

I.O.S.

CTD DATA ON THE IBERIAN ABYSSAL PLAIN

BY
P.M. SAUNDERS AND S. COOPER

REPORT NO. 247

1987

**INSTITUTE OF
OCEANOGRAPHIC SCIENCES
DEACON LABORATORY**

NATURAL ENVIRONMENT
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**INSTITUTE OF OCEANOGRAPHIC SCIENCES
DEACON LABORATORY**

**Wormley, Godalming,
Surrey, GU8 5UB, U.K.**

Telephone: 0428 79 4141
Telex: 858833 OCEANS G
Telefax: 0428 79 3066

Director: Sir Anthony Laughton, Ph.D., F.R.S.

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CTD data on the Iberian Abyssal Plain

P.M. Saunders and S. Cooper*

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**Present address:*

*Department of Oceanography
The University
Highfield
SOUTHAMPTON, SO9 5NH*

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ABSTRACT This report presents lists and graphs of CTD data taken aboard RRS <i>Discovery</i> on Cruise 162 (22 September - 9 October 1986). The data was taken principally in support of a SOFAR dispersion experiment on the Iberian Abyssal Plain, centred near 41° 30'N, 14° 30'W. All CTD data is compared with reversing thermometer observations and with the determinations of salinity and dissolved oxygen derived from samples. Comparisons are made with historic data from the same area and a regional current profile is derived from the hydrographic data.	
ISSUING ORGANISATION Institute of Oceanographic Sciences Deacon Laboratory Wormley, Godalming Surrey GU8 5UB. UK. Director: Dr A S Laughton FRS	TELEPHONE 0428 79 4141
	TELEX 858833 OCEANS G
	TELEFAX 0428 79 3066
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THE COLLECTION OF CTD DATA

The data described in this report was gathered aboard cruise 162 of the RRS Discovery in 1986. The cruise sailed from Funchal, Madeira on 22 September and docked in Falmouth, U.K. on the 9th October: the senior author was the principal scientist and the programme of work was described in Cruise Report No. 186 (1986).

Stations 11360, 61 and 63 were occupied at the Great Meteor East site (GME) West of Madeira and concluded a three year programme of observations in this region (Saunders, 1987). The ship then steamed north into the Iberian basin and completed 10 full-depth stations (11364-11376) in the form of triangle on the Iberian abyssal plain (see Figure 1). This array of measurements was made in support of a dispersion experiment employing a dozen SOFAR floats ballasted for 2000m depth and released near 41°30'N, 14°30'W. The experiment was performed jointly by IOS and MAFF, Lowestoft. Three further stations were performed enroute to Falmouth, the last, 11380, on the continental shelf in under 200m of water.

The CTD stations were made with a NBIS instrument equipped with a Beckman dissolved oxygen sensor, 1m path transmissometer from Sea Tech., Inc. and a General Oceanics Multisampler in a side-by-side location. A general review of our procedures is found in Saunders (1985). Table 1 gives details of the measurements and of their locations.

RECONCILIATION OF CTD DATA WITH MULTISAMPLER DATA

The procedures adopted on cruise 162 are essentially the same as reported previously: for comprehension we summarise them here.

(a) Pressure

The calibration equation based on laboratory measurements was taken to be:-

$$P = 0.1 \text{ praw} - 12.0$$

Differences between the pressure measured by the CTD and by pairs of reversing thermometers are shown in Table 2. The differences are testimony to

the stability of both the unprotected thermometers and the strain gauge sensor of the CTD.

(b) Temperature

The calibration equation based on pre-cruise calibration was:-

$$T = .00049953 \text{ Traw} + .026$$

The calibration of the same platinum resistance thermometer has remained amazingly stable since it was acquired in late 1983 (Saunders 1985) showing a range of only .002 at 2.5°C and .004 at 20°C. The comparison with reversing thermometers is excellent.

(c) Salinity

Salinity is not calibrated in the laboratory at IOS. In the NE Atlantic sample measurements collected over 10 years show remarkably little scatter about the expression (Saunders, 1986)

$$S = 34.698 + .098\theta$$

where θ is the potential temperature. Initially a cell factor of 1.0008 was employed in converting conductivity to salinity, subsequently the factor required to bring salinities into agreement with the above equation in the interval $2.1 < \theta < 2.3$ was calculated, see Table 1, and applied. The difference between the salinities thus derived and those measured on cruise 162 are shown in Table 2.

(d) Oxygen

Sample oxygen values are combined with CTD values of pressure, temperature, salinity and oxygen current in the manner described in Saunders (1980). In computing temperature the weight given to the CTD temperature was 0.25, the cell factor was taken as 1.409 and $\alpha = 0.05^\circ\text{C}^{-1}$ and $\beta = .0000955 \text{ db}^{-1}$. These same constants were used throughout the cruise and the fit of CTD oxygens and sample values is presented in Table 2.

(e) Transmittance

Potential transmittance measurements were computed according to the algorithm of Saunders and Manning (1984). The instrument SN035 was employed and corrections were made for the air calibration (4.31), manufacturers provided sensitivity (1.0032), change in refractive index with p, T, s and for the increase in mass of clear water in the 1m path with increasing depth. The data from Stn 10360 is not considered reliable.

COMPUTER PROCESSING OF CTD DATA

Data processing ashore started with the one-second average values obtained from the shipborne PDP11/34 system: calibrated p, T, s data were used along with raw oxygen current, oxygen temperature and raw transmittance data. The PEXEC programming, developed by R.T. Pollard from his earlier GEXEC system, was employed on the IBM 4381 at the Institute of Hydrology, Wallingford. The processing path is broadly described in Table 3. In contrast to GEXEC, PEXEC employs interactive programming: we have found it easy to use and any problems that resulted arose mainly from the newness of the system at the IBM.

Standard plots and lists (printed from the 4250 Electro Erosion printer) occupy the main body of this report. Derived quantities have been computed from the algorithms published in the UNESCO Technical Paper on Marine Science No. 44 (Fofonoff and Millard, 1983). Note that the units of specific volume (SVANOM) should be $10^{-8} \text{ M}^3/\text{KG}$ and not as printed.

COMPARISON OF CRUISE 162 DATA WITH HISTORICAL DATA

Pollard and Pu (1985) examined salinity in the upper 600m of the NE Atlantic in the area of this study. They concluded that in the 20 years between 1957 to 1977 there was a freshening of about $0.10/00$ on the surfaces $\sigma_T = 27.0, 27.1$ decreasing to $.050/00$ on $\sigma_T = 27.3$ and vanishing on $\sigma_T = 27.4$. A tentative explanation was offered for the freshening invoking changes in the local net moisture flux between ocean and atmosphere.

Using the cruise 162 data stations 11364-76, we have calculated mean salinities on the appropriate σ_T surfaces. Because of recent changes in the definition of density, principally because density was formally specific gravity (!), ancient and modern values of σ_T differ. Employing the lists of 1977

data used by Pollard & Pu (Saunders, 1980) we have determined that modern values are lower by .018 for the range of pressures, temperature and salinity under consideration. The results are presented in Table 4 below.

TABLE 4

**Salinity statistics between 40 and 43°N
and 15 and 20°W on four isopycnals**

Old sigma T	27.0	27.1	27.2	27.3
New sigma T, kgm^{-3}	26.982	27.082	27.182	27.182
1957/58	35.82±.06	35.69±.04	35.57±.02	35.55±.04
1977	35.73±.01	35.60±.03	35.54±.02	35.53±.04
1986	35.76±.015	35.65±.01	35.49±.01	35.47±.02

The surface freshening reported by Pollard & Pu is reversed on the two shallower isopycnals in the period 1977-1986 but freshening has now taken place on the two deeper isopycnal. Are we witnessing ventilation at work?

Comparisons between Cruise 162 data and the atlas of the N. Atlantic prepared by Bauer and Woods (1984) have also been made. The Atlas yields maps of monthly values of the pressure, temperature and salinity on selected potential density surfaces: the resolution of the maps is not sufficient to infer whether this climatological data set differs in salinity and temperature from the Cruise 162 data. Whilst the depth of the isopycnal surface 26.0kg m^{-3} can not be distinguished from our data the Atlas depth of the 27.0kg m^{-3} surface (close to the shallowest Pollard & Pu isopycnal) is considerably (60m) deeper than the values found on Cruise 162.

A REGIONAL CURRENT PROFILE

A regional current profile has been constructed from ten stations (11364-11376) on the Iberian basin. First specific volume anomaly values have been extracted from the station lists at 23 standard levels (pressures). Gradients have then been determined in the west-east (or x-) direction and the south-north (or y-) direction by fitting a plane surface in the least square sense. The associated standard error of the gradient has also been estimated. The mean buoyancy profile for the 10 stations has been derived from the station lists in

this report and hence the local (potential) density gradient in the vertical estimated. From these quantities the slope of the isopycnal surfaces has been measured, see Table 5. Vertical integration of the thermal wind equation leads to the hodograph of geostrophic currents (shown in Figure 2, upper). The 'level of no motion' and hence absolute value of the currents is not determined by this procedure.

A number of techniques have been proposed to remove this uncertainty: collectively they are known as β -spiral methods. We have employed two kinds, both of which ignore diffusion of either an isopycnal or diapycnal kind. Our limited experience is that little difference results if these processes are included.

Given the velocity components U, V, W at, say, the deepest level the first method estimates the vertical velocity as a function of depth by vertical integration of the linear vorticity equation

$$f \frac{\partial w}{\partial z} = \beta v$$

where $f, \beta = \frac{\partial f}{\partial y}$ have the usual significance. An estimate of goodness of fit of the observations to the behaviour of an inviscid, steady geostrophic flow is given by the squared error

$$(uh_x + vh_y - w)^2.$$

A minor variant of this method employs density conservation to estimate vertical velocity and the vorticity equation to estimate the success or lack of it. In either case squared errors is summed over the 23 levels for a particular set of U, V, W and by varying the choice of these components values are found for which the sum is a minimum. The resulting profile of U, V merely shift the origin (Figure 2, upper). Here either of those methods yield at 5000m

$$U, V, W = 3, 2, -4.5 \times 10^{-4} \text{ mm/s}$$

each determined to better than 0.5.

Coats (1981) has developed an alternative technique. Because the standard errors associated with the horizontal gradients in density (or h_x and h_y) are always finite (here they are large) the hodograph of currents is itself uncertain.

Coats' method is to change the observed h_x, h_y at each level by the minimum amount so that both the density conservation and vorticity equations are exactly satisfied. The changes are squared and summed over the 23 levels and the minimum in the sum again found as a function of the choice of U, V, W at, say, the deepest level. The final question is then - are these minimum changes less than the standard error of the estimates?

Our calculations show that at 5000m

$$U, V, W = 3.5, 2.5, -4 \times 10^{-4} \text{ mm/s}$$

with a mean change of slope component of 0.4×10^{-4} provides a fit between the data and an inviscid steady geostrophic flow. This error is about one third of the average standard error of the determination of h_x and h_y (see Table 5). As isopycnal surface slopes are adjusted in this method so is the resulting current hodograph (see Figure 2, lower). Overall the differences between the two methods are small.

The hodograph of absolute current velocity reveals the following:-

- (a) Weak ESE flow of the near surface waters (<1cm/s)
- (b) Weak northward spreading of N. Atlantic Intermediate water (500-900m)
- (c) Westward spreading of Mediterranean water (1000-1200m) at 2-3mm/s only
- (d) Southward spreading of upper NADW (1400-2200m)
- (e) NE flow at the deepest levels reaching a maximum 4mm/s at the bottom.

These results are mostly expected: one unexpected result is that the vertical velocity at 100m is here upwards 1 to 3×10^{-4} mm/s in contrast to the estimate from the wind-stress curl climatology of $-4 \pm 2 \times 10^{-4}$ mm/s (Leetma & Bunker, 1978) The level of minimum motion is found between 2000 and 2200m agreeing with the very small values found at this depth by Olbers et al. (1985). Thus the SOFAR floats mentioned in the introduction must certainly be expected to diffuse rather than advect.

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REFERENCES

- BAUER, J. & WOODS, J.D. 1984 Isopycnic Atlas of the North Atlantic Ocean. Berichte aus dem Institut für Meereskunde an der Christian-Albrechts Universität, Kiel, No. 132, 173pp.
- COATS, D.A. 1981 An estimate of absolute geostrophic velocity from the density field in the northeastern Pacific Ocean. Journal of Geophysical Research, 86, 9031-8036.
- FOFONOFF, N.P. & MILLARD, R.C., JR. 1983 Algorithms for computation of fundamental properties of seawater. Unesco Technical Papers in Marine Science, No. 44, 53pp.
- LEETMA, A & BUNKER A.F. 1978 Updated charts of the mean annual wind stress, convergences in the Ekman Layers and Sverdrup transports in the N. Atlantic. Journal of Marine Research, 36, 311-322.
- OLBERS, D.J., WENZEL, M. & WILLEBRAND, J. 1985 The inference of North Atlantic circulation patterns from climatological hydrographic data. Reviews of Geophysics, 23, 313-356.
- POLLARD, R.T. & PU, S. 1985 Structure and circulation of the upper Atlantic Ocean northeast of the Azores. In, Essays on oceanography: a tribute to John Swallow. (ed. J. Crease, W.J. Gould & P.M. Saunders). Progress in Oceanography, 14, 443-462.
- SAUNDERS, P.M. 1980 CTD data obtained during Discovery Cruise 81. Institute of Oceanographic Sciences, Data Report No. 17.
- SAUNDERS, P.M. & MANNING, A. 1984 CTD data from the northeast Atlantic Ocean 22-33°N, 19-24°W July 1983 during RRS Discovery cruises 138, 139. Institute of Oceanographic Sciences, Report No. 188, 114pp.
- SAUNDERS, P.M. 1985 Collection, calibration and processing of CTD data at IOS. International Council for the Exploration of the Sea, Contribution to Statutory Meeting, Hydrography Committee, C.M. 1985/C:5, 12pp. & 2 figs.

SAUNDERS, P.M. 1986 The accuracy of measurement of salinity, oxygen and temperature in the deep ocean.
Journal of Physical Oceanography, 16, 189-195.

SAUNDERS, P.M. 1987 Currents, dispersion and light transmittance measurements on the Madeira Abyssal Plain, Final Report 1987.
Institute of Oceanographic Sciences, Report No. 241, 55pp.

