5649 BH

ENIU 1719887

Encl. 4

PETROMARINE ITALIA S.p.A.

AGIP
ARCHIVIO POZZI
AGEO

Well: VERONICA 1

E/PROF 01

COORDINATES : Lat. 42° 35' 26".571 N
Long. 14° 31' 37".215

ELEVATION : R.T.E. 33 m
Bottom sea −114 m

PERMIT : BR 190 SE

PROVINCE : ADRIATIC SEA ZONE "B"

U.N.M.I. : ROME

TYPE OF WELL : WILDCAT

RIG : IDECO 2500 (SCARABEO II)

SPUD. DATE : September 12, 1988

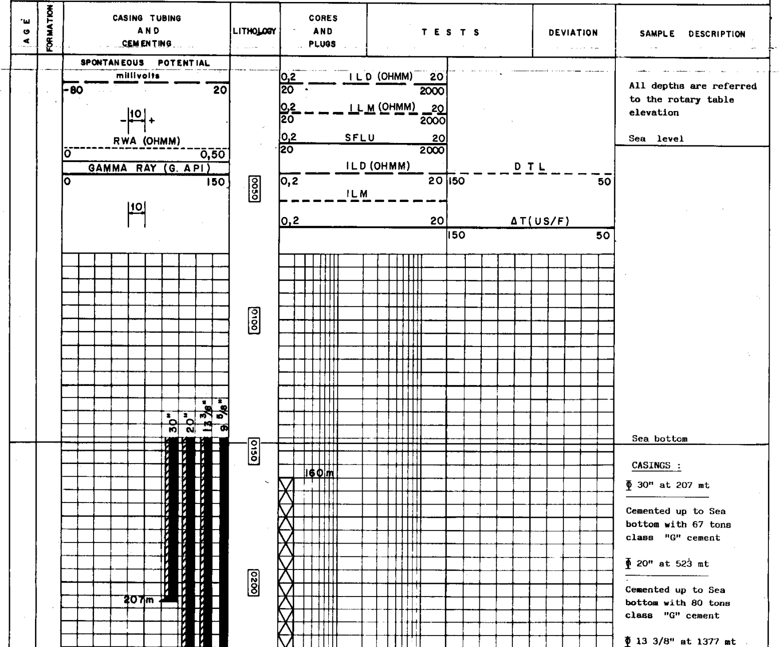
FINISHED DRILLING : October 9, 1988

TOTAL DEPTH : Driller 3265 m.
log 3172 m.

STATUS : DRY HOLE

PRODUCING INTERVAL : ————

SCALE 1 : 1000



All depths are referred to the rotary table elevation

Sea level

Sea bottom

CASINGS :

