ENCLOSURE PS15

DST5A

Schlumberger

SIMILTANEOUS PRODUCTION LOG

CSU Field Log

450697

OR_357D

COMPANY:	AMOCO AUSTRALIA PETROLEUM CO.
WELL:	PELICAN #5
FIELD:	
STATE :	TASMANIA
RIG :	D.M.EPOCH
NATION:	AUSTRALIA
LOCATION:	SHOT POINT 240 LINE TNK4-87
LATITUDE:	40 20'43.259"S
LONGITUDE:	145 51'49.971"

PERMANENT DATUM: MSL
ELEV. OF PERM. DATUM: 0.0 M
LOG MEASURED FROM: KB
21.4 M ABOVE PERM. DATUM
DRLG. MEASURED FROM: KB

ELEVATIONS-
KB: 21.4 M
DF: 21.1 M
GL: -78.3 M

OTHER SERVICES-
ENER #1

PROGRAM
TAPE NO:
27.862
SERVICE
ORDER NO:
DME860403

DATE: 8 APR 86
RUN NO: 5

DEPTH-DRILLER: 2907.5 M
DEPTH-LOGGER: 2907.5 M
BTM. LOG INTERVAL: 2900.0 M
TOP LOG INTERVAL: 850.0 M

CASING-DRILLER:	2995.0 M	3647.0 M	4065.0 M
CASING-LOGGER:	2995.0 M	3647.0 M	4065.0 M
CASING:	9 5/8 IN.	7 IN.	5 IN.
WEIGHT:	53.5000 LB/F	29.0000 LB/F	21.0000 LB/F
BIT SIZE:	12 1/4 IN.	8 1/2 IN.	6 IN.
DEPTH:	3002.2 M	3647.0 M	4267.0 M

MAX. REC. TEMP: 270.0 DEGF

LOGGING UNIT NO: 822
LOGGING UNIT LOC: VEA
RECORDED BY: G.HIXON/R.WINSLOE
WITNESSED BY: J.HARKINS

REMARKS:

EQUIPMENT NUMBERS-

ATM-AA 444	CAL-UB 481	ATC-CB 228	PTS-A 106
TTG-B 2832	CFS-F 754		

ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASUREMENTS AND WE CANNOT, AND DO NOT GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATIONS, AND WE SHALL NOT, EXCEPT IN THE CASE OF GROSS OR WILLFUL NEGLIGENCE ON OUR PART, BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COSTS, DAMAGES OR EXPENSES INCURRED OR SUSTAINED BY ANYONE RESULTING FROM ANY INTERPRETATION MADE BY ANY OF OUR OFFICERS, AGENTS OR EMPLOYEES. THESE INTERPRETATIONS ARE ALSO SUBJECT TO OUR GENERAL TERMS AND CONDITIONS AS SET OUT IN OUR CURRENT PRICE SCHEDULE.

