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NORTH PAARATTE-2
BEACH PETROLEUM

W 736

BEACH PETROLEUM N.L.

NORTH PAARATTE NO.2

WELL COMPLETION REPORT

2 8 APR 1981

OIL and GAS DIVISION

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February, 1981

Distribution: Beach

2

Department of Minerals and Energy 1

SUMMARY

North Paaratte No.2 was drilled over a $17\frac{1}{2}$ day period from 21st January, 1981 to the 8th February, 1981 as a step-out to the North Paaratte No.1 Waarre Formation gas discovery.

The well, which proved the easterly extension of the gas bearing Waarre production formation on the North Paaratte structure, was completed with production casing, tubing and a Christmas tree as a potential producer. Further work is required before it can be determined if the gas discovered on the North Paaratte structure will prove commercially viable.

Two successive cores, which bridge the top Waarre Formation were cut recovering both seal and reservoir lithologies. Upon recovery, the sandstone of the Waarre Formation had a strong gassy odour. The extent of the gas was defined on the electric log suite. Two open hole drill stem tests were attempted to test the top Waarre Formation, but both were unsuccessful due to packer seat failure. Two formation interval tests in the top Waarre Formation recovered gas,

Initial production testing established that the well's Open Flow Potential is 95 MMCFD; condensate production is at the rate of at least 2.5 bbl. per MMCF.

The well was drilled with O.D. & E's rig 8, an Ideco Rambler H35 drilling rig, with the following contract services:-

Halliburton
Schlumberger
Go International
Exlog
Christensen

Cementing and Testing Electric Logging Production Testing Mud Logging Diamond coring

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ENCLOSURES

1.	Exploration Logging	g Mud	1	Log	
2.	Composite Well Log				
3A	DLL-MSFL-GR-SP-CAL	Run	1	Scale	1:200
В	DLL-MSFL-GR-SP-CAL	Run	1	Scale	1:500
4A	BHCS-GR-CAL	Run	1	Scale	1:200
В	BHCS-GR-CAL	Run	1	Scale	1:500
5A	CNL-FDC-GR-CAL	Run	1	Scale	1:200
В	CNL-FDC-GR-CAL	Run	1	Scale	1:500
6	RFT	Run	1		
7	CBL-VDL-GR			Scale	1:200
8	CCL			Scale	1:200
9	QUANTATIVE LO	د			1:200

1. PURPOSE OF WELL

North Paaratte No.1 was a significant gas discovery which flowed gas at a stabilised flow of 9.5 MMCFD (269,000 cubic metres per day) on production test without any formation pressure decline.

North Paaratte No.2 was selected as a step-out well on the same structure. A location was selected near the high point of the structure some 1.6 kilometres east of North Paaratte No.1 and with the expectation of intersecting the Waarre Formation reservoir some 15 metres (50 feet) higher.

2. GENERALISED STRATIGRAPHY OF THE PORT CAMPBELL EMBAYMENT

Age	Group	<u>Formation</u>
Tertiary	Heytesbury	Port Campbell Limestone Gellibrand Marl Clifton Formation
	Nirranda	Narrawaturk Marl Mepunga Formation
	Wangerrip	Dilwyn Formation Pember Mudstone Pebble Point Formation
Upper Cretaceous	Sherbrook	Paaratte Formation Nullawarre Greensand Belfast Formation Flaxman Formation Waarre Formation
Lower Cretaceous	Otway	Eumeralla Formation

3. WELL HISTORY

3.1 Location (Refer Figures 1 and 2)

The well; located as near as was practicable to Shot Point No. 154, line PCH 80-18 of the Beach 1980 Port Campbell High Seismic Survey, was on Crown Allottment 12, Section 9, Parish of Paaratte, County of Heytesbury owned by P.R. & L. Sissons (Refer Figures 1 and 2).

It is on the east side of the gravelled North-South Road 1.4 km. south of Paaratte Corner.

The approximate geographical co-ordinates are:-

142° 58' 19" E 38° 33' 07" S

3.2 General Date

- (i) Well Name and Number
 Beach North Paaratte No.2.
- (ii) Petroleum Title
 Petroleum Exploration Permit No.93, Victoria.
- (iii) District

1:250,000 map sheet: Colac, sheet: SJ54-12; part of the Western District of Victoria.

(iv) Elevation

Ground Level: 117 m. (384 ft.) above mean sea level Kelly Bushing (datum) 120.2 m. (394.5 ft.) above mean sea level.

(v) Total Depth

Driller: 1603.7 m (5260 ft.) Schlumberger: 1604.6 m (5264 ft.)

- (vi) Date Drilling Commenced
 21 January, 1981 at 1900 hours.
- (vii) Date Total Depth Reached
 8 February, 1981 at 0730 hours.
- (viii) Date Rig Released
 15 February, 1981 at 1100 hours.

(ix) Drilling Time in Days to Total Depth 17½ days

(x) Status

Completed and suspended as a potential producing gas well.

3.3 Drilling Data

3.3.1 Rig

Ideco H-35; details of this rig are contained in Appendix 1.

3.3.2 Drilling Contractor

O.D. & E. Pty. Ltd., 50 Bridge Street, Sydney, N.S.W. 2000.

3.3.3 Casing and Cementing Details

(i) Conductor

Size $19\frac{1}{2}$ inch
Set at 7.6 m (25 ft.)
Cement 25 sacks, construction

(ii) Surface Casing

 Size
 9 5/8 inch

 Weight
 36 lb.

 Grade
 J55

 Range
 3

 Coupling
 S.T. & C.

 Centralisers
 at 324, 348 m (1064, 1142 ft)

Insert valve at 348 m (1142 ft)
Shoe at 360 m (1182 ft)
Cement 437 sacks, construction

15.5 ppg slurry

Cemented to

Surface with good returns

Method

Double plug displacement

Equipment

Halliburton Twin T-10 pump

truck.

(iii) Production Casing

Size 7 inch
Weight 26 and 23 lb.
Grade N80 and J55
Range 2 and 3
Coupling Extremeline

Extremeline S.T. & C. This string comprised -

Guide shoe

1 joint J55 23 1b S.r. & C.

Float collar Cross over sub

166 joints N80 26 lb Xline

Cross over sub

2 joints J55 23 lb S.T. & C.

Centralisers

at 1439, 1458, 1486, 1505

1524, 1542 m (4721, 4785, 4876, 4938, 4999, 5060 ft)

Float Collar

Shoe Cement

at 1601 m (5255 ft) 210 sacks, construction

at 1589 m (5214 ft)

15.5 ppg slurry

Cemented to

982 m (3220 ft)

Method

Double plug displacement bumped

plug with 1750 psi.

Equipment

Halliburton Twin T-10 pump

truck.

3.3.4 Drilling Fluid

(i) $12\frac{1}{4}$ inch hole

The mud used during this drilling phase had the following range of properties:-

SG 1.08 to 1.13

Visc 33 to 35 sec.

Filtrate 10.5 to 13.0 ml.

Cake 2 mm

pH 7 to 9.5

Mud rings continued to be troublesome whilst drilling the Gellibrand Marl.

(ii) 8^{1}_{2} inch hole

Upon drilling out cement, the mud was watered back and treated with sodium bicarbonate. Prior to coring the Waarre Formation, the mud had the following properties:-

SG 1

1.13

Visc Filtrate 37 sec. 8.4 ml.

Cake

2 mm

pН

7.5

Sand

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These properties were maintained to total depth. Few hole problems were experienced during the drilling of the $8\frac{1}{2}$ inch hole.

It was found however that at a mud pH of 9.5, hydrogen was being formed by the reaction of caustic soda with the aluminium drill pipe. To minimise this effect, which affected the mud-gas logging, the pH was reduced to 7 to 7.5. At this level, both the ligno sulphonate and carboxymethyl cellulose were not particularly effective and some fermentation of the mud occurred resulting in the formation of sulphides.

Should this problem recur in future drilling, the pH must be maintained at 9.5 and due allowances made by the mud-logging crew.

3.3.5 Water Supply

Drilling water was obtained from the Port Campbell-Timboon pipeline which was contiguous to the well site. Particularly in the early stages of drilling, the supply was restricted to 10,000 gpd due to heavy domestic demand caused by the unbroken hot and dry weather.

3.3.6 Perforations

The 7 inch production casing was perforated from 1469 to 1475 m (4819 to 4839 ft.) with 4 shots per foot using Schlumberger Hyperjet II end loaded 4 inch guns.

3.3.7 Production Tubing

A production string comprising:-

Catcher sub
Otis Type 'XN' Nipple
1 joint 2 7/8 inch J55 6.5 pound tubing
Otis Hydraulic Packer
1 joint 2 7/8 inch J55 6.5 pound tubing
Otis Sliding Side Door sub
161 joints reduced to 148 joints
J55 6.5 pound Tubing

was run to approximately 1573 m (5160 ft). The drilling mud was displaced with a completion fluid; thereafter the packer was pulled back and set at 1440 m (4726 ft).

3.3.8 Completion Fluid

A calcium chloride brine with S.G. 1.04 and treated with a corrosion inhibitor (Correxit 7720) was used.

3.3.9 Christmas Tree Details

See Appendix 6.

3.4 Formation Sampling and Testing

3.4.1 Cuttings

Representative lagged cuttings samples were taken as follows:

20 m to 1200 m every 10 m. 1200 m to 1400 m every 5 m. 1400 m to 1603 m (T.D.) every 3 m.

The cuttings description sheets are enclosed as Appendix 2.

Samples were washed clean of drilling mud. Three splits were made, an air dried and oven dried sample for Beach Petroleum N.L. and an oven dried sample for the Department of Minerals and Energy.

3.4.2 Cores

Two successive cores were cut using a new Christensen C22 face discharge bit and a 60 foot (18m) core barrel. In each case coring was limited to less than 18 m due to jamming of the core barrel.

Core No.1 was cut from 1459.0 m to 1469.15 m*(10.15 m) and recovered 10.13 m of core. (Recovery 99.8%).

Core No.2 was cut from 1469.15 m to 1478.0 m* (8.85 m)

and recovered 4.91 m of core.

For analytical purposes, five samples were taken from the Waarre Formation sand in Core No.1 and three samples were taken from Core No.2. In Core No.1 a 4" sample was taken approximately every foot in order to give reliable statistical results. At the base of Core No.1 and for all of Core No.2 it was not possible to sample every foot as the core recovery was mostly just loose sand. The three samples taken from Core No.2 were collected from the only consolidated portions of the recovered core.

(Recovery 55.5%).

Each sample was wrapped in 'glad wrap', then wrapped in 'alfoil', labelled and dipped in seal peel. The samples were then dispatched to CORELAB in Perth for analysis.

The results of the analyses and core descriptions are included as Appendix 3.

* Note: These depths are drilled depths. Top Waarre Formation in the core was 1467.06 m (refer Appendix 3), whereas top Waarre Formation on the logs is 1469 m. This 2 metre mistie is referred to in Section 5.2. The solution to the mistie is best achieved by matching the coal bed within the Flaxmans Formation in the core with the log character of coal on the Sonic Log.

3.4.3 Tests

(i) Drill Stem Tests

Two open hole drill stem tests were run

Drill Stem Test No.1

Interval Tested: 1462 m - 1478 m (4797 to 4849 ft.)

Packers Set at: 1460 m and 1462 m with

no cushion.

Recovery: Nil. The tool opened but

the anchor pipe blocked together with partial to complete packer seat failure.

Pressures: Only hydrostatic pressures

recorded.

Drill Test No.2

Pressures:

Interval Tested: 1444 m - 1478 m (4739 to 4849 ft.)

Packers Set at: 1442 m and 1444 m with no

cushion.

Recovery: Nil. The tool opened but

the packer seat failed.
Only hydrostatic pressures

recorded.

(ii) Wireline Tests

Two tests and five pressure readings were made during the one run in the hole with the Schlumberger Repeat Formation Tester (RFT).

RFT No.1

1481 m	(4859 ft)
l min.	
17 min.	
10 min.	
	1973.5 psi
	1825 psi
	1973 psi
	1973 psi
	- ⊳2374 psi
	1650 psi
	$1 \times 0.020 in$
	40 cu ft gas
	500 ml water
	and mud.
	1 min. 17 min. 10 min.

RFT No.2

Depth	1473 m (4833 ft)
<u>-</u>	2.5 min.
Initial Shut In	
Sampling Time	13.5 min.
Final Shut In	8 min.
Initial Shut In Pressure	1972.5 psi
Initial Flow Pressure	1942 psi
Final Flow Pressure	1972 psi
Final Shut in Pressure	1972 psi
Hydrostatic Pressure	2340 psi
Surface Chamber Pressure	1650 psi
Choke Size	0.020 in
Recovered	37 cu ft gas
	< 10 ml mud and water

Pressure Readings (Initial Shut in Pressure)

Depth	Pressure	Build Up Time
1500 m (4921')	1993 psi	3 mins.
1490 m (4888')	1979 psi	0.5 mins.
1484 m (4869')	1974 psi	2 mins.
1481 m (4859')	1973.5 psi	l min. (RFT No.1)
1478 m (4849')	1973 psi	0.5 min.
1473 m (4833')	1972.5 psi	2.5 mins. (RFT No.2)
1470 m (4823')	1972 psi	0.6 min.

The Drill Stem Test Service Report is included as Appendix 4 and the RFT raw data is presented as Enclosure 6.

3.5 Logging and Surveys

3.5.1 Mud Logging

A trailer mounted standard Exploration Logging (EXLOG) unit was contracted to provide a complete mud logging service. Drill penetration rate, continuous drilling mud gas detection and intermittent cuttings gas analyses were performed and the mudlog is enclosed as Enclosure 1.

3.5.2 Electric Logging

Schlumberger recorded the following logs in open hole:-

Run 1

Dual Laterlog (DLL-GR-SP) 360.3 to 1604.2 m (1182 to 5263 ft.)

Micro Spherically Focused Log (MSFL-Cal) 1175 to 1604.2 m (3855 to 5263 ft.)

3.5.2 Cont'd.

Compensated Neutron - Formation 1175 to 1604.2m Density (CNL-FDC-GR-Cal) (3855 to 5263 ft.)

Borehole Compensated Sonic Log (BHC-GR-Cal)

360.3 to 1604 m (1182 to 5262 ft.)

Repeat Formation Tester (RFT) 1470 to

1470 to 1500 m (4823 to 4921 ft.)

Schlumberger recorded the following logs in cased hole:-

Run 1

Cement Bond Log

(CBL-VDL-GR)

965 to 1569.3 m (3165 to 5149 ft.)

Casing Collar Log and Perforating Record (CCL)

3.5.3 Deviation Surveys

During drilling, deviation surveys were run using a SURE SHOT survey instrument. Results were;

30 30 at 36.6 m (120 ft.) at 68.6 m (225 ft.) ¹0 95.4 m (313 ft.) at 3/40 at 129.3 m (424 ft.) 3/40 at 193.3 m (634 ft.) 3/4° (847 ft.) at 258.2 m 3/4° at 313.7 m (1029 ft.) at 393.6 m 3/4° at 600 (1291 ft.)(2045 ft.) r_o o at 832 m (273C ft.) at 980.9 m 3/4 (3218 ft.) Tro o, at 1097.3 m (3600 ft.) o at 24 1191.8 m (3910 ft.) 110 at 1225.6 m (4D2] ft.)210 at 1329 m (4360 ft.) at 1365.2 m 23 (4478 ft.) (4786 ft.) at 1459 m 1 3/40 at 1567 m (5140 ft.)

4. POST DRILLING COMPILATION AND LABORATORY STUDIES

4.1 Composite Well Log

A composite well log is included as Enclosure 2.

4.2 Gas and Fluids Analyses

The following gas analyses have been done;

- (i) On site gas chromatography by EXLOG of the gas recovered in RFT No.1.
- (ii) A low pressure sample collected by displacing water in a sample bottle was analyzed by the Gas and Fuel Corporation of Victoria.
- (iii) A high pressure gas cylinder sample was forwarded to the Gas and Fuel Corporation of Victoria for analysis.
- (iv) A high pressure gas cylinder sample collected from after the separator was forwarded to CORELAB in Perth for analysis.

The following fluids analysis has been done;

(i) A condensate sample was forwarded to AMDEL in Adelaide for a high resolution gas liquid chromatography analysis of liquids.

All gas and fluids analyses are included as Appendix 5.

4.3 Core Analyses

The eight samples collected from Cores 1 and 2 were dispatched to CORELAB in Perth for analysis. The following services were requested on each of the samples;

- (i) Porosity and Horizontal Permeability by Helium injection
- (ii) Vertical Permeability by Helium injection
- (iii) Calculated Grain Density
- (iv) Lithologic Description

and on two of the samples (Samples 2 and 5 respectively)

- (v) Six point capillary tests
- (vi) Determination of formation factors 'm' and 'n'
- (vii) Determination of resistivity index
 The results of this work are included in Appendix 3.

5. RESULTS OF DRILLING

5.1 General

North Paaratte No.2, which proved the easterly extension of the gas bearing Waarre reservoir on the North Paaratte structure, was completed with production casing, tubing and a Christmas tree as a potential producer. The top of the Waarre Formation reservoir was intersected 6.3 m (or 20.7 ft.) higher structurally than at North Paaratte No.1. The two wells share the same gas/water contact. There is 20 m (65.6 ft.) of gross and 17.6 m (57.7 ft.) of nett gas column in the well. The upper 11 metres gross of this sand is totally gas saturated with only irreducible water saturation as indicated on the logs. The lower 9 m gross of this sand has reduced gas saturations.

The recovered gas has been analysed and shown to be very dry. (Up to 96% Methane).

Initial production testing has established that the well's Open Flow Potential is 95MMCFD; condensate production is at the rate of at least 2.5 bbl per MMCF.

Further work is required before it can be determined if the gas discovered on the North Paaratte structure will prove commercially viable.

5.2 Formation Tops

The following formation tops have been picked using cuttings description, mudlog and electric log data:-

		Below Subsea	<u>Thi</u>	ckness
	KB	tres)	(Metres)	(feet)
Port Campbell Limestone (ou	•	+117	82.8	271.7
Gellibrand Marl	86	+ 34.2	205	672.6
Clifton Formation	291	-170.8	24	78.7
Narrawaturk Marl	315	-194.8	22	72.2
Mepunga Formation	337	-216.8	62	203.4
Dilwyn Formation	399	-278.8		790.7
Pember Mudstone	640	-519.8	51	167.3
Pebble Point Formation	691	-570.8	72	236.2
Paaratte Formation	763	-642.8		total) 1545.3
Skull Creek Member	1127	-1006.8	107	351.1
Nullawarre Greensand	1234	-1113.8	105	344.5
Belfast Formation	1339	-1218.8	95.3	312.7
Flaxmans Formation	1434.3	-1314.1		113.8
Waarre Formation	1469	-1348.8	95	311.7
Eumeralla Formation (Otway	Group) 1564	-1443.8	39+	128.0+
Total	Depth 1603	-1482.8		

The following comments are made

- (i) All tops down to and including the Mepunga Formation are behind casing and have been defined by cuttings description and mud logging techniques only.
- (ii) Formation tops from Dilwyn to Paaratte Formation show very close agreement (mostly exact or at worst within a metre) to tops selected by cuttings description and mud logging techniques only.
- (iii) All formation tops from Nullawarre to Eumeralla as depicted on logs are consistently 2 metres deeper than those selected on mud log evidence alone prior to running logs. This is assumed to have arisen due to the neglect of part of the BHA in the drill string tally whilst drilling.

5.3 Lithologic Description

The lithologies encountered in the well are generalised as follows - (all depths are metres below KB).

0 - 86 m Port Campbell Limestone

0 - 5 m Clay yellow-brown, soft

5 - 86 m Calcarenite light grey to white, firm to hard, fine to very fine grained, abundant shell fragments (bryozoa, forams, lamellibranchs, gastropods), minor glauconite, trace pyrite.

86 - 291 m Gellibrand Marl

Marl, medium grey, soft, abundant shell fragments
(as above), strongly calcareous, minor glauconite.

291 - 315 m Clifton Formation

Sandstone Grit, yellow-brown and dark grey, very coarse grained to fine grained, ferruginous, calcareous, fossiliferous, very poorly sorted, porosity poor to good.

315 - 337 m Narrawaturk Marl

Marl, light brown to light grey, soft, slightly
shelly, moderately pyritic.

337 - 399 m Mepunga Formation

- 337 364.3 Sandy Claystone, light brown to light grey, very soft, dispersive, moderately silty, slightly calcareous, abundant pyrite, common glauconite. Sand fraction consists of shells (mainly lamellibranch fragments) and quartz, fine grained to coarse grained, clear, white and iron-stained, some opaline.
- Claystone, medium grey, soft to very soft, richly glauconitic, slightly calcareous. Accessories are; glauconite, dark green, medium to coarse grained, rod like; shell fragments, coarse grained, broken lamellibranchs dominant with minor foraminifera; trace pyrite.

399 - 640 m Dilwyn Formation

- Sandstone, yellow-brown, very coarse grained to medium grained, slightly conglomeratic, ferruginous, loosely consolidated, angular to well rounded, poorly sorted. Good inferred porosity. Towards base, thin interbeds of Claystone, as above and Marl, medium grey, soft.
- 459 640 m Sandstone, white to light grey, medium to coarse grained, loosely consolidated, sub-angular to sub-rounded, moderately sorted, good inferred porosity.

 With interbeds of

 Claystone, grey-brown, soft, slightly calcareous, and Marl, light grey to medium grey and brown, soft, glauconitic with minor Coal, black, Shale, carbonaceous, black and Siltstone, dark brown.

640 - 691 m Pember Mudstone

Claystone and Marl, medium grey to buff-brown, soft, moderate to abundantly glauconitic, abundant shell fragments. (dominantly large broken lamellibranchs).

- 691 763 m Pebble Point Formation
- 691 706 m Conglomeratic Sandstone, yellow-brown and white, dominantly coarse grained to very coarse grained with minor pebble size grains, loosely consolidated, sub-angular to well rounded, moderately sorted.

 Quartzose with up to 10% glauconite, minor pyrite and trace shell fragments. Quartz grains commonly ironstained on microfractures and some totally ferruginous.
- 706 763 m Glauconitic & Ferruginous Sandstone, yellow-brown, white to clear and green, medium to coarse grained, loosely consolidated, sub-rounded to sub-angular, moderately sorted. Glauconite and/or chamositic, green clay up to 20% of sample. 50% of the quartz is iron-stained.

 With minor interbedded;

 Siltstone, medium brown, cemented, hard, slightly glauconitic and Claystone, as above
- 763 1234 m Paaratte Formation
- 763 1000 m Sandstone, clear, white and yellow, becoming clearwhite down section, loosely consolidated, dominantly
 very coarse grained, subangular to subrounded,
 moderately sorted, quartzose with up to 10% medium
 grey, speckled lithics, trace pyrite. Good inferred
 porosity with minor interbedded,
 Coal, black, hard, brittle
 Silty Claystone, medium brown, soft, dispersive
 and Siltstone, medium grey, hard, subfissile
- 1000 1109 m Sandstone, as above interbedded with

 Sandstone, light grey, hard, fine grained to very
 fine grained, cemented, sub-angular to sub-rounded,
 moderate to well sorted. Poor visual porosity.
- 1109 1127 m Sandstone, loosely consolidated, as above and Sandstone, very fine grained, cemented, as above with minor interbeds of Silty Claystone, medium brown, soft, dispersive
- 1127 1145 m Claystone, buff-brown, soft, dispersive
- 1145 1172 m Sandstone, white and buff-brown, very fine grained, cemented, hard, variously calcareous and dolomitic cemented with minor

 Sandstone, loosely consolidated, as above Silty Claystone, medium grey, soft, dispersive Carbonaceious Shale and Siltstone, buff-brown, hard, dolomitic.

- 1172 1194 m Silty Claystone, medium grey and medium brown, soft, dispersive with minor interbedded, Sandstone, very fine grained, cemented, as above.
- 1194 1234 m Silty Claystone and Clayey Siltstone, medium grey, firm to soft, dispersive (in part), slightly carbonaceous, with minor interbedded Siltstone, buff-brown, hard, dolomitic and Sandstone, buff, light yellow-white, hard, very fine grained, dolomitic cemented.
- 1234 1339 m Nullawarre Greensand
- 1234 1250 m Sandstone, white to light green, loose and partly cemented (hard), fine grained to granule (grit size), dominantly coarse grained, subrounded to subangular, dominantly subrounded, moderate to poorly sorted, quartzose, slightly glauconitic, slightly carbonaceous, slightly pyritic, weakly calcareous (in part).
- 1250 1339 m Sandstone, dark green, loosely consolidated, medium to very coarse grained, dominantly coarse grained, moderately rounded, moderately sorted, quartzose, argillaceous glauconitic matrix. Quartz grains are discoloured with green clay adhering to quartz grains. With minor interbeds of Siltstone, light brown-buff and medium grey, very soft, dispersive, slightly calcareous, trace glauconite.
- 1339 1434.3 Belfast Formation

<u>Silty Claystone</u>, medium to dark grey, very soft, very glauconitic, slightly carbonaceous with minor interbeds of <u>Dolomite</u>, buff-brown, hard, slightly glauconitic

1434.3 - 1469 m Flaxmans Formation

Silty Claystone, as above with minor Glauconitic Sandstone, green and white, loosely consolidated, fine to medium grained, dominantly medium grained, subrounded, moderately sorted. Quartz grains are white with some yellow-brown discolouration, and minor Dolomite, as above and Dolomitic Sandstone, buff-brown, hard, cemented, fine grained, slightly glauconitic trace of Coal black, pyritic

1469 - 1564 m Waarre Formation

Reference to Figure 5 shows six lithologies present within the Waarre Formation. (Also refer Appendix 3).

LITHOLOGY 1

Sandstone, light grey-white, soft, friable to loosely consolidated, fine grained to very coarse grained (minor pebble sized grains), dominantly medium to coarse grained, sub-rounded to sub-angular, moderate to well sorted, quartzose, slightly carbonaceous. Visible porosity moderate to excellent. This sandstone occurs in the intervals 1469 1476.3, 1477.1 1484.3, 1487 - 1491.3, 1492.6 1495.2, 1495.9 - 1496.2, 1497.1 1507.2, 1496.1 1517.3 - 1518.3, 1559.3 - 1560.6, 1561.3 - 1562, 1562.6 -1564.

LITHOLOGY 2 Silty Claystone, medium grey, firm to soft, moderate to strongly glauconitic. Occurs over intervals;

1476.3 - 1477.1, 1510 - 1510.8, 1511.8 - 1514.2, 1515 -1517.3, 1518.3 -1519.3, 1522.1 - 1522.5, 1523 - 1523.3, 1524.1 - 1525, 1525.7 - 1528.1, 1528.7 - 1529.2,

1533.7 - 1535.7, 1536.3 - 1537.3, 1539 - 1545.9.

LITHOLOGY 3

Sandstone, white, hard, cemented, fine grained to very fine grained, matrix dominant, calcareously cemented. Occurs over intervals; 1484.3 - 1487, 1491.3 - 1492.6, 1495.2 - 1495.9, 1496.2 - 1497.1, 1508.8 - 1510, 1510.8 -1511.8, 1520.4 - 1522.1, 1522.5 - 1523, 1523.3 - 1524.1, 1525 - 1525.7, 1528.1 - 1528.6, 15**30**.3 - 1533.7.

LITHOLOGY 4

Sandstone, yellow-brown, hard, cemented, fine grained to very fine grained, matrix dominant, dolomitic cemented. Occurs over intervals; 1507.2 - 1508.8, 1514.2 - 1515, 1519.3 - 1520.4, 1529.2 - 1530.3.

LITHOLOGY 5

Lithic Sandstone, light grey-white with dark grey, green and minor red-brown speckles (liths), fine grained, moderately sorted. The sandstone is both quartzose and lithic. The quartz is quite angular, the liths tend to be sub-rounded to well-rounded. The liths are mostly quartzite rock fragments. white matrix is calcareous. Occurs over intervals, 1545.9 - 1559.3, 1560.6 -1561.3, 1562 - 1562.6.

LITHOLOGY 6

Coal, black, vitreous lustre. Thin seams at 1535.7 -1536.3, 1537.3 - 1539.

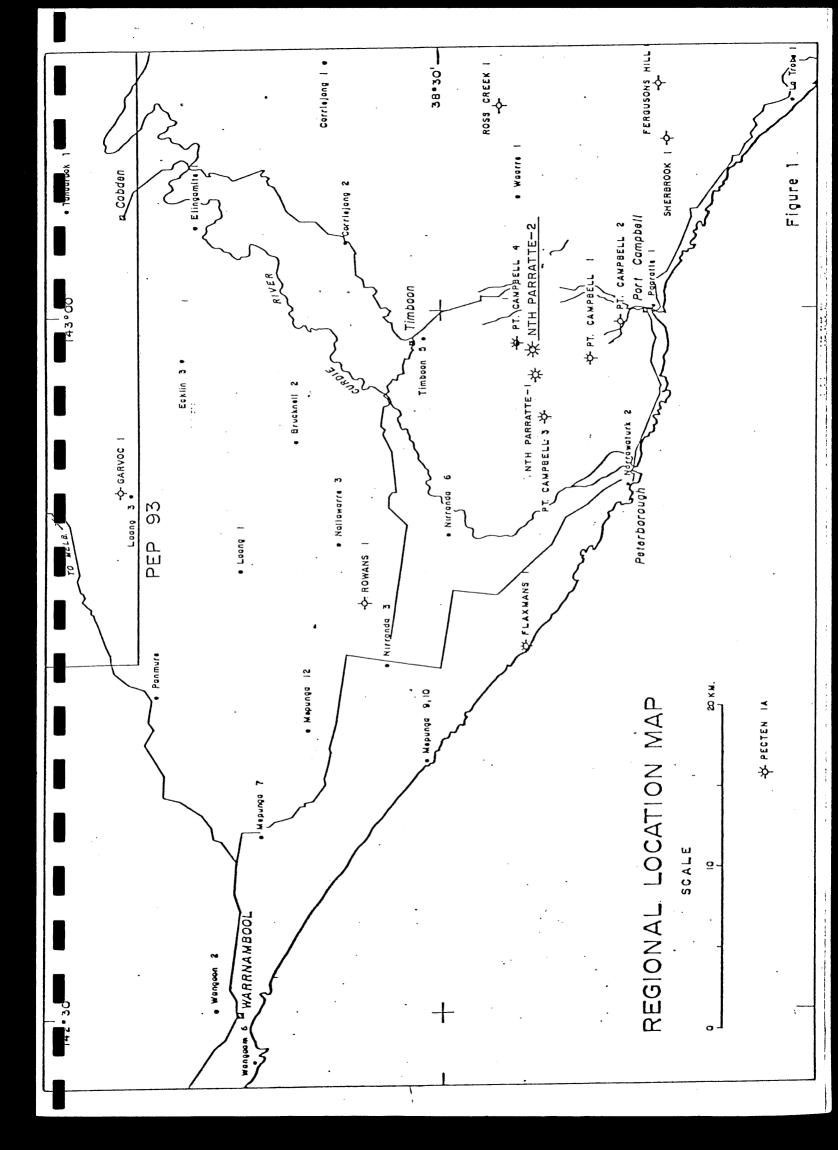
1564 - 1603 m

Eumeralla Formation (Otway Group)

(TD)

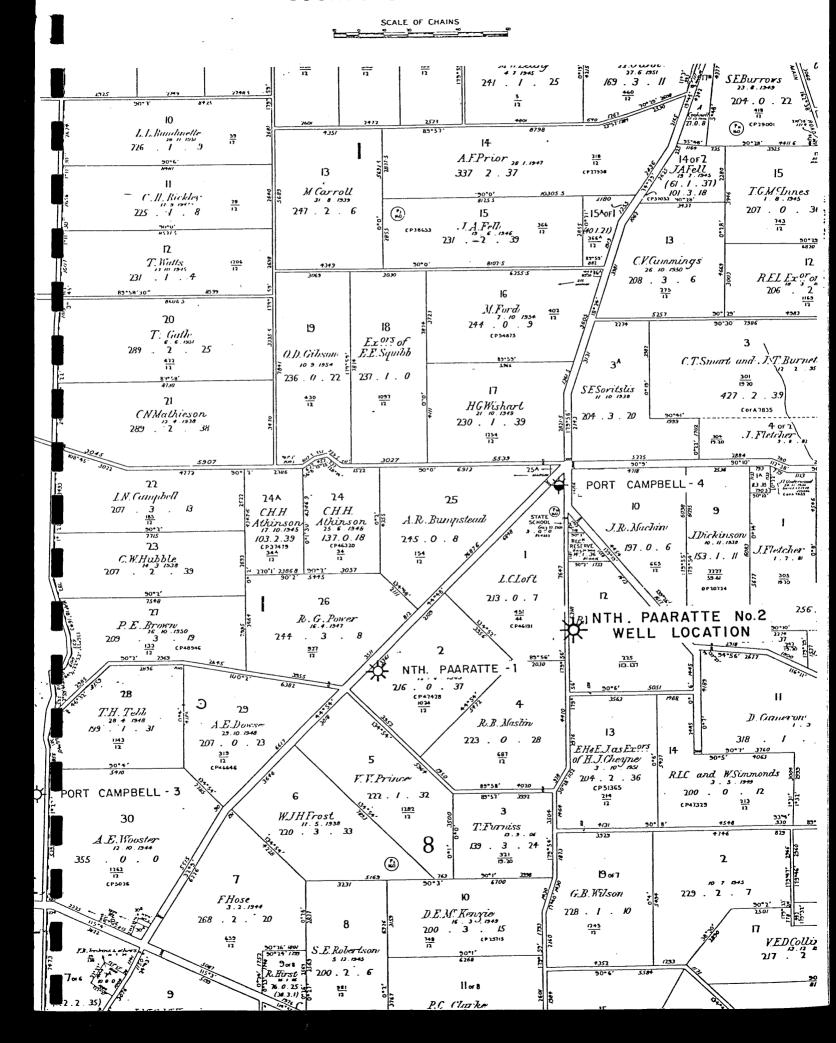
Lithic Sandstone, white, dark grey and medium green, fine to very coarse grained, dominantly medium grained, sub-angular to sub-rounded, moderately sorted, quartzose and lithic. Quartz is clear to white. Lithics are dominantly dark grey and medium green, quartzite liths with light green - white clay adhering to surface.

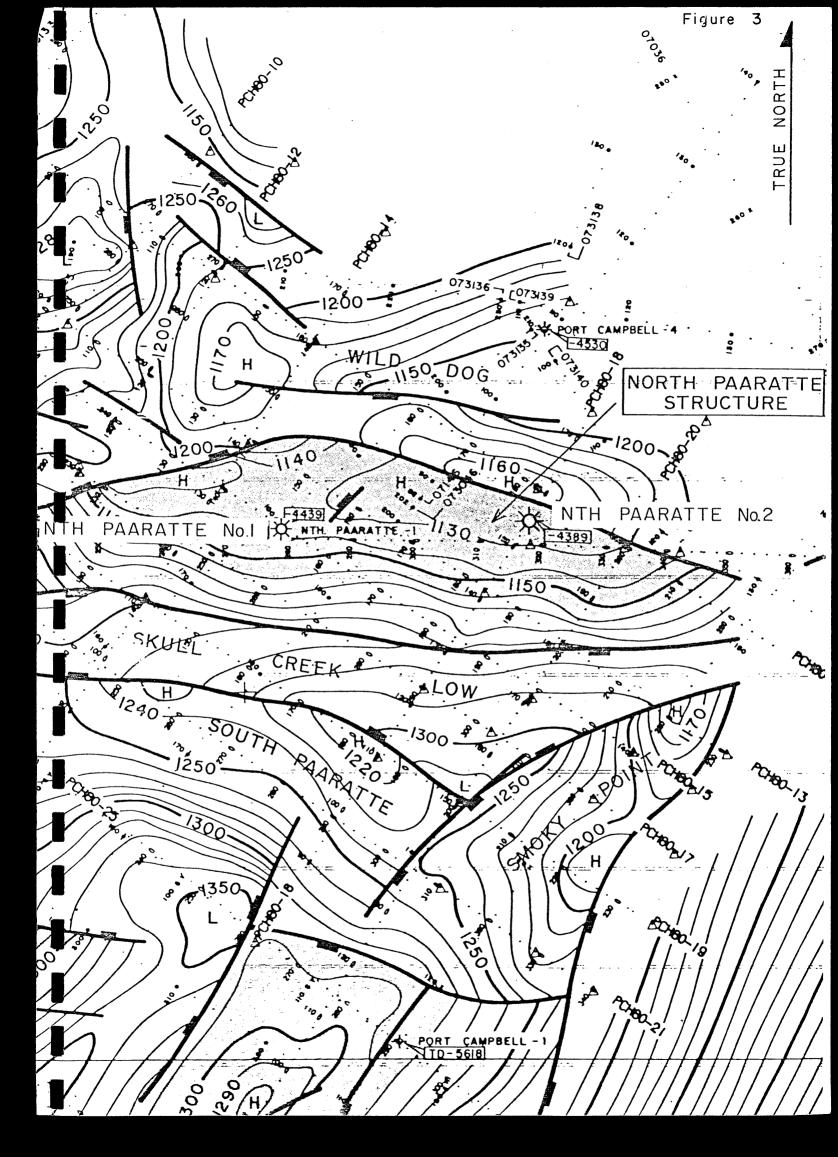
At top of Otway Group have; Claystone, light grey to medium grey, very soft, sticky and puggy.



PAARATTE

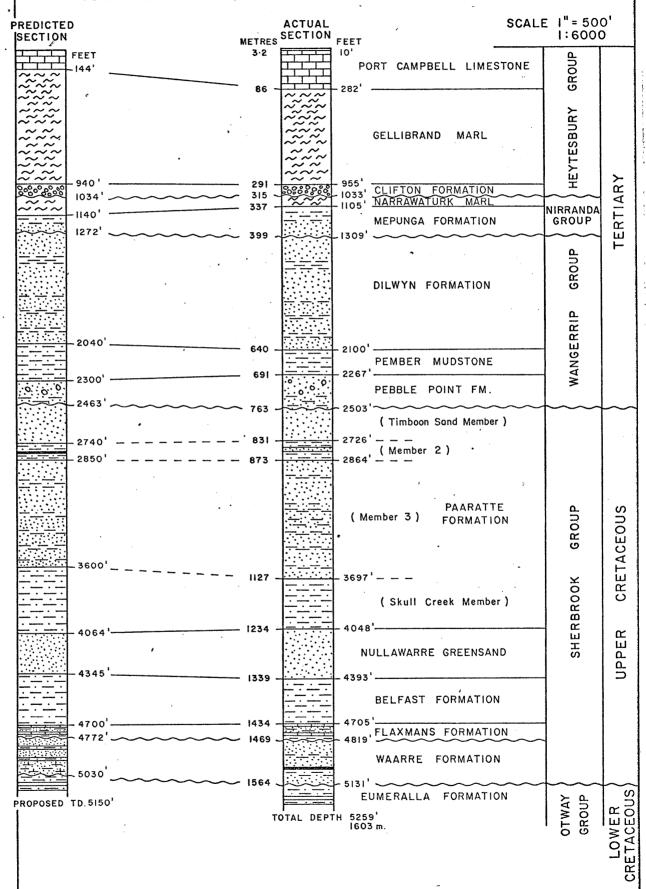
COUNTY OF HEYTESBURY





NORTH PAARATTE No.2

COMPARISON OF PREDICTED AND ACTUAL SECTION



PE604743

This is an enclosure indicator page. The enclosure PE604743 is enclosed within the container PE906815 at this location in this document.

The enclosure PE604743 has the following characteristics:

ITEM_BARCODE = PE604743
CONTAINER_BARCODE = PE906815

NAME = Borehole Compensated Sonic Log

BASIN = OTWAY
PERMIT = PEP93
TYPE = WELL

SUBTYPE = COMPOSITE_LOG

DESCRIPTION = Borehole Compensated Sonic Log/

Interpretive Lithology of Waarre Fm., Scale 1:200 (Figure 5 from WCR) for

North Paaratte-2

REMARKS =

DATE_CREATED = 28/02/81 DATE_RECEIVED = 28/04/81

 $W_NO = W736$

WELL_NAME = NORTH PAARATTE-2

CONTRACTOR =

CLIENT_OP_CO = BEACH PETROLEUM

(Inserted by DNRE - Vic Govt Mines Dept)

APPENDIX - 1

DETAILS OF DRILLING PLANT

APPENDIX - 1

DETAILS OF DRILLING RIG

CONTRACTOR'S, RIG \$ 8

DRAWWORKS

: Ideco H-35 double drum with 15' Hydromatic Brake.

ENGINES

: Two (2) GM 6-71 twin diesel units.

ROTARY . TABLE

: Ideco 17-1/2".

SUBSTRUCTURE

: Mast Subbase 8'6" high.

RIG LIGHTING

: Rig-A-Lite explosion proof system.

MAST

: Ideco KM 103-195-GH Gross nominal capacity 195,000 pounds.

TRAVELLING BLOCK WITH UNITISED HOOK

: Ideco D110-3-24.

SWIVEL

: Ideco TL-120.

KELLY DRIVE

: Ideco Squarehex 4-1/4".

MUD PUMPS

National K380 $7\frac{1}{4}$ " x 14" Mud Pump powered by GM16V Series 71 Engine with K10 Pulsation Dampener.

: National C150B 7-1/4" x 12" powered by twin GM 6-71 diesel engine.

TANK

: (1) 6 x 4 Warman Centrifugal powered by GM 4-71 diesel engine.

: One (1) 35' $long \times 8'$ wide $\times 4'6$ " high - skid

SHALE SHAKER

MIXING PUMP

: Rumba unit.

mounted.

DESANDER/DESILTER

: Combination unit with 2 x 8" and 8 x 4" cones with Warman 6 x 4 centrifugal pump powered by GM 3-71 - diesel engine.

ENERATORS

: Two (2) 75 Kw units powered by GM 6-71 diesel engines.

.O.P.'S & ACCUMULATOR

: One (1) 10" - 3000 psi WP Shaffer Annular BOP. One (1) 10" - 3000 psi WP Shaffer Doubel Gate BOP. Koomey 60 gallon Accumulator system.

ELLY COCK

: Omsco unit - 10,000 psi.

IR COMPRESSOR & RECEIVERS

: Two (2) Ingersoll Rand Compressors with 120 gallon receivers.

One (1) 2 AVC Westinghouse Compressor.

SPOOLS

: One (1) 10" - 3000 x 10" - 3000 Drilling Spool
 with 2" outlets.

One (1) $10" - 3000 \times 6" - 3000$ Studded Adaptor.

One (1) $10" - 3000 \times 10" - 3000$ Spacer Spool.

RAT HOLE DRILLER : C & W unit. CHOKE MANIFOLD : 2 Choke 3000 psi WP unit. 7000 ft 4½" internally plastic coated aluminium 8.351b/ DRILL PIPE . with 6-1/8" OD 18 degree taper hard band tool joints. (Weight of drill pipe with tool joints = 10.75 lb/ft). 6 joints 4-1/2" hevi-wate. DRILL COLLARS : 4 x 8" OD with 6-5/8" Regular connections. 12 x 6-1/4" OD with 4" IF connections. KELLY : 4-1/4" square with 6-5/8" Regular Box Up. FISHING TOOLS : (1) Bowen 7-5/8" series 150 SH Overshot. (1) Bowen 9-5/8" series 150 Overshot. (1) Baash-Ross 6-1/8" OD Bumper Sub. (1) McCullough 6-1/8" OD Rotary Jars. (1) Junk Sub for 8-1/2" hole. HANDLING TOOLS : (1) Varco CU Casing Bushing for 17-1/2" Table and to handle 13-3/8" and 9-5/8" casing. (1) set CMS 13-3/8" Casing Slips. (1) set GAS 9-5/8" Casing Slips. (1) set 13-3/8" Side Door Elevators. (1) set 9-5/8" Side Door Elevators. (1) set 13-3/8" Single Joint Elevators. (1) set 9-5/8" Single Joint Elevators. (1) set 5-1/2" CMS Casing Slips. (1) set 5-1/2" Side Door Elevators. (1) set 5-1/2" Single Joint Elevators. (1) set 4-1/2" Drill Pipe Slips. (1) set 4-1/2" MAA Drill Pipe Elevators. (1) set 5-1/2" - 7" Drill Collar Slips. (1) set 6-3/4" - 8-1/4" Drill Collar Slips. (1) set 2 Elevator Links 2-1/4" x 108" (110 ton). (1) set Web Welson type B Tongs with jaws from 3-1/2" to 10-3/4". (1) set BJ type B tongs with 13-3/8" jaws. NSTRUMENTS & INDICATORS : Martin Decker Clipper Weight Indicator. Pump Pressure Gauge. Martin Decker Tong Torque Indicator. Geolograph G3 Recorder. : Sure Shot $0^{\circ} - 7^{\circ}$ unit. EVIATION RECORDER TOOLHOUSE : (1) 28' long x 8' wide x 7' high. I G HOUSE : (1) 24' long x 8' wide x 7' high. GENERATOR HOUSE : (1) 34' long x 8' wide x 7' high. WELDING EQUIPMENT : (1) Lincoln 400 AMP with diesel engine. (1) set Oxygen/Acetylene. PIPE RICKS : (1) set (6) 26' long x 42" high. : (1) 45' long x 5' wide x 42" high. ER TANKS : (1) 28' long x 8' wide x 7' high.

DAY FUEL TANK

: (1) 1500 gallon unit.

SUBSTITUTES '

: (2) 6-5/8" Reg. Pick up Subs.

(2) 4" IF Pick up Subs.

(1) 4" IF Box x 6-5/8" Reg Pin Sub.

(1) 6-5/8" Reg Box x 4" IF Pin Sub.

