

[page 1 of 50]

909020 001

DEPT. NAT. RES & ENV



PE909020

PE909020 - 2

Geological / Drilling Reports

909020 002

Santos

Santos Ltd
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 91 King William Street
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Facsimile**DATE:**20.08.01**NO. OF PAGES:**2

(including this cover page)

TO:

DEPT. NATIONAL RESOURCES & ENVIRONMENT
MANAGER OF OPERATIONS & SAFETY
ATTENTION: HORACIO HAAG
FAX NO: (03) 9412 5152

DEPT. NATIONAL RESOURCES & ENVIRONMENT
MANAGER OF RESOURCES
ATTENTION: KOUROSH MEHIN
FAX NO. (03) 9412 5156

FROM:

A.P. PIETSCH

SUBJECT:

PENRYN 2

GEOLOGICAL REPORT

MUDLOG

PLEASE ADVISE VIA (08) 8224 7967 IF FAX NOT RECEIVED

909020 003

PAGE 1

Santos

A.B.N. 80 007 550 923

WELL PROGRESS REPORT

PENRYN 2

DATE: 18/08/01 (0600 Hours)

DEPTH: 1703 m

PROGRESS: Nil

DAYS FROM SPUD: 10.7

CURRENT OPERATION: WELL CASED AND SUSPENDED. RIG RELEASED..

NOPE COST (P&A)\$1,277,248
(C&S)\$1,406,161FINAL FORECAST COST (P&A)\$
(C&S)\$

COST TO DATE:

CASING DEPTH: 3 1/2" 1696m.

RIG: ODE 30

PROGRAMMED TD: ~1733m

ROTARY TABLE: 133.56m

GROUND LEVEL: 128.86m

MUD DATA	Type:	Wt:	Visc:	WL:	pH:	K ⁺ :	Cl ⁻ :	PV/YP:	Rmf:
(2400 Hours)	KC/PHPA	0	0	0	0	0	0	0/0	-

BJT DATA	PRESENT	No.	Make	Type	Size	Hours	Meterage	Condition
(2400 Hours)	LAST							

MD(m)	INCLINATION	AZIMUTH (T)	MD(m)	INCLINATION	AZIMUTH
-------	-------------	-------------	-------	-------------	---------

PREVIOUS 24 HOURS OPERATIONS:

WAIT ON CEMENT. LIFT BLOW OUT PREVENTORS AND SET SLIP & SEAL ASSEMBLY WITH 40 KLBS OVER CASING STRING WEIGHT. NIPPLE DOWN AND LAY OUT BLOW OUT PREVENTORS & SPOOLS. HELD UP BY NOT HAVING A FORKLIFT, BROKEN DOWN. USED EXCAVATOR TO PULL BLOW OUT PRREVENTORS OUT AND MOVE THEM. MOVE V-DOOR & CATWALKS. NIPPLE UP XMAS TREE & ADAPTOR FLANGE. ENGERGISE SEAL. PRESSURE TEST ADAPTOR FLAGS - BRADENHEAD TO 200 & 500 PSI, OK. RIG RELEASED AT 1700 HRS, 17/08/01. RIG WILL MOVE OFF SITE.

ANTICIPATED OPERATIONS:

909020 004

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DATE: 17.08.01

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GEOLOGICAL REPORT

MUDLOG

PLEASE ADVISE VIA (08) 8224 7967 IF FAX NOT RECEIVED

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WELL PROGRESS REPORT

PENRYN 2

DATE: 17/08/01 (0600 Hours)

DEPTH: 1703 m

PROGRESS: Nil

DAYS FROM SPUD: 10

CURRENT OPERATION: WAITING ON CEMENT.

NOPE COST (P&A)\$1,277,248
(C&S)\$1,406,161

FINAL FORECAST COST (P&A)\$
(C&S)\$

COST TO DATE:

CASING DEPTH: 3 1/2" 1696m.

RIG: ODE 30

PROGRAMMED TD: ~1733m

ROTARY TABLE: 133.56m

GROUND LEVEL: 128.86m

MUD DATA	Type:	Wt:	Visc:	WL:	pH:	K ⁺ :	Cl ⁻ :	PV/YP:	Rmf:
(2400 Hours)	KCl/PHPA	9.2	46	0	0	0	0	0/0	-

BIT DATA	PRESENT	No.	Make	Type	Size	Hours	Meterage	Condition
(2400 Hours)	LAST							

<u>MD(m)</u>	<u>INCLINATION</u>	<u>AZIMUTH (T)</u>	<u>MD(m)</u>	<u>INCLINATION</u>	<u>AZIMUTH</u>
--------------	--------------------	--------------------	--------------	--------------------	----------------

PREVIOUS 24 HOURS OPERATIONS:

PULL OUT OF HOLE. LAYING OUT PIPE TO RUN CASING. LAY DOWN KELLY, SWIVEL & RKB's. RIG TO RUN CASING. HOLD SAFETY MEETING. RUN 3-1/2" CASING (VERY HIGH WINDS & RAIN). RUN 137 JOINTS & 1 MARKER. CIRCULATE CASING, PUMP BIOCIDES TREATED MUD. PUMP S.A.P.P. PRE-FLUSH. PRESSURE TEST DOWELL LINES PRIOR TO CEMENTING. MIX & PUMP 343 SACKS OF LEAD CEMENT AT 11.5 PPG AND 100 SACKS OF TAIL CEMENT AT 15.6 PPG. DISPLACE WITH 48 BARRELS OF 2% KCL BRINE & PUMP LUG TO 2000 PSI, HELD OK. WAIT ON CEMENT.

ANTICIPATED OPERATIONS:

WAIT ON CEMENT SET SLIPS & NIPPLE DOWN BLOW OUT PREVENTORS. INSTALL & TEST XMAS TREE. RELEASE RIG.

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DATE: 16.8.01NO. OF PAGES: 2
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FAX NO. (03) 9412 5156

FROM: A.P. PIETSCH

SUBJECT: **PENRYN 2** GEOLOGICAL REPORT MUDLOG

PLEASE ADVISE VIA (08) 8224 7967 IF FAX NOT RECEIVED

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WELL PROGRESS REPORT

PENRYN 2

DATE: 16/08/01 (0600 Hours)

DEPTH: 1703 m

PROGRESS: Nil

DAYS FROM SPUD: 9

CURRENT OPERATION: PULLING OUT OF HOLE, LAYING DOWN DRILL PIPE.

NOPE COST (P&A)\$1,277,243
(C&S)\$1,406,161FINAL FORECAST COST (P&A)\$
(C&S)\$

COST TO DATE: \$1,288,672

CASING DEPTH: 355m (7 5/8" CASING SHOE)

RIG: ODE 30

PROGRAMMED TD: ~1733m

ROTARY TABLE: 133.56m

GROUND LEVEL: 128.86m

MUD DATA	Type:	Wt:	Visc:	WL:	pH:	K ⁺ :	Cl ⁻ :	PV/YP:	Rmf:
(2400 Hours)	KCI/PHPA	9.2	46	7	9.5	-	19.5k	13/11	0.162 @ 55.27°C

BIT DATA	PRESENT	No.	Make	Type	Size	Hours	Meterage	Condition
(2400 Hours)	LAST	4	HYC	DS185GNV	6 3/4"	7.9	420	1-2-WT-N-X-I-NO-TD
		3	HU	STR90D	6 3/4"	14.4	196	1-1-WT-A-E-I-NO-BHA

	MD(m)	INCLINATION	AZIMUTH (T)		MD(m)	INCLINATION	AZIMUTH
49	1338	3.7°	234	52	1594	5.9°	229
50	1397	4.2°	234	53	1685	7.25°	221
51	1450	4.3°	234				

TVD: 1681.7m Maximum Offset: 61.8m 181° True North

PREVIOUS 24 HOURS OPERATIONS:

COMPLETE PULLING OUT OF HOLE. CLEAR RIG FLOOR. HOLD SAFETY MEETING. RIG UP BAKER ATLAS. RUN IN HOLE WITH RUN 1, GR-MLL-DLL-DAC-CAL-ZDL-CN. COMPLETE RUN 1. RIG UP AND RUN GR-FMT 23 POINTS PLUS 2 SAMPLE CHAMBERS. COMPLETE FMT'S, RIG DOWN BAKER ATLAS. RUN IN HOLE TO COME OUT SIDEWAYS. REAM AND WASH FROM FROM 1667m TO 1703m. CIRCULATE HOLE CLEAN. PULL OUT OF HOLE, LAYING DOWN DRILL PIPE.

ANTICIPATED OPERATIONS:

LAY DOWN DRILL PIPE. RUN AND CEMENT 3 1/2" MONOBORE TUBING.

1681.7 +
128.86
1810.76

909020 008

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DATE: 15/8/01

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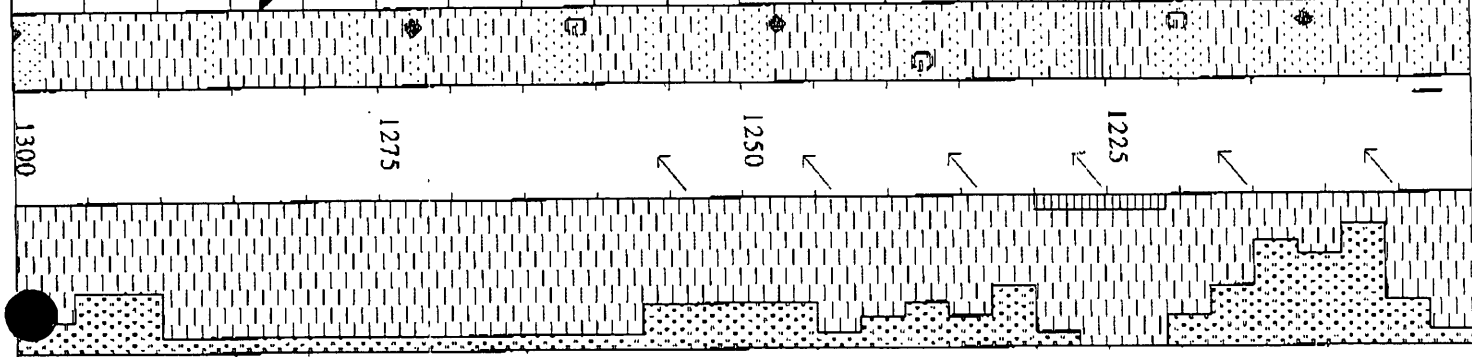
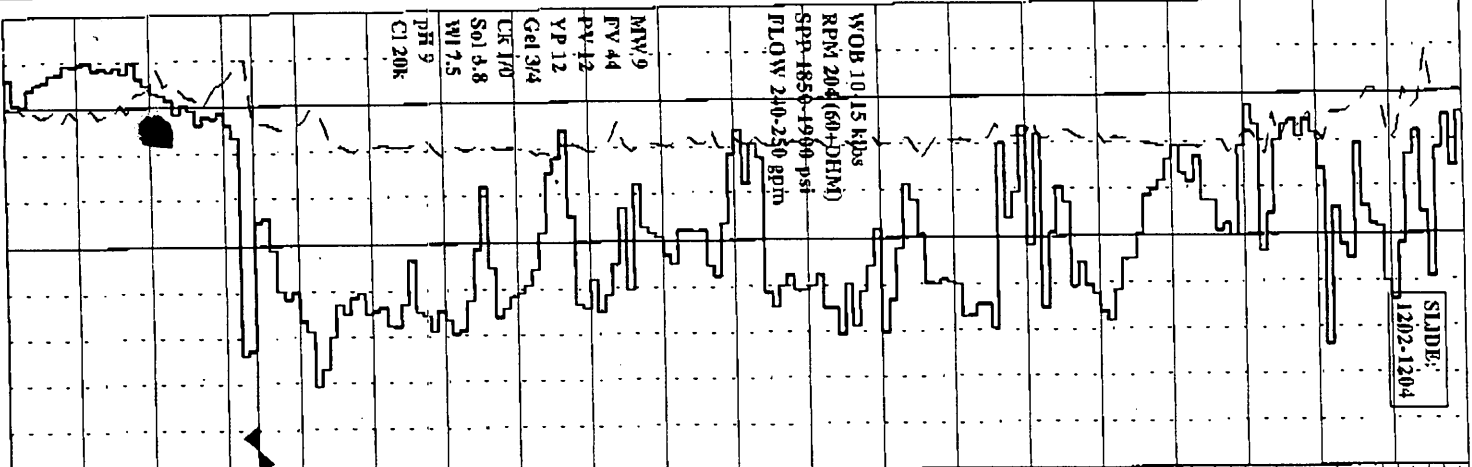
FROM: A.P. PIETSCH

SUBJECT: PENRYN 2
1200m - 1700m

GEOLOGICAL REPORT

MUDLOG

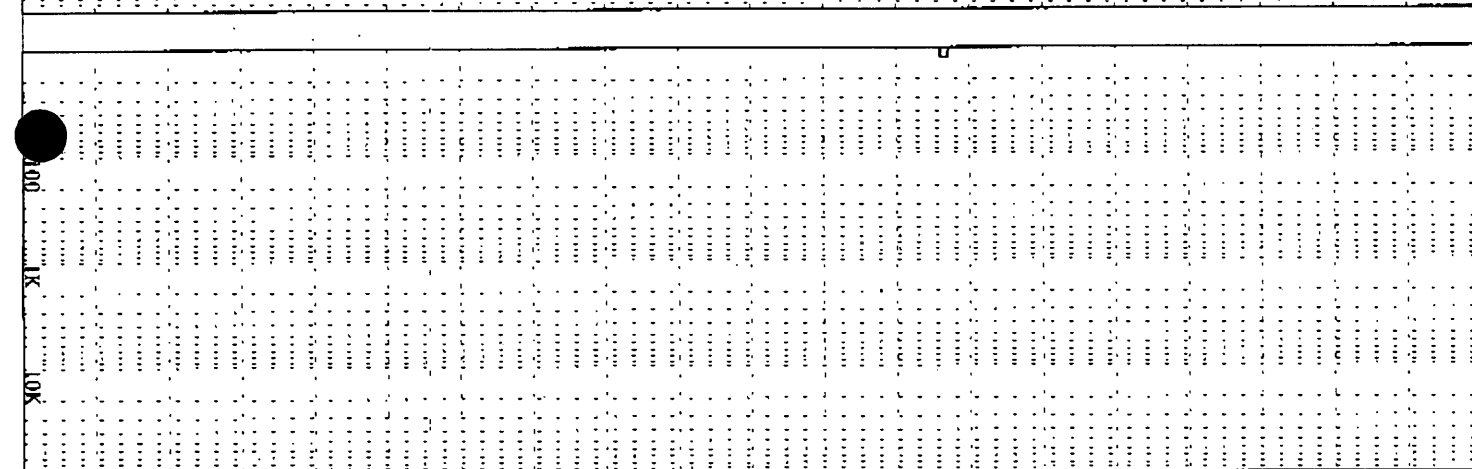
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NIL GAS

NIL GAS

NIL GAS



SURVEY @ 1207m: 3.89° 229.52T
SANDSTONE: cl-fmsl, off wh, f-v
cfs, v pr srt, srt frags, pyr cml
i/p, ssc, fr inf por, no fluor.

SURVEY @ 1217.46m: 3.92° 2321.80T
SILTSTONE: med bn, gy-bn, arg gl/t
CL YST i/p, micmic, v sfl-disp,
amorph.

SURVEY @ 1227.2m: 3.88° 212.92T
CLAYSTONE: med-dk bn, med gy bn,
ared gl/ SLTST, occ micmic, disp,
amorph.

SANDSTONE: ll gy, v/ gl aren
SLTST, abdt ll gy arg mix, com
carb frags, glauc, micmic & liths,
fr dissem pyr, fr-lsc mod hd, pr
vis por, no fluor.

SURVEY @ 1236.99m: 3.86° 233.51T
SILTSTONE: med-dk bn, arg gl/t
CL YST, tr v/ aren, com carb frags
& micmic, tr dissem pyr, sfl, disp,
loc frm, amorph-sbblky.

SANDSTONE: ht gy, gy gn, v/ gl
aren SLTST, abdt ll gy arg mix,
com carb frags & glauc, tr micmic
& liths, fri, pr vis por, no fluor

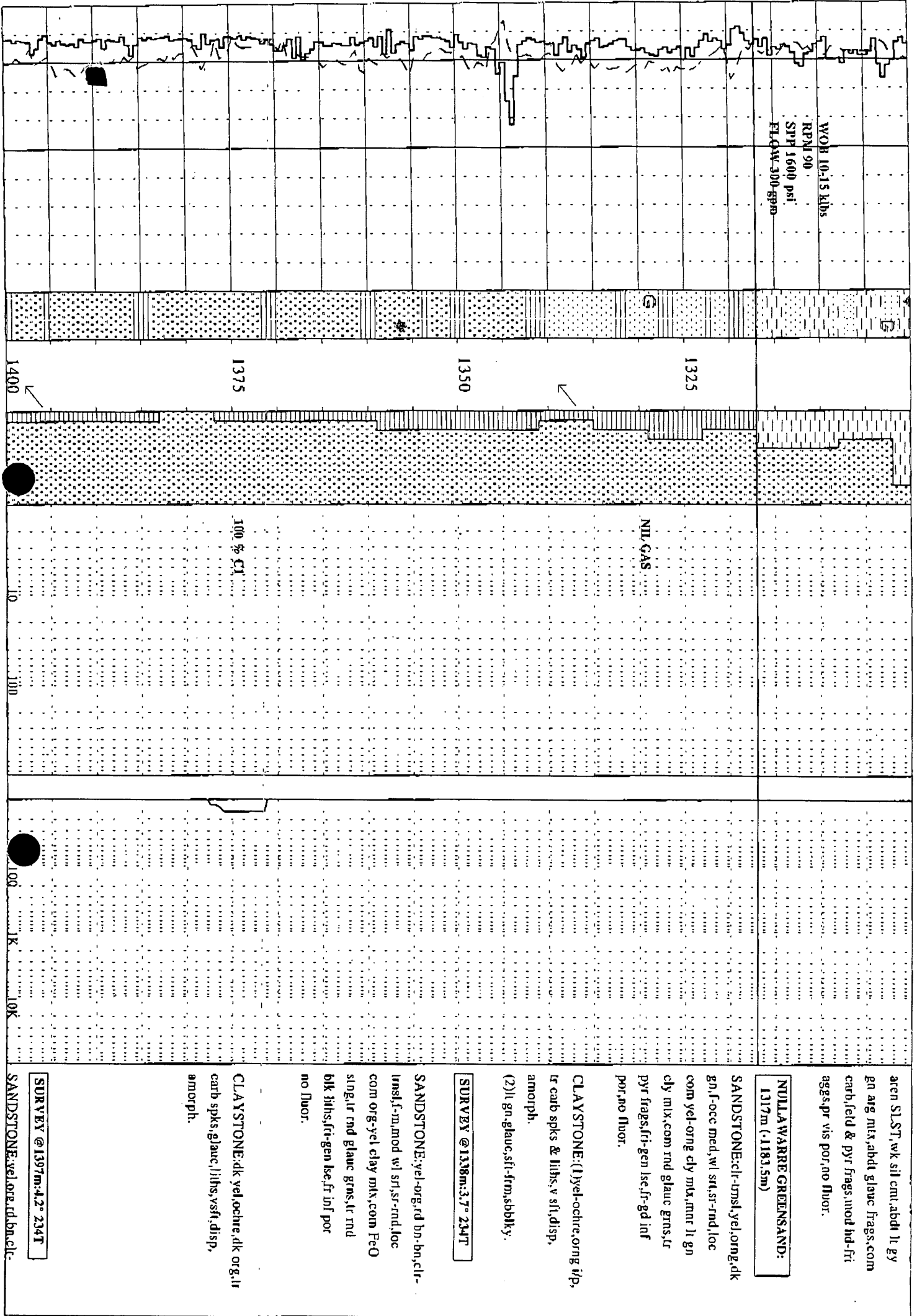
SURVEY @ 1256.46m: 3.92° 231.85T
SILTSTONE: med gy-med bn, occ dk
gy-dk bn, arg gl/ CL YST, com carb
frags, micmic & liths, v sfl-frm,
amorph-sbblky.

POOH, LD DH MOTOR

DIT #4: HYCALOG DS18GNVW
SIZE: 6.75" JETS: 4x12
IN : 1283 OUT: XXXXm
RUN: XXX HRS: XXX
COND:

Rm: 0.2 @ 64.5°F

SANDSTONE: ll gy, ll gy, v/ gl



aren SL-ST, wk sil cml,abd l1 gy
 gn arg mix,abd glauc frags,com
 carb,field & pyr frags,mod hd-ft
 aggs,pr vis por,no fluor.

NULLAWARRRE GREENSAND:
 1317m (-1183.5m)

SANDSTONE:cl-tmsl,yel,org,dk
 gn,f-occ med,w/ sil,sl-rnd,loc
 com yel-org cly mix,mnc l1 gn
 cly mix,com rnd glauc grns,lr
 pyr frags,fr-gen lse,fr-gd inf
 por,no fluor.