TABLE 1
CTD Station List

Station	Day 1986	Down Z	Lat N	Long W	Depth m	Salra
11360	267	2217	31°32.7'N	25°24.1'W	5440	0.999684
11361	268	0532	31°30.2'N	24°45.4'W	5439	0.999806
11363	268	1522	31°25.4'N	25°10.8'W	5187	0.999772
11364	271	1947	41°50.4'N	18°50.1'W	4961	1.000049
11366	272	2309	41°44.8'N	17°15.2'W	5600	0.999937
11367	273	1239	41°40.6'N	15°16.9'W	5349	0.999984
11368	274	0227	41°33.2'N	13°27.8'W	5349	1.000017
11370	274	2324	42°35.2'N	14°49.4'W	5324	1.000074
11371	275	1035	42°48.4'N	16°35.5'W	5130	1.000025
11372	275	2118	44°01.3'N	15°50.5'W	5505	1.000031
11373	276	0932	43°16.8'N	14°05.0'W	5206	1.000053
11374	276	2318	44°38.6'N	15°07.1'W	5248	1.000054
11376	277	2104	45°18.4'N	14°09.6'W	4826	1.000120
11378	279	0728	46°11.5'N	11°35.9'W	4812	1.000213
11379	279	1652	47°05.2'N	10°29.2'W	4626	1.000185
11380/1	281	0731	48°41.6'N	08°50.2'W	168)
11380/2	281	0817	48°45.3'N	08°49.6'W	160)
11380/3	281	0905	48°49.3'N	08°49.0'W	160)
11380/4	281	1256	48°45.2'N	08°57.2'W	170) 1.000185
11380/5	281	1355	48°41.0'N	09°03.0'W	158)
11380/6	281	1449	48°44.9'N	09°03.0'W	155)
11380/7	281	1536	48°49.0'N	09°03.0'W	159)

TABLE 2

Fit of CTD Data to Rosette Sample Values

Variable	Range	Mean Diff	RMS	Number
Pressure, db	0-2000 db			
	2000-6000 db	-0.5	6.1	21
Temperature, °C	5-25°C	0.007	0.011	9
	2-5°C	-0.001	0.005	31
Salinity	0-2000 db	-0.005	0.030	22
	2000-6000 db	0.001	0.002	38
Oxygen ml/l	0-2000 db	-0.09	0.30	21
	2000-6000 db	-0.10	0.28	34

TABLE 3

Data Processing Path

1. Input provisionally calibrated data: make versatec plot
2. Compute potential transmittance and salinity correction
3. Correct salinity and calculate oxygen
4. Remove spikes from data (potential transmittance)
5. Sort data and create 5 db average
6. Plot lowering (0-6000 db and >3500db) for report
7. Archive 5 db average values to tape in GF3 format (CTD162)
8. Construct a station list and print for report

TABLE 5

The β -spiral data for the Iberian Basin: stns 11364-11376

Pressure	$-\rho_z$ $\times 10^{-4} \text{ Kgm}^{-4}$	h_x $\times 10^{-4}$	h_y $\times 10^{-4}$
5000	.04	12±7	-20±6
4600	.10	4.4±2.9	-8±2.5
4200	.205	0.9±1.6	-2.6±1.6
3800	.29	0.5±1.4	0.5±1.3
3400	.44	-0.8±1.2	0.1±1.1
3000	.75	0.4±1.1	-0.7±1.0
2600	1.25	1.6±1.3	-2.1±1.2
2200	1.64	2.4±1.4	-3.1±1.3
2000	1.58	2.3±1.1	-3.6±1.0
1800	1.6	0.9±1.0	-2.8±0.9
1600	2.4	0.2±0.9	-2.0±0.8
1400	4.0	-1.3±1.2	-0.3±1.1
1200	6.1	-1.6±1.1	0.15±1.0
1000	8.3	-0.8±0.9	0.65±0.9
900	9.8	-0.3±1.0	0.9±0.9
800	10.4	0.3±1.0	1.25±0.9
700	9.3	1.5±1.3	1.6±1.1
600	7.1	1.95±1.3	1.6±0.9
500	4.7	2.0±1.3	2.85±1.1
400	3.75	1.45±1.0	3.8±0.9
300	3.9	1.45±0.7	3.5±1.0
200	4.9	1.05±1.0	3.8±1.0
100	19.1	0.4±0.3	0.75±0.3

$$h_x = \rho_x / -\rho_z \quad h_y = \rho_y / -\rho_z$$

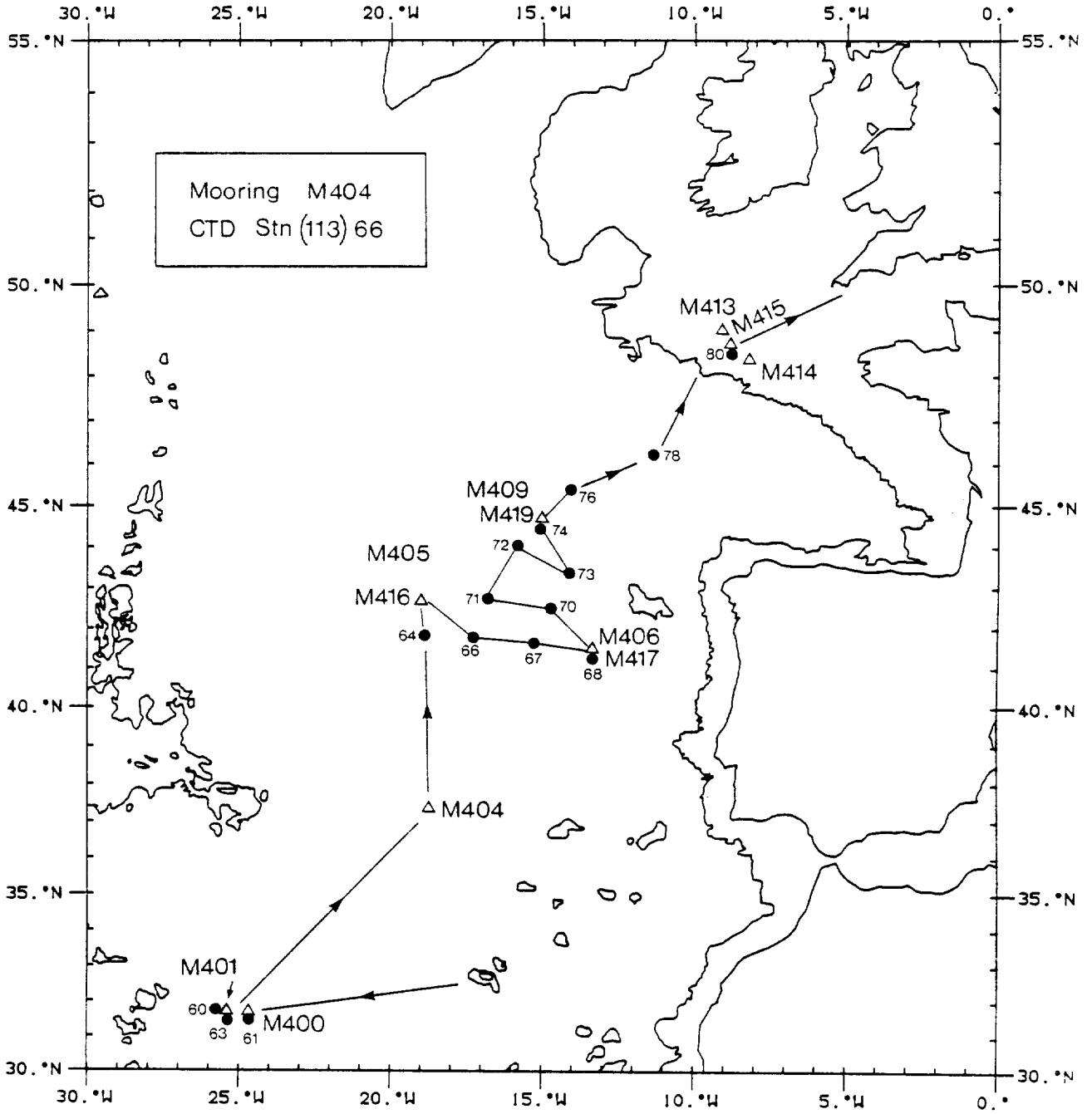


Fig.1. RRS Discovery Cruise 162

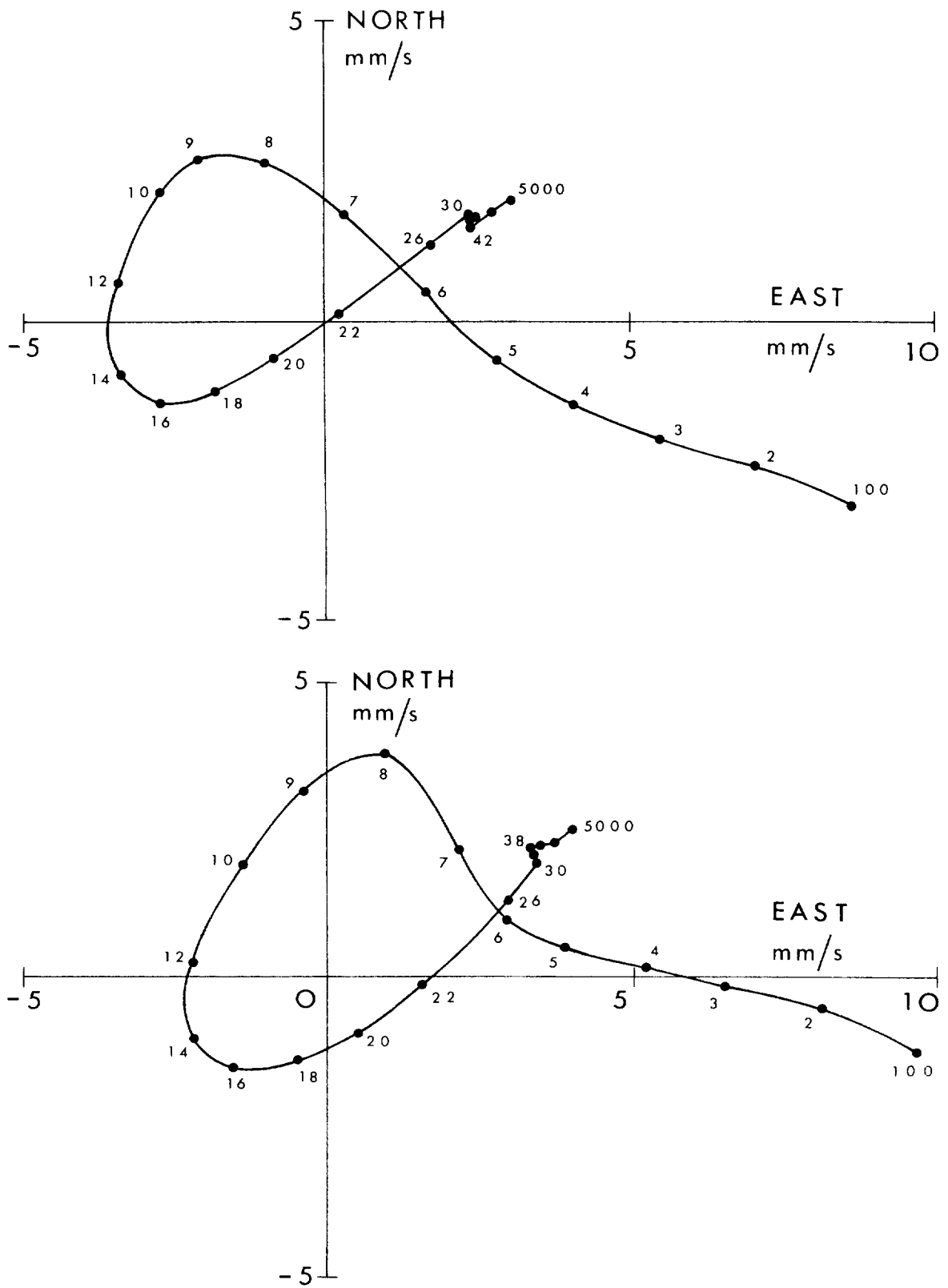
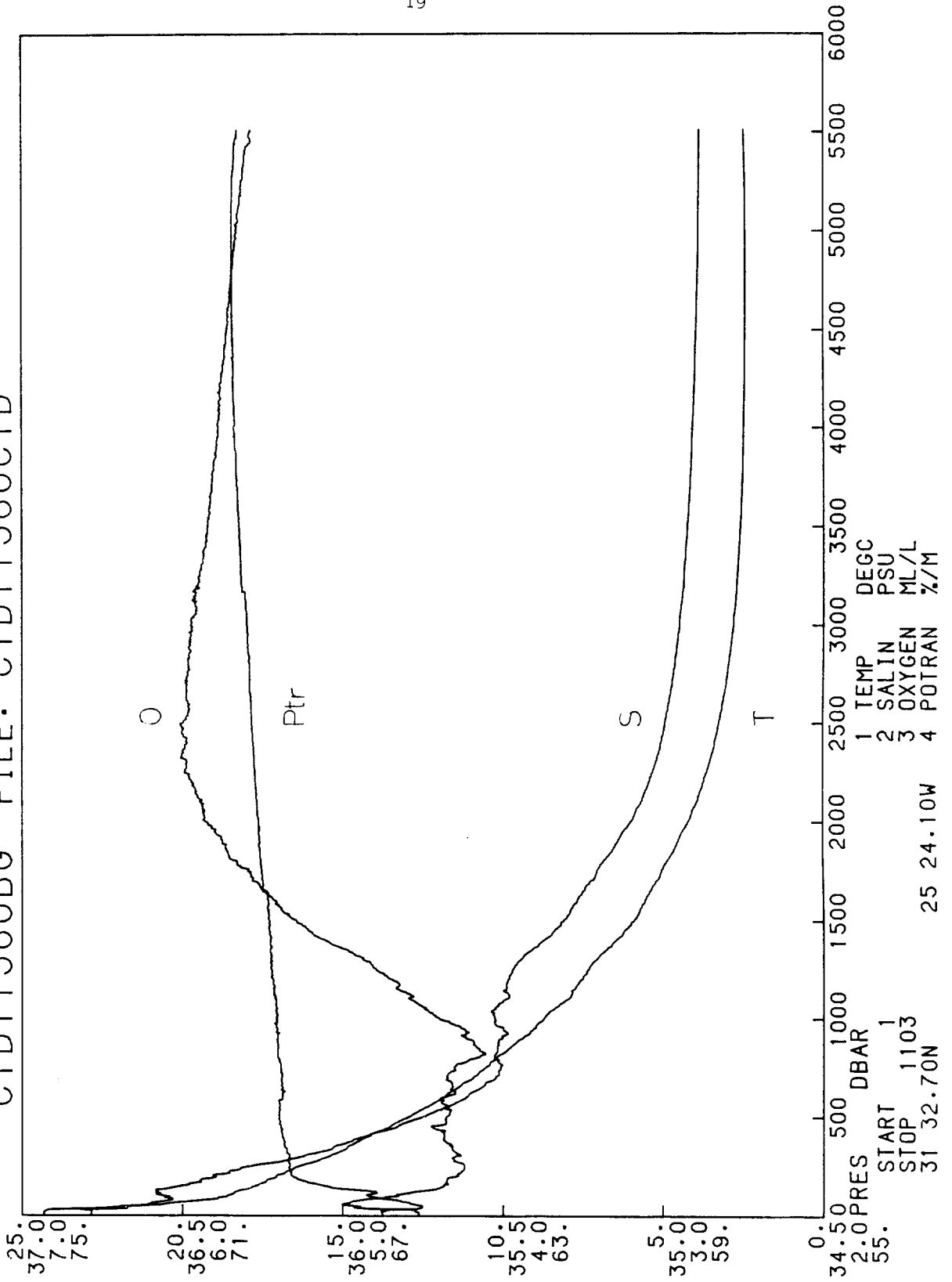
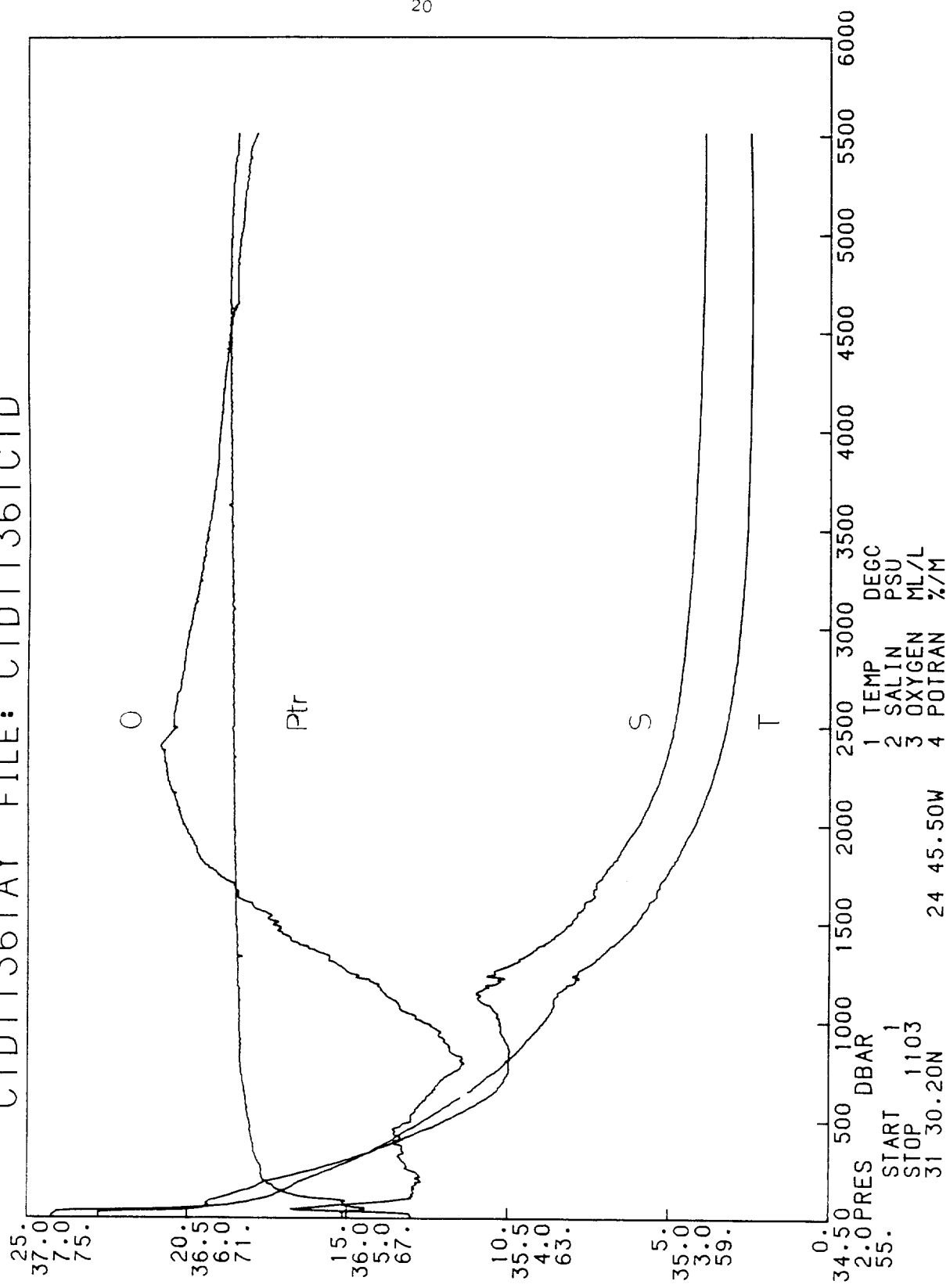


Figure 2 Current hodograph on the Iberian Abyssal Plain (depth db).
 The determination of the origin is described in the text.