(1) 4" IF Pin x 4-1/2" FH Pin Sub.

(1) 4-1/2" FH Pin x 4" IF Box Sub.

(1) 4" IF Pin x 4-1/2" Reg Box Sub.

(1) 6-5/8" Reg Pin x 6-5/8" Reg Box Sub.

(2) Kelly Saver Subs.

MUD TESTING

: Magcobar Rig Lab complete.

JUNK BOX

: (1) 20' x 8' x 4' high.

MATTING

: (1) set Hardwood mats.

WATER PUMPS

: (2) AEI -2" x 1-1/2" powered by electric motors.

FIRE EXTINGUISHERS

: (1) set for rig and surrounding areas as per the applicable State Mines Department Regulation.

TOOLPUSHER OPERATOR OFFICE: (1) 30' x 10' wide x 9' high with office and living facilities.

	PERCEN	IAGE R	
S. E. S	TAHS LAMO		SAMPE DESCRIPTION
700m		90	Conglansatic Sondstone, pehble size inchained gleante han adjumentained quarte,
			downwall cato v.c. o v-by with sub-angular to wall rounded wealth synthe &
			alcure, it is hosel ansolidated board to excellent intered morarity
			10 Claystale as above
	•	V	Ab Carais care: ins abundant (. Note: a c.g. ball basing)
7/0m		<u>:</u>	す
		,	10 Sand Hay- who traislued toosely consolicles of m-c.g
			(Del c. 9 & Chall fronts c. 9 male up to 10% of seminte)
.720.		3,	95 Sandstone y-who or 14 y loozely causalidated m-c.9 moderately sorted
			sub-rounded to sub-angular good interest envisity, taknajnous iron stainants
			are is which canad.
		•	5 Hi such from the H
730~		,	95 Sandshy your harbor loosely emsolidated none a midrately sorted
			sub-moraled to sub-mequaer good inflaved parcisty ferruginans iron stained ata
			grains while
			ovado se la
			H Silbstane, canadistrated, St. a Consoline
			to Black carbonnesout shallo.
740m)	60 Sondetone as about.
	,	- X-	to Siltstone medium brown to madium over the auxed of Dy intic very alongon it is vio
750m			60 Sandshore as above
			20 Haussile Co
			10 Siltatore as charle of Sirrich
			U

a 	RCENTAGE E	
SAMPLE "	TAHB MJ	E DESCRIPTION
0)9		40 Sandstone: 19t gry-while-sonae-clear loosly cons. Aggran, ang-rnd, good infered of
	10 Stistene: 19+ brn-drk brn. mod hrod	ibn modund -sft, richly alays in part, some shell have modecate.
	assoc with minor dies purite.	Aiss purific.
(20	As for 610	7-
O.8.0	70 Sondstone of te	30 Sondstane of to white lookly cons, ta- ca, ang-submd, good int of,
	30 Sillistone, as about	30 Sillstone, as above echinoid spinon together with shall Gogs.
540	Wandstone: clear	100 Sandstone: clear - transleveeut - yellow, loosly cons. 19-mg, Md-subang
-	mad sorting good	
	K Good , Black minor pyrithzation	nor pyritization
	Ir Sillstone: as abour	フ・そうの
020	80 Sandstone: A/A.	
	1 20 Silkstone as above	20/Siltstone as above, richly alaucanistic, minor torains
. 0%	80 Clay show modius	80 Clay show wedness gray but brown soft, modera lely cale we draitely
	glacouitic. At	abusemilie. Acelesanios co, an almenile c.g. dell framusik
	20 Sandstone as als	こて・ててて
670	100 Claystans, midium brown	on brown soft, moderably calcareous, richty glamanthe
	abunda & shell	7-0
	Accessones: 10%	Accessories: 10% Gamerile 10% Shell Grane A
089	to Chaystone as abone	, , , , , , , , , , , , , , , , , , ,
. 669.	10 Sandstone V- bros	int, v.c.g. to mg dominanth ca, minor nobbles, loosely cusplished
	angular to sub-	ounded strangly our iton stained quarts. Un to 10% of concernity, miner profits
	trace stall frame	trace that transmit toward internal Enrices.
	30 Clay chare as about	9.0

	:	
E & STATE	TAHS MJ ACO	_
540		90 End at above
		10 Had making gold.
550.		So Said who It, ay ea to view poorts sould borned consolidated, and
		in land parasity
•		20 Hat yes - cott. alonearlic.
		K anharacana Stato black
295		80 Sand as for SSOM 120- hims privile came L.
		K Cayeson Chian to soft
570		80 Hart light apen - madien apen cold, a faucenation
		To Silvetono al bu time
		10 Sand, as above
580		80 Sand light gray-while, cooper grained out-rounding to sub-angular boscols
		consocial good interned a grassity
		10 Mark 21/2
		10 Stell bagiests a Glaucasife (dK, on 2 bK)
240		90 Hart. In sold, staurosing accessooner, end lorge still frances planearily
		~
049		80 May as above
		15 Sand as above
·		5 Silkhue by Him.

E S SHALE	THE TABLE OF THE PERSONAL WELL WANTE OF THE PROPERTY OF THE PERSONAL PR
450m	low Sand y-busuly e.g. bottle unewholology poort, what A/A becoming lan
	Connections (les inne stained)
460m	100 Sand, who light gray, restimm to coarse grained moderately conted subangular to
	cub-rounded world, care of interface and interpol perveity
	Hr Black Cool Siltshane brown, firm
470	100 Sand : at you 460 m
480	100 Sand as for 460m
	he Mark aper, coff.
	to yoursolle position.
940	95 Sand as whore
	5 Mad and south as about
	to Generale Perite
225	100 Sand as about modal arain size medium i.e. Lat fing down seekin
	It Sittstone over firm to hard.
510.	80 Clarchant grey-brown soft calcarence due to dell traine to
	10 Soud of above
	10 Hoursile, coops grained stall fragment
520	(00 Sand, muse a loosely consolidated white . Wester, at above
	It Carches WA
	to Sithlan brown had to time
	It Black Coal.
530	80 Sand, A/A
	2 Carchans 2/A.
VIII	MISC 09

SHALE	SAME DESCRIPTION AND A COLORADO A CO
	100 Clay shone, well an grey soft to very soft, richly a fauranite, slightly calearans
	Accessives are daysaile dock green redium to coarse grained roof lille, stell trag and coarse
	graind broke larelt hounds dominant intrust foramington a cores. True lyike
380	. Las for 370m
30m	Las for 370ms
90m	
·	postly safed, lovely enrestidated arendar to well rounded. Iran stations as
	microfrachuses faruginans.
工	1
*	
410m	Sand very coarse a raintel as about and
-	Puests is becoming closes and come wilk, origins
2/	Sandstone, light one, while brown area, the orained calconeous hard cano be by cliftly little.
	. shings disservated observative cliquet levingingus
Q	10 Cleyshore a glave probably consin
420 m	50 Soud y-by m-v.cg dominantly a a lary as about
	50 (Lay Work, Medium are, A/A
士	,
4	
430m	90 Sand as about
	Chordon 2/A.
460	Lac for 430m souls words orain size is her similar down so his
	2
0)	Oa
W. C. Const. Con	MISC 09

SAMFE SOLVE	S: 15.2 S	MAPINE SECRIPTION
340,	Q	
	10 Hart	in app. disclik
	00	size traction consisting
	S.	- C - C - C - C - C - C - C - C - C - C
	0	Honday
		sens of shouling
	Q)	Quests fig nh & vellow-by iterstoined
	. <u>Q</u>	rile bk
350m		340 m
355.5,		42 24
355.5m	300	
	90% at	weter 10's
	المحكا	action concists
	\$ 08	ed fromment
	9	Quarte c.9 - f.9 clears while a minor importanted trace citing south
		1 1 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	0	10 Chauconte & Ribe
364.3m	2	100
(11954)		

L			ER	
ss	AH2	1400	HT0	SAMPLE DESCRIPTION
291M GRAB SAMP			ट्ट	Claystone: 10-an very soft attaky, fossilitorous, fossils ine Romer whell
				ر ک
			٢	Glauconite:
			بر	
			上	
				possibly calc cemented,
		*0,	-	Top Wiften? Samples badly conforminated with bellibrand Harl.
300 m				Las for 290m sample
310m	,		B	Chyshone as alone
-			Q	
				to fine agained, lestuainous calicareaus fossilifavous "IT poody sortled parosily poor to good
-		~~		(in very variable) This is a remarkable but type probably a dypical beachwork (as
-				Ĭ
				i. I
		~		because still have promid exstal faces some grains of worn & stillly round
				Stell Sand light grew fine grained strongly calconlour parous
·				Sand who dark brown calcaron with formainous in nodulas
320m			90	Claystone as above.
			Q	mas - 1449
330m			R	
			01	Sandsbone buff to madi
			,	were speior with miner atting one describe there alone on the
			ă	L

3 1014	TAHS TAM	HE	SAMPLE DESCRIPTION CONTRACTOR CON
8		g	100 Horl: gry dik ory, soft elicky hydratable, becoming clayery or less calcarioss.
			onm apos ha
90		B	
8		8	Claystone: gry, soft sticky, milally railrains a Tossile ine forams, gashappeli
			echinoid spine, shell have foroms (almost marl)
		<u>}</u>	7
20	•	త్తి	Clayatone: A/A
		չ	Pinto : A/A.
220	•	ଡ୍ଡୀ	Claystone A/A weakly eate
		ہر	M
03.2		ğ	Clay star : A/A
		エ	
240		B	Claysion: A/A
		≱	Purif : A/A .
50		8	Clayelone: A/A
097		છે	10 Claustone: 14/A
OL?		8	180 Claystone: A/A
		7	Dick: Dist
Q		001	
		٧	Drie Disk
290		8	
		上	D. D.
			MISC, 09

NPLE 12 12 14H8	SAMPLE DESCRIPTION
20m	10 Calcarenite: 19t any - 19t bon, mod hool, vfat ma, sub and - sub and care comunt
	pine,
30	
410m	100 Calcarrate : A/A minor glassingly.
E.O.M.	
	. K Marl! dik, any soll, sticky mort only, lossil hage, yare alawa
is	
	K. Hast A/A
<i>C)</i> ,	90 Calcarente: A/A
	10 Marl A/A
08	as Calcarente: A/A rare hingson
S	80 Calcarembe: A/A) abundant fossil Rage brigann, de frietlet garl orchingid spinies
	7 . 7
	38
001	100 Mart: lot any and sft-fm, was calc abordant Possile what Frage, echinisis
011	180 Marl: A/A.
000	Wo Harl A/A Pewer Possile Han above.
13.0	10 Harl: 4/A Possile more common.
041	(10 Marl: A/A
13	BO MOST : A/A .
3	io Mari: A/A
5	100 Marl , A/4
	MISC 09

APPENDIX - 2

WELL SITE CUTTINGS DESCRIPTION LOG

S S S S S S S S S S S S S S S S S S S	PERCENTAGE CONTROL NAME OF CON
760,	100 Sondstone, pale yellow to while - clear, bosely consolidated, medium to coorse atomose,
	dominantly coarse grained subangular to subsounded dominantly subangular, maderally
	to Silkyone dark are, brown han included moderate to extrangly glaucearitie
•	4 Glaucarile, Red Frague 1+ (Believed cono-in)
770	100 Sondshie while to clear possely earswidows course grained to very course groined,
	sub agular to subsounded wo donably could guartzose trace of gray a ved- brown
	quadrigle & grey motor-some stand accessory orans
	H Silbstone, as along slichtly clayer
7%0	100 Sandstone as above grantrose with lithics up to 5%. lithics are as above with
	over niceelous attomorphoral conditions lith
790	100 Sand Stone as above medium to coarse grained apprincedly coarse grained
	Littes up to 5 to 10% as above
	K Black Gal
800	100 Soulsburg of for 790 m. with a grey-brown silt trackion.
810 8	- 20
	H Carbonneous Shalle, black, fissile pyritic
8 Jon	100 Sandstone, m-cc, as above trace litties
830~	100 Sandshone as for 820m winds prific ce and bithics as above up to 10%
stom.	
85°~	100 Soudshore as for 820m (1442cs in to 5%.
	It Sandyhare, grey, white firm to hard, consuled, y. f.g., subsounded, unaderable, sorted
	quatrose poor visual ponosily,
	MISC 09

SE S	SAME SAME GEOLUGISI TANE
± 260~	100 Sandebaro, as above, m - v. c.g, dominantly c.g., quartoose & up to 51. Whice
-2	Sodie a competition con o les acabasis
870, 95	Sand stone loosely carelidate in -v.c.a dominably c.a as above littics up to 10%
	DYTHE cement stickthy more abundant
4	Silty daystary brown, firm, strangly glamearitic, slightly calearlour minar
	stell frame At
880~	رم
. 生	Carbaraceons Starlo 10 16
890m	Sandshave as for 8PDm
o)	
900m 90	
工	to Cab. Shallo, blc, Ginn
910m	Las for 900 m
920m	Sand show grey-while from to hard cented N. f. a, sub rounded moderately sorted
	quartzose, pyrite conast is abundant in places, poor vicual parosity
N	
08	
930m . 130	Sondstone, white loosely consulidated weeking to your crarge avained dowinantly
	warre grained, sub-rounded to sub-argular, moderally sorted quartose with traco
	of litties (mainly light grey quartaile) and provide coment more abundant.
上	It Silkshowe hard as above
-#	It Cenaded Sex, as above but fine grained

	ENTAGE E	
AMPLE	SS SHAL TA	SANTEL
940m		as for 930m,
450m		Las for 930m!
360€	<u>ا</u>	Sand show borsely cansalidated as above m-ca, with only a trace of 18ths & a
		That of pyring
-	7	langual Sst as above
970m	•	Appears to be a body top tombanisated canale , c.g. glameanile up to Si. 1 Cg
		shell frequents up to 3%. These are probably contamination
	<u>&</u>	Saidshare, loosely cons
	土	to Silly Claystane as described: -870m
	<u></u>	Silkstone, maxima area hand, as above
080	30	30 (sed, blick, dult).
	土	Ir Silbstrae as above a Carbonaccour Chalo black
	2,0	To Sondstone loosely casolidated as above m-cg, dominably c.g.
goom	R	no (oal, black, dull.
	30	30 Sandshar as above
	上	H Siltetone as above a Carbanaceous Shale, black.
] 000°	20	20 Coal, block dull
	40	Conaded, y. G. 9. 55%, as above
	4	
0)01	9	Sandshow will to light grow, from to hard, fine to very fine grained, subsorranded, moderably
		corted a wartage a strike can be common in places slightly calcareaus soon
		to woodbate vicual parosity (King Kaplin water)
	40	Sandshore looked consolidated as above
	7	(na) bk dull x about silkshove by hard
	7	It (na) bk dull x above silkshore ha hard

	PERCENTAGE	ENTA		
SAMPLE	183 IAHS	LSW7	JA∞ HT0	SAMPLE DESCRIPTION
1020				> as for 1010 m
1030				Las for 1010m".
1040			(-	To Sad stone while medium to very coarse grained dominant, coarse grained, substandedto
				subangular moderalely
	·		473	30 (emanded sext as above
1050				Las for 1040m,
0901			0	90 Sandstone lorsals cansalidated as above
			3	to lang ted sox as above.
				to Carbonaceous Shale, lobek, fissile, pyritic
0C01			0	90 Consisted red as above
				10 Sandston loosely carso tidated as above, don't math v.cg
1080			6	`
			- 1	5 Sad Houre, possely engolded as alsone
				S Cod lotent deal or whome
0601			5	90 Santshare, loosely causalidated as above m-c a dominathe a
			<u> </u>	1
				5 (enabled 5st as above
1100				100 Saystand loosely consolidated or eliano. Ca dondard grait sino when a cuel
0111			منج	To Sand stone, loosely care lichated as abone m, a-v.ca dominantly ca py could
			. 1 - 1	
				10 Silvetone ned brown hard with carbonnegous fleeks
				•

S B SHALL	
	SAMPLE DESCRIPTION
1/20 70 5	70 Sandstone light a per, white hard, very fine a raised rub-tounded, morterated someof
	quartzose, occasional olamanite à occasional disseminated cartenaceans maller
	stightly calegraps, compated book visual Davosity
20 (*
S 0)	10 Sandshove loose as above
1130 . 20 C	20 Chystone buff-brown soft, disposive
\$	De Sandstone cenalled tak st calconerus as above
308	Sandstand wadium tan-brown hard yen tine grained cub-rounded moderately
	sorted, quartiese dolonitic censoled For viewal patolity
N)	Block Coal , Carbanacous Shale block
LA.	Sol loose as above.
1(40	A mixture of lithetrack could be a bolty conta. in 191 canole
29	20 Sadstone love as above
2	Debasitic censented set as about u.f.a croding its Sitteture
3	Schink contibled as bane
20	Mrite & Hameanile c.a.
9	Carpenson (tallo, bk
07	Claystre but brown, soft disperive.
	Up to 5 to 10 h Amber (Husnes eame)
1150.	
40 (40 Siltabore butt-biown hard con to the inclurated dolomitic, a few continuous me scark
20 ((eh, wh, came hed as above
ે શ	Sed lours as lowe
	Carbonareous chale hash, ander.

	PERCENTAGE	AGE E	WELL NAME GEOLOGIST PAGE
SAMPLE	SHA	1A00	SAMPLE DESCRIPTION
. 0911		B	Sandrhand, while to clear loozed, cancelidated very coarse grained to produm crained
•			doning the egalte avoingd, sub-vounded to sub-anylar
		3	to Silkehand dolomatic, as above
		土	the Gal block
	•	<u>- ½</u>	The grained , canaled set, with come.
11,20		8	60 SSL, wh comented y fig. of above
	`	30	Ì
		<u>°</u>	Silketone / v. L. a Sch dutymitic, come too, have as above
		上	Silly Claystone, med browning of parsive.
11802		જ	20 Silty Claustan brown cold dispersive
		50	Silkstone hadren bard, dolowitic consisted, st. gloweritic.
		35	Sst loosely consolidated, as above on 1100 dominanthy e.g.
		.W	Py. cg.
		士	to G. dhan, roda
		4	Sch wh 114-9 calegrans a super al al above
		生	Silv (Lancton diket, to soft 51. Carbonaelor)
11900		&	80 Sandshore man 10 ocean above of colorated of sub-rounded to sub-angulo, moderately
			corted grantages.
		2	Silketone, no diem brown, hard delemitic comated of glavessitis
	·	4	Silbsha modium grey hard 2 soft, carbonactoris flects
			Note: the silbethine often appears of making adjained to the abili to dear according sond and a
1) 50 m	,	8	80 Siltshare, dolonitic as above invor arodation its vitia, dolonitic sandeton.
		20	20 Sandshue losely carealidades as above
		· }	Courted Sst, who to asaboup & of & coal box & dispositive told mad by Cilly Churchie
			SAN SAN MAN POR A SOUTH OF SAN PAR MAN

PERCE	
SAMPLE SS SHALL SS S	E SAMPLE DESCRIPTION (6.37)
12005	, not logged
0121	60 (laner Silkeleve nedime grey, firm to gold st. carbon oceans
	30 Silkfund buff-brown hard do lown tic as above
1215	70 Sandstone light vellow-white hard, vary fine grained substituted niveleate
	to vell contact guards-oco dolaritic cenant
·	20 Clayer Silterant as above
	10 Sindshore lovely ensolidated as above
مر1.	70 Silky Clay chore , wedium arey, firm to soft, disparsive (in part), st. carbonacioni
	to sandshare detailed as above
	10 Sandshorp loosely consolidated as above
	(Up to 2), Claurerille in Sample)
5221	90 Silly Claystane, as about
•	10 Sandelane bose of above
	H Fire grassed, contrated 55th on above, 51 about 2. He
1230	100 Santistono indisto to light green (Colst green lie is most evident in had specimen).
	locate a partly cone ted (hard) fine grained to grampo (girtsize) downing the coarse
	grained, quartzone, il glaucaintic, il carbonacheur cupiromaled to subangular
	dominanth subsampled historials to evolue sorthy sorthy ackly caleareas showing
`	It Silty Caystans acalamo
355	
1240.	as for 1230 have of & wing an clay it the figs opined company that is
(245.	30 -

3/ 5	SANDE SANDE ESQUENTIONE
1250	100-Sandeline, dark green, loosely carealidated, madim to very wars grained,
	dominant course grained intologically rounded material growts of
	argillaceous obusailée mahix. Quata is discoloused é que day addring la
1255.	7 /os for 1250'
1260	100 Sandston dark gree loosely consolidated in edium to coarse grained well would
	well sorted anarthose or all areas pleasonitic matrix another is discoloned a ex
	day addring to guarts aftering, land ofter it y-by itanshalled
3921	as for 1250'
0721	100 Sand stare light green - while loosely consolidated medium to coarse a respect
ad.	sub-roundly to sub-angular, moderately sorted quartitioss arollaceous
	alaurearitic nativix some quarts discolanced.
275)	
1280.	\a\ \for 1220'
185	0 CC1 720
1290	as for 1200'
1295	as for 1270 m : Diffic conest
1300	, as lor 1295 m,
1305	to Santston of above, live to cooke opined dominated in above
1310	1 SOS, 130S, 1
1315	105m
1320	100 Sandstone vollow- open light of while boach car entidated natures to enough
	good diminate chare subrounded to sub angular moderatel - suppled
	Particology is aboundary
	WISC 09

SAMPLE	PERCENTAGE LMS A CONTROLL LMS A CONT	AGE OT TO	SAMPLE DESCRIPTION	WELL NAME (SOLGES)	PASE
1325.			Sandshare or for 1320/	but F-Ca dominally mg	
1330.		ા	Sandstone as for 1325'		
		0	٩	or or	
1335.		8			
		0			
1340		2			
		30	Silly daystare as above		
1345		9,	51/4 Claratone, and image, vary coff disporting changes also	The parise change along. It	
38		<u>\$</u>			
1355		<u></u>			
1360		<u>8</u>	S. Hy Clayston medium	to don't even fin to only change in the line in	
1365		<u>(2</u>) for 1360		1/8×30 /d
1370) as far 1360		
1375			1 Jan 1360		
1380				trace dolinite methods	U
1385					7.
1380	·		1 48 for 1360'		
1395			° ar for 1360°		
400			ر	there dolands but brown a same	
1403			,		
1406			Las for 1400		
1409,			1 as for 1900		
14.12		2.47	er for 1400.		
145			. 7	- trace dolonste buffebour of glave.	4.c

	PERCENTAGE		
SAMPLE	HE LMS:	110	SAMPLE DESCRIPTION TASPLE TO DESCRIPTION
1418			Sury Conversion and as to dear time to cott inde at in the story
幸.			ma such lieu
H21		,	
1424			ac for 1418m
1427			Las for 1418 ~ 40 to 5% dollarite but bond : the less . 10
1430.			3
1433			19191 1918m
1436		75	SILTY CARSONE, as about
	4	2	GLAUCONITIC STATUSTONE appear ambile toget fine to marking ordinal daning H
			redim grained subsequed rockets, when
			-
		4	Dolonile ton-brown, marel, shallt a lowerith
			-]
1439		8	
		يد	Glawconthe let Dog at above
147			1956 1436 1
1445		12k	1 25 for 1936'
1448			Larges in bladed scingle.
		303	Pilty Claystrance, as above.
		101.	(1) to good of some y-b- discolours
1451		2	
		0_	Glaventic SSI as above
1454		29	Silby Claystice, as above
	i i	30	30 Humanite mia, quarte coming viba die de de la al oct de lasse
		,	

LE TENTENT	E E E	
s	0	
1457	2	
1460.	2	SILY Clay store as above T 1957 m. Coving, compler booth contaminates
	工	to dolonite but have a share
1463	R	Silty Claystant, nedium arey strangly alemenitin fir to will.
1465.	8	5.12
	N	Comil lok Shull.
1466.		(we Remed wat: - 21459m 4786 . 2/4.
		expect 23 des 23.0
•		1474,24 4836.64. 鑫
		18 4 4 ds
		4831.64.
		Stat & 1470 C1820 1 2 9 4.) 64 Les
		Cene Banel: 2 4786 H.
		ane a 4814 H.
		Expect Top Sand of 23 ft .: Seprect to 4837 ft.
	5	of 12 months (8 4

SAMPLE SAMPLE DESCRIPTION	DESCRIPTION
	Ball Colon Marie Colon
0.8	Sandston light are wife median of to market corrections
	ancidos to cub- ano we made matel carted tree or the co. o t 10/2 Loss. 10.16
10 Sily Claythen, doubt apa, hard	hard.
10 Cardetine with firm ce	Sandstand while from care sed ring arrived raterisher & 1: 10 cl co. 0 d
1487 90 Sandethow as tor 1989	84,
S Silly Claystone as abo	2.6
5 (ord) Nack, diell has	(od) black, dull hard carthy (jet branches avoillacous)
1490 60 Sandeboro while bosed	Sand though while boursolidated medium to very course oring daing the cooks
grained arounds to sub.	grained arounds to subminished and enter
35 Clayer Silbetore dark 9	Clayer Silbetore, dark grey hard, moderately alanearitie
5 Soulstone, L.g. cale	Soudstone, L.g. calcareous conclosed as above
1493 To Sand show loosely careatidated as above	solidated as above
20 Vayer Silbertano as aleare	3
S Cool black dull as above.	3A.E.
5 Sadstone, fig calcareous care sed as about	us ce o led as abuso.
1496. 70 Sandston world excepted as about	Lidated as above
to Salstono f.g Caliareus cane bed as above	es cons bed as above
10 Cayay Silvebre as above	d
It c.a. ander or resim	& Durily (ablitan & as a care)
1499 1 2 Las for 1496'	
1502. Re Sand " (rosp as alame.	as above, m-c. o drawanth ca
5 Clarty S(Khiro, as	Spore.

	PERCENTA		WELL NAME TOTOLOGICAL PAGE
CAMP LE	HS	SAMPLE DESCRIPTION	
1505		To Sandestone voce don. C.g. or above.	
			and so to to the
		1	
		H Littic set F.a	
1508.			
		10 Sandstone up hard come sed v. f. a calcarery cano ses	Expart con 0 101
		5 Obyshap a colone	
		55 Sadshar loose as above	
1151		70 Sand chane 4-bus hard 26.9 delanitic or abose	abase
		15 Sandelshare loose as where	
		15 Chayston as above	
		to Wh cene ted calcorous sets	
1514		10 CHASSONE Silty digy fing, cl. carbo acesus, el glancostic	s, el plancastic.
		10 Doloms Le. y-bu, tan hard.	
		5 Debenitic St as about	
		S W cashed aleaneons of as-bar	
		10 Sst, box, at bone	
1517		70 Siery Currence oll gy fine waderalle to strangely along and its	als a lanco it is
		10 Desaiti Sch hard a cakere	し つて
		15 Wh ceneral calcareme set as above	
		5 Set love as above	
1520		70 CLAYEY SLATSTANE med ay - mad bur tim si carbane one of iscarione	Strandans one of Money
		of a lauravitic	
		10 Calcarbage care sed set as above	

SAMPLE STATES	PERCENTA	1A00	SAMPLE DESCRIPTION
× (2)		4	
777		 -	is in mond in collarang as above
		2	Volonitic Care led Set y bu tour as aleano
		4	at about
		-4	to Which Spl. Light
1526		8	Care, Silkshe as above
		2	Delanily y lan, hard
		2	Dobonitic Cenaped for as above
		9	
		7	to boxe gtz, prile & still frague to
1529		7	33
·			
		त्र	3
		2	
		4	Milic Set fig.
1532		E	o Clayer Silktone as above.
		7	20 Wh. due led set at above
		27	- 1
		7	horse set dowingably and as above
		工	- 1
1535		M	30 CoAr block shiney
		F	To SILTHONE dark bother firm to sold, of carbanaceans
		土	_

SAMPLE	PERCENTAGE E	SAMPLE DESCRIPTION	P/G
15 38	£	The state of the s	
	-4	to Black con his site con in the to cart to carte to cart	
1541	06	SILTY (LAYSTONIE & CITY OF THE CONTROL STATES OF ABLANCE	
		The Comprove is maderable clauserities of any and purple to said	Hos of
		teldspalling , clightly rath a good of the single of the spanning of the spann	erme
	+	H Block cod a carbonare out shall	
	土	H Stell Grane A. C.a alan courts repoli	
	Q	Quentz, CO Jose	
1544	2	20 Block Coal (care-in?), without lucks	
	9	TO SILTY CHRISTONE & SILTSTONE as above web 301 of 4:6 1:4.	.4
		soft buff-very brown dolong the cilletters	2
	0	Quartz, c.o. 1862	
	4	Ca pyrile and shall be as the	
这	8	Sandstone lithic dominath white it one 1000 100 f.	1010
		fine grained littles of arey quarter, a mater to "1:10 Colds Might"	and the second
	8	30 Sur hay some & Surrowe as above	
	0	Prate may v.c. of clear to white loose of about	
1550	<u>,</u>	LITHIC SANDSTONE domina the Hay-while with dark over and and	ا ا
		speckles (liths) fine grained moderally corted sand is grantegon 11.4:	The or or
		is same another. He little tood to be sale minded to hell It live	1
		mostly orientate multhers of the lite is in	æ 3
1553	09	60 LITHIC SANDSTONE as above	
	40	SANDSTONE with clear burth, in 1/101 in 1	
	#	A Start Layrenge A Start and the Color of th	a Sulo-
		sign described a state of all of a year analyste trans.	

S SLUSZOWE AS BETTER THE PERIOD STRONGLY GOLDENING STATES SLUSZOWE AS BETTER THE TO LONG STRONGLY GOLDENING SLUSZOWE STATES SLUSZOWE STATES SLUZZOWE SLUZZ		PERCENTAGE	AGE	
2 N 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	S S	TW7	ω 10	
N 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1556		95	LITTLE SANDSTONE
8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			N	Y PARTY
				carbonalous.
	bssl		8	
				coast aring subanalar to subsanded undered to but entel ante
			0	LITHE SANDSTONE OF above
	1562,		So	SAMOSSANE WASTO (0050 A/A)
8	•		28	
2 T 3 W 2 W 5 T 8	1 5 65		8	Centrone light open vary soft puggy lexture & clicht willener in line 100
	•			probably Kaplinike
2 + 3 × × × × × 8 + 8	8951		<u>8</u>	CHAYSTONE OF above
2 T 3 8 3 V 8 V	1531		95	LITTLE SANDSTONE while dank are signed fine to want course of the U.
N S N & R & B				medium grained subangular do substructed, modstably souled quartzoso and
N X N & R & ± 8				littic. Quarts is don't to tille. Littics are don't a the dark over & portion, are
2 x 2 x 2 x 5 x 5 x 5 x 5 x 5 x 5 x 5 x				quartable lithe with light appear-white day addring to curtaro
2 2 2 2 3			2	Show CLANSMONE light a near boom soft of carbonaceous
5 SILTY CLAYSTONE of above 30 SILTY CLAYSTONE of above 100 Linke SANDSTONE as above 100 Linke SANDSTONE as above 100 Linke SANDSTONE as above	1574		95	Little Spainstrowe as about
70 Little SANDSTONE OF above 30 SILTY (LATYSTONE) of above 100 Little SANDSTONE OSCIOLOR don 100 Little SANDSTONE OSCIOLOR			2	SILTY CLANSTONE of about
30 SILTY (LAYSTONS) or above. 100 Lithe SANDSTONE as above down 100 Lithe SANDSTONE as above.	(577		2	LITHE SAMOSTONE OF About
100 Little SANDSTONE as above down 100 Little SANDSTONE as above			R	ŀ
100 Lithe SANDSTONE as chare	1580		2	1
100 Lithe SANDSTONE as chare			土	
	1583		8	STOWE as charle,
6021	15 A			

586 1 1 1 1 1 1 1 1 1	as above for ca dominant from a
2 2 0 0 B #	as above for ca downant toma
2 0 0 B + - M	as above forced downwalk from a
0 0 5 7	of as above for coninant forma
0 8 4	
<u>B</u> *	١
B +	\~\860°.\
4	4 ary, very soll, shilly, puggy.
ر لا	7
	1989m,
	1989.
	1 as for 1989 m
-	
H. J.	DEPTH 1603 methes
	#

APPENDIX - 3

CORE DESCRIPTIONS AND ANALYSIS

Note: The depths on the core description sheets are drillers depths. These have been shown to be 2 metres shallow when compared with the wireline logs. The mistie is assumed to have arisen due to the neglect of part of the BHA in the drill string tally whilst drilling. The solution to the mistie is best achieved by matching the coal bed within the Flaxmans Formation in the core with the log character of coal on the Sonic Log.

BEACH PETROLEUM N.L.

NORTH PAARATTE No.2

CORE No.1 1459.0m -1469.15m

CUT INTERVAL : 10-15 m RECOVERY : 10-13 m %age RECOVERY : 99.8 %

LOGGING GEOLOGIST : D.M.HARRISON

CLAYSTONE, MEDIUM TO DARK GREY, HARD, INDURATED, MASSIVE BEDDING. MINOR LARGE SHELL FRAGMENTS
(LAMELLIBRANCHS) AND MINOR SIDERITE NODULES.
MINOR SLICKENSIDES.

*CLAYSTONE, DARK GREY AND GREEN WITH MINOR FINE GRAINED SAND AGGREGATES.

SANDSTONE, LIGHT GREY-GREEN, LIGHT BROWN, HARD FINE GRAINED, CALCAREOUS, STRUCTURAL ASPECT OF A CONGLOMERATE, NODULAR WITH CLAYSTONE AS ABOVE INTERMIXED.

SANDY CLAYSTONE, DARK GREY & MINOR WHITE, HARD. 50% GRAINS AND 50% CLAY MATRIX. QUARTZ IS MEDIUM GRAINED TO VERY COARSE TO MINOR GRANULE, DOMINANTLY VERY COARSE GRAINED AND ANGULAR. TRACE PYRITE AND FOSSIL WOOD. MASSIVE BEDDING.

SANDSTONE, LIGHT GREY-LIGHT GREEN, HARD, FINE GRAINED TO VERY FINE GRAINED, MODERATELY SORTED, QUARTZOSE WITH INTERLAMINATED SILTSTONE, DARK GREY-GREEN.

SANDY CLAYSTONE, AS ABOVE AT TOP GRADING INTO PEBBLE CONGLOMERATE, DARK GREY WHITE, HARD, 80% PEBBLE SIZE, ANGULAR QUARTZ WITH 20% DARK GREY CLAY MATRIX.

COAL, BLACK, DULL, LOW GRADE, PYRITIC, MINOR RESIN AND AMBER.

COMMON SLICKENSIDES. BECOMING ARGILLACEOUS TOWARDS BASE.

SILTY CLAYSTONE, DARK GREY, HARD, CARBONACEOUS WITH COMMON ASSOCIATED PYRITE.

SANDSTONE/SILTSTONE, THINLY INTERLAMINATED.
SANDSTONE, WHITE TO LIGHT GREY, HARD, FINE TO VERY FINE GRAINED, MODERATELY SORTED, QUARTZOSE, TRACE PYRITE.

SILTSTONE, MEDIUM TO DARK GREY, HARD.

SANDSTONE/SILTSTONE, THINLY INTERLAMINATED.
SANDSTONE, LIGHT GREY-WHITE, SOFT-FIRM, FINE GRAINED TO MEDIUM GRAINED, DOMINANTLY M.G., WELL SORTED, QTZOSE, GOOD VIS Ø, PETROLIFEROUS ODOUR SILTSTONE, BLACK TO D.GREY, FIRM, CARBONACEOUS.

A/SANDSTONE, LT GY-WH, SOFT F.G-C:G, DOM M.G, SUB-ROUNDED TO SUB-ANGULAR, MODERATELY SORTED, QTZOSE, TR DISSEMINATED CARBONACEOUS MATERIAL WITH MINOR CARBONACEOUS LAMINAE. EXCELLENT VISIBLE Ø, STRONG PETROLIFEROUS ODOUR.

B/SANDSTONE, LT GY, SOFT, WEAKLY CEMENTED TO LOOSELY CONSOLIDATED, M.G. TO V.C.G., DOM C.G., SUB-ROUNDED TO SUB-ANGULAR, MODERATE TO WELL SORTED, QTZOSE, MINOR CARBONACEOUS STREAKS AND INTERLAMINAE EXCELLENT VISIBLE Ø, STRONG PETROLIFEROUS ODOUR.

C/SANDSTONE, LT GY-WH, FINE GRAINED TO COARSE GRAINED, DOMINANTLY MEDIUM GRAINED, WEAKLY CEMENTED TO LOOSELY CONSOLIDATED, QUARTZOSE, SUBROUNDED, WELL SORTED, TRACE DISSEMINATED CARBONACEOUS MATTER AND MINOR STREAKS CARBONACEOUS MATTER. EXCELLENT VISIBLE Ø, STRONG PETROLIFEROUS ODOUR.

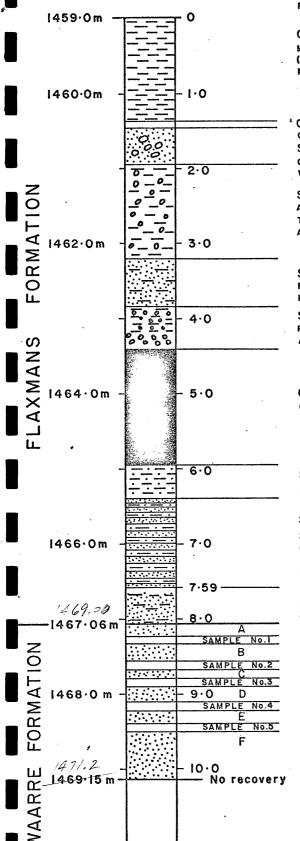
D/SANDSTONE, LT.GY-WH, FIRM, F.G.-M.G., DOMINANTLY M.G., WELL SORTED, SUB-ROUNDED, QUARTZOSE, TRACE CARBONACEOUS MATTER AND MINOR CARBONACEOUS STREAKS. EXCELLENT VISIBLE POROSITY, STRONG PETROLIFEROUS ODOUR

E/ 'AS FOR D'

F/ 'AS FOR D'

NOTE :- WAARRE SAND SECTION HAS EXCELLENT VISIBLE POROSITY WITH STRONG PETROLIFEROUS ODOUR

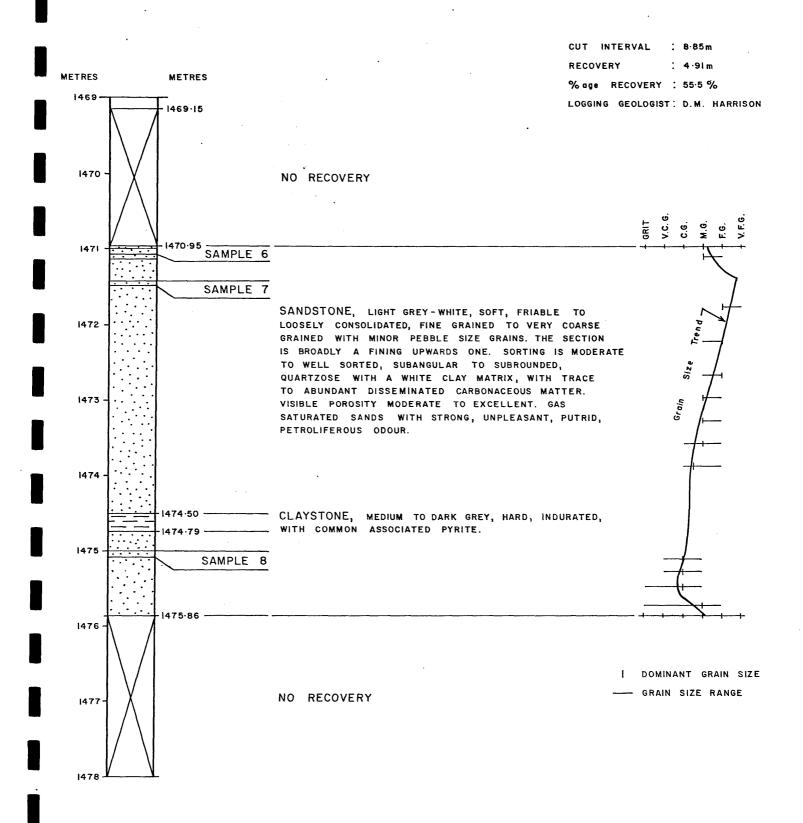
NOTE: THE MAJOR PORTION OF SAND F WAS LOOSELY CONSOLIDATED TO UNCONSOLIDATED.



BEACH PETROLEUM N.L.

NORTH PAARATTE No.2

CORE N° 2 1469 15m - 1478 00m



NOTE: THE SECTION WAS BASICALLY LOOSELY CONSOLIDATED AND FELL OUT OF THE CORE BARREL MINOR SECTIONS REMAINED INTACT AND CONSOLIDATED AT SURFACE. THESE WERE 1470-95 -- 1471-13 m, 1471-4 -- 1471-47, 1474-99 -- 1475-16 m.

THE CLAYSTONE BED AT 1474.50 TO 1474.74m WAS FIXED BY THE DRILLING RATE CURVE AND THE LOOSELY CONSOLIDATED SAND DISTRIBUTED EITHER SIDE OF THE CLAYSTONE. IT IS THEREFORE INFERRED THAT SECTION WAS LOST BOTH AT THE TOP AND THE BOTTOM OF THE CORF.

THE UPPERMOST PART OF THE SECTION FLOWED AND BLEW OUT OF THE CORE BARREL DUE TO THE GAS SATURATED NATURE OF THE SECTION.

CORE LABORATORIES, INC.

Petroleum Reservoir Engineering DALLAS, TEXAS

Page No.	<u> </u>
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+ 1 82 COMBINED CORE ANALYSIS RESULTS

Commonw	מוז מוז מו	TOTAL T	3113 <i>4</i> Nt T	Fo	ormation	•	File WA-CA-127
Company			·		ore Type	CONV.	
Vell	NORTH P	AAKAT"	r NO 2.		rilling Fluid	CONV.	Analysts GK DS
Field	AUST	Ctata	VIC.	Elev.		OTWAY	BASIN.
County_	TOOT	state	VIC				
					logical Abbrevia		BROWN — BRN FRACTURED — FRAC SLIGHTLY — SL/
SAND — SD SHALE — SH _1_ME — LM	DOLOMITE — DOL CHERT — CH GYPSUM — GYP	CONGLO	ITE — ANHY MERATE — CONG EROUS — FOSS	SANDY — SD' SHALY — SH' LIMY — LMY		CRYSTALLINE — XLN GRAIN — GRN GRANULAR — GRNL	BROWN - BRN FRACTURED - FRAC SLIGHTLY - SLI GRAY - GY LAMINATION - LAM VERY - VI Vuggy - VGY STYLOLITIC - STY WITH - WI
		T		T T	RESIDUAL SATURATION	GRAIN	
S/MEPLE NUMBER	DEPTH EEET M	PEF	RMEABILITY LLIDARCYS KL	POROSITY PER CENT	OIL TOTAL WATER	DENS.	SAMPLE DESCRIPTION AND REMARKS
140	69.1	HORIZ	. VERT.				
1	/?	449	65	26.5		2.67	SST: lt-med gy, med-
							v crse, firm poor sort
							wht cly mtx, sub ang,
							minor argill carb lams
	?	1026	600	24.9		2.68	CCT - 7 /7 7
						2.00	SST: A/A, med crse, mod sort, occ v. crse
€1	ζ .						qtz grains.
		054				·	
	3	274	15	25.2		2.67	SST: lt gy, fn-v crse,
_			•	•	•		firm, v poor sort, wht
			•				<pre>cly mtx, sub ang, : minor argill carb lams</pre>
							minor digiti carb rams
4	?	44	5.5	21.2		2.65	SST: A/A, fn med, hd,
							mod sort.
5	?	539	35	25.6		2.65	CCM
	1471.2		J J	~ > • 0		2.03	SST: A/A med crse.
	1469.2	34	8.3	20.3		2.64	SST: A/A, abunt argill
	10 -1 -						carb laminations.
£2	1471.0 1469.03?	- 088	276	29.0		2 60	
	7407.03:	200	2/0	27.U		2.69	SST: A/A, med crse,
	1475,2				• .		firm, well sort
	1473.19	847	481	25.6		2.76	SST: med gy, crse-v
	16 1			and the same of th	•		crse, fria, mod sort,
- 14	1475,2 1473.19 16, /	20110 /	436/3	17:1	3 =		argill mtx, sub ang
	27	101/32		248			sub rnd, abunt pyrite.
_	Í	525		14.0			•

Received 27m 0/4/81.

; ;.

BEAPET AA36500 TO MR D HARRISON - BEACH PETROLEUM CC D SISELY - CORELAB PERTH

FM T KENNAIRD - CORELAB SPORE

TLX 4433 2 APR 81

YR REF: TLX NO. 2/4
OUR REF: SNSCAL 81010

RE: N. PAARATTE NO. 2

FLWG POROPERM MEASUREMENTS, PLUGS WERE SATURATED N FF MEASURED ON SEVERAL CONSECUTIVE DAYS UNTIL RESULTS STABLE (INDICATING IONIC EQUILIBRIUM). SAMPLES ARE NOW IN CAP. PRESS. CELLS WHERE THEY MUST COME INTO CAPILLARY EQUILIBRIUM AT EACH OF SIX PRESSURE POINTS. THIS WILL TAKE APPROX 4 WKS. (R1 WILL BE MEASURED IN CONJUNCTION WITH CAP. PRESS. TESTS). HERE IS FF DATA:

INTERCEPT ''A'' ASSUMED TO BE UNITY.

RGDS NNN CORELAB RS21423* BEAPET AA36500 VVVV

leceived 9 am 20/4/81.

