous.
No show.
- SWC Number 44. Depth 2274.5m. Recovery 25mm.
CLAYSTONE, medium grey, friable, very silty, slightly calcareous. No show.
- SWC Number 45. Depth 2260m. Recovery 15mm.
SILTSTONE, medium grey, friable to firm, very argillaceous, micromicaceous,
grading in part to a very fine grained SANDSTONE, medium grey,
slightly calcareous. No show.

SWC Number 46. Depth 2249m. Recovery 12mm.

SILTSTONE, light medium grey, friable, blocky, very argillaceous, kaolinitic, wackestone texture. No show.

SWC Number 47. Depth 2230.5m. Recovery 22mm.

SILTSTONE, very dark brownish grey, soft, very argillaceous, micropyrritic, earthy. No show.

SWC Number 48. Depth 2218m. Recovery 22mm.

SILTSTONE, very light grey, friable, very kaolinitic matrix with minor silt sized quartz grains and inclusions of mica. No show.

SWC Number 49. Depth 2207.5m. Recovery 18mm.

SANDSTONE, very light grey, silt to fine grained, friable, soft, somewhat sticky due to the very high proportion of kaolin and argillaceous matrix, non-calcareous, micaceous. No show.

SWC Number 50. Depth 2191.5m. Recovery 22mm.

CLAYSTONE, very light grey, moderately soft, dominantly kaolinitic matrix, minor silt. No show.

SWC Number 51. Depth 2183m. Recovery 20mm.

CLAYSTONE, very dark grey, moderately firm, massive, silty, lignitic, non-calcareous. No show.

SWC Number 52. Depth 2179m. Recovery 22mm.

SILTSTONE, medium grey, friable to soft, very argillaceous, slightly calcareous, containing rare inclusions of coarse quartz grains. No show.

SWC Number 53. Depth 2173m. Recovery 18mm.

SILTSTONE, medium brown, friable to soft, very argillaceous, kaolinitic, non-calcareous. No show.

SWC Number 54. Depth 2168m.

No recovery. (Bullet empty).

SWC Number 55. Depth 2161m. Recovery 28mm.

SILTSTONE, medium brown, friable to moderately firm, abundant clay matrix. micaceous. No show.

SWC Number 56. Depth 2157m. Recovery 20mm.

CLAYSTONE, dark brown, firm, containing interspersed inclusions of silt sized quartz grains, trace mica, inclusions of kaolin. No show.

SWC Number 57. Depth 2133m. Recovery 18mm.

SILTSTONE, grading to SANDSTONE, medium grey, very fine grained, argillaceous, micaceous, lignitic, slightly calcareous. No show.

SWC Number 58. Depth 2112.5m. Recovery 22mm.

CLAYSTONE, dark brown, firm to friable, very silty, micromicaceous, with rare inclusions of loose quartz grains. No show.

SWC Number 59. Depth 2107m. Recovery 10mm.

CLAYSTONE, dark brownish grey, friable, blocky, very silty, slightly calcareous, earthy, lignitic.

SWC Number 60. Depth 2097m. Recovery 50mm.

CLAYSTONE, medium grey, very soft, sticky, slightly silty, moderately calcareous. No show.

SWC Number 61. Depth 2084m. Recovery 30mm.

SILTSTONE, medium brown, very friable, contains inclusions of fine to medium sized quartz grains, argillaceous, micaceous, non-calcareous. No show.

SWC Number 62. Depth 2081m. Recovery 30mm.

SILTSTONE, medium grey, soft, slightly calcareous, very argillaceous. No show.

SWC Number 63. Depth 2068.5m. Recovery 25mm.

CLAYSTONE, dark grey, firm, massive, silty, lignitic, micromicaceous, non-calcareous. No show.

SWC Number 64. Depth 2060m. Recovery 18mm.

SILTSTONE, grading in part to SANDSTONE, medium dark brown, very fine grained, moderately friable, moderately hard to firm, slightly argillaceous matrix, micaceous. No show.

SWC Number 65. Depth 2057m. Recovery 20mm.

SILTSTONE, dark brownish grey, friable, micaceous, argillaceous, non-calcareous. No show.

SWC Number 66. Depth 2053.5m. Recovery 20mm.

SILTSTONE, medium brown, friable, soft, sticky, very argillaceous, very micaceous. No show.

SWC Number 67. Depth 2049m. Recovery 25mm.

SILTSTONE, light grey, friable, kaolinitic, micaceous, lignitic, non-calcareous. No show.

SWC Number 68. Depth 2045.5m. Recovery 32mm.

SILTSTONE, very light grey, friable, very kaolinitic, micaceous, lignitic, non-calcareous. No show.

SWC Number 69. Depth 2039m. Recovery 32mm.

SANDSTONE, light greyish brown, silt to fine grained, very friable, soft, with a minor argillaceous matrix, abundantly micaceous. No show.

SWC Number 70. Depth 2029.5m. Recovery 30mm.

SILTSTONE, very light grey, friable, very kaolinitic, micaceous, lignitic, non-calcareous. No show.

SWC Number 71. Depth 2012.5m. Recovery 40mm.

SANDSTONE, light greyish brown, silt to fine grained, very friable, soft, micaceous, with a minor argillaceous matrix. Containing fragments of coal. Micas are slightly chloritised. No show.

SWC Number 72. Depth 2004m. Recovery 20mm.

SANDSTONE, very light grey, very friable, silt to medium grained, dominantly very fine grained, poorly sorted, very micaceous, minor kaolinitic matrix. No show.

SWC Number 73. Depth 1985.5m. Recovery 35mm.

SILTSTONE, grading to SANDSTONE, medium greyish brown, very friable. Sandstone very fine grained with a minor argillaceous matrix, micaceous, lignitic. No show.

SWC Number 74. Depth 1982m.

No recovery (bullet lost).

SWC Number 75. Depth 1968.5m. Recovery 30mm.

SILTSTONE, medium brownish grey, friable, argillaceous, micaceous, lignitic, very slightly calcareous. No show.

SWC Number 76. Depth 1964.5m. Recovery 40mm.

SANDSTONE, light brownish grey, very fine to fine grained, moderately well sorted, minor kaolinitic matrix, with occasional inclusions of grains of coal and mica. No show.

SWC Number 77. Depth 1954m. Recovery 54mm.

SILTSTONE, grading to SANDSTONE, very light brownish grey, very fine grained, friable to soft, very micaceous, kaolinitic, with inclusions of small fragments of coal. No show.

SWC Number 78. Depth 1944m. Recovery 30mm.

SILTSTONE, dark greenish brown, friable, argillaceous, with abundant inclusions of fine grained glauconite. No show.

SWC Number 79. Depth 1940m. Recovery 25mm.

CLAYSTONE, dark brownish grey, massive, friable to soft, very silty, slightly calcareous, micromicaceous. No show.

SWC Number 80. Depth 1936m. Recovery 25mm.

SILTSTONE, dark brown, very fine grained, friable, micaceous, non-calcareous. No show.

SWC Number 81. Depth 1932m. Recovery 20mm.

CLAYSTONE, dark green, very soft, sticky, containing inclusions of abundant silt-sized glauconite grains, very slightly calcareous. No show.

- SWC Number 82. Depth 1927m. Recovery 18mm.
SILTSTONE, very light grey, soft, very kaolinitic, micaceous, non-calcareous.
No show.
- SWC Number 83. Depth 1919.3m. Recovery 33mm.
SILTSTONE, brownish grey, friable, to soft, very kaolinitic, slightly
calcareous, micaceous. No show.
- SWC Number 84. Depth 1911m. Recovery 30mm.
SILTSTONE, very light grey, soft, very kaolinitic, micaceous, non-calcareous.
No show.
- SWC Number 85. Depth 1906m. Recovery 30mm.
SILTSTONE, medium grey, soft, kaolinitic, non-calcareous, grading to
CLAYSTONE, very dark grey, massive, weakly micaceous, non-
calcareous. No show.
- SWC Number 86. Depth 1901.5m. Recovery 15mm.
CLAYSTONE, white, crystalline, soft, kaolinitic, swelling when acid
added, slightly calcareous. With minor inclusions of silt
sized quartz grains. No show.
- SWC Number 87. Depth 1899m. Recovery 30mm.
CLAYSTONE, white, soft, predominantly formed of kaolin with a minor silt
matrix and inclusions of mica. No show.
- SWC Number 88. Depth 1895m. Recovery 20mm.
SILTSTONE, grading to SANDSTONE, light grey, friable, silt to medium grained
quartz, dominantly fine to silt sized, very poor sorting, very
high proportion of kaolinitic matrix, minor inclusions of Mica.
No show.
- SWC Number 89. Depth 1886.5m. Recovery 33mm.
SANDSTONE, white, silt to very fine grained, with 50% kaolinitic matrix,
white, soft. Dark brown inclusions of mica flakes. No show.
- SWC Number 90. Depth 1881m. Recovery 20mm.
SILTSTONE, dark grey, friable, very argillaceous, micaceous, minor kaolin,
containing inclusions of quartz granules. No show.