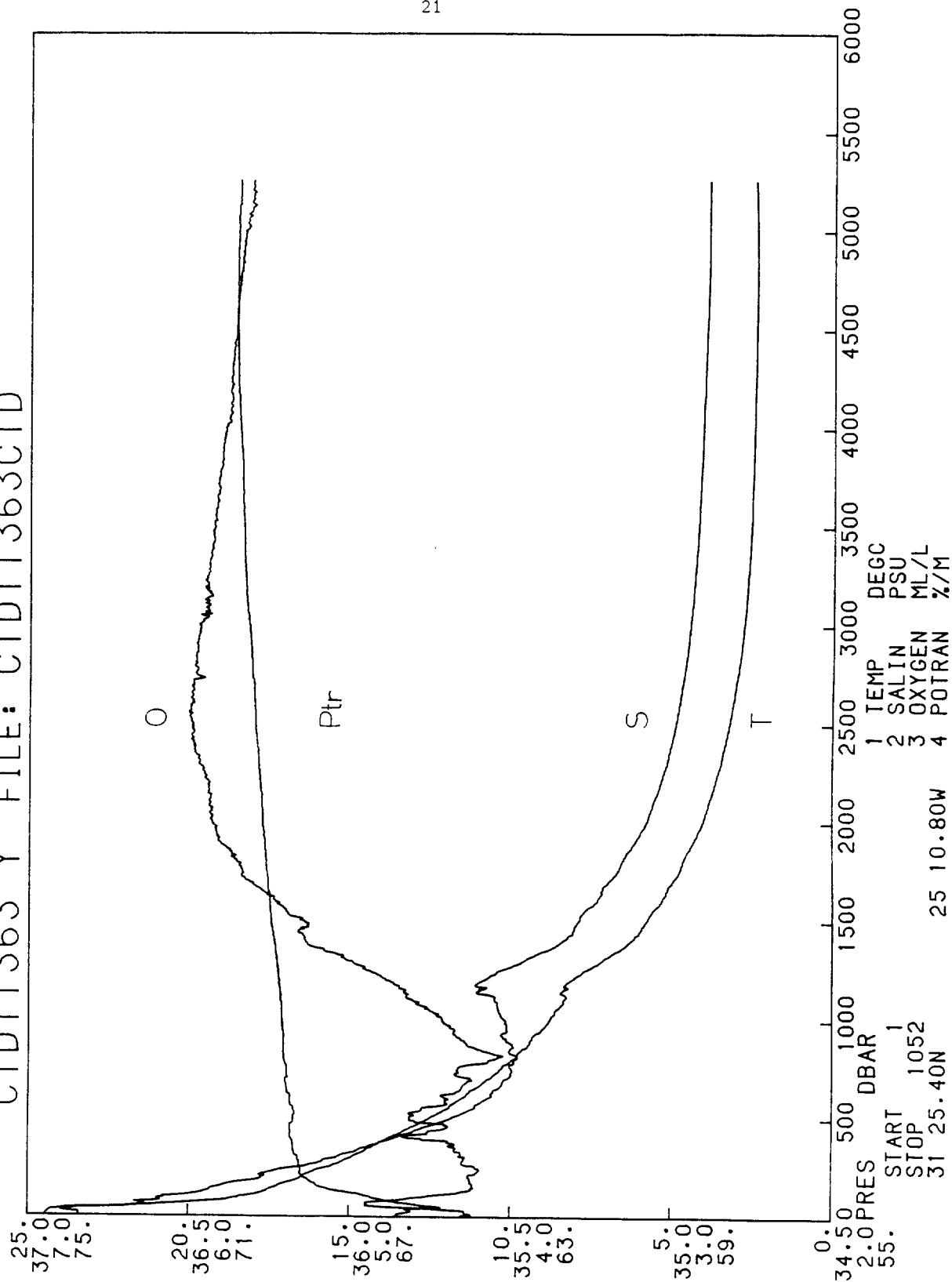
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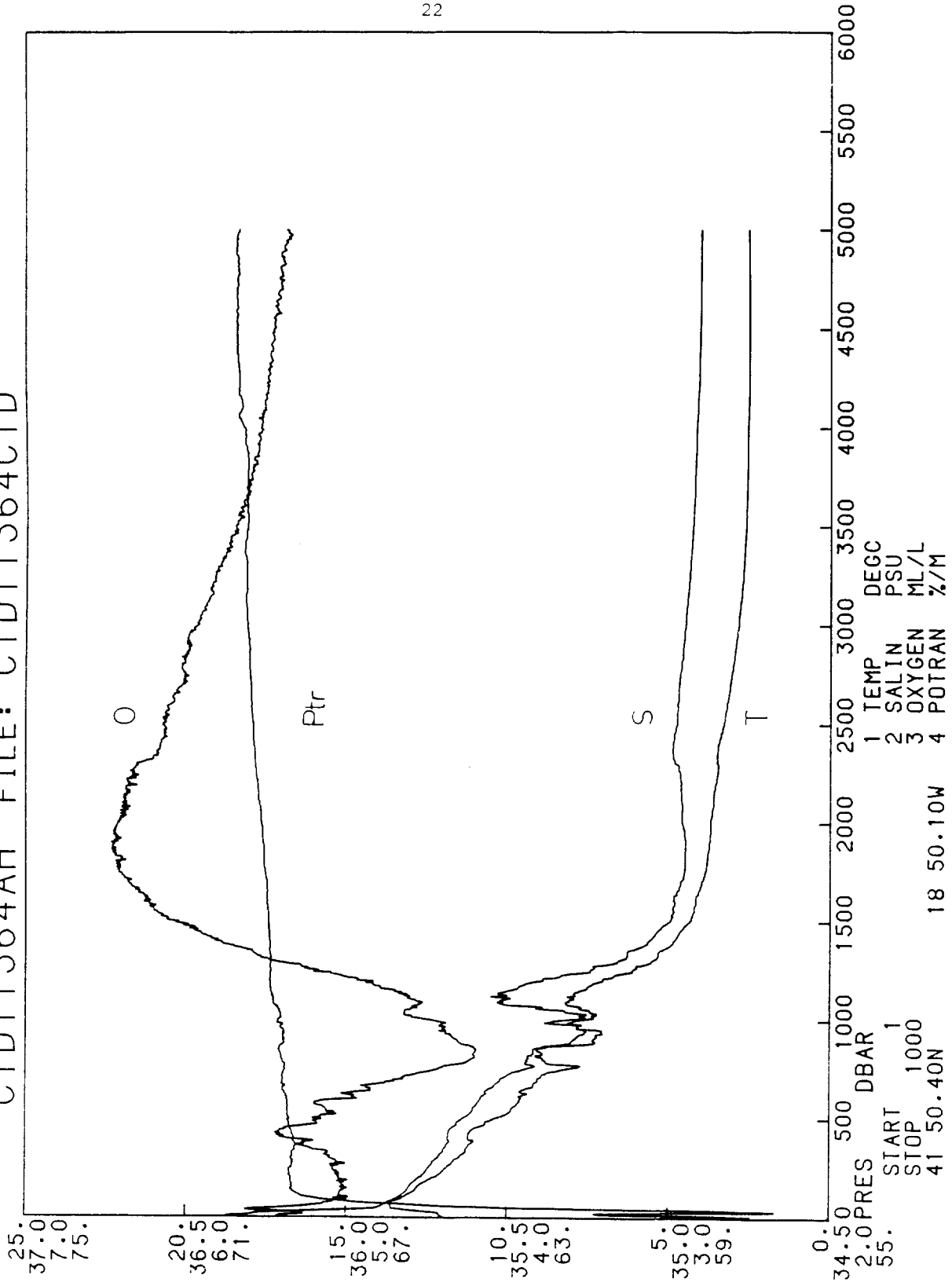
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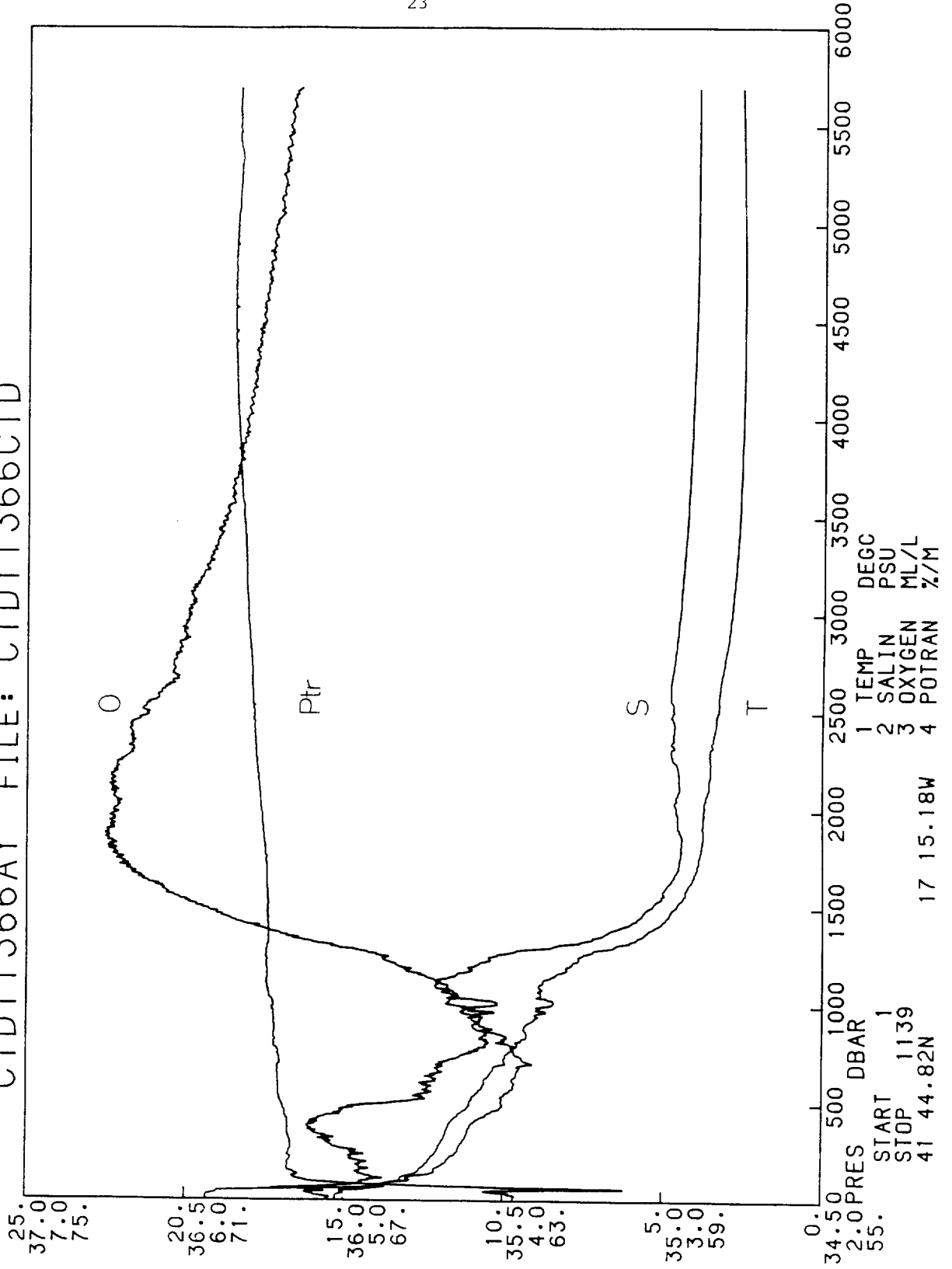
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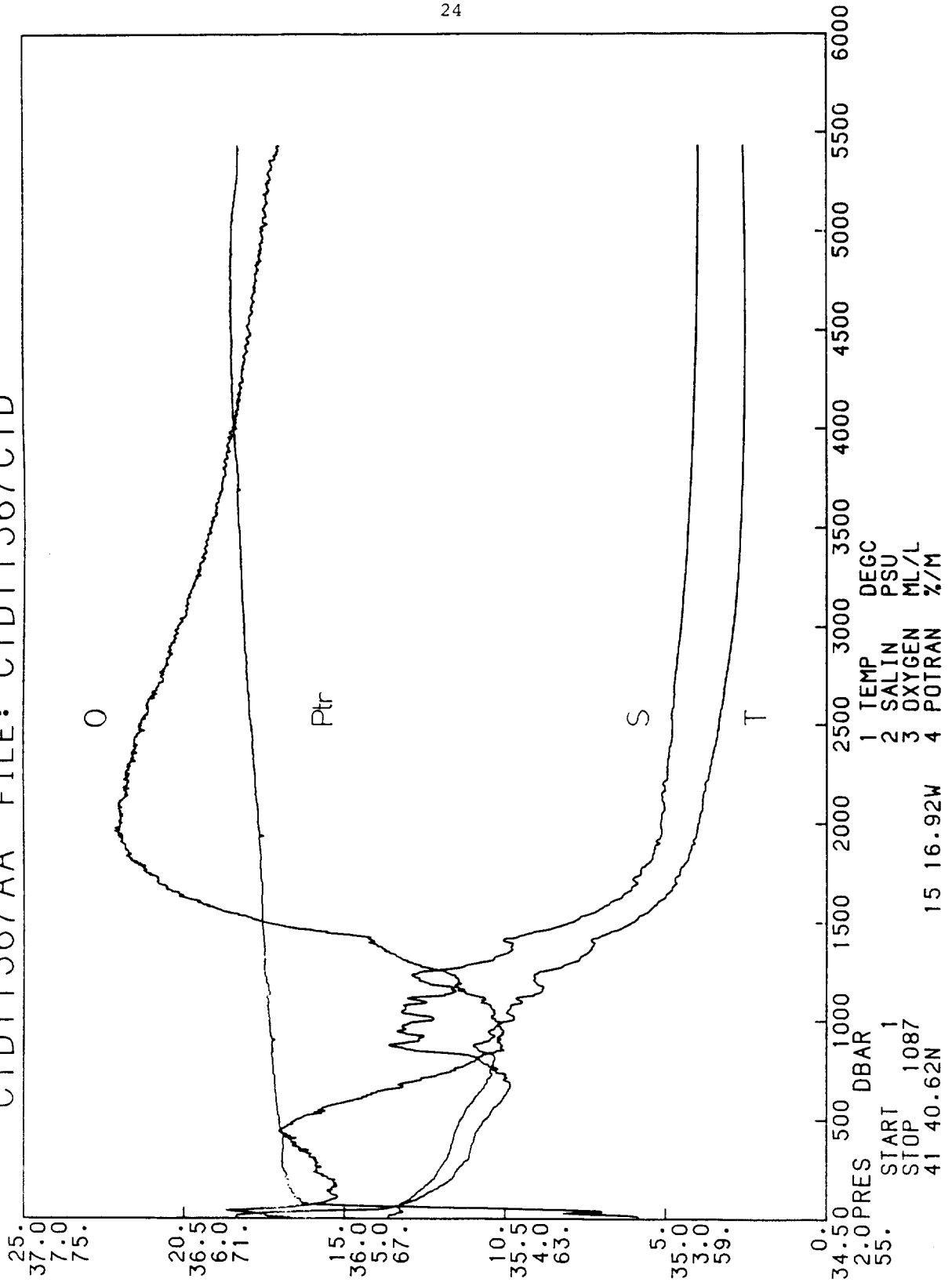
CTD11364AH FILE: CTD11364CTD