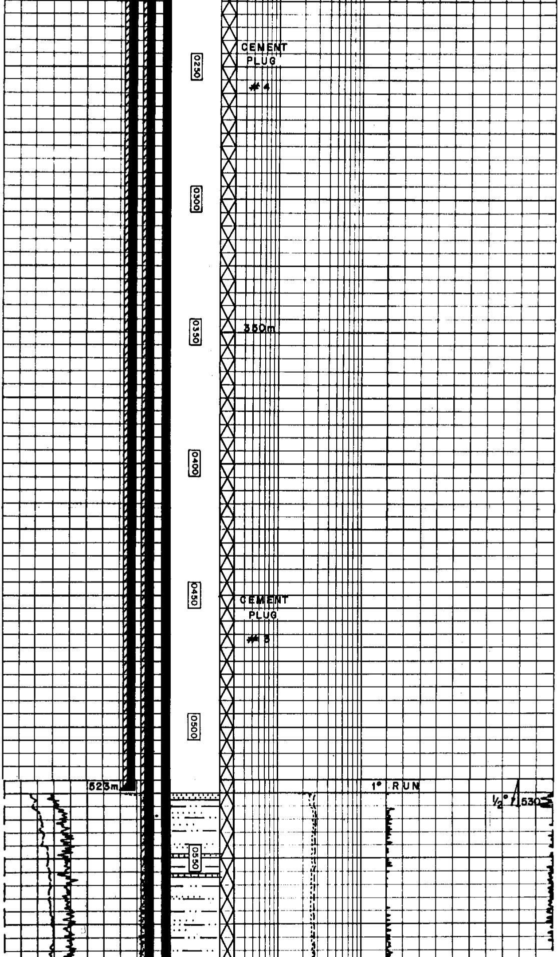
Φ 30" at 207 mt

Cemented up to Sea bottom with 67 tons class "G" cement

Φ 20" at 523 mt

Cemented up to Sea bottom with 80 tons class "G" cement

Φ 13 3/8" at 1377 mt



Cemented up to 400 mt (BRT) with 78 tons class "G" cement + 2% of Bentonte

Φ 9 5/8" at 2333 mt

Cemented up to 1100 mt (BRT) with 44 tons class "G" cement.

Note: 9 5/8" -82 casing cut 35 mt below Sea bottom. 30", 20" and 13 3/8"(153) casings cut about 6 mt below Sea bottom.

DEVIATION SURVEY (TOTCO)

At 530 mt ½°
" 1390 mt ½°
" 1422 mt ½°
" 2097 mt ½°
" 2346 mt ½°
" 2587 mt 1° 3/4
" 2930 mt 1°

SAMPLING RATE

- From 530 mt to 2800 mt every 10 mt
- From 2800 mt to 3000 mt every 5 mt
- From 3000 mt to 3265 (TD) every 10 mt with some infilling down to 3200 mt

DRILLING MUD

Bentonitic Type

- From 207 mt to 550 mt MW = 8,8 lb/gall. x 80"

LS Type

- From 530 mt to 880 mt MW = 9 lb/gal x 47"
- from 880 mt to 1200 mt MW = 9,6 lb/gal x 46"
- from 1200 mt to 2346 mt MW = 10 lb/gal x 56"
- from 2346 mt to 2540 mt MW = 9,5 lb/gal x 60"
- from 2540 mt to 3265mt(TD) MW = 9,2 lb/gal x 65"

CEMENT PLUGS

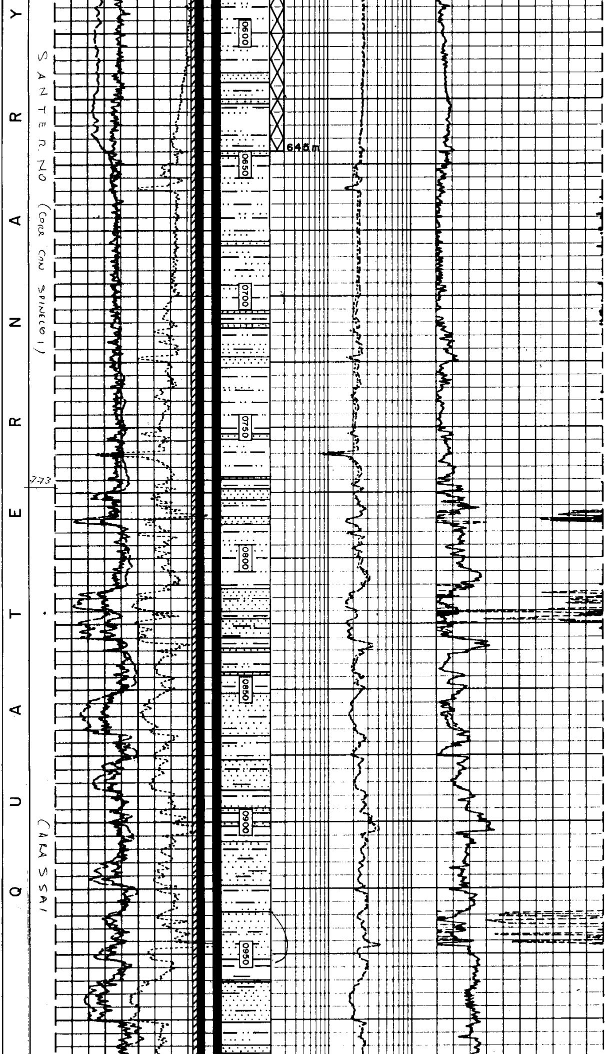
1st PLUG

From 3219 mt to 2900 mt 16,4 tons cement

2nd PLUG

From 2480 mt to 2180 mt 15 tons cement

3rd PLUG



From 645 mt to 350 mt
15 tons cement

4th PLUG

From 350 mt to 160 mt
20 tons cement.