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WELL & TOOL SKETCH

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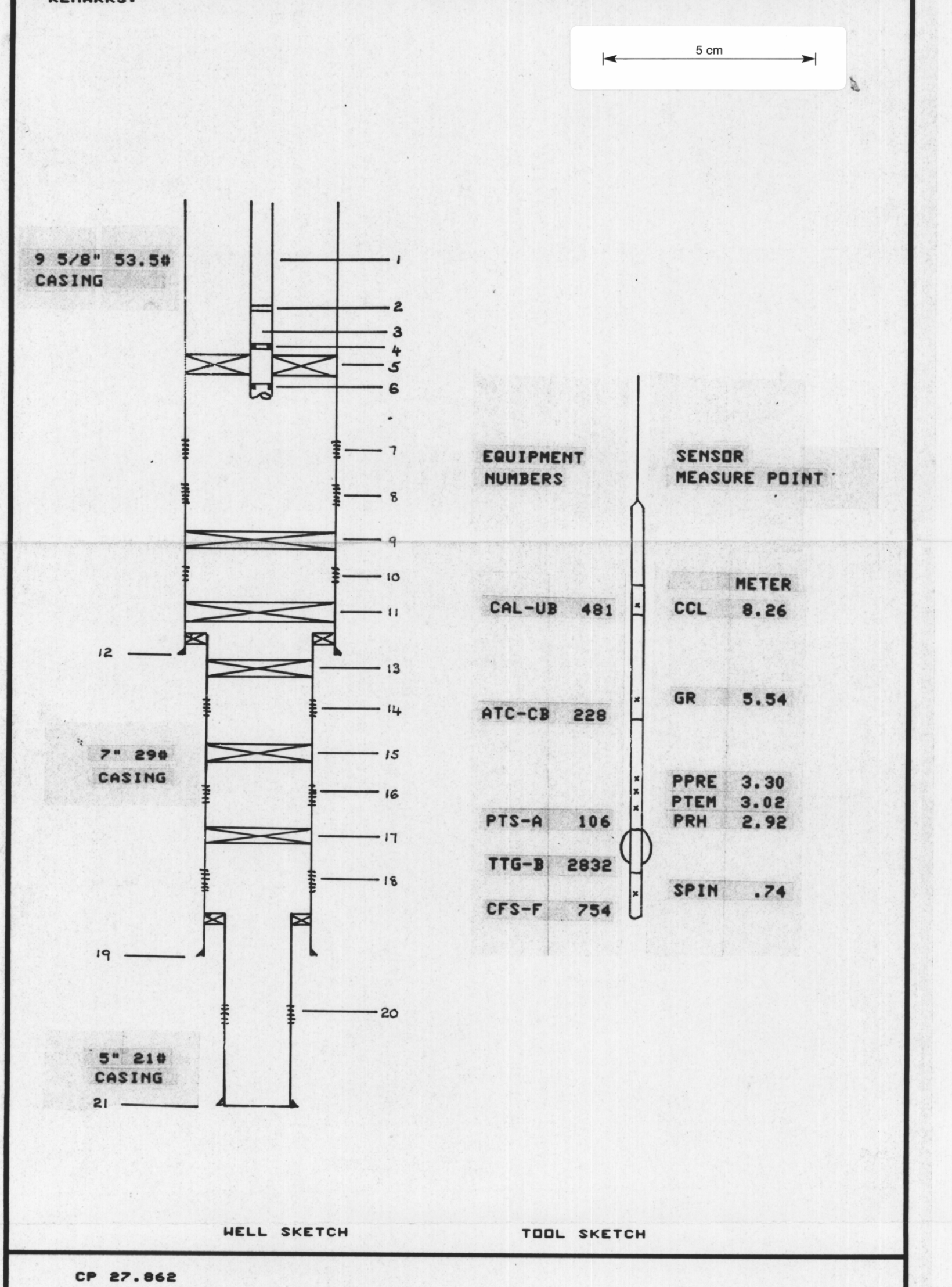
REMARKS:

5 cm



CP 27.862

WELL SKETCH LISTING

ITEM		CATEGORY	DESCRIPTION	TOP DEPTH	BOT DEPTH
1		TUBING #1	3 1/2" VAM TUBING	0.0 M	2547.4 M
2		MISC.	OTIS SRO LATCH	2547.4 M	2548.3 M
3		MISC.	DST TOOLS	2548.3 M	2811.6 M
4		MISC.	BUNDLE CARRIER	2811.6 M	2815.7 M
5		MISC.	RTTS PACKER ASSY	2815.7 M	2819.2 M
6	*	MISC.	BUNDLE CARRIER ASSY	2819.2 M	2830.0 M
7		PERFOR	2 1/8" ENERJET	2853.5 M	2859.0 M
8		PERFOR	5" TCP @ 12SPF 120DEG/SQUEEZED	2868.0 M	2884.0 M
9		PLUG	9 5/8" EZSV CEMENT RETAINER	2907.5 M	2908.7 M
10		PERFOR	5" WLC @ 12SPF 120DEG/SQUEEZED	2911.0 M	2913.0 M
11		PLUG	9 5/8" EZSV PLUG	2923.3 M	2924.5 M
12		CASING #3	9 5/8" 53.5# CASING	99.0 M	2995.0 M
13		PLUG	7" EZSV PLUG	3111.0 M	3112.2 M
14		PERFOR	5" TCP @ 12SPF 120 DEG	3142.0 M	3163.5 M
15		PLUG	7" EZSV PLUG	3412.0 M	3413.2 M
16		PERFOR	2 1/8" ENER	3439.5 M	3450.5 M
17		PLUG	7"EZSV PLUG	3553.7 M	3554.9 M
18		PERFOR	2 1/8" ENERJET	3605.6 M	3617.5 M
19		CASING #2	7" 29# CASING	2930.0 M	3647.0 M
20		PERFOR	2 1/8"ENERJET	3672.0 M	3699.0 M
21		CASING #1	5" 21# CASING	3557.0 M	4065.0 M