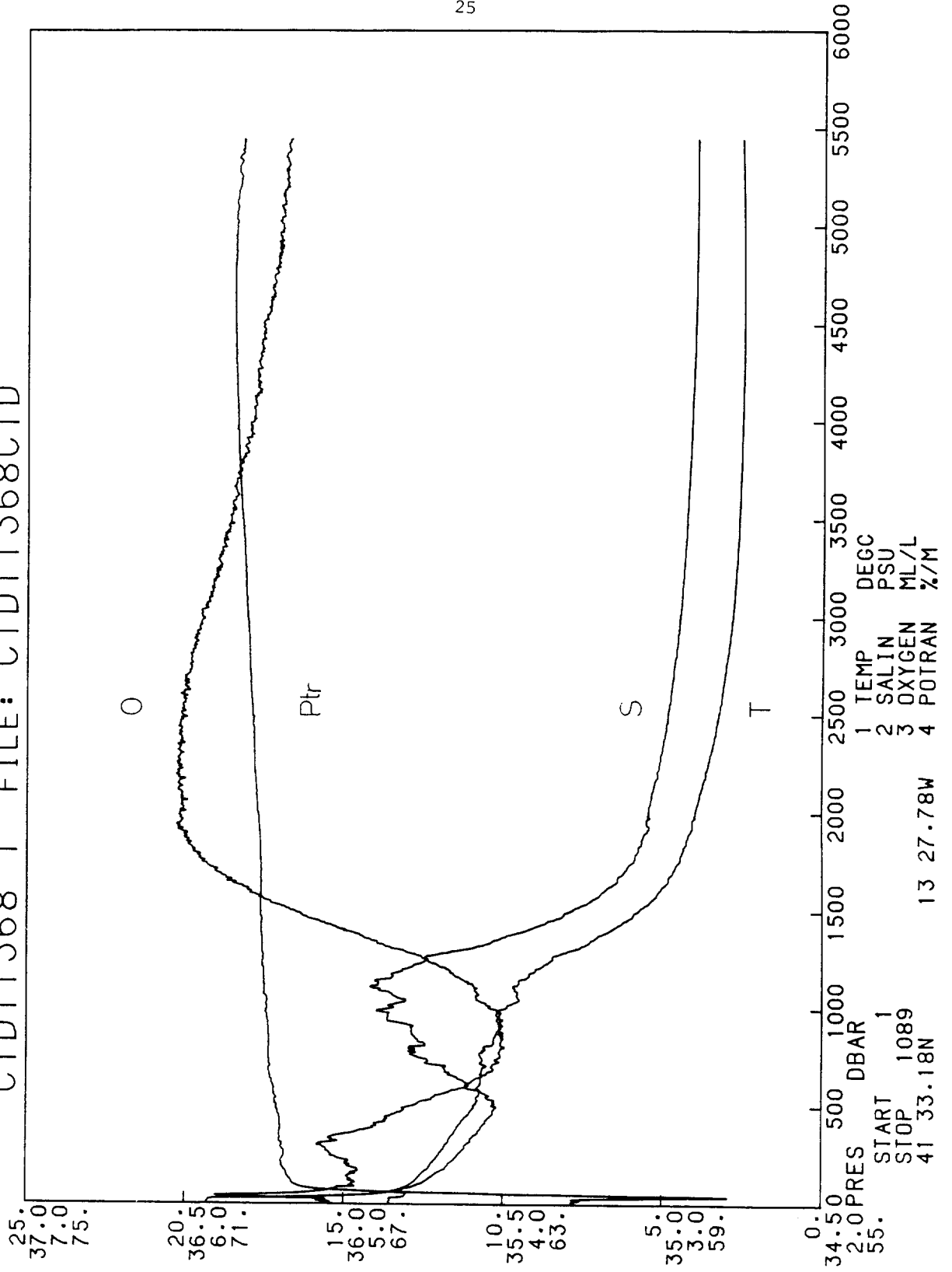
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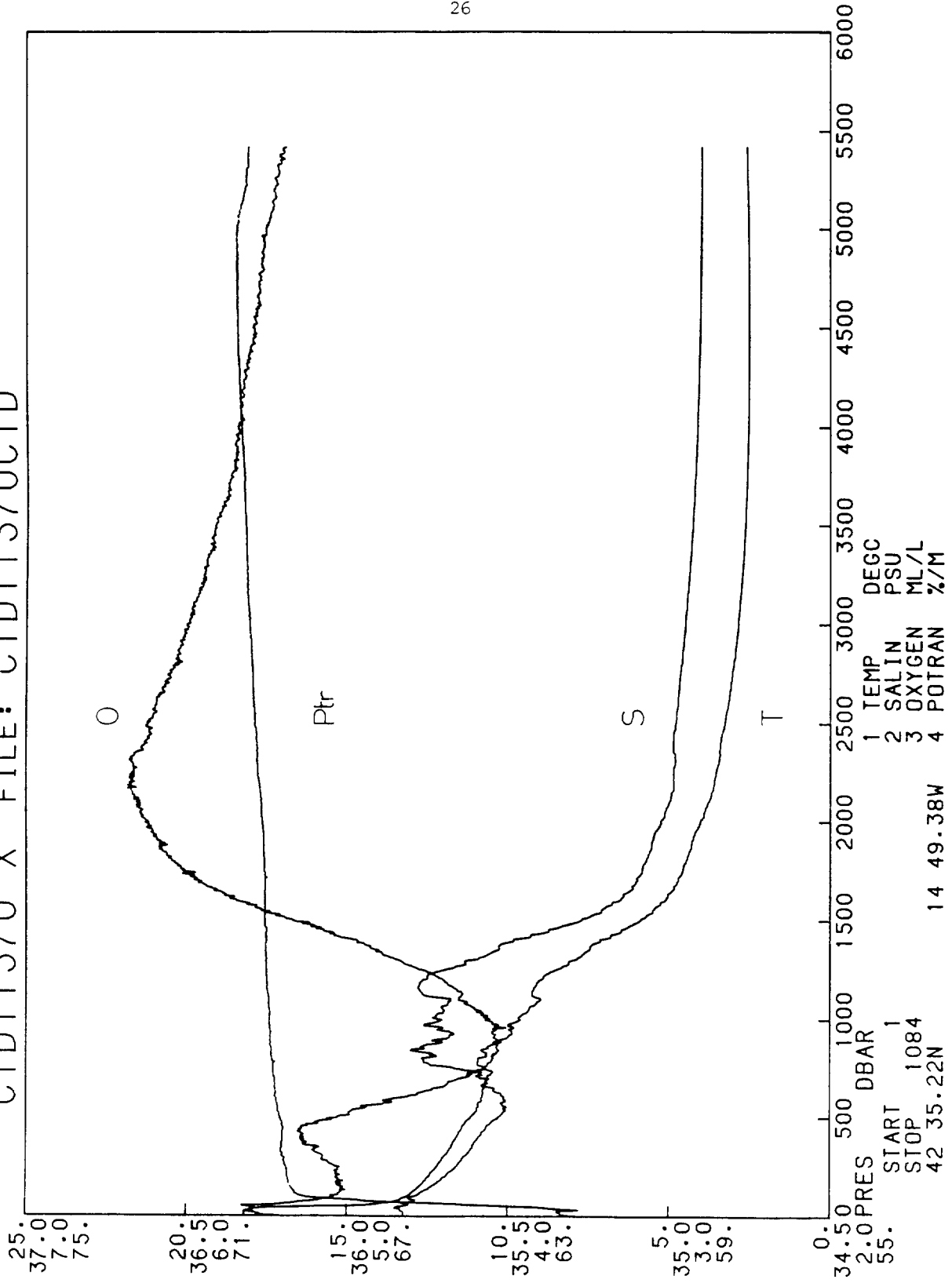
CTD11367AA FILE: CTD11367CTD