CLAYSTONE:(1)yel-ochre,org w/p,
 lr carb spks & liths,v sil,disp,
 amorph.
 (2)ll gn-glauc,sl-frms,shlky.

SURVEY @ 1338m, 3.7° 234T

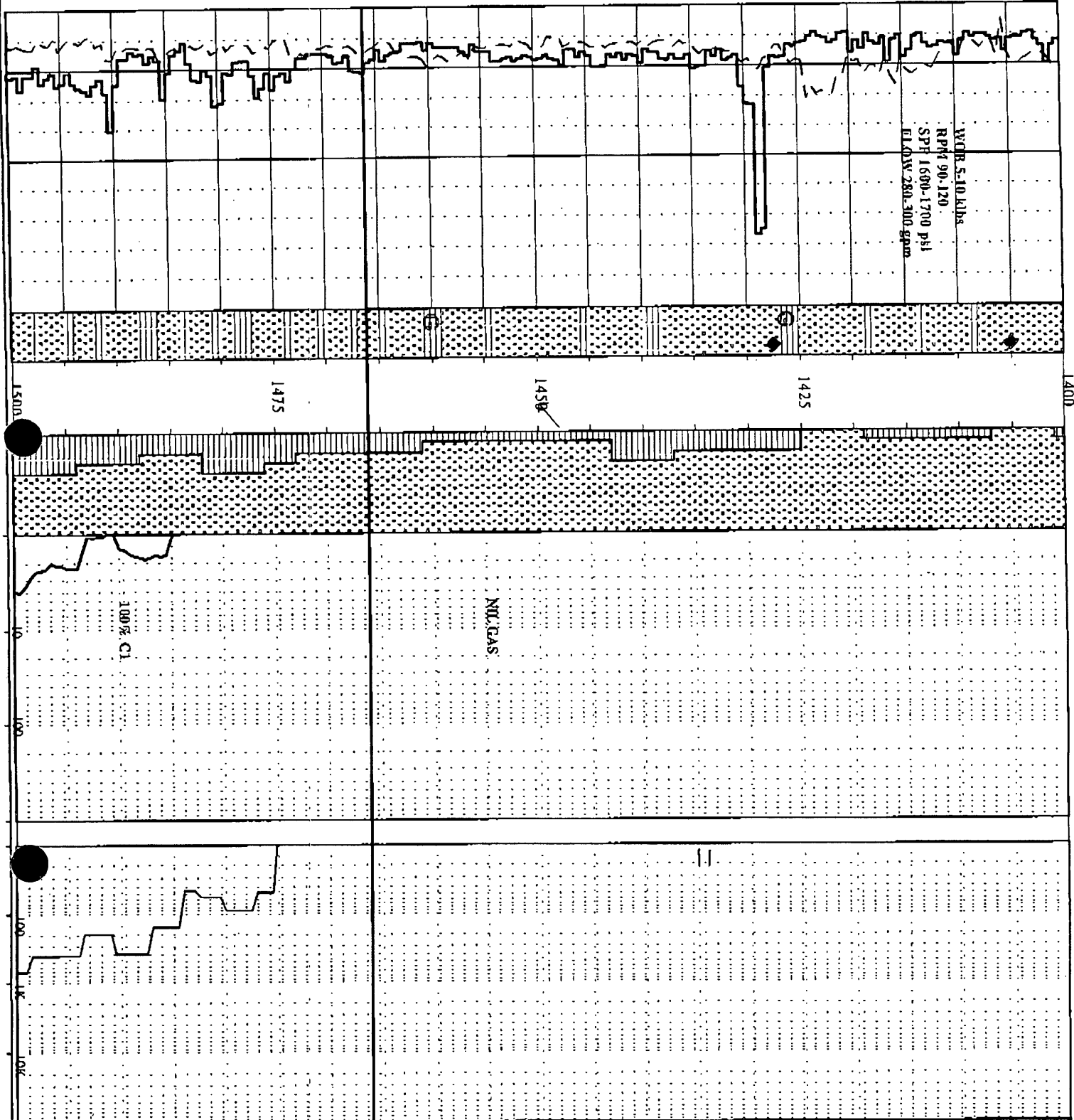
SANDSTONE:yel-org,rd bn-bn,cl-
 tmsl,f-m,mod w/ sil,sl-rnd,loc
 com org-yel clay mix,com FeO
 sil,lr rnd glauc grns,lr rnd
 blk liths,fr-gen lse,fr inf por
 no fluor.

CLAYSTONE:dk yel ochre,dk org,lr
 carb spks glauc,liths,vs,sl,disp,
 amorph.

SURVEY @ 1397m, 4.2° 234T

SANDSTONE:yel-ore,rd,bn,cl-

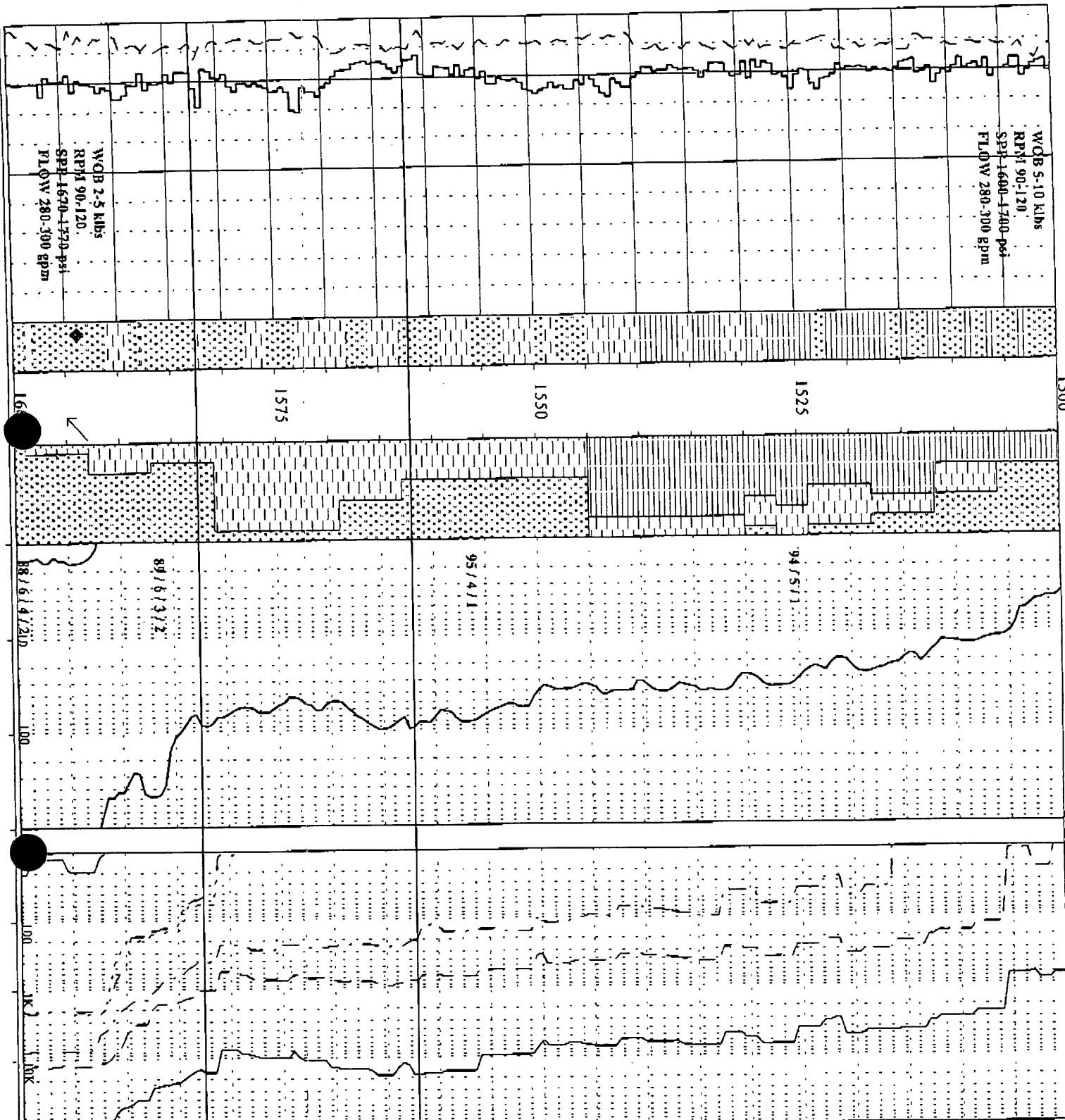
Well Name: PENRYN#2



(ms) f-med, tr crs, mod wt srl,
 sr-med, mur, yel, cly, mix, tr med
 glauc, frags, tr med blk, liths, fr
 -gen lsc, fr inf por, no fluor.
 SANDSTONE: yel, org, bn, cl, trmsl,
 f-med, gros, ore, crs, mod pr srl,
 sr-med, dur, arg, mix, tr carb spks,
 tr qtz conl, fr-down lsc, fr inf
 por, no fluor.
 CLAYSTONE: (1)dk, yel, org, tr carb
 spks, com liths, v srl, disp, amorph
 (2)pl, gn, pl, gn, gy, abd, glauc, v s
 n, disp, amorph.
SURVEY @ 1450m - 1.3° 234T
 SANDSTONE: yel, org, pl, bn, ch,
 trmsl, f-med, grms, mod wt srl, sr-
 med, mur, ar, mix, tr carb spks, tr
 glauc, fr-down lsc, fr inf por, no
 fluor.
 CLAYSTONE: olv, gy, gy, bn, ll, gy, gy
 gn, mur, dk, yel, pl, SLTST, l/p, con
 carb frags, glauc & liths, v srl-
 frms, sbblky.
BREAST MDST:
1466m (-1332, 5mSS)
 SANDSTONE: cl, trmsl, pl, yel, org,
 f-med, gros, mod wt srl, sr-sa, arg
 mlk, tr carb spks, lsc, pr inf por
 CLAYSTONE: olv, gy, gy, bn, ll, gy, gy
 gn, pl, SLTST, l/p, com, carb spks,
 tr glauc & liths, v srl, frms,
 sbblky.
 SANDSTONE: cl, trmsl, of, wh, pl
 well, f, crs, v, ore, srl, crs, mod, wt

ose services

Well Name: PENRYN#2



fr int por. no fluid

SILTSTONE: med gy bn, pl gy, dk gy, arg g/t CLYST, abdt carb spk com librs, r pyr nod, v sil-disp amorph

CLAYSTONE: med-dk gy, med gy/bn, arg, micnic, com carb spks, frm-mod hd, sbblky

CLAYSTONE: dk gy, dk gn gy, arg g/t

SLTST, glauc, com dissem pyr, tr worm burrows, mod hd, sbblky.

SILTSTONE: med gy, gy, arg g/t

CLYST, fr vf aren, com micnic & glauc, mod hd, sbblky.

FLAXMANS FM
1562m (-1428.5mSS)

SANDSTONE: clr, trnsil, pl bn, f-med w/ st, sr, md, lsc, ch, fr int por no fluid.

WAARBE FM
1582.5m (-1449mSS)

SANDSTONE: trnsil, frsid, pl gy, med-v crs, gr, st, ang-st, lsc, ch, fr int por no fluid.

SURVEY @1594m:5.9c 229T

SANDSTONE: trnsil, frsid, opq, mod wh vf-v crs, gr, st, sa-st, fr sil cont fr pyr eml, fr wh arg mtk, fr-geo

fr int por. no fluid

Geoservices

Well Name: PENRYN#2



WQB 2-10 kDbs
 Rptd 90-120
 SPG 1400-1950 pps
 FLOW 280-300 gpm

MOV 9.1
 PV 45
 PV 13
 VP 12
 Gal 3/4
 CK 1/0
 Sol 4.9
 W 7.0
 PH 9.5
 GR 40k

SILTSTONE: med gy, gy, bn, vf, areo,
 com micmic, rr glauc frags, mod hd
 sbblky.

SANDSTONE: (1) ms, milky, opp, med-
 v crs, pr srl, ang, sr, lr pyr cml,
 frt, gen lsc, fr inf por, oo fluor
 (2) wh-off wh, vf, f, w/ srl, sa-sr,
 mod stng sil cml, com wh kaol mix
 lr carb frags & hids, mod hd-fri
 aggs, pr vis por, no fluor.

EUMERALLA FM
 1634m (-1506 smss)

SANDSTONE: wh-ll gm, vf gl aren
 SLST up, w/ srl, mod stng sil cml
 tr calc cml, abdl o/l wh kaol mtx
 abdl glauc frags, tr carb, lr
 micmic, mod hd-down frt, pr vis por
 no fluor.

SANDSTONE: cr- (trns) off wh-ll gm
 vf, f, tr crs, sr-mod, mod stng sil
 cml, abdl off wh-ll go arg mtk,
 abdl carb spks, mod hd, pr vis por
 lr fluor.

FLUOR: 1653m - 1655m
 Tr, dim-mod br, gl, w/wh
 ppt, no vis cml, thin frt.

SANDSTONE: pl-m, gm, c, com gy, vf, f,
 w/ srl, sr-mod, sig sil cml, abdt
 arg mtk, abdl glauc, occ carb spks
 mod hd, spr vis por, no fluor.

SILTSTONE: (1) pl bn, gy, dn, bn, arg,
 occ carb spks, frm-mod bd, sbblky
 2) pl gy, dn, gy, aren, com glauc,
 frm, sbblky.

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GEOLOGICAL REPORT

MUDLOG

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WELL PROGRESS REPORT

PENRYN 2

DATE: 15/08/01 (0600 Hours)

DEPTH: 1703 m

PROGRESS: 420m

DAYS FROM SPUD: 8

CURRENT OPERATION: RIGGING TO RUN WIRELINE LOGS.

NOPE COST (P&A)\$1,277,248
(C&S)\$1,406,161

FINAL FORECAST COST (P&A)\$
(C&S)\$

COST TO DATE:

CASING DEPTH: 355m (7 5/8" CASING SHOE).

RIG: ODE 30

PROGRAMMED TD: ~1733m

ROTARY TABLE: 133.56m

GROUND LEVEL: 128.86m

MUD DATA	Type:	Wt:	Visc:	WL:	pH:	K ⁺ :	Cl ⁻ :	PV/YP:	Rmf:
(2400 Hours)	KCl/PHPA	9.1	44	7.0	9.5	19.9k	19.5k	12/13	

BIT DATA	PRESENT	No.	Make	Type	Size	Hours	Meterage	Condition
(2400 Hours)	LAST	3	HU	STR90D	6 3/4"	14.4	196	1-1-WT-A-E-I-NO-BHA

	MD(m)	INCLINATION	AZIMUTH (T)		MD(m)	INCLINATION	AZIMUTH
45	1236.99	3.86°	233.51	50	1397	4.2°	234
46	1246.71	3.86°	230.8	51	1450	4.3°	234
47	1256.46	3.92°	231.85	52	1594	5.9°	229
48	1265.65	3.85°	231.36	53	1685	7.25°	221
49	1338	3.7°	234				

TVD: 1681.7m Maximum Offset: 61.8m 181° True North

PREVIOUS 24 HOURS OPERATIONS:

DRILL AHEAD FROM 1283m TO 1703m. REACHED TD @ 2145 HOURS, 14/08/01. CIRCULATE HOLE CLEAN. WIPER TRIP TO 900m AND BACK TO BOTTOM. BREAK CIRCULATION AND WASH TO BOTTOM FROM 1672m. CIRCULATE HOLE CLEAN, PUMP SLUG, DROP SURVEY. PULL OUT OF HOLE.

ANTICIPATED OPERATIONS:

RUN IN HOLE FOR LOGGING RUN 1: GRAND SLAM. PULL OUT OF HOLE, RUN IN HOLE FOR LOGGING RUN 2: FMT SURVEY.

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WELL PROGRESS REPORT

PENRYN 2

DATE: 15/08/01 (0600 hours)

FORMATION TOPS						
FORMATION	MDRT (m)	MDSS (m)	H/L TO PROG.	H/L TO PENRYN 1	H/L TO FENTON CREEK 1	H/L TO MYLOR 1
SKULL CREEK	1152	1018.5	20.5m H	34.1m H	93.0m H	223.0m H
NULLAWARR E GRNSND	1317	1183.5	31.5m H	38.6m H	53.6m H	102.3m H
BELFAST MUDSTONE	1466	1332.5	5.5m H	32.1m H	2.4m L	77.8m H
FLAXMANS	1562	1428.5	NP	107.1m H	9m H	120.3m H
WAAREE	1582.5	1449	25m H	107.1m H	16.5m H	120.3m H
EUMERALLA	1634	1500.5	37.5m H	136.6m H	67.6m H	158.3m H
TD	1703	1569.5	30.5m H			

HYDROCARBON SHOW SUMMARY		
INTERVAL 1590-1612 ROP: 0.8-1.5 Ave: 1.1 mn/m 1616-1628 ROP: 0.8-1.2 Ave: 1.0 mn/m 1653-1665 ROP: 0.9-1.5 Ave: 1.2 mn/m	LITHOLOGY WAARRE FORMATION : GAS SHOW SANDSTONE: Colourless to translucent, frosted, opaque, pale grey, minor white, very fine to very coarse, poor sorting, angular to sub rounded, trace siliceous cement, loose, clean, fair to good inferred porosity, no fluorescence. WAARRE FORMATION : GAS SHOW SANDSTONE: (1) Translucent, white, medium to very coarse, poor sorting, angular to sub rounded, trace siliceous cement, trace pyrite cement, friable to generally loose, fair inferred porosity, no fluorescence. SANDSTONE: (2) White to off white, very fine to fine, well sorted, sub angular to sub rounded, moderately strong siliceous cement, common white kaolinitic matrix, trace carbonaceous fragments and lithics, moderately hard to friable aggregates, poor visual porosity, no fluorescence. EUMERALLA FORMATION : TRACE OIL SHOW SANDSTONE: White to light green, very fine grading to arenaceous SILTSTONE in part, well sorted, moderately strong siliceous cement, trace calcareous cement, abundant white kaolinitic matrix, abundant glauconite fragments, trace carbonaceous fragments and micromicaceous, moderately hard to dominantly friable aggregates, poor visual porosity, trace fluorescence. Fluorescence: Dim to moderately bright yellow / white pinpoint fluorescence, no visible cut, thin ring residue.	GAS 1675 Units Max. BG: 100 Units 88/6/4/2% 1203 Units Max. BG: 100 Units 88/6/4/2% 300 Units Max. BG: 80 Units 89/7/3/1%

Santos

A.B.N. 80 007 550 923

WELL PROGRESS REPORT

PENRYN 2

DATE: 15/08/01 (0600 hours)

GEOLOGICAL SUMMARY

INTERVAL	LITHOLOGY	GAS
1283-1317 ROP: 0.5-1.6 Ave: 0.7 mn/m	<p>SILTSTONE WITH MINOR SANDSTONE <u>SANDSTONE</u>: Light grey, light grey green, very fine grading to arenaceous SILTSTONE, well sorted, sub angular to sub rounded, abundant light grey green argillaceous matrix, common carbonaceous specks, lithics and glauconite, friable, poor visual porosity, no fluorescence. <u>SILTSTONE</u>: Medium to dark brown, medium grey brown, argillaceous grading to CLAYSTONE in part, trace carbonaceous fragments, micromicaceous, disseminated pyrite and lithics, very soft to firm, amorphous to sub blocky.</p>	No Gas
1317-1466 ROP: 0.5-9.0 Ave: 1.1 mn/m	<p>NULLAWARRE GREENSAND SANDSTONE WITH MINOR CLAYSTONE <u>SANDSTONE</u>: Yellow, orange, red brown to brown, fine to coarse, dominantly medium, moderately well sorted, sub rounded to rounded, locally common yellow to orange clay matrix, common iron oxide staining, trace rounded glauconitic fragments with occasional pyrite coating, trace pyrite fragments, trace rounded black lithics, friable to generally loose, fair inferred porosity, no fluorescence. <u>CLAYSTONE</u>: Yellow to orange, ochre, trace carbonaceous specks and lithics, very soft, dispersive, amorphous.</p>	No Gas
1466-1510 ROP: 0.6-3.0 Ave: 0.8 mn/m	<p>BELFAST FORMATION INTERBEDDED CLAYSTONE AND SANDSTONE <u>CLAYSTONE</u>: Olive grey, grey brown, light grey, grey green, grading to SILTSTONE in part, common carbonaceous specks, trace glauconite and lithics, very soft to firm, sub blocky. <u>SANDSTONE</u>: Colourless to translucent, pale yellow to orange, fine to medium grains, moderately well sorted, sub rounded to sub angular, minor yellow to orange clay matrix, trace carbonaceous specks, friable to generally loose, fair inferred porosity, no fluorescence.</p>	0-10 Units 100% C1
1510-1562 ROP: 0.7-1.8 Ave: 0.8 mn/m	<p>CLAYSTONE WITH MINOR SANDSTONE AND SILTSTONE <u>CLAYSTONE</u>: Medium to dark grey, medium grey brown, grey green in part, grading to arenaceous SILTSTONE in part, glauconitic in part, common disseminated pyrite, trace worm burrows, moderately hard, sub blocky. <u>SANDSTONE</u>: Colourless to translucent, pale yellow, pale brown, fine to very coarse, poor sorting, sub angular to rounded, loose, fair inferred porosity, no fluorescence. <u>SILTSTONE</u>: Medium grey brown, dark grey, argillaceous, common very fine arenaceous, common carbonaceous specks, trace micromicaceous, firm to moderately hard, sub blocky.</p>	10-80 Units 94/5/1%