•

BEAPET AA36500 TO MR D HARRISON - BEACH PETROLEUM, MELBOURNE FM T KENNAIRD - CORELAB SPORE

TLX 4673 20 APR 81

RE: NORTH PAARATTE NO. 2 OUR REF: SNSCAL 81010

HERE ARE PRELIMINARY AIR-BRINE CAP. PRESS. N RESISTIVITY INDEX RESULTS:

PRESSURE, PSI

SAMPLE NO.	KA(MD)	1 BRIN	2 IE SATUI	4 RATION	8 PERCENT	15 PORE	35 SPACE
2H 5H	1170 587	69.3 93.8			32.9 48.3		
SAMPLE NO.	POROSITY PERCENT	FF 	BRINE S	SATN.	RESIST	LVITY	AVERAGE
			PERCEN		INDE	Ξ X	′′N′′
2H	23.2	11.5	100 69 51 39	.3 .2 .5	1.00 1.93 3.40 5.42 8.50	7] 2	1.83
5H	25.1	9.9	100.0 67.3 56.1 48.3 44.6		1.00 1.98 2.75 3.55 3.94	3 5 5	1.73

RGDS NNN CORELAB RS21423* BEAPET AA36500 VVVV SPECIAL CORE ANALYSIS REPORT FOR

BEACH PETROLEUM N.L.

WELL: NORTH PAARATTE NO.2

OIL and GAS DIVISION

= 7 JUIL 1981





Beach Petroleum N.L. 32nd Floor, 360 Collins Street Melbourne Victoria 3000 Australia

Attention: Mr. D Harrison

April 1981

Subject: Special Core Analysis
Well: North Paaratte No.2
File: SNSCAL 81010

Gentlemen,

In Order No. 272, dated February 25, 1981, Mr. Ian McPhee of Beach Petroleum N.L. requested Core Laboratories to perform various special core analysis measurements on two samples from the subject well.

Two one-inch diameter plug-size samples were despatched from our Perth laboratory to our Singapore laboratory in preparation for this study. These samples are described with respect to lithology on page 1 of this report.

Air-Brine Capillary Pressure (Pages 2 through 4)

Both samples had been cleaned prior to analysis in Perth. Their cleanliness was verified by checking with ultra-violet light (to detect oil) and methanol (to detect salt). The samples were then dried in an oven maintained at 40-45% relative humidity.

The clean dry samples were evacuated and pressure saturated with a simulated formation brine having a concentration of approximately 24,000 mg/l. This brine was synthesised from an Rw value given by Beach Petroleum, and it's salt content comprised 80% sodium chloride and 20% calcium chloride since a full brine analysis was not available.

After measurements of formation factor had been made, the samples were placed in a porous plate cell and humidified air introduced at increasing incremental pressures up to 35 psi. At equilibrium saturations the samples were removed from the cell and the brine saturations determined gravimetrically.

Beach Petroleum N.L. Well: North Paaratte No.2 April 1981

The results of the measurements are presented in tabular form on page 2 and in graphical form on pages 3 and 4.

Considering the air permeabilities of these two samples, the irreducible water saturations appear rather high. It may be possible that the coarse grained lamination in sample number 2H, and the carbonaceous laminations in sample number 5H tend to channel air flow at conditions of low overburden pressure. At conditions of reservoir overburden pressure it might be found that both samples would exhibit lower air permeabilities.

Formation Factor and Resistivity Index (Pages 5 through 9)

Prior to performing capillary pressure measurements electrical resistivities of the brine saturated samples and the saturant brine were measured on consecutive days until the results stabilised indicating ionic equilibrium within the core samples.

Formation resistivity factors were calculated and the results are presented in tabular form on page 5 and graphical form on page 6. The resultant plot yields a value of unity for the intercept "a" and an average value of 1.67 for the cementation exponent "m".

Electrical resistivities of the partially saturated plugs were measured in conjunction with the capillary pressure measurements. Resistivity index values were calculated and the results are presented in tabular form on page 5 and in graphical form on pages 7 through 9. The resultant plots yield values for the saturation exponent "n" of 1.83 for sample number 2H and 1.73 for sample number 5H. The composite plot gives a value of 1.78 for "n".

It has been a pleasure to perform this study for Beach Petroleum and should you have any questions or require further assistance, please do not hesitate to contact us.

Yours faithfully CORE LABORATORIES INTERNATIONAL LTD

Tony Kennoird

TONY KENNAIRD Laboratory Manager Special Core Analysis

Enc

TABLE OF CONTENTS

	PAGE
Sample Identification and Lithological Description	. 1
Air-Brine Capillary Pressure	
Tabular	2
Graphical	3
Formation Factor and Resistivity Index	
Tabular	5
Graphical	6

CORE LABORATORIES Petroleum Reservoir Engineering

Page 1 of 9
File SNSCAL 81010

COMPANY:

BEACH PETROLEUM N.L.

FORMATION:

WELL:

NORTH PAARATTE NO.2

COUNTRY:

AUSTRALIA

FIELD:

IDENTIFICATION AND DESCRIPTION OF SAMPLES

Sample Number	Depth, Feet	Lithological Description				
2н	N/A	SST:gy, f-mg, occ cg, cg lam, mod-p cmtd, mod-p std, subang-sub rdd.				
5н	N/A	SST:gy, fg, mod cmtd, w std, subang-sub rdd, abd carb lams.				

CORE LABORATORIES

Petroleum Reservoir Engineering

Page 2 of 9
File SNSCAL 81010

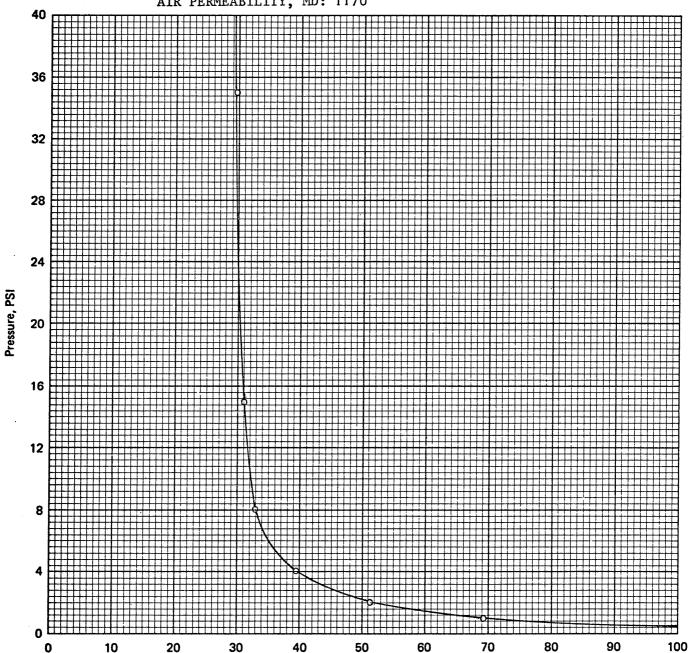
AIR-BRINE CAPILLARY PRESSURE DATA

	Pres	sure, Psi:	1	2	4	. 8	15	35
Sample Number	Permeability Millidarcys	Porosity Per Cent	Br	ine Satu	ration,	Per Cent	Pore Sp	ace
2Н	1170	23.2	69.3	51.2	39.5	32.9	30.9	29.7
5H	587	25.1	93.8	67.3	56.1	48.3	44.6	43.4

BEACH PETROLEUM N.L. Company_ Formation_ NORTH PAARATTE NO.2 AUSTRALIA Well_ _ Country_ Field_

SAMPLE NUMBER:

AIR PERMEABILITY, MD: 1170



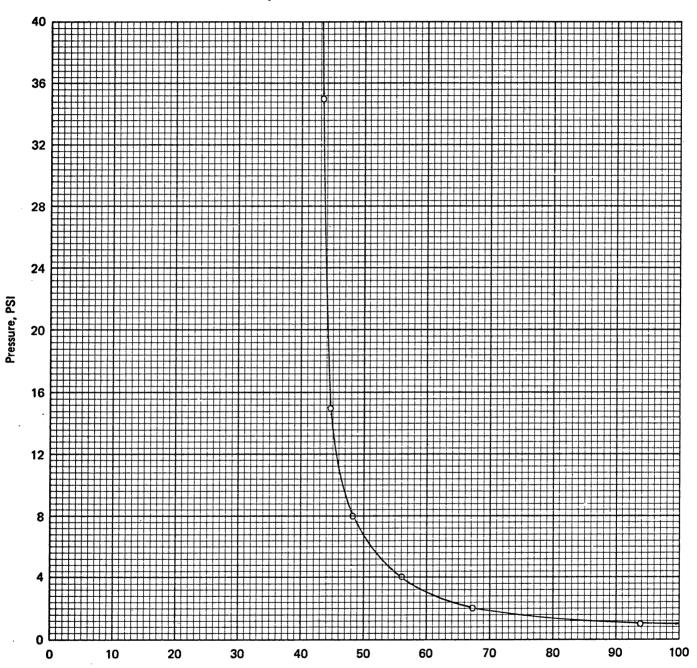
Brine Saturation, PerCent Pore Space

Petroleum Reservoir Engineering

Company BEACH PETROLEUM N.L. Formation Country AUSTRALIA

SAMPLE NUMBER: 5H

AIR PERMEABILITY, MD: 587



Brine Saturation, PerCent Pore Space

CORE LABORATORIES Petroleum Reservoir Engineering

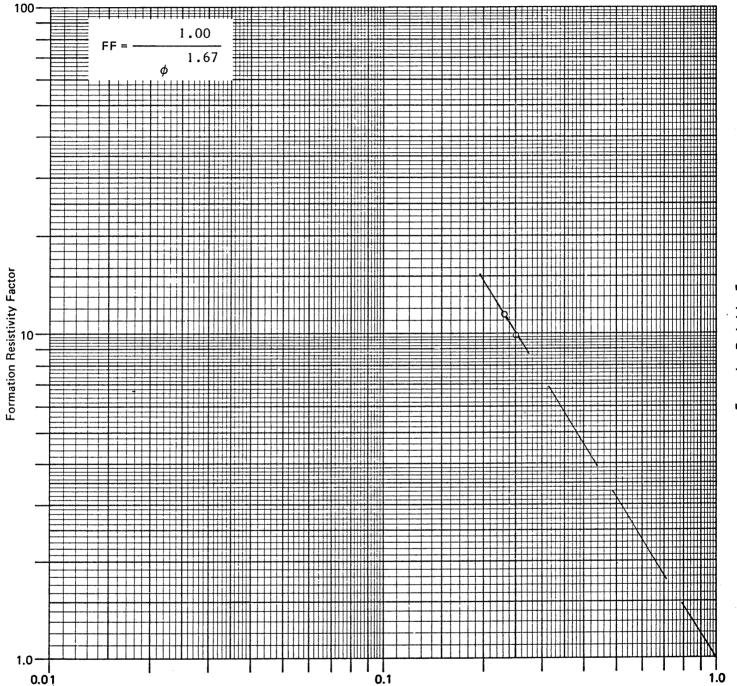
Page ____5 of ____9 File ____SNSCAL 81010

FORMATION FACTOR AND RESISTIVITY INDEX DATA

Resistivity of Saturant Brine, Ohm-Metres: 0.334 @ 60°F

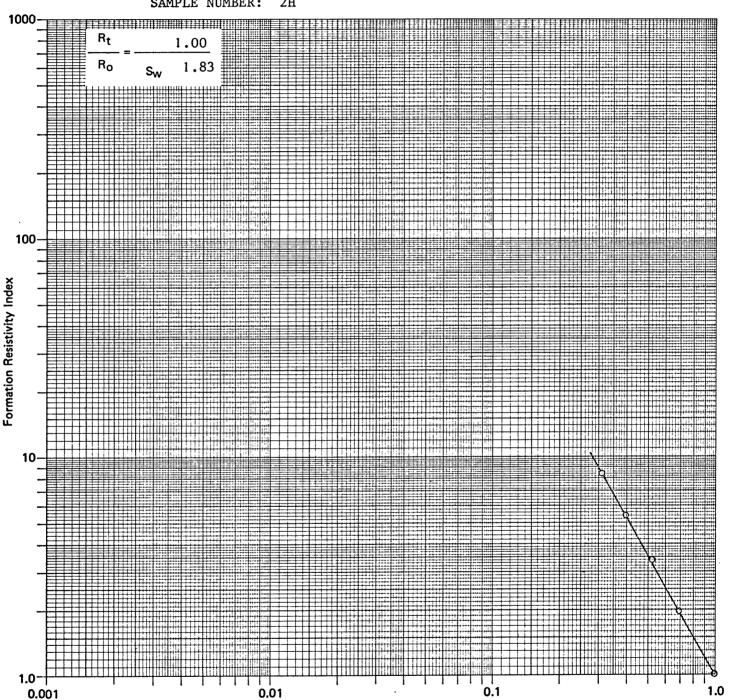
Sample Number	Air Permeability Millidarcys	Porosity Per Cent	Formation Factor	Brine Saturation Per Cent Pore Space	Resistivity Index
2Н	1170	23.2	11.5	100	1.00
	·			69.3	1.97
				51.2	3.40
				39.5	5.42
				30.9	8.50
5H	587	25.1	9.9	100	1.00
				67.3	1.98
				56.1	2.75
				48.3	3.55
				44.6	3.94

Company	BEACH PETROLEUM N.L.	Formation
Well		CountryAUSTRALIA
T7: 1.1		•



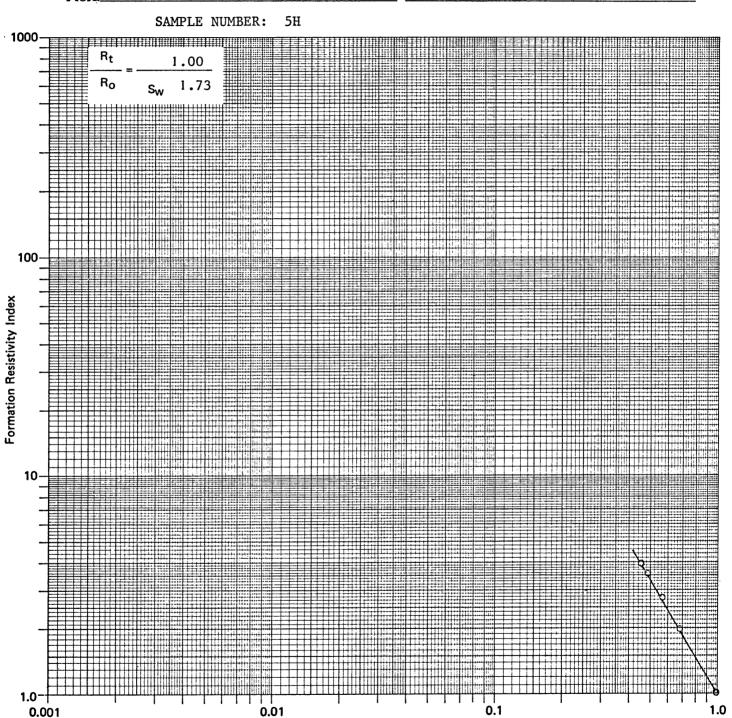
Porosity, Fraction

SAMPLE NUMBER:



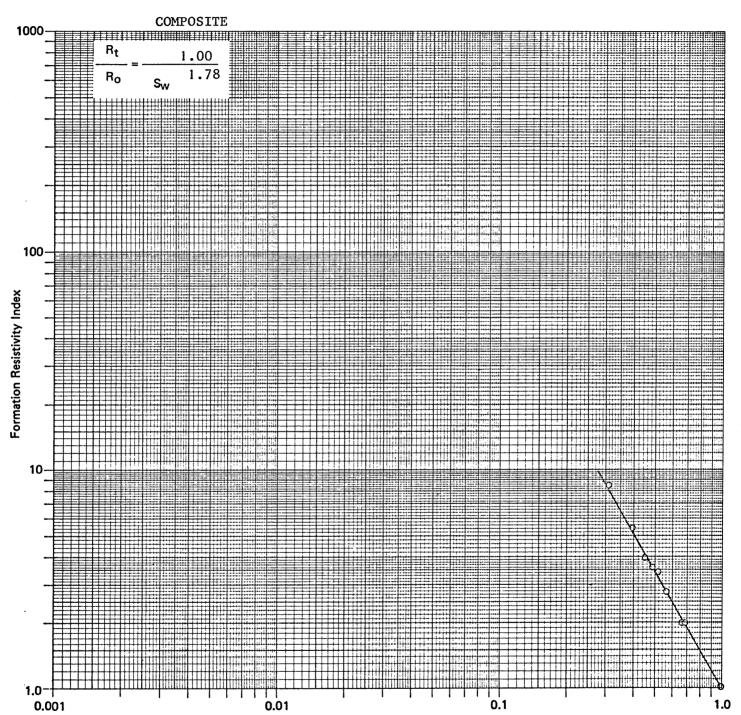
Brine, Saturation, Fraction

BEACH PETROLEUM N.L. Company_ _ Formation_ AUSTRALIA NORTH PAARATTE NO.2 Well _____ Country_ Field_



Brine, Saturation, Fraction

Company_	BEACH PETROLEUM N.L.	Formation	,	
Well	NORTH PAARATTE NO.2	Country	AUSTRALIA	
Field		, , , , , , , , , , , , , , , , , , , 		



Brine, Saturation, Fraction

APPENDIX - 4

DRILL STEM TEST SERVICE REPORT

									l 1	1
FLUII	S S A M P L	E DATA	D	oate 2	2-5-81	Ticket Number	002099		Legal Sec	
ampler Pressure		P.S.I.G.	at Surface K	ind	PEN HOLE	Halliburto Location	on SALF		Location Twp Rng.	
Recovery: Cu. Ft.	Gas			D.S.1.	- TOLL	Location	3/1LL		Rng	z
cc. Oil				ester	SAM BURGESS	S Witness	DERRIN	GTON		NORTH
cc. Wate	-					***************************************	CH.			
	uid cc		1 ~	ontractor () D & E		SM			PAARATTE Name
ravity				EQU	JIPMENT		DATA			° R
Gas/Oil Ratio				ormation Tested		aarre			i l	
-	RESIST	IVITY CHL	ITENIT .	levation		84' 6 '		Ft.		mi
ecovery Water	· @	°F	^	let Productive In	1/	o elly bushi	inα	Ft.		
Recovery Mud		°F	^	II Depths Measuotal Depth	A.	8491	1119	Ft.		
Recovery Mud Filt			1 .	Main Hole/Casin	01	ار ا				. 1
		°F	1 ~	rill Collar Leng	,	50'I.D	2 15/1			\$
Aud Pit Sample Mud Pit Sample Fi				rill Pipe Length	4;		3.6"?			2 Well No.
Mud Pit Sample Fi		Λ	D	acker Depth(s)_		<u> 792-4797'</u>		Ft.		6
ud Weight	9.4	vis	sec. D	epth Tester Val	ve4	7851		Ft.		. I
TYPE	AMOUNT	_	Depth Back		Surface 5.40	Bott	tom oke .75"			1
Cushion		Ft.	Pres. Valve		Choke 5/8-	1/2" Ch	oke ./5	-		1 Test No
	Feet	of	•					>	Field Area	Z M
Recovered	rect	01						Mea.	2 2	
_Recovered	Feet	of						From		
								I		
Recovered	Feet	of						Tester	٦	
								r Valve	PORT	
Recovered	Feet	of	-							47
		•						ľ	CAMPBELL	4797
Recovered	Feet							<u></u>	용	Test
R _{emarks} Op	ened tool	and packer	s failed.	filled	hole with	mudse	t more w	eight_		ed 15
									'	7 - 4849¹ Tested Interval
on	packer ru	obers. Pa	ckers app	eared to h	old. Stro	ng blow to	Surtac	e,		₽ -
67	acad taal	noonanad	tool with	no indica	tion at su	rface C	losed to	no]		
C I	oseu tooi,	reopened	COOT WICH	no marca	cron at 3a	Trace: 0			ς Σ	
an	d bulled o	ut of hole	. Discov	ered ancho	r pipe plu	gged.			ytnu	
411	a parrea o	40 01 11010								
									<u> </u>	
		043	Gauge No.	2044	Gauge No.			ME		l ,
TEMPERATURE	Deptit.	788 _{Ft.}	Depth:	4846 _{Ft.}	Depth:	Ft.	<u></u>	4:00 hrs.)	VICTORIA	
	1.			24 _{Hour Clock}		Hour Clock	Tool	1805	IA	
Est. °F.	Blanked Off n	0	Blanked Off	yes	Blanked Off		Opened Dened	1003	┨	
. 125	_				Dunne			L945		BE
Actual 135 •F.	Press			ssures	Press	Ures Office	Reported	Computed	1	- A
	Field 2345	Office 2329.8	Field 2338.7	Office 2358.6	Field	Office	Minutes	Minutes		age H
nitial Hydrostatic	2345	414.8	2550.7	Plugging					State	₽ F
Flow Final		550.3		Plugging			30]ਜ਼ੋਂ	1 1 7
Closed in		636.6		Plugging			40]	
1		494.6		Plugging					-	BEACH PETROLEUM Lease Owner/Company Name
Flow Final		482.7		Plugging			30		- F	N N
Closed in								ļ	1 ES	me
Flow Initial									爿	
Final								<u> </u>	AUSTRALIA	
Closed in	2215	222E V	2338.7	2365.3					A	
Final Hydrostatic	2345	2336.4	2330.1	2303.3					1	
	I							1	L	

)RM 181-R2 - PRINTED IN U.S.A.

sing per	rfs		Bottom	.75"	Su	rf. temp°F Ticket No
Oil gravity		GC.	OR			
Spec. gravity			es	Res°F		
		MD SIZE	OF GAS MEAS	ONING DEVICE US		
Date Time	a.m. p.m.	Choke Size	Surface Pressure psi	Gas Rate MCF	Liquid Rate BPD	Remarks
1100						Tools started in hole
1300						Made up surface equipment
1600						Tool on bottom - waited on safety
						equipment
1805						Tool opened
1835						Closed tool
1915						Reopened tool
1945						Unseated packer
1950						Reversed out drill pipe
2030						Started out of hole
2400						Tools out of hole.
_						

TICKET NO. 002099

		O. D.	I. D.	LENGTH	DEPTH
	Drill Pipe or Tubing				
	Drill Collars	CII .	3"		
	Reversing Sub	6"	<u> </u>		
	Water Cushion Valve	5"	3.6" ?	4326'	
	Drill Pipe	6.25"	2.937"	450'	
	Drill Collars	5.87"	2.58"	2'	
	Handling Sub & Choke Assembly	5"	.89"	4.67'	
٥	Dual CIP Valve				
	Dual CIP Sampler	5"	.75"	5.3'	4785'
	Hydro-Spring Tester				
	Multiple CIP Sampler	****			
\mathbb{H}					
	Extension Joint				
		5"	3.06"	4'	4788'
	AP Running Case				
	Hydraulic Jar	5"]"	3.25'	
J	Tryardanc Jan				
, N	VR Safety Joint	5"] "	2.3'	
0	Pressure Equalizing Crossover				
		·			
	Packer Assembly				
	Distributor				
	Packer Assembly				
-					
	Flush Joint Anchor				
	Pressure Equalizing Tube				
H-H					
	Blanked-Off B.T. Running Case				
	D.:III Callana				
	Anchor Pipe Safety Joint				
~	Anchor Pipe Safety Joint				
	Packer Assembly	7.75"	1.53"	5.75'	4792'
	,				
	Distributor				
		7 7511	1 5011	E 7E1	47071
	Packer Assembly	7.75"	1.53"	<u>5.75'</u>	<u>4797'</u>
	Anchor Pipe Safety Joint		<u></u>		
	Side Wall Anchor				
` ##		6.25"	2.937"	30'	
	Drill Collars				
	That lains Angles	5"	2.37"	18'	
	Flush Joint Anchor				
	Blanked-Off B.T. Running Case	5"	2.44"	4'	<u>4846'</u>
	Didirect-Off D.T. Naming Gase				
	Total Depth				4849'
تطلقا -					at the state of th

	 								SE	1	
FLUII	SAMPL	E DATA		Date 2	-6-81	Ticket Number	002100		Legal Location Sec Twp Rng		
mpler Pressure		P.S.I.G.	at Surface	Kind of D.S.T.	PEN HOLE	Halliburto Location	SALE		ocatio wp F		-
Recovery: Cu. Ft.	Gas								ng.		
cc. Oil				Tester B	URGESS	Witness	DERRIN	GTON	ı.	Lea	Z I
cc. Mud				Drilling						Lease Name	,
	uid cc			Contractor 0	D & E			NM		am :	PΔ
avity			°F.	EQU	JIPMENT		DATA				PAARATTE
s/Oil Ratio			u. ft./bbl.	Formation Tested		Waarre					ĀT
1	RESIS"	TIVITY CHL	ORIDE TENT	Elevation		384' 36'		Ft.		li	금
1	(c	°F	1	Net Productive Ir		Kelly Bu	shina	Ft.			
covery Water		⊋ · ⊋ °F	1	All Depths Measu		4849	Jiiiig	Ft.			
Recovery Mud Recovery Mud Filt	-			Total Depth Main Hole/Casin		81211		-			
			1	Drill Collar Leng	-	390' I.D.	2	2 15/16"		<	
ud Pit Sample		© °F		Drill Pipe Length		390' I.D 4326' I.D	3.	.6"		Well No.	2
Mud Pit Sample Fi	iltrate@	°F		Packer Depth(s)_		4734' -	4739'	t.		Š	
Mad Weight	9.4	4 vis	40 _{sec.}	Depth Tester Val		4718'		Ft.		1	
TYPE NC	AMOUNT)NE	Ft.	Depth Back Pres. Valve		Surface 5/8"	+ ½" Bot	tom oke	3/4"		_	
Casmon										Test No.	
covered	Feet	t of MI	SRUN					Mea.	Field Area	٥	2
Recovered	Feet	t of						From	P		
									PORT		
ecovered	Fee:	t of						Tester	1		
covered	Fee	t of						Valve	CAMPBELL		47
								ľ	18E		4739
Recovered	Fee	t of								Tested	_
marks	Set t	ool on bott	om with	20,000# - r	oackers fa	ailed. Clo	sed too	1 and		ed In	1
										Interva	4849
reset r	packers.	Opened too	- pack	ers failed -	- closed 1	1001 - unse	eaceu pa	CKCI3	1		91
and rev	versed dri	ll pipe. F	Pulled o	ut of the ho	ole						
									County		
8		MISRUN							\		
									- <		
TEMPERATURE	Gauge No.	2043	Gauge No.	2044	Gauge No.			ME 4:00 hrs.)	VICTORIA		
TENGLERATURE	Depth:	4721 _{Ft.}	Depth:	4846' _{Ft.}	Depth:	Ft.		4:00 Mrs.)	ㅓ호		
•	12	Hour Clock		24 Hour Clock	DI 1 1011	Hour Clock	Tool	11:15	I FA		
Est, °F.	Blanked Off	NO	Blanked Of	y YES	Blanked Off		Opened Opened		1		
			מ	ressures	Pres	ssures	Bypass	11:55			BEACH
tual 135 °F.		ssures	Field	Office	Field	Office	Reported	Computed	1	E	AC.
<u>làitial</u> Hydrostatic	Field 2292	Office 2319.2	2352	2377.3	rieid	Office	Minutes	Minutes	<u> </u>	gse	—
Initial Initial	_		_	-					State	9	Ĕ
Flow		_	_	-					हि	her/0	PETROLEUM
Final Closed in	_	-	-						4	om	Ē
Initial	_	_	_	-					1 A	pan	₹
Flow Final	_	_	_						Į ST	Lease Owner/Company Name	
Closed in	_	_	-						₽ R	ıme	
Flow Initial									AUSTRALIA		
Final									1 ^		
Closed in	2202	2319.2	2352	2377.3				 	1		
Final Hydrostatic	2292	2313.4	2332					 	1		
4	<u> </u>					<u></u>	L	<u> </u>	1		i ·
FORM 181-R2 - PRINTED IN U.S.	A .	E\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	ΛΔΤΙΛ	N TEST	I)ATA	4	LIT	TTLE'S			

asing perfs		Bottom	choke		_Surf. temp°F Ticket No002100
Spec gravity		Chlorid	les	om Res	
NDICATE TYPE	AND SIZE	OF GAS MEAS	SURING DEVICE US	SED	
Date Time a.m. p.m.	Choke Size	Surface Pressure psi	Gas Rate MCF	Liquid Rate BPD	Remarks
2-6-81 7:15					Tool started in the hole.
11:15 AM					Set packers - opened tool - packers
					failed. Closed tool - reset packers -
					packers failed again.
11:50					Closed tool - unseated packers.
11:55					Dropped reversing bar and circulated.
12:15					Started out of the hole.
6:00					Tool out of the hole
<u> </u>					
	ļ			,	
-	ļ				
	<u> </u>				
	ļ				
	I	1		1	

FORM 182-R1-PRINTED IN U.S.A.

			Т	ICKET NO.	002100
		0. D.	I. D.	LENGTH	DEPTH
Dri	II Pipe or Tubing —				_
11 11	Il Collars		011		**
	versing Sub	6"	3"		
Re Wo Dri	ater Cushion Valve	5"	3.6"??	4326'	
Dri	II Pipe		2.937"	390'	_
Dri	II Collars —	6.25" 5.87"	2.58"	2'	-
	ndling Sub & Choke Assembly —	<u> </u>	.89"	4.67'	_
1110111	al CIP Valve —	<u> </u>	.03	4.07	
	al CIP Sampler	5"	.75"	5.3'	4718'
Ну	dro-Spring Tester		.,,	 	
	to the CIR S. I.				
Mi	ultiple CIP Sampler	•			_
	tension Joint				_
Ш	rension Joint				
III AF	Running Case	5"	3.06"	4'	4721'
## ´¨					
∭ Н∨	draulic Jar	<u>5"</u> .]"	3.25'	_
 		E II	ן ן יי	2.3'	
1:1011	Safety Joint	5"	l	۷.3	_
Pre	essure Equalizing Crossover				-
Pa	cker Assembly				
	stributor				
	stributor				_
Pa	cker Assembly				
	·				
Fi	ash Joint Anchor —				_
Pr.	essure Equalizing Tube —				-
HTH					
Ble	anked-Off B.T. Running Case				
فللسنت	ill Collars — nchor Pipe Safety Joint —				
^'	ichor Fipe Safety Joint				
					47041
Pac	cker Assembly	<u>7.75"</u>	1.53"	5.75'	4734
	•				
Dis	tributor				
		7 75"	1.53"	5.75'	4739'
Pad	cker Assembly	7.75"	1.33	3.73	
An An	chor Pipe Safety Joint				_
V	e Wall Anchor —				
310	- 17 dii 7 iligiloi				
Dri	ill Collars —	6.25"	2.43"	87'	
				7 F 1	
Flu	sh Joint Anchor	5"	2.37"	15'	
		F.II	0 4411	A 1	4846'
BIG BIG	anked-Off B.T. Running Case	5"	2.44"	4'	4040
					4849'
To	tal Depth				

NOMENCLATURE

b	= Approximate Radius of Investigation Fee	t
$\mathbf{b}_{\scriptscriptstyle 1}$	= Approximate Radius of Investigation (Net Pay Zone $h_1)$ Fee	t
D.R	.= Damage Ratio	-
El	= ElevationFee	t
GD	= B.T. Gauge Depth (From Surface Reference) Fee	t
h	= Interval TestedFeet	t
h,	= Net Pay Thickness Feet	t
K	= Permeabilitymd	
K۱	$= Permeability \; (From \; Net \; Pay \; Zone \; h_1) \; \dots \dots \dots md$	
m	= Slope Extrapolated Pressure Plot (Psi²/cycle Gas)	'cycle
OF,	= Maximum Indicated Flow Rate	F/D
OF ₂	= Minimum Indicated Flow Rate	F/ D
OF ₃	= Theoretical Open Flow Potential with/Damage Removed Max MCI	F/D
OF ₄	= Theoretical Open Flow Potential with/Damage Removed Min MCI	F/D
P _s	= Extrapolated Static Pressure	١.
P _F	= Final Flow Pressure	١.
P	= Potentiometric Surface (Fresh Water*)Feet	ŀ
Q	= Average Adjusted Production Rate During Test bbls	i/day
Q ₁	= Theoretical Production w/Damage Removed	:/day
Q,	= Measured Gas Production Rate	-/D
R	= Corrected Recoverybbls	i
r "	= Radius of Well Bore	ŀ
t	= Flow Time	utes
t.	= Total Flow Time	utes
T	= Temperature Rankine°R	
Z	= Compressibility Factor	
μ	= Viscosity Gas or Liquid	
Log	= Common Log	

^{*} Potentiometric Surface Reference to Rotary Table When Elevation Not Given, Fresh Water Corrected to 100° F.

PE906816

This is an enclosure indicator page. The enclosure PE906816 is enclosed within the container PE906815 at this location in this document.

The enclosure PE906816 has the following characteristics:

ITEM BARCODE = PE906816 CONTAINER_BARCODE = PE906815

NAME = DST 1

BASIN = OTWAYPERMIT = PEP93

TYPE = WELL

SUBTYPE = DST

DESCRIPTION = DST 1 Photographs (From WCR) for North

Paaratte-2

REMARKS =

DATE_CREATED =

DATE_RECEIVED = 28/04/81

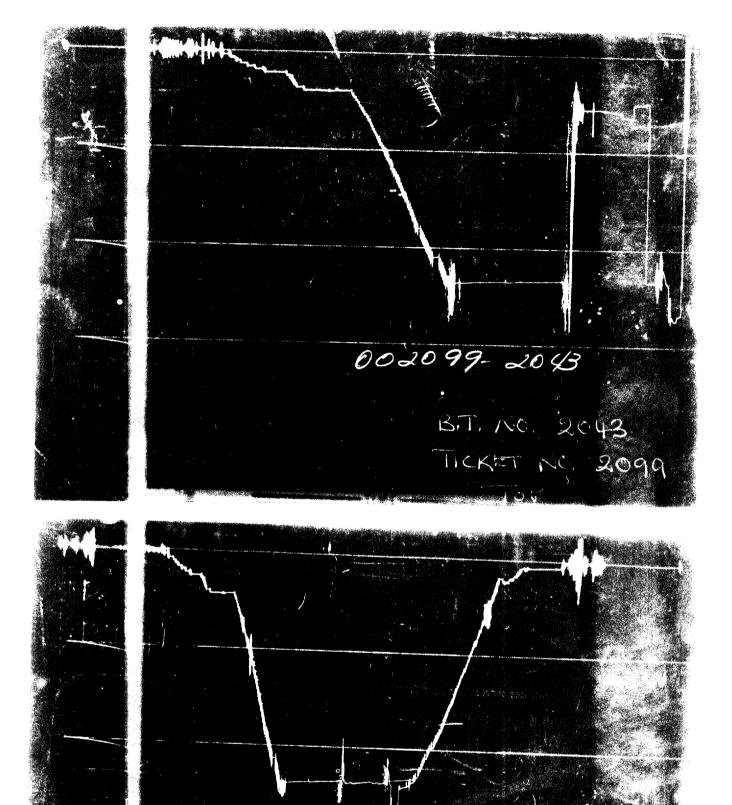
 $W_NO = W736$

WELL_NAME = NORTH PAARATTE-2

CONTRACTOR = HALLIBURTON SERVICES

CLIENT_OP_CO = BEACH PETROLEUM

(Inserted by DNRE - Vic Govt Mines Dept)



002099-2044

BT NO. 201 TICKET NO. 2000

PE906817

This is an enclosure indicator page. The enclosure PE906817 is enclosed within the container PE906815 at this location in this document.

The enclosure PE906817 has the following characteristics:

ITEM_BARCODE = PE906817

CONTAINER_BARCODE = PE906815

NAME = DST 2

BASIN = OTWAY

PERMIT = PEP93

TYPE = WELL

SUBTYPE = DST

DESCRIPTION = DST 2 Photographs (From WCR) for North

Paaratte-2

REMARKS =

DATE_CREATED =

DATE_RECEIVED = 28/04/81

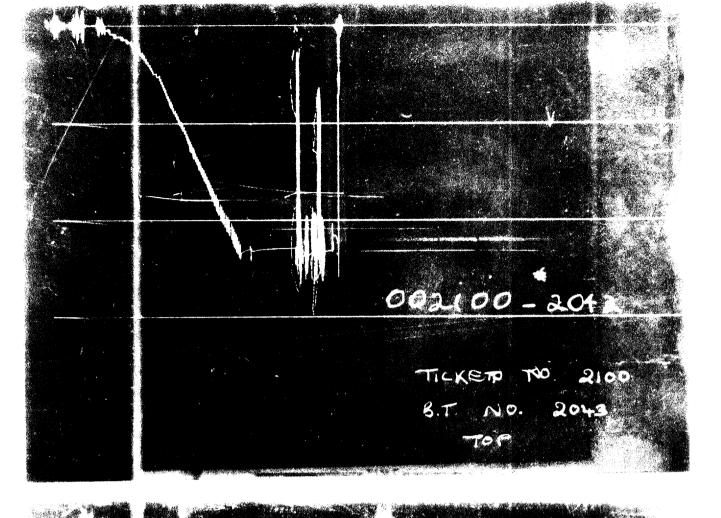
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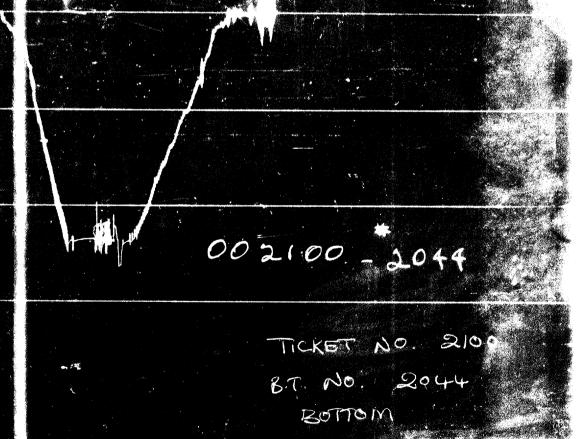
WELL NAME = NORTH PAARATTE-2

CONTRACTOR = HALLIBURTON SERVICES

CLIENT_OP_CO = BEACH PETROLEUM

(Inserted by DNRE - Vic Govt Mines Dept)





APPENDIX - 5

GAS ANALYSES

BEACH PETROLEUM

RFT REPORT No. 1

NORTH PAARATTE No. 2

A formation sample was recovered at 1481 meters, being 40.95 cubic feet of GAS at 1650 PSI and 500 ml of fluid with An RW of 2.98 at 75.6F with a minor oil scum giving a faint hid yellow natural fluorescence - probable contamination. The GAS GAVE AN ANALYSIS of:

C1......99.01%
C2......0.92%
C3......0.06%
IC4.....0.01%
NC4.....0.01%
IC5.....NIL

SAMPLE 2: A FORMATION SAMPLE WAS RECOVERED AT 1473 METERS, BEING 37.00 CUBIC FEET OF GAS AT 1650 PSI WITH LESS THAN 10 ML of MUD.

SPECIAL TEST REPORT

Requested by

Beach Petroleum

Sample book no.

81/125

Date received

6/2/81

Material

Crude Natural Gas

Job no.

Query

Analyse for Sulphur Compounds

Origin of sample Otway Area, Victoria

Report no.

81/89/AN

Report:

Samples taken from two (2) of the bottles supplied gave identical chromatographic analyses for sulphur compounds.

The bottles used were labelled

(1) RFT No. 2 - 1473 m - Bottle 1

(2) RFT No. 2 - 1473 m - Bottle 3

The results indicate

Hydrogen Sulphide approx. 2 ppm

Carbonyl Sulphide approx. 1 ppm

Ethyl Mercaptan and

Methyl, Ethyl, and DiMethyl Sulphides all present

in trace quantities.

The result for Hydrogen Sulphide does not indicate the quantity originally present, but does indicate that Hydrogen sulphide is probably present in the gas samples supplied together with other sulphur compounds which are normally found in natural gas. Similar sulphur compounds are present in the gas from the Gippsland area, so the probabilities are that these compounds are present in the gas and are not derived from the "mud" used.

Distribution: Mr. F. L. Ward, Beach Petroleum

Mr. O. Anderson

Mr. G. Mitchelmore

Master File

(2) / (1/4 ly la. Jl)

 $\binom{1}{2}$

Chemist Checked

P. Baltutis

Date 11/2/81

necked O. Anders

O. Anderson (Quarantaboratory

GAS AND FUEL CORPORATION OF VICTORIA SCIENTIFIC SERVICES DEPARTMENT

SPECIAL TEST REPORT

Requested by

Beach Petroleum N/L

Sample Book No. .81/.231......

Date Received

19/3/81

Natural Gas

Query

Material

Analysis

Report No. 81/169/AN.....

Origin of Sample Sample Bomb 4024, Paaratte No. 2

REPORT

Component	Concentration	Estimated Error
	Mole %	Mole %
Methane	96.53	± 0,2
Ethane	1.16	± 0.2
Propane	0.04	± 0.01
iso-Butane	0.039	± 0.002
normal-Butane	0.003	± 0.002
iso-Pentane	0.004	± 0.002
neo-Pentane	0.007	± 0.002
Hexanes +	0.09	± 0.02
Carbon Dioxide	0.28	± 0.01
Nitrogen	1.83	± 0.02
Oxygen Plus Argon	0.01	± 0.01

(For the dry gas at 15°C Characteristics 101.325 kPa)

Gross Heating Value

37.5 ± 0.2

MJ/m³

Specific Gravity (Air = 1)

0.574[±] 0.003

<u>Dew Point</u> (using a SHAW Hygrometer) - 17°C

Hydrogen Sulphide was not found present on testing

with lead acetate paper.

Distribution: Mr.F.Ward

Beach Petroleum O.Anderson G.Mitchelmore

Master File

"This Laboratory is registered by the National Association of Testing Authorities, Australia. The test(s) reported herein have been performed with its

terms of registration,



A Laboratory Certificate, Statement or Report may not be published except in full unless permission for the publication of an approved abstract has been obtained, in writing

Chemist Checked I. Strudwick

Date Laboratory

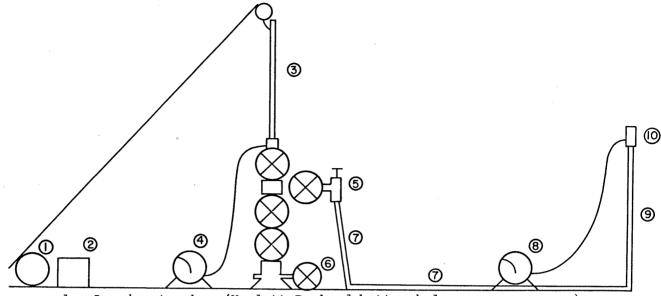
20/3/81

23/25/4561

Pieas

PRODUCTION TEST NO.2

Surface Installation (Schematic - not to scale).



- 1 Logging truck. (Hewlett-Packard bottom hole pressure gauge)
- 2 H.P. Gauge recorder
- 3.- Lubricator
- 4 Recording pressure gauge tubing head pressure (THP)
- 5 Adjustable choke
- 6 Pressure gauge casing head (7" x 2 7/8" annulus) pressure (CHP)
- 7 2" flow line (100 ft. long)
- 8 Recording pressure gauge flow prover pressure (FPP)
- 9 Vertical standpipe. (10 ft. high)
- 10 2" critical flow prover

Notes

- (a) As the separator was not covered by a current pressure vessel certificate, it could not be used.
- (b) The lubricator was supported by a crane (not shown on diagram).
- (c) Under Country Fire Authority regulations, gas could only be flared in the period 0800 to 1800 hours daily and then only if the temperature did not exceed 32°C and the wind velocity was not more than 8 kph.

CORE LABORATORIES INTERNATIONAL LTD.

Petroleum Reservoir Engineering SINGAPORE

GAS ANALYSIS

COMPANY
DST/PROD'N TEST
WELL
SAMPLING POINT
FIELD
AREA
COUNTRY
FILE
WA-CA-7

Beach Petroleum N.L.
North Paratte No. 2.
Wildcat
Australia
WA-CA-7

COMPONENTS		MOL %
Hydrogen		
Helium	~~	
Carbon Monoxide		
Hydrogen Sulphide		
Carbon Dioxide		0.23
Oxygen		
Nitrogen		1.48
Methane		96.21
Ethane	0.3325	1.32
Propane	0.0165	0.06
Iso-Butane	0.1598	0.49
N-Butane	0.0063	0.02
Iso-Pentane	0.0438	0.12
N-Pentane	0.0036	0.01
Hexanes	0.0081	0.02
Heptanes Plus	0.0181	0 04

CALCULATED GAS GRAVITY= 0.58	GPM = 0.5887
CALCULATED GROSS HEATING VALUE= 102	21.58 BTU per cubic foot of dry gas @ 14.696 psia and 60 °F
COLLECTED @ 350 psig and 48 °F	ON 15 MARCH 81
REMARKS.	