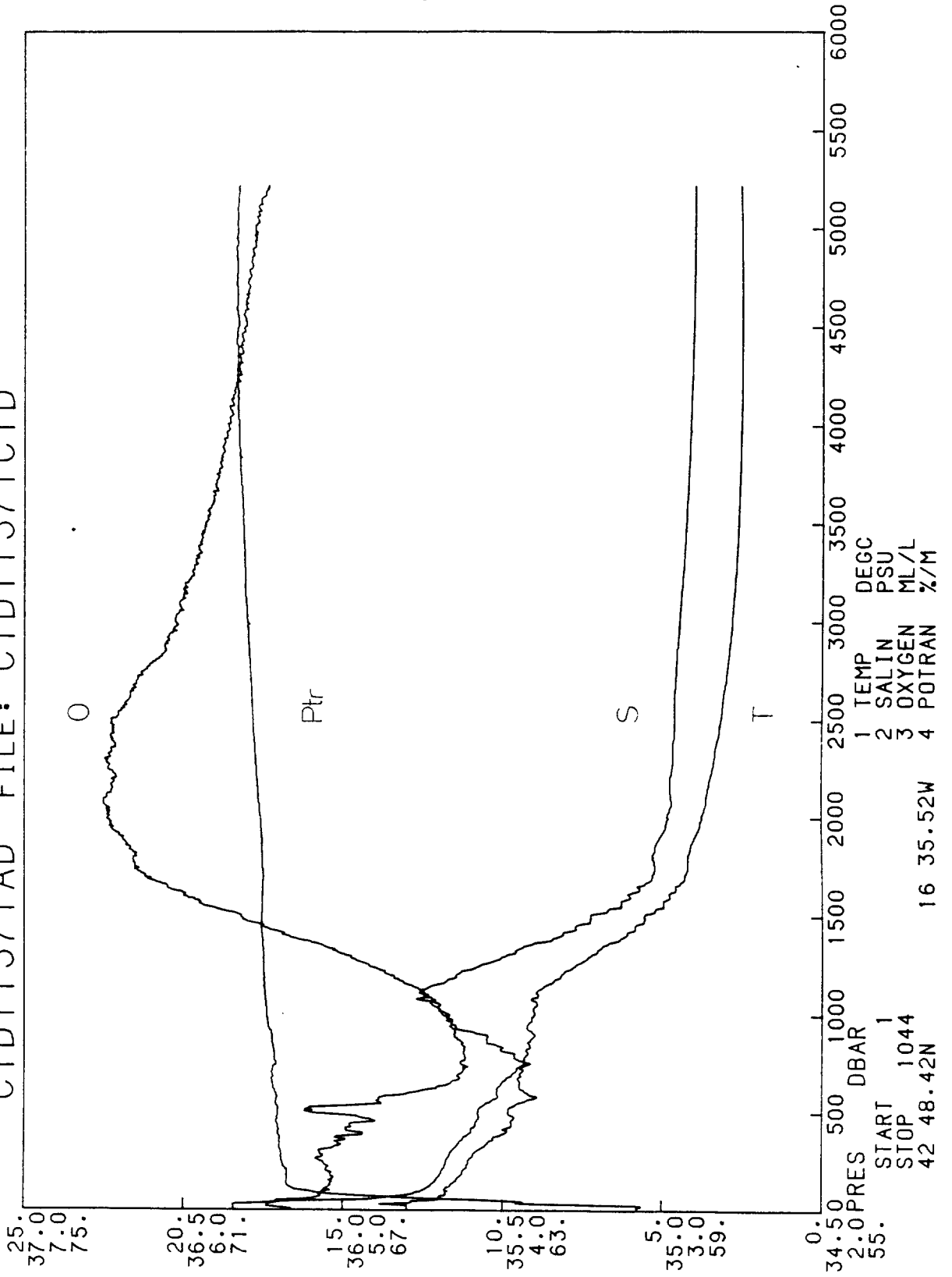
CTD11368 T FILE: CTD11368CTD



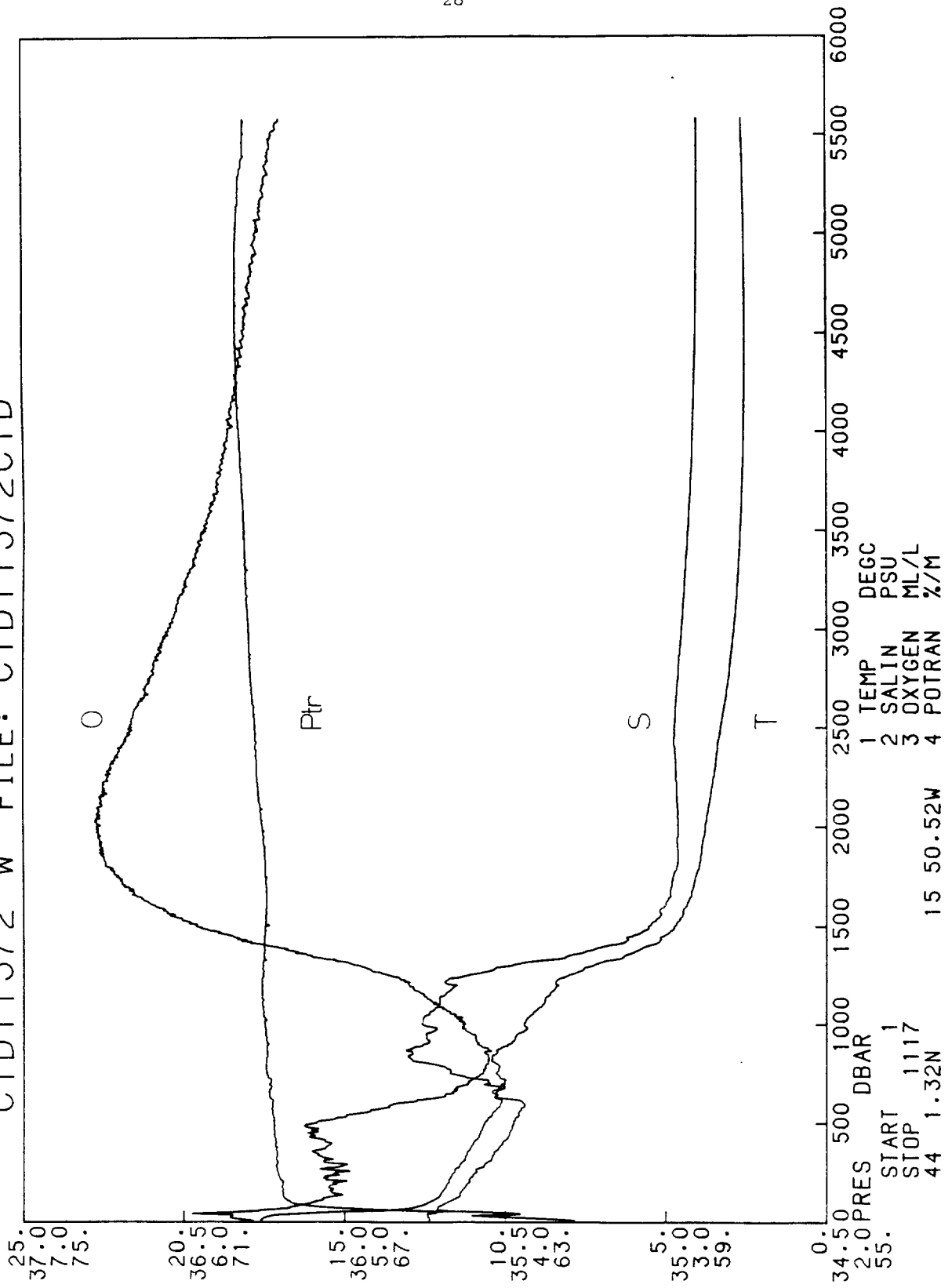
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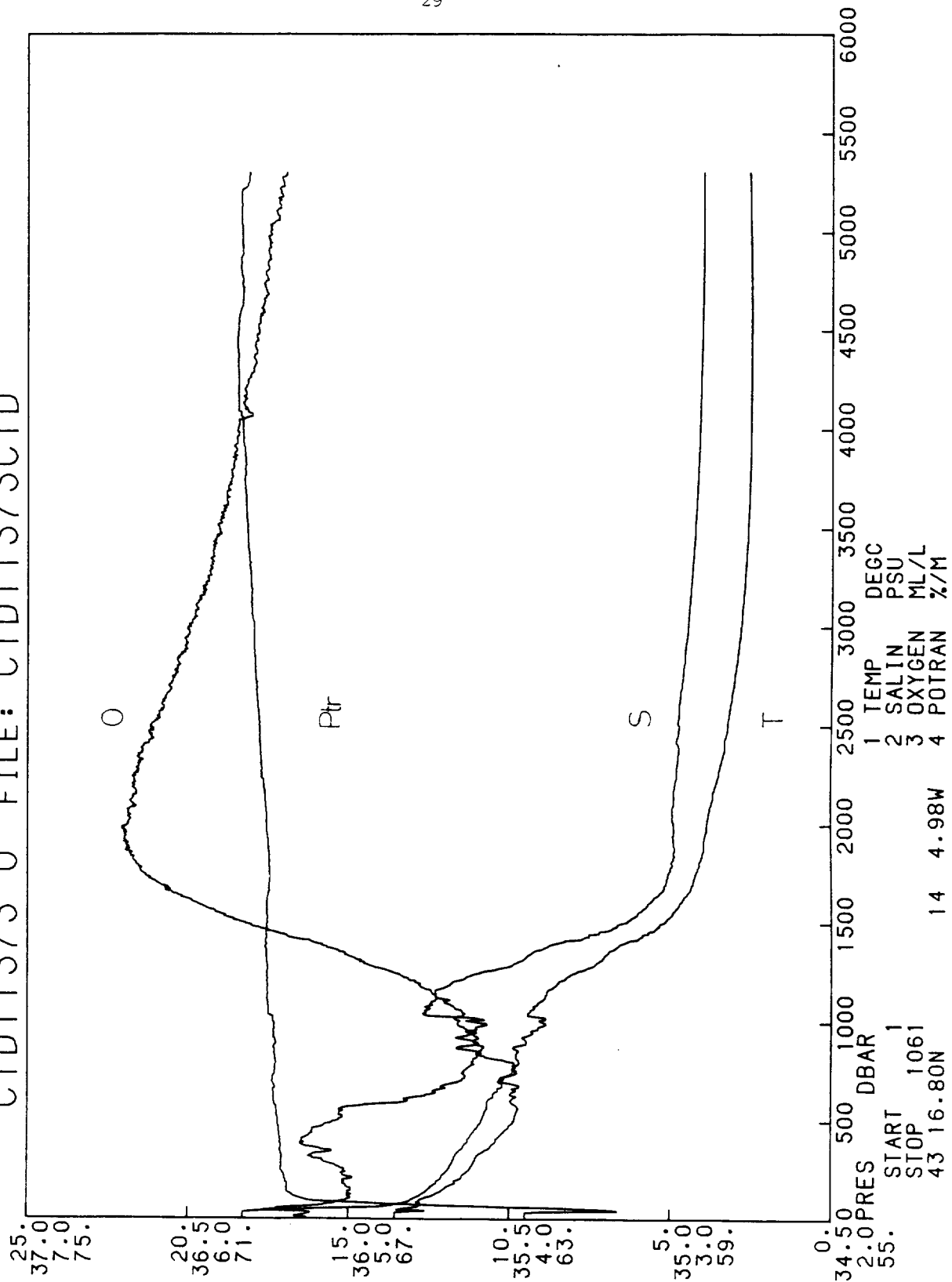
CTD11371AD FILE: CTD11371CTD