GAS SHOWS

From 665 mt to 935 mt

Background gas 0,1÷0,2 % of C1 with peaks up to 0,9 % C1

From 935 mt to 1300 mt

Background gas 0,1÷0,2% C1 with many peaks from 1,1% to 1,5% C1

From 1300 mt to 1680 mt

Background gas 0,2÷0,3% C1 with rare peaks up to 1,4% C1

From 1680 mt to 2815 mt

Background gas of 0,1% C1 with peaks of 0,5÷0,6% C1

From 2815 mt to 2980 mt

Background gas of 0,1% C1 with peaks of 0,2÷0,3% C1
Note: The pipe connection gas was recorded when drilling the above interval.

From 2980 mt to 3265 mt(TD)

Only traces of C1 were recorded here

WATER SHOWS

During last circulation at 3265 mt (TD) well showed a salt water cushion (Na Cl max 12,5 gr/l)

From 530 mt to 774 mt

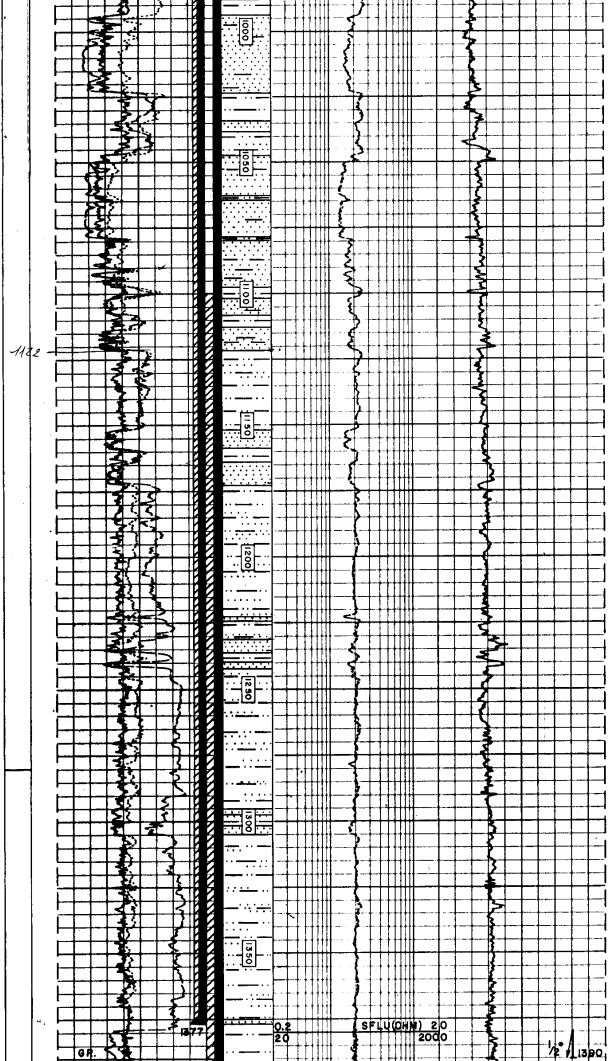
Prevaling grey-greenish clay, gummy and silty. Abundant microfossils and fragments ofmacrofossils. Traces of lignite.