The Australian **Mineral Development** Laboratories

Flemington Street, Frewville, South Australia 5063 Phone Adelaide 79 1662 Telex AA 82520

Please address all correspondence to P.O. Box 114 Eastwood SA 5063 In reply quote:



MATA CERTIFICATE

Mr. John Hinkins, Executive Director, Beach Petroleum N.L., G.P.O. Box 1280 L, MELBOURNE. VIC. 3001

REPORT AC 4842/81

YOUR REFERENCE:

Order No. 049 Dated 31/3/81

3/944/0 - AC 4842/81

IDENTIFICATION:

As listed

DATE RECEIVED:

2nd April, 1981

D.K. Rowley Manager Analytical Chemistry Division

S.l. Bowditch for Norton Jackson Managing Director

g1j

Mark thorator, recombined to Associate the term of the second of the sec

Pilot Plant: Osman Place Thebarton S.A. Telephone 43 8053 Branch Laboratory: Perth

AMDEL

GAS CHROMATOGRAPHY ANALYSIS

Well tested:

North Paaratte # 2

Date tested:

14/3/81

Type of test:

Type of sample:

Gas

Source of sample:

Field sampling conditions: 25°F 380 psi

Reference:

O/N 049

RESULTS OF ANALYSIS

Oxygen plus argon	<0.01	% mol vol
Nitrogen	1.72	
Hydrogen	Trace < 0.01	
Helium	Trace < 0.01	
Carbon dioxide	0.07	
Methane	96.7 (By	Difference)
Ethane	1.40	
Propane	0.04	
i Butane	0.04	
n Butane	< 0.01	
i Pentane	<0.01	
n Pentane	<0.01	
Hexanes	0.01	
Heptanes	0.02	
Octanes & higher hydrocarbons	<0.01	

Calculated Gas Density (relative air = 1) 0.570

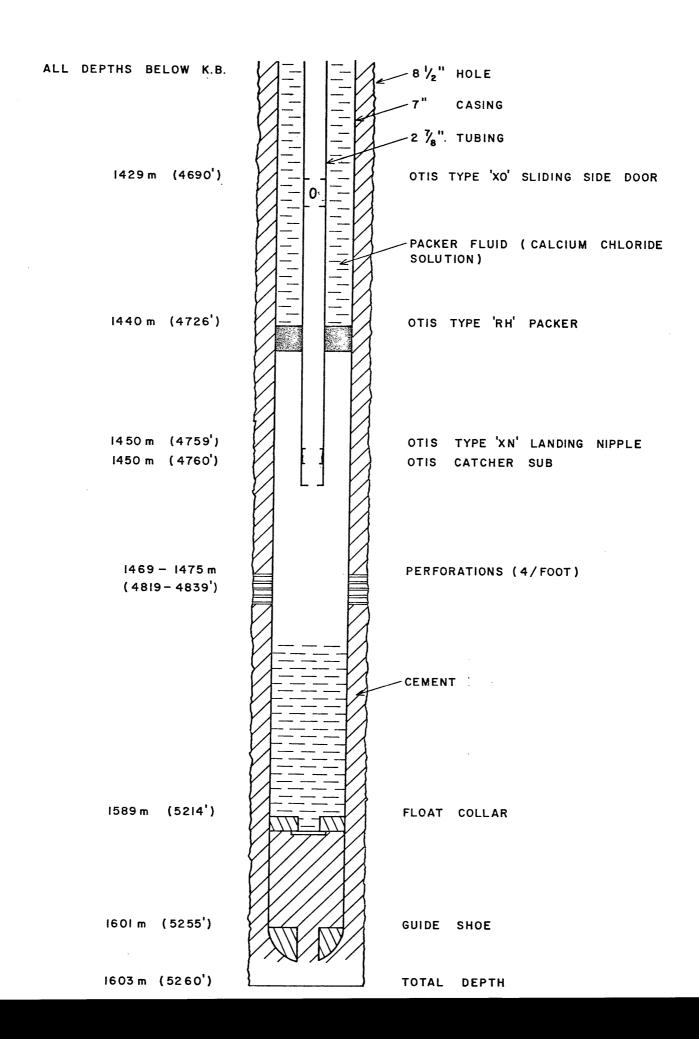
REMARKS:

APPENDIX - 6

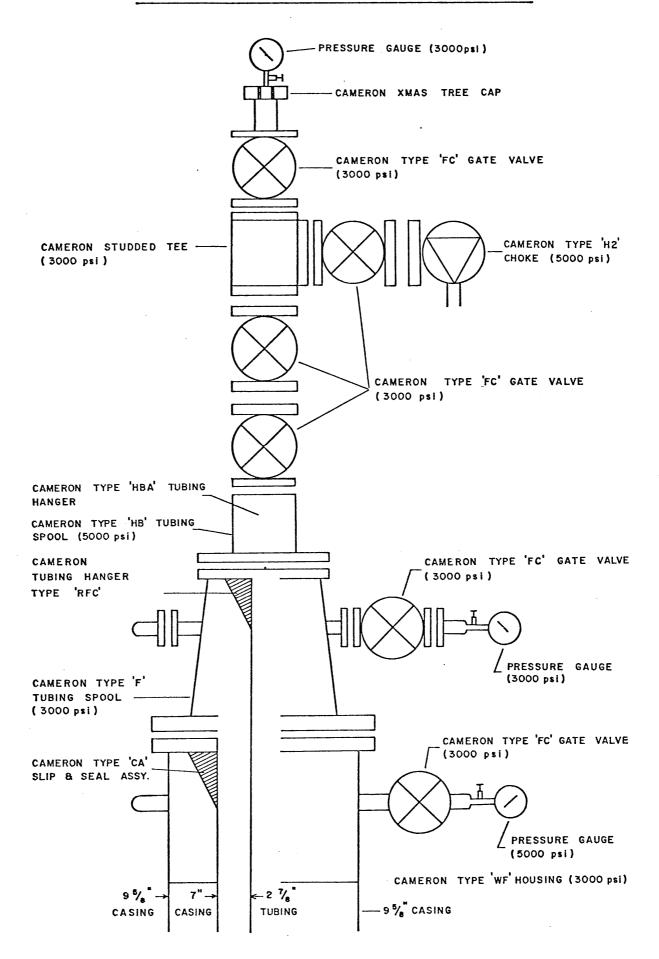
COMPLETION DETAILS

COMPLETION - NORTH PAARATTE N°2

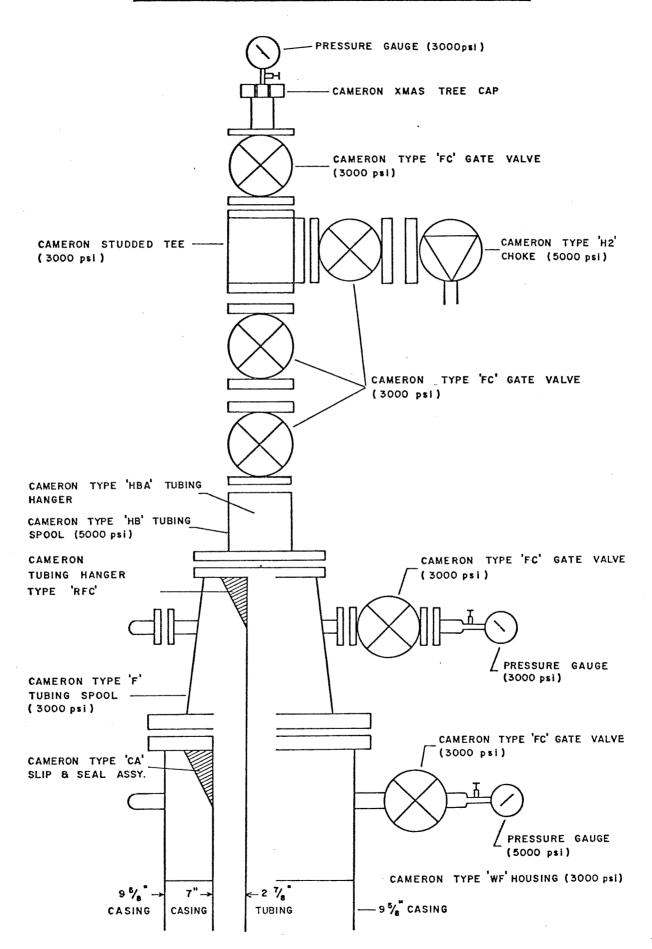
(NOT TO SCALE)



CHRISTMAS TREE - NORTH PAARATTE 2



CHRISTMAS TREE - NORTH PAARATTE 2



APPENDIX - 7

PRODUCTION TESTING

- 1. Production Test No.1
- 2. Production Test No.2
- 3. Production Test No.3
- 4. Production Test Report by Go International Wireline Services

PRODUCTION TEST NO.1

This test was of short duration and was designed primarily to clean the well after swabbing.

<u>Date</u>	15 February 1981
0813 hours	Commenced swabbing
0845 hours	Swabbed to 1200 ft. (365 m); commenced to flow completion fluid from the tubing; shut master gate and removed lubricator.
0910 hours	Re-opened master gate; well commenced to blow
0915 hours	Lit gas
0950 hours	Closed master gate; installed back pressure valve and secured well.

Flow Measurement

Flow measurements were estimated by reading a 3000 psi gauge upstream of the well head variable choke.

Time	Choke	THP	СНР	FLP	Q
0920	50/64"	675 psia	145 psia	465 psia	9.8MMCFD
0930	50/64"	680 psia	155 psia	465 psia	9.86 MMCFD
0940	32/64"	900 psia	200 psia	415 psia	5.64 MMCFD
0950	16/64"	1100 psia	225 psia	415 psia	1.62 MMCD

The above tabulated flow rates are not considered to be reliable.

Wednesday, 4th March, 1981

0930 - CHP 1200 psi

Bled back (?air) to 250 psi

0950 - CHP 600 psi

Bled back (? air) and small quantity brine to 380 psi.

1010 - CHP 500 psi

Bled back (? air) to 350 psi

1025 - CHP 400 psi

1028 - Opened well on 16/64" choke to clean up - had difficulty in keeping flare alight.

THP

CHP

	<u> </u>	1111
1032	425	1760
1035	425	1760
1045	425	1760
	Extinguished	flare - recovered l" orifice plate
	from critical	flow prover - opened on 24/64" choke
1055	430 .	1720
1115	480	1730
1130	500	1730
1145	510	1730
1200	560	1725
1215	580	1720
1230	600	1700
1245	625	1700
1300	640	1650
	Well commenced	d to flow slugs of condensate.
1330	680	1675
1345	700	1680
1400	720	1680
1415	750	1680
1428	760	1680
	Shut in well.	
1500	680	1760
1530	640	1765
1600	600	1765

Rigged lubricator; ran HP gauge several hundred feet to ensure ease of running; pulled back, bled pressure; secured well.

Thursday 5th March, 1981

Ran in hole with HP gauge. BHP stable at 1987 psi.

At this stage it was decided to discontinue the test for the following reasons:-

- (i) As the slugging of condensate was potentially hazardous, a separator was needed before any further flow testing was carried out. All efforts were to be made to have the available separator approved.
- (ii) The temperature element in the HP gauge was unserviceable.
- (iii) The seat and needle in the Cameron Type H2 choke were badly eroded and required replacing.

Comments

- 1. The well was flowed for four hours for clean-up. In effect this was the only positive achievement of this test.
- 2. In the period 15th February to 4th March, 1981, the pressure in the 7" \times 2 7/8" annulus had built up to 1200 psi. Initially, it was thought that there must have been a leak

(a) around the packer

and/or

(b) around the tubing hanger

and/or

(c) in the tubing string

Had there been such a leak however, it would have been expected that some of the calcium chloride brine would have been produced with the gas. As far as could be ascertained such was not the case and significantly the gas flare was very nearly odourless with no indication of the characteristic brick-red calcium colouration.

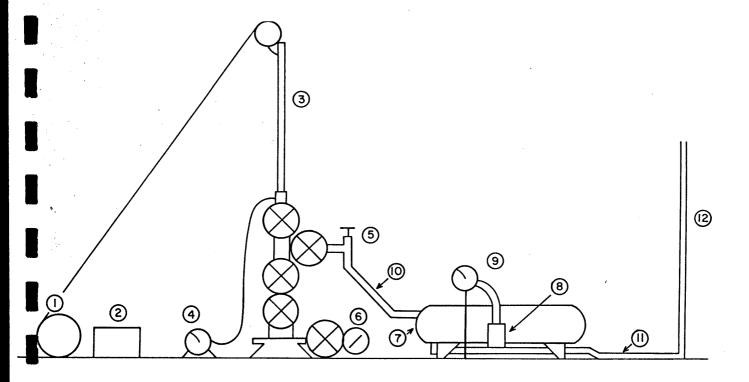
It was tentatively concluded therefore the pressure build up was due to upward migration of air contained in the calcium chloride brine during mixing and if this was so, there should be little or no further pressure build up.

In the interval between the conclusion of Production Test No.2 and the commencement of Production Test No.3, the following pressures were observed.

6	March	430	psi
7	March	430	psi
8	March	430	psi
9	March	430	psi
10	March	430	psi
11	March	430	psi
12	March	430	psi

PRODUCTION TEST NO.3

Surface Installation (Schematic - not to scale)



- 1 Logging truck (Hewlett-Packard bottom hole pressure gauge)
- 2 H-P gauge recorder
- 3 Lubricator
- 4 Recording pressure gauge tubing head pressure (THP)
- 5 Adjustable choke
- 6 Pressure gauge casing head (7" x 2 7/8" annulus) pressure (CHP)
- 7 Separator
- 8 Orifice Meter (3 inch)
- 9 Recording pressure gauge (differential and static pressures)
- 10 2 inch flow line (100 ft. long)
- 11 2 inch flow line (100 ft. long)
- 12 Vertical stand pipe (10 ft. high)

Notes

- (a) The lubricator was supported by a crane (not shown on the diagram).
- (b) Under Country Fire Authority regulations, gas could only be flared in the period 0800 to 1800 hours daily and then only if the temperature did not exceed 32°C and the wind velocity was not more than 8 kph.

The four point isochronal test was carried out by Go International Australia Pty. Ltd. whose report follows.

Assessment of Results

The tests conducted on this well were designed to be of a preliminary nature only and it was considered that more rigorous testing should be carried out by reservoir engineers at the appropriate time.

For this reason the data collected have been used to derive the Open Flow Potential of the well, as it is a general industry rule of thumb that a well can be economically produced at about 15% of this volume.

NB.

The attached graph shows that the OFP of the well is 95 MMCFD; thus an initial production rate of approximately 14 MMCFD is indiated. It is doubtful, however, with the present equipment in the well, that a flow rate in excess of 10 MMCFD is possible.

Preliminary data indicate that condensate will be produced at least at the rate of 2.5 barrels per MMCF.

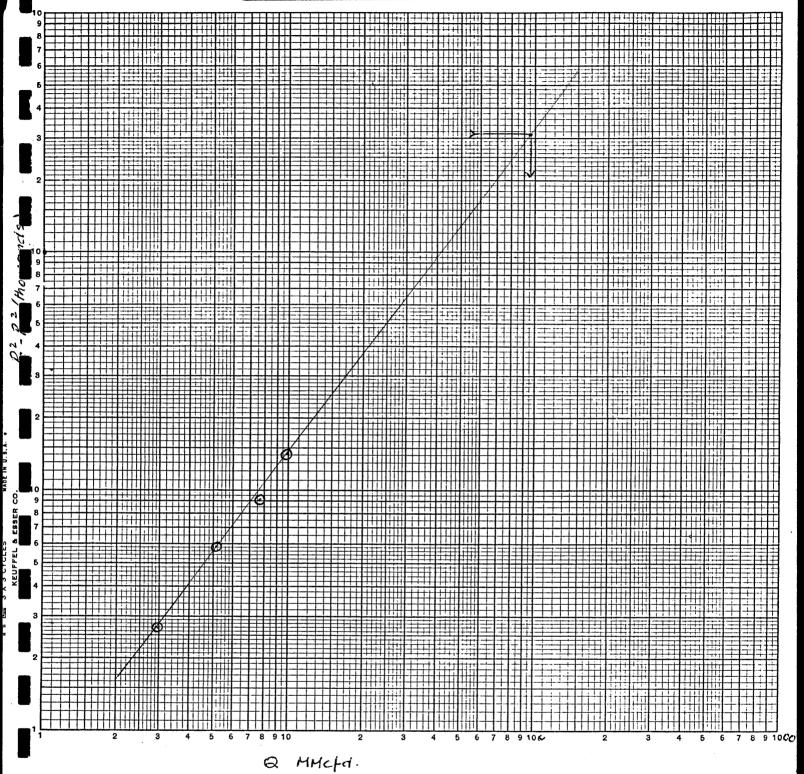
Following the completion of Production Test No.3 on 16 March, 1981, the pressure on the 7" \times 2 7/8" annulus was bled down at intervals and pressure build up observed.

16th March Pressure 300 psi bled to 75 psi
17th March Pressure 200 psi bled to 0 psi
18th March Pressure 125 psi bled to Opsi
19th March Pressure <75 psi bled to Opsi

Between 1700 and 1715 hours 19th March, there was no apparent build up in pressure and the annulus appeared dead.

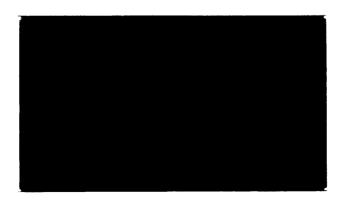
It is concluded that this annular pressure was caused by the slow vertical migration of air entrained whilst mixing the completion fluid and that its effect may have been exacerbated by the mandatory pressure testing of the packer seat. Remedial operations are unnecessary.

Plot Points are:- 27 vs 2.975
59 vs 5.158
91 vs 7.797
148 vs 9.855
Pc2 is 3177



OFP = 95 HMC/cl. n = 0.73.







(INCORPORATED IN W.A.)

BEACH PETROLEUM N.L. NORTH PAARATTE NO. 2 MARCH 14, 1981



(INCORPORATED IN W.A.)

Beach Petroleum N.L.

March 2, 1981

North Paaratte No. 2

HOURS	REMARKS
March 2, 1981	
1100 2000	Depart Sale Arrive Port Campbell
March 3,1981	
0800 1500	Rig up equipment Pressure test Cameron lubricator to 2500 psi Pull back pressure valve
March 4, 1981	
0800 1000 1600 1700	Rigging up Flow well to clean up Shut in well Rig up lubricator and run in hole to 200 metres - check tool. Temperature tool did not work. Rig down
March 5,1981	
0700 0831 1115 1400 1700	Run in hole with only Hewlett Packard Pressure Probe Hang at 1469 metres. Found Cameron choke out Pull out of hole - rig down Pack up gear Depart Port Campbell for Sale



(INCORPORATED IN W.A.)

Beach Petroleum N.L.

North Paaratte No. 2

March 11, 1981

Hours	Remarks
1200 1800	Depart Sale Arrive Port Campbell
March 12, 1981	
0700 1000 1030 1613 1743 1800 0730 1800 2400	Rig up Pull Cameron Back Pressure valve Rigging up Flow well to clean up Shut in well Run in hole Hang at 1468 metres Start P.C.P. printer static B.H.P. Static B.H.P.
March 13, 1981	
0001 2400	Hang at 1468 metres Static B.H.P. Standby bad weather
March 14, 1981	
0804 0830 1130 1430 1730	Flow well 16/64 choke, 1.250 orifice Change choke 18/64 Shut in well Flow well on 22/64 choke 1.500 orifice Shut in well
March 15, 1981	
0001 0800 1400 1700	Well shut in Flow well on 26/64 choke @ 1.875 orifice Flow well on 30/64 choke @ 2.000 orifice Shut in well final build up

Beach Petroleum N.L. North Paaratte No. 2

March 11, 1981

Continued.....

Hours	Remarks
March 16, 1981	
0610 0617 0635 0645 0703 0722 0741 0800 0825 0842 0907 0924 0940 1000 1100	Pull up hole for Static Gradient Hang @ 1368 metres Pull up Hang @ 1220 metres Pull up Hang at 915 metres Pull out of hole Hang at 610 metres Pull out of hole Hang at 305 Pull up Hang in lubricator Shut in well bleed down Run in well with 2-7/8 X plug Set at 4759 feet Rig up Cameron lubricator and set Cameron back pressure valve Rig down
1500	Move to next location

Page

Tool Positioned at a depth of: 1468 Time Temp. Temp. PSIA. PSIA. Time Time Temp. PSIA. 13:03:40 141.4 1987.55 /3/3 13:03:30 141.3 1987.53 13:30:00 141.3 1987.53 14:00:00 141.3 1987.55 14:30:00 141.3 1987.54 15:00:00 141.4 1987.56 15:30:00 141.4 1987.55 16:00:00 141.3 1987.55 16:30:00 141.4 1987.56 1987.54 17:30:00 141.3 1987.55 18:00:00 17:00:00 141.4 1987.56 141.4 1987.54 18:30:00 141.4 1987.55 19:30:00 19:00:00 141.3 1987.54 141.3 20:00:00 141.4 1987.54 20:30:00 141.4 1987.55 21:00:00 141.3 1987.53 21:30:00 141.4 1987.54 23:00:00 141.4 1987.54 141.3 1987.54 141.3 1987.53 22:00:00 22:30:00 141.4 1987.56 1987.54 23:30:00 00:00:00 141.4 141.3 1987.53 /4/301:30:00 00:30:00 141.4 1987.54 141.3 1987.53 01:00:00 02:00:00 141.3 1987.53 02:30:00 141.4 1987.54 03:00:00 141.4 1987.54 03:30:00 141.4 1987.54 04:00:00 141.4 1987.54 04:30:00 141.3 1987.52 05:00:00 141.4 1987.54 05:30:00 141.3 1987.52 06:00:00 141.3 1987.53 06:30:00 141.4 1987.54 07:00:00 141.4 1987.53 07:30:00 141.3 1987.53 08:00:00 141.4 1987.54 08:03:00 141.3 1987.53 08:03:10 141.4 1987.53 08:03:20 141.4 1987.54 08:03:30 141.3 1987.53 08:03:40 141.4 1987.54 141.4 08:04:00 141.3 1987.53 08:04:10 1987.52 08:03:50 141.4 1987.51 1983.10 08:04:20 141.4 1986.13 08:04:30 141.3 1984.68 08:04:40 141.3 08:05:00 141.2 1981.82 08:05:30 141.3 1981.78 08:06:00 141.4 1982.35 141.3 1981.64 141.2 1982.05 141.4 1981.70 08:04:50 08:05:10 141.4 1981.90 08:05:20 08:05:40 08:05:50 141.4 1982.12 08:06:10 141.4 1982.37 08:06:30 141.5 1982.84 08:06:20 141.4 1982.54 08:06:40 141.4 1982.77 08:06:50 141.5 1983.03 08:07:00 141.4 1983.02 08:07:10 141.4 1983.03 08:07:20 141.4 1983.14 08:07:30 141.4 1983.18 08:07:40 141.5 1983.20

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 141.5
 1984.23
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 141.4 1978.95 141.4 1979.12 08:33:30 141.4 08:32:30 08:33:00 08:34:00 141.5 1979.25 08:34:30 141.5 1979.29 08:35:00 141.5 1979.31 08:35:30 141.4 1979.48 08:36:00 141.5 1979.65 08:36:30 141.4 1979.79 08:37:00 141.5 1980.09 08:37:30 141.4 08:38:00 141.4 1980.17 1980.04 1980.56 08:39:30 141.4 1980.63 08:38:30 141.4 1980.24 08:39:00 141.5 1980.95 1980.80 08:41:00 141.4 08:40:30 141.4 08:40:00 141.4 1980.71

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 1980.95

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09:03:00	141.4	1979.83	09:04:00	141.4	1979.76	09:05:00	141.4	1979.64
09:06:00	141.4	1979.65	09:07:00	141.5	1979.65	09:08:00	141.5	1979.69
09:09:00	141.4	1979.77	09:10:00	141.5	1979.81	09:11:00	141.4	1979.78
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09:18:00	141.4	1979.84	09:19:00	141.4	1979.94	09:20:00	141.4	1979.98
					1980.06	09:23:00	141.5	1980.03
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09:27:00	141.4	1980.06	09:28:00	141.4	1980.06	09:29:00		
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09:36:00	141.5	1979.93	09:37:00	141.5	1979.92	09:38:00	141.4	1979.93
09:39:00	141.4	1979.92	09:40:00	141.4	1979.94	09:41:00	141.4	1979.93
09:42:00	141.4	1979.92	09:43:00	141.4	1979.83	09:44:00	141.4	1979.81
09:45:00	141.4	1979.79	09:46:00	141.4	1979.77	09:47:00	141.5	1979.74
09:48:00	141.4	1979.72	09:49:00	141.4	1979.70	09:50:00	141.5	1979.69
09:51:00	141.4	1979.66	09:52:00	141.4	1979.60	09:53:00	141.5	1979.59
09:54:00	141.4	1979.59	09:55:00	141.4	1979.57	09:56:00	141.4	1979.53
09:57:00	141.4	1979.47	09:58:00	141.4	1979.47	09:59:00	141.4	1979.45
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10:21:00	141.4	1978.85	10:22:00	141.4	1978.84		141.4	1978.78
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10:45:00	141.4	1978.37	10:46:00	141.5	1978.33	10:47:00	141.4	1978.33
10:48:00	141.4	1978.31	10:49:00	141.4	1978.28	10:50:00	141.4	1978.24
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10:57:00	141.4	1978.14	10:58:00	141.4	1978.09	10:59:00	141.4	1978.07
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11:03:00	141.4	1978.00	11:04:00	141.4	1977.95	11:05:00	141.4	1977.94
			11:07:00	141.4	1977.90	11:08:00	141.4	1977.85
11:06:00	141.4	1977.92		141.4	1977.83	11:11:00	141.4	1977.80
11:09:00	141.4	1977.85	11:10:00			11:14:00	141.5	1977.72
11:12:00	141.4	1977.79	11:13:00	141.4	1977.77		141.4	1977.67
11:15:00	141.5	1977.73	11:16:00	141.4	1977.73	11:17:00		
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11:21:00	141.4	1977.63	11:22:00	141.4	1977.65	11:23:00	141.4	1977.63
11:24:00	141.4	1977.58	11:25:00	141.4	1977.57	11:26:00	141.5	1977.57
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11:29:50	141.4	1977.54	11:30:00	141.4	1977.52	11:30:10	141.4	1977.52
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11:30:50	141.7	1986.06	11:31:00	141.8	1986.20	11:31:10	141.7	1986.28
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11:31:50	141.7	1986.50	11:32:00	141.7	1986.55	11:32:10	141.7	1986.61
11:32:20	141.7	1986.64	11:32:30	141.7	1986.66	11:32:40	141.7	1986.68
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14:37:20 141.3 1969.22

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14:38:20 141.3 1968.48 14:38:50 141.3 1968.32 2

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Tool Positioned at a depth of: 1468 Time Temp. PSIA. Time Temp. PSIA. 11:33:50 141.6 1986.84 11:34:00 141.7 1986.86 Time Temp. PSIA. 11:34:10 141.6 1986.87 11:34:40 141.6 1986.91 11:35:30 141.6 1986.97 11:34:20 141.6 1986.87 11:34:30 141.6 1986.89 11:34:50 141.6 1986.93 11:35:00 141.6 1986.93 11:36:00 141.6 1986.98 11:36:30 141.6 1986.99 11:37:00 141.6 1987.02 11:37:30 141.5 1987.03 11:38:00 141.6 1987.04 11:38:30 141.6 1987.06 11:39:00 141.6 1987.06 11:40:00 141.5 1987.08 11:39:30 141.5 1987.07 11:40:30 141.5 1987.09 11:41:00 141.6 1987.09 11:41:30 141.5 1987.09 11:43:00 141.5 1987.11 11:46:00 141.5 1987.13 11:49:00 141.6 1987.16 141.5 141.5 1987.09 1987.12 141.5 1987.11 141.5 1987.14 11:42:00 11:44:00 11:45:00 11:47:00 11:48:00 141.5 1987.13 141.5 1987.15 11:50:00 11:51:00 141.5 1987.15 11:52:00 141.5 1987.15 11:53:00 141.5 1987.16 11:54:00 141.5 1987.17 11:55:00 141.5 1987.18 11:56:00 141.6 1987.20 11:57:00 141.5 1987.18 11:58:00 141.5 1987.19 11:59:00 141.6 1987.21 11:57:00 141.5 1987.18 11:58:00 141.5 1987.19 11:59:00 141.6 1987.21 12:00:00 141.5 1987.19 12:01:00 141.5 1987.21 12:02:00 141.5 1987.21 12:03:00 141.5 1987.21 12:04:00 141.6 1987.22 12:05:00 141.5 1987.22 12:06:00 141.5 1987.21 12:07:00 141.5 1987.22 12:08:00 141.5 1987.21 12:09:00 141.5 1987.22 12:10:00 141.5 1987.21 12:11:00 141.5 1987.23 12:12:00 141.5 1987.24 12:13:00 141.5 1987.25 12:17:00 141.5 1987.25 12:18:00 141.5 1987.25 12:19:00 141.5 1987.25 12:21:00 141.5 1987.25 12:21:00 141.5 1987.25 12:22:00 141.5 1987.25 12:23:00 141.5 1987.25 12:24:00 141.5 1987.26 12:25:00 141.4 1987.26 12:26:00 141.5 1987.27 12:27:00 141.4 1987.27 12:31:00 141.4 1987.27 12:31:00 141.4 1987.27 12:31:00 141.4 1987.27 12:32:00 141.5 1987.27 12:30:00 141.4 1987.27 12:31:00 141.4 1987.28 12:32:00 141.5 1987.28 12:33:00 141.4 1987.27 12:34:00 141.5 1987.28 12:35:00 141.5 1987.29 12:36:00 141.5 1987.28 12:37:00 141.4 1987.29 12:38:00 141.5 1987.29 12:39:00 141.4 1987.29 12:40:00 141.5 1987.29 12:41:00 141.5 1987.29 12:42:00 141.5 1987.29 12:43:00 141.4 1987.30 12:44:00 141.5 1987.29 12:47:00 141.5 1987.30 12:45:00 141.5 1987.30 12:46:00 141.5 1987.29 12:49:00 141.4 1987.31 12:52:00 141.4 1987.31 12:55:00 141.5 1987.31 12:48:00 141.4 1987.31 12:51:00 141.5 1987.31 12:50:00 12:53:00 141.4 1987.30 12:56:00 141.4 1987.32 12:59:00 141.4 1987.32 141.5 1987.30 141.4 1987.30 12:50:00 12:52:00 12:51:00 141.5 1987.31 12:54:00 141.4 1987.31 12:58:00 141.5 1987.31 12:57:00 141.4 1987.32 13:00:00 141.4 1987.32 13:01:00 141.4 1987.33 13:02:00 141.4 1987.31 13:03:00 141.4 1987.32 13:04:00 141.4 1987.31 13:05:00 141.4 1987.33 13:10:00 141.4 1987.32 13:20:00 141.5 1987.34 13:30:00 141.5 1987.34 13:10:00 141.4 1987.32 13:20:00 141.5 1987.34 13:30:00 141.5 1987.34 13:40:00 141.5 1987.35 13:50:00 141.5 1987.33 14:00:00 141.5 1987.36 14:10:00 141.5 1987.36 14:20:00 141.5 1987.36 14:29:40 141.5 1987.36 14:29:50 141.5 1987.37 14:30:00 141.5 1987.37 pob*z14:30:10 141.5 1986.90 14:30:20 141.5 1986.74 14:30:30 141.5 1986.21 14:30:40 141.5 1986.16 14:30:50 141.4 1986.15 14:31:00 141.4 1986.11 14:31:10 141.4 1986.11 14:31:20 141.4 1985.31 14:31:30 141.4 1984.06 14:31:40 141.4 1986.71 14:31:50 141.5 1986.72 14:32:00 141.4 1983.30 14:32:10 141.3 1982.53 14:32:20 141.3 1981.19 14:32:30 141.4 1980.82 14:32:40 141.4 1980.68 14:33:50 141.4 1980.57 14:33:30 141.4 1980.53 14:33:40 141.4 1980.50 14:33:20 141.5 1980.50 14:33:30 141.4 1980.50 14:33:40 141.4 1980.50 14:33:50 141.4 1980.50 14:33:30 141.4 1980.50 14:33:40 141.4 1980.50 14:33:50 141.4 1980.50 14:34:40 141.4 1980.50 14:34:20 141.4 1980.50 14:34:30 141.4 1978.29 14:34:40 141.3 1975.62 14:34:20 141.3 1969.35 14:35:20 141.4 1969.63 14:35:30 141.3 1969.79 14:35:20 141.4 1969.63 14:35:30 141.3 1969.79 14:35:40 141.4 1969.85 14:35:40 141.4 1969.85 14:36:10 141.3 1969.75 14:36:40 141.4 1969.63 14:35:20 141.4 1969.63 14:35:50 141.4 1969.86 14:35:30 141.3 1969.74 14:36:00 141.3 1969.82 14:36:30 141.3 1969.69 14:37:00 141.3 1969.44 14:36:20 141.4 1969.74 14:37:10 141.3 1969.35 14:36:50 141.3 1969.56

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14:38:00 141.2 1968.64 14:38:10 141.3 1968.56

14:38:30 141.3 1968.43 14:38:40 141.3 1968.38

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Tool Posi		at a dept	th of: 1468					
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14:47:30	141.3	1968.24	14:48:00	141.2	1968.33	14:48:30	141.2	1968.33
14:49:00	141.3	1968.37	14:49:30	141.3	1968.36	14:50:00	141.2	1968.36
14:51:00	141.2	1968.40	14:52:00	141.2	1968.74	14:53:00	141.2	1968.90
14:54:00	141.3	1968.96	14:55:00	141.2	1968.97	14:56:00	141.2	1968.95
14:57:00	141.3	1968.96	14:58:00	141.2	1968.90	14:59:00	141.3	1968.93
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15:06:00	141.2	1968.66	15:07:00	141.2	1968.60	15:08:00	141.2	1968.45
15:09:00	141.2	1968.33	15:10:00	141.2	1968.48	15:11:00	141.2	1969.10
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15:24:00	141.3	1969.48	15:25:00	141.3	1969.41	15:26:00	141.3	1969.37
15:27:00	141.3	1969.25	15:28:00	141.3	1969.35	15:29:00	141.2	1969.18
15:30:00	141.2	1969.21	15:31:00	141.2	1969.06	15:32:00	141.2	1968.97
15:33:00	141.2	1968.99	15:34:00	141.2	1968.78	15:35:00	141.3	1968.83
15:36:00	141.3	1968.49	15:37:00	141.2	1968.33	15:38:00	141.3	1968.34
15:39:00	141.3	1968.20	15:40:00	141.3	1968.27	15:41:00	141.2	1968.02
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15:54:00	141.2	1968.32	15:55:00	141.3	1968.25	15:56:00	141.3	1968.26
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16:15:00	141.2	1967.59	16:16:00	141.3	1967.57	16:17:00	141.2	1967.55
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16:21:00	141.3	1967.52 1967.57	16:25:00	141.2 141.3	1967.57 1967.53	16:23:00	141.2	1967.54
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16:33:00	141.2	1967.41	16:34:00	141.2	1967.38	16:35:00	141.2	1967.43
16:36:00	141.2	1967.47	16:37:00	141.2	1967.52	16:33:00	141.2	1967.34
16:39:00	141.2	1967.32	16:40:00	141.2	1967.27	16:41:00	141.2	1967.27
16:42:00	141.3	1967.31	16:43:00	141.2	1967.31	16:44:00	141.2	1967.29
16:45:00	141.2	1967.30	16:46:00	141.2	1967.27	16:47:00	141.3	1967.28
16:48:00	141.3	1967.26	16:49:00	141.2	1967.24	16:50:00	141.2	1967.24
16:51:00	141.2	1967.26	16:52:00	141.2	1967.26	16:53:00	141.2	1967.23
16:54:00	141.2	1967.22	16:55:00	141.2	1967.24	16:56:00	141.2	1967.21
16:57:00	141.2	1967.20	16:58:00	141.3	1967.20	16:59:00	141.2	1967.22
17:00:00	141.2	1967.16	17:01:00	141.3	1967.20	17:02:00	141.2	1967.16
17:03:00	141.2	1967.15	17:04:00	141.2	1967.13	17:05:00	141.2	1967.20
17:06:00	141.3	1967.39	17:07:00	141.2	1967.45	17:08:00	141.2	1967.06
17:09:00	141.2	1966.99	17:10:00	141.2	1966.97	17:11:00	141.2	1967.00
17:12:00	141.2	1966.98	17:13:00	141.3	1966.98	17:14:00	141.3	1966.98
17:15:00	141.2	1966.94	17:16:00	141.3	1966.96	17:17:00	141.2	1966.93
17:18:00	141.2	1966.91	17:19:00	141.3	1966.90	17:20:00	141.3	1966.87
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17:24:00	141.2	1966.88	17:25:00	141.3	1966.86	17:26:00	141.2	1966.86
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11.30:40	141.8	1984.55	17:30:50	141.8	1984.78	17:31:00	141.8	1984.96

5

Tool Positioned at a depth of: 1468 Time PSIA. PSIA. Temp. Time Temp. PSIA. Time. Temp. 17:31:20 141.9 1985.24 141.9 17:31:30 141.8 1985.32 1985.11 17:31:10 17:31:50 141.7 1985.52 17:32:00 141.7 17:31:40 141.8 1985.42 1985.62 17:32:10 141.7 1985.68 17:32:20 141.8 1985.76 17:32:30 141.7 1985.83 17:32:40 141.6 1985.88 17:32:50 141.6 1985.95 17:33:00 141.7 1986.01 17:33:10 141.7 1986.06 17:33:20 141.6 1986.09 17:33:30 141.6 1986.13 17:33:40 141.6 1986.16 17:33:50 141.6 1986.19 17:34:00 141.6 1986.22 17:34:10 141.6 1986.25 17:34:20 141.6 1986.27 17:34:30 141.6 1986.30 17:34:50 141.6 1986.33 17:34:40 141.6 1986.32 17:35:00 141.5 1986.35 17:35:20 141.5 1986.38 17:35:10 141.6 1986.36 17:35:30 141.6 1986.39 17:35:40 141.6 1986.41 17:35:50 17:36:00 141.6 1986.42 141.5 1986.41 141.5 1986.46 17:36:20 141.5 1986.43 17:36:10 141.6 1986.44 17:36:30 17:36:50 141.5 1986.47 17:36:40 141.5 1986.47 141.5 1986.49 17:37:00 17:37:10 141.4 1986.51 17:37:20 141.5 1986.50 17:37:30 141.5 1986.51 17:37:40 141.4 1986.52 17:37:50 141.5 1986.53 17:38:00 141.5 1986.53 17:38:10 141.4 1986.55 17:38:20 141.5 1986.55 17:38:30 141.5 1986.56 17:38:40 141.5 1986.56 17:38:50 141.5 1986.57 17:39:00 141.5 1986.57 17:39:20 141.4 1986.57 17:39:30 141.5 1986.59 17:39:10 141.5 1986.57 17:39:40 141.4 1986.59 17:39:50 141.4 1986.60 17:40:00 141.4 1986.60 17:41:00 141.4 1986.63 17:41:30 141.4 1986.64 17:40:30 141.5 1986.61 141.4 1986.66 141.4 1986.60 17:42:00 141.5 1986.65 141.5 1986.68 141.5 1997 17:42:30 17:43:00 141.5 1986.67 141.4 17:44:00 17:44:30 17:43:30 1986.70 17:45:30 141.4 1986.72 141.4 17:45:00 17:46:00 1986.72 17:46:30 141.5 1986.72 17:47:00 141.4 1986.72 141.4 1986.75 17:47:30 17:48:30 141.5 1986.74 17:48:00 141.4 1986.75 17:49:00 141.4 1986.75 17:50:30 141.4 1986.77 17:49:30 141.4 1986.77 17:50:00 141.4 1986.75 17:52:00 141.4 1986.79 17:51:00 141.4 1986.77 17:51:30 141.4 1986.78 17:52:30 141.4 1986.77 17:53:00 141.4 1986.79 17:53:30 141.4 1986.79 17:55:00 141.4 1986.79 17:54:00 141.4 1986.79 17:54:30 141.4 1986.79 17:57:00 141.4 1986.80 17:58:00 141.3 1986.80 17:56:00 141.4 1986.80 18:00:00 141.3 1986.82 17:59:00 141.3 1986.82 18:01:00 141.4 1986.82 141.4 1986.83 18:02:00 141.4 1986.83 18:03:00 18:04:00 141.4 1986.84 18:06:00 18:07:00 18:05:00 141.4 1986.85 141.3 1986.86 141.4 1986.85 141.4 1986.86 141.4 1986.86 18:09:00 18:10:00 1986.87 18:08:00 141.4 18:12:00 141.4 1986.90 141.4 1986.89 18:11:00 141.4 1986.88 18:13:00 18:16:00 141.3 1986.89 18:14:00 141.4 1986.90 18:15:00 141.4 1986.90 18:18:00 141.3 1986.91 18:17:00 141.4 1986.90 18:19:00 141.4 1986.92 18:20:00 141.3 1986.90 18:21:00 141.4 1986.92 18:22:00 141.4 1986.92 18:23:00 141.3 1986.91 18:24:00 141.3 1986.93 18:25:00 141.4 1986.94 18:27:00 141.4 1986.94 18:26:00 141.4 1986.94 18:28:00 141.4 1986.94 18:29:00 141.4 1986.95 18:30:00 141.4 1986.95 18:40:00 141.4 1986.98 19:00:00 141.4 1987.02 19:10:00 141.4 1987.04 18:50:00 141.4 1987.00 1987.07 141.4 1987.08 19:20:00 141.5 1987.05 19:30:00 141.4 19:40:00 141.4 1987.10 141.4 1987.10 1987.10 20:00:00 141.4 20:10:00 19:50:00 141.4 1987.10 141.4 1987.12 141.4 1987.12 20:20:00 20:30:00 20:40:00 20:50:00 141.4 1987.13 21:10:00 141.3 1987.13 21:00:00 141.4 1987.13 21:20:00 141.4 1987.15 21:30:00 141.4 1987.15 22:00:00 141.4 1987.17 22:30:00 141.3 1987.17 23:00:00 141.3 1987.17 23:30:00 141.4 1987.20 23:36:10 141.4 1987.19 23:36:20 141.4 1987.20 00:00:00 141.4 1987.21 00:30:00 141.4 1987.23 01:00:00 141.4 1987.23 01:30:00 141.4 1987.23 02:00:00 141.4 1987.23 02:30:00 141.4 1987.23 03:00:00 141.4 1987.26 04:00:00 141.4 1987.25 04:30:00 03:30:00 141.3 1987.25 141.4 1987.27 1987.27 05:00:00 141.4 05:30:00 141.4 1987.27 06:00:00 141.4 1987.29 07:00:00 07:30:00 06:30:00 141.4 1987.29 141.4 1987.29 141.4 1987.29 07:59:40 141.4 1987.30 07:59:50 141.4 1987.30 08:00:00 141.4 1987.31 141.4 1987.31 141.3 1986.82 141.3 1987.09 08:00:30 08:00:20 08:00:10 08:00:40 141.4 1986.75 141.3 1986.25 08:00:50 141.4 1986.72 08:01:00 08:01:10 141.4 1985.83 08:01:20 141.3 1985.80 08:01:30 141.3 1985.63 08:01:40 141.4 1982.54 08:01:50 141.3 1980.59 08:02:00 141.3 1977.94 08:02:10 141.2 1975.25 08:02:20 141.2 1971.50 08:02:30 141.2 1968.59 08:02:40 141.2 1964.50 08:02:50 141.2 1963.61 08:03:00 141.2 1963.67