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WELL PROGRESS REPORT

PENRYN 2

DATE: 15/08/01 (0600 hours)

GEOLOGICAL SUMMARY

INTERVAL	LITHOLOGY	GAS
1562-1582.5 ROP: 0.5-2.1 Ave: 0.8 mm/m	FLAXMANS FORMATION SILTSTONE WITH MINOR SANDSTONE <u>SILTSTONE</u> : Medium grey, grey green, argillaceous grading to CLAYSTONE in part, trace very fine arenaceous, common micromicaceous and glauconite fragments, moderately hard, sub blocky to blocky. <u>SANDSTONE</u> : Colourless to translucent, pale brown, fine to medium, moderately well sorted, sub rounded to rounded, loose, fair inferred porosity, no fluorescence.	40-90 Units 96/4/1%
1582.5-1615 ROP: 0.8-1.5 Ave: 0.8 mm/m	WAARRE FORMATION MASSIVE SANDSTONE WITH MINOR SILTSTONE <u>SANDSTONE</u> : Colourless to translucent, frosted, opaque, pale grey, minor white, very fine to very coarse, poor sorting, angular to sub rounded, trace siliceous cement, loose, clean, fair to good inferred porosity, no fluorescence. <u>SILTSTONE</u> : Medium grey, grey brown, arenaceous, trace micromicaceous, moderately hard, sub blocky.	100-1675 Units 88/6/4/2%
1615-1634 ROP: 0.6-2.1 Ave: 0.8mm/m	MASSIVE SANDSTONE WITH TRACE SILTSTONE <u>SANDSTONE</u> : (1) Translucent, white, medium to very coarse, poor sorting, angular to sub rounded, trace siliceous cement, trace pyrite cement, friable to generally loose, fair inferred porosity, no fluorescence. <u>SANDSTONE</u> : (2) White to off white, very fine to fine, well sorted, sub angular to sub rounded, moderately strong siliceous cement, common white kaolinitic matrix, trace carbonaceous fragments and lithics, moderately hard to friable aggregates, poor visual porosity, no fluorescence. <u>SILTSTONE</u> : Medium grey, grey brown, arenaceous, trace micromicaceous, moderately hard, sub blocky.	800-1200 Units 88/6/4/2%
1634-1680 ROP: 0.7-5.0 Ave: 0.6 mm/m	EUMERALLA FORMATION INTERBEDDED SANDSTONE AND SILTSTONE <u>SANDSTONE</u> : White to light green, very fine grading to arenaceous <u>SILTSTONE</u> in part, well sorted, moderately strong siliceous cement, trace calcareous cement, abundant white kaolinitic matrix, abundant glauconite fragments, trace carbonaceous fragments and micromicaceous, moderately hard to dominantly friable aggregates, poor visual porosity, trace dim to moderately bright yellow / white pinpoint fluorescence, no visible cut, thin ring residue. <u>SILTSTONE</u> : Dark grey to black, argillaceous, trace micromicaceous, hard, sub blocky.	70-300 Units 89/7/3/1%
1680-1703 ROP: 0.5-2.0 Ave: 0.7 mm/m	INTERBEDDED SILTSTONE AND SANDSTONE <u>SILTSTONE</u> : (1) Light grey brown to medium brown, argillaceous, trace carbonaceous specks, firm to moderately hard, sub blocky to blocky. <u>SILTSTONE</u> : (2) Light grey green to medium grey, arenaceous, glauconitic in part, firm, sub blocky. <u>SANDSTONE</u> : Light to medium green, colourless to translucent, medium grey, very fine to fine, well sorted, sub rounded to rounded, moderately strong siliceous cement, abundant grey green argillaceous matrix, abundant glauconite fragments, moderately hard, poor visual porosity, no fluorescence.	40-150 Units 92/5/2/1%

019

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Facsimile

DATE:

14/8/01

NO. OF PAGES:

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TO:

~~BEACH PETROLEUM~~
~~ATTENTION: HECTOR GORDON~~
~~FAX NO: 8338 2336~~

DEPT. NATIONAL RESOURCES & ENVIRONMENT
 MANAGER OF OPERATIONS & SAFETY
ATTENTION: HORACIO HAAG
 FAX NO: (03) 9412 5152

DEPT. NATIONAL RESOURCES & ENVIRONMENT
 MANAGER OF RESOURCES
ATTENTION: KOUROSH MEHIN
 FAX NO. (03) 9412 5156

FROM:

A.P. PIETSCH

SUBJECT:

PENRYN 2

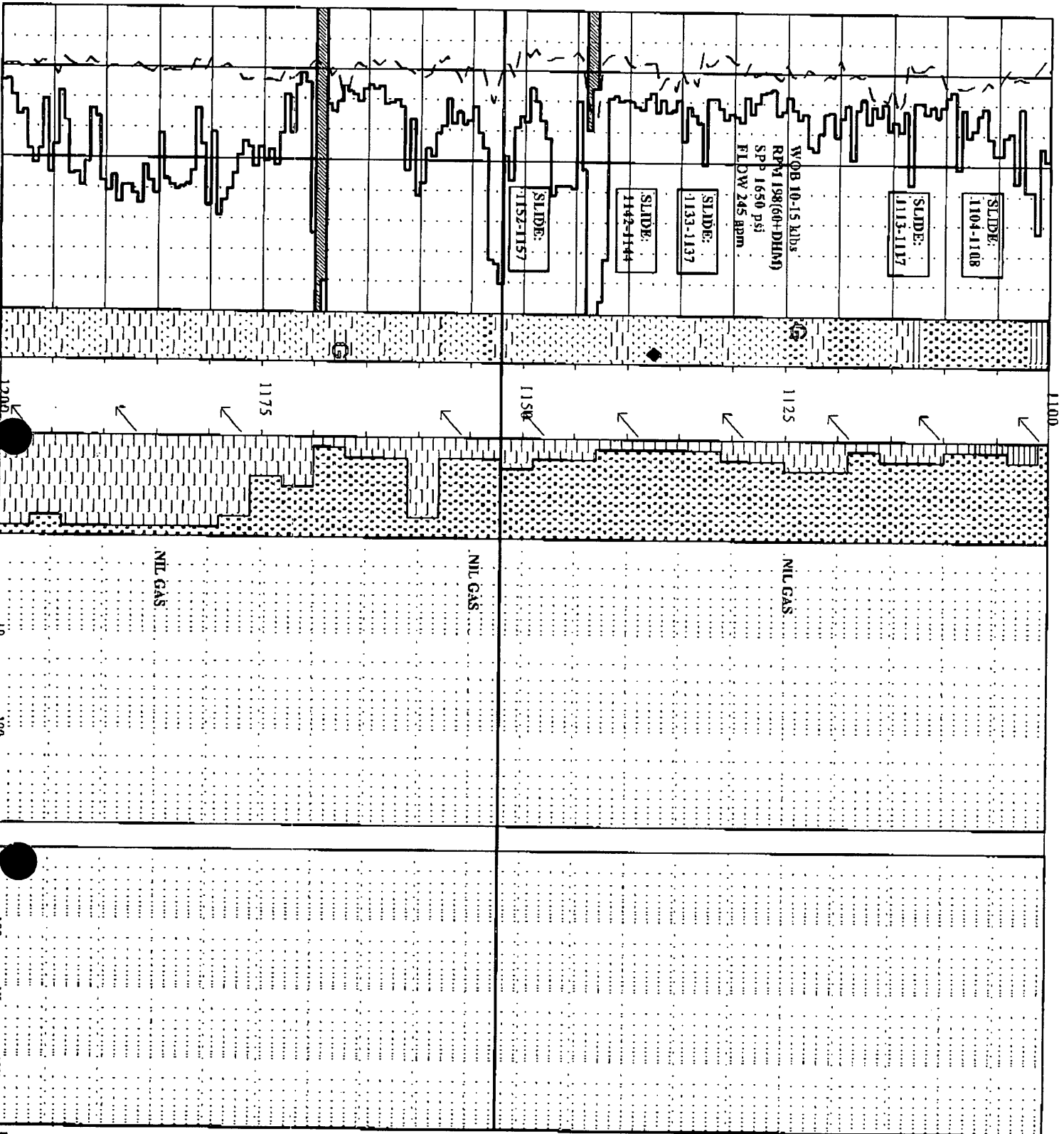
1100m - 1280m

GEOLOGICAL REPORT

MUDLOG

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Well Name: PENRYN#2



SURVEY @1093m:1.27 109.22T

SURVEY @1102m:2.95 132.12T

SANDSTONE:cl-fmsl,of wh-pl gy

vf,gr aren SLTST,lr carb spks &

feld,lr plauc,abdt,of wh-lt gy

arg mx,fr,pr vis por,ao fluor

SURVEY @1112m:3.09 159.92T

SURVEY @1121m:3.39 171.76T

SILTSTONE:lt gy,gy bn,un-dk bn,dk

gy i/p,arg gr CLVSY,aren gr vt

SST,lr carb frags & micritic,vsf-

fms,disp i/p,amorph-sbbkly.

SURVEY @1131m:3.52 184.64T

SANDSTONE:cl-fmsl,pl bn,fm,lr

crs,mod str-st-rod,lr sil con,lr

carb & glaue frags,loc,fr inf

por,ao fluor.

SURVEY @1141m:3.63 199.16T

SANDSTONE:wh,vt gl aren SLTST,

wl sr,sa-sr,abdt vth kaol mx,

com carb frags,fr,pr vis por,fr

fluor.

FLUOR: 1140-1149m:11.5%

dia,gr,vel,spid,ao cut

SKULL CREEK MDST:

1152m (1018.5mSS)

SANDSTONE:(1)H gy,lt gy,gr,vt

gl aren SLTST,wl sr,sa-sr,abdt

gy,gr,ely mx,com carb spks,

frhs & glaue,fr,pr vis por,

no fluor.

(2)cl-fmsl,vt-gr med,wt sr,

sr-med,loc,fr inf por,ao fluor.

SURVEY @1178m:3.98 217.55T

SILTSTONE:lt gy-dm dk gy,dk gy,

bn arg gl CLYST,lr aren,com

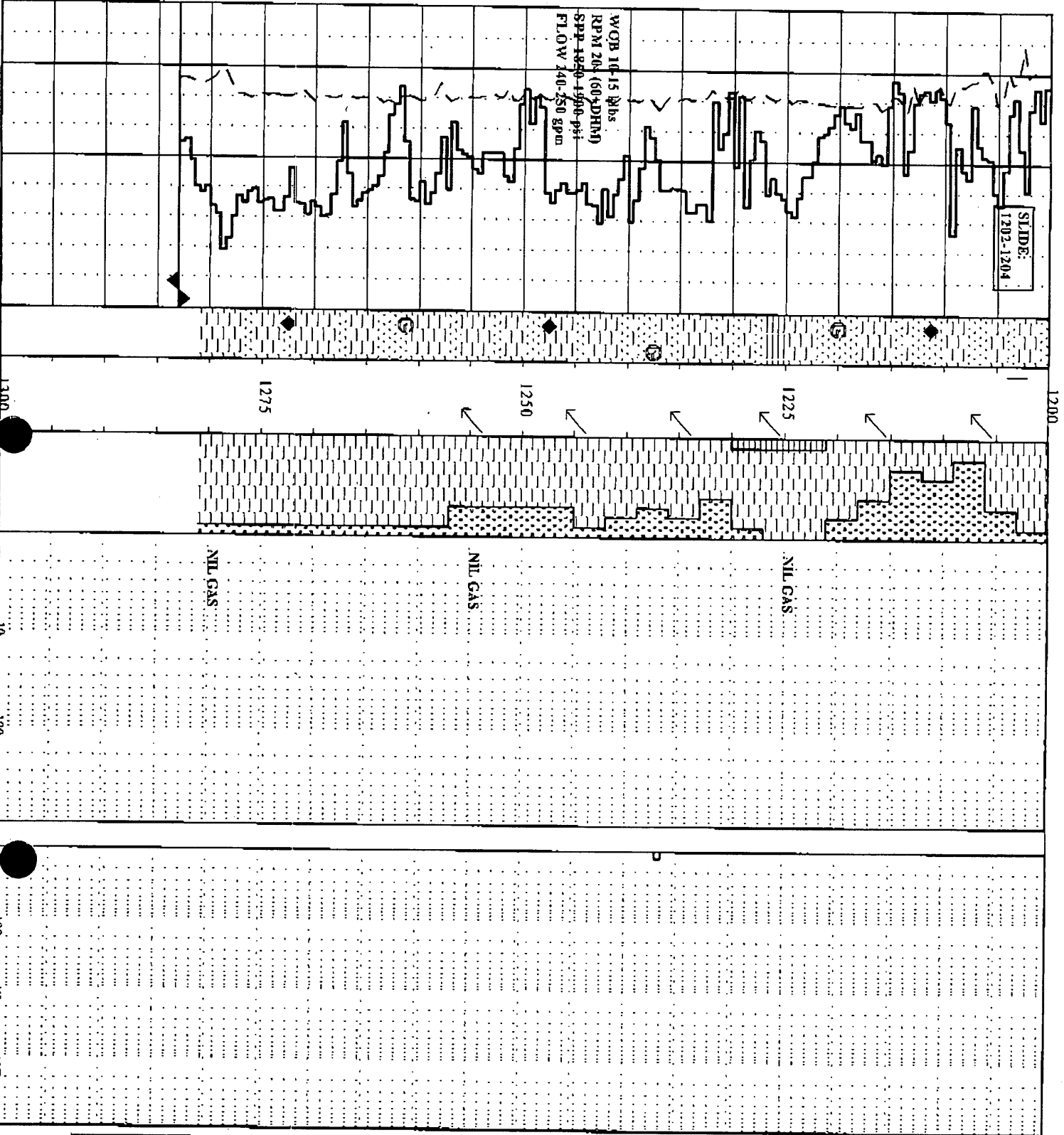
carb frags,micritic & liths,lr pyr

frags,v sft-disp,occ frm,amorph-sbbkly.

oservices

909020 021

Well Name: PENRYN#2



SURVEY @1198.29m: 410 231.40T

SURVEY @1207m: 3.86° 229.57T

SANDSTONE: ch-fms, ofT wh, f-v
c/s, v pr srl, srl frags, pyr conl
ip, lse, fr md por, no fluor.

SURVEY @1217.46m: 3.92° 2321.80T

SILTSTONE: med bn, gy-bn, arg gl
CLAYST: lf, micmic, v sf-disp,
anoorp.

SURVEY @1227.2m: 3.86° 232.92T

CLAYSTONE: med-dk bn, med gy, bn,
argn gl/ SLTST, oec micmic, disp,
anoorp.

SANDSTONE: lf gy, vf gl, aren
SLTST, abdt lf gy arg mix, com
carb frags, glauc, micmic & libb,
t dissem pyr, fr-lae mod hld, pr
vis por, no fluor.

SURVEY @1236.99m: 3.86° 233.51T

SILTSTONE: med-dk bn, arg gl
CLAYST, lf vf aren, com carb frags
& micmic, tr dissem pyr, sR, disp,
loc frm, anoorp-sbbly.

SANDSTONE: lf, gy, sv, go, vf, gl
aren SLTST, abdt lf gy arg mix,
com carb frags & glauc, lf micmic
& libb, fr, pr vis por, no fluor

SURVEY @1256.40m: 3.92° 231.85T

SILTSTONE: med gy, med bn, oec dk
gy, dk bn, arg gl/ CLAYST, com carb
frags, micmic & libb, v sf-fm,
anoorp-sbbly.

POOH TO CHANGE BHA

BIT #: DS185GNVW
SIZE: 6.75" JEITS: 312
IN: 1283 OUT: XXXXm
RUN: XXX HRS: XXX
COND:

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DATE: 14.08.01

NO. OF PAGES: 4
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TO:

DEPT. NATIONAL RESOURCES & ENVIRONMENT
MANAGER OF OPERATIONS & SAFETY
ATTENTION: HORACIO HAAG
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DEPT. NATIONAL RESOURCES & ENVIRONMENT
MANAGER OF RESOURCES
ATTENTION: KOUROSH MEHIN
FAX NO. (03) 9412 5156

FROM: A.P. PIETSCH

SUBJECT: PENRYN 2

GEOLOGICAL REPORT

MUDLOG

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WELL PROGRESS REPORT

PENRYN 2

DATE: 14/08/01 (0600 Hours)

DEPTH: 1283 m

PROGRESS: 173m

DAYS FROM SPUD: 7

CURRENT OPERATION: RUNNING IN HOLE WITH NEW BIT TO DRILL AHEAD IN THE SKULL CREEK MUDSTONE.

NOPE COST (P&A)\$1,277,248
(C&S)\$1,406,161FINAL FORECAST COST (P&A)\$
(C&S)\$

COST TO DATE: \$

CASING DEPTH: 355m (7 5/8" CASING SHOE)

RIG: ODE 30

PROGRAMMED TD: ~1733m

ROTARY TABLE: 133.56m

GROUND LEVEL: 128.86m

MUD DATA	Type:	Wt:	Visc:	WL:	pH:	K ⁺ :	Cl ⁻ :	PV/YP:	Rmf:
(2400 Hours)	KCl/PHPA	9.0	44	7.5	9.0	20.4k	20.5k	12/12	0.22Ω @ 68°F

BIT DATA	PRESENT	No.	Make	Type	Size	Hours	Meterage	Condition
(2400 Hours)	LAST	3	HU	STR90D	6 3/4"	14.4	196	Not Graded

	MD(m)	INCLINATION	AZIMUTH (T)		MD(m)	INCLINATION	AZIMUTH
30	1093.07	3.27°	109	40	1188.57	4.06°	215.9
31	1102.34	2.95°	132.12	41	1198.29	4.00°	221.42
32	1112.12	3.09°	159.92	42	1207.81	3.89°	229.52
33	1121.82	3.39°	171.76	43	1217.46	3.92°	231.80
34	1131.53	3.52°	184.64	44	1227.20	3.88°	232.92
35	1141.26	3.63°	199.16	45	1236.99	3.86°	233.51
36	1150.98	3.9°	208.13	46	.	.	.
37	1159.94	3.93°	216.41	47	.	.	.
38	1169.1	3.94°	218.19	58			
39	1178	3.98°	217.55	59			

TVD: 1235.44m Maximum Offset: 46.77m 143.42° True North

PREVIOUS 24 HOURS OPERATIONS:

DRILL AHEAD 6 3/4" HOLE WITH SURVEYS FROM 1110 m TO 1283 m. PUMP SLUG AND PULL OUT OF HOLE. LAY DOWN DOWNHOLE MOTOR AND MWD. MAKE UP PDC BIT AND BOTTOM HOLE ASSEMBLY. RUN IN HOLE. SLIP LINE. RUN IN HOLE.

ANTICIPATED OPERATIONS:

DRILL AHEAD TO T.D.