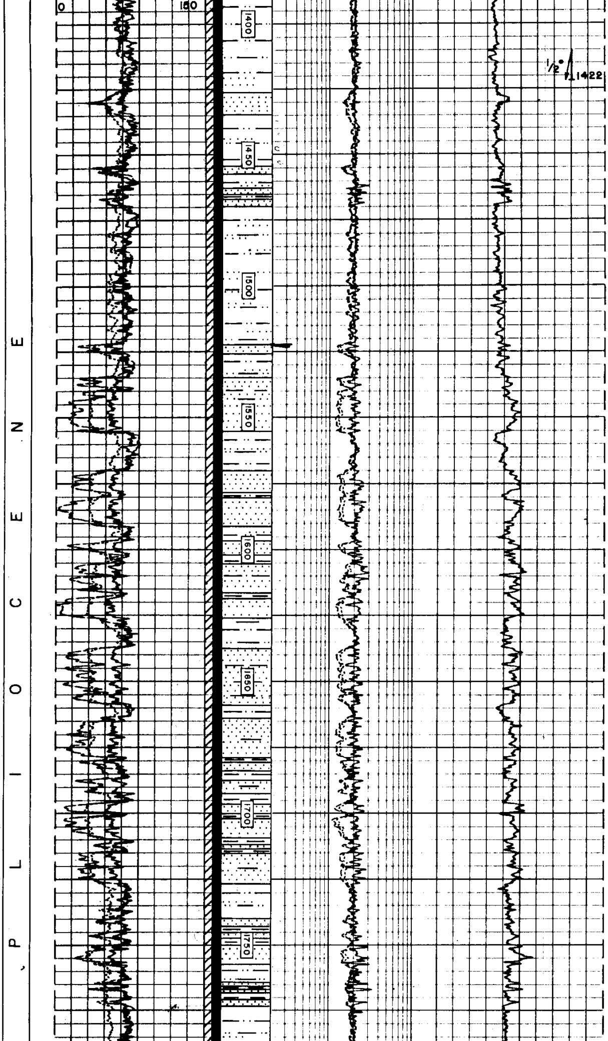
From 774 mt to 1172 mt

Sand fine to medium and rarely coarse in thick beds sandwiched between clay layers.

From 1172 mt to 1522 mt

Clay s/a with thin intercalation of sand.