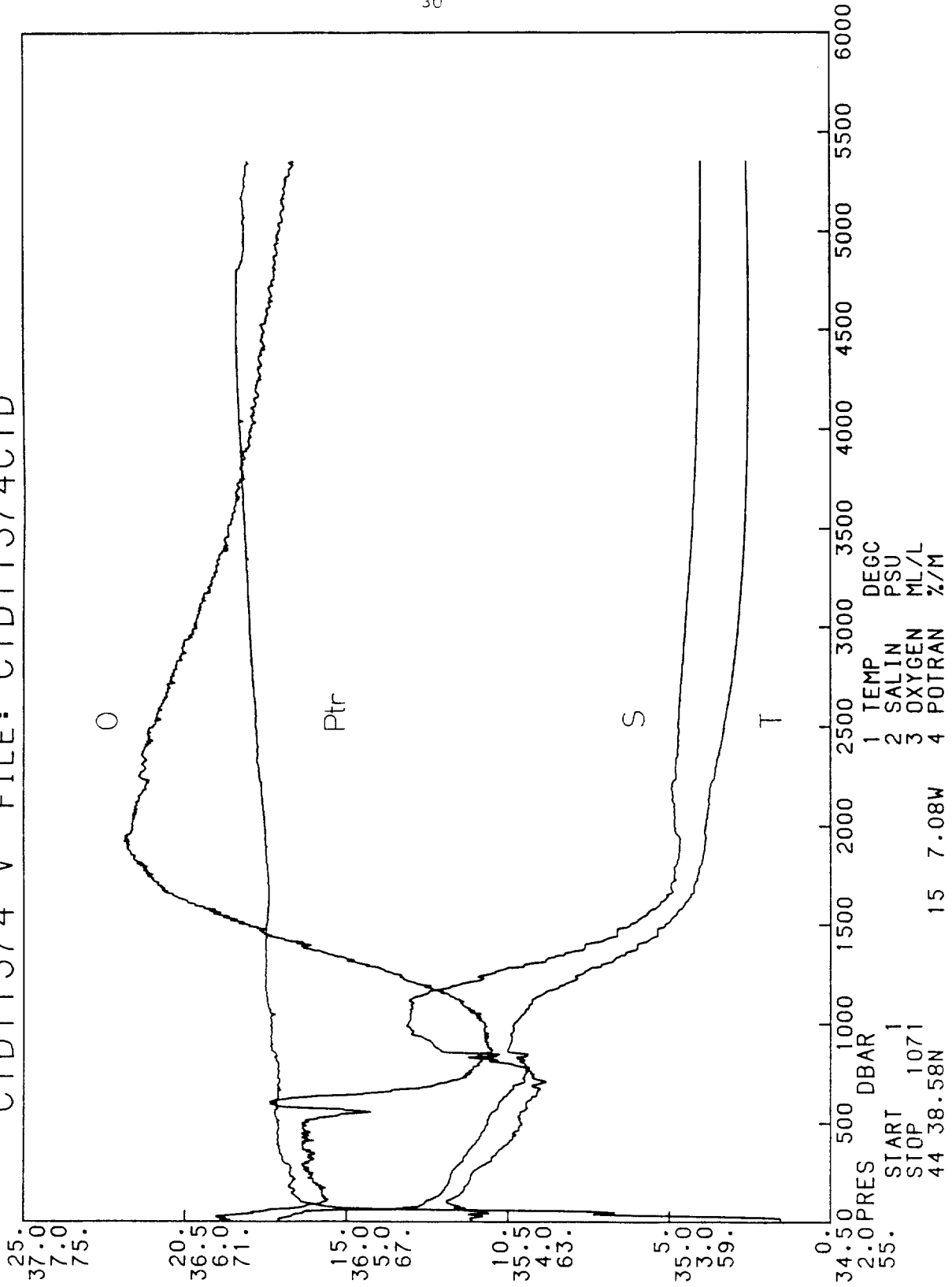
CTD11372 W FILE: CTD11372CTD



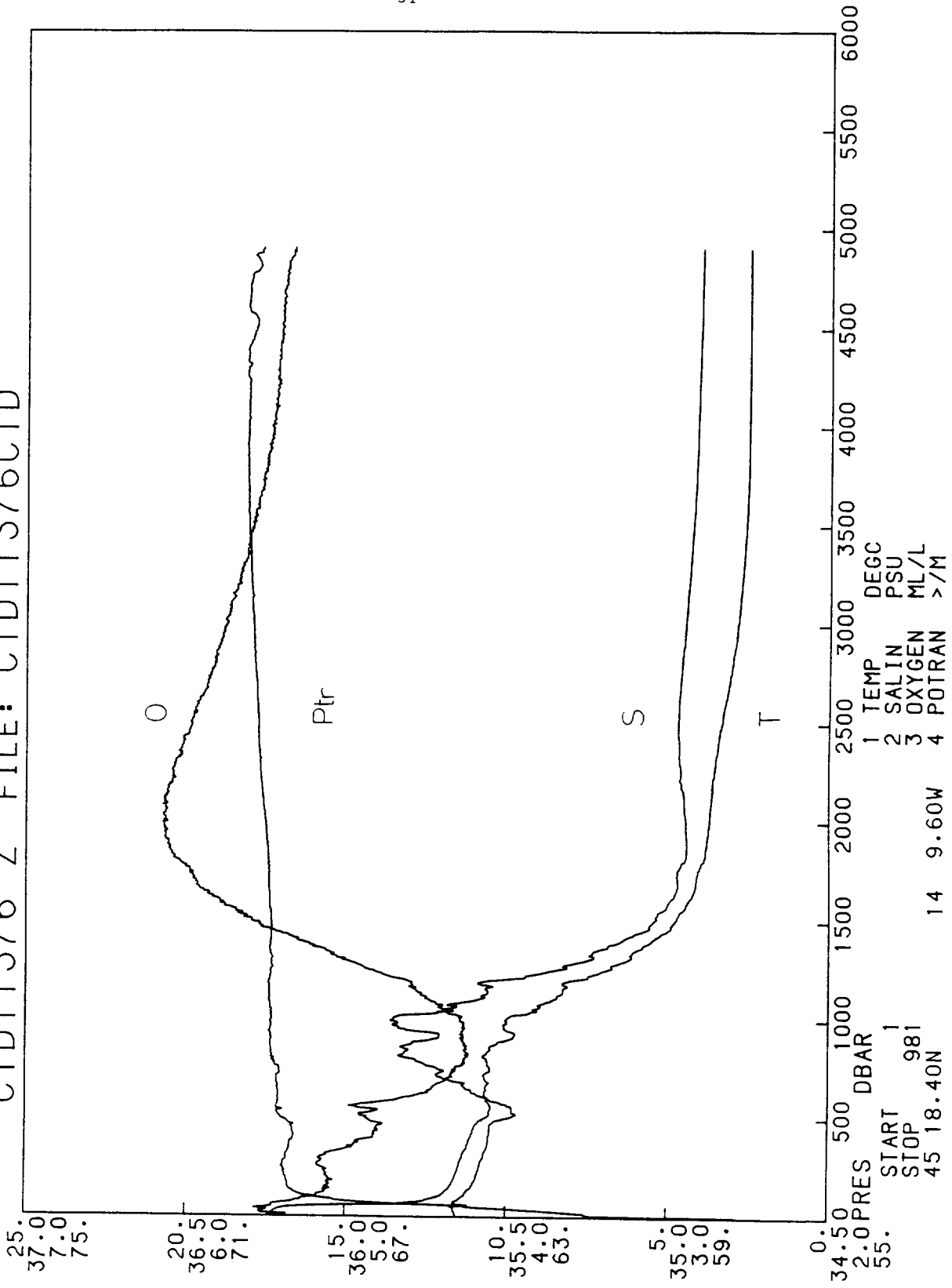
CTD11373 U FILE: CTD11373CTD



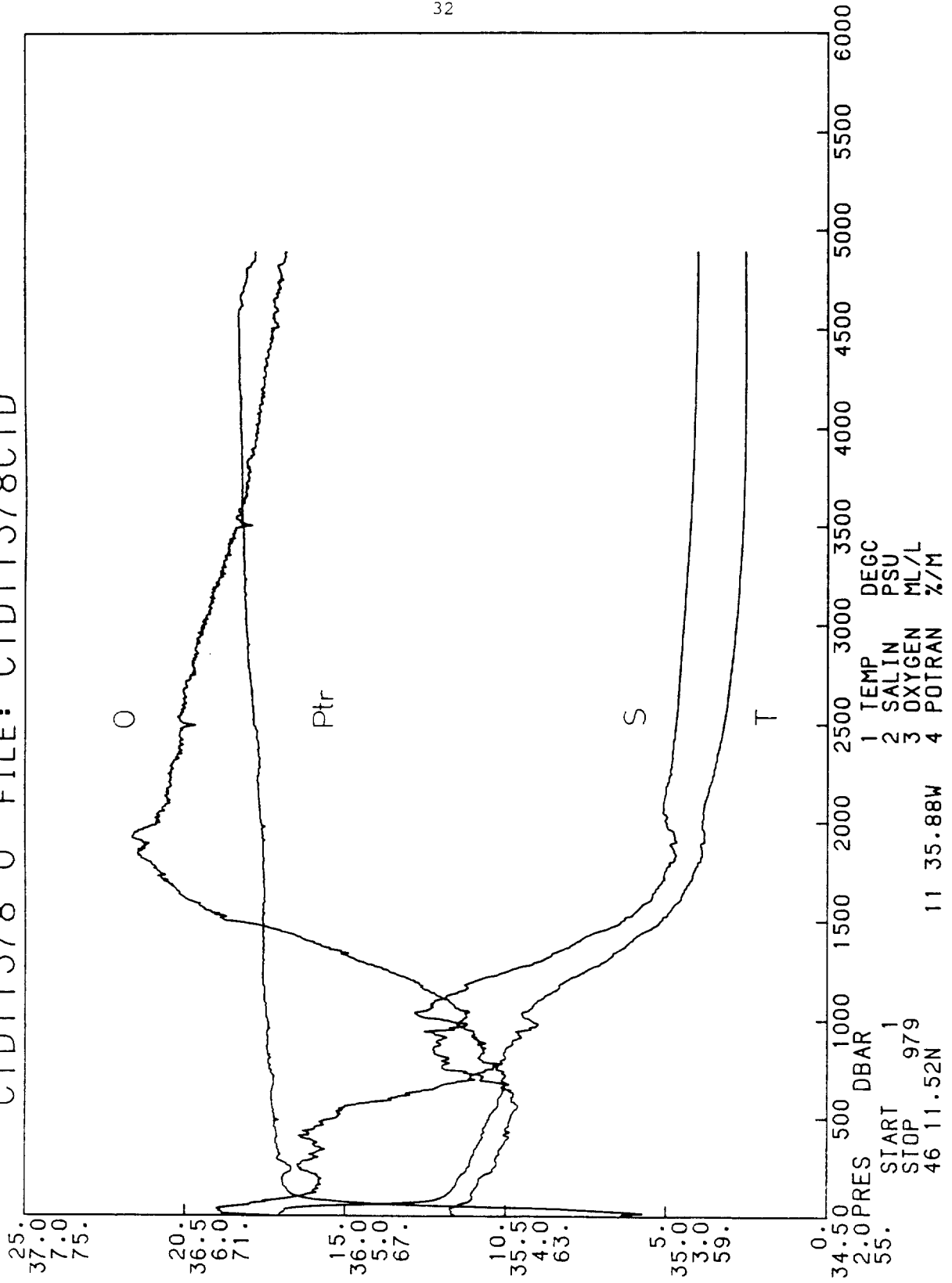
CTD11374 V FILE: CTD11374CTD



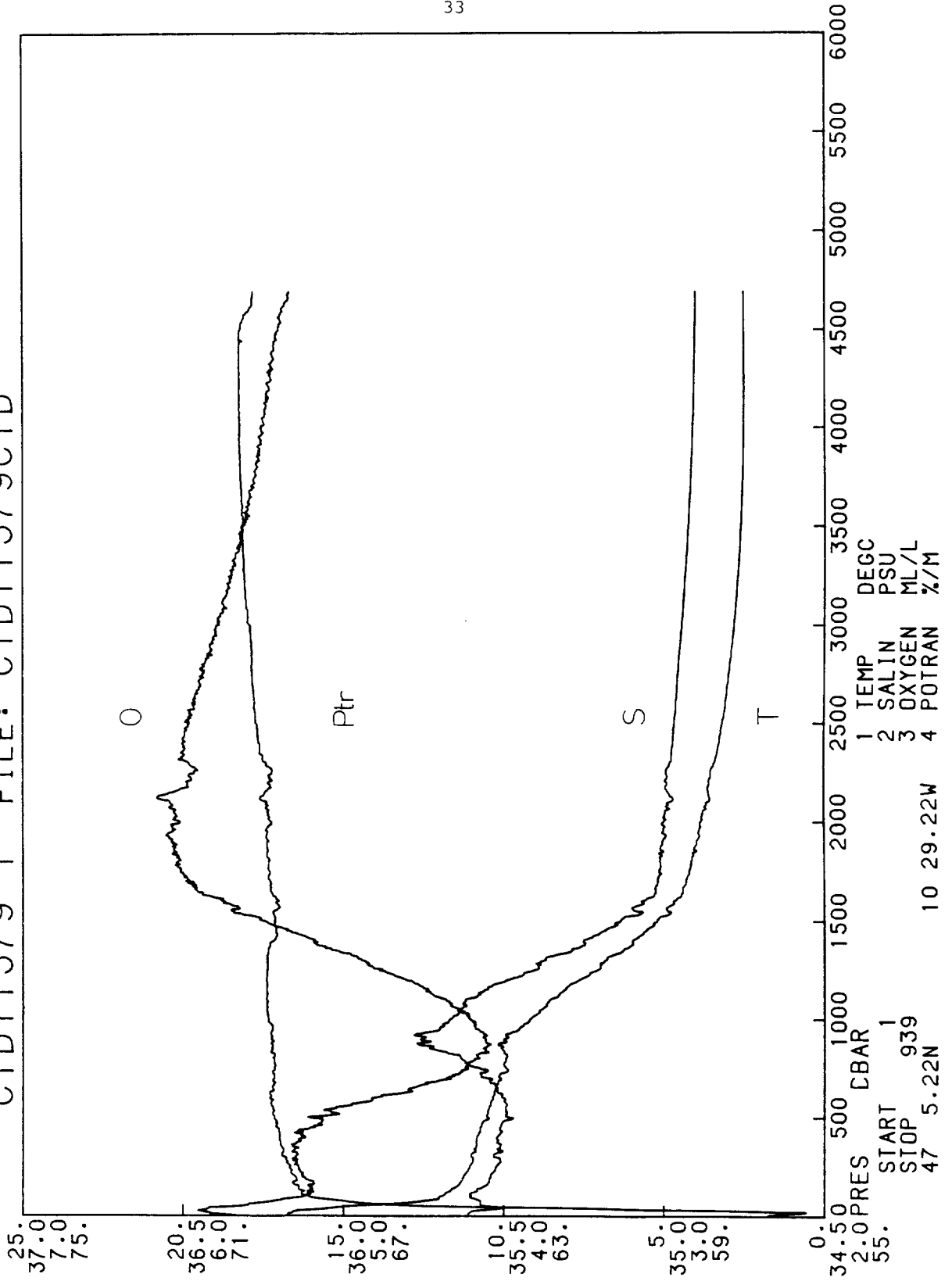
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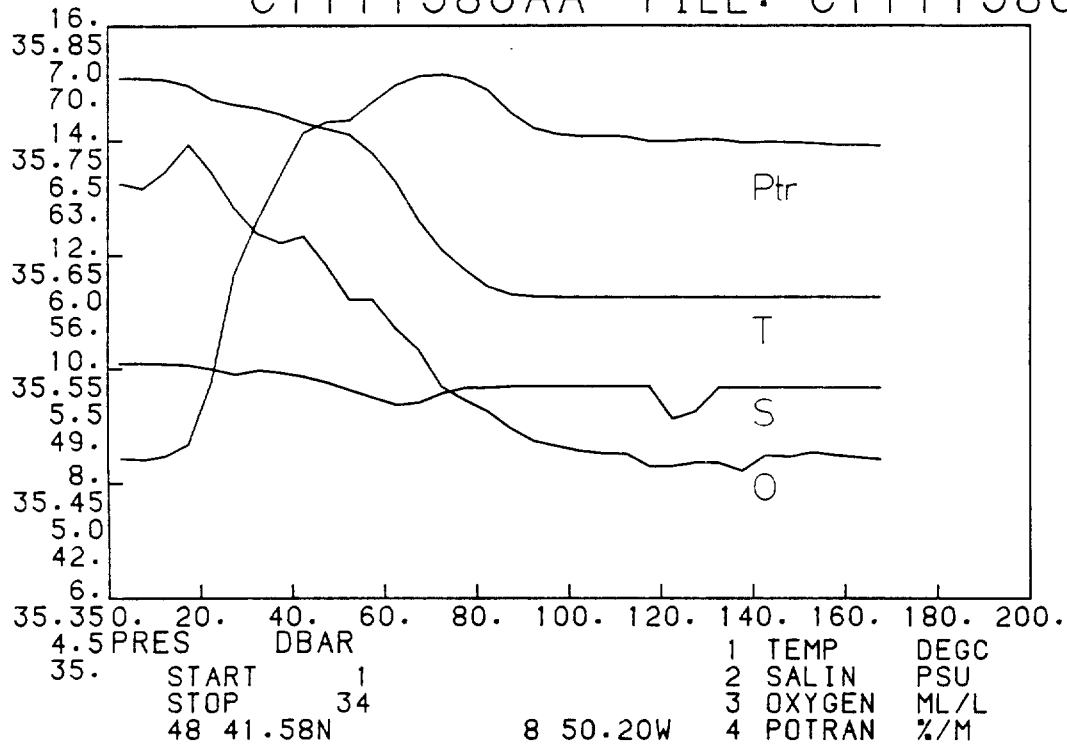
CTD11378 U FILE: CTD11378CTD



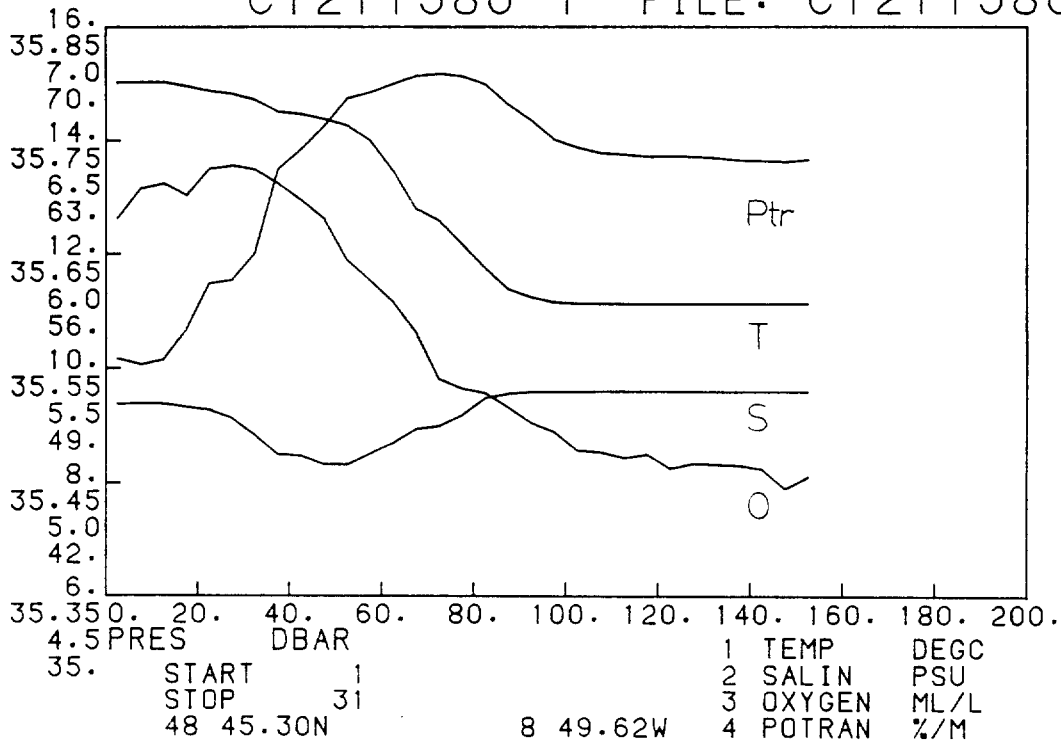
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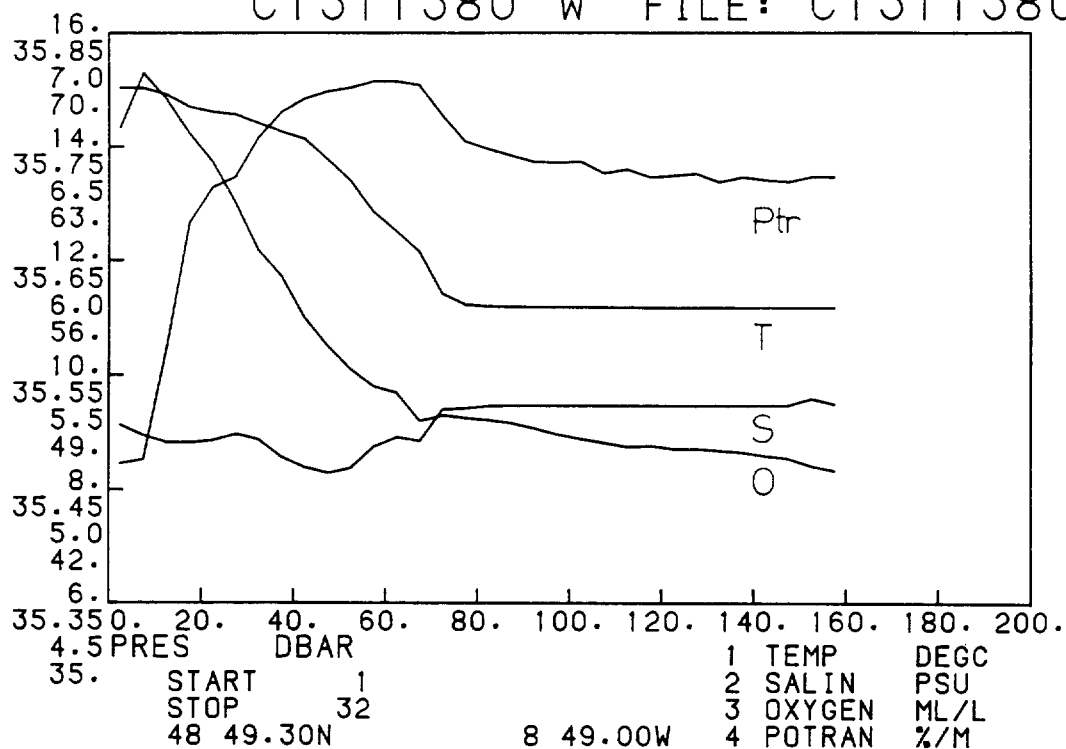
CT111380AA FILE: CT111380CTD