Tool Posi	tioned	at a depth	of: 1468					
Time.	Temp.	PSIA.	Time	Temp.	PSIA.	Time	Temp.	PSIA.
08:03:10	141.3	1963.70	08:03:20	141.3	1963.40	08:03:30	141.3	1963.35
08:03:40	141.2	1963.20	08:03:50	141.3	1962.97	08:04:00	141.3	1962.83
08:04:10	141.2	1962.52	08:04:20	141.2	1962.30	08:04:30	141.2	1962.05
08:04:40	141.2	1961.68	08:04:50	141.2	1961.30	08:05:00	141.2	1960.92
08:05:10	141.2	1960.59	08:05:20	141.2	1960.19	08:05:30	141.2	1959.76
08:05:40	141.2	1959.33	08:05:50	141.2	1959.01	08:06:00	141.2	1958.61
08:06:10	141.1	1958.18	08:06:20	141.2	1957.88	08:06:30	141.1	1957.57
08:06:40	141.2	1957.35	08:06:50	141.1	1957.21	08:07:00	141.1	1957.00
08:07:10	141.1	1956.71	08:07:20	141.1	1956.41	08:07:30	141.1	1956.24
08:07:40	141.1	1956.13	08:07:50	141.1	1956.07	08:08:00	141.1	1956.04
08:08:10	141.1	1955.95	08:08:20	141.1	1955.93	08:08:30	141.1	1955.83
08:08:40	141.1	1955.76	08:08:50	141.1	1955.74	08:09:00	141.1	1955.69
08:09:10	141.1	1955.69	08:09:20	141.0	1955.63	08:09:30	141.1	1955.66
08:09:40	141.1	1955.98	08:09:50	141.0	1956.22	08:10:00	141.1	1956.38
08:10:30	141.0	1956.52	08:11:00	141.1	1956.53	08:11:30	141.1	1956.55
08:12:00	141.1	1956.34	08:12:30	141.1	1956.30	08:13:00	141.1	1956.28
08:13:30	141.1	1956.15	08:14:00	141.1	1956.16	08:14:30	141.1	1956.18
08:15:00	141.0	1956.17	08:15:30	141.0	1956.13	08:16:00	141.0	1956.16
08:16:30	141.0	1956.17	08:17:00	141.0	1956.18	08:17:30	141.1	1956.16
08:18:00	141.0	1956.20	08:18:30	141.1	1956.20	08:19:00	141.1	1956.15
08:19:30	141.0	1956.12	08:20:00	141.0	1956.07	08:21:00	141.0	1955.95
08:22:00	141.1	1955.76	08:23:00	141.0	1955.65	08:24:00	141.0	1955.48
08:25:00	141.0	1955.44	08:26:00	141.0	1955.35	08:27:00	140.9	1955.27
08:28:00	141.0	1955.20	08:29:00	141.0	1955.00	08:30:00	141.0	1954.80
08:31:00	141.0	1954.63	08:32:00	140.9	1954.47	08:33:00	140.9	1954.35 1954.22
08:34:00 08:37:00	140.9	1954.34	08:35:00	141.0	1954.28 1954.15	08:36:00 08:39:00	141.0 140.9	1954.22
08:40:00	140.9 140.9	1954.18 1954.06	08:38:00 08:41:00	141.0 141.0	1954.15 1954.05	08:42:00	140.9	1954.10
08:43:00	141.0	1954.01	00.41.00 08:44:00	140.9	1953.99	08:45:00	141.0	1953.96
08:46:00	140.9	1953.93	08:47:00	140.9	1953.93	08:48:00	140.9	1953.93
08:49:00	141.0	1953.92	08:50:00	140.9	1953.93	08:51:00	140.9	1953.97
08:52:00	141.0	1953.97	08:53:00	140.9	1953.99	08:54:00	141.0	1954.00
08:55:00	141.0	1953.98	08:56:00	141.0	1953.97	08:57:00	141.0	1953.97
08:58:00	140.9	1953.97	08:59:00	141.0	1953.96	09:00:00	141.0	1953.96
09:01:00	140.9	1953.93	09:02:00	141.0	1953.94	09:03:00	141.0	1953.91
09:04:00	141.0	1953.88	09:05:00	140.9	1953.87	09:06:00	140.9	1953.87
09:07:00	141.0	1953.84	09:08:00	140.9	1953.83	09:09:00	141.0	1953.82
09:10:00	141.0	1953.82	09:11:00	140.9	1953.79	09:12:00	140.9	1953.77
09:13:00	141.0	1953.76	09:14:00	140.9	1953.71	09:15:00	141.0	1953.70
09:16:00	141.0	1953.72	09:17:00	141.0	1953.65	09:18:00	141.0	1953.61
09:19:00	140.9	1953.57	09:20:00	140.9	1953.56	09:21:00	141.0	1953.53
09:22:00	141.0	1953.49	09:23:00	141.0	1953.48	09:24:00	140.9	1953.42
09:25:00	140.9	1953.42	09:26:00	141.0	1953.40	09:27:00	140.9	1953.39
09:28:00	140.9	1953.35	09:29:00	140.9	1953.34	09:30:00	141.0	1953.32
09:31:00	140.9	1953.30	09:32:00	140.9	1953.29	09:33:00	141.0	1953.28
09:34:00	140.9	1953.25	09:35:00	140.9	1953.25	09:36:00	141.0	1953.24
09:37:00	140.9	1953.24	09:38:00	140.9	1953.21	09:39:00	141.0	1953.24
09:40:00	140.9	1953.23	09:41:00	141.0	1953.23	09:42:00	140.9	1953.23
09:43:00 09:46:00	141.0	1953.23	09:44:00	140.9	1953.23	09:45:00 09:48:00	140.9 140.9	1953.24 1953.23
09:49:00 09:49:00	140.9 141.0	1953.25 1953.22	09:47:00 09:50:00	140.9 140.9	1953.23 1953.21	09:48:00 09:51:00	140.9	1953.20
09:52:00	141.0	1953.22	07.50.00 09:53:00	141.0	1953.21	09:54:00	140.9	1953.23
09:55:00	141.0	1953.22	09:56:00	141.0	1953.22	09:57:00	140.9	1953.19
09:58:00	140.9	1953.21	09:59:00	140.9	1953.21	10:00:00	141.0	1953.22
10:01:00	141.0	1953.22	10:02:00	141.0	1953.23	10:03:00	141.0	1953.22
10:04:00	140.9	1953.20	10:05:00	141.0	1953.21	10:06:00	140.9	1953.22
10:07:00	141.0	1953.22	10:08:00	141.0	1953.24	10:09:00	141.0	1953.24
10:10:00	141.0	1953.25	10:11:00	140.9	1953.21	10:12:00	141.0	1953.22
10:13:00	140.9	1953.19	10:14:00	141.0	1953.02	10:15:00	141.0	1952.44
10:16:00	141.0	1952.40	10:17:00	141.0	1952.38	10:18:00	140.9	1952.38

Tool Posi	tioned	at a depth	of: 1468					
Time	Temp.	PSIA.	Time	Temp.	PSIA.	Time	Temp.	PSIA.
10:19:00	140.9	1952.40	10:20:00	141.0	1952.40	10:21:00	140.9	1952.40
10:22:00	140.9	1952.39	10:23:00	140.9	1952.40	10:24:00	141.0	1952.39
10:25:00	140.9	1952.38	10:26:00	141.0	1952.40	10:27:00	141.0	1952.64
10:28:00	141.0	1952.68	10:29:00	140.9	1952.67	10:30:00	141.0	1952.66
10:31:00	141.0	1952.65	10:32:00	140.9	1952.62	10:33:00	141.0	1952.63
10:34:00	140.9	1952.63	10:35:00	141.0	1952.63	10:36:00	140.9	1952.63
10:37:00	140.9	1952.62	10:38:00	141.0	1952.62	10:39:00	141.0	1952.66
10:40:00	140.9	1952.60	10:41:00	140.9	1952.59	10:42:00	141.0	1952.60
10:43:00	141.0	1952.58	10:44:00	141.0	1952.56	10:45:00	141.0	1952.56
10:46:00	140.9	1952.55	10:47:00	141.0	1952.61	10:48:00	140.9	1952.57
10:49:00	141.0	1952.54	10:50:00	140.9	1952.49	10:51:00	140.9	1952.53
10:52:00	141.0	1952.54	10:53:00	140.9	1952.55	10:54:00	140.9	1952.56
10:55:00	140.9	1952.55	10:56:00	141.0	1952.50	10:57:00	141.0	1952.49
10:58:00	140.9	1952.45	10:59:00	140.9	1952.40	10:59:40	141.0	1952.40
10:59:50	141.0	1952.39	11:00:00	140.9	1952.38	11:00:10	140.9	1952.39
11:00:20	141.2	1966.35	11:00:30	141.6	1980.99	11:00:40	141.7	1982.54
11:00:50	141.7	1983.16	11:01:00	141.7	1983.57	11:01:10	141.7	1983.91
11:01:20	141.7	1984.18	11:01:30	141.6	1984.39	11:01:40	141.6	1984.56
11:01:50	141.6	1984.72	11:02:00	141.6	1984.85	11:02:10	141.5	1984.96
11:02:20	141.6	1985.06	11:02:30	141.5	1985.15	11:02:40	141.5	1985.21
11:02:50	141.5	1985.29	11:03:00	141.5	1985.35	11:03:10	141.4	1985.41
11:03:20	141.4	1985.46	11:03:30	141.4	1985.52	11:03:40	141.4	1985.55
11:03:50	141.4	1985.59	11:04:00	141.4	1985.64	11:04:10	141.5	1985.66
11:04:20	141.4	1985.70	11:04:30	141.4	1985.72	11:04:40	141.4	1985.76
11:04:50	141.4	1985.77	11:05:00	141.4	1985.80	11:05:10	141.4	1985.83
11:05:20	141.4	1985.83	11:05:30	141.4	1985.86	11:05:40	141.4	1985.87
11:05:50	141.3	1985.89	11:06:00	141.4	1985.91	11:06:10	141.3	1985.91
11:06:20	141.4	1985.94	11:06:30	141.3	1985.94	11:06:40	141.3	1985.96
11:06:50	141.4	1985.99	11:07:00	141.3	1985.98	11:07:10	141.4	1986.00
11:07:20	141.3	1986.00	11:07:30	141.4	1986.03	11:07:40	141.3	1986.02
11:07:50	141.3	1986.05	11:08:00	141.3	1986.04	11:08:10	141.3	1986.06
11:08:20	141.3	1986.08	11:08:30	141.3	1986.08	11:08:40	141.3	1986.10
11:08:50	141.3	1986.10	11:09:00	141.3	1986.11	11:09:10	141.3	1986.12
11:09:20	141.3	1986.12	11:09:30	141.3	1986.12	11:09:40	141.2	1986.13
11:09:50	141.3	1986.14	11:10:00	141.3	1986.15	11:10:30	141.2	1986.15
11:11:00	141.3	1986.18	11:11:30	141.3	1986.21	11:12:00	141.3	1986.22
11:12:30	141.2	1986.22	11:13:00	141.2	1986.24	11:13:30	141.3	1986.26
11:14:00 11:15:30	141.2	1986.27 1986.30	11:14:30	141.3	1986.27	11:15:00 11:16:30	141.2	1986.28
11:17:00	141.3		11:16:00	141.3		11:16:30		1986.34
11:17:00	141.2	1986.33 1986.33	11:17:30 11:19:00	141.2	1986.32		141.2 141.3	1986.35
11:20:00	141.2	1986.36	11:21:00	141.2	1986.34 1986.38	11:19:30 11:22:00	141.3	1986.39
11:28:00	141.2	1986.40	11:21:00	141.2 141.2	1986.30	11:25:00	141.3	1986.42
11:25:00	141.2	1986.42	11:27:00	141.2	1986.44	11:23:00	141.2	1986.44
11:29:00	141.2	1986.46	11:30:00	141.2	1986.47	11:40:00	141.3	1986.55
11:50:00	141.2	1986.60	12:00:00	141.2	1986.65	12:10:00	141.2	1986.71
12:20:00	141.2	1986.73	12:30:00	141.3	1986.78	12:40:00	141.3	1986.80
12:50:00	141.3	1986.83	13:00:00	141.2	1986.83	13:10:00	141.3	1986.85
13:20:00	141.3	1986.88	13:30:00	141.3	1986.88	13:40:00	141.3	1986.89
13:50:00	141.3	1986.90	13:59:50	141.2	1986.91	14:00:00	141.3	1986.92
14:00:10	141.3	1986.91	14:00:20	141.3	1986.91	14:00:30	141.3	1985.98
14:00:40	141.3	1986.22	14:00:50	141.3	1984.95	14:01:00	141.2	1983.44
14:01:10	141.2	1980.89	14:01:20	141.2	1975.74	14:01:30	141.1	1970.14
14:01:40	141.1	1963.27	14:01:50	141.0	1955.33	14:02:00	140.9	1949.93
14:02:10	141.0	1946.41	14:02:20	140.9	1944.00	14:02:30	140.9	1942.29
14:02:40	140.9	1941.04	14:02:50	140.9	1940.10	14:03:00	140.9	1939.60
14:03:10	140.9	1939.41	14:03:20	140.8	1939.26	14:03:30	140.8	1939.13
14:03:40	140.8	1938.99	14:03:50	140.8	1938.86	14:04:00	140.7	1938.78
14:04:10	140.8	1938.66	14:04:20	140.8	1938.58	14:04:30	140.8	1938.53
14:04:40	140.8	1938.50	14:04:50	140.7	1938.43	14:05:00	140.8	1938.48

Tool Posi	tioned	at a depth	of: 1468					
Time	Temp.	PSIA.	Time	Temp.	PSIA.	Time	Temp.	PSIA.
14:05:10			14:05:20	140.7	1938.51	14:05:30	140.7	1938.49
14:05:40	140.7	1938.49	14:05:50	140.7	1938.49	14:06:00	140.7	1938.48
14:06:10	140.6	1938.48	14:06:20	140.7	1938.46	14:06:30	140.7	1938.53
14:06:40	140.7	1938.52	14:06:50	140.7	1938.53	14:07:00	140.7	1938.53
14:07:10	140.7	1938.52	14:07:20	140.7	1938.55	14:07:30	140.7	1938.55
14:07:40	140.7	1938.39	14:07:50	140.7	1938.15	14:08:00	140.7	1937.98
14:08:10	140.6	1937.89	14:08:20	140.6	1937.80	14:08:30	140.7	1937.75
14:08:40	140.7	1937.74	14:08:50	140.7	1937.75	14:09:00	140.6	1937.73
14:09:10	140.6	1937.73	14:09:20	140.6	1937.71	14:09:30	140.6	1937.70
14:09:40	140.7	1937.71	14:09:50	140.6	1937.71	14:10:00	140.6	1937.69
14:10:30	140.6	1937.73	14:11:00	140.6	1937.75	14:11:30	140.6	1937.81
14:12:00	140.6	1937.82	14:12:30	140.7	1937.83	14:13:00	140.6	1937.82
14:13:30	140.7	1937.82	14:14:00	140.6	1937.82	14:14:30	140.6	1937.81
14:15:00	140.7	1937.86	14:15:30	140.6	1937.65	14:16:00	140.6	1937.63
14:16:30	140.7	1937.58	14:17:00	140.6	1937.55	14:17:30	140.7	1937.52
14:18:00	140.6	1937.53	14:18:30	140.6	1937.51	14:19:00	140.7	1937.52
14:19:30	140.6	1937.49	14:20:00	140.6	1937.49	14:21:00	140.6	1937.50
14:22:00	140.6	1937.53	14:23:00	140.6	1937.54	14:24:00	140.6	1937.51
14:25:00	140.6	1937.55	14:26:00	140.7	1937.60	14:27:00	140.6	1937.57
14:28:00	140.6	1937.56	14:29:00	140.6	1937.53	14:30:00	140.6	1937.57
14:31:00	140.6	1937.55	14:32:00	140.7	1937.53	14:33:00	140.7	1937.54
14:34:00	140.6	1937.52	14:35:00	140.6	1937.52	14:36:00	140.6	1937.45
14:37:00	140.6	1937.47	14:38:00	140.6	1937.39	14:39:00	140.6	1937.37
14:40:00	140.6	1937.34	14:41:00	140.6	1937.30	14:42:00	140.6	1937.31
14:43:00	140.6	1937.30	14:44:00	140.6		14:45:00	140.6	1937.29
14:46:00	140.6	1937.28	14:47:00	140.6	1937.30	14:48:00	140.6	1937.30
14:49:00	140.6	1937.31	14:50:00	140.6	1937.30	14:51:00	140.6	1937.32
14:52:00	140.6	1937.32	14:53:00	140.6	1937.36	14:54:00	140.6	1937.33
14:55:00	140.6	1937.31	14:56:00	140.6	1937.32	14:57:00	140.7	1937.36
14:58:00	140.7	1937.38	14:59:00	140.6	1937.40	15:00:00	140.7	1937.40
15:01:00	140.6	1937.42	15:02:00	140.6	1937.43	15:03:00	140.7	1937.43
15:04:00	140.6	1937.43	15:05:00	140.6	1937.43	15:06:00	140.6	1937.45
15:07:00	140.6	1937.49	15:08:00	140.7	1937.50	15:09:00	140.6	1937.49
15:10:00	140.6	1937.47	15:11:00	140.6	1937.51	15:12:00	140.6	1937.53
15:13:00	140.6	1937.52	15:14:00	140.6	1937.53	15:15:00	140.6	1937.53
15:16:00	140.6	1937.55	15:17:00	140.7	1937.58	15:18:00	140.6	1937.57
15:19:00	140.7	1937.61	15:20:00	140.6	1937.61	15:21:00	140.6	1937.63
15:22:00	140.6	1937.65	15:23:00	140.6	1937.65	15:24:00	140.6	1937.65
15:25:00		1933.96	15:26:00		1933.84	15:27:00		
15:28:00	140.5	1933.83	15:29:00	140.6	1933.89	15:30:00	140.5	1933.91
15:31:00	140.6	1933.91	15:32:00	140.5	1933.94	15:33:00	140.6	1933.96
15:34:00	140.5	1933.99	15:35:00	140.5	1933.98	15:36:00	140.5	1934.02
15:37:00	140.6	1934.04	15:38:00	140.5	1934.03	15:39:00	140.5	1934.02
15:40:00	140.5	1934.08 1934.20	15:41:00	140.5 140.6	1934.13 1934.19	15:42:00 15:45:00	140.5 140.5	1934.13 1934.23
15:43:00	140.6		15:44:00		1934.19	15:48:00		1934.23
15:46:00	140.5	1934.23 1934.25	15:47:00 15:50:00	140.5 140.5	1934.23	15:51:00	140.6 140.5	1934.20
15:49:00 15:52:00	140.5 140.6	1934.23	15:53:00	140.5	1934.42	15:54:00	140.5	1934.27
15:55:00	140.6	1934.47	15:56:00	140.5	1934.47	15:57:00	140.5	1934.48
15:58:00	140.6	1934.49	15:59:00	140.5	1934.51	16:00:00	140.5	1934.50
16:01:00	140.6	1934.55	16:02:00	140.5	1934.56	16:03:00	140.5	1934.56
16:04:00	140.6	1934.57	16:05:00	140.5	1934.58	16:06:00	140.5	1934.58
16:07:00	140.6	1934.58	16:08:00	140.5	1934.59	16:09:00	140.5	1934.59
16:10:00	140.5	1934.58	16:11:00	140.6	1934.61	16:12:00	140.6	1934.64
16:13:00	140.6	1934.62	16:14:00	140.6	1934.66	16:15:00	140.5	1934.66
16:16:00	140.6	1934.66	16:17:00	140.5	1934.69	16:18:00	140.5	1934.69
16:19:00	140.6	1934.71	16:20:00	140.6	1934.68	16:21:00	140.5	1934.70
16:22:00	140.6	1934.72	16:23:00	140.5	1934.69	16:24:00	140.6	1934.74
16:25:00	140.5	1934.73	16:26:00	140.5	1934.74	16:27:00	140.6	1934.75
16:28:00	140.6	1934.76	16:29:00	140.6	1934.77	16:30:00	140.6	1934.76

9

Tool Positioned at a depth of: 1468 Time Temp. PSIA. Time Temp. PSIA. 16:31:00 140.6 1934.77 PSIA. Time Temp. 16:32:00 140.5 1934.78 16:33:00 140.5 1934.79 16:34:00 140.6 1934.80 16:35:00 140.5 1934.80 16:36:00 140.6 1934.84 16:37:00 140.6 1934.85 16:38:00 140.5 1934.85 16:39:00 140.6 1934.87 16:40:00 140.6 1934.86 16:41:00 140.6 1934.88 16:42:00 140.6 1934.86 16:45:00 140.6 1934.90 16:43:00 140.6 1934.90 16:44:00 140.6 1934.89 140.6 1934.90 140.6 1934.90 140.5 1934.91 16:48:00 140.5 1934.89 16:46:00 140.6 1934.88 16:47:00 16:49:00 140.6 1934.90 16:52:00 140.6 1934.91 16:55:00 140.6 1934.93 16:50:00 140.6 1934.91 16:51:00 140.6 16:53:00 16:54:00 1934.92 1934.93 16:57:00 140.5 1934.95 16:56:00 140.6 1934.93 16:58:00 140.5 1934.95 16:59:00 140.6 1934.96 16:59:40 140.5 1934.96 16:59:50 140.5 1934.96 17:00:00 140.5 1934.97 17:00:10 140.6 1934.97 17:00:20 140.6 1934.98 17:00:30 140.7 1942.49 17:00:40 141.2 1970.51 17:00:50 141.4 1979.57 17:01:00 141.5 1980.78 17:01:10 141.4 1981.59 17:01:20 141.4 1982,19 17:01:30 141.4 1982.62 17:01:40 141.4 1982.97 17:01:50 141.3 1983.23 17:02:00 141.3 1983.47 17:02:10 141.3 1983.65 17:02:20 141.3 1983.79 17:02:30 141.2 1983.92 17:02:40 141.2 1984.02 17:02:50 141.2 1984.12 17:03:00 141.2 1984.21 17:03:10 141.2 1984.31 17:03:30 141.2 1984.44 17:04:00 141.1 1984.61 17:04:30 141.2 1984.76 17:03:20 141.2 1984.37 17:03:40 141.2 1984.50 17:03:50 141.1 1984.55 17:04:20 141.1 1984.71 141.1 1984.65 141.2 1984.82 17:04:10 17:04:40 141.2 17:04:50 141.1 1984.84 17:05:00 141.1 1984.87 1984.90 17:05:10 141.1 17:05:20 141.1 1984.94 17:05:30 141.1 1984.97 17:05:40 141.1 1984.99 17:05:50 141.0 1985.03 17:06:00 141.0 1985.05 17:06:10 141,1 1985.07 17:06:20 141.1 1985.09 17:06:30 141.0 1985.11 17:06:40 141.1 1985.13 17:06:50 141.1 1985.15 17:07:00 141.1 1985.17 17:07:10 141.1 1985.19 17:07:20 141.0 1985.21 17:07:30 141.1 1985.22 17:07:40 141.0 1985.23 17:07:50 141.1 1985.24 17:08:10 141.1 1985.27 17:08:00 141.0 1985.27 17:08:30 141.1 1985.30 17:08:40 141.0 1985.31 17:08:20 141.0 1985.28 17:08:50 141.0 1985.32 17:09:20 141.0 1985.36 17:09:00 141.0 1985.33 141.0 1985.37 17:09:10 141.0 1985.34 141.0 1985.38 17:09:30 17:09:40 17:09:50 141.0 1985.39 17:10:00 141.0 1985.40 17:10:30 141.1 1985.41 17:11:00 141.0 1985.44 17:11:30 141.1 1985.46 17:12:00 141.0 1985.48 17:12:30 141.0 1985.49 17:13:00 141.0 1985.52 17:13:30 141.0 1985.54 17:14:30 141.0 1985.56 17:15:00 141.0 1985.57 17:14:00 141.0 1985.56 17:15:30 141.0 1985.60 17:16:00 141.0 1985.60 17:16:30 141.0 1985.62 17:17:00 141.0 1985.63 17:17:30 141.0 1985.64 17:18:00 141.0 1985.64 17:19:00 141.0 1985.68 17:19:30 140.9 1985.67 17:18:30 141.0 1985.66 17:20:00 141.0 1985.70 17:21:00 141.0 1985.70 17:22:00 140.9 1985.71 17:24:00 140.9 1985.74 17:27:00 141.0 1985.81 17:30:00 141.0 1985.83 17:33:00 141.0 1985.87 17:23:00 141.0 1985.74 17:26:00 141.0 1985.78 17:29:00 141.0 1985.82 17:25:00 141.0 1985.77 17:28:00 141.0 1985.80 17:31:00 140.9 1985.83 17:34:00 141.0 1985.88 141.0 17:32:00 141.0 1985.86 17:35:00 141.0 1985.88 17:36:00 141.0 1985.89 17:37:00 141.0 1985.91 17:38:00 141.0 1985.92 17:39:00 141.0 1985.93 17:40:00 141.0 1985.94 17:41:00 141.0 1985.95 17:42:00 141.0 1985.95 17:43:00 141.0 1985.95 17:44:00 141.0 1985.97 17:45:00 141.0 1985.99 17:46:00 141.1 1985.99 17:47:00 141.0 1985.99 17:48:00 141.0 1986.01 17:49:00 141.0 1986.01 17:50:00 141.0 1986.02 17:51:00 141.0 1986.03 17:52:00 141.1 1986.03 17:53:00 141.0 1986.05 17:54:00 141.1 1986.04 17:55:00 141.0 1986.05 17:57:00 141.0 1986.06 18:00:00 141.1 1986.08 18:30:00 141.1 1986.23 17:56:00 141.0 1986.06 17:58:00 141.1 1986.06 1986.14 141.0 1986.07 141.1 1986.18 17:59:00 18:10:00 141.0 18:20:00 18:40:00 141.1 1986.27 141.1 1986.30 19:00:00 141.1 1986.33 1986.33 19:10:00 141.1 18:50:00 19:20:00 141.1 1986.35 19:30:00 141.1 1986.38 19:40:00 141.2 1986.40 19:50:00 141.1 1986.42 20:00:00 141.2 1986.44 20:10:00 141.2 1986.47 20:20:00 141.2 1986.46 20:30:00 141.2 1986.48 20:40:00 141.2 1986.51 20:50:00 141.2 1986.51 21:00:00 141.2 1986.54 21:10:00 141.2 1986.54 21:20:00 141.3 1986.55 21:30:00 141.2 1986.56 21:40:00 141.2 1986.57 21:50:00 141.2 1986.58 22:00:00 141.3 1986.58 22:10:00 141.3 1986.60 22:20:00 141.3 1986.61 22:30:00 141.2 1986.61 22:40:00 141.2

			-0. 1460					
		at a depth	of: 1468 Time	T	PSIA.	Time	T	PSIA.
Time	Temp.	PSIA. 1986.64	11me 23:00:00	Temp. 141.3	1986.64	23:30:00	Temp. 141.2	1986.65
22:50:00	141.3		23.00.00 00:30:00		1986.70			
00:00:00	141.2	1986.67		141.3		01:00:00	141.2	1986.70
01:30:00	141.3	1986.74	02:00:00	141.2	1986.73	02:30:00	141.3	1986.76
03:00:00	141.3	1986.78	03:30:00	141.3	1986.78	04:00:00	141.3	1986.80
04:30:00	141.3	1986.81	05:00:00	141.4	1986.82	05:30:00	141.3	1986.83
06:00:00	141.3	1986.86	06:07:00	141.3	1986.86	06:08:00	141.3	1986.86
06:09:00	141.3	1986.86	06:10:00	141.3	1986.86	06:11:00	141.3	1986.84
06:12:00	140.7	1985.33	06:13:00	139.7	1984.32	06:14:00	138.9	1983.12
06:15:00	137.7	1981.89	06:16:00	136.5	1980.30	06:17:00	135.4	1978.68
06:18:00	135.1	1976.92	06:19:00	135.1	1976.14	06:20:00	135.0	1975.81
06:21:00	135.0	1975.60	06:22:00	135.0	1975.39	06:23:00	134.8	1975.21
06:24:00	134.8	1975.04	06:25:00	134.8	1974.91	06:26:00	134.7	1974.77
06:27:00	134.7	1974.64	06:28:00	134.7	1974.55	06:29:00	134.7	1974.47
06:30:00	134.6	1974.37	06:31:00	134.6	1974.31	06:32:00	134.6	1974.25
06:33:00	134.6	1974.19	06:34:00	134.5	1974.13	06:35:00	134.5	1973.77
06:36:00	133.6	1973.13	06:37:00	132.6	1972.23	06:38:00	131.7	1971.22
06:39:00	130.9	1969.65	06:40:00	130.1	1967.99	06:41:00	129.4	1966.07
06:42:00	128.7	1964.21	06:43:00	128.0	1962.25	06:44:00	127.3	1960.28
06:45:00	126.7	1958.81	06:46:00	126.8	1957.87	06:47:00	126.7	1957.26
06:48:00	126.7	1956.79	06:49:00	126.6	1956.38	06:50:00	126.6	1956.03
06:51:00	126.6	1955.73	06:52:00	126.5	1955.44	06:53:00	126.5	1955.20
06:54:00	126.5	1954.99	06:55:00	126.5	1954.81	06:56:00	126.5	1954.65
06:57:00	126.4	1954.52	06:58:00	126.3	1954.40	.06:59:00	126.4	1954.30
07:00:00	126.4	1954.20	07:01:00	126.4	1954.14	07:02:00	126.3	1954.07
07:03:00	126.3	1954.00	07:22:00	111.5	1922.23	07:23:00	111.5	1920.63
07:24:00	111.5	1919.33	07:25:00	111.5	1918.23	07:26:00	111.4	1917.28
07:27:00	111.3	1916.47	07:28:00	111.3	1915.78	07:29:00	111.3	1915.19
07:30:00	111.3	1914.68	07:31:00	111.2	1914.26	07:32:00	111.2	1913.89
07:33:00	111.1	1913.58	07:34:00	111.2	1913.30	07:35:00	111.1	1913.05
07:36:00	111.1	1912.85	07:37:00	111.1	1912.68	07:38:00	111.1	1912.51
07:39:00	111.1	1912.38	07:40:00	111.1	1912.27	07:41:00	111.1	1912.16
	98.9	1881.50	08:03:00	98.8	1879.63	08:04:00	98.7	1878.07
08:02:00	98.8	1876.78	08:06:00	98.7	1875.67	08:07:00	70.1 98.7	1874.73
08:05:00 08:08:00	70.0 98.6	1873.91	08:09:00	70.1 98.6	1873.20	08:10:00	70.1 98.5	1872.59
				70.0 98.5			70.J 98.5	
08:11:00	98.5	1872.07	08:12:00		1871.61	08:13:00		1871.22
08:14:00	98.4	1870.89	08:15:00	98.4	1870.57	08:16:00	98.4	1870.31
08:17:00	98.4	1870.10	08:18:00	98.3	1869.88	08:19:00	98.3	1869.72
08:20:00	98.3	1869.56	08:21:00	98.3	1869.43	08:22:00	98.2	1869.32
08:23:00	98.3	1869.21	08:24:00	98.2	1869.12	08:42:00	85.0	1843.94
08:43:00	85.0	1841.30	08:44:00	84.9	1839.00	08:45:00	84.8	1837.03
08:46:00	84.7	1835.34	08:47:00	84.7	1833.87	08:48:00	84.6	1832.62
08:49:00	84.6	1831.54	08:50:00	84.5	1830.61	08:51:00	84.5	1829.82
08:52:00	84.5	1829.13	08:53:00	84.4	1828.54	08:54:00	84.5	1828.01
08:55:00	84.4	1827.58	08:56:00	84.5	1827.20	08:57:00	84.4	1826.85
08:58:00	84.4	1826.54	08:59:00	84.4	1826.30	09:00:00	84.3	1826.08
09:01:00	84.3	1825.87	09:02:00	84.3	1825.70	09:03:00	84.2	1825.57
09:04:00	84.3	1825.45	09:05:00	84.3	1825.32	09:06:00	84.2	1825.24
09:07:00	84.2	1825.14	09:24:00	65.7	1805.50	09:25:00	65.8	1801.67
09:26:00	65.7	1798.38	09:27:00	65.7	1795.61	09:28:00	65.5	1793.27
09:29:00	65.4	1791.47	09:30:00	65.3	1790.12	09:31:00	65.1	1789.05
09:32:00	65.0	1788.02	09:33:00	65.1	1786.92	09:34:00	65.i	1785.84
09:35:00	65.2	1784.77	09:36:00	65.1	1783.83	09:37:00	65.2	1783.01
09:38:00	65.2	1782.33	09:39:00	65.2	1781.74	09:40:00	65.2	1781.22

Time (Hrs

2000

GO INTERNATIONAL AUSTRALIA -LINEAR PRESSURE PLOT BEACH PETROLEUM NORTH PAARATTIE #2 Plotted from: 13:03:30 to 08:04:10 (~ 19 Pressure (PSIA) 1980 1984 1986 1982 1988 ω 4 ij 5 17 <u>-</u> 9 Ω n N Ν Time (Hrs) \bigcirc N ω 4 ហ \bigcirc N 00 Œ

BEACH PETROLEUM NORTH PAARATTIE #2 Plotted from: 07:00:00 to 14:30:00 (~ 8 hrs.) Pressure (PSIA) 1970 1978 1980 1982 1976 1986 1974 1972 1984 \odot ω \Box --- Time (Hrs) Ŋ $\ddot{\omega}$ --- ū

GO INTERNATIONAL AUSTRALIA - LINEAR PRESSURE PLOT

BEACH PETROLEUM NORTH PAARATTIE #2 Plotted from: 13:00:00 to 08:00:10 (~ 19 Pressure (PSIA) 1960 1972 1976 1978 1980 1966 1982 1964 1984 1986 1988 1974 $\frac{1}{3}$ 14 ö <u>+</u> 7 <u>...</u> 9 Ω <u>μ</u> M ro N $\dot{\omega}$ Time (Hrs \Box N ω 4 O σ 00

GO INTERNATIONAL AUSTRALIA - LINEAR PRESSURE PLOT

BEACH PETROLEUM . NORTH PAARATTIE #2 Plotted from: 07:00:00 to 14:00:20 (~ 7 hrs.) Pressure (PSIA) 1964 1966 1968 1970 1972 1982 1954 1958 1960 1962 1974 1980 1984 1952 1956 1986 1988 1990 \odot Θ 0 ----Time (Hrs) N $\ddot{\omega}$ 4 ü