SWC Number 91. Depth 1863m. Recovery 37mm.

SANDSTONE, brownish grey, silt to very fine grained, friable, very micaceous, with traces of coal as inclusions. No show.

SWC Number 92. Depth 1858m. Recovery 25mm.

SILTSTONE, grading to SANDSTONE, very light grey, friable. Sandstone is very fine grained with a kaolinitic matrix, common inclusions of mica and rare medium sized quartz grains. No show.

SWC Number 93. Depth 1850m. Recovery 45mm.

SANDSTONE, light grey, silt to medium sized quartz grains, dominantly very fine grained, very poor sorting, argillaceous, micaceous with a locally abundant kaolinitic matrix. No show.

SWC Number 94. Depth 1843.5m. Recovery 35mm.

SILTSTONE, medium grey, friable to sticky, very argillaceous, slightly kaolinitic, with rare inclusions of fine grained sand, slightly calcareous. No show.

SWC Number 95. Depth 1834m. Recovery 25mm.

CLAYSTONE, very dark brownish grey, firm, subfissile, earthy, non-calcareous. No show.

SWC Number 96. Depth 1827m. Recovery 35mm.

SANDSTONE, dirty greenish brown, very fine to fine grained, rare coarse grains, argillaceous matrix, with abundant silt sized glauconite grains, non micaceous. No show.

SWC Number 97. Depth 1825m. Recovery 25mm.

SILTSTONE, very dark green, poorly friable to moderately hard, with occasional inclusions of medium sized quartz grains, very glauconitic, minor mica, some argillaceous matrix, non-calcareous. No show.

SW Number 98. Depth 1823m. Recovery 30mm.

SILTSTONE, dark green, friable, argillaceous, very glauconitic, micaceous. No show.

SWC Number 99. Depth 1820.5m. Recovery 23mm.

CLAYSTONE, very dark green, massive, soft, very silty, slightly calcareous. No show.

SWC Number 100. Depth 1816.5m. Recovery 35mm.

SANDSTONE, reddish brown, friable to brittle in part, very fine to very coarse grained, very poorly sorted, red clay matrix, micaceous, with occasional grains of glauconite. No show.

SWC Number 101. Depth 1812.5m. Recovery 40mm.

SANDSTONE, multicoloured from brown to rust to yellowish orange and green, fine to coarse grained, very poorly sorted, abundant varicoloured clay matrix, friable, very glauconitic.

SWC Number 102. Depth 1808.5m. Recovery 25mm.

SANDSTONE, reddish brown, friable to brittle in part, very fine to very coarse grained, very poorly sorted, red clay matrix, micaceous, with distinctive greenish patches rich in glauconitic grains. No show.

SWC Number 103. Depth 1803m. Recovery 28mm.

SILTSTONE, grading to SANDSTONE, very light greyish green, very fine grained, friable, with occasional coarse grains of quartz, very glauconitic. Some decomposition of glauconite grains to an orange coloured clay. No show.

SWC Number 104. Depth 1799m. Recovery 40mm.

SILTSTONE, grading to SANDSTONE, very light greyish green, very fine grained, friable, very glauconitic. With perhaps evidence of the breakdown of the glauconitic grains to a rusty coloured clay product.

SWC Number 105. Depth 1796.5m. Recovery 35mm.

SILTSTONE, grading to SANDSTONE, pale green, friable. Sandstone is very fine grained and contains abundant inclusions of glauconite. No show.

SWC Number 106. Depth 1794.5m. Recovery 37mm.

CLAYSTONE, dark medium grey, fairly soft to friable, very pyritic, very calcareous. No show.

SWC Number 107. Depth 1792.5m. Recovery 15mm.

CLAYSTONE, medium grey, massive, moderately calcareous. No show.

SWC Number 108. Depth 1791m. Recovery 50mm.

CLAYSTONE, medium grey, massive, fairly soft, very calcareous.
No show.

SWC Number 109. Depth 1769.5m. Recovery 35mm.

CLAYSTONE, dark medium grey, massive, firm, moderately calcareous.
No show.

SWC Number 110. Depth 1745.5m. Recovery 40mm.

CLAYSTONE, medium brownish grey, massive, firm, subfissile, very calcareous. No show.

SWC Number 111. Depth 1722.5m. Recovery 35mm.

CLAYSTONE, medium brownish grey, massive, firm, subfissile, moderately calcareous. No show.

SWC Number 112. Depth 1696.5m. Recovery 20mm.

CLAYSTONE, medium grey, firm, massive, subfissile, moderately calcareous.
No show.

SWC Number 113. Depth 1687m. Recovery 35mm.

CLAYSTONE, medium grey, firm, massive, subfissile, moderately calcareous.
No show.

SWC Number 114. Depth 1684.5m. Recovery 35mm.

CLAYSTONE, medium grey, firm, massive, subfissile, very calcareous.
No show.

SWC Number 115. Depth 1681.5m. Recovery 40mm.

CLAYSTONE, medium grey, firm, massive, subfissile, very calcareous.
No show.

SWC Number 116. Depth 1679.5m. Recovery 42mm.

CLAYSTONE, medium brownish grey, massive, firm, subfissile, micromicaceous, very calcareous (marl). No show.

SWC Number 117. Depth 1668.5m. Recovery 40mm.

CLAYSTONE, medium brownish grey, massive, firm, subfissile, micromicaceous, very calcareous (marl). No show.

SWC Number 118. Depth 1643m. Recovery 40mm.

CLAYSTONE, medium grey, massive, firm, subfissile, micromicaceous, very calcareous (marl). No show.

SWC Number 119. Depth 1633m. Recovery 22mm.

CLAYSTONE, medium grey, firm, massive, subfissile, micromicaceous, moderately calcareous. No show.

SWC Number 120. Depth 1620m. Recovery 35mm.

CLAYSTONE, medium grey, firm, subfissile, very calcareous. No show.

SWC Number 121. Depth 1604m. Recovery 35mm.

CLAYSTONE, medium grey, firm, subfissile, very calcareous. No show.

SWC Number 122. Depth 1589.5m. Recovery 40mm.

CLAYSTONE, medium dark grey, firm, blocky, moderately calcareous.

SWC Number 123. Depth 1575.5m. Recovery 35mm.

CLAYSTONE, dark medium grey, firm, blocky, moderately calcareous.

SWC Number 124. Depth 1564.5m. Recovery 30mm.

CLAYSTONE, medium grey, moderately hard, blocky, silty, very calcareous.

SWC Number 125. Depth 1553m. Recovery 40mm.

CLAYSTONE, dark medium grey, firm, blocky, massive, very calcareous.

SWC Number 126. Depth 1541m. Recovery 45mm.

CLAYSTONE, medium grey, firm, massive, subfissile, very calcareous.
No show.

SWC Number 127. Depth 1527.5m. Recovery 40mm.

CLAYSTONE, medium grey, firm, massive, subfissile, very calcareous.
No show.

SWC Number 128. Depth 1514m. Recovery 50mm.

CLAYSTONE, dark medium grey, subfissile, brittle, slightly calcareous, micromicaceous. No show.

SWC Number 129. Depth 1498.5m. Recovery 35mm.

CLAYSTONE, medium grey, firm, massive, subfissile, very calcareous (marl). No show.

SWC Number 130. Depth 1487m. Recovery 45mm.

CLAYSTONE, greenish grey, soft, massive, subfissile, very calcareous. No show.

SWC Number 131. Depth 1475m. Recovery 35mm.

CLAYSTONE, medium grey, firm, massive, subfissile, very calcareous (marl). No show.

SWC Number 132. Depth 1464m. Recovery 35mm.

CLAYSTONE, medium grey, soft, massive, subfissile, very calcareous. No show.

SWC Number 133. Depth 1454m. Recovery 30mm

CLAYSTONE, medium grey, firm, massive, subfissile, very calcareous (marl). No show.

SWC Number 134. Depth 1398m. Recovery 32mm.

CLAYSTONE, medium grey, firm, massive, subfissile, very calcareous. No show.

SWC Number 135. Depth 1351.5m. Recovery 40mm.