* = ITEM WITH SMALLEST I.D. IN WELL

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WELL & TOOL SKETCH

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REMARKS

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REMARKS:
1/ DEPTH CORRELATED WITH CBL-VDL-GR-CCL RUN #2 (12/02/86)
2/ THIS LOG WAS RECORDED ON A FLOATING RIG
3/ PRESSURE (PPRE) WAS RECORDED WITH A STRAIN GAUGE USING THE SURFACE CALIBRATION AND PCOR TABLES
4/ FLUID DENSITY MEASUREMEMTS (PRH) ARE NOT CORRECTED FOR WELL DEVIATION OR FLUID FRICTION EFFECTS

OBJECTIVES:
1/ DETERMINE THE NATURE OF FLUIDS FLOWING FROM THE PERFORATIONS AT 2853.5 TO 2859.0 MTRS
2/ MONITOR THE FLUID CONTACT MOVEMENT IN THE TUBING TO ALLOW FLOWRATE TO BE DETERMINED IN THE TUBING WHEN THE WELL IS UNLOADING
3/ DETERMINE THE SOURCE OF WATER IF ANY

TECHNIQUE: RUN A PLT WITH PRESSURE, DENSITY, TEMPERATURE AND FLOWMETER SENSORS.

SEQUENCE OF EVENTS:

```
DATE   TIME    REMARK

30/03  05:50   APPLY PRESSURE TO THE ANULUS OF DST #5 AND FIRE
               THE HYDRAULICALLY FIRED TCP GUNS

                INTERVAL:      2868.0 TO 2884.0 MTRS
                CHARGE TYPE:   22 GRAM HMX H304952
                SHOT DENSITY:  12 SPF
                PHASING:       120 DEG
                UNDERBALANCE:  2000 PSI

30/03  07:00   TEST WELL/ RECORD PLT #3 AND PLT #4
                FLOW PERIOD: 0700 HRS (30/03/86) TO 1323 HRS (30/03/86)
                 OIL FLOWRATE:      0     BPD AT SC
                 GAS FLOWRATE:      200   MSCF/D
                 WATER FLOWRATE:    20    BPD AT SC
                 GAS GRAVITY:       0.856 AT SC (AIR = 1.0)
                FLOW PERIOD: 1949 HRS (30/03/86) TO 2204 HRS (30/03/86)
                 ZERO PRODUCTION AT SURFACE. WATER APPEARED TO BE FLOWING
                 INTO THE TUBING DOWNHOLE

31/03  17:30   CIRCULATE OUT TUBING CONTENTS. THE TUBING WAS FOUND TO
               BE FULL OF WATER (REFER TO PLT RUN #3 & #4 29/03/86)

31/03          PULL DST #5

03/04  07:45   SHOOT SQUEEZE GUN:

                INTERVAL       2911.0 TO 2913.0 MTRS
                CHARGE TYPE:   22 GRAM RDX H304953
                DENSITY:       12 SPF
                PHASE:         120 DEG

04/04          BULL SQUEEZE WITH CEMENT INTO INTERVALS 2911.0 TO
               2913.0 MTRS AND 2868.0 TO 2884.0 MTRS

05/04          RUN 9 5/8" EZSV CEMENT RETAINER ON DP AND SET IT
               AT 2907.5 MTRS/ TEST CEMENT SQUEEZE/ POOH

07/04          RUN DST #5A

08/04  13:50   PERFORATE DST #5A AND FLOW THE WELL
                INTERVAL:      2853.5 TO 2859.0 MTRS
                CHARGE TYPE:   2 1/8" ENERJET
                DENSITY:       6 SPF
                PHASE:         ZERO DEG
                UNDERBALANCE:  3000 PSI

08/04  16:00   SHUT WELL IN DOWNHOLE AT LPR-N VALVE/ RIG UP PLT

08/04  17:30   RIH WITH PLT AND LOOK FOR THE FLUID CONTACT IN
               THE CUSHION WITH THE LPR-N CLOSED

08/04  19:30   OPEN THE LPR-N VALVE AND FLOW THE WELL.
               MONITOR THE MOVEMENT OF THE GAS/FLUID CONTACT IN THE
               TUBING.

                          TIME             CONTACT DEPTH

                          19:46/08           1107 MTRS
                          20:04/08           1043 MTRS
                          20:18/08           1008 MTRS
                          20:27/08            988 MTRS
                          20:44/08            950 MTRS
                          20:59/08            911 MTRS

08/04  21:05   LOG DOWN TO THE PERFORATIONS TO DETERMINE WHERE
               THE FLUID IS COMING FROM AND THE TYPE OF FLUID FLOWING

08/04  22:56   LOG DOWN: TEMPERATURE PROFILE

09/04  00:10   LOG DOWN: TEMPERATURE PROFILE

09/04  00:53   LOG DOWN: TEMPERATURE PROFILE

09/04  03:00   MONITOR GAS/FLUID CONTACT MOVEMENT

                          TIME             CONTACT DEPTH

                          03:17/09            432 MTRS
                          03:46/09            407 MTRS
                          04:25/09            370 MTRS
                          05:20/09            328 MTRS
                          07:06/09            254 MTRS
                          08:16/09            219 MTRS
                          09:15/09            192 MTRS
                          10:18/09            163 MTRS

09/04  11:30   RIG DOWN SCHLUMBERGER
```