GO INTERNATIONAL AUSTRALIA - LINEAR PRESSURE PLOT

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LINEAR PRESSURE PLOT
        GO INTERNATIONAL AUSTRALIA -
        BEACH PETROLEUM
                                     NORTH PAARATTIE #2
        Plotted from:
                           13:00:00 to 06:11:00 (~ 17
                                      Pressure
                                                   (PSIA)
       1925
                                  1950
                                                              1975
     \overline{\omega}
     <u>+</u>
     ü
     5
     17
     100
     19
     \Omega
     N
     N
Time (Hrs)
    N
     \square
    M
    ω
    U
    (\mathcal{D})
```

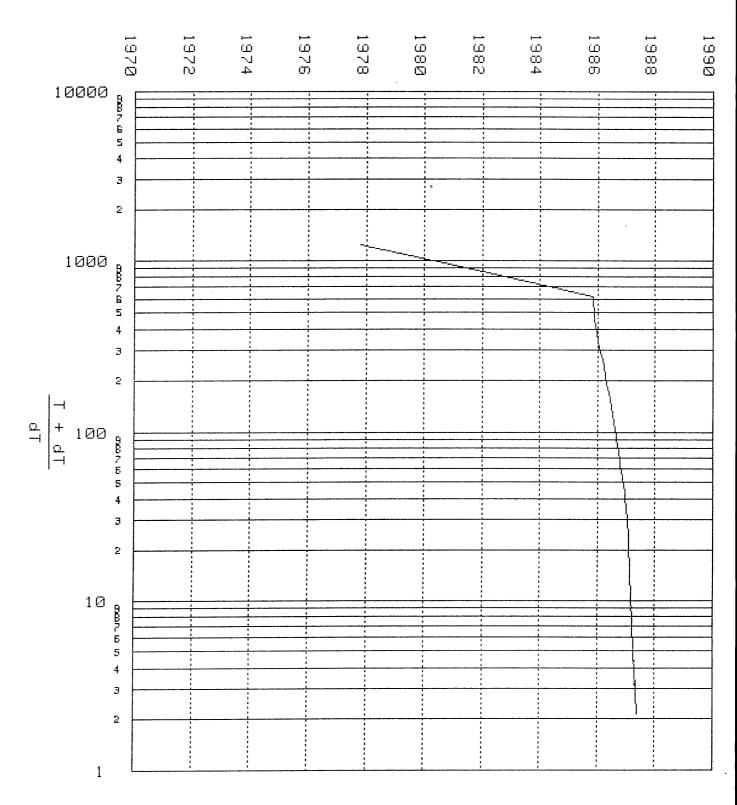
BEACH PETROLEUM . NORTH PAARATTIE #2 Plotted from: 05:00:00 to 09:40:00 (~ 5 Pressure (PSIA) 1800 1825 1850 1875 1900 1975 σ Time (Hrs) \odot ω \Box

GO INTERNATIONAL AUSTRALIA - LINEAR PRESSURE PLOT

DDDC

GO INTERNATIONAL AUSTRALIA - HORNER PLOT
BEACH PETROLEUM NORTH PAARATTIE #2 10/64 CHOKE
Time well flowed:08:04:20 Date: 14/03/81
Time well shut in:11:30:10 Date: 14/03/81
Time build-up completed:14:30:00 Date:14/03/81

Pressure (PSIA)



BUILD-UP #1

2,

Well Name: NORTH PAARATTIE #2 Company: BEACH PETROLEUM Date: 14/03/81 Tool Positioned at a depth of: 1468

	elouen ar a r	•		•••	TT + TD + + TD +
Time	Temperature	PSIA	Dt	Dρ	T+Dt/Dt
12:01:00	141.5	1987.21	.514	9.69	7.676
12:02:00	141.5	1987.21	.531	9.69	7.466
12:03:00	141.5	1987.21	.547	9.69	7.269
12:04:00	141.6	1987.22	.564	9.70	7.084
12:05:00	141.5	1987.22	.581	9.70	6.909
12:06:00	141.5	1987.21	.597	9.69	6.744
12:07:00	141.5	1987.22	.614	9.70	6.588
12:08:00	141.5	1987.21	.631	9.69	6.441
12:09:00	141.5	1987.22	.647	9.70	6.300
12:10:00	141.5	1987.21	.664	9.69	6.167
12:11:00	141.5	1987.23	.681	9.71	6.041
12:12:00	141.5	1987.24	.697	9.72	5.920
12:13:00	141.5	1987.23	.714	9.71	5.805
12:14:00	141.5	1987.23	.731	9.71	5.696
12:15:00	141.5	1987.24	.747	9.72	5.591
12:16:00	141.5	1987.25	.764	9.73	5.491
12:17:00	141.4	1987.25	.781	9.73	5.395
12:18:00	141.5	1987.25	.797	9.73	5.303
12:19:00	141.5	1987.25	.814	9.73	5.215
12:20:00	141.5	1987.25	.831	9.73	5.130
12:21:00	141.5	1987.25	.847	9.73	5.049
12:22:00	141.5	1987.25	.864	9.73	4.971
12:23:00	141.5	1987.25	.881	9.73	4.896
12:24:00	141.5	1987.26	.897	9.74	4.824
12:25:00	141.4	1987.26	.914	9.74	4.754
12:26:00	141.5	1987.25	.931	9.73	4.687
12:27:00	141.4	1987.27	.947	9.75	4.622
12:28:00	141.5	1987.27	.964	9.75	4.559
	141.4	1987.27	.981	9.75	4.499
12:29:00					
12:30:00	141.4	1987.27	.997	9.75	4.440
12:31:00	141.4	1987.28	1.014	9.76	4.384
12:32:00	141.5	1987.28	1.031	9.76	4.329
12:33:00	141.4	1987.27	1.047	9.75	4.276
12:34:00	141.5	1987.28	1.064	9.76	4.225
12:35:00	141.5	1987.29	1.081	9.77	4.175
12:36:00	141.5	1987.28	1.097	9.76	4.127
12:37:00	141.4	1987.29	1.114	9.77	4.080
12:38:00	141.5	1987.29	1.131	9.77	4.034
12:39:00	141.4	1987.29	1.147	9.77	3.990
12:40:00	141.5	1987.29	1.164	9.77	3.947
12:41:00	141.5	1987.29	1.181	9.77	3.906
12:42:00	141.5	1987.29	1.197	9.77	3.865
12:43:00	141.4	1987.30	1.214	9.78	3.826
12:44:00	141.5	1987.29	1.231	9.77	3.788
12:45:00	141.5	1987.30	1.247	9.78	3.751
12:46:00	141.5	1987.29	1.264	9.77	3.714
12:47:00	141.5	1987.30	1.281	9.78	3.679
12:48:00	141.4	1987.31	1.297	9.79	3.645
12:49:00	141.4	1987.31	1.314	9.79	3.611
12:50:00	141.5	1987.30	1.331	9.78	3.578
12:51:00	141.5	1987.31	1.347	9.79	3.546
12:52:00	141.4	1987.31	1.364	9.79	3.515
12:53:00	141.4	1987.30	1.381	9.78	3.485
12:54:00	141.4	1987.31	1.397	9.79	3.455
12:55:00	141.5	1987.31	1.414	9.79	3.426
12:56:00	141.4	1987.32	1.431	9.80	3.398
12:57:00	141.4	1987.32	1.447	9.80	3.370
12:58:00	141.5	1987.31	1.464	9.79	3.343
12:59:00	141.4	1987.32	1.481	9.80	3.317
13:00:00	141.4	1987.32	1.497	9.80	3.291

Tool Posit	ioned at a de	pth of: 1468	3		
Time	Temperature	PSIA	Dt	Dρ	T+Dt/Dt
13:01:00	141.4	1987.33	1.514	9.81	3.266
13:02:00	141.4	1987.31	1.531	9.79	3.241
13:03:00	141.4	1987.32	1.547	9.80	3.217
13:04:00	141.4	1987.31	1.564	9.79	3.194
13:05:00	141.4	1987.33	1.581	9.81	3.170
13:10:00	141.4	1987.32	1.664	9.80	3.062
13:20:00	141.5	1987.34	1.831	9.82	2.874
13:30:00	141.5	1987.34	1.997	9.82	2.718
13:40:00	141.5	1987.35	2.164	9.83	2.585
13:50:00	141.5	1987.33	2.331	9.81	2.472
14:00:00	141.5	1987.36	2.497	9.84	2.374
14:10:00	141.5	1987.36	2.664	9.84	2.288
14:20:00	141.5	1987.36	2.831	9.84	2.212
14:29:40	141.5	1987.36	2.992	9.84	2.147
14:29:50	141.5	1987.37	2.994	9.85	2.146
14.20.00	141 5	1907 97	2 007	9 95	2 145

GO INTERNATIONAL AUSTRALIA

dP/dT PLOT

Build-up

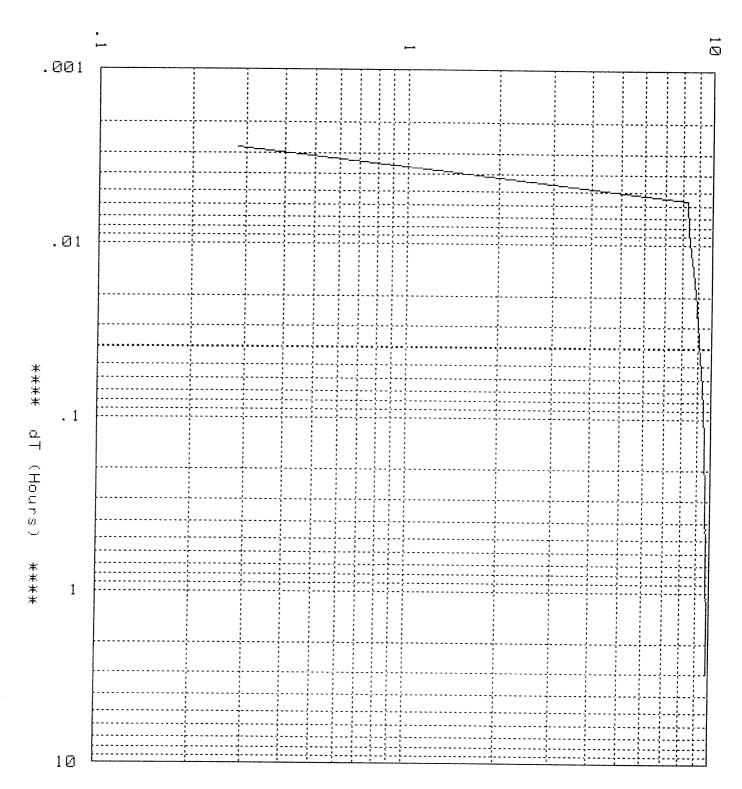
BEACH PETROLEUM

NORTH PAARATTIE #2 18/64 CHOKE

Time well flowed:08:04:20 Date: 14/03/81 Time well shut in: 11:30:10 Date: 14/03/81

Time build-up completed: 14:30:00 Date: 14/03/81

жжжжж dP (PSIA) жжжжж



GO INTERNATIONAL AUSTRALIA

dP/dT PLOT

Drawdown

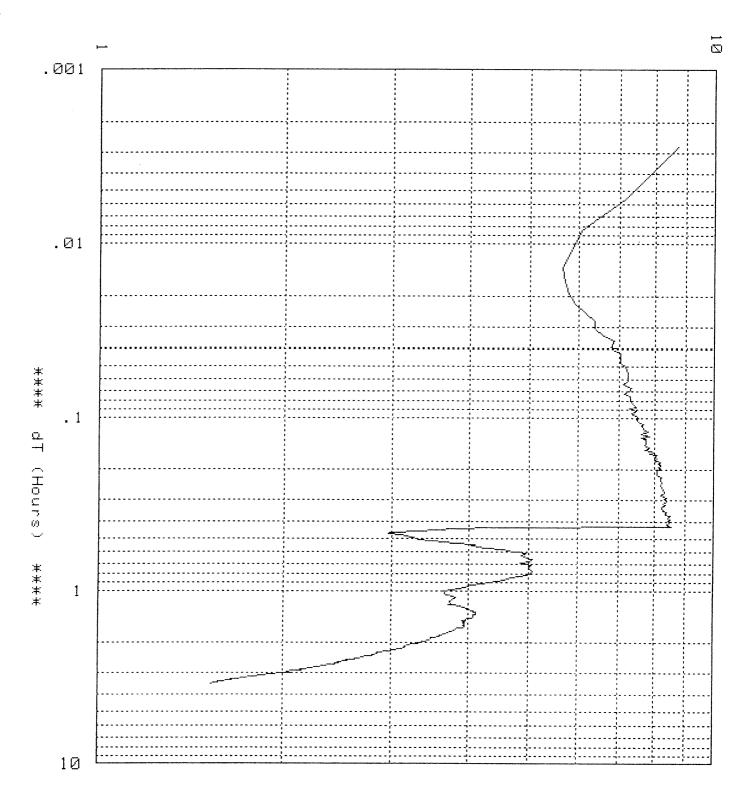
BEACH PETROLEUM

NORTH PAARATTIE #2 18/64 CHOKE

Time well flowed: 08:04:20 Date: 14/03/81 Time well shut in: 11:30:10 Date: 14/03/81

Time build-up completed: 14:30:00 Date: 14/03/81

**** dP (PSIA) ****



Well Name: NORTH PAARATTIE #2 _ Company: BEACH PETROLEUM Date: 14/03/81 DRAWDOWN #1 Tool Positioned at a depth of: 1468

Tool Posi	tioned at a d	epth of: 1468			DK/W DOW N
Time		PSIA	Dt	Dρ	T+Dt/Dt
08:04:30	141.3	1984.68	.003	8.68	1236.000
08:04:40	141.3	1983.10	.005	7.10	618.500
08:04:50	141.2	1982.05	.000	6.05	412.667
08:05:00	141.2	1981.82	.011	5.82	309.750
08:05:10	141.3	1981.64	.014	5.64	248.000
08:05:20	141.4	1981.70	.017	5.70	206.833
08:05:30	141.3	1981.78	.019	5.78	177.429
08:05:40	141.4	1981.90	.022	5.90	155.375
08:05:50	141.4	1982.12	.025	6.12	138.222
08:06:00	141.4	1982.35	.028	6.35	124.500
08:06:10	141.4	1982.37	.031	6.37	113.273
08:06:20	141.4	1982.54	.033	6.54	103.917
08:06:30	141.5	1982.84	.036	6.84	96.000
08:06:40	141.4	1982.77	.039	6.77	89.214
08:06:50	141.5	1983.03	.042	7.03	83.333
08:07:00	141.4	1983.02	.044		78.187
00.07.00 08:07:10					
	141.4	1983.03	.047	7.03	73.647
08:07:20	141.4	1983.14	.050	7.14	69.611
08:07:30	141.4	1983.18	.053	7.18	66.000
08:07:40	141.5	1983.20	.056	7.20	62.750
08:07:50	141.4	1983.22	.058		59.810
08:08:00	141.4	1983.20	.061	7.20	57.136
08:08:10	141.5	1983.08	.064	7.08	54.696
08:08:20	141.4	1983.30	.067	7.30	52.458
08:08:30	141.4	1983.29	.069	7.29	50.400
08:08:40	141.4	1983.10	.072	7.10	48.500
08:08:50	141.4	1983.27	.075	7.27	46.741
08:09:00	141.4	1983.28	.078	7.28	45.107
08:09:10	141.5	1983.27	.081	7.27	43.586
08:09:20	141.4	1983.37	.083	7.37	42.167
08:09:30	141.5	1983.47	.086	7.47	40.839
08:09:40	141.5	1983.25	.089	7.25	39.594
08:09:50	141.4	1983.44	.092	7.44	38.424
08:10:00	141.5	1983.33	.094	7.33	37.324
08:10:10	141.4	1983.45	.077 .097	7.45	36.286
08:10:20	141.5	1983.54	.100	7.43 7.54	35.306
08:10:30	141.5	1983.46	.103	7.46	
	141.4				34.378
08:10:40		1983.52	.106	7.52	33.500
08:10:50	141.4	1983.66	.108	7.66	
08:11:00	141.5	1983.58	. 111	7.58	31.875
08:11:10	141.5	1983.68	.114		31.122
08:11:20	141.4	1983.68	.117	7.68	30.405
08:11:30	141.5	1983.82	.119	7.82	29.721
08:11:40	141.5	1983.66	.122	7.66	29.068
08:11:50	141.5	1983.61	.125	7.61	28.444
08:12:00	141.4	1983.83	.128	7.83	27.848
08:12:10	141.5	1983.58	.131	7.58	27.277
08:12:20	141.5	1983.74	.133	7.74	26.729
08:12:30	141.5	1983.75	.136	7.75	26.204
08:12:40	141.4	1983.72	.139	7.72	25.700
08:12:50	141.5	1983.74	.142	7.74	25.216
08:13:00	141.5	1983.71	.144		24.750
08:13:10	141.5	1983.84	.147	7.84	24.302
08:13:20	141.5	1983.79	.150	7.79	23.870
08:13:30	141.5	1983.71	.153	7.71	23.455
08:13:40	141.5	1983.87	.156	7.87	23.054
08:13:50	141.5	1984.01	.158		22.667
08:14:00	141.5	1983.85	.161		22.293
08:14:10	141.5	1984.07	.164		21.932
08:14:20	141.5	1984.03	.167	8.03	21.583
08:14:30	141.5	1984.03	.169	8.03	21.246
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	tioned at a d	epth of: 1468		_	
Time	Temperature		Dt	Dρ	
08:14:40	141.5	1984.06	.172	8.06	20.919
08:14:50	141.5	1983.99	.175	7.99	20.603
08:15:00	141.4	1984.06	.178	8.06	20.297
08:15:10	141.4	1984.19	.181	8.19	20.000
08:15:20	141.5	1984.09	.183	8.09	19.712
08:15:30	141.4	1984.17	.186		
08:15:40	141.4	1984.19	.189	8.19	
08:15:50	141.4	1984.11	.192	8.11	18.899
08:16:00	141.5	1984.20	.194	8.20	18.643
08:16:10	141.5	1984.16	.197	8.16	18.394
08:16:20	141.5	1984.08	.200	8.08	18.153
08:16:30	141.5	1984.08	.203	8.08	17.918
08:17:00	141.5	1984.05	.211	8.05	17.250
08:17:30	141.5	1984.21	.219	8.21	16.633
08:18:00	141.5	1984.19	.228	8.19	16.061
08:18:30	141.4	1984.21	.236	8.21	15.529
08:19:00	141.5	1984.19	.244	8.19	15.034
08:19:30	141.5	1984.23	.253	8.23	
08:20:00	141.5	1984.24	.261	8.24	
08:20:30	141.5	1984.28	.269	8.28	
08:21:00	141.5	1984.20	.278	8.20	13.350
08:21:30	141.4	1984.38	.286	8.38	12.990
08:22:00	141.5	1984.30	.294	8.30	12.651
08:22:30	141.5	1984.38	.303	8.38	12.330
08:23:00	141.4	1984.26	.311	8.26	12.027
08:23:30	141.5	1984.32	.319	8.32 8.23	11.739
08:24:00	141.5	1984.23 1984.22	.328 .336	0.23 8.22	11.466 11.207
08:24:30 08:25:00	141.5 141.5	1984.26	.344	0.22 8.26	10.960
08:25:30	141.5	1984.36	.353	0.20 8.36	
00.23.30 08:26:00	141.4	1984.34	.361	8.34	10.500
08:26:30	141.5	1984.51	.369	8.51	10.286
08:27:00	141.5	1984.42	.378	8.42	10.081
08:27:30	141.4	1984.49	.386	8.49	9.885
08:28:00	141.5	1984.42	.394	8.42	9.697
08:28:30	141.5	1984.46	.403	8.46	9.517
08:29:00	141.5	1984.39	.411	8.39	9.345
08:29:30	141.5	1984.46	.419	8.46	9.179
08:30:00	141.5	1984.53	.428	8.53	9.019
T08:30:30	141.3	1980.30	.436	4.30	8.866
08:31:00	141.5	1979.48	.444	3.48	8.719
08:31:30	141.4	1979.34	.453	3.34 ·	8.577
08:32:00	141.5	1978.97	.461	2.97	8.440
08:32:30	141.4	1978.95	.469	2.95	8.308
08:33:00	141.4	1979.12	.478	3.12	8.180
08:33:30	141.4	1979.13	.486	3.13	8.057
08:34:00	141.5	1979.25	.494	3.25	7.938
08:34:30	141.5	1979.29	.503	3.29	7.823
08:35:00	141.5	1979.31	.511	3.31	7.712
08:35:30	141.4	1979.48	.519	3.48	7.604
08:36:00	141.5	1979.65	.528	3.65	7.500
08:36:30	141.4	1979.79	.536	3.79	7.399
08:37:00	141.5	1980.09	.544	4.09	7.301
08:37:30	141.4	1980.04	.553	4.04	7.206
08:38:00	141.4	1980.17	.561	4.17	7.114
08:38:30	141.4	1980.24	.569	4.24	7.024
08:39:00	141.5	1980.56	.578	4.56	6.937
08:39:30	141.4	1980.63	.586	4.63	6.853
08:40:00	141.4	1980.71	.594	4.71	6.771
08:40:30	141.4	1980.80	.603	4.80	6.691

Tool Posit	ioned at a d	depth of: 1468			
Time	Temperature	PSIA	Dt	Dρ	T+Dt/Dt
08:41:00	141.4	1980.95	.611	4.95	6.614
08:42:00	141.4	1980.85	.628	4.85	6.465
08:43:00	141.5	1980.97	.644	4.97	6.323
08:44:00	141.4	1981.06	.661	5.06	6.189
08:45:00	141.4	1981.02	.678	5.02	6.061
08:46:00	141.5	1980.83	.694	4.83	5.940
08:47:00	141.4	1981.03	.711	5.03	5.824
08:48:00	141.5	1980.99	.728	4.99	5.714
08:49:00	141.4	1980.99	.744	4.99	5.608
08:50:00	141.5	1981.05	.761	5.05	5.507
08:51:00	141.5	1981.07	.778	5.07	5.411
08:52:00	141.4	1981.05	.794	5.05	5.318
08:53:00	141.5	1980.95	.811	4.95	5.229
08:54:00	141.4	1980.82	.828	4.82	5.144
08:55:00	141.5	1980.67	.844	4.67	5.062
08:56:00	141.5	1980.62	.861	4.62	4.984
08:57:00	141.4	1980.44	.878	4.44	4.908
08:58:00	141.5	1980.31	.894	4.31	4.835
08:59:00	141.4	1980.20	.911	4.20	4.765
09:00:00	141.5	1980.03	.928	4.03	4.698
09:01:00	141.4	1979.98	.944	3.98	4.632
09:02:00	141.4	1979.96	.961	3.96	4.569
09:03:00	141.4	1979.83	.978	3.83	4.509
09:04:00	141.4	1979.76	.994	3.76	4.450
09:05:00	141.4	1979.64	1.011	3.64	4.393
09:06:00	141.4	1979.65	1.028	3.65	4.338
09:07:00	141.5	1979.65	1.044	3.65	4.285
09:08:00	141.5	1979.69	1.061	3.69	4.233
09:09:00 09:10:00	141.4 141.5	1979.77	1.078	3.77 3.81	4.183 4.135
09:11:00	141.4	1979.81 1979.78	1.094 1.111	3.78	4.088
09:11:00 09:12:00	141.4	1979.76	1.111	3.76	4.042
09:12:00	141.4	1979.73	1.120	3.73	3.998
09:14:00	141.4	1979.73	1.161	3.73	3.955
09:15:00	141.4	1979.75	1.178	3.75	3.913
09:16:00	141.5	1979.71	1.194	3.71	3.872
09:17:00	141.4	1979.79	1.211	3.79	3.833
09:18:00	141.4	1979.84	1.228	3.84	3.794
09:19:00	141.4	1979.94	1.244	3.94	3.757
09:20:00	141.4	1979.98	1.261	3.98	3.720
09:21:00	141.4	1979.98	1.278	3.98	3.685
09:22:00	141.4	1980.06	1.294	4.06	3.650
09:23:00	141.5	1980.03	1.311	4.03	3.617
09:24:00	141.4	1980.10	1.328	4.10	3.584
09:25:00	141.5	1980.11	1.344	4.11	3.552
09:26:00	141.4	1980.10	1.361	4.10	3.520
09:27:00	141.4	1980.06	1.378	4.06	3.490
09:28:00	141.4	1980.06	1.394	4.06	3.460
09:29:00	141.4	1980.06	1.411	4.06	3.431
09:30:00	141.4	1980.04	1.428	4.04	3.403
09:31:00	141.4	1979.97	1.444	3.97	3.375
09:32:00	141.4	1979.96	1.461	3.96	3.348
09:33:00	141.4	1979.95	1.478	3.95	3.321
09:34:00	141.4	1979.90	1.494	3.90	3.296
09:35:00	141.4	1979.94	1.511	3.94	3.270
09:36:00	141.5	1979.93	1.528	3.93	3.245
09:37:00	141.5	1979.92	1.544	3.92	3.221
09:38:00	141.4	1979.93	1.561	3.93	3.198
09:39:00	141.4	1979.92	1.578	3.92	3.174
09:40:00	141.4	1979.94	1.594	3.94	3.152

Tool Posi	tioned at a d	epth of: 146	8		
Time	Temperature	PSIA	Dt	Dρ	T+Dt/Dt
09:41:00	141.4	1979.93	1.611	3.93	3.129
09:42:00	141.4	1979.92	1.628	3.92	3.108
09:43:00	141.4	1979.83	1.644	3.83	3.086
09:44:00	141.4	1979.81	1.661	3.81	3.065
09:45:00	141.4	1979.79	1.678	3.79	3.045
09:46:00	141.4	1979.77	1.694	3.77	3.025
09:47:00	141.5	1979.74	1.711	3.74	3.005
09:48:00	141.4	1979.72	1.728	3.72	2.986
09:49:00	141.4	1979.70	1.744	3.70	2.967
09:50:00	141.5	1979.69	1.761	3.69	2.948
09:51:00	141.4	1979.66	1.778	3.66	2.930
09:52:00	141.4	1979.60	1.794	3.60	2.912
09:53:00	141.5	1979.59	1.811	3.59	2.894
09:54:00	141.4	1979.59	1.828	3.59	2.877
09:55:00	141.4	1979.57	1.844	3.57	2.860
09:56:00	141.4	1979.53	1.861	3.53	2.843
09:57:00	141.4	1979.47	1.878	3.47	2.827
09:58:00	141.4	1979.47	1.894	3.47	2.811
09:59:00	141.4	1979.45	1.911	3.45	2.795
10:00:00	141.4	1979.44	1.928	3.44	2.780
10:01:00	141.4 141.4	1979.40 1979.38	1.944	3.40	2.764 2.749
10:02:00 10:03:00	141.4	1979.30	1.961	3.38 3.32	2.747 2.735
10:03:00	141.4	1979.29	1.978 1.994	3.29	2.733 2.720
10:05:00	141.4	1979.32	2.011	3.32	2.720 2.706
10:06:00	141.5	1979.24	2.028	3.24	2.700 2.692
10:07:00	141.4	1979.20	2.044	3.20	2.678
10:08:00	141.4	1979.18	2.061	3.18	2.664
10:00:00	141.4	1979.15	2.078	3.15	2.651
10:10:00	141.4	1979.17	2.094	3.17	2.638
10:11:00	141.4	1979.15	2.111	3.15	2.625
10:12:00	141.4	1979.15	2.128	3.15	2.612
10:13:00	141.5	1979.10	2.144	3.10	2.600
10:14:00	141.4	1979.08	2.161	3.08	2.587
10:15:00	141.4	1979.04	2.178	3.04	2.575
10:16:00	141.4	1979.00	2.194	3.00	2.563
10:17:00	141.5	1978.99	2.211	2.99	2.552
10:18:00	141.4	1978.94	2.228	2.94	2.540
10:19:00	141.5	1978.93	2.244	2.93	2.528
10:20:00	141.4	1978.89	2.261	2.89	2.517
10:21:00	141.4	1978.85	2.278	2.85	2.506
10:22:00	141.4	1978.84	2.294	2.84	2.495
10:23:00	141.4	1978.84	2.311	2.84	2.484
10:24:00	141.5	1978.79	2.328	2.79	2.474
10:25:00	141.4	1978.80	2.344	2.80	2.463
10:26:00	141.4	1978.78	2.361	2.78	2.453
10:27:00	141.4	1978.73	2.378	2.73	2.443
10:28:00	141.4	1978.71	2.394	2.71	2.433
10:29:00	141.4	1978.70	2.411	2.70	2.423
10:30:00	141.4	1978.69	2.428	2.69	2.413
10:31:00	141.4	1978.65	2.444	2.65	2.403
10:32:00	141.4	1978.62	2.461	2.62	2.394
10:33:00	141.4 141.4	1978.61 1978.58	2.478 2.494	2.61 2.58	2.385 2.385
10:34:00 10:35:00	141.4	1978.58	2.494 2.511	2.58 2.53	2.375 2.366
10:36:00	141.4	1978.54	2.511 2.528	2.53 2.54	2.357
10:37:00	141.4	1978.52	2.544	2.52	2.348 2.348
10:37:00	141.4	1978.45	2.561	2.45	2.339
10:30:00	141.4	1978.46	2.578	2.46	2.331
10:40:00	141.4	1978.49	2.594	2.49	2.322
	ar + at # 1		- 1 - 1 - 1		a # 'a' bis bis

Tool Posi	tioned at a d	epth of: 146	3		
Time	Temperature	PSIA	Dt	Dρ	T+Dt/Dt
10:41:00	141.4	1978.44	2.611	2.44	2.314
10:42:00	141.4	1978.43	2.628	2.43	2.305
10:43:00	141.4	1978.43	2.644	2.43	2.297
10:44:00	141.4	1978.39	2.661	2.39	2.289
10:45:00	141.4	1978.37	2.678	2.37	2.281
10:46:00	141.5	1978.33	2.694	2.33	2.273
10:47:00	141.4	1978.33	2.711	2.33	2.265
10:48:00	141.4	1978.31	2.728	2.31	2.258
10:49:00	141.4	1978.28	2.744	2.28	2.250
10:50:00	141.4	1978.24	2.761	2.24	2.242
10:51:00	141.4	1978.23	2.778	2.23	2.235
10:52:00	141.5	1978.22	2.794	2.22	2.228
10:53:00	141.4	1978.19	2.811	2.19	2.220
10:54:00	141.4	1978.18	2.828	2.18	2.213
10:55:00	141.5	1978.14	2.844	2.14	2.206
10:56:00	141.4	1978.13	2.861	2.13	2.199
10:57:00	141.4	1978.14	2.878	2.14	2.192
10:58:00	141.4	1978.09	2.894	2.09	2.185
10:59:00	141.4	1978.07	2.911	2.07	2.178
11:00:00	141.5	1978.02	2.928	2.02	2.172
11:01:00	141.4	1978.02	2.944	2.02	2.165
11:02:00	141.4	1978.06	2.961	2.06	2.159
11:03:00	141.4	1978.00	2.978	2.00	2.152
11:04:00	141.4	1977.95	2.994	1.95	2.146
11:05:00	141.4	1977.94	3.011	1.94	2.139
11:06:00	141.4	1977.92	3.028	1.92	2.133
11:07:00	141.4	1977.90	3.044	1.90	2.127
11:08:00	141.4	1977.85	3.061	1.85	2.121
11:09:00	141.4	1977.85	3.078	1.85	2.115
11:10:00	141.4	1977.83	3.094	1.83	2.109
11:11:00	141.4	1977.80	3.111	1.80	2.103
11:12:00	141.4	1977.79	3.128	1.79	2.097
11:13:00	141.4	1977.77	3.144	1.77	2.091
11:14:00	141.5	1977.72	3.161	1.72	2.085
11:15:00	141.5	1977.73	3.178	1.73	2.080
11:16:00	141.4	1977.73	3.194	1.73	2.074
11:17:00	141.4	1977.67	3.211	1.67	2.068
11:18:00	141.4	1977.65	3.228	1.65	2.063
11:19:00	141.4	1977.67	3.244	1.67	2.057
11:20:00	141.4	1977.64	3.261	1.64	2.052
11:21:00	141.4	1977.63	3.278	1.63	2.047
11:22:00	141.4	1977.65	3.294	1.65	2.041
11:23:00	141.4	1977.63	3.311	1.63	2.036
11:24:00	141.4	1977.58	3.328	1.58	2.031
11:25:00	141.4	1977.57	3.344	1.57	2.026
11:26:00	141.5	1977.57	3.361	1.57	2.021
11:27:00	141.4	1977.57	3.378	1.57	2.016
11:28:00	141.4	1977.56	3.394	1.56	2.011
11:29:00	141.4	1977.54	3.411	1.54	2.006
11:29:50	141.4	1977.54	3.425	1.54	2.002
11:30:00	141.4	1977.52	3.428	1.52	2.001
11:30:10	141.4	1977.52	3.431	1.52	2.000

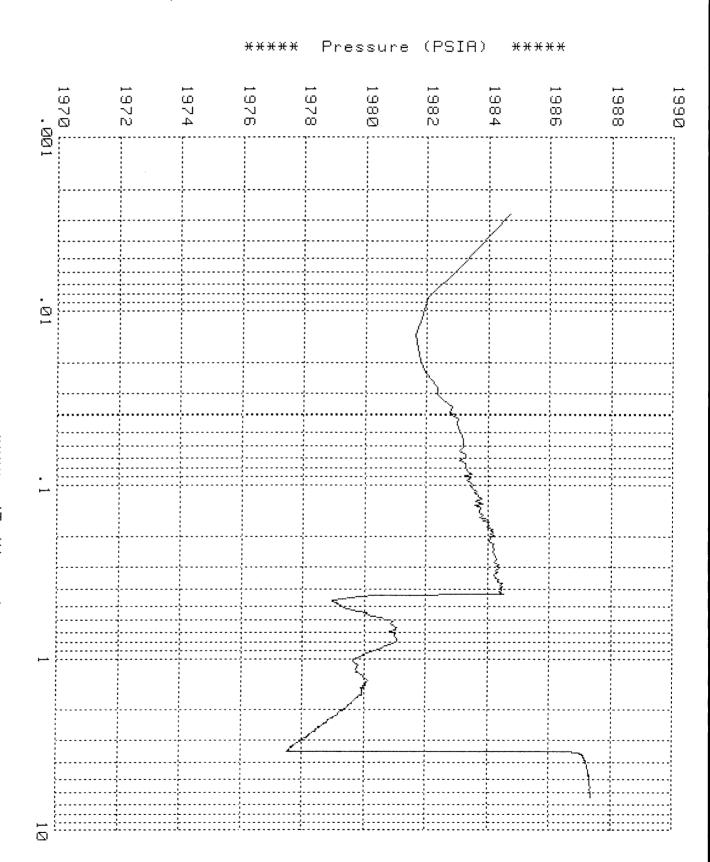
GO INTERNATIONAL AUSTRALIA

LINEAR PRESSURE VS. LOG TIME

BEACH PETROLEUM

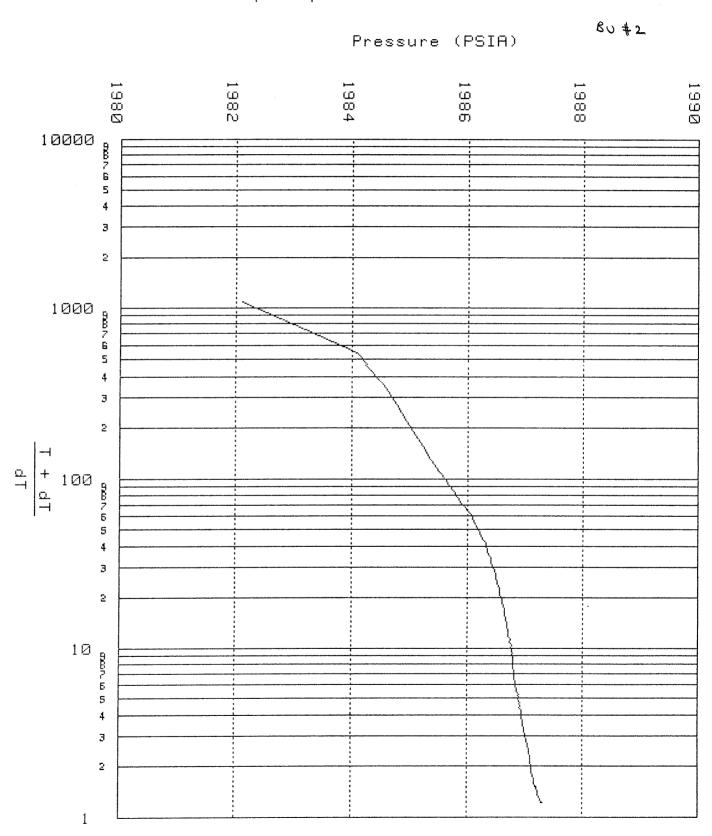
NORTH PAARATTIE #2 18/64 CHOKE

Start of plot: 08:04:20 Date: 14/03/81 Finish of plot: 14:30:00 Date: 14/03/81



dT (Hours)

GO INTERNATIONAL AUSTRALIA - HORNER PLOT
BEACH PETROLEUM NORTH PAARATTIE #2 22/64 CHOKE
Time well flowed:14:30:10 Date: 14/03/81
Time well shut in:17:30:10 Date: 14/03/81
Time build-up completed:08:00:10 Date:15/03/81



17.615

Well Name: NORTH PAARATTIE #2' Company: BEACH PETROLEUM Date: 14/03/81 Tool Positioned at a depth of: 1468 BU #2 Time Temperature PSIA Dt Dρ T+Dt/Dt 141.5 17:30:20 1982.09 .003 15.31 1081.000 1984.09 17:30:30 141.7 .006 17.31 541.000 141.8 17:30:40 1984.55 .008 17.77 361.000 141.8 17:30:50 1984.78 .011 18.00 271.000 18.18 17:31:00 141.8 1984.96 .014 217.000 17:31:10 141.9 1985.11 181.000 .017 18.33 .019 18.46 17:31:20 141.9 1985.24 155.286 17:31:30 141.8 .022 18.54 1985.32 135.000 136.000 17:31:40 141.8 1985.42 .025 18.64 17:31:50 141.7 1985.52 .028 18.74 109.000 141.7 17:32:00 1985.62 .031 18.84 99.182 17:32:10 141.7 1985.68 .033 18.90 91.000 1985.76 17:32:20 141.8 .036 18.98 84.077 141.7 17:32:30 1985.83 .039 19.05 78.143 141.6 .042 19.10 .044 19.17 .047 19.23 .050 19.28 17:32:40 1985.88 73.000 141.6 17:32:50 1985.95 68.500 17:33:00 141.7 1986.01 64.529 17:33:10 141.7 1986.06 .050 19.28 61.000 19.31 17:33:20 141.6 1986.09 .053 57.842 17:33:30 141.6 .056 19.35 1986.13 55.000 17:33:40 141.6 1986.16 .058 19.38 52.429 17:33:50 141.6 1986.19 .061 19.41 50.091 141.6 17:34:00 1986.22 .064 19.44 47.957 17:34:10 141.6 1986.25 .067 19.47 141.6 46.000 17:34:20 .069 1986.27 19.49 44.200 141.6 17:34:30 .072 1986.30 19.52 42.538 141.6 17:34:40 1986.32 .075 19.54 41.000 17:34:50 1986.33 141.6 .078 19.55 39.571 141.5 141.6 141.5 141.6 141.6 141.6 141.5 17:35:00 1986.35 .081 19.57 38.241 17:35:10 1986.36 .083 19.58 37.000 17:35:20 1986.38 .086 19.60 35.839 17:35:30 1986.39 .089 19.61 34.750 17:35:40 1986.41 .092 19.63 33.727 17:35:50 1986.42 .094 19.64 32.765 17:36:00 141.5 .097 1986.41 19.63 31.857 17:36:10 141.6 1986.44 .100 19.66 31.000 17:36:20 141.5 1986.43 .103 19.65 30.189 17:36:30 141.5 1986.46 .106 19.68 29.421 17:36:40 141.5 1986.47 .108 19.69 28.692 17:36:50 141.5 1986.47 .111 19.69 17:36:50 141.5 17:37:00 141.5 17:37:10 141.4 17:37:20 141.5 17:37:30 141.5 17:37:40 141.4 17:37:50 141.5 28.000 1986.49 .114 19.71 27.341 1986.51 .117 19.73 26.714 1986.50 .119 19.72 26.116 1986.51 .122 19.73 25.545.125 19.74 1986.52 25.000 17:37:50 141.5 1986.53 .128 19.75 24.478 17:38:00 141.5 1986.53 .131 19.75 141.5 141.4 141.5 141.5 141.5 141.5 23.979 17:38:10 1986.55 .133 19.77 23.500 17:38:20 1986.55 .136 19.77 23.041 17:38:30 1986.56 .139 19.78 22.600 17:38:40 1986.56 .142 19.78 22.176 17:38:50 1986.57 .144 19.79 21.769 17:39:00 .147 19.79 1986.57 21.377 17:39:10 141.5 1986.57 .150 19.79 21.000 17:39:20 141.4 1986.57 .153 19.79 20.636 17:39:30 141.5 1986.59 .156 19.81 20.286 17:39:40 141.4 .158 1986.59 19.81 19.947 17:39:50 141.4 1986.60 .161 19.82 19.621 17:40:00 141.4 1986.60 .164 19.82 19.305 .172 17:40:30 141.5 1986.61 19.83 18.419 17:41:00 .181 19.85 141.4 1986.63

Tool Design		damah - Ca - 1460			
Time	lioned at a Temperature	•	Dt	Dρ	T+Dt/Dt
17:41:30	141.4	1986.64	.189	19.86	16.882
17:42:00	141.5	1986.65	.197	19.87	16.211
17:42:30	141.4	1986.66	.206	19.88	15.595
17:43:00	141.5	1986.67	.214	19.89	15.026
17:43:30	141.5	1986.68	.222	19.90	14.500
17:44:00	141.4	1986.69	.231	19.91	14.012
17:44:30	141.4	1986.70	.239	19.92	13.558
17:45:00	141.5	1986.70	.247	19.92	13.135
17:45:30	141.4	1986.72	.256	19.94	12.739
17:46:00	141.4	1986.72	.264	19.94	12.368
17:46:30	141.5	1986.72	.272	19.94	12.020
17:47:00	141.4	1986.72	.281	19.94	11.693
17:47:30	141.4	1986.75	.289	19.97	11.385
17:48:00	141.4	1986.75	.297	19.97	11.093
17:48:30	141.5	1986.74	.306	19.96	10.818
17:49:00	141.4	1986.75	.314	19.97	10.558
17:49:30	141.4	1986.77	.322	19.99	10.310
17:50:00	141.4	1986.75	.331	19.97	10.076
17:50:30	141.4	1986.77	.339	19.99	9.852
17:51:00	141.4	1986.77	.347	19.99	9.640
17:51:30	141.4	1986.78	.356	20.00	9.438
17:52:00	141.4	1986.79	.364	20.01	9.244
17:52:30	141.4	1986.77	.372	19.99	9.060
17:53:00	141.4	1986.79	.381	20.01	8.883
17:53:30	141.4 141.4	1986.79	.389	20.01	8.714
17:54:00 17:54:30	141.4	1986.79 1986.79	.397 .406	20.01 20.01	8.552 8.397
17:55:00	141.4	1986.79	.414	20.01	0.377 8.248
17:56:00	141.4	1986.80	.431	20.02	0.240 7.968
17:57:00	141.4	1986.80	.447	20.02	7.708
17:58:00	141.3	1986.80	.464	20.02	7.467
17:59:00	141.3		.481	20.04	7.243
18:00:00	141.3	1986.82	.497	20.04	7.034
18:01:00	141.4	1986.82	.514	20.04	6.838
18:02:00	141.4	1986.83	.531	20.05	6.654
18:03:00	141.4	1986.83	.547	20.05	6.482
18:04:00	141.4	1986.84	.564	20.06	6.320
18:05:00	141.4	1986.85	.581	20.07	6.167
18:06:00	141.3	1986.86	.597	20.08	6.023
18:07:00	141.4	1986.85	.614	20.07	5.887
18:08:00	141.4	1986.86	.631	20.08	5.758
18:09:00	141.4	1986.86	.647	20.08	5.635
18:10:00	141.4	1986.87	.664	20.09	5.519
18:11:00	141.4	1986.88	.681	20.10	5.408
18:12:00	141.4	1986.90	.697	20.12	5.303
18:13:00	141.4	1986.89	.714	20.11	5.202
18:14:00 18:15:00	141.4 141.4	1986.90 1986.90	.731 .747	20.12	5.106
18:16:00	141.3	1986.89	.764	20.12 20.11	5.015 4.927
18:17:00	141.4	1986.90	.781	20.11	4.843
18:18:00	141.3	1986.91	.797	20.13	4.763
18:19:00	141.4	1986.92	.814	20.14	4.686
18:20:00	141.3	1986.90	.831	20.12	4.612
18:21:00	141.4	1986.92	.847	20.14	4.541
18:22:00	141.4	1986.92	.864	20.14	4.473
18:23:00	141.3	1986.91	.881	20.13	4.407
18:24:00	141.3	1986.93	.897	20.15	4.344
18:25:00	141.4	1986.94	.914	20.16	4.283
18:26:00	141.4	1986.94	.931	20.16	4.224
18:27:00	141.4	1986.94	.947	20.16	4.167

Well Name: NORTH PAARATTIE #2 _ Company: BEACH PETROLEUM Date: 14/03/81

Tool Posi	tioned at a d	epth of: 1460	3		
Time	Temperature	PSIA	Dt	Dρ	T+Dt/Dt
18:28:00	141.4	1986.94	.964	20.16	4.112
18:29:00	141.4	1986.95	.981	20.17	4.059
18:30:00	141.4	1986.95	.997	20.17	4.008
18:40:00	141.4	1986.98	1.164	20.20	3.578
18:50:00	141.4	1987.00	1.331	20.22	3.255
19:00:00	141.4	1987.02	1.497	20.24	3.004
19:10:00	141.4	1987.04	1.664	20.26	2.803
19:20:00	141.5	1987.05	1.831	20.27	2.639
19:30:00	141.4	1987.07	1.997	20.29	2.502
19:40:00	141.4	1987.08	2.164	20.30	2.386
19:50:00	141.4	1987.10	2.331	20.32	2.287
20:00:00	141.4	1987.10	2.497	20.32	2.201
20:10:00	141.4	1987.10	2.664	20.32	2.126
20:20:00	141.4	1987.10	2.831	20.32	2.060
20:30:00	141.4	1987.12	2.997	20.34	2.001
20:40:00	141.4	1987.12	3.164	20.34	1.948
20:50:00	141.4	1987.13	3.331	20.35	1.901
21:00:00	141.4	1987.13	3.497	20.35	1.858
21:10:00	141.3	1987.13	3.664	20.35	1.819
21:20:00	141.4	1987.15	3.831	20.37	1.783
21:30:00	141.4	1987.15	3.997	20.37	1.751
22:00:00	141.4	1987.17	4.497	20.39	1.667
22:30:00	141.3	1987.17	4.997	20.39	1.600
23:00:00	141.3	1987.17	5.497	20.39	1.546
23:30:00	141.4	1987.20	5.997	20.42	1.500
23:36:10	141.4	1987.19	6.100	20.41	1.492
23:36:20	141.4	1987.20	6.103	20.42	1.492
15/03/81					
00:00:00	141.4	1987.21	6.497	20.43	1.462
00:30:00	141.4	1987.23	6.997	20.45	1.429
01:00:00	141.4	1987.23	7.497	20.45	1.400
01:30:00	141.4	1987.23	7.997	20.45	1.375
02:00:00	141.4	1987.23	8.497	20.45	1.353
02:30:00	141.4	1987.23	8.997	20.45	1.333
03:00:00	141.4	1987.26	9.497	20.48	1.316
03:30:00	141.3	1987.25	9.997	20.47	1.300
04:00:00	141.4	1987.25	10.497	20.47	1.286
04:30:00	141.4	1987.27	10.997	20.49	1.273
05:00:00	141.4	1987.27	11.497	20.49	1.261
05:30:00	141.4	1987.27	11.997	20.49	1.250
06:00:00	141.4	1987.29	12.497	20.51	1.240
06:30:00	141.4	1987.29	12.997	20.51	1.231
07:00:00	141.4	1987.29	13.497	20.51	1.222
07:30:00	141.4	1987.29	13.997	20.51	1.214
07:59:40	141.4	1987.30	14.492	20.52	1.207
07:59:50	141.4	1987.30	14.494	20.52	1.207
08:00:00	141.4	1987.31	14.497	20.53	1.207
08:00:10	141.4	1987.31	14.500	20.53	1.207

dP/dT PLOT

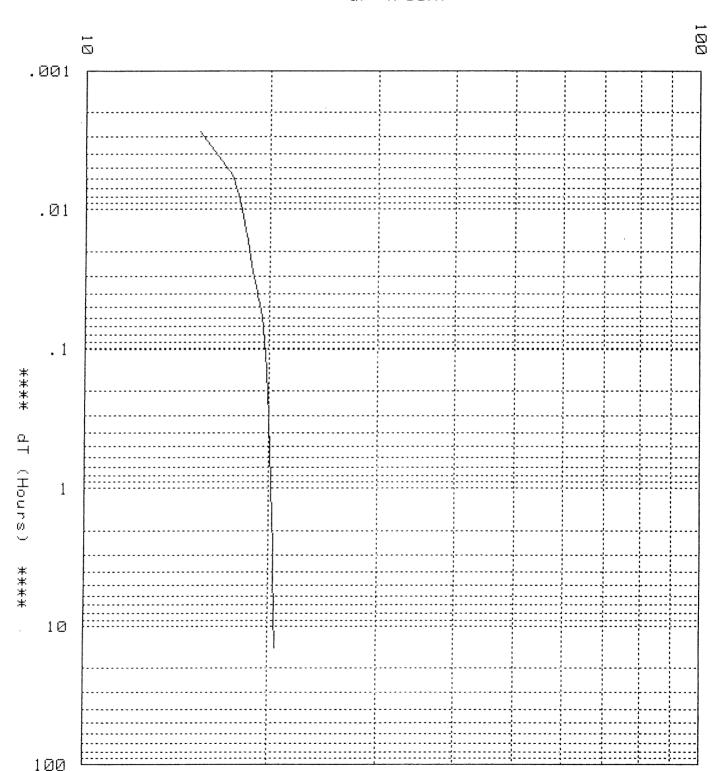
Build-up

BEACH PETROLEUM

NORTH PAARATTIE #2 22/64 CHOKE

Time well flowed:14:30:10 Date: 14/03/81 Time well shut in: 17:30:10 Date: 14/03/81

жжжжж dP (PSIA) жжжжж



dP/dT PLOT

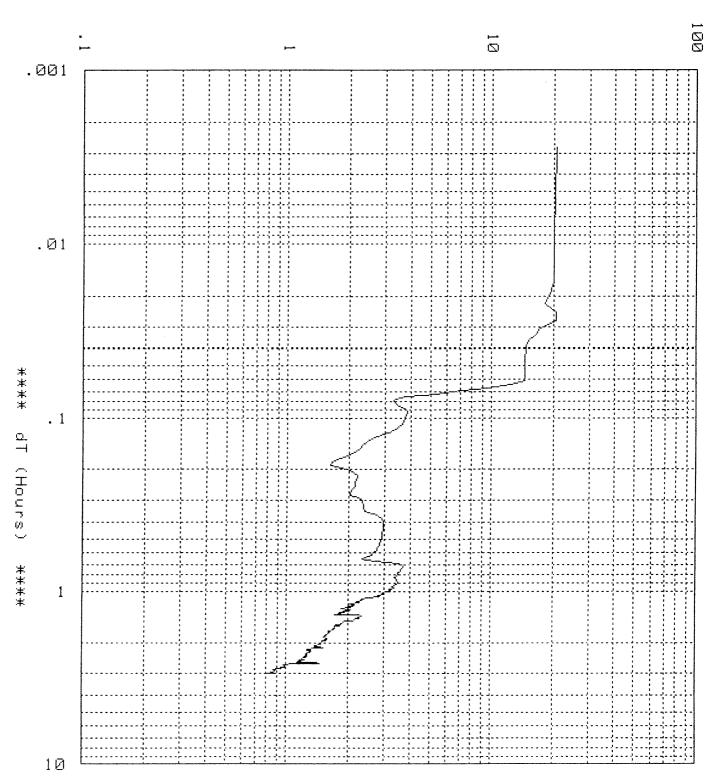
Drawdown

BEACH PETROLEUM NORTH PAARATTIE #2 22/64 CHOKE

Time well flowed: 14:30:10 Date: 14/03/81 Time well shut in: 17:30:10 Date: 14/03/81

Time build-up completed: 08:00:10 Date: 15/03/81

**** dP (PSIA)



Well Name: NORTH PAARATTIE #2 Company: BEACH PETROLEUM Date: 14/03/81

T1 D:		jepth of: 1468			
lool Posi Time	tioned at a d Temperature	epin of. 1400. PSIA	Dt	Dр	T+Dt/Dt