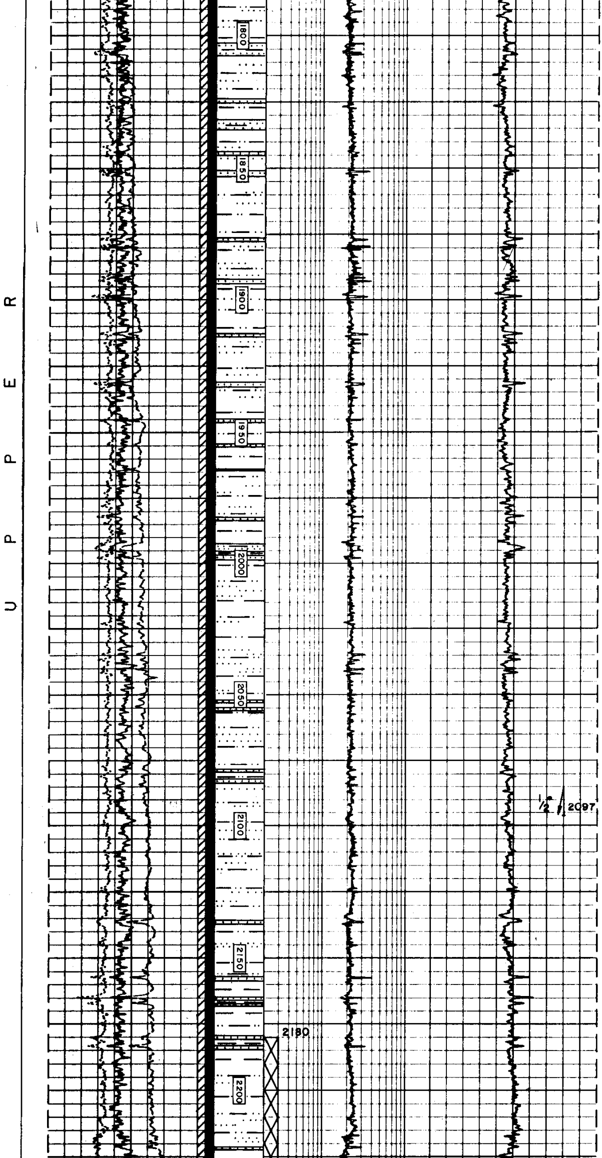




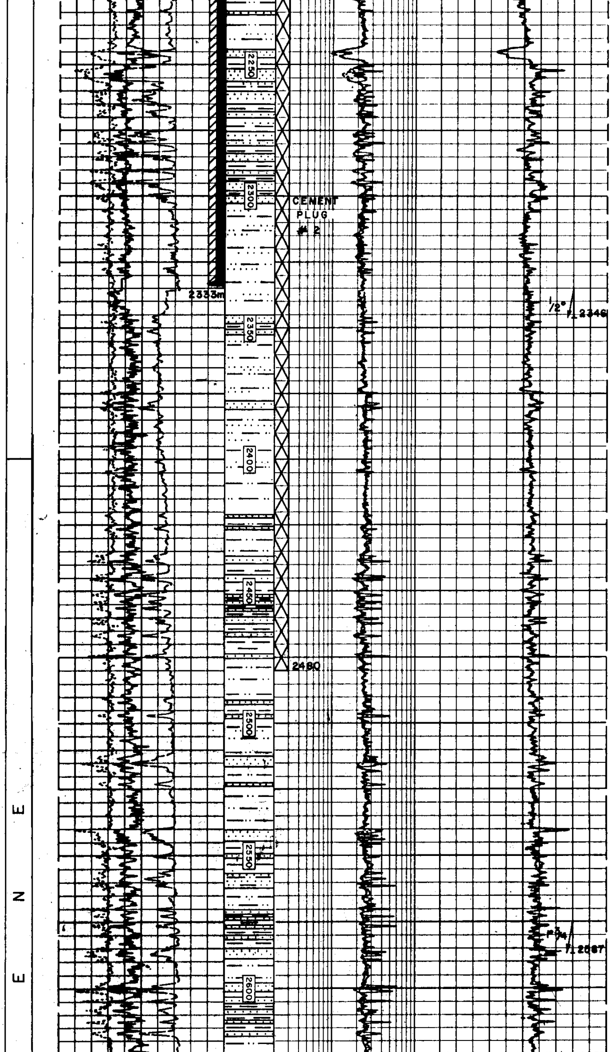
From 1522 mt to 1773 mt

Sand fine to very fine interbedded with silty clay.