CONCLUSIONS:
1/ THE PERFORATIONS AT 2853.5 TO 2859.0 MTRS ARE PRODUCING WATER
2/ THE PERFORATIONS AT 2868.0 TO 2884.0 MTRS (WHICH WERE SQUEEZED) ARE LEAKING AND ARE PRODUCING WATER
3/ NO CHANNELING IS EVIDENT

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REMARKS

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MERGED TEMP LOGS: WELL FLOWING

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REMARKS:

FILES #3,5,7,8 MERGED
LOG RECORDED WITH WELL FLOWING TO SURFACE

PRESSURE (PPRE) WAS RECORDED WITH A STRAIN GAUGE USING SURFACE CALIBRATION AND PCOR SUMMARY

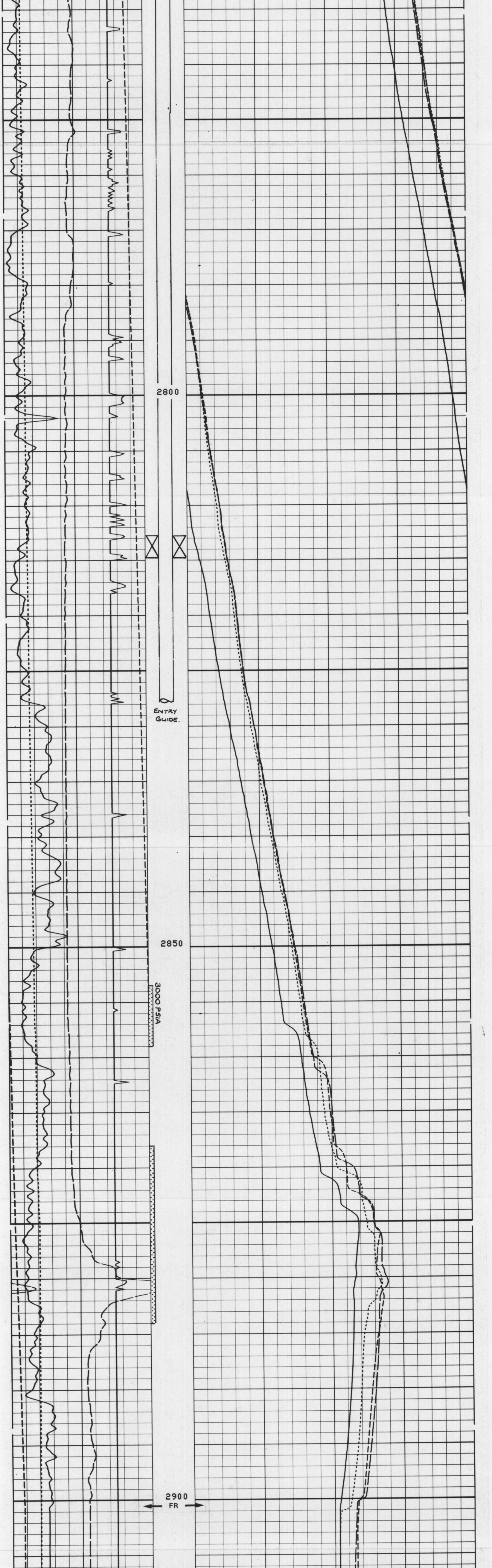
FLUID DENSITY MEASUREMENT (PRH) IS NOT CORRECTED FOR WELL DEVIATION OR FRICTION EFFECTS