CLAYSTONE, medium grey, firm, massive, subfissile, very calcareous. No show.

SWC Number 136. Depth 1293m. Recovery 38mm.

CLAYSTONE, medium grey, firm, massive, subfissile, very calcareous, in part micropyrritic. No show.

SWC Number 137. Depth 1251m. Recovery 38mm.

CLAYSTONE, medium grey, firm, massive, subfissile, very calcareous, containing inclusions of very small shell fragments. No show.

SWC Number 138. Depth 1198.5m. Recovery 50mm.

CLAYSTONE, medium grey, firm, massive, subfissile, moderately calcareous.
No show.

SWC Number 139. Depth 1155m. Recovery 35mm.

CLAYSTONE, medium grey, soft, massive, subfissile, moderately calcareous.
No show.

SWC Number 140. Depth 1127m. Recovery 42mm.

CLAYSTONE, medium grey, firm, massive, subfissile, moderately calcareous.
No show.

SWC Number 141. Depth 1075m. Recovery 40mm.

CLAYSTONE, medium grey, soft, massive, subfissile, moderately calcareous.
No show.

Results of Sidewall Coring Programme

Total Shot : 141

Total Recovered : 139 (99%)

Bullets empty 1; Bullets misfired 0; Bullets lost 1.

4. SUMMARY OF DRILLING OPERATIONS

The Diamond M Epoch dropped its first anchor at 0530 hrs on 13th April, 1982. The Pisces 1 well was spudded at 1200 hrs on 15th April. A 36" hole was drilled to 190m. when 30" casing was run and cemented at 187 m. The riser was run and a 12 $\frac{1}{4}$ " hole drilled to 368 m. After insuring the well was static the riser was pulled and the hole opened to 26". 20" casing was run and cemented at 353 m. The BOP stack and riser were run and a 12 $\frac{1}{4}$ " hole drilled to 1071 m. A first suite of logs was completed. A 17 $\frac{1}{2}$ " underreamer was used to open the hole to 17 $\frac{1}{2}$ " and 13 $\frac{3}{8}$ " casing was run to 1056 m. and cemented. A 12 $\frac{1}{2}$ " hole was drilled to 2580 m. and logs were run to T.D. No significant indications of hydrocarbons were encountered so the well was plugged and abandoned and the rig released at 1700 hrs on 15th May, 1982.

Estimated well cost at the time of release was Aus\$8,770,000.

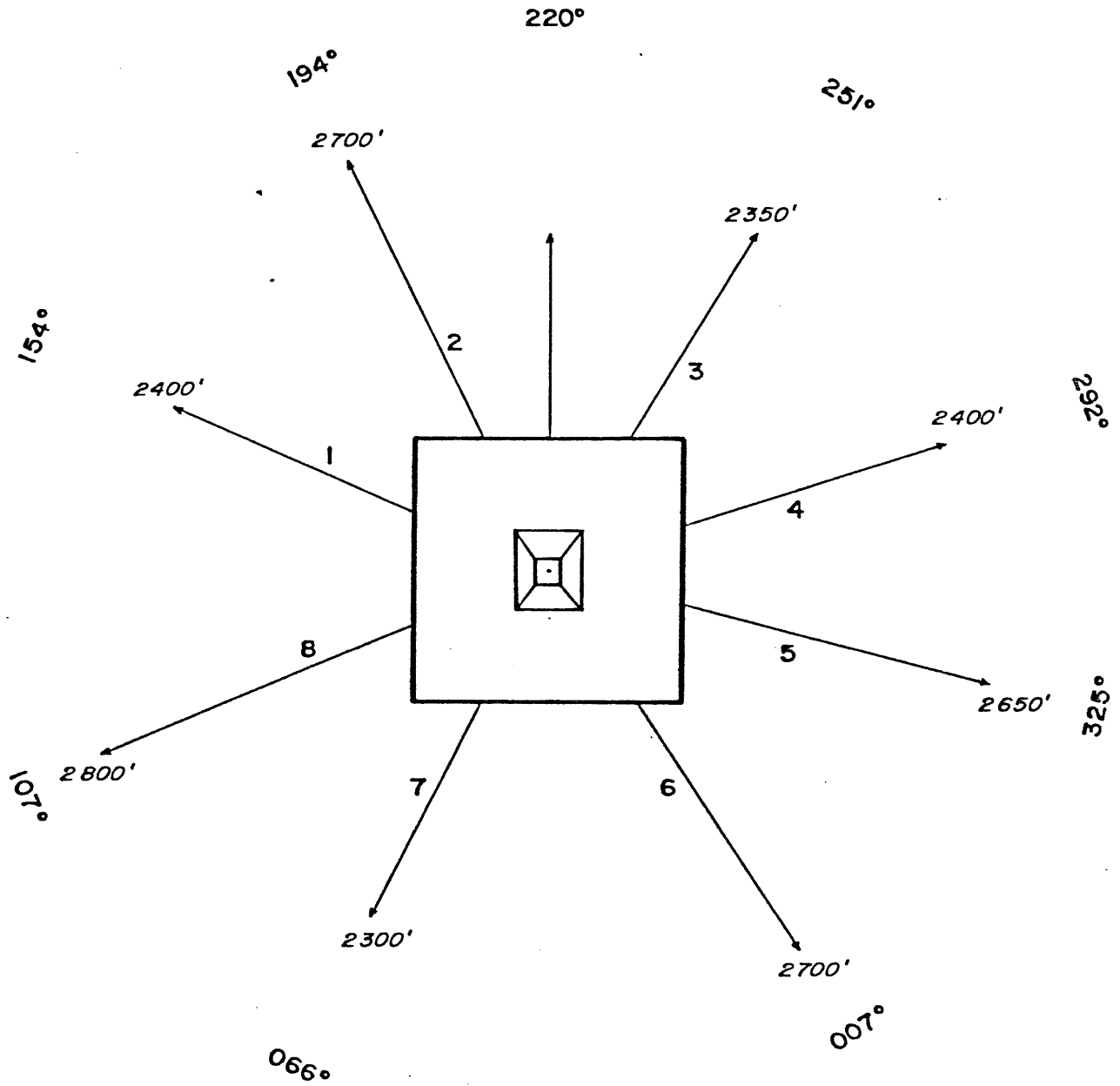
5. SUMMARY OF PREPARATIONS

The semi-submersible "Diamond M Epoch" was towed from South America to Australia, under contract to Phillips Australia. It stopped in Eden Harbour to clear customs and resupply. It was then towed to the Pisces 1 location. The first anchor was dropped at 0543 on 13th April, 1982. In accordance with the assignment between Phillips Australian Oil Company and Union Texas, the Epoch was onhire at 0530 hrs the same day. The anchor handling was completed at 1845 hrs and the rig was ballasted down. (See Fig. 2 for anchor pattern). The well was spudded at 1200 hrs. on 15th April.

Prior to the rig arriving at the location a combined sidescan sonar, echo sounder, sparker and boomer survey was conducted. A total of eight drop cores samples was obtained. All surveys indicated no hazards.

A Maxiran positioning system was used to site the rig on location. The final Maxiran coordinates were $39^{\circ} 03' 40.281''$ S, and $148^{\circ} 30' 38.893''$ E. This was 14 m. at 300.25° from the intended location of $39^{\circ} 03' 40.5''$ S and $148^{\circ} 30' 39.4''$ E. Satellite positioning was used to obtain a final fix, using both the WGS-72 and AGD datums. After 38 valid passes, this placed the well location at $39^{\circ} 03' 35.919''$ S and $148^{\circ} 30' 42.474''$ E which is an error of 33 m. at 224.614° . The temporary guide base was run indicating 122 m. of water.

PISCES #1 ANCHOR PATTERN



Normal Anchor Tension 150,000 lbs.