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WELL PROGRESS REPORT

PENRYN 2

DATE: 14/08/01 (0600 hours)

FORMATION LOGS						
FORMATION	MDRT (m)	MDSS (m)	H/L TO PROG.	H/L TO PENRYN 1	H/L TO FENTON CREEK 1	H/L TO MYLOR 1
SKULL CREEK	1152	1018.5	20.5 m H	34.1 m H	93.0 m H	223.0 m H

HYDROCARBON SHOWS SUMMARY		
INTERVAL	LITHOLOGY	GAS

GEOLOGICAL SUMMARY		
INTERVAL	LITHOLOGY	GAS
1110-1140 ROP: 1.6-5.2 Ave: 2.6 mn/m	<p>SANDSTONE WITH MINOR SILTSTONE SANDSTONE: Colourless to translucent, fine to medium, minor coarse, moderately sorting, sub rounded to rounded, trace siliceous cement, trace carbonaceous and glauconitic fragments, trace pyritic nodules, friable to generally loose, fair inferred porosity, no fluorescence. SILTSTONE: Light grey, grey brown, medium dark brown, dark grey in part, argillaceous grading to CLAYSTONE, arenaceous grading to very fine SANDSTONE, trace carbonaceous fragments and micromicaceous, very soft to firm, dispersive in part, amorphous to sub blocky.</p>	No Gas
1140-1152 ROP: 1.6-17.0 Ave: 6.0 mn/m	<p>SANDSTONE WITH MINOR SILTSTONE SANDSTONE: Colourless to translucent, white, dominantly very fine grading to arenaceous SILTSTONE, occasionally fine to medium, moderately well sorted, sub angular to sub rounded, abundant white kaolinitic matrix, common carbonaceous fragments, friable, poor visual porosity, trace to 5% dim green/yellow spotted fluorescence, no cut. SILTSTONE: Medium grey, medium grey brown, argillaceous grading to CLAYSTONE in part, common micromicaceous and lithics. trace disseminated pyrite, very soft, dispersive, locally firm to moderately hard, amorphous to sub blocky.</p>	No Gas
1152-1180 ROP: 1.1-30.0 Ave: 4.9 mn/m	<p>SKULL CREEK MUDSTONE INTERBEDDED SANDSTONE AND SILTSTONE SANDSTONE: (1) Light grey, light grey green, very fine grading to arenaceous SILTSTONE, well sorted, sub angular to sub rounded, abundant light grey green argillaceous matrix, common carbonaceous specks, lithics and glauconite, friable, poor visual porosity, no fluorescence. SANDSTONE: (2) Colourless to translucent, very fine to fine, trace medium, well sorted, sub rounded to rounded, trace pyrite coated grains, loose, clean, fair inferred porosity, no fluorescence. SILTSTONE: Light to dominantly dark grey/ dark grey brown, argillaceous grading to CLAYSTONE in part, trace arenaceous, common carbonaceous fragments, micromicaceous and lithics, very soft to firm, amorphous to sub blocky.</p>	No Gas

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WELL PROGRESS REPORT

PENRYN 2

DATE: 14/08/01 (0600 hours)

GEOLOGICAL SUMMARY

INTERVAL	LITHOLOGY	GAS
1180-1230 ROP: 1.5-9.0 Ave: 3.9 mn/m	SILTSTONE WITH MINOR SANDSTONE <u>SILTSTONE</u> : Medium to dark brown, medium grey brown, argillaceous grading to CLAYSTONE in part, trace carbonaceous fragments, micromicaceous, disseminated pyrite and lithics, very soft, dispersive, amorphous. <u>SANDSTONE</u> : Colourless to translucent, fine to very coarse, predominantly medium, moderately well sorted, sub rounded to rounded, trace weak siliceous cement, rare glauconite grains, loose, fair inferred porosity, no fluorescence.	No Gas
1230-1283 ROP: 1.7-10.0 Ave: 4.9 mn/m	SILTSTONE WITH MINOR SANDSTONE <u>SANDSTONE</u> : Light grey, light grey green, very fine grading to arenaceous SILTSTONE , well sorted, sub angular to sub rounded, abundant light grey green argillaceous matrix, common carbonaceous specks, lithics and glauconite, friable, poor visual porosity, no fluorescence. <u>SILTSTONE</u> : Medium to dark brown, medium grey brown, argillaceous grading to CLAYSTONE in part, trace carbonaceous fragments, micromicaceous, disseminated pyrite and lithics, very soft to firm, amorphous to sub blocky.	No Gas

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TO:

DEPT. NATIONAL RESOURCES & ENVIRONMENT
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ATTENTION: HORACIO HAAG
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DEPT. NATIONAL RESOURCES & ENVIRONMENT
 MANAGER OF RESOURCES
ATTENTION: KOUROSH MEHIN
 FAX NO. (03) 9412 5156

FROM:

A.P. PIETSCH

SUBJECT:

PENRYN 2

 GEOLOGICAL REPORT

 MUDLOG

PLEASE ADVISE VIA (08) 8224 7967 IF FAX NOT RECEIVED

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WELL PROGRESS REPORT

PENRYN 2

DATE: 11/08/01 (0600 Hours)

DEPTH: 357 m

PROGRESS: 0

DAYS FROM SPUD: 4

CURRENT OPERATION: DRILLING OUT CEMENT @ 331m.

NOPE COST (P&A)\$1,277,248
(C&S)\$1,406,161FINAL FORECAST COST (P&A)\$
(C&S)\$

COST TO DATE: \$

CASING DEPTH: 7 5/8" CASING SHOE @ 355m.

RIG: ODE 30

PROGRAMMED TD: 1734m

ROTARY TABLE: 133.56m

GROUND LEVEL: 128.86m

MUD DATA	Type:	Wt:	Visc:	WL:	pH:	K ⁺ :	Cl ⁻ :	PV/YP:	Rmf:
(2400 Hours)	AQUGEL	8.5	50		9.1	17800	18k	10/8	

BIT DATA	LAST	No.	Make	Type	Size	Hours	Meterage	Condition
(2400 Hours)	PRESEN	2	SECURITY	FM2465	6.75"			IN HOLE
	T	1	SMITH	FGSS+2	9.875"	23.7	357m	1-2-WT-A-E-I-NO- TD

SURVEYS:	MD	INCLINATION	AZIMUTH (T)	MD	INCLINATION	AZIMUTH (T)
1	26m	0.25°	62.1°	8	203m	1.70°
2	52m	1.2°	191.1°	9	232m	1.5°
3	63m	2.5°	199.1	10	260m	1.6°
4	90m	2.5°	201.1	11	290m	1.6°
5	118m	2.25°	200.1°	12	327m	3.7°
6	145m	2.25°	198°	13	351m	3.7°
7	175m	1.80°	204°			

PREVIOUS 24 HOURS OPERATIONS:

CONTINUE PRESSURE TESTING. PRESSURE TEST CHOCK MANIFOLD. INSTALL W/BUSHING. PRESSURE TEST KELLY COCKS. PICK UP AND MAKE UP BOTTOM HOLE ASSEMBLY AND RUN IN HOLE. LAY OUT 10 DRILL PIPES AND CONTINUE RUN IN HOLE. PICK UP KELLY AND PRESSURE TEST PIPE RAMS AND OUTER KILL LINE VALVE. NOT ABLE TO GET TEST. WORK ON KILL LINE. PRESSURE TEST PIPE RAMS AND OUTER KILL LINE VALVE TO 200 AND 2000psi. ANNULAR TO 200 TO 1500psi. RUN IN HOLE AND DRILL OUT CEMENT AND PLUGS FROM 326m.

ANTICIPATED OPERATIONS:

DRILL OUT SHOE TRACK @ 355.3m AND 3m(10') OF NEW HOLE TO 360m. CIRCULATE HOLE CLEAN AND PREPARE THE PRESSURE TEST UNIT. PERFORM LEAK OFF TEST. DRILL AHEAD AND DISPLACE TO NEW MUD. DRILL 6.75" HOLE WITH SURVEYS.

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WELL PROGRESS REPORT

PENRYN 2

DATE: 12/08/01 (0600 Hours)

DEPTH: 833m

PROGRESS: 476m

DAYS FROM SPUD: 5

CURRENT OPERATION: DRILLING AHEAD 6 3/4" HOLE IN THE PAARATTE FORMATION.

NOPE COST (P&A)\$1,277,248
(C&S)\$1,406,161FINAL FORECAST COST (P&A)\$
(C&S)\$

COST TO DATE: \$

CASING DEPTH: 355m (7 5/8" CASING SHOE)

RIG: ODE 30

PROGRAMMED TD: ~1733m

ROTARY TABLE: 133.56m

GROUND LEVEL: 128.86m

MUD DATA	Type:	Wt:	Visc:	WL:	pH:	K ⁺ :	Cl ⁻ :	PV/YP:	Rmf:
(2400 Hours)	KCI/PHPA	8.7	45	8.5	9.4	-	17.5k	45/10	No Filtrate

BIT DATA	PRESENT	No.	Makc	Type	Size	Hours	Meterage	Condition
(2400 Hours)	LAST	1	SMITH	FGSS+2C	9.875	23.7	357	1-2-WT-A-E-I-NO-TD

	MD(m)	INCLINATION	AZIMUTH (T)		MD(m)	INCLINATION	AZIMUTH
14	382	3.2°	142	19	564	2.75°	127
15	411	3.1°	138	20	621	2.6°	125
16	449	2.8°	129	21	680	2.75°	127
17	478	2.9°	125	22	737	3.25°	122
18	526	2.7°	124	23	795	2.8°	118

TVD: 794m Maximum Offset: 29m 145° True North

PREVIOUS 24 HOURS OPERATIONS:

DRILL OUT CEMENT AND PLUGS FROM 326m AND NEW HOLE TO 360m. CIRCULATE HOLE CLEAN, PERFORM LEAK OFF TEST, 17.2 ppg EMW. DRILL AHEAD 6 3/4" HOLE WITH SURVEYS FROM 360m TO 833m.

ANTICIPATED OPERATIONS:

DRILL AHEAD 6 3/4" HOLE (PICK UP DIRECTIONAL ASSEMBLY IF REQUIRED).

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WELL PROGRESS REPORT

PENRYN 2

DATE: 12/08/01 (0600 hours)

FORMATION TOPS						
FORMATION	MDRT (m)	MDSS (m)	H/L TO PROG.	H/L TO PENRYN 1	H/L TO FENTON CREEK 1	H/L TO MYLOR 1
MEPUNGA	378	244.5	7.5mH	27.6m H	86.1m H	112.3m H
DILWYN	512	378.5	Not Prog	34.6 m H	87.6 m H	104.3 m H
PEMBER MDST	662	528.5	Not Prog	23.1 m H	63.1 m H	87.3 m H
PEBBLE POINT	728	594.5	4.5m L	31.6 m H	69.6 m H	89.8 m H
PAARRATTE	785	651.5	Not Prog	41.1 m H	155.0 m H	84.3 m H

HYDROCARBON SHOW SUMMARY		
INTERVAL	LITHOLOGY	GAS

GEOLOGICAL SUMMARY		
INTERVAL	LITHOLOGY	GAS
355 - 378m ROP: 0.5 - 2.2 Av: 0.4 mn/m	NARRAWATURK MARL MARL: Pale to medium grey, light green/grey, light brown, light olive grey, calcareous, abundant fossil and shell fragments, common forams, inoceramus, corals, abundant pyrite, soft to very dispersive, sticky, amorphous.	No Gas
378 - 512m ROP: 0.2 - 10.7 Av: 2 mn/m	MEPUNGA FORMATION SANDSTONE WITH MINOR CLAYSTONE SANDSTONE: Medium brown, occasionally yellow/brown, fine, trace coarse, moderate to poor sorting, sub angular, trace iron staining, trace fossil fragments, trace to common disseminated pyrite, commonly loose, poor inferred porosity, no fluorescence. CLAYSTONE: Medium brown, argillaceous, trace pyrite, trace lithics, trace calcareous fragments, soft to dispersive, amorphous in part.	No Gas
512 - 630 ROP: 0.8 - 17.1 Av: 2.1 mn/m	DILWYN FORMATION INTERBEDDED SANDSTONE AND CLAYSTONE SANDSTONE: Translucent, opaque, pale grey/blue, fine to very coarse pebbles, poor sorting, sub rounded to rounded, trace disseminated and nodular pyrite, rare mica, loose, friable to good inferred porosity, no fluorescence. CLAYSTONE: Dark brown, argillaceous grading to SILTSTONE in part, common micromicaceous and lithics, very soft to dispersive, amorphous.	No Gas
630 - 662 ROP: 0.9 - 3.1 Av: 1.7 mn/m	INTERBEDDED SANDSTONE, SILTSTONE AND CLAYSTONE SANDSTONE: Translucent, opaque, pale grey, pale blue grey, coarse to very coarse, pebbles, poor sorting, rounded to sub rounded, loose, fair inferred porosity, no fluorescence. SILTSTONE: Light to medium brown, medium grey/green, dark green, argillaceous grading to CLAYSTONE, common glauconite and lithics, trace carbonaceous fragments, very soft, dispersive, occasionally firm, amorphous to sub blocky. CLAYSTONE: Medium brown, common micromicaceous, dispersive, amorphous.	0 - 2 Units 100% C1

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A.B.N. 80 007 550 923

WELL PROGRESS REPORT

PENRYN 2

DATE: 12/08/01 (0600 hours)

GEOLOGICAL SUMMARY

INTERVAL	LITHOLOGY	GAS
662 - 728 ROP: 0.9 - 3.1 Av: 1.3 mn/m	PEMBER MUDSTONE INTERBEDDED CLAYSTONE, SILTSTONE AND SANDSTONE <u>SANDSTONE</u> : Translucent, opaque, pale grey, pale blue grey, coarse to very coarse, pebbles, poor sorting, rounded to sub rounded, trace to common pyrite fragments, loose, fair inferred porosity, no fluorescence. <u>SILTSTONE</u> : Dark brown, dark grey/brown, argillaceous grading to CLAYSTONE, common micromicaceous, trace lithics, very soft, dispersive, amorphous to sub blocky. <u>CLAYSTONE</u> : Medium to dark brown, common micromicaceous, dispersive, amorphous.	No Gas
728 - 785 ROP: 0.8 - 4.1 Av: 2.0 mn/m	PEBBLE POINT FORMATION SANDSTONE WITH MINOR CLAYSTONE AND SILTSTONE. <u>SANDSTONE</u> : Translucent, pale yellow to pale brown, fine to coarse, poor sorting, sub rounded, common pyrite fragments, trace iron staining, loose, fair inferred porosity, no fluorescence. <u>SILTSTONE</u> : Dark brown, argillaceous grading to CLAYSTONE, trace lithics, trace micromicaceous and glauconite fragments, very soft, amorphous to sub blocky. <u>CLAYSTONE</u> : Dark green, red/brown, glauconite, trace micromicaceous, trace lithics, firm to sub blocky.	No Gas
785 - 833 ROP: 1.5-6.5 Av: 3.6 mn/m	PAARATTE FORMATION SANDSTONE WITH MINOR CLAYSTONE. <u>SANDSTONE</u> : Colourless to translucent, opaque, pale grey, pale yellow, fine to very coarse, pebbles, poor sorting, sub rounded, loose, fair inferred porosity, no fluorescence. <u>CLAYSTONE</u> : Light to medium grey, argillaceous grading to SILTSTONE, common carbonaceous specks, micromicaceous, trace disseminated pyrite, very soft, amorphous to sub blocky.	No Gas

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A.B.N. 80 007 550 923

WELL PROGRESS REPORT

PENRYN 2

DATE: 13/08/01 (0600 Hours)

DEPTH: 1110 m

PROGRESS: 277m

DAYS FROM SPUD: 6

CURRENT OPERATION: DRILLING AHEAD 6 3/4" HOLE IN THE PAARATTE FORMATION.

NOPE COST (P&A)\$1,277,248
(C&S)\$1,406,161

FINAL FORECAST COST (P&A)\$
(C&S)\$

COST TO DATE: \$1,076,943

CASING DEPTH: 355m (7 5/8" CASING SHOE)

RIG: ODE 30

PROGRAMMED TD: ~1733m

ROTARY TABLE: 133.56m

GROUND LEVEL: 128.86m

MUD DATA	Type:	Wt:	Visc:	WL:	pH:	K ⁺ :	Cl ⁻ :	PV/YP:	Rmf:
(2400 Hours)	KCI/PHPA	8.9	45	7.5	9.4	20.4k	20500	13/12	No Filtrate

BIT DATA	PRESENT	No.	Make	Type	Size	Hours	Meterage	Condition
(2400 Hours)	LAST	2	SEC	FM2465	6 3/4"	23	731	2-3-CT-N-X-I-WT-BHA

	MD(m)	INCLINATION	AZIMUTH (T)		MD(m)	INCLINATION	AZIMUTH
24	853	2.8°	120	28	1073	3.44°	102.8
25	910	3.0°	116	29	1083	3.52°	101.8
26	968	3.1°	113	30	1093	3.27°	109.2
27	1026	3.5°	110				

TVD: 1093m Maximum Offset: 43.6m 134° True North

PREVIOUS 24 HOURS OPERATIONS:

DRILL AHEAD 6 3/4" HOLE WITH SURVEYS FROM 833m TO 1087 m. RUN HI-VIS WEEP, CIRCULATE HOLE CLEAN AND PUMP SLUG. PULL OUT OF HOLE TO PICK UP DIRECTIONAL ASSEMBLY AND MWD FOR CORRECTION RUN. LAY DOWN TOOLS, NMDC AND 1 ONE DRILL COLLAR. MAKE UP DOWN HOLE MOTOR AND MWD. RUN IN HOLE WITH DOWN HOLE MOTOR. REAM AND WASH BRIDGE FROM 1059-1110m. SLIDING/ROTATING TO CORRECT DIRECTION. DRILL AHEAD 6 3/4" HOLE TO TD.

ANTICIPATED OPERATIONS:

STEER WELL TO TARGET, DRILL AHEAD 6 3/4" HOLE TO T.D. WITH DOWN HOLE MOTOR IF ACCEPTABLE PENETRATION RATES ARE MAINTAINED.

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WELL PROGRESS REPORT

PENRYN 2

DATE: 13/08/01 (0600 hours)

FORMATION TOPS						
FORMATION	MDRT (m)	MDSS (m)	H/L TO PROG.	H/L TO PENRYN 1	H/L TO FENTON CREEK 1	H/L TO MYLOR 1
PEBBLE POINT	728	594.5	4.5m L	31.6 m H	69.6 m H	89.8 m H
PAARRATTE	785	651.5	Not Prog	41.1 m H	155.0 m H	84.3 m H

HYDROCARBON SHOW SUMMARY		
INTERVAL	LITHOLOGY	GAS

GEOLOGICAL SUMMARY		
INTERVAL	LITHOLOGY	GAS
833 - 890 ROP: 0.6-5.0 Ave: 2.8 mm/m	<p>SANDSTONE WITH MINOR SILTSTONE SANDSTONE: Colourless to translucent, pale brown, light grey, coarse to very coarse, poor sorting, sub rounded, trace to common pyrite nodules, trace pyrite coated sand grains, loose, fair inferred porosity, no fluorescence. SILTSTONE: Off white to light grey, medium brown, argillaceous grading to CLAYSTONE, common arenaceous inclusions, abundant lithics, very soft, dispersive, amorphous to rarely sub blocky.</p>	No Gas
890 - 930 ROP: 0.7-1.8 Ave: 1.2 mm/m	<p>SANDSTONE WITH MINOR CLAYSTONE SANDSTONE: Colourless to translucent, pale brown, light grey, common smoky quartz fragments, coarse to very coarse, poor sorting, sub rounded, trace to common pyrite nodules, loose, fair inferred porosity, no fluorescence. CLAYSTONE: Light to medium grey, medium grey brown, common micromicaceous and lithics, very soft, dispersive, amorphous.</p>	No Gas
930 - 990 ROP: 0.6-3.2 Ave: 1.7 mm/m	<p>SANDSTONE WITH MINOR SILTSTONE SANDSTONE: Colourless to translucent, pale brown, light grey, coarse to very coarse, poor sorting, sub rounded to rounded, trace pyrite nodules, loose, fair inferred porosity, trace dim, green, pinpoint fluorescence, no cut. SILTSTONE: Light grey brown, medium brown, argillaceous grading to CLAYSTONE, abundant lithics, trace carbonaceous fragments, very soft, dispersive, amorphous to rarely sub blocky.</p>	No Gas
990 - 1055 ROP: 0.7-4.1 Ave: 1.9 mm/m	<p>INTERBEDDED SANDSTONE AND CLAYSTONE SANDSTONE: Translucent, light grey, light blue grey, common smoky quartz fragments, fine to very coarse, poor sorting, trace pyrite nodules, loose, clean, fair inferred porosity, no fluorescence. CLAYSTONE: Light to medium grey, medium brown, argillaceous grading to SILTSTONE in part, common carbonaceous specks, micromicaceous and lithics, very soft to occasionally firm, dispersive, amorphous to rarely sub blocky.</p>	0-3 Units 100% C1

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WELL PROGRESS REPORT

PENRYN 2

DATE: 13/08/01 (0600 hours)

GEOLOGICAL SUMMARY

INTERVAL

1055 - 1087
ROP: 1.0-28.4
Ave: 2.8 mn/m

LITHOLOGY

SANDSTONE WITH MINOR CLAYSTONE

SANDSTONE: (1) Translucent, light grey, light blue grey, common smoky quartz fragments, fine to very coarse, poor sorting, loose, clean, fair inferred porosity, no fluorescence.

SANDSTONE: (2) Off white to light grey, very fine grading to arenaceous SILTSTONE, well sorted, sub rounded, abundant off white to light grey argillaceous matrix, trace carbonaceous specks, feldspar, glauconite and lithics, friable, poor visual porosity, no fluorescence.

CLAYSTONE: Light to medium grey, medium brown, argillaceous grading to SILTSTONE in part, common carbonaceous specks, micromicaceous and lithics, very soft to occasionally firm, dispersive, amorphous to rarely sub blocky.

GAS

No Gas

1087 - 1110

ROP: 1.8-6
Ave: 2.9 mn/m

SANDSTONE WITH MINOR SILTSTONE AND CLAYSTONE

SANDSTONE: (1) Off white to light grey, very fine grading to arenaceous SILTSTONE, well sorted, sub rounded, abundant off white to light grey argillaceous matrix, trace carbonaceous specks, feldspar, glauconite and lithics, friable, poor visual porosity, no fluorescence.