DATA RECORDED WHILE LOGGING DOWN

5 cm

Curve	Left	Right
PTEM(DEGF)	250.00	350.00
PPRE;5 (PSIA)	2000.0	3000.0
PRH;3 (G/C3)	0.0	2.0000
GR;3 (GAPI)	0.0	150.00
ACCL;3	-15.00	5.0000
PTEM;8 (DEGF)	5.0000	15.000
PTEM;7 (DEGF)	5.0000	15.000
PTEM;5 (DEGF)	5.0000	15.000
PTEM;3 (DEGF)	5.0000	15.000

CP 27.862 FILE 7 09-APR-86 02:25
DATA ACQUIRED NA



CP 27.862 FILE 10 09-APR-86 02:24
DATA ACQUIRED NA

Curve	Left	Right
PTEM(DEGF)	250.00	350.00
PPRE;5 (PSIA)	3000.0	4000.0
PRH;3 (G/C3)	0.0	2.0000
GR;3 (GAPI)	0.0	150.00
ACCL;3	-15.00	5.0000
PTEM;8 (DEGF)	5.0000	15.000
PTEM;7 (DEGF)	5.0000	15.000
PTEM;5 (DEGF)	5.0000	15.000
PTEM;3 (DEGF)	5.0000	15.000

SENSOR MEASURE POINT TO TOOL ZERO

```
SPTS  2.92 METER          GR    5.54 METER
TENS  8.26 METER          EXP   0.0  METER
CCL   8.26 METER          CVEL   .74 METER
PPVC  3.30 METER          PPRE  3.30 METER
PRVC  2.92 METER          PRH   2.92 METER
PTVC  3.02 METER          PTEM  3.02 METER
SPIN   .74 METER
```

PARAMETERS

```
NAME  VALUE        UNIT          NAME  VALUE       UNIT

QIOP  FLOW                       TCSH  0.0         IN
VPCF  .830000                    FDSH  0.0         G/C3
NTHR  -10.0000     F/MN          TIRA  .500000
FCHD  CSID                       PTHR  10.0000     F/MN
SGSN  PTS-A 106                  CDAT  01 03 86
BS    12.2500      IN            BHS   CASE
PP    NORM                       DO    0.0         M
```

TAPE NOT MADE

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MERGED TEMP LOGS: WELL FLOWING

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TEMPERATURE LOGS: WELL FLOWING

CSU Field Log

REMARKS:

FILE #8
LOG RECORDED WITH WELL FLOWING TO SURFACE

PRESSURE (PPRE) WAS RECORDED WITH A STRAIN GAUGE USING SURFACE CALIBRATION AND PCOR SUMMARY

FLUID DENSITY MEASUREMENT (PRH) IS NOT CORRECTED FOR WELL DEVIATION OR FRICTION EFFECTS

DATA RECORDED WHILE LOGGING DOWN

PARAMETERS

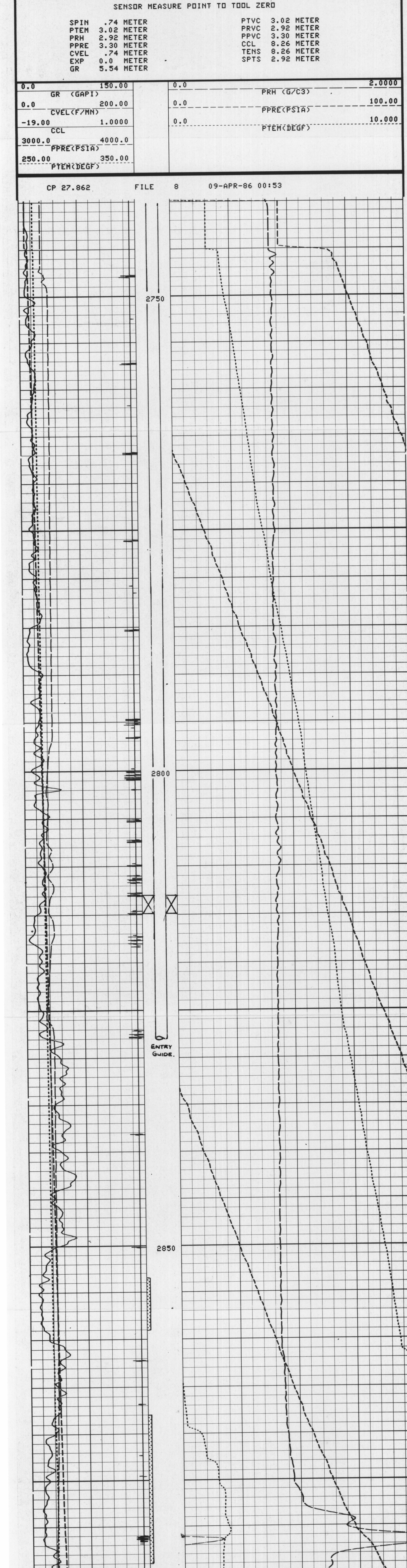
```
NAME  VALUE        UNIT          NAME  VALUE       UNIT

BS    12.2500      IN            BHS   CASE
SGSN  PTS-A 106                  CDAT  01 03 86
FCHD  CSID                       PTHR  10.0000     F/MN
NTHR  -10.0000     F/MN          TIRA  .500000
VPCF  .830000                    FDSH  0.0         G/C3
QIOP  FLOW                       TCSH  0.0         IN
```