6. DAILY OPERATIONAL SUMMARY

<u>Date</u> <u>(Report Number)</u>	<u>Depth</u> - m <u>Progress</u> - m	<u>Operation</u>
13th April 1982 (1)	0 0	No. 6 anchor on bottom 0543 hrs, 13th April 1982 Diamond M Epoch on hire at 0530 hrs 13th April 1982
14th April 1982 (2)	0 0	No. 7 anchor on bottom 0745 hrs No. 3 anchor on bottom 0802 hrs No. 5 anchor on bottom 0847 hrs No. 2 anchor on bottom 0946 hrs No. 8 anchor on bottom 1323 hrs No. 1 anchor on bottom 1339 hrs No. 4 anchor on bottom 1403 hrs Ballast rig - completed at 1845 hrs. Rig up temporary guide base.
15th April 1982 (3)	144 0	Run temporary guide base RKB-ML 144 m. Water depth 122 m. Wait on permission to spud from Victorian Government.
16th April 1982 (4)	190 46	Permission to spud received at 0900 hrs on 15th April 1982. Well spudded 1200 hrs on 15th April 1982. Drill 36" hole to 190 m. Condition hole for 30" casing. MW 8.9, Vis 100.
17th April 1982 (5)	190 0	Run 4 joints of 30" x 1" wall casing. Shoe at 187 m. Cement with 770 sxs 'N' plus 2% CaCl ₂ . Run pin connector and riser. Nipple up diverter. MW 8.8, Vis 38.
18th April 1982 (6)	368 178	Drill 12¼" hole to 368 m. Pull riser and pin connector. MW 8.9, Vis 48.

<u>Date</u> (Report Number)	<u>Depth</u> - m <u>Progress</u> - m	<u>Operation</u>
19th April 1982 (7)	368 0	Drill 26" hole to 368 m. Condition hole for 20" casing. Run 20" casing. MW 8.9, Vis 48.
20th April 1982 (8)	368 0	Run 18 joints 20" casing, 94 ppf. Shoe at 353 m. Cement with 767 sxs Class 'N' with 3% prehydrated gel, followed by 514 sxs Class 'N' neat. Run and test BOP. Test casing. MW 8.8, Vis 38.
21st April 1982 (9)	746 378	Run in hole with 12 $\frac{1}{4}$ " bit. Leak off test 12.4 ppg EMW. Drill 12 $\frac{1}{4}$ " hole to 746 m. MW 8.8, Vis 30.
22nd April 1982 (10)	1049 303	Drill 12 $\frac{1}{4}$ " hole to 1049 m. MW 8.8, Vis 35, WL 15.
23rd April 1982 (11)	1071 22	Drill 12 $\frac{1}{4}$ " hole to 1071 m. Condition hole for logs. Run ISF/Sonic/GR/SP (920-353 m.) FDC/CNL/GR (920-353 m.) Logs hung up at 920 m. Run in hole with 17 $\frac{1}{2}$ " underreamer MW 8.9, Vis 33, WL 18.
24th April 1982 (12)	12 $\frac{1}{4}$ " hole to 1071 m.	Underream 12 $\frac{1}{4}$ " hole to 17 $\frac{1}{2}$ " Pull out and change cutter arms. Underream to 741 m. MW 9.0, Vis 32, WL 23.
25th April 1982 (13)	12 $\frac{1}{4}$ " hole to 1071 m.	Underream 12 $\frac{1}{4}$ " hole to 17 $\frac{1}{2}$ " 741-867 m. Pull out to change cutter arms. MW 9.0, Vis 30, WL 25.
26th April 1982 (14)	12 $\frac{1}{4}$ " hole to 1071 m.	Underream 12 $\frac{1}{4}$ " hole to 17 $\frac{1}{2}$ " 878-1071 m. Circulate and condition mud for casing. MW 9.1, Vis 47, WL 13.

<u>Date</u> <u>(Report Number)</u>	<u>Depth</u> - m <u>Progress</u> - m	<u>Operation</u>
27th April 1982 (15)	1071 0	Run 78 joints 13 $\frac{3}{8}$ " casing. 68 ppf. Shoe at 1056 m. Float collar at 1032 m. Cement with 1378 sxs 'N' with 3% prehydrated gel, followed with 496 sxs 'N' neat. Set seal assembly and test. MW 9.1, Vis 48, WL 12.8.
28th April 1982 (16)	1258 187	Test BOP's. Drill 12 $\frac{1}{4}$ " hole 1034 - 1087 m. Leak off test 13.0 ppg EMW. Drill to 1258 m. MW 9.4, Vis 38, WL 15.2
29th April 1982 (17)	1458 200	Drill 12 $\frac{1}{4}$ " hole to 1458 m. Circulate bottoms up Trip for new bit. MW 9.6, Vis 39, WL 14.4.
30th April 1982 (18)	1708 250	Drill 12 $\frac{1}{4}$ " hole to 1703 m. MW 9.7, Vis 47, WL 10.0.
1st May 1982 (19)	1750 42	Drill 12 $\frac{1}{4}$ " hole to 1750 m. Pull out of hole, begin conversion of mud system to KCL/Brine system. MW 9.7, Vis 45, WL 9.6.
2nd May 1982 (20)	1923 173	Complete conversion and dis- placement of mud system. Drill 12 $\frac{1}{4}$ " hole to 1806 m. Circulate bottoms up. Drill 12 $\frac{1}{4}$ " hole to 1832 m. Circulate bottoms up. Drill 12 $\frac{1}{4}$ " hole to 1923 m. MW 9.5, Vis 35, WL 13.5.
3rd May 1982 (21)	2200 277	Drill 12 $\frac{1}{4}$ " hole to 1950 m. Circulate bottoms up. Drill 12 $\frac{1}{4}$ " hole to 2121 m. Circulate bottoms up. Drill 12 $\frac{1}{4}$ " hole to 2200 m. MW 9.9, Vis 36, WL 12.8.
4th May 1982 (22)	2442 242	Drill 12 $\frac{1}{4}$ " hole to 2442 m. MW 10.3, Vis 36, WL 16.4.

<u>Date</u> <u>(Report Number)</u>	<u>Depth</u> - m <u>Progress</u> - m	<u>Operation</u>
5th May 1982 (23)	2530 88	Drill 12 $\frac{1}{4}$ " hole to 2465 m. Circulate bottoms up. Trip for new bit. Drill 12 $\frac{1}{4}$ " hole to 2530 m. MW 10.3, Vis 43, WL 19.8.
6th May 1982 (24)	2547 17	Drill 12 $\frac{1}{4}$ " hole to 2544 m. Circulate bottoms up. Short trip to shoe. Received orders to drill ahead. Drill 12 $\frac{1}{4}$ " to 2547 m. Trip for new bit. No. 2 cone missing. Pick up reserve circulating junk basket. Run in hole. MW 10.3, Vis 47, WL 12.6.
7th May 1982 (25)	2556 9	Work junk basket. Pull out of hole - recovered 75% of cone. Run in hole. Drill 12 $\frac{1}{4}$ " hole to 2556 m. Pull out of hole. MW 10.4, Vis 4.3, WL 12.4.
8th May 1982 (26)	2570 14	Hang off and wait on weather. Change bit and run in hole. Drill 12 $\frac{1}{4}$ " hole to 2570 m. MW 10.4, Vis 39, WL 11.8.
9th May 1982 (27)	2580 10 *Total Depth	Drill 12 $\frac{1}{4}$ " hole to 2580 m. Condition hole for logs. Run DLL/MSFL/GR/Cal (2574-1057 m.) Run FDC/CNL/GR/Cal (2571-1057 m.) MW 10.4, Vis 39, WL 12.8.
10th May 1982 (28)	2580 0	Run BHC Sonic/GR/SP (2574-1057 m.) Run HDT (2571-1600 m.) Run Velocity Survey. MW 10.4, Vis 39, WL 12.8.
11th May 1982 (29)	2580 0	Complete Velocity Survey (2570 - 780 m.) Run side wall core samples. Run to TD with open-ended drill pipe.

Date (Report Number)	Depth - m. Progress - m.	Operation
12th May 1982 (30)	175 0 Well Plugged	Cement abandonment plugs No. 1 (2572-2511 m.) 138 sxs Class 'N' Neat. No. 2 (1847-1750 m.) 209 sxs Class 'N' Neat. No. 3 (1102-1010 m.) 212 sxs Class 'N' Neat. Lay down drill pipe. No. 3 tagged at 1065 m. No. 4 (1065-1010 m.) 128 sxs Class 'N' Neat. No. 5 (236-175 m.) 142 sxs Class 'N' Neat. Retrieve seal assembly. Pick up casing cutter.
13th May 1982 (31)	Well Plugged	Cut 13 $\frac{3}{8}$ " casing at 167 m. Attempt to pull - No success. Cut 13 $\frac{3}{8}$ ", 20" and 30" casing at 149 m. Nipple down diverter. Wait on weather to pull stack and riser.
14th May 1982 (32)	Well Plugged	Wait on weather. Attempt to pull 13 $\frac{3}{8}$ " - No success. Wait on weather. Pull stack and riser. Pull 16 $\frac{3}{4}$ " wellhead, 20" casing stub and 13 $\frac{3}{8}$ " casing stub.
15th May 1982 (33)	Well Plugged	Latch into 30" wellhead housing. Attempt to pull - No success. Recut 30" casing at 147 m. Pull 30" casing stub. Inspect sea-bed with RCV. Sealed proved clean. Deballast rig. Lay down drill pipe and drill collars.
16th May 1982 (34)	Well Plugged	Pull all anchors, Rig released to Shell Development at 1700 hours on 15th May 1982.