From 1773 mt to 2248 mt

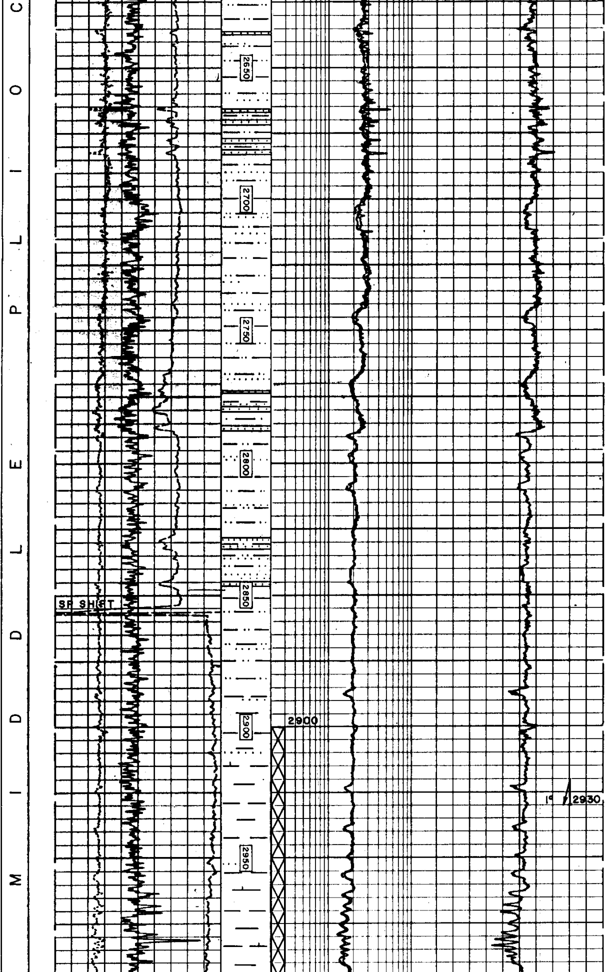


Prevaling gummy clay with
intercalation of thin
layers of sand and sandstone



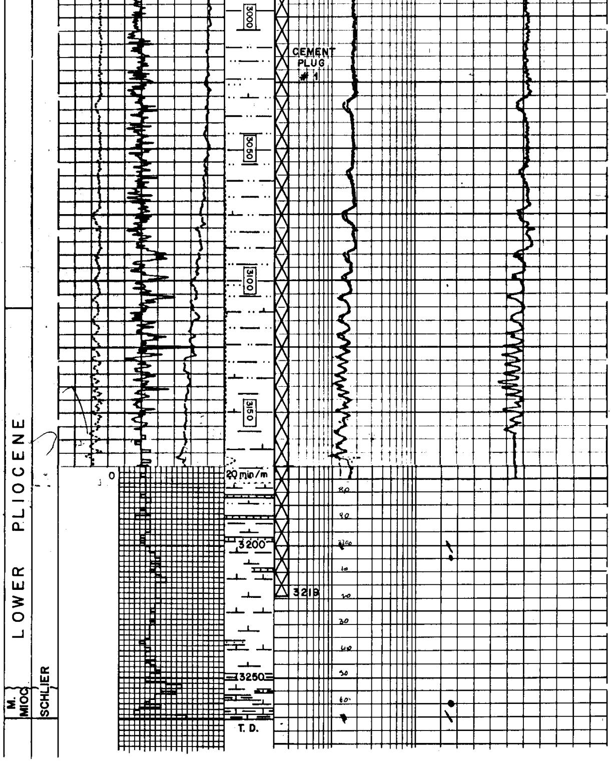
From 2248 mt to 2848 mt

Clay and marly clay with
interbedded thin layers
of sandstone and siltstone



From 2848 mt to 3200 mt

Marly clay with shale and thin rare beds of sandstones.



From 3200 mt to 3248 mt

Greenish marls and siltstone.

From 3248 mt to 3265 mt(T.D.)

Marls and marly limestone grey whitish with bioclastic limestone to the end of the sequence.

TOTAL DEPTH DRILLING: 3265 m

* TOTAL DEPTH LOGGING: 3172 m

TABLE OF ELECTRICAL LOGS

Type	Runs	Date	From	To	Depth		Ø	Salinity of mud Type	Scale	Remarks
					Drilling	Log				
● DIL/SLS/GR	1	SEPT.22,88	523	1388	1390	1390	17 ½	3600 ppm Lignosulphonate	1:200 - 1:1000	SFU curve was not recorded
● DIL/SLS/GR	2	SEPT.30,88	1377	2346	2346	2348	12 1/4	3600 ppm Lignosulphonate	1:200 - 1:1000	———
● SHDT	1	SEPT.09,88	1377	2348	2346	2348	12 1/4	3600 ppm Lignosulphonate	1:200	
● DIL/SLS/GR	3	OCT.11,88	2333	3167	3265	3172	8½	7880 ppm Lignosulphonate	1:200 - 1:1000	———
● LDL/CNL/GR	1	OCT.12,88	2333	2850	3265	2878	8½	9140 ppm Lignosulphonate	1:200 - 1:1000	———
● EPT/GR	1	OCT.12,88	2333	2850	3265	2864	8½	9140 ppm Lignosulphonate	1:200	———
● SHDT	2	OCT.14,88	2333	3197	3265	3197	8½	7880 ppm Lignosulphonate	1:200	———
● WSS	1	OCT.13,88	645	3230	3265	3230	8½	7880 ppm Lignosulphonate	———	39 check shots

NOTE: *

SCHLUMBERGER TOOL COULD NOT PASS BELOW 3172 M PROBABLY DUE TO BORE HOLE COLLAPSE.