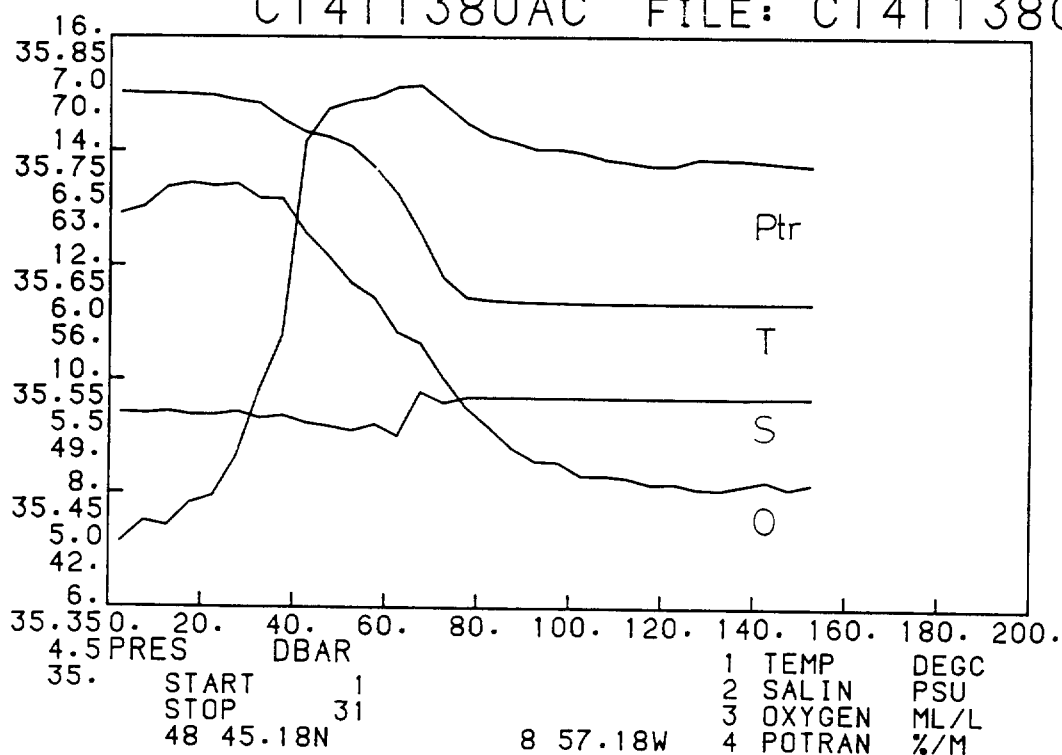
CT211380 T FILE: CT211380CTD



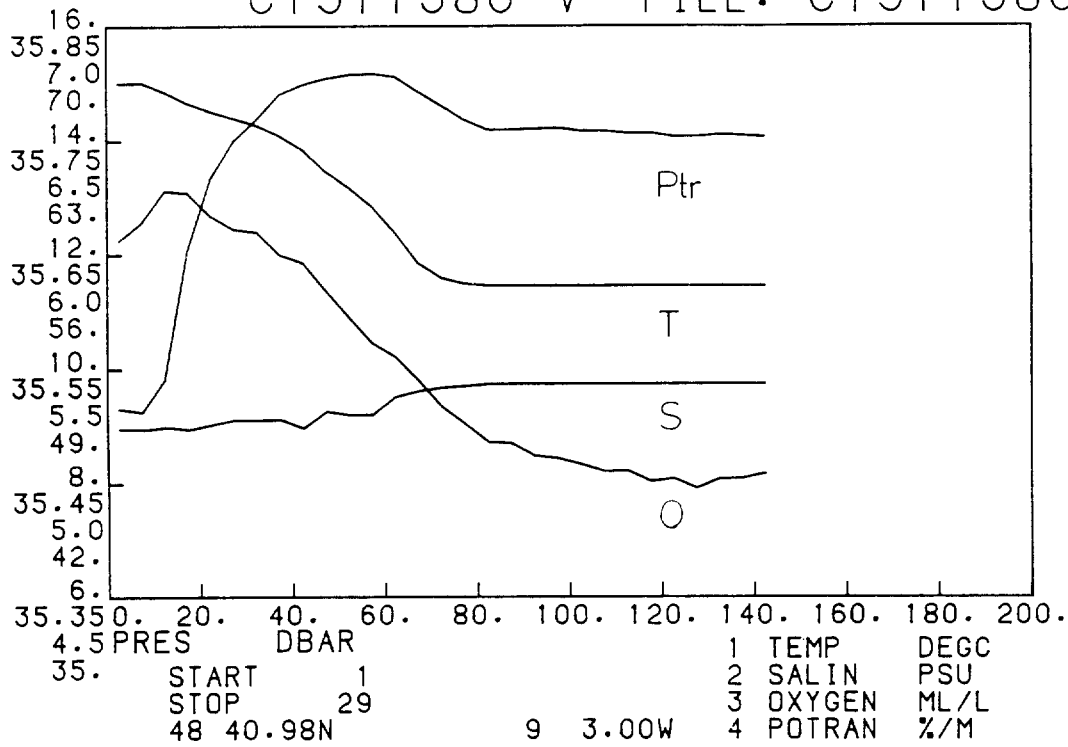
CT311380 W FILE: CT311380CTD



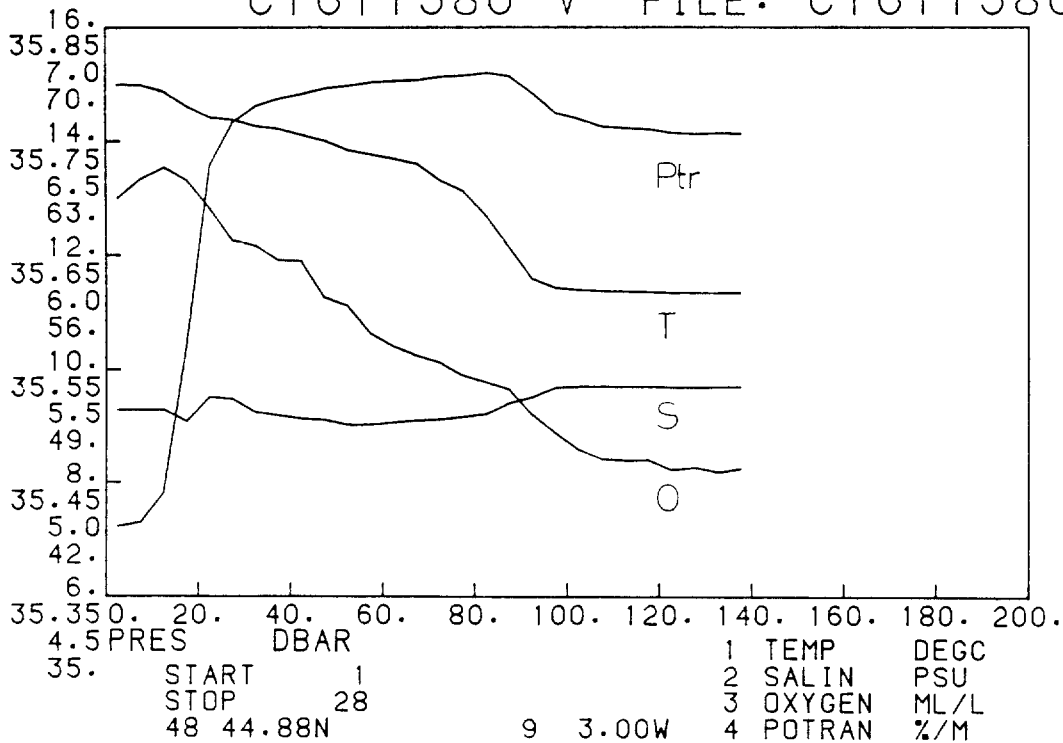
CT411380AC FILE: CT411380CTD



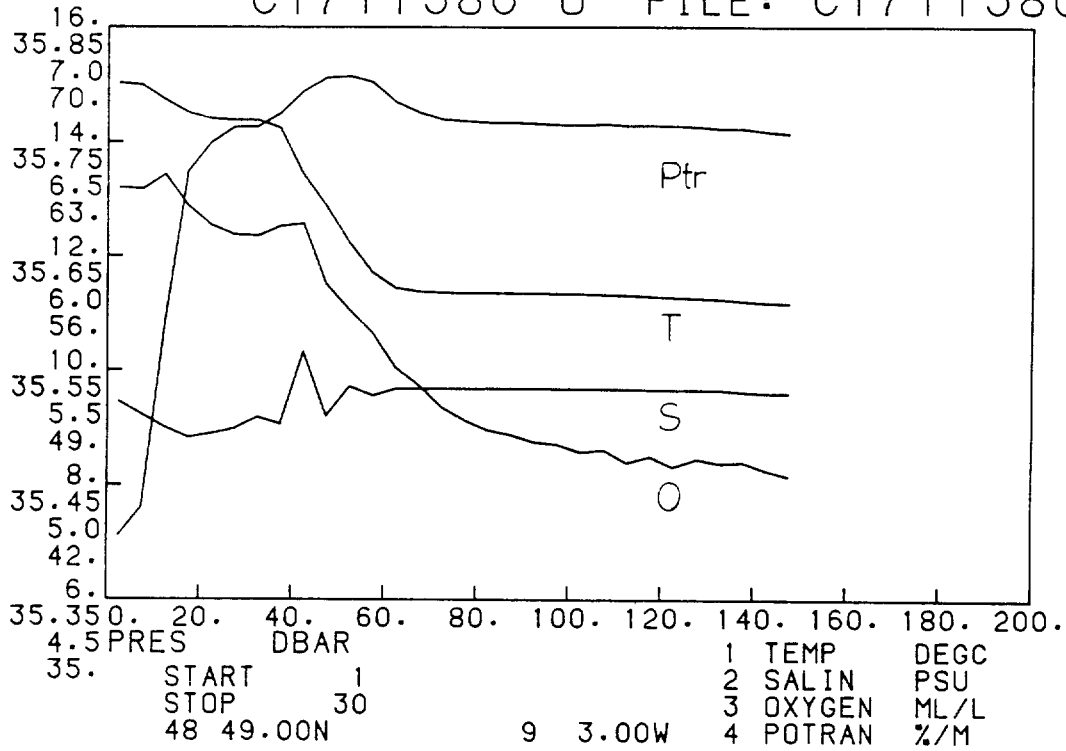
CT511380 V FILE: CT511380CTD



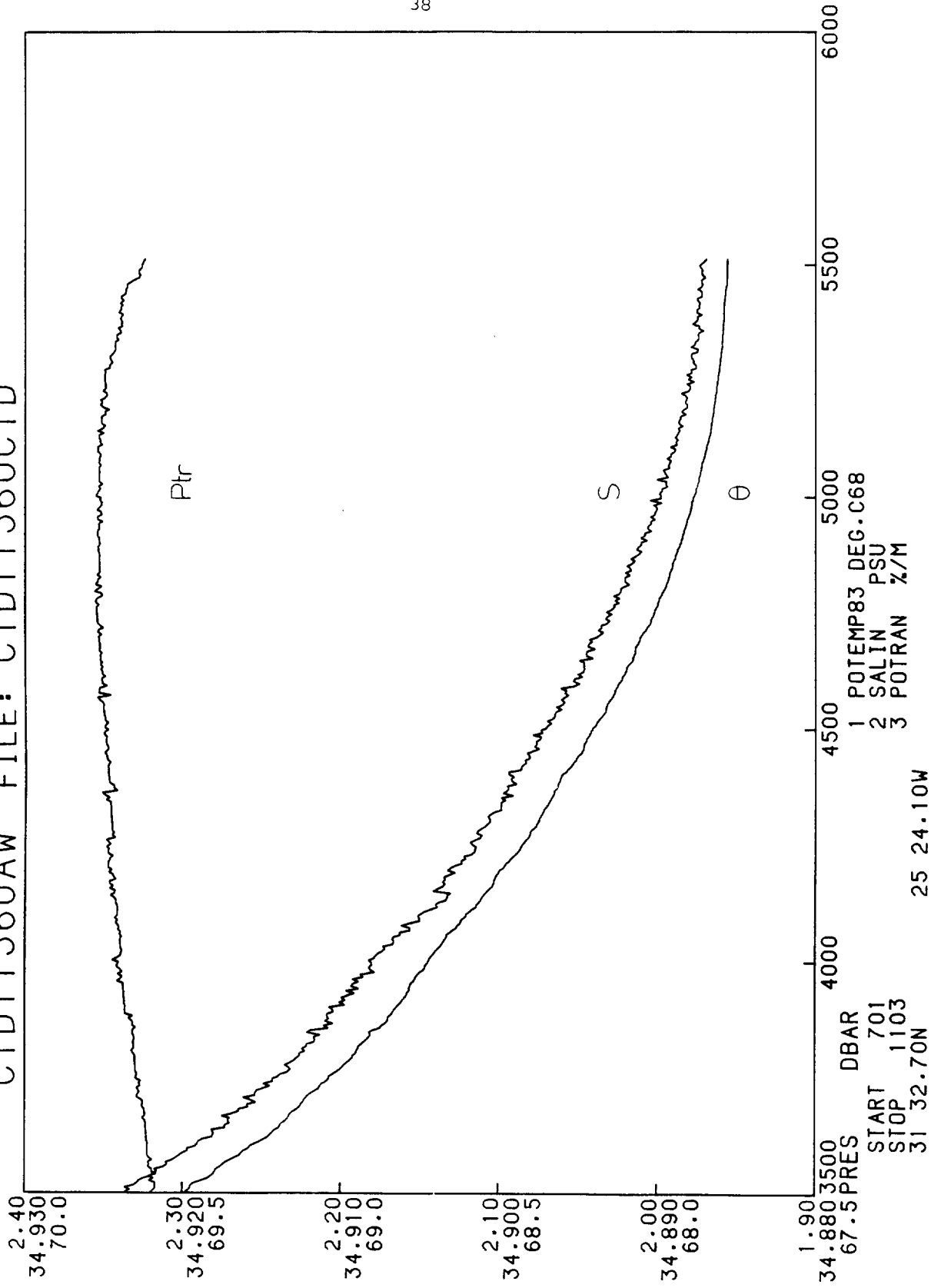
CT611380 V FILE: CT611380CTD



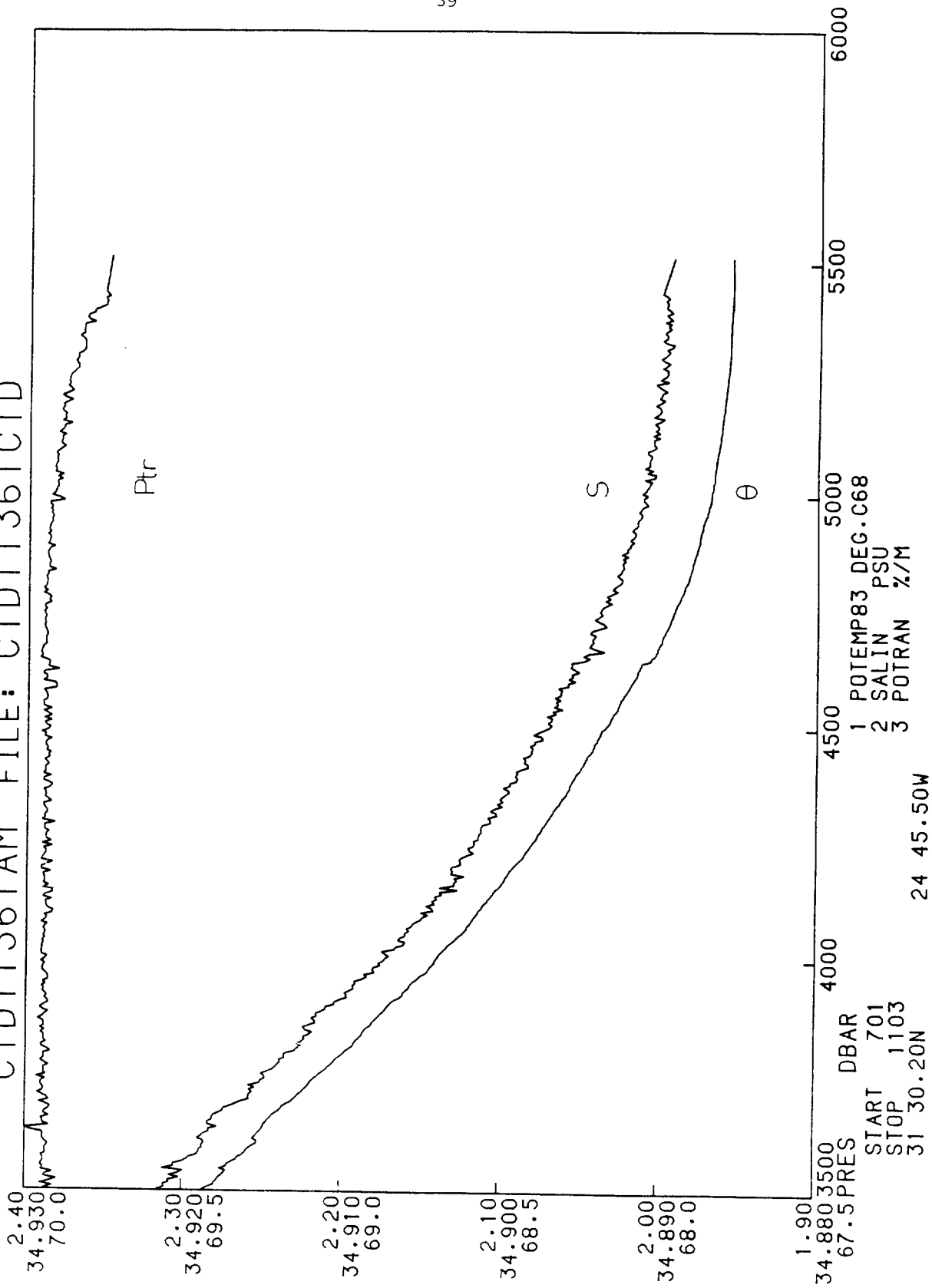