7. MUD PROGRAMME SUMMARY

The Pisces 1 was drilled using two types of mud systems. In most of the well a seawater-gel mud was used to circulate the hole. Hi-vis sweeps aided in cleaning the larger diameter holes. At 1750 m. this mud was dumped and a KCL-Brine system was substituted. The mud did an excellent job of stabilizing the hole as at no time were filled or tight spots encountered. Logging runs were completed without a wiper trip and at all times the hole was in excellent shape. The following is a brief discussion of each hole size and a list of the mud products used.

36" HOLE (144-190 m.)

This section of hole was drilled with seawater using high viscosity sweeps on making connections to clean the hole. The same mud was used to fill the hole at T.D. No hole problems were encountered. The 30" casing was run with no problems.

MUD MATERIALS USED

Kwik Gel	100 sxs
Caustic Soda	5 drs
Soda Ash	1 sx
Lime	2 sxs
Barite (Guide Base and Shipment loss)	150 sxs
Calcium Chloride (30" cement job)	40 sxs

26" HOLE (190-368 m.)

This section was pilot drilled with a 12 $\frac{1}{4}$ " bit and then opened with a 26" bit using seawater and hi-vis slugs to clean the hole. Prehydrated bentonite was used to make up the spud mud. This mud was used to fill the hole prior to the casing job. No hole problems were encountered. The 20" casing was run with no problems.

MUD MATERIALS USED

Kwik Gel	210 sxs
Aqua Gel	43 sxs
Caustic Soda	6 drs
Lime	3 sxs
Sodium Bi-Carb	1 sx

17 $\frac{1}{2}$ " HOLE (368-1071 m.)

This section was pilot drilled with a 12 $\frac{1}{4}$ " bit. Logs were run but hung up at 920 m. A 17 $\frac{1}{2}$ " underreamer was used to open the hole prior to running casing. Seawater was used to circulate the hole with hi-viscosity mud being used to sweep and clean the hole. The hole was filled with mud before the casing job. The casing was run with no problems.

MUD MATERIALS USED

Aqua Gel	720 sxs
Caustic Soda	16 drs
Soda Ash	14 sxs
Lime	5 sxs
Barite	330 sxs
Q-Broxin	30 sxs
CMC-HV	63 sxs

12½" HOLE (1071-2580 m.)

The upper portion of this hole (1071-1750 m.) was drilled with the same seawater-gel system used previously. At 1750 m. this system was dumped and replaced with a BARACARB-BRINE system. This is a KCL brine system used to provide maximum inhibition with little formation damage. The BARACARB (Calcium Carbonate) is a bridging agent used to form a physical block against the pores but can be dissolved using acid. Calcium Chloride is used as a weight material to minimize non dissolvable solids. A mud cleaner was used to maintain low drill solids. The 12½" hole was drilled to 2580 m. Even with a fishing job and waiting on weather for 7 hours the hole remained in good condition. No fill was encountered on trips and 38 hours of logging was completed with no wiper trip being necessary. After logs were completed the hole was plugged and abandoned.

TOTAL MUD MATERIALS USED
PISCES NO. 1

Kwik Gel	316 sxs
Aqua Gel	763 sxs
Caustic Soda	33 drs
Soda Ash	35 sxs
Lime	10 sxs
Barite	626 sxs
Calcium Chloride	1348 sxs
Q-Broxin	85 sxs
Sodium Bi-Carb	1 sx
CMC-HV	72 sxs
CMC-LV	50 sxs
BARACARB	1160 sxs
MgO	100 sxs
BARAVIS	61 sxs
KCL	909 sxs
XC Polymer	68 sxs
BARADEFOAM	6 drs

Estimated Mud Cost Aus\$117,032

8. CASING SUMMARY

30", 20", and 13 $\frac{3}{8}$ " casing were run in the Pisces 1 well. All casing jobs were completed with no problems. The following is a summary of the details of the three casing strings run. A diagram of the casing strings is also included (Figure 3).

30" CASING

Size	30"
Grade	5 LGB
Weight	1" Wall
Threads	Vetco ST
No. of Joints	4
Range	3
Length	39.01 m.
Type Shoe	Float Guide
Shoe Depth	187
Type Collar	N/A
Collar Depth	N/A
Centralizers	N/A

Notes

1. Run with 30" Housing and Permanent Guide Base.
2. Set on Temporary Guide Base.

20" CASING

Size	20"
Grade	X 56
Weight	94 ppf
Threads	Vetco L
No. of Joints	18
Range	3
Length	210.54 m.
Type Shoe	Float Guide
Shoe Depth	353 m.
Type Collar	N/A
Collar Depth	N/A
Centralizers	340 m.
	317 m.
	174 m.

Notes

1. Run with FMC 16 $\frac{3}{4}$ " 10000 Wellhead
2. Latched into 30" housing.
3. Top of Wellhead 142 m.

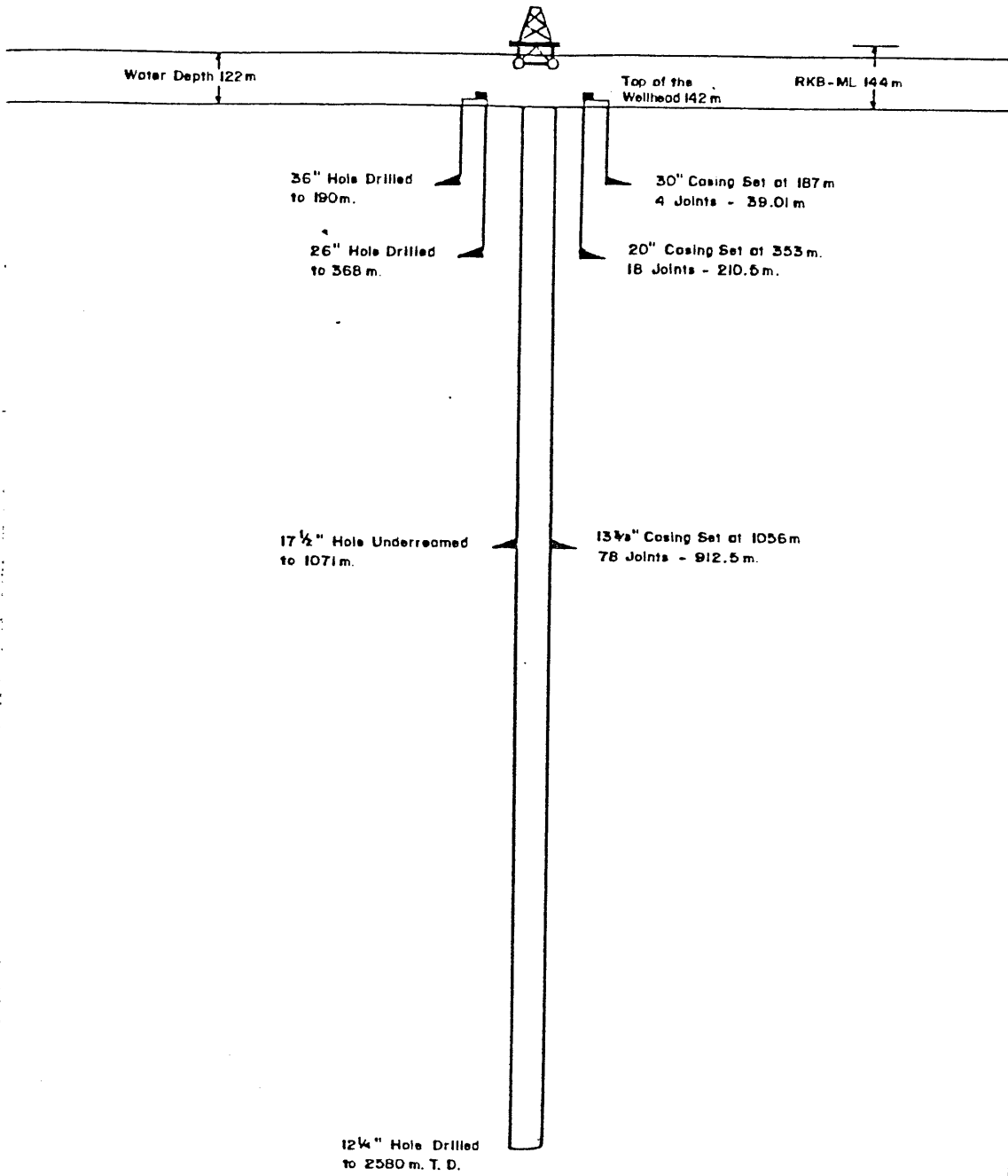
13 $\frac{3}{8}$ " CASING

Size	13 $\frac{3}{8}$ "
Grade	K55
Weight	68 ppf
Threads	Buttress
No. of Joints	78
Range	3
Length	912.5 m.
Type Shoe	Differential Fill Float
Shoe Depth	1056 m.
Type Collar	Differential Fill Float
Collar Depth	1032 m.
Centralizers	N/A

Notes

1. Run with 13 $\frac{3}{8}$ " hanger.
2. Set and tested seal assembly with no problems.

PISCES #1 CASING SUMMARY



9. CEMENT SUMMARY

The three primary cement jobs done on the Pisces 1 well were completed with no problems. The use of a recirculating mixer enhanced the quality of the cement slurry used. Brighton Class 'N' was the only type of cement used in both the cement jobs and the plugging of the well. The following is a summary of the details of the three primary cement jobs.