SANDSTONE: (2) Translucent, light grey, common smoky quartz fragments, fine to very coarse, poor sorting, trace pyrite nodules, loose, clean, fair inferred porosity, no fluorescence.

CLAYSTONE: Light to medium grey, medium brown, argillaceous grading to SILTSTONE in part, common carbonaceous specks, micromicaceous and lithics, very soft to occasionally firm, dispersive, amorphous to rarely sub blocky.

SILTSTONE: Medium to dark grey, argillaceous grading to CLAYSTONE, trace carbonaceous specks and glauconite, trace micromicaceous, firm to moderately hard, sub blocky to blocky.

No Gas

909020 034

Santos

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Facsimile

DATE: 13/8/01

NO. OF PAGES: 12
(including this cover page)

TO: ~~BEACH PETROLEUM~~
~~ATTENTION: HECTOR GORDON~~
~~FAX NO. 8338 2336~~

DEPT. NATIONAL RESOURCES & ENVIRONMENT
MANAGER OF OPERATIONS & SAFETY
ATTENTION: HORACIO HAAG
FAX NO: (03) 9412 5152

DEPT. NATIONAL RESOURCES & ENVIRONMENT
MANAGER OF RESOURCES
ATTENTION: KOUROSH MEHIN
FAX NO. (03) 9412 5156

FROM: A.P. PIETSCH

SUBJECT: NAYLOR 1

PENNYN 2 - 0 - 1100m

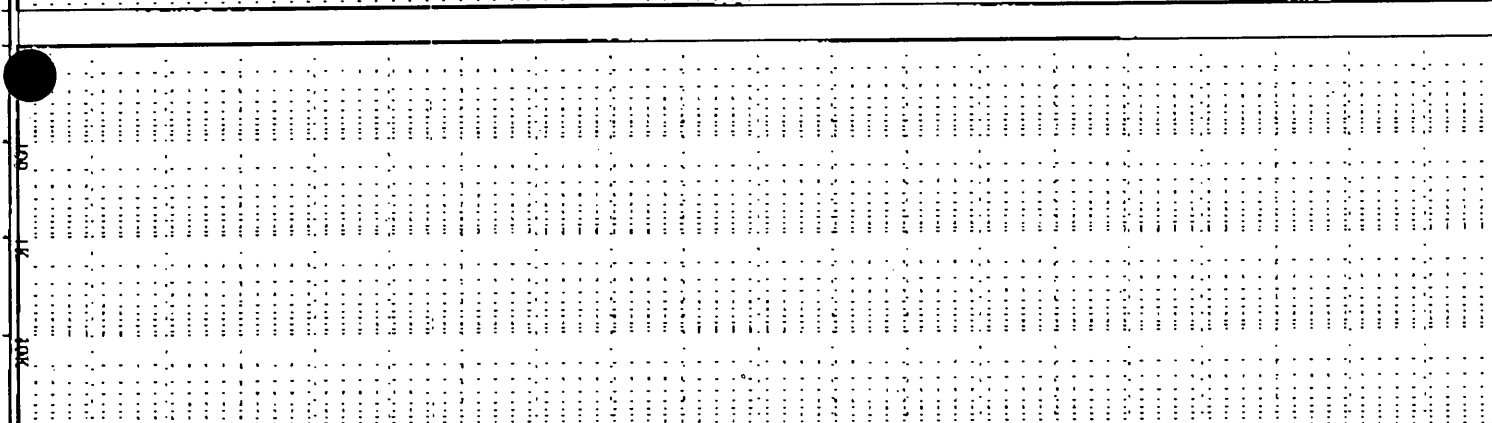
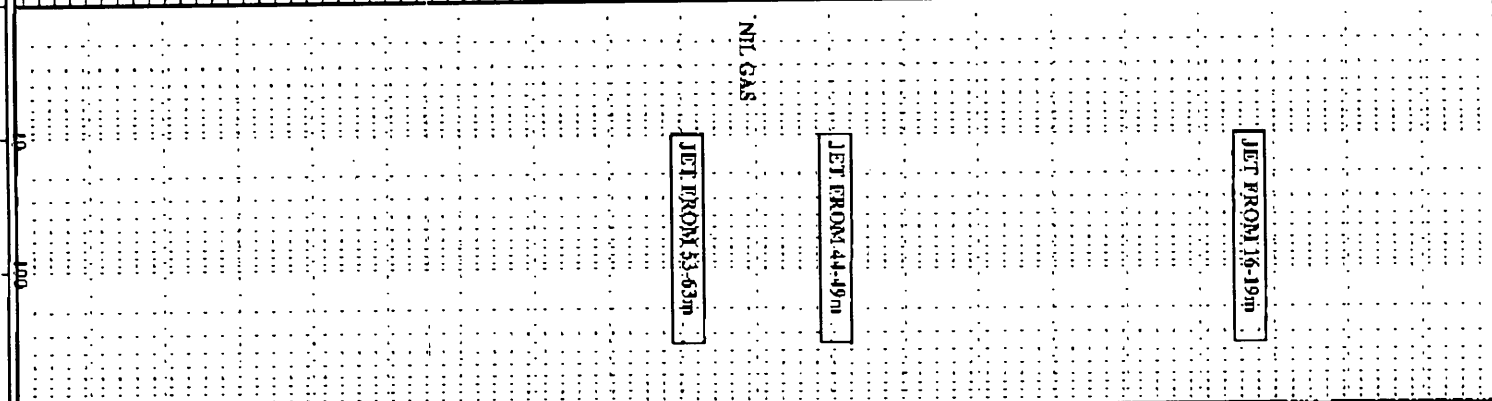
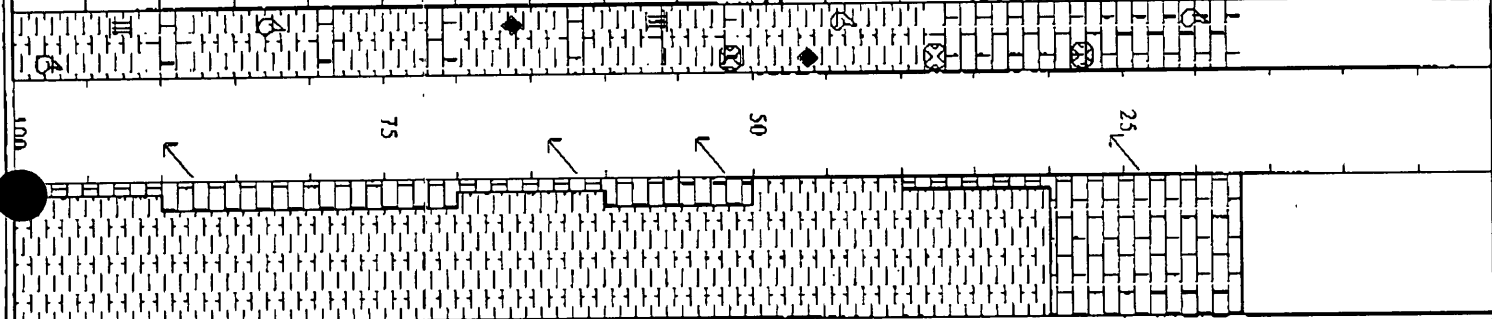
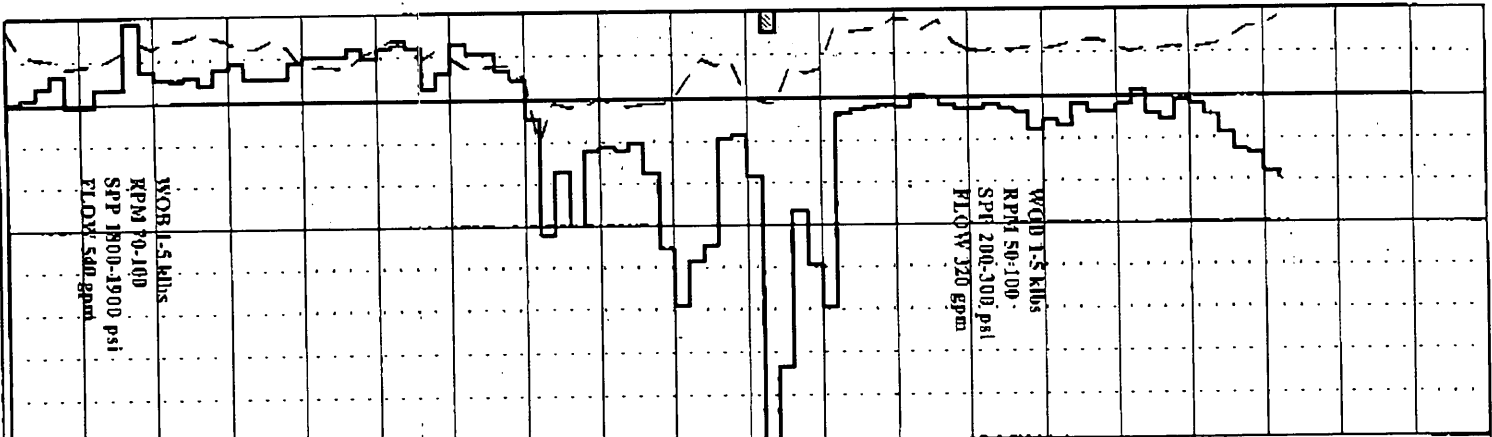
GEOLOGICAL REPORT

MUDLOG

PLEASE ADVISE VIA (08) 8224 7967 IF FAX NOT RECEIVED

909020 035

Well Name: PENRYN#2



PENRYN#2 SPUDDED ON
07/08/2001 @ 6:30HRS

BIT #1: SMITH FG SS+2
SIZE: 9.875" JETS: 2x22
IN : 14 OUT: 357m
RUN: 343 HRS: 23.7
COND: 1-2-WT-A-E-I-NO-TD
DRILL 9 7/8" SURFACE
HOLE WITH SPUD MUD

LIMESTONE: soft w/ yellow/g. c'tr-
inst. Up: m. crystalline, ooc
fossiliferous, com shell frags, fr
coral.

SURVEY @ 26m: 0.25° 37.9°T

MARL: pl. gy. ll. oliv. by. sh. pl. bn. gy.
calc. fr. foss. frags. fr. dissem. pyr
slt. fr. m. sh. lly. - amorph.

SURVEY @ 52m: 1.20° 166.9°T

SURVEY @ 63m: 2.50° 174.9°T

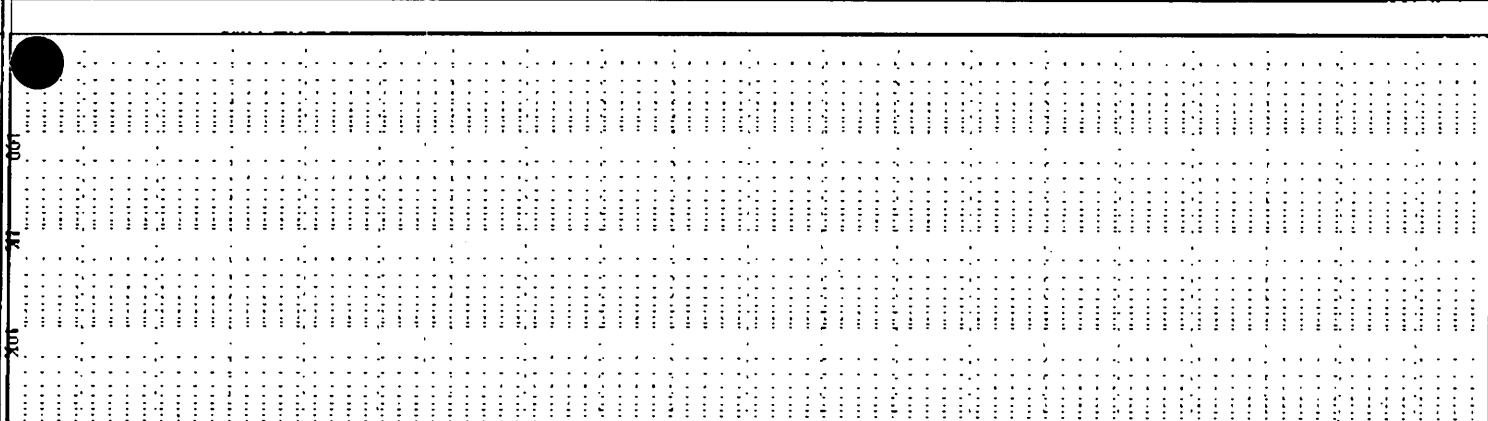
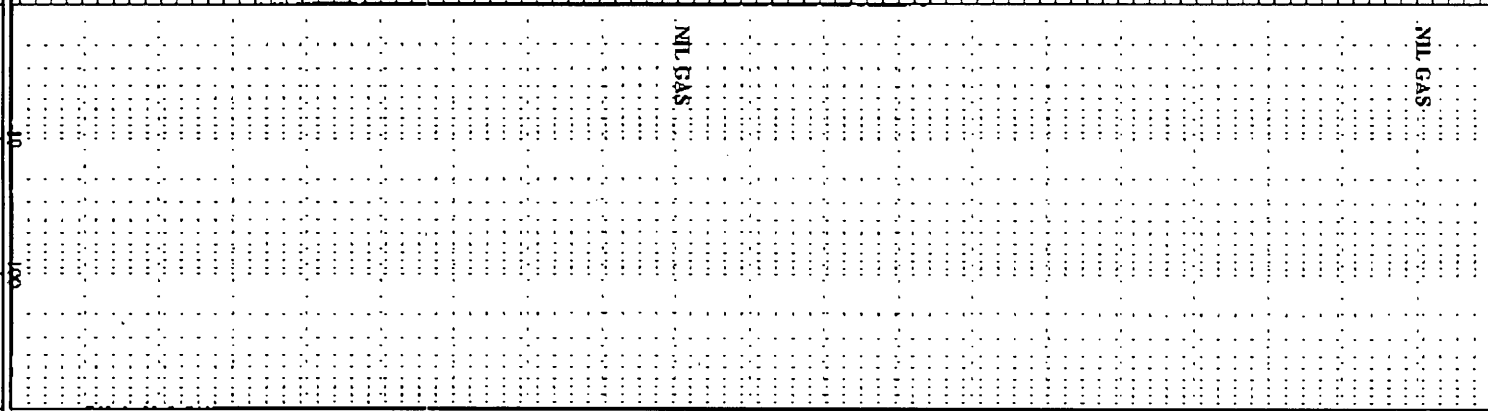
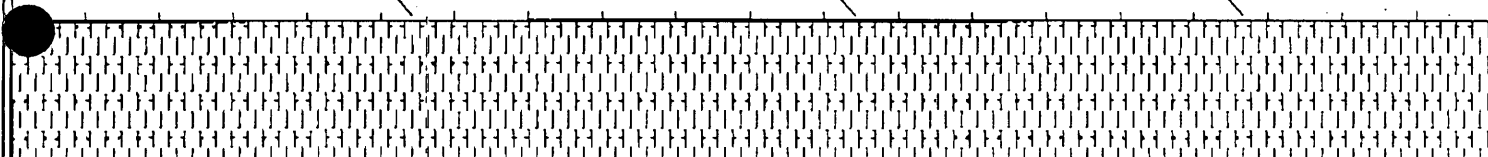
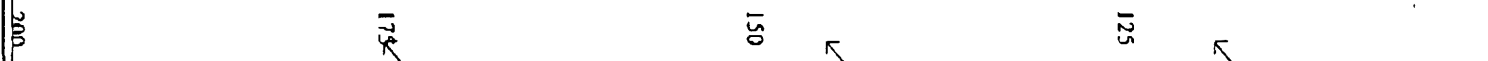
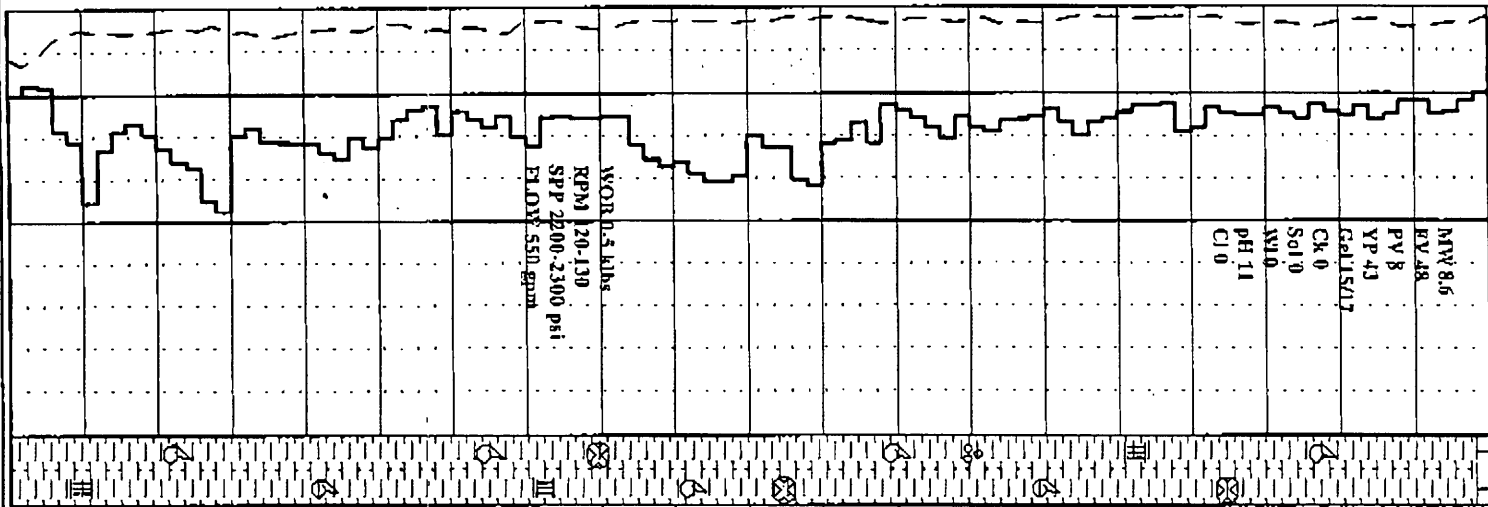
MARL: gy. fr. pl. gy. sh. m. gy. ooc
calc. com. fr. sh. fr. gran. nod. pyr
lly. sh. lly.

SURVEY @ 90m: 2.50° 176.9°T

MARL: fr. ooc. calc. sh. lly. fr. ooc. com.
oservices

300020 036

Well Name: PENRYN#2



shell frags v sli-disp.amorph.

SURVEY @ 118m:2.25° 175.9°T

MARL:il gy:occ bn/n bn:occ strg calc.abnd foss frags.(pred shell) frags.forams & coral fgs.sli.v sly.amorph.