14:30:20	141.5	1986.74	.003	20.74	1081.000
14:30:30	141.5	1986.21	.006	20.21	541.000
14:30:40	141.5	1986.16	.008	20.16	361.000
14:30:50	141.4	1986.15	.011	20.15	271.000
14:31:00	141.4	1986.11	.014	20.11	217.000
14:31:10	141.4	1986.11	.017	20.11	181.000
14:31:20	141.4	1985.31	.019	19.31	155.286
14:31:30	141.4	1984.06	.022	18.06	136.000
14:31:40	141.4	1986.71	.025	20.71	121.000
14:31:50	141.5	1986.72	.028	20.72	109.000 99.182
14:32:00	141.4	1983.30	.031	17.30	91.000
14:32:10	141.3	1982.53	.033	16.53 15.19	91.000 84.077
14:32:20	141.3	1981.19	.036 .039	14.82	78.143
14:32:30	141.4	1980.82 1980.68	.037	14.68	73.000
14:32:40	141.4 141.4	1980.57	.044	14.57	68.500
14:32:50 14:33:00	141.4	1980.53	.047	14.53	64.529
14:33:10	141.4	1980.50	.050	14.50	61.000
14:33:20	141.5	1980.50	.053	14.50	57.842
14:33:30	141.4	1980.50	.056	14.50	55.000
14:33:40	141.4	1980.50	.058	14.50	52.429
14:33:50	141.4	1980.50	.061	14.50	50.091
14:34:00	141.4	1978.29	.064	12.29	47.957
14:34:10	141.3	1975.62	.067	9.62	46.000
14:34:20	141.2	1973.10	.069	7.10	44.200
14:34:30	141.3	1971.31	.072	5.31	42.538
14:34:40	141.3	1969.79	.075	3.79	41.000
14:34:50	141.3	1969.35	.078	3.35	39.571
14:35:00	141.3	1969.29	.081	3.29	38.241
14:35:10	141.4	1969.43	.083	3.43	37.000
14:35:20	141.4	1969.63	.086	3.63	35.839 34.750
14:35:30	141.3	1969.74	.089	3.74	34.730 33.727
14:35:40	141.4	1969.85	.092 .094	3.85 3.86	32.765
14:35:50	141.4	1969.86	.097	3.82	31.857
14:36:00	141.3	1969.82 1969.75	.100	3.75	31.000
14:36:10	141.3 141.4	1969.74	.103	3.74	30.189
14:36:20 14:36:30	141.3	1969.69	.106	3.69	29.421
14:36:40	141.4	1969.63	.108	3.63	28.692
14:36:50	141.3	1969.56	.111	3.56	28.000
14:37:00	141.3	1969.44	.114	3.44	27.341
14:37:10	141.3	1969.35	.117	3.35	26.714
14:37:20	141.3	1969.22	.119	3.22	26.116
14:37:30	141.2	1969.13	.122	3.13	25.545
14:37:40	141.3	1968.92	.125	2.92	25.000
14:37:50	141.3	1968.76	.128	2.76	24.478
14:38:00	141.2	1968.64	.131	2.64	23.979
14:38:10	141.3	1968.56	.133	2.56 2.48	23.500 23.041
14:38:20	141.3	1968.48 1968.43	.136 .139	2.40 2.43	22.600
14:38:30	141.3	1968.38	.142	2.38	22.176
14:38:40	141.3	1968.32	.144	2.32	21.769
14:38:50 14:39:00	141.3 141.3	1968.30	.147	2.30	21.377
14:39:00	141.3	1968.18	.156	2.18	20.286
14:40:00	141.3	1968.02	.164	2.02	19.305
14:40:30	141.2	1967.81	.172	1.81	18.419
14:41:00	141.2	1967.64	.181	1.64	17.615
14:41:30	141.2	1967.63	.189	1.63	16.882
14:42:00	141.2	1967.95	.197	1.95	16.211
14:42:30	141.2	1968.09	.206	2.09	15.595
14:43:00	141.3	1968.20	.214	2.20	15.026

Well Name: NORTH PAARATTIE #2 . Company: BEACH PETROLEUM Date: 14/03/81

Tool Posi	tioned at a d	epth of: 146	8		
Time	Temperature	PSIA	Dt	Dρ	T+Dt/Dt
14:43:30	141.2	1968.21	.222	2.21	14.500
14:44:00	141.2	1968.17	.231	2.17	14.012
14:44:30	141.2	1968.14	.239	2.14	13.558
14:45:00	141.2	1968.14	.247	2.14	13.135
14:45:30	141.3	1968.09	.256	2.09	12.739
14:46:00	141.2	1968.05	.264	2.05	12.368
14:46:30	141.2	1968.01	.272	2.01	12.020
14:47:00	141.2	1968.04	.281	2.04	11.693
14:47:30	141.3	1968.24	.289	2.24	11.385
14:48:00	141.2	1968.33	.297	2.33	11.093
14:48:30	141.2	1968.33	.306	2.33	10.818
14:49:00	141.3	1968.37	.314	2.37	10.558
14:49:30	141.3	1968.36	.322	2.36	10.310
14:50:00	141.2	1968.36	.331	2.36	10.076
14:51:00	141.2	1968.40	.347	2.40	9.640
14:52:00	141.2	1968.74	.364	2.74	9.244
14:53:00	141.2	1968.90	.381	2.90	8.883
14:54:00	141.3	1968.96	.397	2.96	8.552
14:55:00	141.2	1968.97	.414		8.248
14:56:00	141.2	1968.95		2.97	
14:57:00	141.3	1968.96	.431	2.95	7.968
14:58:00	141.2		.447	2.96	7.708
14:59:00		1968.90	.464	2.90	7.467
	141.3	1968.93	.481	2.93	7.243
15:00:00	141.2	1968.90	.497	2.90	7.034
15:01:00	141.2	1968.87	.514	2.87	6.838
15:02:00	141.2	1968.85	.531	2.85	6.654
15:03:00	141.3	1968.84	.547	2.84	6.482
15:04:00	141.3	1968.77	.564	2.77	6.320
15:05:00	141.3	1968.74	.581	2.74	6.167
15:06:00	141.2	1968.66	.597	2.66	6.023
15:07:00	141.2	1968.60	.614	2.60	5.887
15:08:00	141.2	1968.45	.631	2.45	5.758
15:09:00	141.2	1968.33	.647	2.33	5.635
15:10:00	141.2	1968.48	.664	2.48	5.519
15:11:00	141.2	1969.10	.681	3.10	5.408
15:12:00	141.2	1969.53	.697	3.53	5.303
15:13:00	141.2	1969.69	.714	3.69	5.202
15:14:00	141.3	1969.68	.731	3.68	5.106
15:15:00	141.2	1969.61	.747	3.61	5.015
15:16:00	141.3	1969.58	.764	3.58	4.927
15:17:00	141.2	1969.50	.781	3.50	4.843
15:18:00	141.2	1969.49	.797	3.49	4.763
15:19:00	141.3	1969.44	.814	3.44	4.686
15:20:00	141.2	1969.36	.831	3.36	4.612
15:21:00	141.3	1969.40	.847	3.40	4.541
15:22:00	141.3	1969.46	.864	3.46	4.473
15:23:00	141.3	1969.51	.881	3.51	4.407
15:24:00	141.3	1969.48	.897	3.48	4.344
15:25:00	141.3	1969.41	.914	3.41	4.283
15:26:00	141.3	1969.37	.931	3.37	4.224
15:27:00	141.3	1969.25	.947	3.25	4.167
15:28:00	141.3	1969.35	.964	3.35	4.112
15:29:00	141.2	1969.18	.981	3.18	4.059
15:30:00	141.2	1969.21	.997	3.21	4.008
15:31:00	141.2	1969.06	1.014	3.06	3.959
15:32:00	141.2	1968.97	1.031	2.97	3.911
15:33:00	141.2	1968.99	1.047	2.99	3.865
15:34:00	141.2	1968.78	1.064	2.78	3.820
15:35:00	141.3	1968.83	1.081	2.83	3.776
15:36:00	141.3	1968.49	1.097	2.49	3.734
					•

Well Name: NORTH PAARATTIE #2 . Company: BEACH PETROLEUM Date: 14/03/81

			•		
	tioned at a d			_	
Time		PSIA	Dt	Dρ	T+Dt/Dt
15:37:00	141.2	1968.33	1.114	2.33	3.693
15:38:00	141.3	1968.34	1.131	2.34	3.654
15:39:00	141.3	1968.20	1.147	2.20	3.615
15:40:00	141.3	1968.27	1.164	2.27	3.578
15:41:00	141.2	1968.02	1.181	2.02	3.541
15:42:00	141.3	1968.14	1.197	2.14	3.506
15:43:00	141.3	1967.99	1.214	1.99	3.471
15:44:00	141.3	1968.11	1.231	2.11	3.438
15:45:00	141.2	1968.01	1.247	2.01	3.405
15:46:00	141.2	1967.84	1.264	1.84	3.374
15:47:00	141.2	1968.07	1.281	2.07	3.343
15:48:00	141.2	1967.90	1.297	1.90	3.313
15:49:00	141.2	1968.04	1.314	2.04	3.283
15:50:00	141.2	1967.81	1.331	1.81	3.255
15:51:00	141.2	1967.84	1.347	1.84	3.227
15:52:00	141.2	1967.72	1.364	1.72	3.200
15:53:00	141.3	1968.24	1.381	2.24	3.173
15:54:00	141.2	1968.32	1.397	2.32	3.147
15:55:00	141.3	1968.25	1.414	2.25	3.122
15:56:00	141.3	1968.26	1.431		3.097
15:57:00	141.2	1968.17	1.447	2.17	3.073
15:58:00	141.3	1968.14	1.464	2.14	3.049
15:59:00	141.3	1968.09	1.481	2.09	3.026
16:00:00	141.3	1967.93	1.497	1.93	3.004
16:01:00	141.2	1967.90	1.514	1.90	2.982
16:02:00	141.2	1967.84	1.531	1.84	2.960
16:03:00	141.3	1967.83	1.547	1.83	2.939
16:04:00	141.2	1967.73	1.564	1.73	2.918
16:05:00	141.2	1967.81	1.581	1.81	2.898
16:06:00	141.2	1967.71	1.597	1.71	2.878
16:07:00	141.2	1967.72	1.614	1.72	2.859
16:08:00	141.2	1967.68	1.631	1.68	2.840
16:09:00	141.3	1967.71	1.647	1.71	2.821
16:10:00	141.2	1967.67	1.664	1.67	2.803
16:11:00	141.2	1967.63	1.681	1.63	2.785
16:12:00	141.2	1967.60	1.697	1.60	2.768
16:13:00	141.2	1967.61	1.714	1.61	2.750
16:14:00	141.2	1967.63	1.731	1.63	2.734
16:15:00	141.2	1967.59	1.747	1.59	2.717
16:16:00	141.3	1967.57	1.764	1.57	2.701
16:17:00	141.2	1967.55	1.781	1.55	2.685
16:18:00	141.2	1967.56	1.797	1.56	2.669
16:19:00	141.2	1967.54	1.814	1.54	2.654
16:20:00	141.3	1967.53	1.831	1.53	2.639
16:21:00	141.3	1967.52	1.847	1.52	2.624
16:22:00	141.2	1967.57	1.864	1.57	2.610
16:23:00	141.2	1967.54	1.881	1.54	2.595
16:24:00 16:25:00	141.2	1967.57	1.897	1.57	2.581
	141.3	1967.53	1.914	1.53	2.567
16:26:00	141.2	1967.50	1.931	1.50	2.554
16:27:00	141.2	1967.50	1.947	1.50	2.541
16:28:00	141.2	1967.50	1.964	1.50	2.528
16:29:00	141.3	1967.46	1.981	1.46	2.515
16:30:00	141.2	1967.48	1.997	1.48	2.502
16:31:00	141.2	1967.47	2.014	1.47	2.490 2.477
16:32:00	141.2	1967.43	2.031	1.43	2.477 2.465
16:33:00 16:34:00	141.2 141.2	1967.41 1967.38	2.047 2.064	1.41 1.38	2.465 2.454
		1967.38	2.064 2.001	1.38	2.454 2.442
16:35:00 16:36:00	141.2 141.2		2.081		
10.30.00	171.5	1967.47	2.097	1.47	2.430

Well Name: NORTH PAARATTIE #2 Company: BEACH PETROLEUM Date: 14/03/81

2.003 2.002 2.001 2.000

1468 Tool Positioned at a depth of: T+Dt/Dt 2.419 2.408 2.3972.386 2.345 2.335 2.325 2.315 2.306 2.297 2.287 2.278 2.269 2.260 2.251 2.243 2.234 2.226 2.218 2.209 2.201 2.193 2.186 2.178 2.170 2.155 2.148 2.140 2.133 2.126 2.119 2.112 2.105 2.099 2.092 2.085 2.079 2.072 2.066 2.060 2.054 2.048 2.881 141.2 1966.88 17:23:00 .88

 17:23:00
 141.2
 1966.88
 2.881
 .88

 17:24:00
 141.2
 1966.88
 2.897
 .88

 17:25:00
 141.3
 1966.86
 2.914
 .86

 17:26:00
 141.2
 1966.86
 2.931
 .86

 17:27:00
 141.2
 1966.84
 2.947
 .84

 17:28:00
 141.3
 1966.84
 2.964
 .84

 17:29:00
 141.2
 1966.86
 2.981
 .86

 17:29:40
 141.2
 1966.85
 2.992
 .85

 17:29:50
 141.3
 1966.82
 2.994
 .82

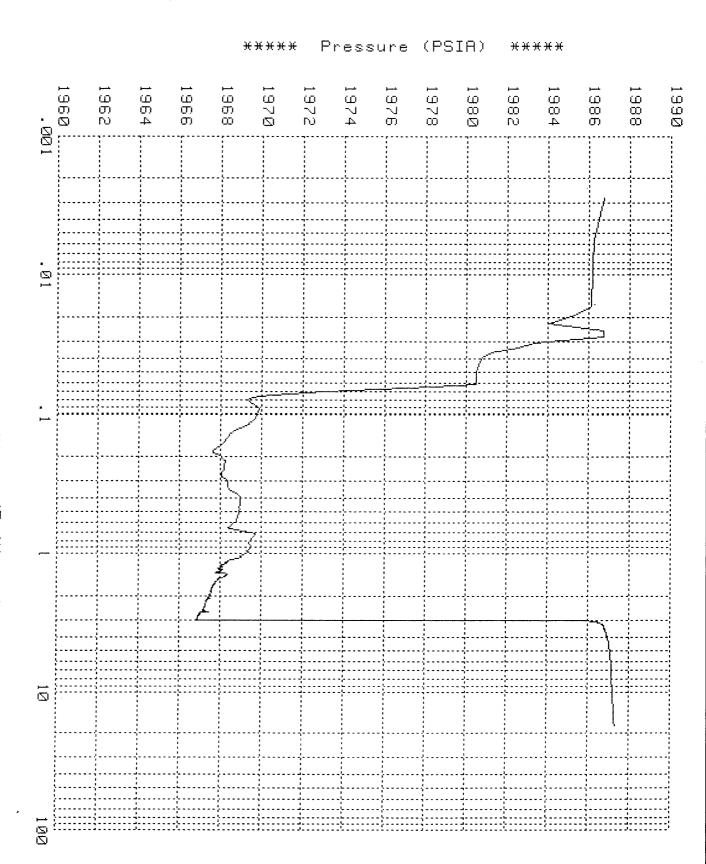
 17:30:00
 141.2
 1966.78
 3.000
 .78

 2.041 2.897 2.035 2.030 2.024 2.012 2.007

GO INTERNATIONAL AUSTRALIA LINEAR PRESSURE VS. LOG TIME

BEACH PETROLEUM NORTH PAARATTIE #2 22/64 CHOKE

'Start of plot: 14:30:10 Date: 14/03/81 Finish of plot: 08:00:10 Date: 15/03/81



**** dT (Hours) ***

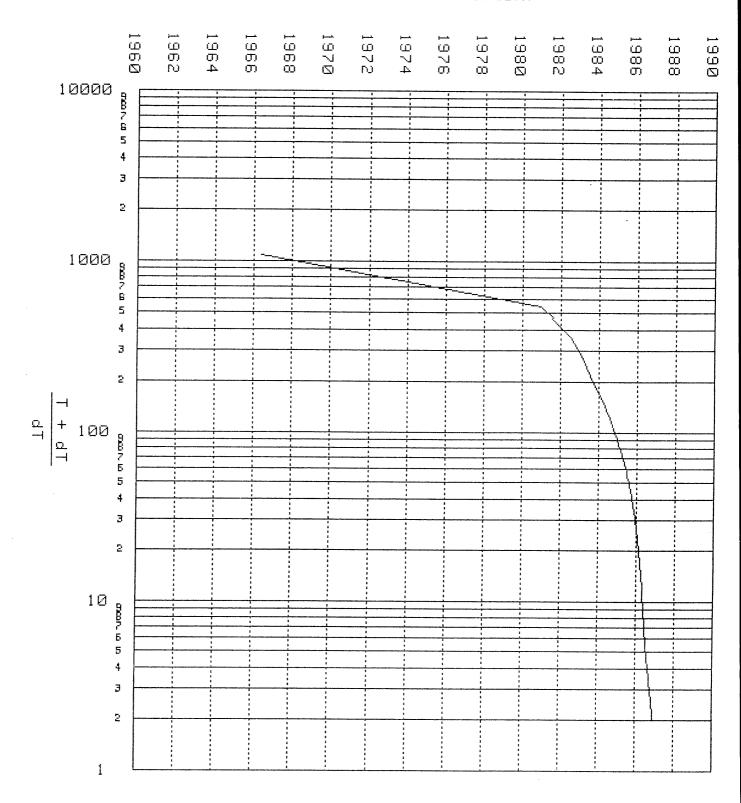
GO INTERNATIONAL AUSTRALIA - HORNER PLOT BEACH PETROLEUM NORTH PAARATTIE #2 26/64 CHOKE

Time well flowed:08:00:10 Date: 15/03/81

Time well shut in:11:00:10 Date: 15/03/81

Time build-up completed:14:00:20 Date:15/03/81

Pressure (PSIA)



Well Name: NORTH PAARATTIE #2 . Company: BEACH PETROLEUM Date: 15/03/81

Tool Posi	tioned at a :	depth of: 1468)		
Time	Temperature	oepun ot. 1460 PSIA	, Dt	Dρ	T+Dt/Dt
11:00:20	141.2	1966.35	.003	13.96	1081.000
11:00:20	141.6	1980.99	.005	28.60	541.000
11:00:40	141.7	1982.54	.008	30.15	361.000
11:00:50	141.7	1983.16	.011	30.77	271.000
11:01:00	141.7	1983.57	.014	31.18	217.000
11:01:10	141.7	1983.91	.017	31.52	181.000
11:01:20	141.7	1984.18	.019	31.79	155.286
11:01:30	141.6	1984.39	.022	32.00	136.000
11:01:40	141.6	1984.56	.025	32.17	121.000
11:01:50	141.6	1984.72	.028	32.33	109.000
11:02:00	141.6	1984.85	.031	32.46	99.182
11:02:10	141.5	1984.96	.033	32.57	91.000
11:02:20	141.6	1985.06	.036	32.67	84.077
11:02:30	141.5	1985.15	.039	32.76	78.143
11:02:40	141.5	1985.21	.042	32.82	73.000
11:02:50	141.5	1985.29	.044	32.90	68.500
11:03:00	141.5	1985.35	.047	32.96	64.529
11:03:10	141.4	1985.41	.050	33.02	61.000
11:03:20	141.4	1985.46	.053	33.07	57.842
11:03:30	141.4	1985.52	.056	33.13	55.000
11:03:40	141.4	1985.55	.058	33.16	52.429
11:03:50	141.4	1985.59	.061	33.20	50.091
11:04:00	141.4	1985.64	.064	33.25	47.957
11:04:10	141.5	1985.66	.067	33.27	46.000
11:04:20	141.4	1985.70	.069	33.31	44.200
11:04:30	141.4	1985.72	.072	33.33	42.538
11:04:40	141.4	1985.76	.075	33.37	41.000
11:04:50	141.4	1985.77	.078	33.38	39.571
11:05:00	141.4	1985.80	.081	33.41	38.241
11:05:10	141.4	1985.83	.083	33.44	37.000
11:05:20	141.4	1985.83	.086	33.44	35.839
11:05:30	141.4	1985.86	.089	33.47	34.750
11:05:40	141.4	1985.87	.092	33.48	33.727
11:05:50	141.3	1985.89	.094	33.50	32.765
11:06:00	141.4	1985.91	.097	33.52	31.857
11:06:10	141.3	1985.91	.100	33.52	31.000
11:06:20	141.4	1985.94	.103	33.55	30.189
11:06:30	141.3	1985.94	.106	33.55	29.421
11:06:40	141.3	1985.96	.108	33.57	28.692
11:06:50	141.4	1985.99	.111	33.60	28.000
11:07:00	141.3	1985.98	.114	33.59	27.341
11:07:10	141.4	1986.00	.117	33.61	26.714
11:07:20	141.3	1986.00	.119	33.61	26.116
11:07:30	141.4	1986.03	.122	33.64	25.545
11:07:40	141.3	1986.02	.125	33.63	25.000
11:07:50	141.3	1986.05	.128	33.66	24.478
11:08:00	141.3	1986.04	.131	33.65	23.979
11:08:10	141.3	1986.06	.133	33.67	23.500
11:08:20	141.3	1986.08	.136	33.69	23.041
11:08:30 11:08:40	141.3 141.3	1986.08	.139	33.69 33.71	22.600 22.176
11:08:50	141.3	1986.10 1986.10	.142 .144	33.71	21.769
11:00:00	141.3	1986.11	.147	33.72	21.707
11:09:10	141.3	1986.12	.150	33.73	21.000
11:09:20	141.3	1986.12	.158	33.73	20.636
11:09:30	141.3	1986.12	.156	33.73 33.73	20.286
11:09:40	141.2	1986.13	.158	33.74	19.947
11:09:50	141.3	1986.14	.161	33.75	19.621
11:10:00	141.3	1986.15	.164	33.76	19.305
11:10:30	141.2	1986.15	.172	33.76	18.419
11:11:00	141.3	1986.18	.181	33.79	17.615
	· · · · · · ·		= = =		

Well Name: NORTH PAARATTIE #2 . Company: BEACH PETROLEUM Date: 15/03/81

Tool Posi	tioned at a d	epth of: 1468	}		
Time	Temperature	PSIA	Dt	Dρ	T+Dt/Dt
11:11:30	141.3	1986.21	.189	33.82	16.882
11:12:00	141.3	1986.22	.197	33.83	16.211
11:12:30	141.2	1986.22	.206	33.83	15.595
11:13:00	141.2	1986.24	.214	33.85	15.026
11:13:30	141.3	1986.26	.222	33.87	14.500
11:14:00	141.2	1986.27	.231	33.88	14.012
11:14:30	141.3	1986.27	.239	33.88	13.558
11:15:00	141.2	1986.28	.247	33.89	13.135
11:15:30	141.3	1986.30	.256	33.91	12.739
11:16:00	141.3	1986.31	.264	33.92	12.368
11:16:30	141.3	1986.32	.272	33.93	12.020
11:17:00	141.3	1986.33	.281	33.94	11.693
11:17:30	141.2	1986.32	.289	33.93	11.385
11:18:00	141.2	1986.34	.297	33.95	11.093
11:18:30	141.2	1986.33	.306	33.94	10.818
11:19:00	141.2	1986.34	.314	33.95	10.558
11:19:30	141.3	1986.35	.322	33.96	10.310
11:20:00	141.2	1986.36	.331	33.97	10.076
11:21:00	141.2	1986.38	.347	33.99	9.640
11:22:00	141.3	1986.39	.364	34.00	9.244
11:23:00	141.2	1986.40	.381	34.01	8.883
11:24:00	141.2	1986.41	.397	34.02	8.552
11:25:00	141.2	1986.42	.414	34.03	8.248
11:26:00	141.2	1986.42	.431	34.03	7.968
11:27:00	141.2	1986.44	.447	34.05	7.708
11:28:00	141.2	1986.44	.464	34.05	7.467
11:29:00	141.2	1986.46	.481	34.07	7.243
11:30:00	141.2	1986.47	.497	34.08	7.034
11:40:00	141.3	1986.55	.664	34.16	5.519
11:50:00	141.2	1986.60	.831	34.21	4.612
12:00:00	141.2	1986.65	.997	34.26	4.008
12:10:00	141.2	1986.71	1.164	34.32	3.578
12:20:00	141.2	1986.73	1.331	34.34	3.255
12:30:00	141.3	1986.78	1.497	34.39	3.004
12:40:00	141.3	1986.80	1.664	34.41	2.803
12:50:00	141.3	1986.83	1.831	34.44	2.639
13:00:00	141.2	1986.83	1.997	34.44	2.502
13:10:00	141.3	1986.85	2.164	34.46	2.386
13:20:00	141.3	1986.88	2.331	34.49	2.287
13:30:00	141.3	1986.88	2.497	34.49	2.201
13:40:00	141.3	1986.89	2.664	34.50	2.126
13:50:00	141.3	1986.90	2.831	34.51	2.060
13:59:50	141.2	1986.91	2.994	34.52	2.002
14:00:00	141.3	1986.92	2.997	34.53	2.001
14:00:10	141.3	1986.91	3.000	34.52	2.000
14:00:20	141.3	1986.91	3.003	34.52	1.999

dP/dT PLOT

Build-up

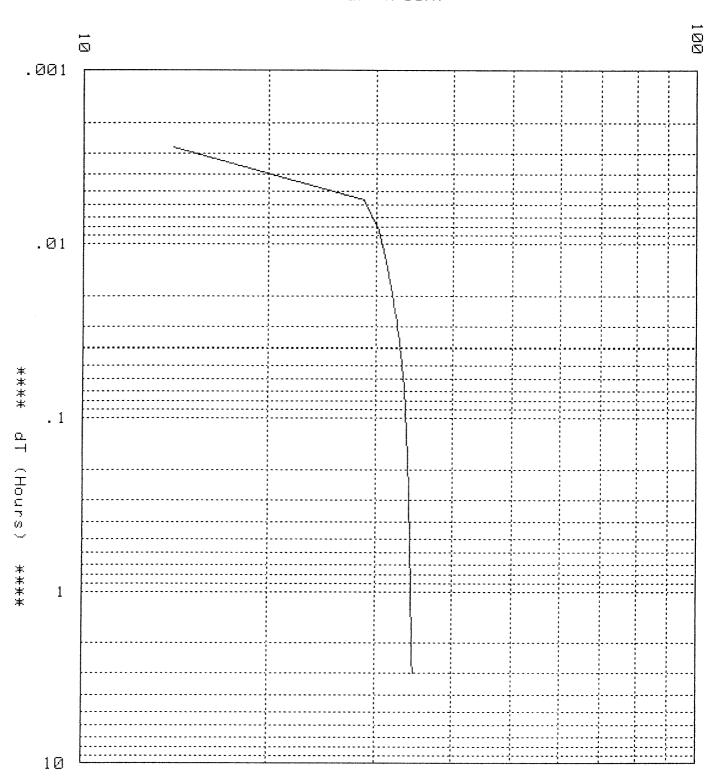
BEACH PETROLEUM

NORTH PAARATTIE #2 26/64 CHOKE

Time well flowed: 08:00:10 Date: 15/03/81 Time well shut in: 11:00:10 Date: 15/03/81

Time build-up completed: 14:00:20 Date: 15/03/81

**** dP (PSIA) ****



dP/dT PLOT

Drawdown

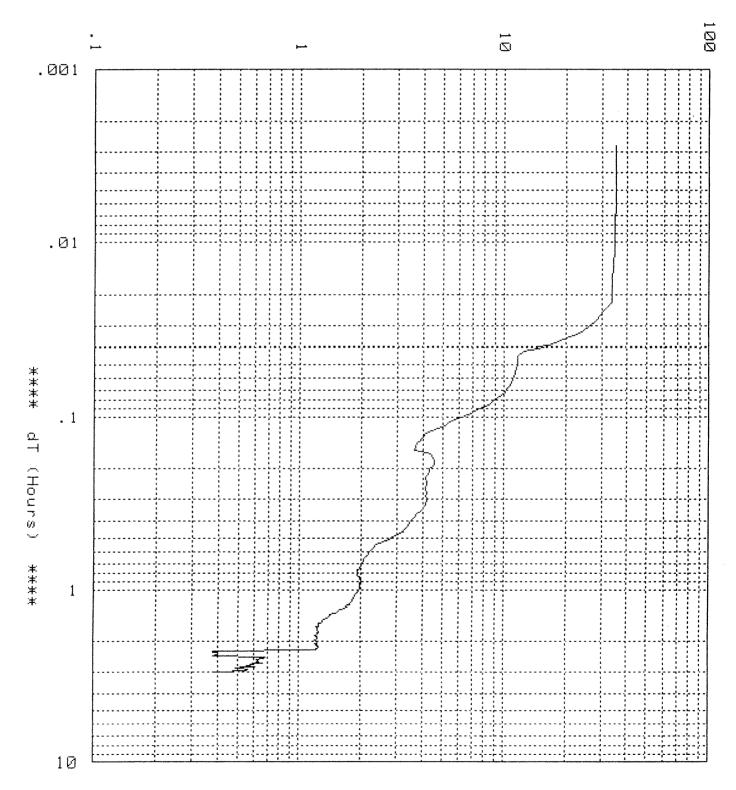
BEACH PETROLEUM

NORTH PAARATTIE #2 26/64 CHOKE

Time well flowed:08:00:10 Date: 15/03/81 Time well shut in: 11:00:10 Date: 15/03/81

Time build-up completed: 14:00:20 Date: 15/03/81

**** dP (PSIA) ****



Well Name: NORTH PAARATTIE #2 Company: BEACH PETROLEUM Date: 15/03/81

Tool Posit	ioned at a de	pth of: 1468			
Time	Temperature	PSIA	Dt	Dр	T+Dt/Dt
08:00:20	141.3	1987.09	.003	35.09	1081.000
08:00:30	141.3	1986.82	.006	34.82	541.000
08:00:40	141.4	1986.75	.008	34.75	361.000
08:00:50	141.4	1986.72	.011	34.72	271.000
08:01:00	141.3	1986.25	.014	34.25	217.000
08:01:10	141.4	1985.83	.017	33.83	181.000
08:01:20	141.3	1985.80	.019	33.80	155.286
08:01:30	141.3	1985.63	.022	33.63	136.000
08:01:40	141.4	1982.54	.025	30.54	121.000
08:01:50	141.3	1980.59	.028	28.59	109.000
08:02:00	141.3	1977.94	.031	25.94	99.182
08:02:10	141.2	1975.25	.033	23.25	91.000
08:02:20	141.2	1971.50	.036	19.50	84.077
08:02:30	141.2	1968.59	.039	16.59	78.143
08:02:40	141.2	1964.50	.042	12.50	73.000
08:02:50	141.2	1963.61	.044	11.61	68.500
08:03:00	141.2	1963.67	.047	11.67	64.529
08:03:10	141.3	1963.70	.050	11.70	61.000
08:03:20	141.3	1963.40	.053	11.40	57.842
08:03:30	141.3	1963.35	.056	11.35	55.000
08:03:40	141.2	1963.20	.058	11.20	52.429
08:03:50	141.3	1962.97	.061	10.97	50.091
08:04:00	141.3	1962.83	.064	10.83	47.957
08:04:10	141.2	1962.52	.067	10.52	46.000
08:04:20	141.2	1962.30	.069	10.30	44.200
08:04:30	141.2	1962.05	.072	10.05	42.538
08:04:40	141.2	1961.68	.075	9.68	41.000
08:04:50	141.2	1961.30	.078	9.30	39.571
08:05:00	141.2	1960.92	.081	8.92	38.241
08:05:10	141.2	1960.59	.083	8.59	37.000
08:05:20	141.2	1960.19	.086	8.19	35.839
08:05:30	141.2	1959.76	.089	7.76	34.750
08:05:40	141.2	1959.33	.092	7.33	33.727
08:05:50 08:06:00	141.2 141.2	1959.01 1958.61	.094	7.01	32.765
08:06:10	141.1	1958.18	.097 .100	6.61 6.18	31.857
08:06:20	141.2	1957.88	.100	5.88	31.000 30.189
00:00:20 08:06:30	141.1	1957.57	.103	5.57	29.421
00.00.30 08:06:40	141.2	1957.35	.108	5.35	28.692
00.00.40 08:06:50	141.1	1957.21	.111	5.21	28.000
08:07:00	141.1	1957.00	.114	5.00	27.341
08:07:10	141.1	1956.71	.117	4.71	26.714
08:07:20	141.1	1956.41	.119	4.41	26.116
08:07:30	141.1	1956.24	.122	4.24	25.545
08:07:40	141.1	1956.13	.125	4.13	25.000
08:07:50	141.1	1956.07	.128	4.07	24.478
08:08:00	141.1	1956.04	.131	4.04	23.979
08:08:10	141.1	1955.95	.133	3.95	23.500
08:08:20	141.1	1955.93	.136	3.93	23.041
08:08:30	141.1	1955.83	.139	3.83	22.600
08:08:40	141.1	1955.76	.142	3.76	22.176
08:08:50	141.1	1955.74	.144	3.74	21.769
08:09:00	141.1	1955.69	.147	3.69	21.377
08:09:10	141.1	1955.69	.150	3.69	21.000
08:09:20	141.0	1955.63	.153	3.63	20.636
08:09:30	141.1	1955.66	.156	3.66	20.286
08:09:40	141.1	1955.98	.158	3.98	19.947
08:09:50	141.0	1956.22	.161	4.22	19.621
08:10:00	141.1	1956.38	.164	4.38	19.305
08:10:30	141.0	1956.52	.172	4.52	18.419
08:11:00	141.1	1956.53	.181	4.53	17.615

Tool Posi	tioned at a d	epth of: 146	8		
Time	Temperature	PSIA	Dt	Dρ	T+Dt/Dt
08:11:30	141.1	1956.55	.189	4.55	16.882
08:12:00	141.1	1956.34	.197	4.34	16.211
08:12:30	141.1	1956.30	.206	4.30	15.595
08:13:00	141.1	1956.28	.214	4.28	15.026
08:13:30	141.1	1956.15	.222	4.15	14.500
08:14:00	141.1	1956.16	.231	4.16	14.012
08:14:30	141.1	1956.18	.239	4.18	13.558
08:15:00	141.0	1956.17	.247	4.17	13.135
08:15:30	141.0	1956.13	.256	4.13	12.739
08:16:00	141.0	1956.16	.264	4.16	12.368
08:16:30	141.0	1956.17	.272	4.17	12.020
08:17:00	141.0	1956.18	.281	4.18	11.693
08:17:30	141.1	1956.16	.289	4.16	11.385
08:18:00	141.0	1956.20	.297	4.20	11.093
08:18:30	141.1	1956.20	.306	4.20	10.818
08:19:00	141.1	1956.15	.314	4.15	10.558
08:19:30	141.0	1956.12	.322	4.12	10.310
08:20:00 08:21:00	141.0	1956.07	.331	4.07	10.076
08:22:00	141.0	1955.95	.347	3.95	9.640
08:23:00	141.1	1955.76	.364	3.76	9.244
08:24:00	141.0	1955.65	.381	3.65	8.883
08:25:00	141.0 141.0	1955.48	.397	3.48	8.552
08:26:00	141.0	1955.44	.414	3.44	8.248
00.20.00 08:27:00	140.9	1955.35 1955.27	.431 .447	3.35	7.968
08:28:00	141.0	1955.20	.447 .464	3.27 3.20	7.708
08:29:00	141.0	1955.00	.481	3.20 3.00	7.467 7.243
08:30:00	141.0	1954.80	.497	3.00 2.80	7.034
08:31:00	141.0	1954.63	.514	2.63	6.838
08:32:00	140.9	1954.47	.531	2.47	6.654
08:33:00	140.9	1954.35	.531 .547	2.35	6.482
08:34:00	140.9	1954.34	.564	2.34	6.320
08:35:00	141.0	1954.28	.581	2.28	6.167
08:36:00	141.0	1954.22	.597	2.22	6.023
08:37:00	140.9	. 1954.18	.614	2.18	5.887
08:38:00	141.0	1954.15	.631	2.15	5.758
08:39:00	140.9	1954.10	.647	2.10	5.635
08:40:00	140.9	1954.06	.664	2.06	5.519
08:41:00	141.0	1954.05	.681	2.05	5.408
08:42:00	140.9	1954.03	.697	2.03	5.303
08:43:00	141.0	1954.01	.714	2.01	5.202
08:44:00	140.9	1953.99	.731	1.99	5.106
08:45:00	141.0	1953.96	.747	1.96	5.015
08:46:00	140.9	1953.93	.764	1.93	4.927
08:47:00	140.9	1953.93	.781	1.93	4.843
08:48:00	140.9	1953.93	.797	1.93	4.763
08:49:00	141.0	1953.92	.814	1.92	4.686
08:50:00	140.9	1953.93	.831	1.93	4.612
08:51:00	140.9	1953.97	.847	1.97	4.541
08:52:00	141.0	1953.97	.864	1.97	4.473
08:53:00	140.9	1953.99	.881	1.99	4.407
08:54:00	141.0	1954.00	.897	2.00	4.344
08:55:00	141.0	1953.98	.914	1.98	4.283
08:56:00 08:57:00	141.0	1953.97	.931	1.97	4.224
08:58:00	141.0	1953.97	.947	1.97	4.167
08:59:00	140.9	1953.97	.964	1.97	4.112
09:00:00	141.0 141.0	1953.96 1952 06	.981	1.96	4.059
09:01:00	140.9	1953.96 1953.93	.997 1.014	1.96 1.93	4.008 2 050
09:02:00	141.0	1953.94			3.959
U	14116	1700.74	1.031	1.94	3.911

Well Name: NORTH PAARATTIE #2 - Company: BEACH PETROLEUM Date: 15/03/81

			_		
		depth of: 146		T)	T D + 2D +
Time	Temperature 141.0	PSIA 1953.91	Dt	Dρ	T+Dt/Dt
09:03:00 09:04:00	141.0	1953.88	1.047 1.064	1.91 1.88	3.865 3.820
09:05:00	140.9	1953.87	1.081	1.87	3.776
09:06:00	140.9	1953.87	1.001	1.87	3.734
09:07:00	141.0	1953.84	1.114	1.84	3.693
09:08:00	140.9	1953.83	1.131	1.83	3.654
09:09:00	141.0	1953.82	1.147	1.82	3.615
09:10:00	141.0	1953.82	1.164	1.82	3.578
09:11:00	140.9	1953.79	1.181	1.79	3.541
09:12:00	140.9	1953.77	1.197	1.77	3.506
09:13:00	141.0	1953.76	1.214	1.76	3.471
09:14:00	140.9	1953.71	1.231	1.71	3.438
09:15:00	141.0	1953.70	1.247	1.70	3.405
09:16:00	141.0	1953.72	1.264	1.72	3.374
09:17:00	141.0	1953.65	1.281	1.65	3.343
09:18:00	141.0	1953.61	1.297	1.61	3.313
09:19:00	140.9	1953.57	1.314	1.57	3.283
09:20:00	140.9	1953.56	1.331	1.56	3.255
09:21:00	141.0	1953.53	1.347	1.53	3.227
09:22:00	141.0	1953.49	1.364	1.49	3.200
09:23:00	141.0	1953.48	1.381	1.48	3.173
09:24:00	140.9	1953.42	1.397	1.42	3.147
09:25:00	140.9	1953.42	1.414	1.42	3.122
09:26:00	141.0	1953.40	1.431	1.40	3.097
09:27:00	140.9	1953.39	1.447	1.39	3.073
09:28:00	140.9	1953.35	1.464	1.35	3.049
09:29:00	140.9	1953.34	1.481	1.34	3.026
09:30:00	141.0	1953.32	1.497	1.32	3.004
09:31:00	140.9	1953.30	1.514	1.30	2.982
09:32:00 09:33:00	140.9 141.0	1953.29 1953.28	1.531 1.547	1.29 1.28	2.960 2.939
07.33.00 09:34:00	140.9	1953.25	1.564	1.20	2.918
09:35:00	140.9	1953.25	1.581	1.25	2.898
09:36:00	141.0	1953.24	1.597	1.24	2.878
09:37:00	140.9	1953.24	1.614	1.24	2.859
09:38:00	140.9	1953.21	1.631	1.21	2.840
09:39:00	141.0	1953.24	1.647	1.24	2.821
09:40:00	140.9	1953.23	1.664	1.23	2.803
09:41:00	141.0	1953.23	1.681	1.23	2.785
09:42:00	140.9	1953.23	1.697	1.23	2.768
09:43:00	141.0	1953.23	1.714	1.23	2.750
09:44:00	140.9	1953.23	1.731	1.23	2.734
09:45:00	140.9	1953.24	1.747	1.24	2.717
09:46:00	140.9	1953.25	1.764	1.25	2.701
09:47:00	140.9	1953.23	1.781	1.23	2.685
09:48:00	140.9	1953.23	1.797	1.23	2.669
09:49:00	141.0	1953.22	1.814	1.22	2.654
09:50:00	140.9	1953.21	1.831	1.21	2.639
09:51:00	141.0	1953.20	1.847	1.20	2.624
09:52:00	141.0	1953.22	1.864	1.22	2.610
09:53:00	141.0	1953.22	1.881	1.22	2.595
09:54:00 09:55:00	140.9 141.0	1953.23 1953.22	1.897 1.914	1.23 1.22	2.581 2.567
07.33.00 09:56:00	141.0	1953.22	1.931	1.22	2.554
07.36.00 09:57:00	140.9	1953.19	1.947	1.19	2.541
07.57.00 09:58:00	140.9	1953.19	1.964	1.21	2.528
09:59:00	140.9	1953.21	1.981	1.21	2.515
10:00:00	141.0	1953.22	1.997	1.22	2.502
10:01:00	141.0	1953.22	2.014	1.22	2.490
10:02:00	141.0	1953.23	2.031	1.23	2.477

Well Name: NORTH PAARATTIE #2 Company: BEACH PETROLEUM Date: 15/03/81

Tool Posi	tioned at a de	epth of: 146	8		
Time	Temperature	PSIA	Dt	Dρ	T+Dt/Dt
10:03:00	141.0	1953.22	2.047	1.22	2.465
10:04:00	140.9	1953.20	2.064	1.20	2.454
10:05:00	141.0	1953.21	2.081	1.21	2.442
10:06:00	140.9	1953.22	2.097	1.22	2.430
10:07:00	141.0	1953.22	2.114	1.22	2.419
10:08:00	141.0	1953.24	2.131	1.24	2.408
10:09:00	141.0	1953.24	2.147	1.24	2.397
10:10:00	141.0	1953.25	2.164	1.25	2.386
10:11:00	140.9	1953.21	2.181	1.21	2.376
10:12:00	141.0	1953.22	2.197	1.22	2.365
10:13:00	140.9	1953.19	2.214	1.19	2.355
10:14:00	141.0	1953.02	2.231	1.02	2.345
10:15:00	141.0	1952.44	2.247	.44	2.335
10:16:00	141.0	1952.40	2.264	.40	2.325
10:17:00	141.0	1952.38	2.281	.38	2.315
10:18:00	140.9	1952.38	2.297	.38	2.306
10:19:00	140.9	1952.40	2.314	.40	2.297
10:20:00	141.0	1952.40	2.331	.40	2.287
10:21:00	140.9	1952.40	2.347	.40	2.278
10:22:00	140.9	1952.39	2.364	.39	2.269
10:23:00	140.9	1952.40	2.381	.40	2.260
10:24:00	141.0	1952.39	2.397	.39	2.251
10:25:00	140.9	1952.38	2.414	.38	2.243
10:26:00	141.0	1952.40	2.431	.40	2.234
10:27:00	141.0	1952.64	2.447	.64	2.226
10:28:00	141.0	1952.68	2.464	.68	2.218
10:29:00	140.9	1952.67	2.481	.67	2.209
10:30:00	141.0	1952.66	2.497	.66	2.201
10:31:00	141.0 140.9	1952.65	2.514	.65	2.193
10:32:00		1952.62	2.531	.62	2.186
10:33:00 10:34:00	141.0 140.9	1⁄952.63 1952.63	2.547 2.564	.63 .63	2.178
10:35:00	141.0	1952.63	2.581	.63	2.170 2.163
10:35:00	140.9	1952.63	2.597	.63	2.163 2.155
10:37:00	140.9	1952.62	2.614	.62	2.148
10:38:00	141.0	1952.62	2.631	.62	2.140
10:39:00	141.0	1952.66	2.647	.66	2.133
10:40:00	140.9	1952.60	2.664	.60	2.126
10:41:00	140.9	1952.59	2.681	.59	2.119
10:42:00	141.0	1952.60	2.697	.60	2.112
10:43:00	141.0	1952.58	2.714	.58	2.105
10:44:00	141.0	1952.56	2.731	.56	2.099
10:45:00	141.0	1952.56	2.747	.56	2.092
10:46:00	140.9	1952.55	2.764	.55	2.085
10:47:00	141.0	1952.61	2.781	.61	2.079
10:48:00	140.9	1952.57	2.797	.57	2.072
10:49:00	141.0	1952.54	2.814	.54	2.066
10:50:00	140.9	1952.49	2.831	.49	2.060
10:51:00	140.9	1952.53	2.847	.53	2.054
10:52:00	141.0	1952.54	2.864	.54	2.048
10:53:00	140.9	1952.55	2.881	.55	2.041
10:54:00	140.9	1952.56	2.897	.56	2.035
10:55:00	140.9	1952.55	2.914	.55	2.030
10:56:00	141.0	1952.50	2.931	.50	2.024
10:57:00	141.0	1952.49	2.947	.49	2.018
10:58:00	140.9	1952.45	2.964	.45	2.012
10:59:00	140.9	1952.40	2.981	.40	2.007
10:59:40	141.0	1952.40	2.992	.40	2.003
10:59:50	141.0	1952.39	2.994	.39	2.002
11:00:00	140.9	1952.38	2.997	.38	2.001

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Well Name: NORTH PARRATTIE #2 . Company: BEACH PETROLEUM Date: 15/03/81

Tool Positioned at a depth of: 1468

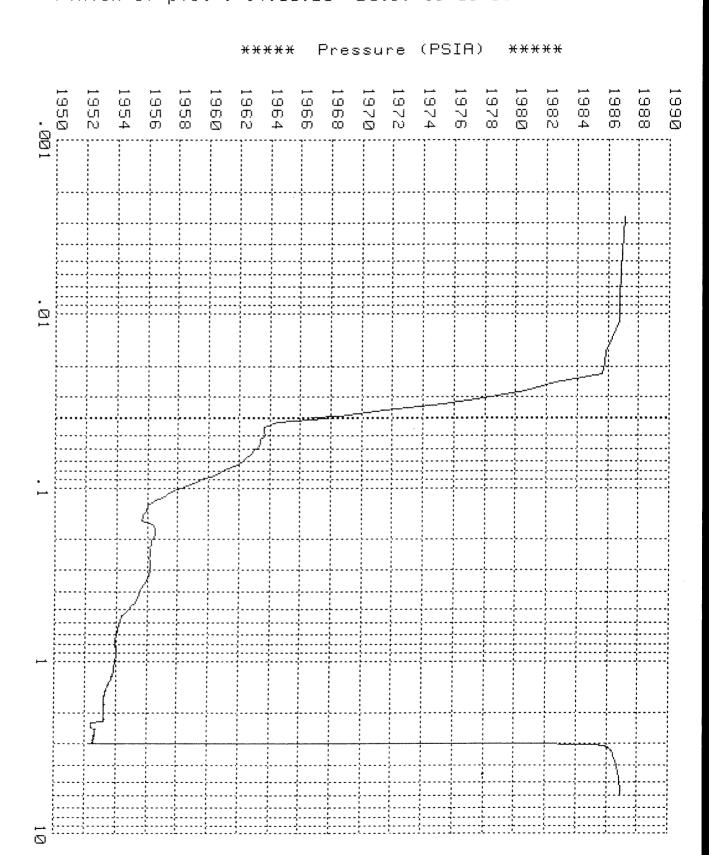
Time Temperature PSIA Dt Dp T+Dt/Dt 11:00:10 140.9 1952.39 3.000 .39 2.000

GO INTERNATIONAL AUSTRALIA LINEAR PRESSURE VS. LOG TIME

BEACH PETROLEUM

NORTH PAARATTIE #2 26/64 CHOKE

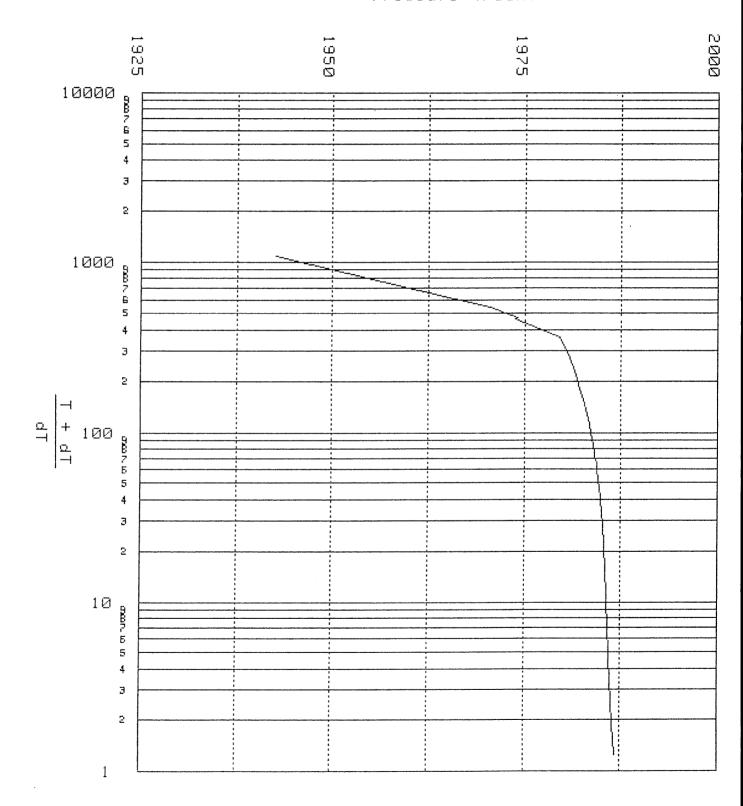
Start of plot: 08:00:10 Date: 15/03/81 Finish of plot: 14:00:20 Date: 15/03/81



**** dT (Hours) ***

GO INTERNATIONAL AUSTRALIA - HORNER PLOT
BEACH PETROLEUM NORTH PAARATTIE #2 30/64 CHOKE
Time well flowed:14:00:20 Date: 15/03/81
Time well shut in:17:00:20 Date: 15/03/81
Time build-up completed:06:11:00 Date:16/03/81

Pressure (PSIA)



Well Name: NORTH PAARATTIE #2 _ Company: BEACH PETROLEUM Date: 15/03/81

Tool Posit	ioned at a c	depth of: 1468			
Time	Temperature	PSIA	Dt	Dρ	T+Dt/Dt
17:00:30	140.7	1942.49	.003	7.51	1081.000
17:00:40	141.2	1970.51	.006	35.53	541.000
17:00:50	141.4	1979.57	.008	44.59	361.000
17:01:00	141.5	1980.78	.011	45.80	271.000
17:01:10	141.4	1981.59	.014	46.61	217.000
17:01:20	141.4	1982.19	.017	47.21	181.000
17:01:30	141.4	1982.62	.019	47.64	155.286
17:01:40	141.4	1982.97	.022	47.99	136.000
17:01:50	141.3	1983.23	.025	48.25	121.000
17:02:00	141.3	1983.47	.028	48.49	109.000
17:02:10	141.3	1983.65	.031	48.67	99.182