30" CEMENT JOB

Casing Size	30"
Hole Size	36"
Shoe Depth	187 m.
Float Collar Depth	N/A
Hole Depth	190 m.
Lead Slurry Composition	Brighton 'N' with 2% Ca Cl ₂
Slurry Weight	15.6 ppg
Slurry Volume	770 sxs
Tail Slurry Composition	N/A
Slurry Weight	N/A
Slurry Volume	N/A
Displacement	12.5 bbls Water
Plug Bumped	N/A
CIP	1800 hrs 16/04/82
Final Circulating Pressure	800 psi

Notes

1. Good returns throughout job.
2. Cement sample obtained with Solus Dart RCV.
3. Float held with no problems.
4. Used drill pipe stinger inside 30" casing.

20" CEMENT JOB

Casing Size	20'
Hole Size	26"
Shoe Depth	353 m.
Hole Depth	368 m.
Lead Slurry Composition	Brighton 'N' with 3% prehydrated gel
Slurry Weight	12.3 ppg
Slurry Volume	767 sxs
Tail Slurry Composition	Brighton 'N' Neat
Slurry Weight	15.6 ppg
Slurry Volume	514 sxs
Displacement	3 bbls water and 20 bbls mud
Plug Bumped	N/A
CIP	0900 hrs 19/04/82
Final Circulating Pressure	300 psi

Notes

1. Good return throughout job.
2. Sample obtained with Solus Dart RCV.
3. Float held with no problems.
4. Used drill pipe stinger inside 20" casing.

13 $\frac{3}{8}$ " CEMENT JOB

Casing Size	13 $\frac{3}{8}$ "
Hole Size	17 $\frac{1}{2}$ "
Shoe Depth	1056 m.
Float Collar Depth	1032 m.
Lead Slurry Composition	Brighton 'N' with 3% prehydrated gel
Slurry Weight	12.2 ppg
Slurry Volume	1378 sxs
Tail Slurry Composition	Brighton 'N' Neat
Slurry Weight	15.6 ppg
Slurry Volume	496 sxs
Displacement	429 bbls mud
Plug Bumped	Yes
CIP	0100 hrs 27/04/82
Final Circulating Pressure	1400 psi

Notes

1. Good returns throughout job.
2. Cement to surface at 357 bbls displacement.
3. Floats held with no problems.
4. Differential Fill Float Shoe and collar used.
5. Used SSR plug set.

10. BIT SUMMARY

A total of 8 bits, 1 hole opener, and 3 sets of underreamer cutters were used to open hole and drill on the Pisces 1 well. All bits were pulled in gauge with the exception of one: Bit 6, a 12 $\frac{1}{4}$ " Reed S11 was pulled after 21 hours drilling with the No. 2 cone missing. The junk was successfully fished in one trip with a reverse circulating junk basket and by using a boot basket on subsequent bit runs. Following is a bit record showing details of the bits used (Figure 4).

FIGURE 4
PISCES #1
BIT RECORD

COUNTRY			FIELD			LOCATION				WELL				No.											
AUSTRALIA			WILDCAT			LAT. 39° 03' 35.919" S LONG. 148° 30' 42.474" E				PISCES				1											
CONTRACTOR				RIG No.	OPERATOR				TOOLPUSHER																
DIAMOND M				EPOCH	UNION TEXAS				J. LINN																
SPUD				REACHED T.D.	PUMP No. 1		LINER		PUMP No. 2		LINER		TYPE MUD												
APR. 15/82				MAY 8/82	6 1/2 X 12				6 1/2 X 12				KCL												
DRILL PIPE		TOOL JOINTS		SIZE		TYPE		DRILL COLLARS		NUMBER		O.D.		LENGTH		DRAWWORKS POWER									
5", 19.5				6 3/8		4 1/2 IF				3 12		9 1/2 7 3/4		28.36 M 110.51 M		OILWELL E-3000									
No.	SIZE	MAKE	TYPE	JET 32ND IN	SERIAL	DEPTH OUT	M	HOURS	ROTATING HOURS	M/HR *	ACCU DRLG. HRS.	WT. 1000 LBS.	RPM	VERT DEV	PUMP PRESS	SPM		MUD			DULL. COND.				
																1	2	WT.	VIS.	W.L.	T	B	G	OTHER	
1	26	REED		OPEN	A19756	190	43	14		3	14	12	40	-	900	90	90	SEA WATER				1	1	IN	
	36	REED	H.O.			190	43	14		3															
2	12 1/4	REED	S11	3 x 16	957839	368	178	7 1/2		24	21 1/2	6	90	1 3/4	2000	80	80	SEA WATER				1	1	IN	
1RR	26	REED		OPEN	A19756	368	178	7 1/2		24		10/15	50/60		1000	100	100	SEA WATER				1	1	IN	
2RR	12 1/4	REED	S11	3 x 14	957839	1071	703	44		16	37 1/2	15/20	106	1/2	2100	71	71	S.W. - GEL				4	4	IN	
1A	17 1/2	KWA	LOCKOMATIC UNDERREAMER	3 x 16	TS 476	1071	703	41		-		20	120		1900	90	90	S.W. - GEL							
3	12 1/4	REED	S11J	2 x 14 1 x 16	941088	1458	387	30		13	50 1/2	25/30	120	3/4	2500	76	76	S.W. - GEL				2	7	IN	
4	12 1/4	REED	S11J	3 x 14	941089	1750	292	28 1/2	20.4	14.3	79	25/30	120	3/4	2500	63	64	S.W. - GEL				3	6	IN	
5	12 1/4	REED	HS51	3 x 14	948494	2465	715	66 1/2	53.3	13.4	145.5	40/45	120	1/2	2100	64	54		KCL			2	2	IN	
6	12 1/4	REED	S11J	3 x 14	957946	2547	82	21	17.7	4.6	149.5	45/50	100		2200	64		10.3	42	12.6	6	8	No. 2 CONE MISSING		
7	12 1/4	REED	S21G	3 x 14	889507	2558	12	7	5.4	2.2	156.5	30	100		2200	60	58	10.3	44						
8	12 1/4	HTC	J33	3 x 12	792 BL	2580	22	8	5.5	4.0	164.5	40/50	50/70		2800	54	52	10.3	40						

* ROP's calculated using Rotating Hours where available.

11. DEVIATION SUMMARY

No deviation problems were encountered in the Pisces 1 well. A Sperry Sun 8⁰ Single shot instrument was used 10 times to check the angle of the hole. One run was a misrun. The following is a list of the deviation checks carried out on Pisces 1.

<u>Depth</u>	<u>Deviation</u>
211 m.	0 ⁰
368 m. 12 $\frac{1}{4}$ " Hole	1 $\frac{3}{4}$ ⁰
368 m. 26" Hole	3 ⁰
700 m.	$\frac{1}{2}$ ⁰
1071 m.	$\frac{1}{2}$ ⁰
1179 m.	$\frac{3}{4}$ ⁰
1458 m.	$\frac{3}{4}$ ⁰
1750 m.	Misrun
1750 m.	1 $\frac{1}{4}$ ⁰
2465 m.	$\frac{1}{2}$ ⁰

12. HOLE PROBLEMS

The Pisces 1 well was drilled with virtually no hole problems. After trips no fill was found and tight spots were never encountered.

The only problem occurring with logging the well was the unexplained hanging up of logging tools at 920 m. There was no apparent lithology change at this point and casing was run successfully.