SURVEY @ 145m:2.25° 198T

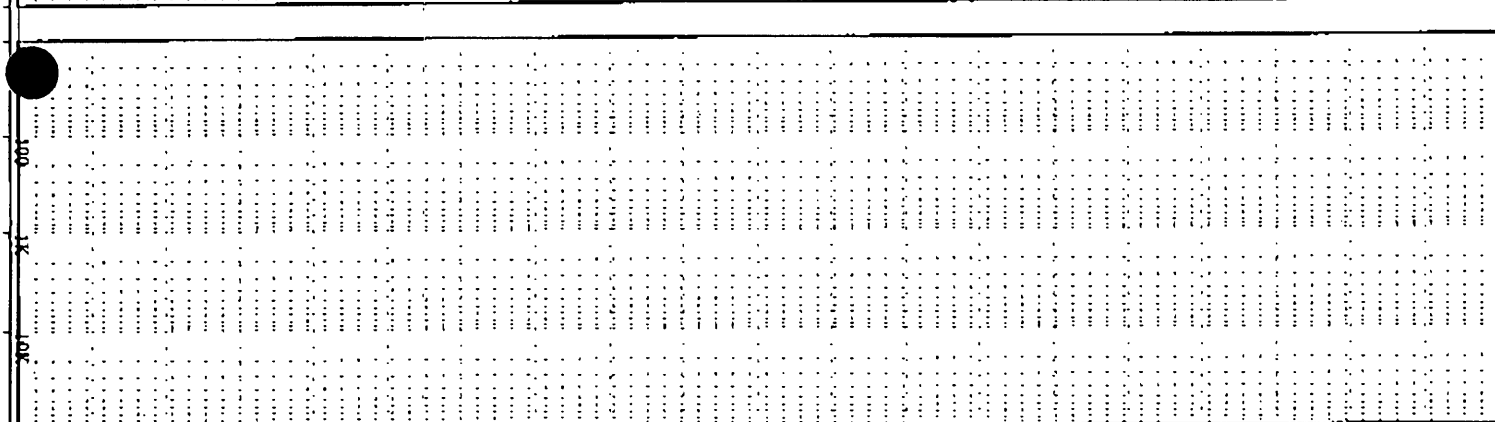
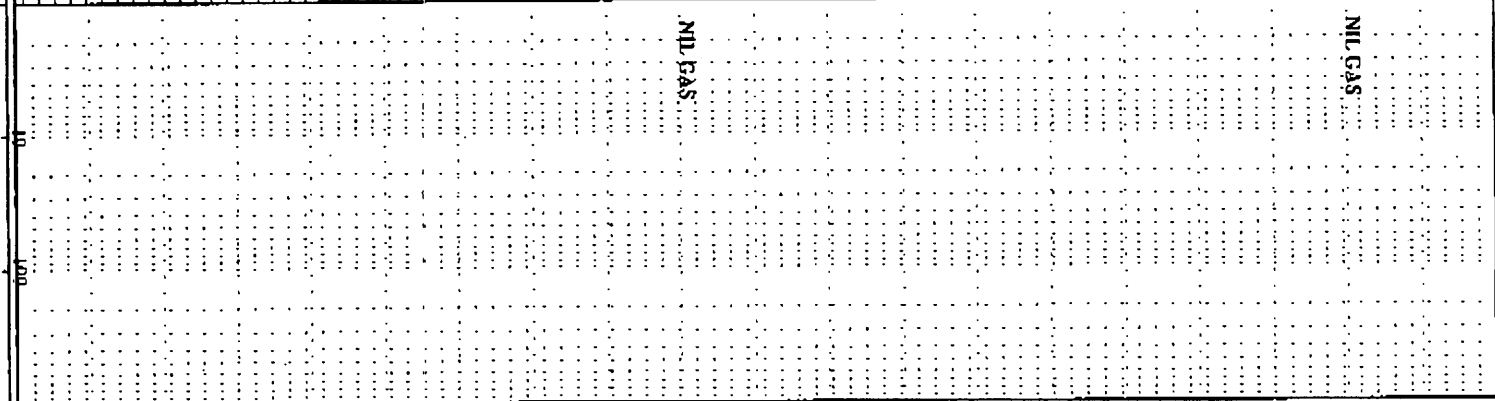
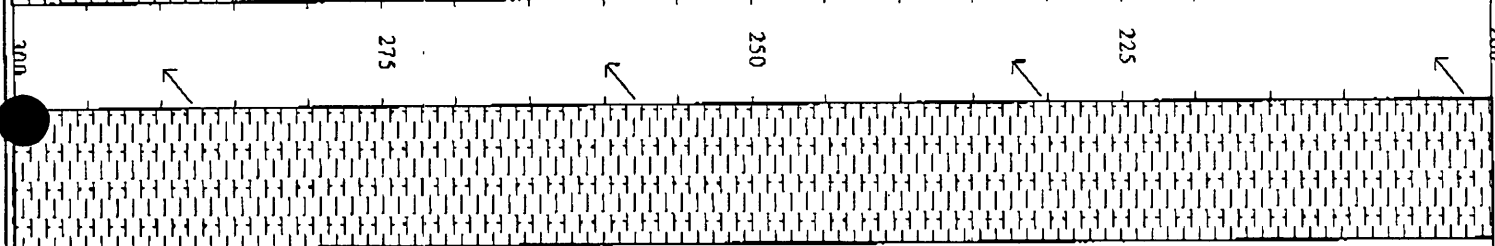
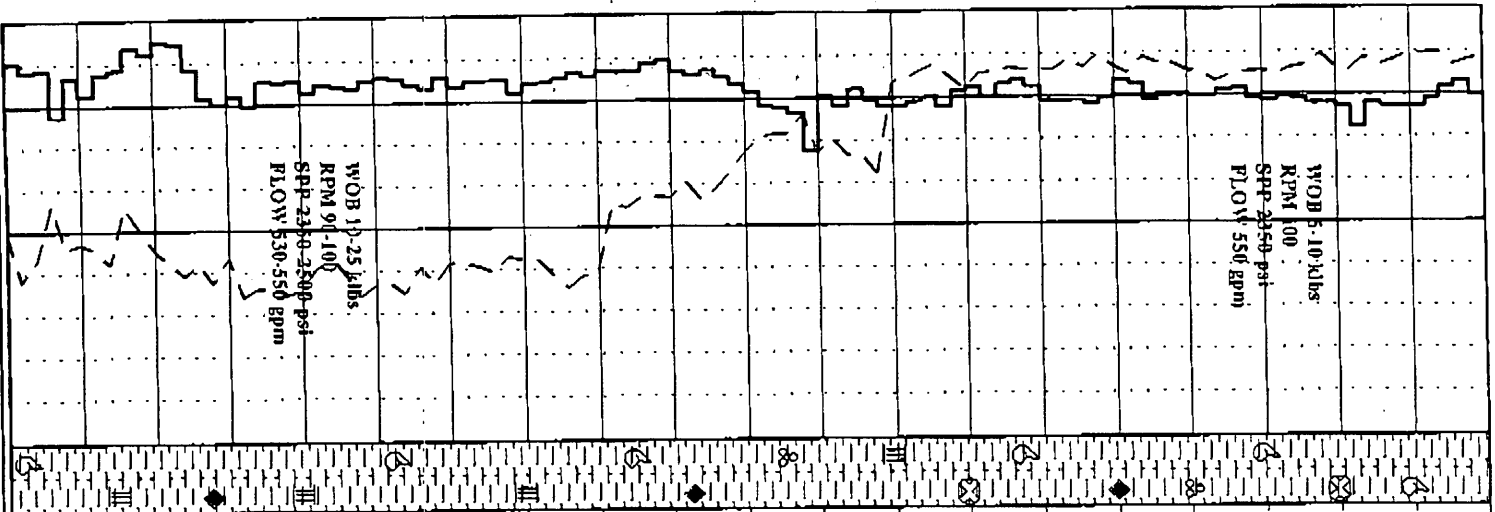
MARL:il gy:il bn/nd bn /p:occ mod strg calc.abnd shell frags & com foss.coral & forams f/p.v sli-disp.amorph.sbbky.

SURVEY @ 175m:1.8° 204T

MARL:pl-m gy:com foss frags.occ archioalid spones forams corals.

909020 037

Well Name: PENRYN#2



ifp:disp,vsit,amorph.
SURVEY @ 203m:1.7° 202T

SURVEY @ 232m:1.5° 201T

MARL:pl-med gy,l gnl/gy pl bn,lt
org gy,calc,abdt fossil & shell
frags,abdt forams,abdt corals,if
pyr:lt,frm,s slky ifp,amorph.

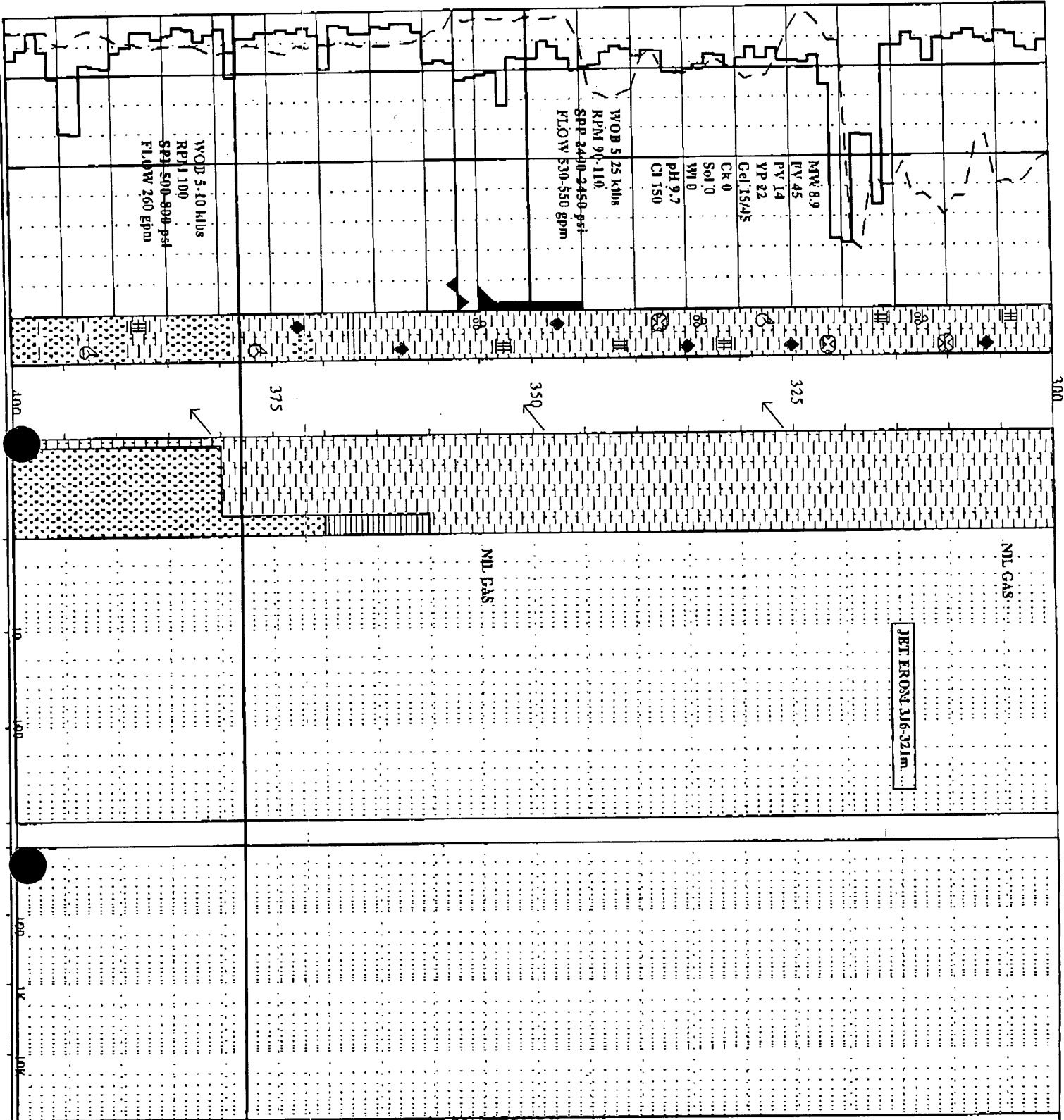
SURVEY @ 260m:1.6° 202T

MARL:pl-med gy,lt gnl/gy,lt pl bn
lt org gy,calc,abdt foss & shell
frags,com forams,corals,lt pyr,
sl-v disp,frm ifp,slky,amorph.

SURVEY @ 290m:1.6° 199.2T

000020 038

Well Name: PENRYN#2



JET FERRO 316-321m

NIL GAS

MLD GAS

MARL: pl-med gy, ll gr/gy, ll pl bn
 ll org gy, calc, abdl foss & shell
 frags, com forams, inoceramus,
 corals, abdl pyr, sil, v disp, silky,
 amorph.

SURVEY @ 327m: 3.7° 138T

SURVEY @ 351m: 3.7° 138T

MARL: dom ab, abdl pyr, v disp.
 7.5/8" CSG SHOE SET @ 355m

LOT TEST @ 360m: 17.2ppg EMW

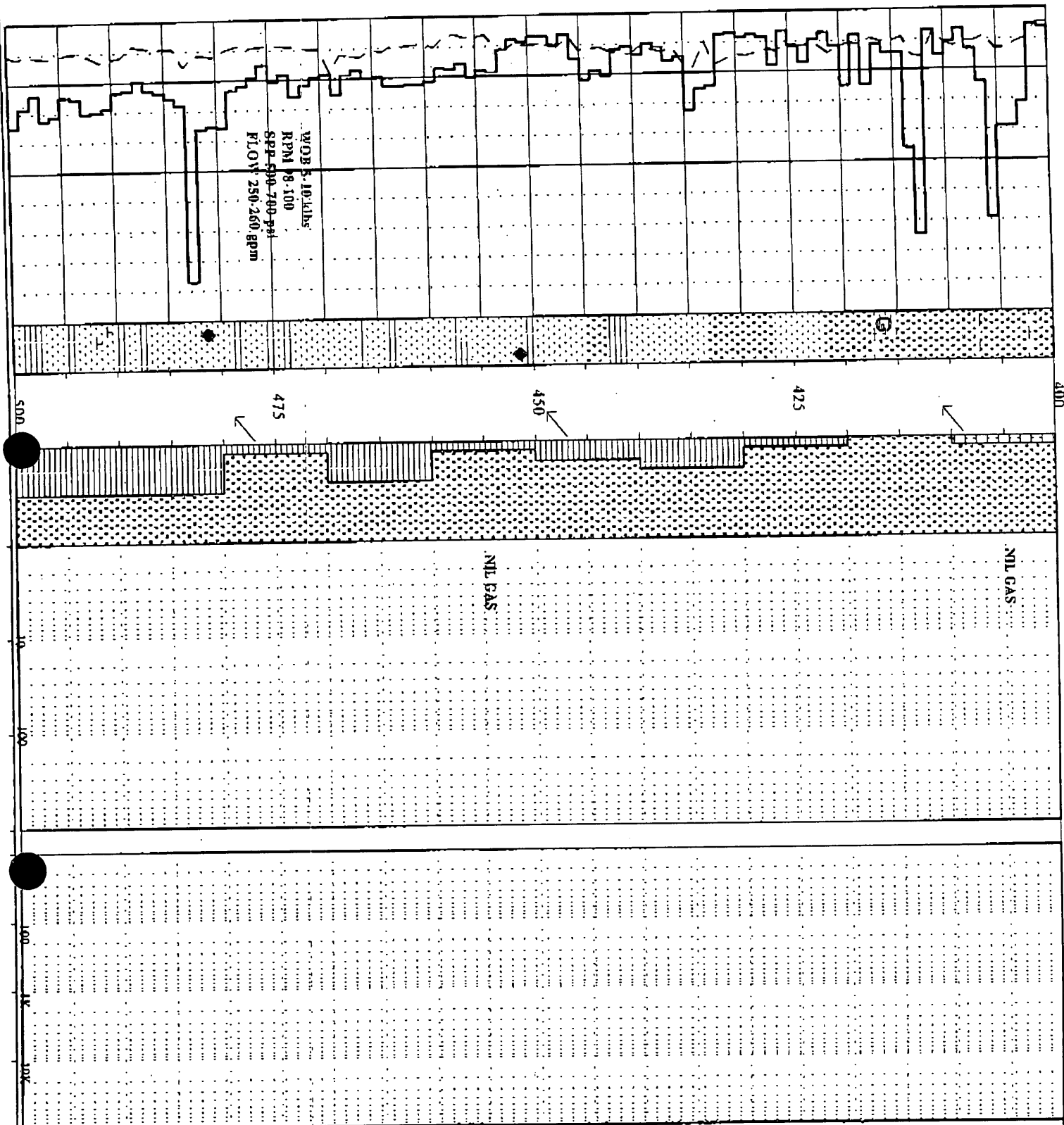
BIT #Z(HR): FM12465
 SIZE: 6.75" JETS: 4x11
 IN: 357 OUT: 1087m
 RUN: 730m HRS: 23
 COND:

MEPUNGA FM: 378m (241.5mSS)

SURVEY @ 382m: 3.2° 142T
 SANDSTONE: m bn, ocr yellow, fr
 ccs, mod-pt srl, sa, fr foss frags,
 fr pyr, sec, fr inf por, no fiber.

909020 039

Well Name: PENRYN#2



SANDSTONE: ms, sl, dk, yel, bn, f, v
 crs, pr, srl, sr, lsc, fr, inf, por, no
 fluor.

SURVEY @ 411m: 3.1° 138T

SANDSTONE: ms, sl, yel, pl, bn, f, gen
 v, crs, pr, srl, sr, ind, com, Fe, stain
 lsc, fr, inf, por, no fluor.

CLAYSTONE: dk, bn, arg, gl, SLTST,
 com, micnic, u-com, dissem, pyr, fr
 calc, frags, v, sl, disp, amorph.

SURVEY @ 449m: 2.8° 129T

CLAYSTONE: med, bn, v, arg, u, pyr, fr
 lih, sl, dis, amorph, up.

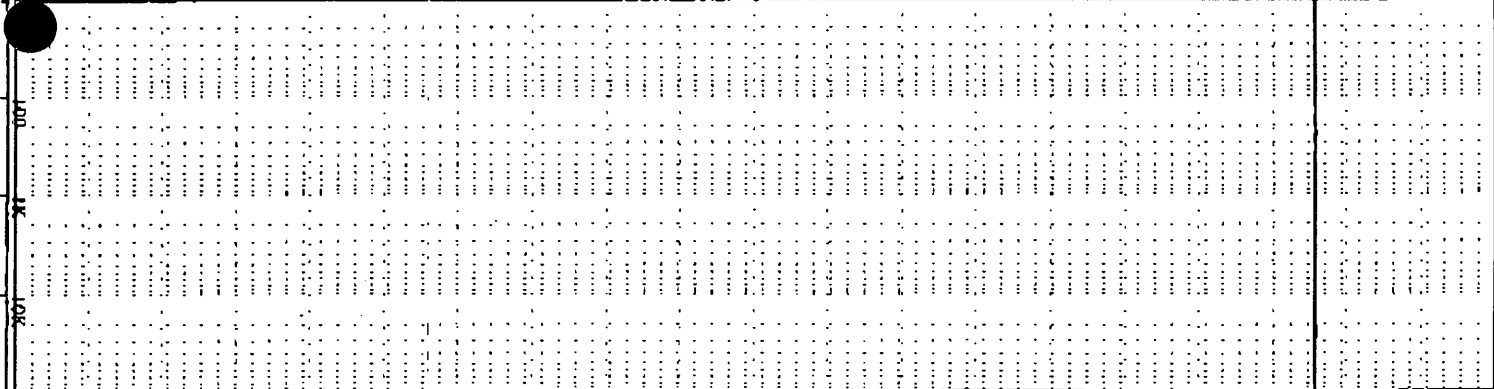
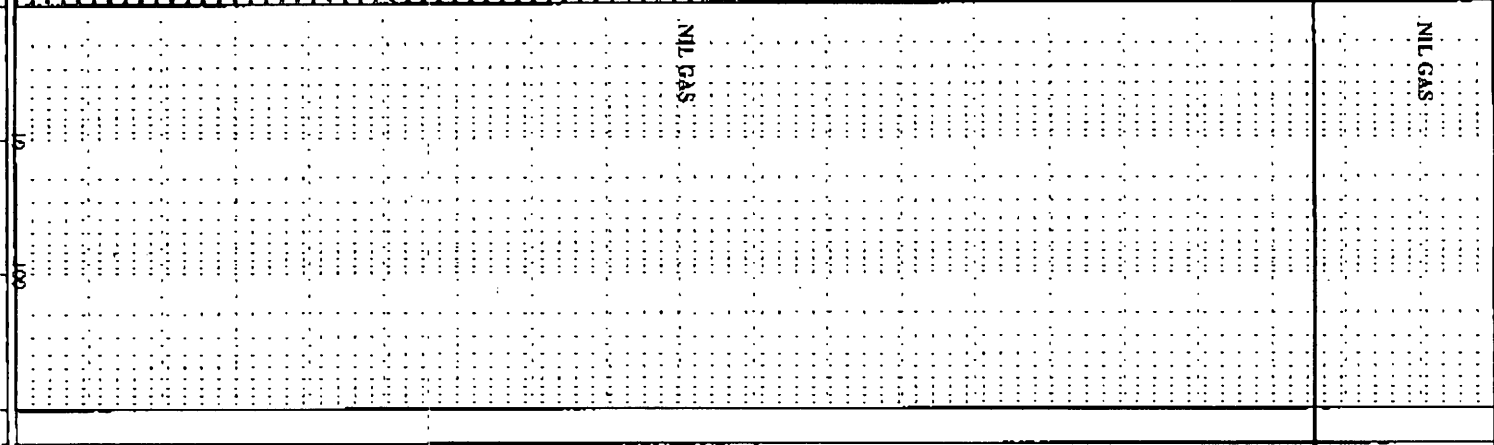
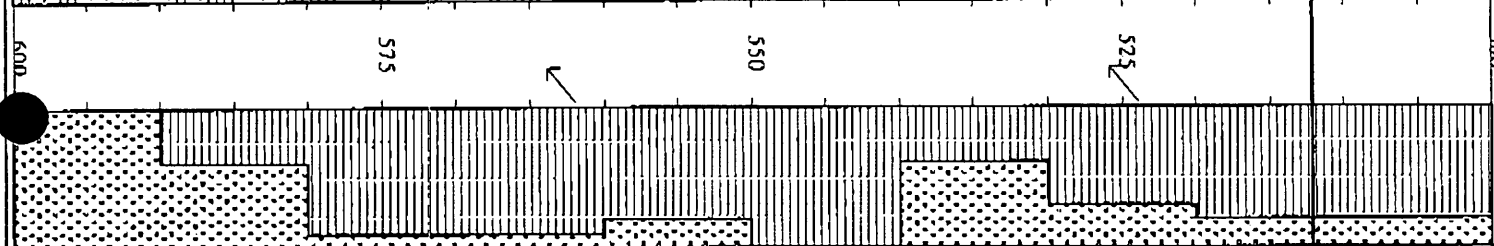
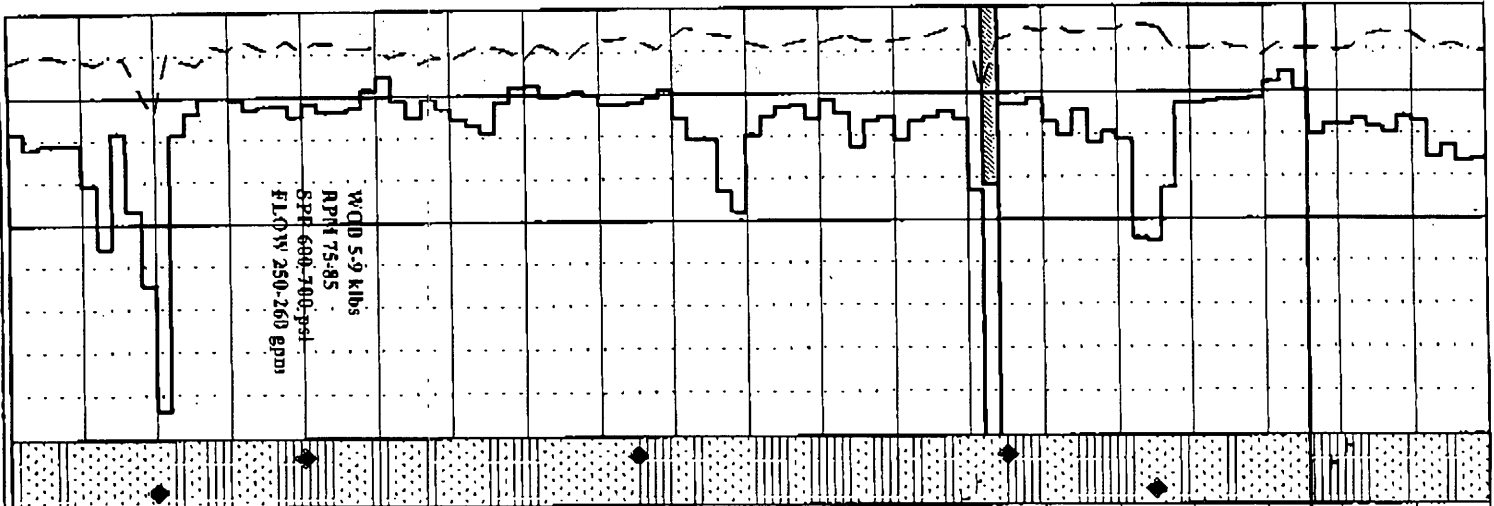
SANDSTONE: crs, ms, sl, dk, yel, bn, f,
 crs, pr, srl, sr, ind, com, nod, pyr, &
 pyr, coal, gms, lsc, fr, inf, por,
 no fluor.