17:02:20	141.3	1983.79	.033	48.81	91.000
17:02:30	141.2	1983.92	.036	48.94	84.077
17:02:40	141.2	1984.02	.039	49.04	78.143
17:02:50	141.2	1984.12	.042	49.14	73.000
17:03:00	141.2	1984.21	.044	49.23	68.500
17:03:10	141.2	1984.31	.047	49.33	64.529
17:03:20	141.2	1984.37	.050	49.39	61.000
17:03:30	141.2	1984.44	.053	49.46	57.842
17:03:40	141.2	1984.50	.056	49.52	55.000
17:03:50	141.1	1984.55	.058	49.57	52.429
17:04:00	141.1	1984.61	.061	49.63	50.091
17:04:10	141.1	1984.65	.064	49.67	47.957
17:04:20	141.1	1984.71	.067	49.73	46.000
17:04:30	141.2	1984.76	.069	49.78	44.200
17:04:40	141.2	1984.82	.072	49.84	42.538
17:04:50	141.1	1984.84	.075	49.86	41.000
17:05:00	141.1	1984.87	.078	49.89	39.571
17:05:10	141.1	1984.90	.081	49.92	38.241
17:05:20	141.1	1984.94	.083	49.96	37.000
17:05:30	141.1	1984.97	.086	49.99	35.839
17:05:40	141.1	1984.99	.089	50.01	34.750
17:05:50	141.0	1985.03	.092	50.05	33.727
17:06:00	141.0	1985.05	.094	50.07	32.765
17:06:10	141.1	1985.07	.097	50.09	31.857
17:06:20	141.1	1985.09	.100	50.11	31.000
17:06:30	141.0	1985.11	.103	50.13	30.189
17:06:40	141.1	1985.13	.106	50.15	29.421
17:06:50	141.1	1985.15	.108	50.17	28.692
17:07:00	141.1	1985.17	.111	50.19	28.000
17:07:10	141.1	1985.19	.114	50.21	27.341
17:07:20	141.0	1985.21	.117	50.23	26.714
17:07:30	141.1	1985.22	.119	50.24	26.116
17:07:40	141.0	1985.23	.122	50.25	25.545
17:07:50	141.1	1985.24	.125	50.26	25.000
17:08:00	141.0	1985.27	.128	50.29	24.478
17:08:10	141.1	1985.27	.131	50.29	23.979
17:08:20	141.0	1985.28	.133	50.30	23.500
17:08:30	141.1	1985.30	.136	50.32	23.041
17:08:40	141.0	1985.31	.139	50.33	22.600
17:08:50	141.0	1985.32	.142	50.34	22.176
17:09:00	141.0	1985.33	.144	50.35	21.769
17:09:10	141.0	1985.34	.147	50.36	21.377
17:09:20	141.0	1985.36	.150	50.38 50.20	21.000 20 626
17:09:30	141.0	1985.37	.153 .156	50.39 50 40	20.636 20.036
17:09:40	141.0	1985.38		50.40 50.41	20.286
17:09:50	141.0	1985.39	.158	50.41	19.947
17:10:00	141.0	1985.40	.161	50.42 50.42	19.621
17:10:30	141.1	1985.41	.169	50.43	18.705
17:11:00	141.0	1985.44	.178	50.46 50 40	17.875
17:11:30	141.1	1985.46	.186	50.48	17.119

Well Name: NORTH PAARATTIE #2 Company: BEACH PETROLEUM Date: 15/03/81

Tool Posi	tioned at a d	epth of: 146	3		
Time	Temperature	PSIA	Dt	Dρ	T+Dt/Dt
17:12:00	141.0	1985.48	.194	50.50	16.429
17:12:30	141.0	1985.49	.203	50.51	15.795
17:13:00	141.0	1985.52	.211	50.54	15.211
17:13:30	141.0	1985.54	.219	50.56	14.671
17:14:00	141.0	1985.56	.228	50.58	14.171
17:14:30	141.0	1985.56	.236	50.58	13.706
17:15:00	141.0	1985.57	.244	50.59	13.273
17:15:30	141.0	1985.60	.253	50.62	12.868
17:16:00	141.0	1985.60	.261	50.62	12.489
17:16:30	141.0	1985.62	.269	50.64	12.134
17:17:00	141.0	1985.63	.278	50.65	11.800
17:17:30	141.0	1985.64	.286	50.66	11.485
17:18:00	141.0	1985.64	.294	50.66	11.189
17:18:30	141.0	1985.66	.303	50.68	10.908
17:19:00	141.0	1985.68	.311	50.70	10.643
17:19:30	140.9	1985.67	.319	50.69	10.391
17:20:00	141.0	1985.70	.328	50.72	10.153
17:21:00	141.0	1985.70	.344	50.72	9.710
17:22:00	140.9	1985.71	.361	50.73	9.308
17:23:00	141.0	1985.74	.378	50.76	8.941
17:24:00	140.9	1985.74	.394	50.76	8.606
17:25:00 17:26:00	141.0	1985.77	.411	50.79	8.297
17:27:00	141.0 141.0	1985.78	.428	50.80	8.013 7.750
17:28:00	141.0	1985.81 1985.80	.444	50.83	7.750 7.506
17:29:00	141.0	1985.82	.461 .478	50.82 50.84	7.279
17:30:00	141.0	1985.83	.494	50.85	7.067
17:31:00	140.9	1985.83	.511	50.85	6.870
17:32:00	141.0	1985.86	.528	50.88	6.684
17:33:00	141.0	1985.87	.544	50.89	6.510
17:34:00	141.0	1985.88	.561	50.90	6.347
17:35:00	141.0	1985.88	.578	50.90	6.192
17:36:00	141.0	1985.89	.594	50.91	6.047
17:37:00	141.0	1985.91	.611	50.93	5.909
17:38:00	141.0	1985.92	.628	50.94	5.779
17:39:00	141.0	1985.93	.644	50.95	5.655
17:40:00	141.0	1985.94	.661	50.96	5.538
17:41:00	141.0	1985.95	.678	50.97	5.426
17:42:00	141.0	1985.95	.694	50.97	5.320
17:43:00	141.0	1985.95	.711	50.97	5.219
17:44:00	141.0	1985.97	.728	50.99	5.122
17:45:00	141.0	1985.99	.744	51.01	5.030
17:46:00	141.1	1985.99	.761	51.01	4.942
17:47:00	141.0	1985.99	.778	51.01	4.857
17:48:00	141.0	1986.01	.794	51.03	4.776
17:49:00	141.0	1986.01	.811	51.03	4.699
17:50:00	141.0	1986.02	.828	51.04	4.624
17:51:00	141.0	1986.03	.844	51.05	4.553
17:52:00	141.1	1986.03	.861	51.05	4.484
17:53:00	141.0	1986.05	.878	51.07	4.418
17:54:00	141.1	1986.04	.894	51.06	4.354
17:55:00	141.0	1986.05	.911	51.07	4.293
17:56:00	141.0	1986.06	.928	51.08	4.234
17:57:00 17:58:00	141.0	1986.06	.944	51.08 51.00	4.176
17:59:00	141.1	1986.06 1996 07	.961	51.08 51 00	4.121 4 060
18:00:00	141.0 141.1	1986.07 1996 09	.978 004	51.09 51.0	4.068 4.017
18:10:00	141.0	1986.08 1986.14	.994 1.161	51.10 51.16	4.017 3.584
18:20:00	141.1	1986.18	1.328	51.20	3.259
18:30:00	141.1	1986.23	1.320	51.25	3.207 3.007
	1 7 1 1	1700.23	1.777	لے . د ب	3.901

Well Name: NORTH PAARATTIE #2 Company: BEACH PETROLEUM Date: 15/03/81

Tool Posi	tioned at a d	epth of: 146	8		
Time	Temperature	PSIA	Dt	Dρ	T+Dt/Dt
18:40:00	141.1	1986.27	1.661	51.29	2.806
18:50:00	141.1	1986.30	1.828	51.32	2.641
19:00:00	141.1	1986.33	1.994	51.35	2.504
19:10:00	141.1	1986.33	2.161	51.35	2.388
19:20:00	141.1	1986.35	2.328	51.37	2.289
19:30:00	141.1	1986.38	2.494	51.40	2.203
19:40:00	141.2	1986.40	2.661	51.42	2.127
	141.1	1986.42	2.828	51.44	2.061
19:50:00	141.2	1986.44	2.994	51.46	2.001
20:00:00	141.2	1986.47	3.161	51.49	1.949
20:10:00				51.48	1.902
20:20:00	141.2	1986.46	3.328	51.40	1.859
20:30:00	141.2	1986.48	3.494		1.819
20:40:00	141.2	1986.51	3.661	51.53	
20:50:00	141.2	1986.51	3.828	51.53	1.784
21:00:00	141.2	1986.54	3.994	51.56	1.751
21:10:00	141.2	1986.54	4.161	51.56	1.721
21:20:00	141.3	1986.55	4.328	51.57	1.693
21:30:00	141.2	1986.56	4.494	51.58	1.667
21:40:00	141.2	1986.57	4.661	51.59	1.644
21:50:00	141.2	1986.58	4.828	51.60	1.621
22:00:00	141.3	1986.58	4.994	51.60	1.601
22:10:00	141.3	1986.60	5.161	51.62	1.581
22:20:00	141.3	1986.61	5.328	51.63	1.563
22:30:00	141.2	1986.61	5.494	51.63	1.546
22:40:00	141.2	1986.61	5.661	51.63	1.530
22:50:00	141.3	1986.64	5.828	51.66	1.515
23:00:00	141.3	1986.64	5.994	51.66	1.500
23:30:00	141.2	1986.65	6.494	51.67	1.462
16/03/81					
00:00:00	141.2	1986.67	6.994	51.69	1.429
00:30:00	141.3	1986.70	7.494	51.72	1.400
01:00:00	141.2	1986.70	7.994	51.72	1.375
01:30:00	141.3	1986.74	8.494	51.76	1.353
02:00:00	141.2	1986.73	8.994	51.75	1.334
02:30:00	141.3	1986.76	9.494	51.78	1.316
03:00:00	141.3	1986.78	9.994	51.80	1.300
03:30:00	141.3	1986.78	10.494	51.80	1.286
04:00:00	141.3	1986.80	10.994	51.82	1.273
04:30:00	141.3	1986.81	11.494	51.83	1.261
05:00:00	141.4	1986.82	11.994	51.84	1.250
05:30:00	141.3	1986.83	12.494	51.85	1.240
06:00:00	141.3	1986.86	12.994	51.88	1.231
06:07:00	141.3	1986.86	13.111	51.88	1.229
06:08:00	141.3	1986.86	13.128	51.88	1.229
06:09:00	141.3	1986.86	13.144	51.88	1.228
06:10:00	141.3	1986.86	13.161	51.88	1.228
06:11:00	141.3	1986.84	13.178	51.86	1.228
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dP/dT PLOT

Build-up

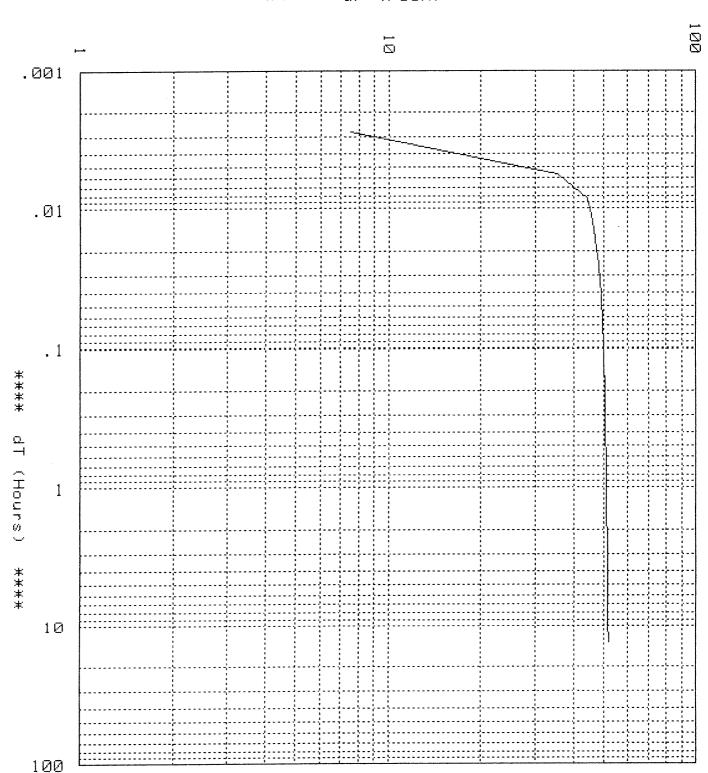
BEACH PETROLEUM

NORTH PAARATTIE #2 30/64 CHOKE

Time well flowed:14:00:20 Date: 15/03/81 Time well shut in: 17:00:20 Date: 15/03/81

Time build-up completed: 06:11:00 Date: 16/03/81

**** dP (PSIA) ****



dP/dT PLOT

Drawdown

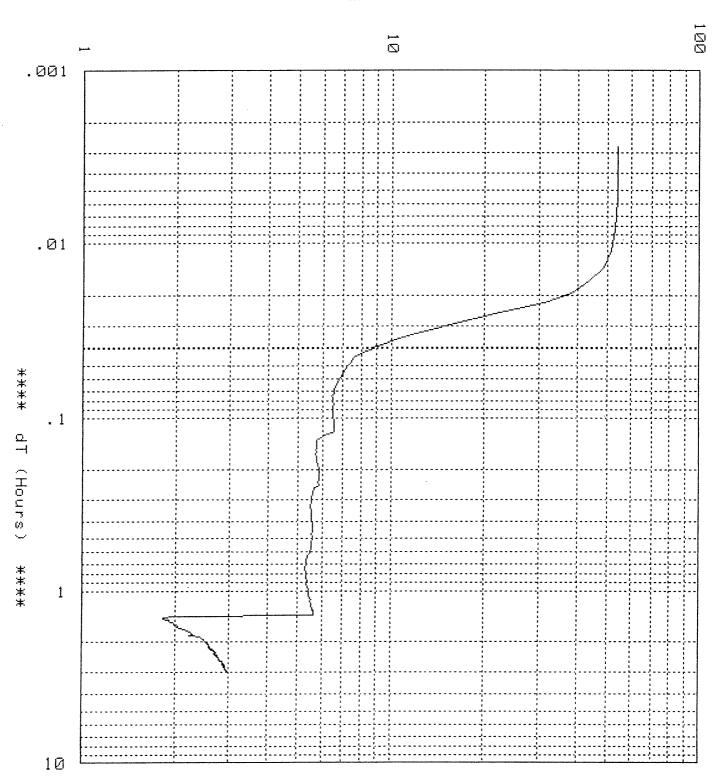
BEACH PETROLEUM

NORTH PAARATTIE #2 30/64 CHOKE

Time well flowed:14:00:20 Date: 15/03/81 Time well shut in: 17:00:20 Date: 15/03/81

Time build-up completed: 06:11:00 Date: 16/03/81

**** dP (PSIA) ****



Well Name: NORTH PAARATTIE #2 Company: BEACH PETROLEUM Date: 15/03/81

Tool Posi	tioned at a d	epth of: 1468	}		
Time	Temperature	PSIA	Dt	Dρ	T+Dt/Dt
14:00:30	141.3	1985.98	.003	53.98	1081.000
14:00:40	141.3	1986.22	.006	54.22	541.000
14:00:50	141.3	1984.95	.008	52.95	361.000
14:01:00	141.2	1983.44	.011	51.44	271.000
14:01:10	141.2	1980.89	.014	48.89	217.000
14:01:20	141.2	1975.74	.017	43.74	181.000
14:01:30	141.1	1970.14	.019	38.14	155.286
14:01:40	141.1	1963.27	.022	31.27	136.000
14:01:50	141.0	1955.33	.025	23.33	121.000
14:02:00	140.9	1949.93	.028	17.93	109.000
14:02:10	141.0	1946.41	.031	14.41	99.182
14:02:20	140.9	1944.00	.033	12.00	91.000
14:02:30	140.9	1942.29	.036	10.29	84.077
14:02:40	140.9	1941.04	.039	9.04	78.143
14:02:50	140.9	1940.10	.042	8.10	73.000
14:03:00	140.9	1939.60	.044	7.60	68.500
14:03:10	140.9	1939.41	.047	7.41	64.529
14:03:20	140.8	1939.26	.050	7.26	61.000
14:03:30	140.8	1939.13	.053	7.13	57.842
14:03:40	140.8	1938.99	.056	6.99	55.000
14:03:50	140.8	1938.86	.058	6.86	52.429
14:04:00	140.7	1938.78	.061	6.78	50.091
14:04:10	140.8	1938.66	.064	6.66	47.957
14:04:20	140.8	1938.58	.007 .067	6.58	46.000
14:04:30	140.8	1938.53	.00, .069	6.53	44.200
14:04:40	140.8	1938.50	.002	6.50	42.538
14:04:50	140.7	1938.43	.075	6.43	41.000
14:05:00	140.8	1938.48	.073 .078	6.48	39.571
14:05:10	140.7	1938.48	.081	6.48	38.241
14:05:20	140.7	1938.51	.083	6.51	37.000
14:05:30	140.7	1938.49	.086	6.49	35.839
14:05:40	140.7	1938.49	.089	6.49	34.750
14:05:50	140.7	1938.49	.092	6.49	33.727
14:06:00	140.7	1938.48	.094	6.48	32.765
14:06:10	140.6	1938.48	.097	6.48	31.857
14:06:20	140.7	1938.46	.100	6.46	31.000
14:06:30	140.7	1938.53	.103	6.53	30.189
14:06:40	140.7	1938.52	.106	6.52	29.421
14:06:50	140.7	1938.53	.108	6.53	28.692
14:07:00	140.7	1938.53	.111	6.53	28.000
14:07:10	140.7	1938.52		6.52	27.341
14:07:20	140.7	1938.55	.117	6.55	26.714
14:07:30	140.7	1938.55	.119	6.55	26.116
14:07:40	140.7	1938.39	.122	6.39	25.545
14:07:50	140.7	1938.15	.125	6.15	25.000
14:08:00	140.7	1937.98	.128	5.98	24.478
14:08:10	140.6	1937.89	.131	5.89	23.979
14:08:20	140.6	1937.80	.133	5.80	23.500
14:08:30	140.7	1937.75	.136	5.75	23.041
14:08:40	140.7	1937.74	.139	5.74	22.600
14:08:50	140.7	1937.75	.142	5.75	22.176
14:09:00	140.6	1937.73	.144	5.73	21.769
14:09:10	140.6	1937.73	.147	5.73	21.377
14:09:20	140.6	1937.71	.150	5.71	21.000
14:09:30	140.6	1937.70	.153	5.70	20.636
14:09:40	140.7	1937.71	.156	5.71	20.286
14:09:50	140.6	1937.71	.158	5.71	19.947
14:10:00	140.6	1937.69	.161	5.69	19.621
14:10:30	140.6	1937.73	.169	5.73	18.705
14:11:00	140.6	1937.75	.178	5.75	17.875
14:11:30	140.6	1937.81	.186	5.81	17.119

Well Name: NORTH PAARATTIE #2 _ Company: BEACH PETROLEUM Date: 15/03/81

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Tool Posi	tioned at a d	epth of: 146	8		
Time	Temperature	PSIA	Dt	Dρ	T+Dt/Dt
14:12:00	140.6	1937.82	.194	5.82	16.429
14:12:30	140.7	1937.83	.203	5.83	15.795
14:13:00	140.6	1937.82	.211	5.82	15.211
14:13:30	140.7	1937.82	.219	5.82	14.671
14:14:00	140.6	1937.82	.228	5.82	14.171
	140.6	1937.81	.236	5.81	
14:14:30		1937.86			13.706
14:15:00	140.7		.244	5.86	13.273
14:15:30	140.6	1937.65	.253	5.65	12.868
14:16:00	140.6	1937.63	.261	5.63	12.489
14:16:30	140.7	1937.58	.269	5.58	12.134
14:17:00	140.6	1937.55	.278	5.55	11.800
14:17:30	140.7	1937.52	.286	5.52	11.485
14:18:00	140.6	1937.53	.294	5.53	11.189
14:18:30	140.6	1937.51	.303	5.51	10.908
14:19:00	140.7	1937.52	.311	5.52	10.643
14:19:30	140.6	1937.49	.319	5.49	10.391
14:20:00	140.6	1937.49	.328	5.49	10.153
14:21:00	140.6	1937.50	.344	5.50	9.710
14:22:00	140.6	1937.53	.361	5.53	9.308
14:23:00	140.6	1937.54	.378	5.54	8.941
14:24:00	140.6	1937.51	.394	5.51	8.606
14:25:00	140.6	1937.55	.411	5.55	8.297
	140.7	1937.60	.428	5.60	
14:26:00					8.013
14:27:00	140.6	1937.57	.444	5.57	7.750
14:28:00	140.6	1937.56	.461	5.56	7.506
14:29:00	140.6	1937.53	.478	5.53	7.279
14:30:00	140.6	1937.57	.494	5.57	7.067
14:31:00	140.6	1937.55	.511	5.55	6.870
14:32:00	140.7	1937.53	.528	5.53	6.684
14:33:00	140.7	1937.54	.544	5.54	6.510
14:34:00	140.6	1937.52	.561	5.52	6.347
14:35:00	140.6	1937.52	.578	5.52	6.192
14:36:00	140.6	1937.45	.594	5.45	6.047
14:37:00	140.6	1937.47	.611	5.47	5.909
14:38:00	140.6	1937.39	.628	5.39	5.779
14:39:00	140.6	1937.37	.644	5.37	5.655
14:40:00	140.6	1937.34	.661	5.34	5.538
14:41:00	140.6	1937.30	.678	5.30	5.426
14:42:00	140.6	1937.31	.694	5.31	5.320
14:43:00	140.6	1937.30	.711	5.30	5.219
14:44:00	140.6	1937.28	.728	5.28	5.122
14:45:00	140.6	1937.29	.744	5.29	5.030
14:46:00	140.6	1937.28	.761	5.28	4.942
14:47:00	140.6	1937.30	.778	5.30	4.857
14:48:00	140.6	1937.30	.794	5.30	4.776
14:49:00	140.6	1937.31	.811	5.31	4.699
14:50:00	140.6	1937.30	.828	5.30	4.624
14:51:00	140.6	1937.32	.844	5.32	4.553
14:52:00	140.6	1937.32	.861	5.32	4.484
14:53:00	140.6	1937.36	.878	5.36	4.418
14:54:00	140.6	1937.33	.894	5.33	4.354
14:55:00	140.6	1937.31	.911	5.31	4.293
14:56:00	140.6	1937.32	.928	5.32	4.234
14:57:00	140.7	1937.36	.944	5.36	4.176
14:58:00	140.7	1937.38	.961	5.38	4.121
14:59:00	140.6	1937.40	.978	5.40	4.068
15:00:00	140.7	1937.40	.994	5.40	4.017
15:01:00	140.6	1937.42	1.011	5.42	3.967
15:02:00	140.6	1937.43	1.028	5.43	3.919
15:03:00	140.7	1937.43	1.044	5.43	3.872
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Well Name: NORTH PAARATTIE #2 Company: BEACH PETROLEUM Date: 15/03/81

Time	ioned at a d Temperature	PSIA	Dt	Dρ	T+Dt/Dt
15:04:00	140.6	1937.43	1.061	5.43	3.82
15:05:00	140.6	1937.43	1.078	5.43	3.78
15:06:00	140.6	1937.45	1.094	5.45	3.74
15:07:00	140.6	1937.49	1.111	5.49	3.70
15:08:00	140.7	1937.50	1.128		3.66
15:09:00	140.6	1937.49	1.144		3.62
15:10:00	140.6	1937.47	1.161	5.47	3.58
15:11:00	140.6	1937.51	1.178	5.51	3.54
15:12:00	140.6	1937.53	1.194	5.53	3.51
15:13:00	140.6	1937.52	1.211	5.52	3.47
15:14:00	140.6	1937.53	1.228	5.53	3.44
15:15:00	140.6	1937.53	1.244	5.53	3.41
15:16:00	140.6	1937.55	1.261	5.55	3.37
15:17:00	140.7	1937.58	1.278	5.58	3.34
15:18:00	140.6	1937.57	1.294	5.57	3.31
15:19:00	140.7	1937.61	1.311	5.61	3.28
15:20:00	140.6	1937.61	1.328	5.61	3.25
15:21:00	140.6	1937.63	1.344		3.23
15:22:00	140.6	1937.65	1.361	5.65	3.20
15:23:00	140.6	1937.65	1.378	5.65	3.17
15:23.00 15:24:00	140.6	1937.65	1.370	5.65	3.15
15:25:00	140.6	1933.96	1.411	1.96	3.12
15:26:00	140.5	1933.84	1.428	1.84	3.10
15:27:00	140.5	1933.82	1.444	1.82	3.07
15:28:00	140.5	1933.83	1.461	1.83	3.05
15:29:00	140.6	1933.89	1.478	1.89	3.03
15:30:00	140.5	1933.91	1.494	1.91	3.00
15:31:00	140.6	1933.91	1.511	1.91	2.98
15:32:00	140.5	1933.94	1.528	1.94	2.96
15:33:00	140.6	1933.96	1.544	1.96	2.94
15:34:00	140.5	1933.99	1.561	1.99	2.92
15:35:00	140.5	1933.98	1.578	1.98	2.90
15:36:00	140.5	1934.02	1.594	2.02	2.88
15:37:00	140.6	1934.04	1.611	2.04	2.86
15:38:00	140.5	1934.03	1.628	2.03	2.84
15:39:00	140.5	1934.02	1.644	2.02	2.82
15:40:00	140.5	1934.08	1.661	2.08	2.80
15:41:00	140.5	1934.13	1.678	2.13	2.78
15:42:00	140.5	1934.13	1.694	2.13	2.77
15:43:00	140.6	1934.20	1.711	2.20	2.75
15:44:00	140.6	1934.19	1.728	2.19	2.73
15:45:00	140.5	1934.23	1.744	2.23	2.72
15:46:00	140.5	1934.23	1.761	2.23	2.70
15:47:00	140.5	1934.25	1.778	2.25	2.68
15:48:00	140.6	1934.28	1.794	2.28	2.67
15:49:00	140.5	1934.25	1.811	2.25	2.65
15:50:00	140.5	1934.21	1.828	2.21	2.64
5:51:00	140.5	1934.27	1.844	2.27	2.62
5:52:00	140.6	1934.40	1.861	2.40	2.61
15:53:00	140.5	1934.42	1.878	2.42	2.59
5:54:00	140.6	1934.44	1.894	2.44	2.58
5:55:00	140.6	1934.47	1.911	2.47	2.57 2.57
5:56:00	140.5	1934.47	1.928	2.47	2.55
5:57:00	140.5	1934.48	1.944	2.48	2.54
5:58:00	140.6	1934.49	1.961	2.49	2.53
5:59:00	140.5	1934.51	1.978	2.51	2.51
6:00:00	140.5	1934.50	1.994	2.50	2.50
6:01:00	140.6	1934.55	2.011	2.55	2.49
6:02:00	140.6	1934.56	2.028	2.56	2.47

Well Name: NORTH PAARATTIE #2 _ Company: BEACH PETROLEUM Date: 15/03/81

Tool Posi	tioned at a de	epth of: 146	8		
Time	Temperature	PSIA	Dt	Dρ	T+Dt/Dt
16:04:00	140.6	1934.57	2.061	2.57	2.456
16:05:00	140.5	1934.58	2.078	2.58	2.444
16:06:00	140.5	1934.58	2.094	2.58	2.432
16:07:00	140.6	1934.58	2.111	2.58	2.421
16:08:00	140.6	1934.59	2.128	2.59	2.410
16:09:00	140.6	1934.59	2.144	2.59	2.399
16:10:00	140.5	1934.58	2.161	2.58	2.388
16:11:00	140.6	1934.61	2.178	2.61	2.378
16:12:00	140.6	1934.64	2.194	2.64	2.367
16:13:00	140.6	1934.62	2.211	2.62	2.357
16:14:00	140.6	1934.66	2.228	2.66	2.347
16:15:00	140.5	1934.66	2.244	2.66	2.337
16:16:00	140.6	1934.66	2.261	2.66	2.327
16:17:00	140.5	1934.69	2.278	2.69	2.317
16:18:00	140.5	1934.69	2.294	2.69	2.308
16:19:00	140.6	1934.71	2.311	2,71	2.298
16:20:00	140.6	1934.68	2.328	2.68	2.289
16:21:00	140.5	1934.70	2.344	2.70	2.280
16:22:00	140.6	1934.72	2.361	2.72	2.271
16:23:00	140.5	1934.69	2.378	2.69	2.262
16:24:00	140.6	1934.74	2.394	2.74	2.253
16:25:00	140.5	1934.73	2.411	2.73	2.244
16:26:00	140.5	1934.74	2.428	2.74	2.236
16:27:00	140.6	1934.75	2.444	2.75	2.227
16:28:00	140.6	1934.76	2.461	2.76	2.219
16:29:00	140.6	1934.77	2.478	2.77	2.211 2.203
16:30:00	140.6	1934.76	2.494	2.76	2.203 2.195
16:31:00 16:32:00	140.6 140.5	1934.77 1934.78	2.511 2.528	2.77 2.78	2.193
16:32:00	140.5	1934.79	2.544	2.79	2.179
16:34:00	140.5	1934.80	2.561	2.80	2.171
16:35:00	140.5	1934.80	2.578	2.80 2.80	2.164
16:36:00	140.5	1934.84	2.594	2.84	2.156
16:37:00	140.6	1934.85	2.611	2.85	2.149
16:38:00	140.5	1934.85	2.628	2.85	2.142
16:39:00	140.6	1934.87	2.644	2.87	2.134
16:40:00	140.6	1934.86	2.661	2.86	2.127
16:41:00	140.6	1934.88	2.678	2.88	2.120
16:42:00	140.6	1934.86	2.694	2.86	2.113
16:43:00	140.6	1934.90	2.711	2.90	2.107
16:44:00	140.6	1934.89	2.728	2.89	2.100
16:45:00	140.6	1934.90	2.744	2.90	2.093
16:46:00	140.6	1934.88	2.761	2.88	2.087
16:47:00	140.6	1934.90	2.778	2.90	2.080
16:48:00	140.5	1934.89	2.794	2.89	2.074
16:49:00	140.6	1934.90	2.811	2.90	2.067
16:50:00	140.6	1934.90	2.828	2.90	2.061
16:51:00	140.6	1934.91	2.844	2.91	2.055
16:52:00	140.6	1934.91	2.861	2.91	2.049
16:53:00	140.5	1934.91	2.878	2.91	2.042
16:54:00	140.6	1934.92	2.894	2.92	2.036
16:55:00	140.6	1934.93	2.911	2.93	2.031
16:56:00	140.6	1934.93	2.928	2.93	2.025
16:57:00	140.5	1934.95	2.944	2.95	2.019
16:58:00	140.5	1934.95	2.961	2.95	2.013
16:59:00	140.6	1934.96	2.978	2.96	2.007
16:59:40	140.5	1934.96	2.989	2.96	2.004
16:59:50	140.5	1934.96	2.992	2.96	2.003
17:00:00	140.5	1934.97	2.994	2.97	2.002
17:00:10	140.6	1934.97	2.997	2.97	2.001

PRESSURE SURVEY

Page 5

Well Name: NORTH PAARATTIE #2 Company: BEACH PETROLEUM Date: 15/03/81

Tool Positioned at a depth of: 1468

Time Temperature PSIA Dt Dp T+Dt/Dt 17:00:20 140.6 1934.98 3.000 2.98 2.000

LINEAR PRESSURE VS. LOG TIME

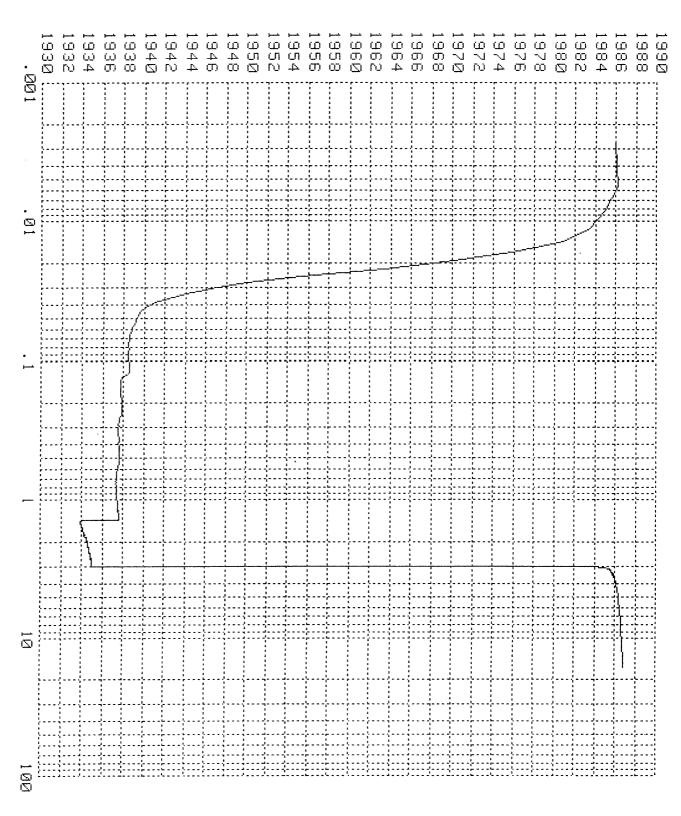
BEACH PETROLEUM

dT (Hours)

NORTH PAARATTIE #2 30/64 CHOKE

Start of plot: 14:00:20 Date: 15/03/81 Finish of plot: 06:11:00 Date: 16/03/81

**** Pressure (PSIA) ****



GO INTERNATIONAL AUSTRALIA PTY. LTD.

COMPANY..BEACH PETROLEUM

STATE...VICTORIA

FIELD....PAARATTIE

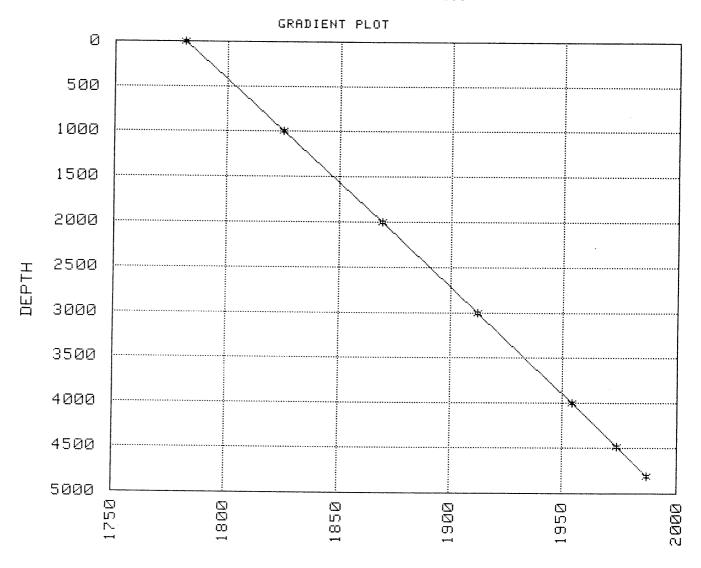
WELL...#2

DATE.....16/03/81

PURPOSE.....GRADIENT

ELEMENT....H.P.PROBE

SERIAL No...509



PRESSURE

DEPTH (TVD)FT	PRESSURE	GRADIENT (PSI/FT.)
0.0	1781.22	
1000.6	1825.14	.044
2001.3	1869.12	.044
3001.9	1912.16	.043
4002.6	1954.00	.042
4488.1	1973.77	.041
4816.2	1986.84	.040

GO INTERNATIONAL AUSTRALIA PTY. LTD. P.O. BOX 380 SALE, VICTORIA 3850

BEACH P	ETROLEUM 1	N.L.			EXPLORAT	TION		NORTH PAARATTE NO. 2 March 14, 1981
_	Test: Is	sochronal						
HOURS	TUBING PRESS	CASING PRESS	WELL HEAD TEMP	DIFF PRESS H20 X2	STATIC PRESS	SEPARATOR TEMP FO	GAS VOLUME MCF/DAY	ORIFICE PLATE
March 1	4, 1981				,			
0800	1766	100						
0804	Well ope	ened up on	choke	size 16/	64			1.250
0810	1760	220	56					
0820	1760	280	59					
0830	1760	300	58					
0830	Changed			18/64				
0835	1743	300	58					
_ 1084	1750	305	57					
0850	1749	325	58			4-		
0900	1746	332	58	86.50	340	17		
_ 0100	1746	350	60	83.50	340	19		
0920	1746	355	60	84.00	340	20		
0930	1746	360	60	83.40	360	21		
0940	1746	380	61	86.50	367	21		
1000	1744	400	60	83.40	360	21	O 7MMCE/	DAV
1015	1743	425	63	89.50	375	23	2.7MMCF/	DAY
1030	1741	425	63	92.00	375	24		
1045	1741	425	64	92.50	380	25 25		
1100	1740	450	64 66	93.50	380 385	26		
■ 1115	1739 1739	465 475	66 66	96.70 97.30	385	27		
1130 ■ 1130	Shut in			hole bui		21		
1135	1770	470	66	note but	ra ap			
1140	1770	455	66					
1145	1770	450	66					
1200	1759	425	66					
1215	1769	410	66					
1230	1768	410	66					
1430		ened up on		choke				1.500
1430	1767	340	67					
1445	1704	410	66	90.00	490	31		
1 500	1705	415	67	88.00	490	30		
1515	1711	450	67	85.00	495	26		
1530	1707	480	66	87.50	495	26		
_ 1545	1702	500	67	90.50	495	27		
1600	1704	520	67	91.40	510	29		
1 615	1704	555	67	92.00	510	29	4.7 MMCF	/DAY
1645	1705	605	67	92.90	525	30		
1700	1705	605	67	92.90	525	30	4.8 MMCF	/DAY
1715	1704	625	67	93.60	525	30		
1730	1705	625	68	Well sh	ut in at	1730 hours		
1735	1772	605	67					
1740	1772	600	66					
1745	1772	600	66					
1815	1771	530	64					
1830	1771	510	64					

HOURS	TUBING PRESS	CASING PRESS	WELL HEAD TEMP	DIFF PRESS H20 X2	STATIC PRESS	SEPARATOR TEMP F ^O	GAS VOLUME MCF/DAY	ORIFICE PLATE	
March	15, 1981								
0800 0805 0810	1767 1661 1656	300 325 330	65 71 68	Flow we	ell on 26,	/64 choke ar	ıd	1.875	
0815	1654	375	70	82.50	420	28			
0830	1646	420	75	83.70	486	26			
0845	1643	465	71 72	83.50	482 487	28			
0900 0915	1643 1643	500 550	73 74	83.00 84.20	467 487	29 30			
0930	1643	580	80	84.80	500	30			
0945	1644	610	78	83.20	502	32			
1000	1645	650	78	83.50	505	34			
_ 1015	1641	670	84	83.50	510	36	7.4MMCF/	DAY	
1030	1642	700	80	82.50	515	36			
1045	1642 1774	729 725	75 78	83.20 84.00	505 495	38 39 Shut	in well		
1100 1 105	1774	725 725	70 77	04.00	490	39 Silut	m wen		
1110	1773	700	76						
1115	1773	640	75						
1130	1773	580	74						
1200	1772	540	72						
1300	1771	490	72	-1	11 20	/C/L 1 0 00	0 6:		
1400	1770	450 505	72	Flow we	11 on 30/	/64 and 2.00	U orifice		
1405 1410	1549 1549	505 525	74 74	85.00	625	44			
1430	1549	590	74 74	85.20	630	46			
1445	1548	635	75	86.20	630	47			
1500	1549	680	75	87.00	615	48			
1515	1550	725	76	87.00	630	49			
1530	1548	750 700	76	86.7	630	49			
1545	1548	780	77 77	87.00	640 600	50 50			
■1600 1615	1549 1549	810 825	77 76	86.20 85.00	600	49			
1 630	1549	850	77	85.40	578	51	9/3MMCD/E	ΣΑΥ	
1645	1549	865	78	88.00	578	50	.,, .		
1700	1550	880	77	88.80	585	51	Shut in w	ell final build	un
1705	1775	870	77	Final f	low track			or mar buy, a	αр
1710	1774	845	76						
─1715 1730	1774	810	75 74						
1730	1773 1773	750 730	74 72						
1800	1773	730 700	72 70						
1830	1772	680	69						
1900	1770	650	65						
2000	1769	600	-						
2200	1769	540	-						
2400 0400	1769 1768					•			
0600	1768								

APPENDIX - 8

BIT RECORD



RIT RECORD

	WELL NO.	ż		•	TYPE MUD	53/4 6M671. VA6M 64	DRAWWORKS POWER	2.6m671	FORMATION	REMARKS	3 6 I TRO 1842 996	15.N.B	ENB	ENB	FNB	93 to 78 37 16 TR.O To Case
	-				VER	1. Veen	DRAWWOR	2.6	DULL. COND.	G OTHER	1 TR.0	67 1/8 TRIP 15 N. B	78 % TRID ENB	66 \$ TRIP ENB	92 40 82 5 4 16 TRID FNB	4 16.0
		.	SALESMAN		PUMP POWER	6mb7	Ε		DOLL	1 83	36	67	78%	661	161	37.
		BITTE	SAL		H 3	3	LENGTH		MUD	¥.1	- 1				82	1.8
		NTH PAGRATTE			LINER	3		3//6	ž	WT. VIS.	92 42	9 30	9.7 40	9.242	3.2 40	3.7
	LOCATION	MEN					G.	2,3/6	Σ	N						
	707	-		>				11/9	ß	<u> </u> -	8	Ş.	8	8	\$ 60	3
	36		COLPUSHER	P. Low			0.0	//9	PUMP	ATION	S	8	3 60	S		8
	RANGE	ಸ	TOOLP	Ø:	PUMP NO. 2	612 4514 61508			VERT PUMP	PRESS	450	jao	1150	392 151, 253/1411 12 100 114 1150	1150	3/1
	SHIP	ようほり CamPAell			PUMP	V	UMBER	9	VERT	DEV.	3%	3,6	1/6	1.12	27%	, C
	TOWNSHIP	33			INER	3	1	DRILL 5 % /6 COLLARS /6	0	LBS.	3	96	90	00/	90	8
	7			2	-	45		SOLLA			5%	3	43	25g	3	2 6
2	SECTION			Ž		12			Accu	HRS	53	191	99	7/1	127	7'''
200		,		rach		8			ACCUM		22.5	615	9/4	25.3	17.5	23.7
		1/10		G,			0.0	4.9	9		53	23%	7.00	15%	12%	61
<u> </u>	STATE		~	BENEH Perturberm	PUMP NO. 1	14380			<u> </u>	d d	1195 1195 53 325 53 5/0 100 3/ 450	136, 23/4 57.9 76/1. 20 90 36 1000	3629 1073 224 476 99 20 11, 1150	392	311 1/6 04 2/4 TEI 2/6 1/61 44E	0211 46 08 56 8111 1.50 61 154
			OPERATOR	60	<u> </u>	3	TYPE	STAN	DEPTH	OUT	95		58	171	4365	4827
			Ö.	۵	REACHED T.D.			Reso ALSTAN	DE	U		25.56	L	4021		
			RIG		T				1410110	4	63392	FA845	FA849	PRYGI	868 NS	15407
U.S.A.	FIELD	····			SET SAND ST.		SIZE	14.9	JET	32ND IN	3.18	3.5	3.6	3.10	3.6	2.6
PRINTED IN U. S.					UNDER INTER.			TOOL JOINTS	1	J L -	1414 HTC 05C35 318 103592	812 HTC 05C3 R3 3210 FAS45	812 NTC 6363 BJ FAB49	812 Hr OSC39I 3.10 PR361	81/2 HTC OSCIES 3.40 SN 898	6 9% HT 050155 316 11-407
				ri,	UNDER SURF.	18/1/ne 18/1/18		HIL MUMINION		A A A	エス	HTC	Mrc	Hrc	HR	14.00
	.		ACTOR	ريز. (C. O.	1	18/1	J. E.	1, "ALU.	1	4716	17.79	4.8	811	8%	8%	%6
	COUNTY		CONTRACTOR		SPUD	2%	DRILL PIPE	É	9	į	-	વ્ય	~	2	3	9

Yours for the asking ...

weight and rotary speed. This information is tail-ored for you, your loca-Technical information and help to get your hales down faster with fewer problems, mance, bit selection, drill string analysis, hydraulics Advice on rock bit perforprograms and recommendations on the best bit tion and your rig.

Your Hughes Tool Company representative is your best source for drilling you drill.

4541 8464E TRIP FAIR

45408411E TRIPTOLOG

63 72 34 1534 32 7496 - 750 P 3436 9.437 84 Oct TRIPTO TEST

Speco 525 4849

622

41 8%1 CHR.

HTC 056167 3×10×4308 5260 117

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Compliments of

Houston, Texas

HUGHES TOOL COMPANY

PE604744

This is an enclosure indicator page.

The enclosure PE604744 is enclosed within the container PE906815 at this location in this document.

The enclosure PE604744 has the following characteristics:

ITEM_BARCODE = PE604744

CONTAINER_BARCODE = PE906815

NAME = Mud Log

BASIN = OTWAY

PERMIT = PEP93

TYPE = WELL

SUBTYPE = MUD_LOG

DESCRIPTION = Mud Log (Enclosure 1 from WCR) for North
Paaratte-2

REMARKS =

DATE_CREATED = 8/02/81

DATE_RECEIVED = 28/04/81

 $W_NO = W736$

WELL_NAME = NORTH PAARATTE-2

CONTRACTOR = EXPLORATION LOGGING

CLIENT_OP_CO = BEACH PETROLEUM

(Inserted by DNRE - Vic Govt Mines Dept)

PE604745

This is an enclosure indicator page. The enclosure PE604745 is enclosed within the container PE906815 at this location in this document.

The enclosure PE604745 has the following characteristics:

ITEM_BARCODE = PE604745
CONTAINER_BARCODE = PE906815

NAME = Composite Well Log

BASIN = OTWAY PERMIT = PEP93

TYPE = WELL

SUBTYPE = COMPOSITE_LOG

DESCRIPTION = Composite Well Log (Enclosure 2 from

WCR) for North Paaratte-2

REMARKS =

DATE_CREATED = 8/02/81 DATE_RECEIVED = 28/04/81

 $W_NO = W736$

WELL_NAME = NORTH PAARATTE-2

CONTRACTOR =

CLIENT_OP_CO = BEACH PETROLEUM

(Inserted by DNRE - Vic Govt Mines Dept)