The weather also caused some down time. Winds of 45 to 60 mph and seas to 12 m. caused 8 hours of downtime on 7th May and a further 20½ hours on 12th and 13th May. The first occurrence suspended drilling operations and the second interfered with the abandoning of the well as the stack and riser could not be pulled.

The only other problem occurred with the cutting of the casing strings. Initially the 13¾" casing was cut but could not be pulled. The next attempt cut the 13¾", 20", and 30" casings. When the attempt was made to pull all three, the 16¾" well-head sheared out of the 30" housing and left the 30" casing, housing and the permanent and temporary guide base on bottom. Another cut was needed to recover all these items. This is further explained in the plug and abandonment summary.

13. PLUG AND ABANDONMENT

At 1100 hours on 10th May, 1982 permission had been received from Union Texas Petroleum, all partners, and the Victorian Government to plug and abandon the Pisces 1 Well in Victoria Permit 12.

The rig was notified and after completion of the side-wall coring programme plugging of the well commenced at 0130 hours on 11th May, 1982. A total of five cement plugs was set. The third plug was tagged low so, to fulfill the Governmental requirements, a fourth plug was set directly on top. The surface plug was set and the three casing strings cut and retrieved. The 30" casing retrieval presented some problems but after recutting the casing, it too was retrieved.

Following is a summary of the plugging and abandonment details of Pisces No. 1 (Figure 5).

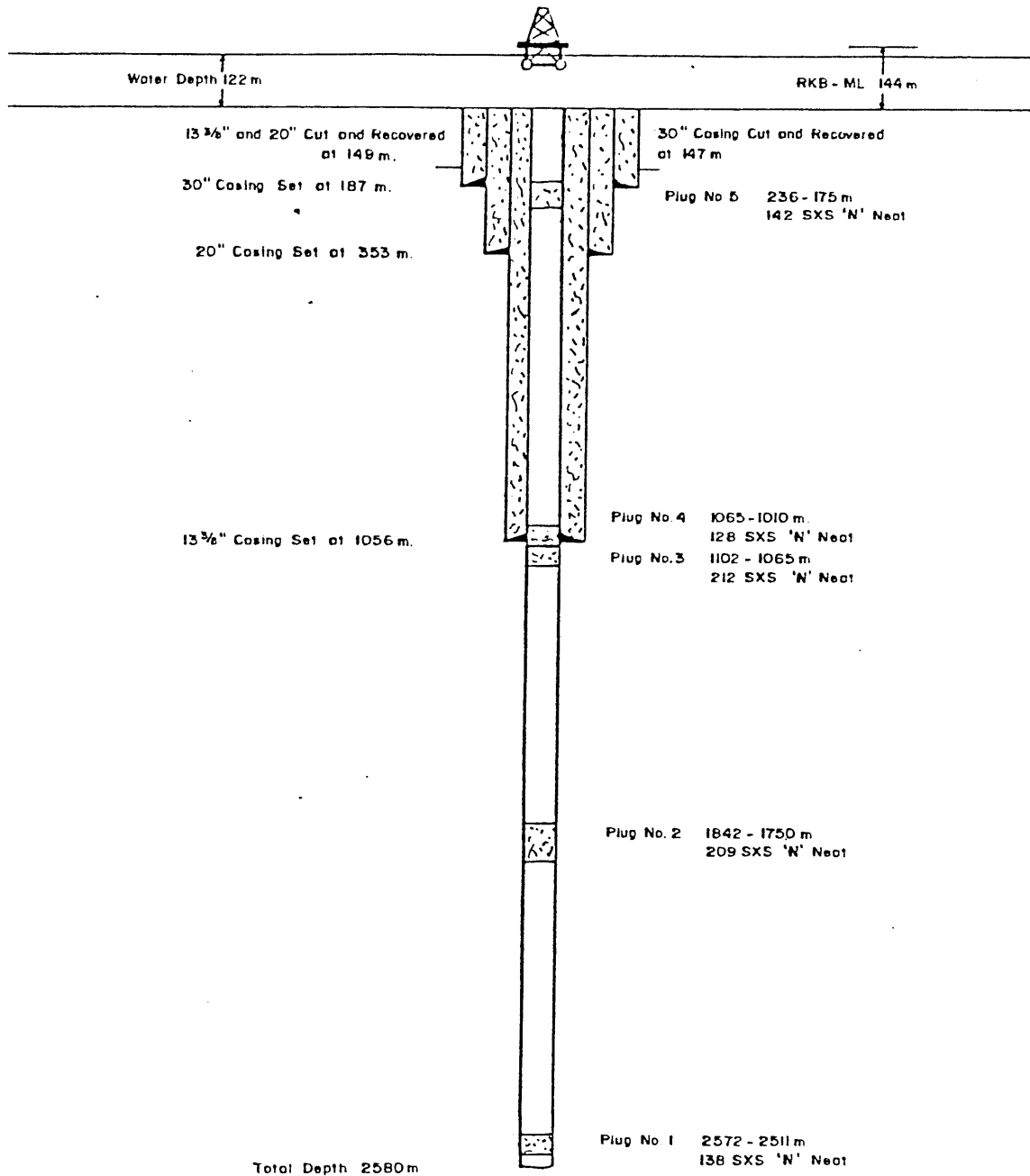
13.1 Casing Cutting Detail

The 13 $\frac{3}{8}$ " casing was initially cut at 167.24 m. An attempt to pull it was unsuccessful as cement had been circulated to surface in the primary cement job on the casing. The 13 $\frac{3}{8}$ " was again cut at 149 m. The cutter was pulled and the cutting arms changed.

The 20" and 30" casing were cut at 149 m. The cutter was pulled. In the next 22 $\frac{1}{2}$ hours, winds of 45-55 m.p.h. and seas of 10 metres made the operation too difficult to pull the stack and riser. During this time another unsuccessful attempt was made to pull the 13 $\frac{3}{8}$ " casing.

PISCES #1

ABANDONMENT SUMMARY



When the weather died down, the stack and riser were pulled. The 16 $\frac{3}{4}$ " wellhead housing was latched into and an attempt to pull all three casings was made. The 16 $\frac{3}{4}$ " wellhead with the 20" casing stub and the 13 $\frac{3}{8}$ " casing stub inside were recovered. Several attempts were made to relatch into the 30" housing, all unsuccessful.

The wellhead was laid down and 30" running tool latched into the housing. Attempts to pull the 30" in this manner were unsuccessful. The 30" casing was recut at 147 m. The 30" running tool was latched in and the 30" casing was recovered. This required two attempts as the mechanical function of the running tool failed. The hydraulic function was used in the second attempt. The temporary and permanent guide base were recovered along with the 30" housing and the casing stub. A survey of the sea-floor surrounding the area occupied by the wellhead was conducted using the RCV submersible and was video-taped. The entire cutting and surveying sequence, including the 22 $\frac{1}{2}$ hours lost to weather, took 71 $\frac{1}{2}$ hours.