SURVEY @ 478m: 2.9° 125T

pose services

903020 040

Well Name: PENRYN#2



CALYSTONE:dk bn, v arg, gl SLTST
 i/p, com micmic & lills, Jr-com
 dissem pyr, v sft-disp amorph.

DLWYN FM:
 s12m (378.5mSS)

SANDSTONE:trns, qpq, pl gy, f-vcrs
 peh, pr, sr, sr-md, Jr nod pyr, lbc
 fr inf por, no fluor.

SURVEY @ 526m: 2.7° 124T

CLAYSTONE:dk bn, v arg, gl SLTST
 i/p, com micmic & lills, Jr-com
 dissem pyr, v sft-disp amorph.

SANDSTONE:cl-trms, lqp, pl gy, f-
 v cis, pr, sr, sr, fr-com pyr coald
 gms, lsc, fr inf por, no fluor.

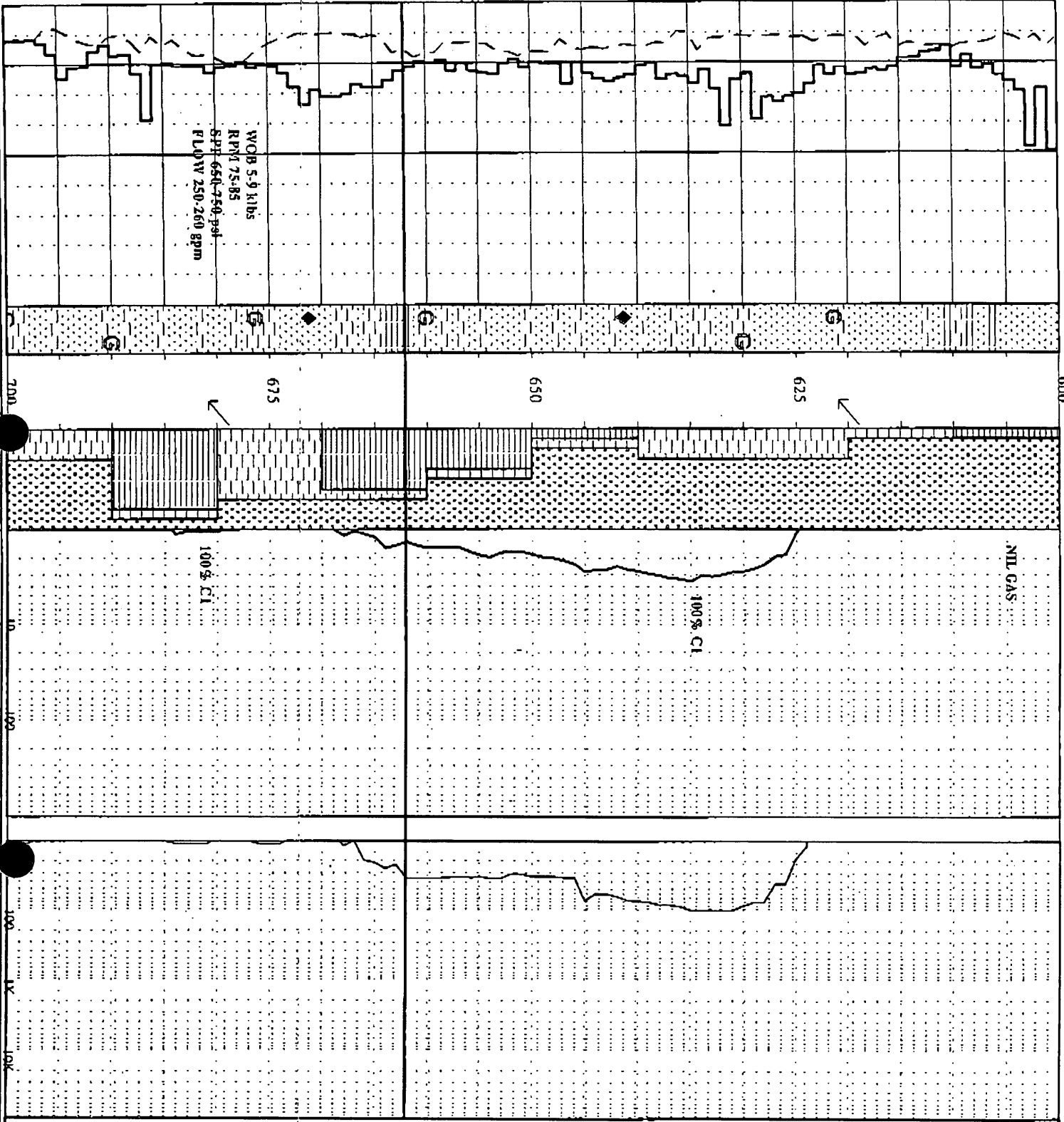
SURVEY @ 564m: 2.75° 127T

SANDSTONE:cl-trns, l, pl bn, o, pq
 l-v cis, pr, sr, sr, ind, um sa b/p
 u pyr nod, lr mica, lsc, fr inf
 por, no fluor.

Services

909020 041

Well Name: PENRYN#2



CARBIDE LAG CHECK @606m
 THEOR STKS: 1242
 ACTUAL STKS: 1300
 HOLE O/G % : 4.5%

SURVEY @ 621m: 2.6° 125T

SILTSTONE: lt-med bn, med gy/en, dk
 gn arg gl CLYST i/p, com glauc &
 liths, lr carb frags, sfl, disp, fm
 amorph-sbbkly.

SANDSTONE: cl-trns, lt pl bn, opa
 l-v cfs, gr st, sc-rnd, mu sa up
 tr bn sily mlk, lr pyr nod, lr
 mica gen lse, lr-gd inf por, no
 fluor.

SILTSTONE: lt-med bn, med gy/en, dk
 gn arg gl CLYST i/p, com glauc,
 lr liths, lr carb spks, sfl, disp,
 fm i/p, amorph-sbbkly.

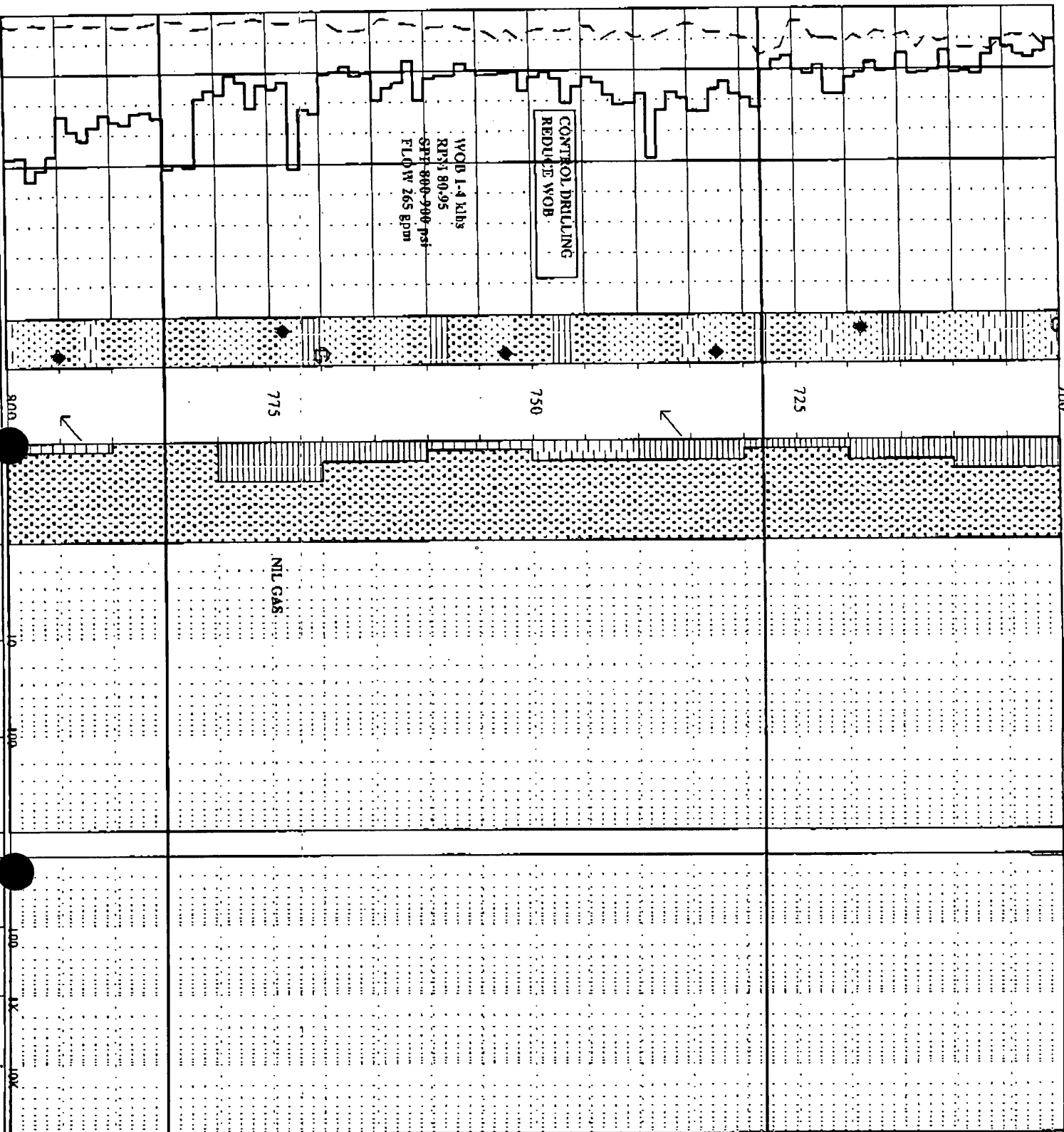
PEBBLE MUDSTONE:
 662m (528.5mSS)

SURVEY @ 680m: 2.75° @ 127T°

SANDSTONE: cl-trns, lt pl bn, lt bl
 gy, cfs-v cfs, pebb, pr srt, und, com
 pyr nod, lse, fr inf por, no fluor

309020 042

Well Name: PENRYN#2



SILTSTONE: dk bn, dk gy bn, arg gl
 CLYST, con micritic & lills, v sfi,
 disp, anorp, sbblky.

SANDSTONE: ms, gl, yel, pl bn, l-
 crs, pr silt, con pyr frags, fr
 Fe staining, lsc, fr in f por, no
 fluor.

PEBBLE POINT FM:
 728m (59.4, 5mSS)

SILTSTONE: m-dk bn, oec gy, bn, con
 arg gl, CLYST, fr carb, lt lills,
 sfi, oec disp, sbfss- anorp.

SURVEY @ 737m: 3.25° @ 122T°

CLAYSTONE: l-med gy, arg gl
 SLTST, con carb spks, intemic, fr
 dissem pyr, v sfi, anorp, sbblky.

SANDSTONE: ch- ms, lt, lt gy, f-
 crs, pb, pr silt, sl, lce cin, fr inf
 por, no fluor.

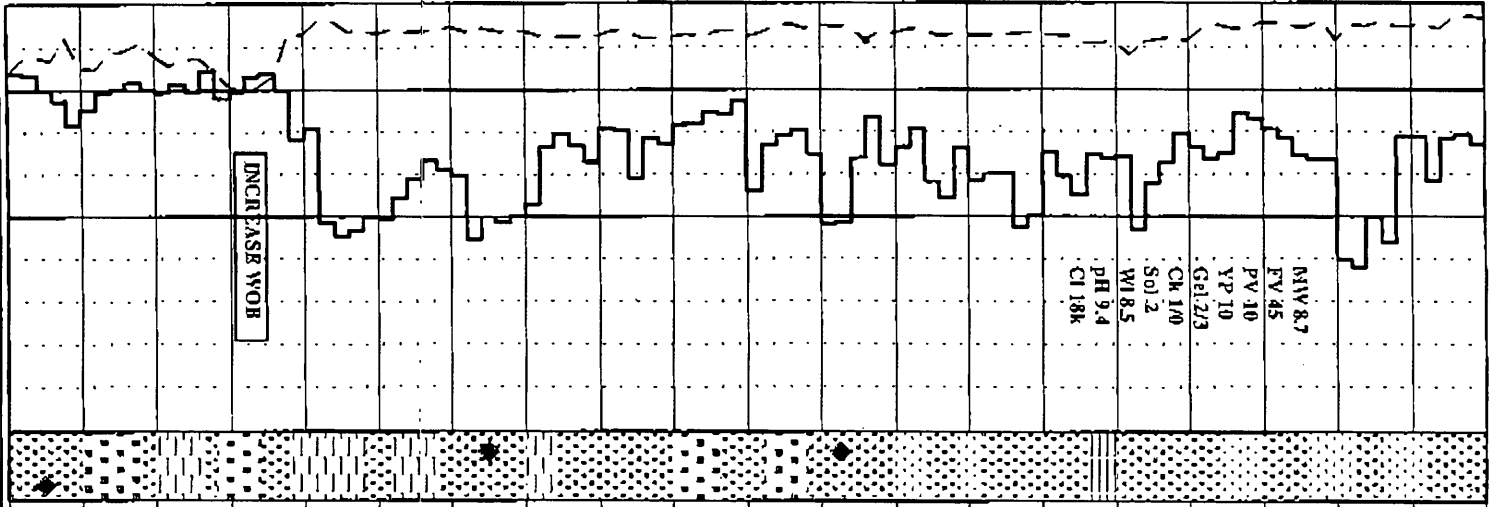
PARATITE FM:
 785m (65.1, 5mSS)

SURVEY @ 795m: 2.8° 118T°

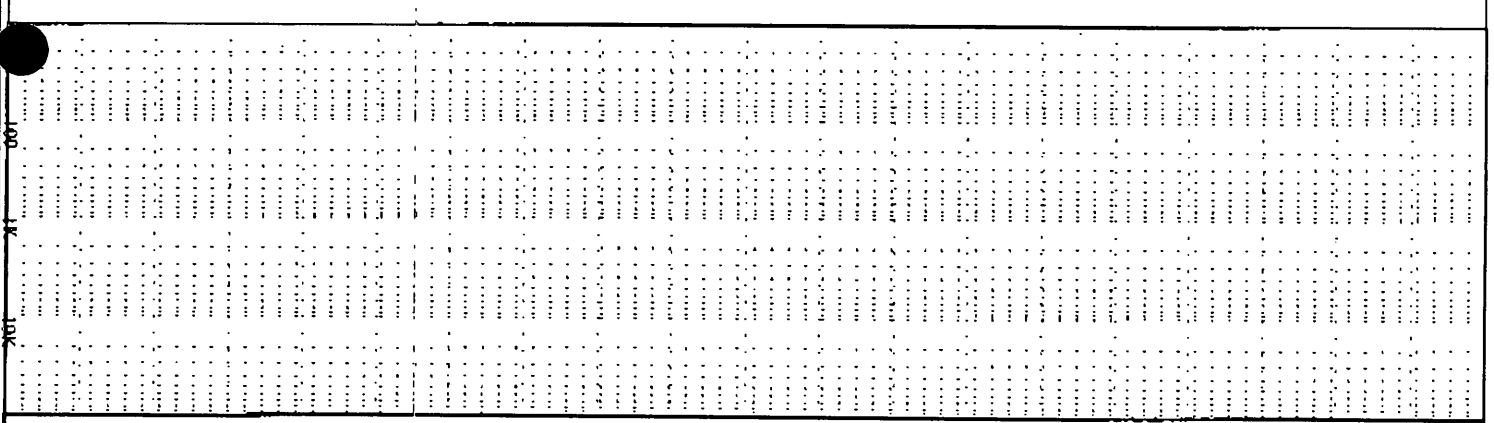
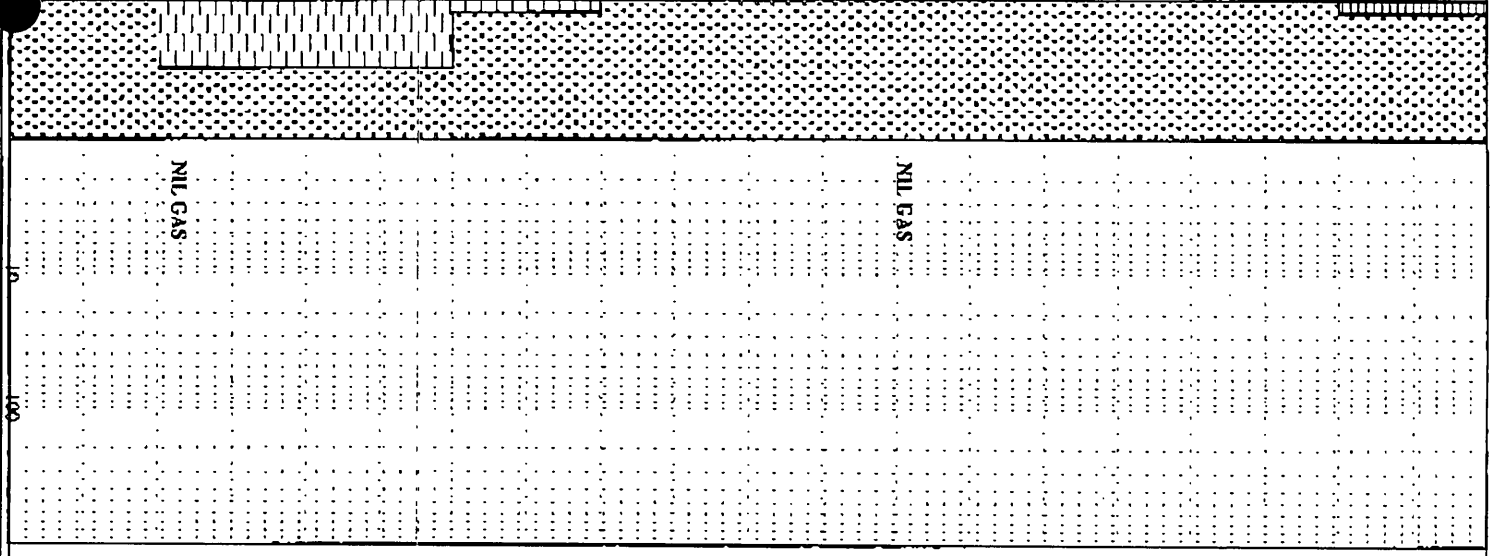
SANDSTONE: ms, l, opq, fr pl, yel, fr

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043

Well Name: PENIRYN#2



800
825
850
875
900



str-sealr pyr frags,sc,cln.
fr inf por, no fluor.