SENSOR MEASURE POINT TO TOOL ZERO

```
SPIN   .74 METER          PTVC  3.02 METER
PTEM  3.02 METER          PRVC  2.92 METER
PRH   2.92 METER          PPVC  3.30 METER
PPRE  3.30 METER          CCL   8.26 METER
CVEL   .74 METER          TENS  8.26 METER
EXP   0.0  METER          SPTS  2.92 METER
GR    5.54 METER
```

Curve	Left	Right
GR (GAPI)	0.0	150.00
CVEL(F/MN)	0.0	200.00
CCL	-19.00	1.0000
PPRE(PSIA)	3000.0	4000.0
PTEM(DEGF)	250.00	350.00
PRH (G/C3)	0.0	2.0000
PPRE(PSIA)	0.0	100.00
PTEM(DEGF)	0.0	10.000

CP 27.862 FILE 8 09-APR-86 00:53



CP 27.862 FILE 8 09-APR-86 01:07

Curve	Left	Right
GR (GAPI)	0.0	150.00
CVEL(F/MN)	0.0	200.00
CCL	-19.00	1.0000
PPRE(PSIA)	3000.0	4000.0
PTEM(DEGF)	250.00	350.00
PRH (G/C3)	0.0	2.0000
PPRE(PSIA)	0.0	100.00
PTEM(DEGF)	0.0	10.000

DATA ACQUIRED LOGGING DOWN

REMARKS:

FILE #7
LOG RECORDED WITH WELL FLOWING TO SURFACE

PRESSURE (PPRE) WAS RECORDED WITH A STRAIN GAUGE USING SURFACE CALIBRATION AND PCOR SUMMARY

FLUID DENSITY MEASUREMENT (PRH) IS NOT CORRECTED FOR WELL DEVIATION OR FRICTION EFFECTS

DATA RECORDED WHILE LOGGING DOWN

PARAMETERS

```
NAME  VALUE        UNIT          NAME  VALUE       UNIT

BS    12.2500      IN            BHS   CASE
SGSN  PTS-A 106                  CDAT  01 03 86
FCHD  CSID                       PTHR  10.0000     F/MN
NTHR  -10.0000     F/MN          TIRA  .500000
VPCF  .830000                    FDSH  0.0         G/C3
QIOP  FLOW                       TCSH  0.0         IN
```

SENSOR MEASURE POINT TO TOOL ZERO

```
SPIN   .74 METER          PTVC  3.02 METER
PTEM  3.02 METER          PRVC  2.92 METER
PRH   2.92 METER          PPVC  3.30 METER
PPRE  3.30 METER          CCL   8.26 METER
CVEL   .74 METER          TENS  8.26 METER
EXP   0.0  METER          SPTS  2.92 METER
GR    5.54 METER
```

Curve	Left	Right
GR (GAPI)	0.0	150.00
CVEL(F/MN)	0.0	200.00
CCL	-19.00	1.0000
PPRE(PSIA)	2000.0	3000.0
PTEM(DEGF)	250.00	350.00
PRH (G/C3)	0.0	2.0000
PPRE(PSIA)	0.0	100.00
PTEM(DEGF)	0.0	10.000

CP 27.862 FILE 7 09-APR-86 00:10