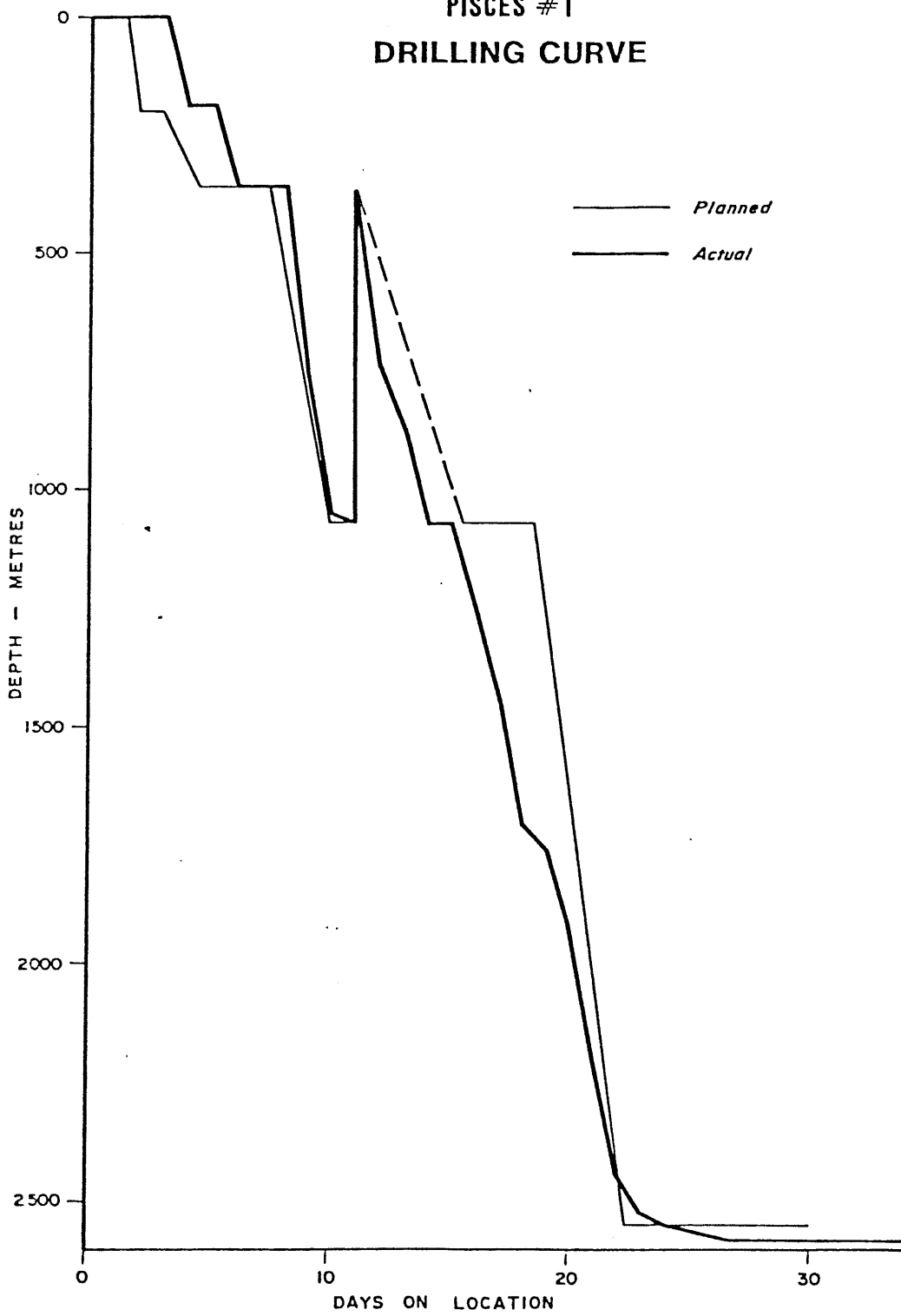
13.2 Abandonment Cement Plugs

<u>Plug Number</u>	<u>Location</u>	<u>Volume</u>	<u>Composition</u>	<u>Weight</u>
1	2572-2511 m.	138 sxs	Neat 'N'	15.6 ppg
2	1842-1750 m.	209 sxs	Neat 'N'	15.6 ppg
3	1102-1010 m.	212 sxs	Neat 'N'	15.6 ppg
	No 3 was tagged at 1065 m.			
	No. 4 was spotted directly on top to satisfy Victorian Government Regulations.			
4	1065-1010 m.	128 sxs	Neat 'N'	15.6 ppg
5	236- 175 m.	142 sxs	Neat 'N'	15.6 ppg

14. DRILLING TIME CURVE

Following is a plot of predicted versus actual operation time. A total of 34 days was spent on location, 24 of these used to actually drill the well.

PISCES #1 DRILLING CURVE



15. OVERALL TIME BREAKDOWN SUMMARY

Following is a summary of the various operations performed throughout the history of the well. Both hours and percentages are noted and a pie diagram used to illustrate the differences.

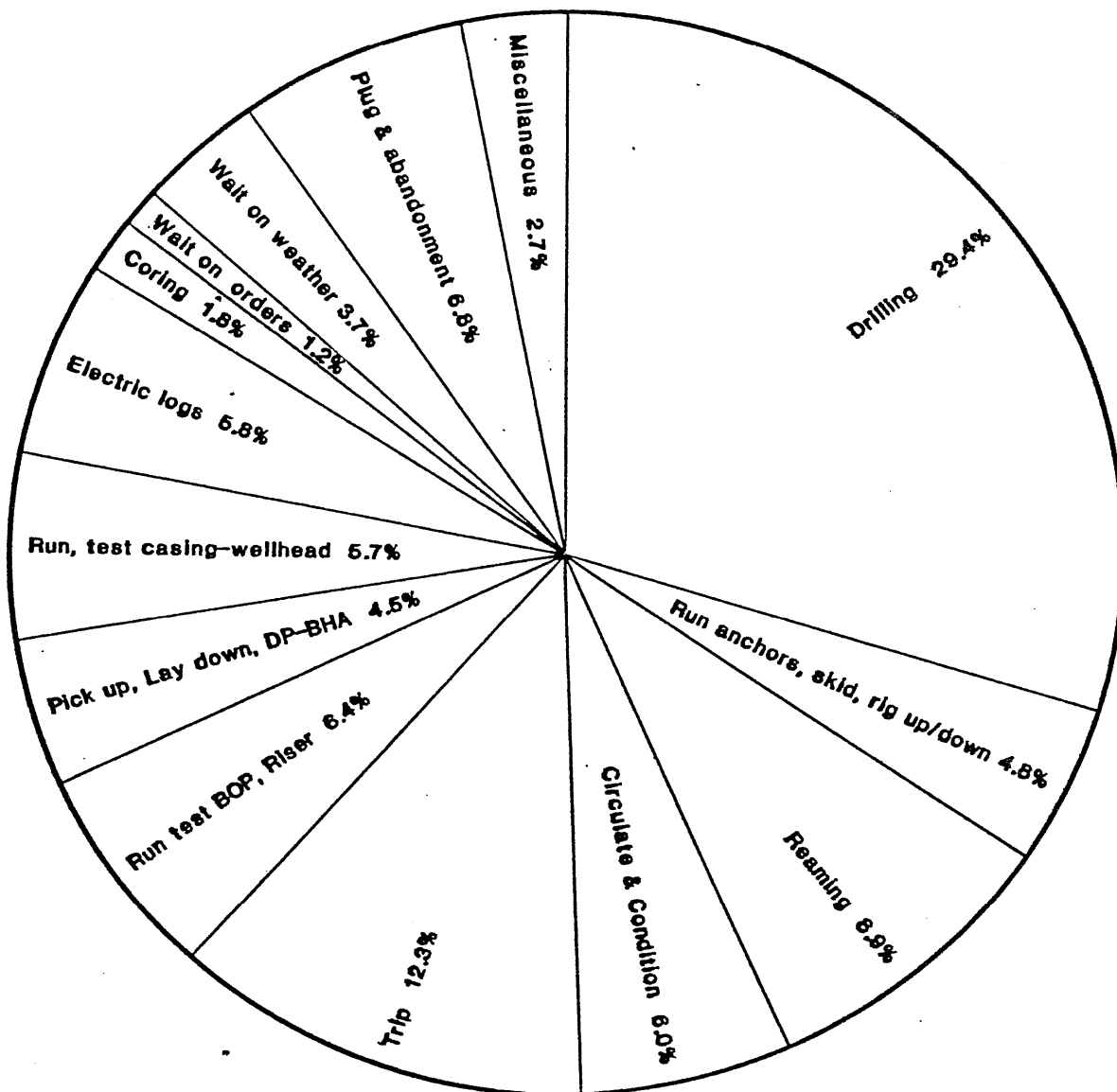
OVERALL TIME BREAKDOWN

	<u>Hours</u>	<u>Percent</u>
Run Anchors, Skid, Rig Up/Down	37.5	4.8
Drilling	229.5	29.4
Reaming	69.5	8.9
Circulate and Condition	46.5	6.0
Trip	95.5	12.3
Run, Test BOP, Riser	50.5	6.4
Pick up, Lay Down DP-BHA	35.5	4.5
Run, Test Casjng - Wellhead	44.5	5.7
Electric Logs	45.5	5.8
Cementing	7.5	0.9 *
Deviation Surveys	5.0	0.6 *
Fishing	4.0	0.5 *
Coring	14.0	1.8
Rig Maintenance	2.0	0.4 *
Leak-off Tests	1.5	0.3 *
Wait on Orders	9.5	1.2
Wait on Weather	28.5	3.7
Plug and Abandonment	53.0	6.8
	<u> </u>	<u> </u>
TOTAL	779.3 Hrs.	100.0%
	=====	=====

* Included in miscellaneous operations.

PISCES #1

OPERATIONAL TIME BREAKDOWN



Miscellaneous Operations Include:

Cementing	0.9%
Deviation Surveys	0.6%
Fishing	0.5%
Rig Maintenance	0.4%
Leak-off Tests	0.3%
TOTAL	2.7%