SANDSTONE:cl-fms,lr mly,ro-
occ fr crs, mod str,slr wk
sll cml,lr arg, mly,lr flts,gen
lsc cln sand,fr inf por, no fluor

SURVEY @ 853m, 2.8° 132°T

SANDSTONE:cl,roc mly,m-cr,pr
str,sa,occ wk-slg sll cml,lr gy
arg mlt up,lr slths,rr mod pyr,
pred lsc cln,fr inf por, no fluor

SILTSTONE:off wh-lt gy,gy br-no
bn, arg gl/ CLYST, con avn, abbt
lths,dk carb frags,vsf,disp,
amorph,rr sbilky.

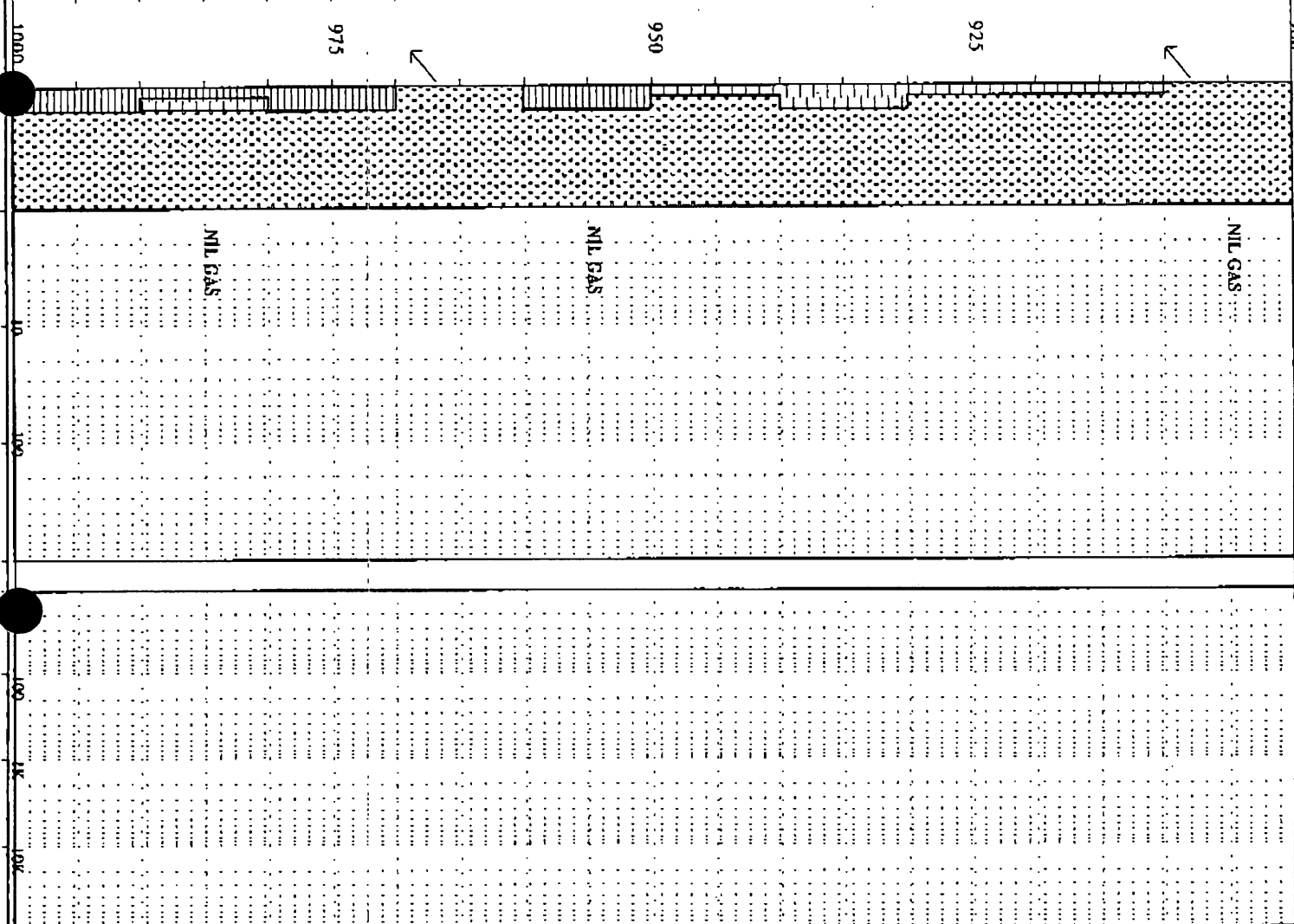
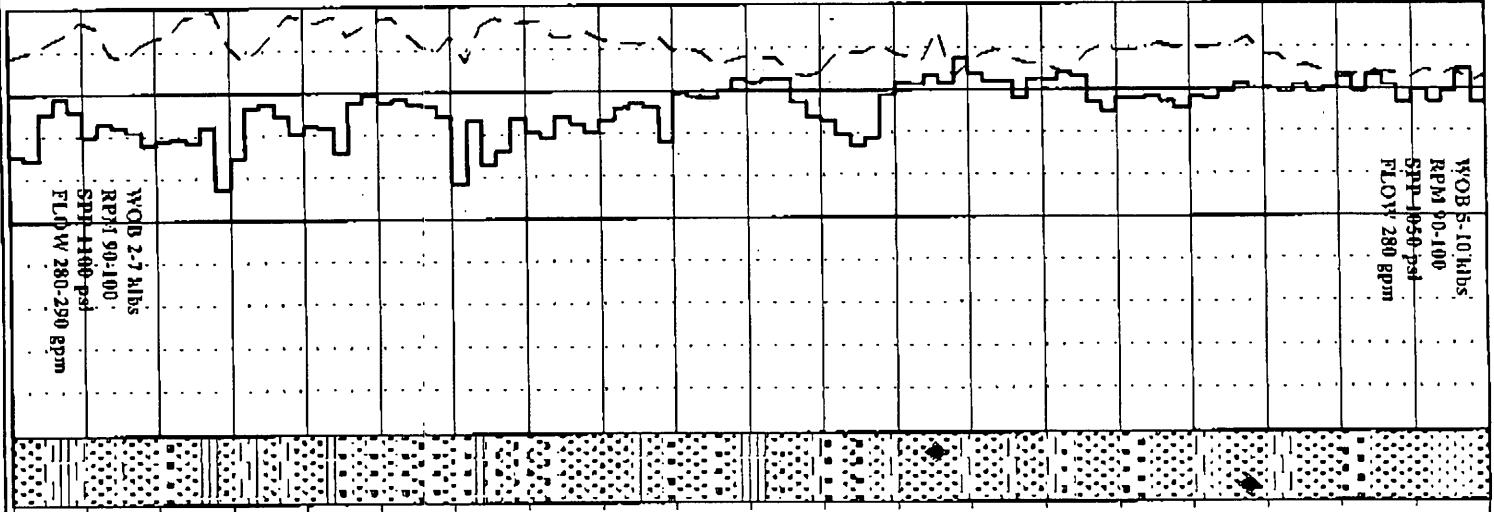
SANDSTONE:cl-fms,qd bn,pl,gy.

Services

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Well Name: PENRYN#2



por, no fluor.

SURVEY @ 910m-3.0° 116T

SILTSTONE:off white gy-bn-med bn, arg pl/ CLYST, com aren incl, abd lth, v s.R, disp, amorph-rr sbbly.

FLUOR: 930m - 990m
T, d, h, m, pp, l,
no crl.

SANDSTONE:cl-fmsl, pl bn, pt gy, cts-v cts, gr sil, s, com pyr noids & pyr coated grns, lsc, clin, fr por tr fluor.

SURVEY @ 968m-3.1° 113T

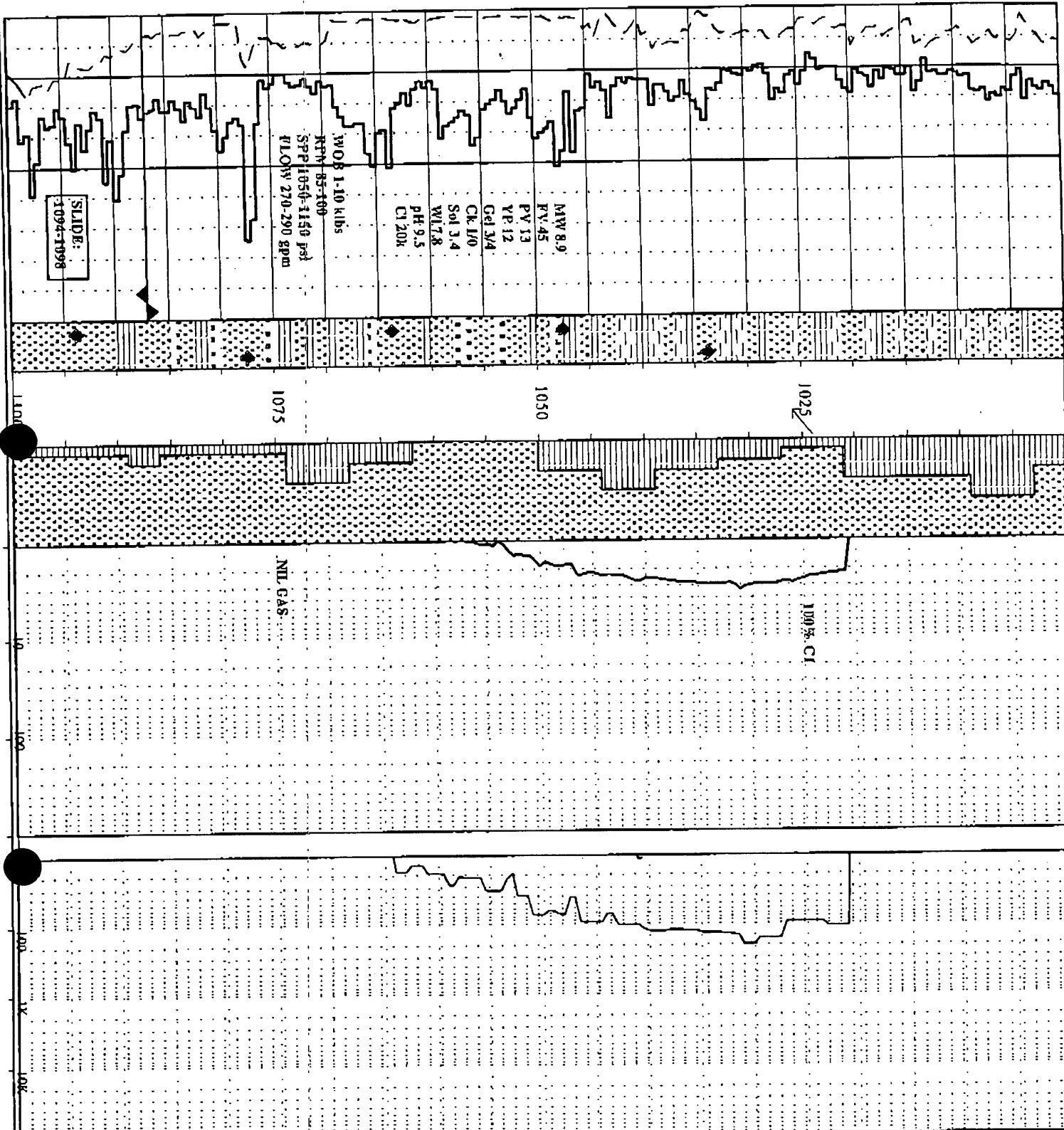
CLAYSTONE:l-med gy, med gy-bn, eom-mitic & lth, s, st-disp, amorph.

SANDSTONE:col-lmsl, pl gy, cts-v cts, gr sil, med-sr, fr wk sil em, ltr pyr, lsc, fr-gd inf por, tr fluor.

CARBIDE LAG CHECK @ 1001m
THEOR. STKS: 2121

909020 045

Well Name: PENRYN#2



ACTUAL STRKS: 2156
HOLE O/G % : 2 %

SILTSTONE: pl gy bl gy bn arg g/l
CLYST: con micritic & liths sfl
disp: amorph.

SANDSTONE: (msl) cl, lt pl gy, f
v crs, pr sn, sl, sc, fr in por,
no fluor.

SURVEY @ 1026m: 3.5" 1107

CALYSTONE: med bn arg sfl g/l SLT
ST up, fr-con liths, fr carb spks
fr micritic, v sfl-disp: amorph.

SANDSTONE: cl- (msl) pl gy, pl gy,
com snky qtz frags, crs-v crs, pr
sfl, sl, sc, fr in por, no fluor

SANDSTONE: off wh-pl gy, v f g/l
aren SLTST i/p, fr carb spks, field
glauc & liths, abdt off wh-pl gy,
arg mta, fl, pr vis por, no fluor

CLAYSTONE: med gy, bn-med bn arg
g/l SLTST, con carb spks, micritic &
liths, v sfl-occ from disp: amorph

POOH TO RUN MUD MOTOR &
STEERING ASSEMBLY @ 1087m

BIT #3: HUGHES STR-R09D
SIZE: 6.75" JETS: 2x12, 1x14
IN : 1087m OUT:
RUN : HRS:
COND:

Santos

Santos Ltd
A.C.N. 007 550 923
91 King William Street
Adelaide SA 5001
GPO Box 2319
Adelaide SA 5001
Telephone: (08) 8218 5111
Facsimile: (08) 8224 7962 (Geology Operations)

Facsimile

DATE: 10. 8. 01

NO. OF PAGES: 2
(including this cover page)

TO:

DEPT. NATIONAL RESOURCES & ENVIRONMENT
MANAGER OF OPERATIONS & SAFETY
ATTENTION: HORACIO HAAG
FAX NO: (03) 9412 5152

DEPT. NATIONAL RESOURCES & ENVIRONMENT
MANAGER OF RESOURCES
ATTENTION: KOUROSH MEHIN
FAX NO. (03) 9412 5156

FROM: A.P. PIETSCH

SUBJECT: PENRYN 2

GEOLOGICAL REPORT

MUDLOG

PLEASE ADVISE VIA (08) 8224 7967 IF FAX NOT RECEIVED

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WELL PROGRESS REPORT

PENRYN 2

DATE: 10/08/01 (0600 Hours)

DEPTH: 357 m

PROGRESS: 0

DAYS FROM SPUD: 3

CURRENT OPERATION: NIPPLE UP BLOW OUT PREVENTORS.

NOPE COST (P&A)\$1,277,248 FINAL FORECAST COST (P&A)\$
(C&S)\$1,406,161 (C&S)\$

COST TO DATE: \$955,045

CASING DEPTH: 7 5/8" CASING SHOE @ 355m.

RIG: ODE 30

PROGRAMMED TD: 1734m ROTARY TABLE: 133.56m

GROUND LEVEL: 128.86m

MUD DATA (2400 Hours)	Type:	Wt:	Visc:	WL:	pH:	K ⁺ :	Cl ⁻ :	PV/YP:	Rmf:
	AQUGEL	8.9	45		9.7		150	14/22	

BIT DATA (2400 Hours)	PRESENT	No.	Make	Type	Size	Hours	Meterage	Condition
		1	SMITH	FGSS+2	9.875"	23.7	357m	

SURVEYS:		MD	INCLINATION	AZIMUTH (T)	MD	INCLINATION	AZIMUTH (T)
1		26m	0.25°	62.1°	8	203m	1.70°
2		52m	1.2°	191.1°	9	232m	1.5°
3		63m	2.5°	199.1	10	260m	1.6°
4		90m	2.5°	201.1	11	290m	1.6°
5		118m	2.25°	200.1°	12	327m	3.7°
6		145m	2.25°	198°	13	351m	3.7°
7		175m	1.80°	204°			

PREVIOUS 24 HOURS OPERATIONS:

RUN 30 JOINTS OF 7 5/8" CASING. RIG UP DOWELL SCHLUMBERGER LINES AND CEMENT HEAD. CIRCULATE HOLE CLEAN. MIX & PUMP 100 SKS OF LEAD CEMENT AT 11.5 PPG AND 85 SKS OF TAIL CEMENT AT 16.6 PPG. DISPLACE WITH 51 BARRELS OF MUD, BUMP PLUG AND PRESSURE TESTING CASING TO 2000 PSI. CEMENT CASING. RIG DOWN CEMENT HEAD. TOP UP JOB WITH DOWELL. FLUSH CEMENT LINES AND CONDUCTOR RISER AND FLOW LINES. WAIT ON CEMENT. NIPPLE UP BLOW OUT PREVENTORS.

ANTICIPATED OPERATIONS:

PRESSURE TEST BREDENHEAD AND BLOW OUT PREVENTORS. RUN IN HOLE WITH NEW BOTTOM HOLE ASSEMBLY AND 6.75" BIT. DRILL OUT SHOE TRACK AND 3m(10') OF NEW HOLE. PERFORM LOT TEST. DRILL 6.75" HOLE WITH SURVEY.

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FAX NO. (03) 9412 5156**

FROM: A.P. PIETSCH

SUBJECT: PENRYN 2

GEOLOGICAL REPORT

MUDLOG

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909020 049

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WELL PROGRESS REPORT

PENRYN 2

DATE: 09/08/01 (0600 Hours)

DEPTH: 357 m

PROGRESS: 232 m

DAYS FROM SPUD: 2

CURRENT OPERATION: RIG TO RUN 7 5/8" SURFACE CASING.

NOPE COST (P&A)\$1,277,248 FINAL FORECAST COST (P&A)\$
(C&S)\$1,406,161 (C&S)\$

COST TO DATE: \$891,216

CASING DEPTH: 7 5/8" CASING SHOE @ m

RIG: ODE 30

PROGRAMMED TD: 1734m ROTARY TABLE: 133.56m

GROUND LEVEL: 128.86m

MUD DATA	Type:	Wt:	Visc:	WL:	pH:	K ⁺ :	Cl ⁻ :	PV/YP:	Rmf:
(2400 Hours)	AQUGEL	8.9	45		9.7		150	14/22	

BIT DATA	PRESENT	No.	Make	Type	Size	Hours	Meterage	Condition
(2400 Hours)		1	SMITH	FGSS+2	9.875"	10.7	294m	IN HOLE

SURVEYS:	MD	INCLINATION	AZIMUTH (T)	MD	INCLINATION	AZIMUTH (T)
1	26m	0.25°	62.1°	8	203m	1.70°
2	52m	1.2°	191.1°	9	232m	1.5°
3	63m	2.5°	199.1	10	260m	1.6°
4	90m	2.5°	201.1	11	290m	1.6°
5	118m	2.25°	200.1°	12	327m	3.7°
6	145m	2.25°	198°	13	351m	3.7°
7	175m	1.80°	204°			

PREVIOUS 24 HOURS OPERATIONS:

DRILL FROM 125m TO 153m RUN SURVEY @ 145m. DRILL FROM 153 TO 181m RUN SURVEY @ 175m. DRILL FROM 181m TO 210m RUN SURVEY @ 203m. DRILL FROM 210m TO 239m RUN SURVEY @ 232m. DRILL FROM 239m TO 268m RUN SURVEY @ 260m. DRILL FROM 268m TO 296m RUN SURVEY @ 290m. DRILL FROM 296m TO 316m. JET FROM 316m TO 321m. DRILL FROM 321m TO 334m RUN SURVEY @ 327m. DRILL FROM 334m TO 357.3m RUN SURVEY @ 351m. CIRCULATE HOLE CLEAN. WIPER TRIP TO SURFACE AND BACK. PUMP HI-VISUAL SWEEP AND CIRCULATE HOLE CLEAN. PUMP SLUG AND PULL OUT OF HOLE. LAYING OUT THE 6 1/2" DC'S AND 9 7/8" TOOLS. RIG TO RUN 30 JOINTS OF SURFACE CASING.

ANTICIPATED OPERATIONS:

RUN IN HOLE 7 5/8" CASING. CIRCULATE HOLE CLEAN. CEMENT CASING. NIPPLE UP AND TEST BRADENHEAD AND BLOW OUT PREVENTORS. EXPECT TO RESUME DRILLING MAIN HOLE BY LATE FRIDAY.

909020 050

909020 050

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A.C.N. 007 550 923

WELL PROGRESS REPORT

PENRYN 2

DATE: 09/08/01 (0600 Hours)

FORMATION TOPS:	RT	-Subsea	H/L to Prog	H/L to Offsets

HYDROCARBON SHOW SUMMARY		
INTERVAL	LITHOLOGY	GAS

GEOLOGICAL SUMMARY		
INTERVAL	LITHOLOGY	GAS
125m-357m Rop:1.1-2.3 Ave:1.4mn/m	MASSIVE MARL MARL: pale to medium grey, pale brown, trace light orange, calcareous, abundant fossil fragments, occasional echinoid spines, common forams, corals in part, trace nodular pyrite, very soft to dispersive, commonly washing out, occasional sticky, amorphous.	NIL GAS