CT711380 0 FILE: CT711380CTD



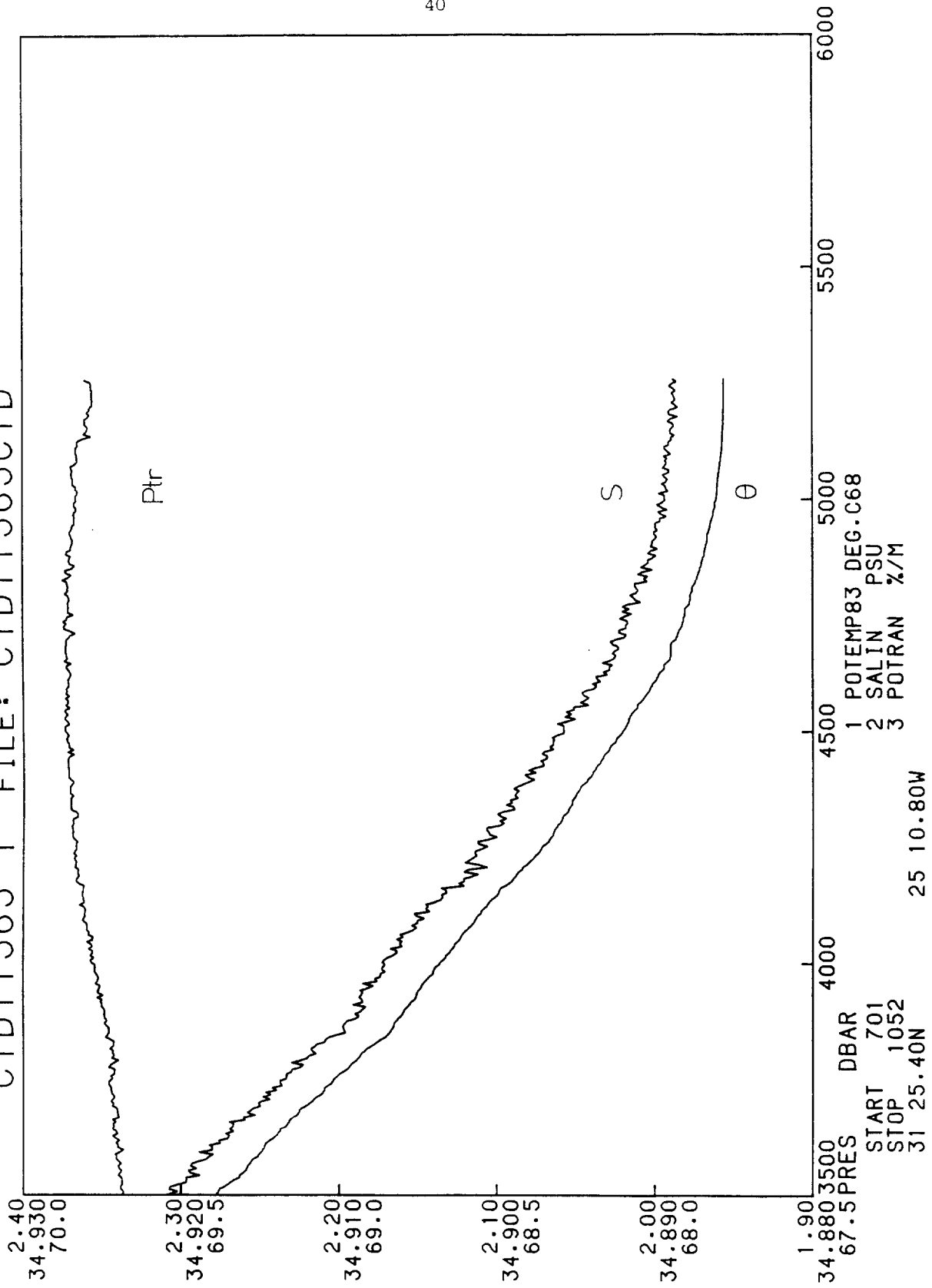
CTD11360AW FILE: CTD11360CTD



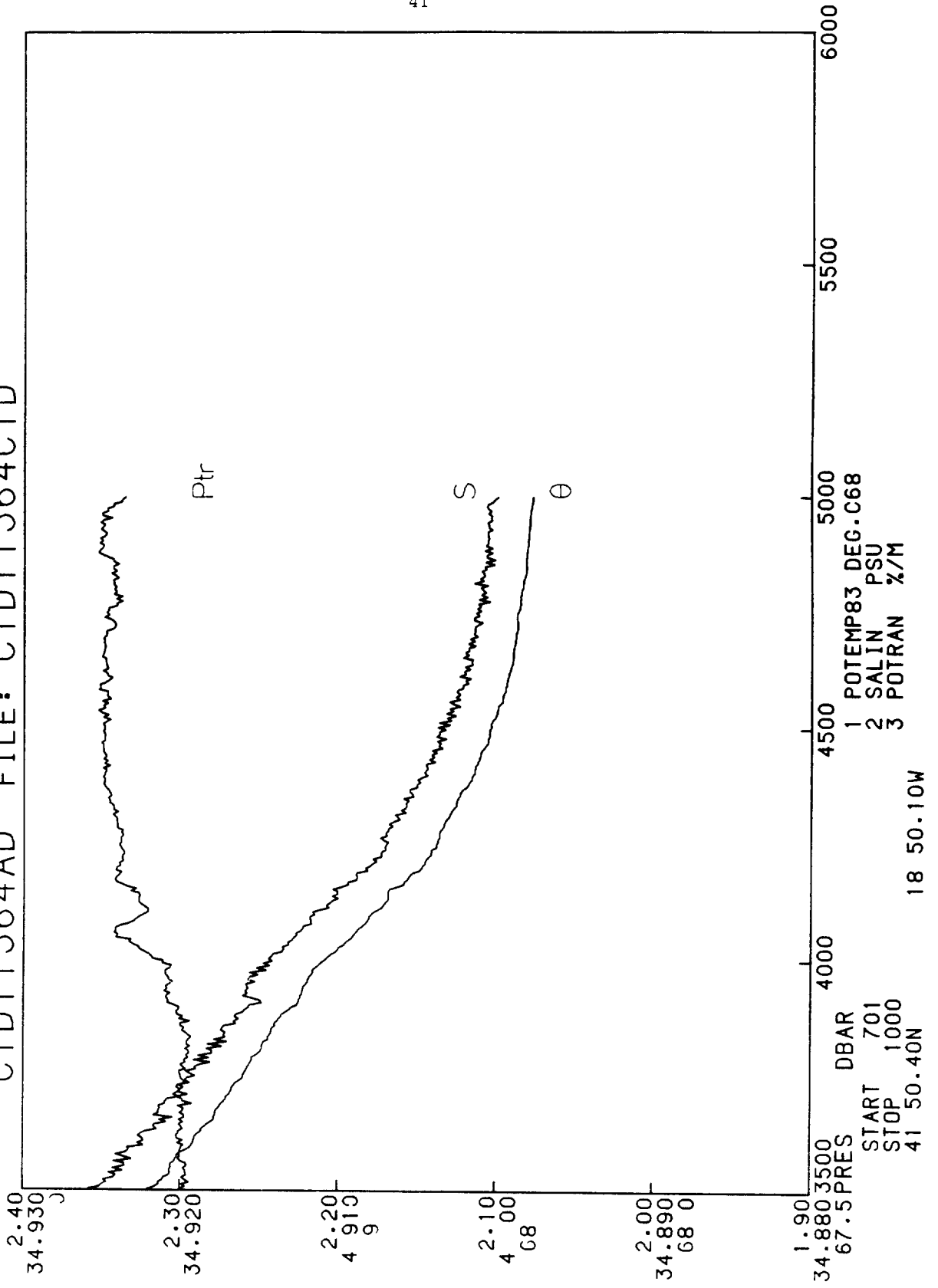
CTD11361AM FILE: CTD11361CTD



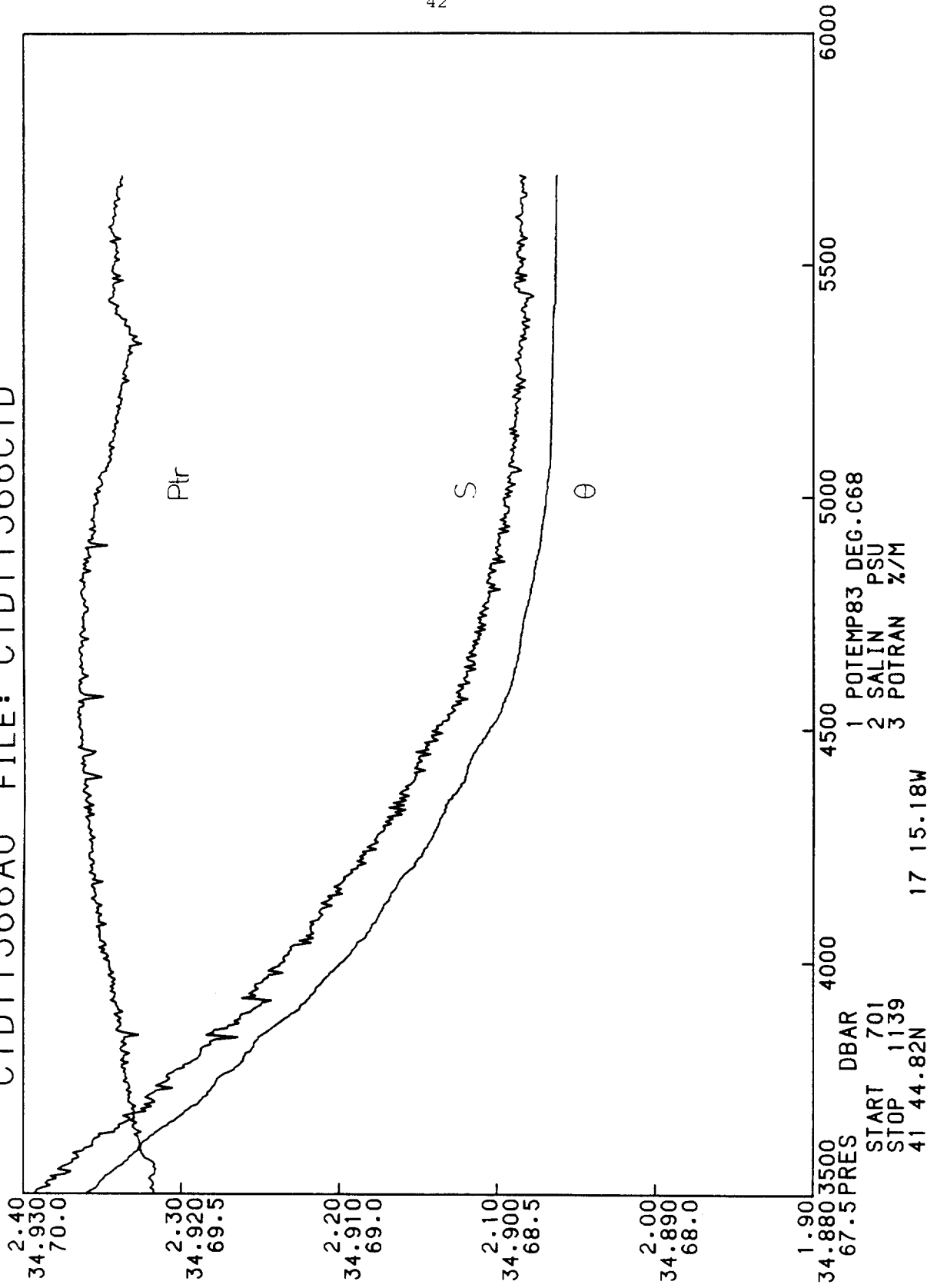
CTD11363 T FILE: CTD11363CTD



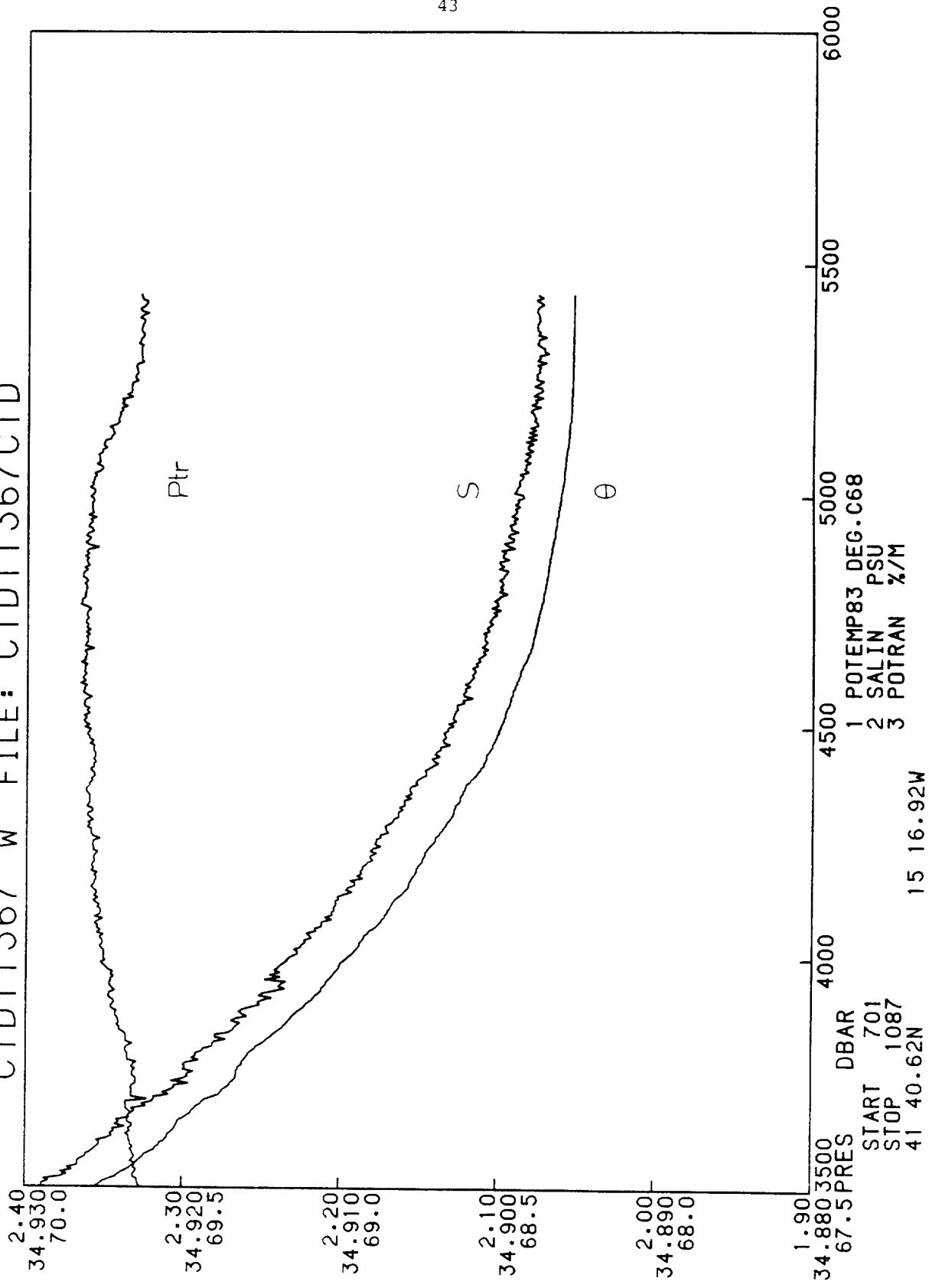
CTD11364AD FILE: CTD11364CTD



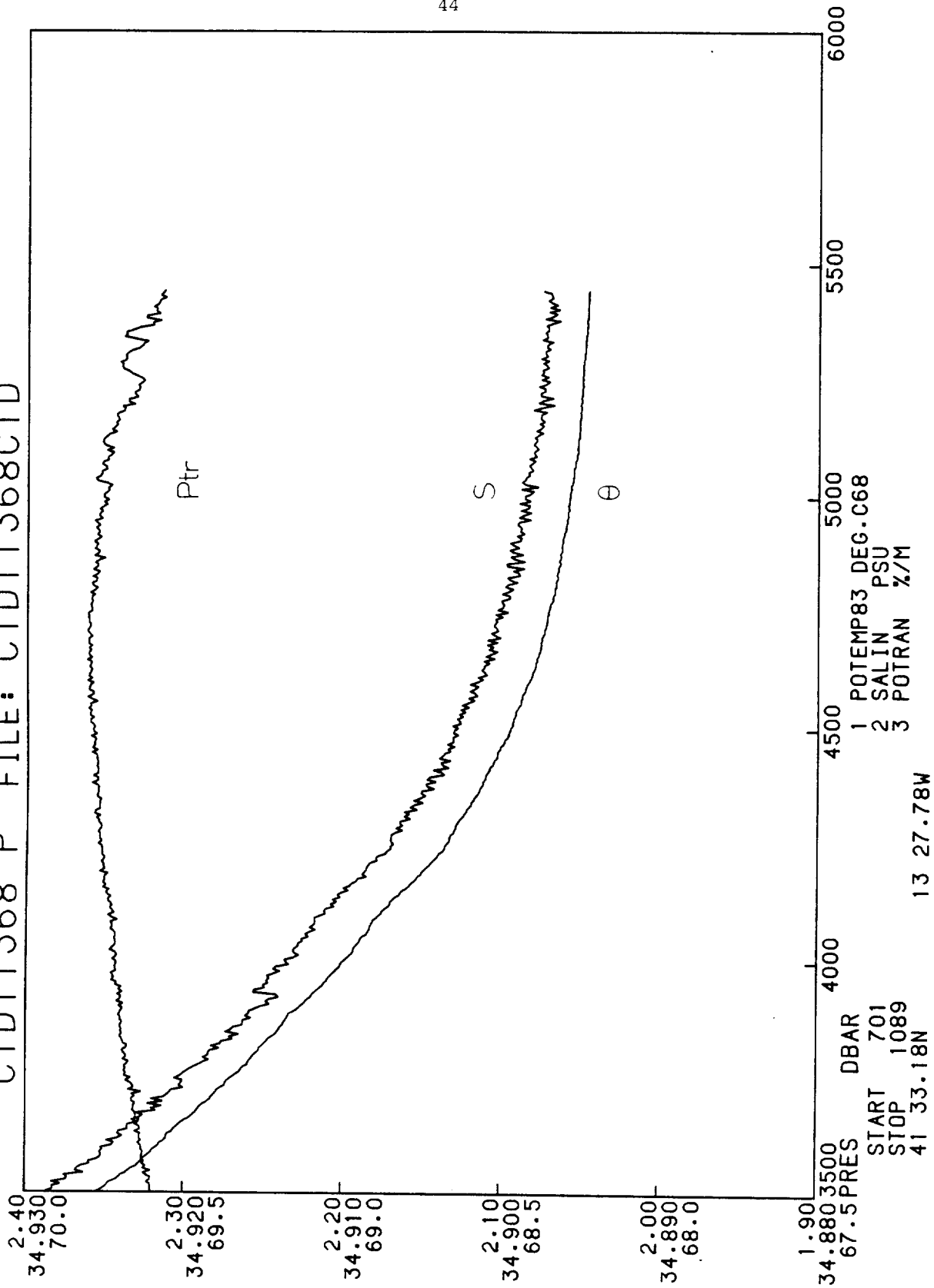
CTD11366AU FILE: CTD11366CTD



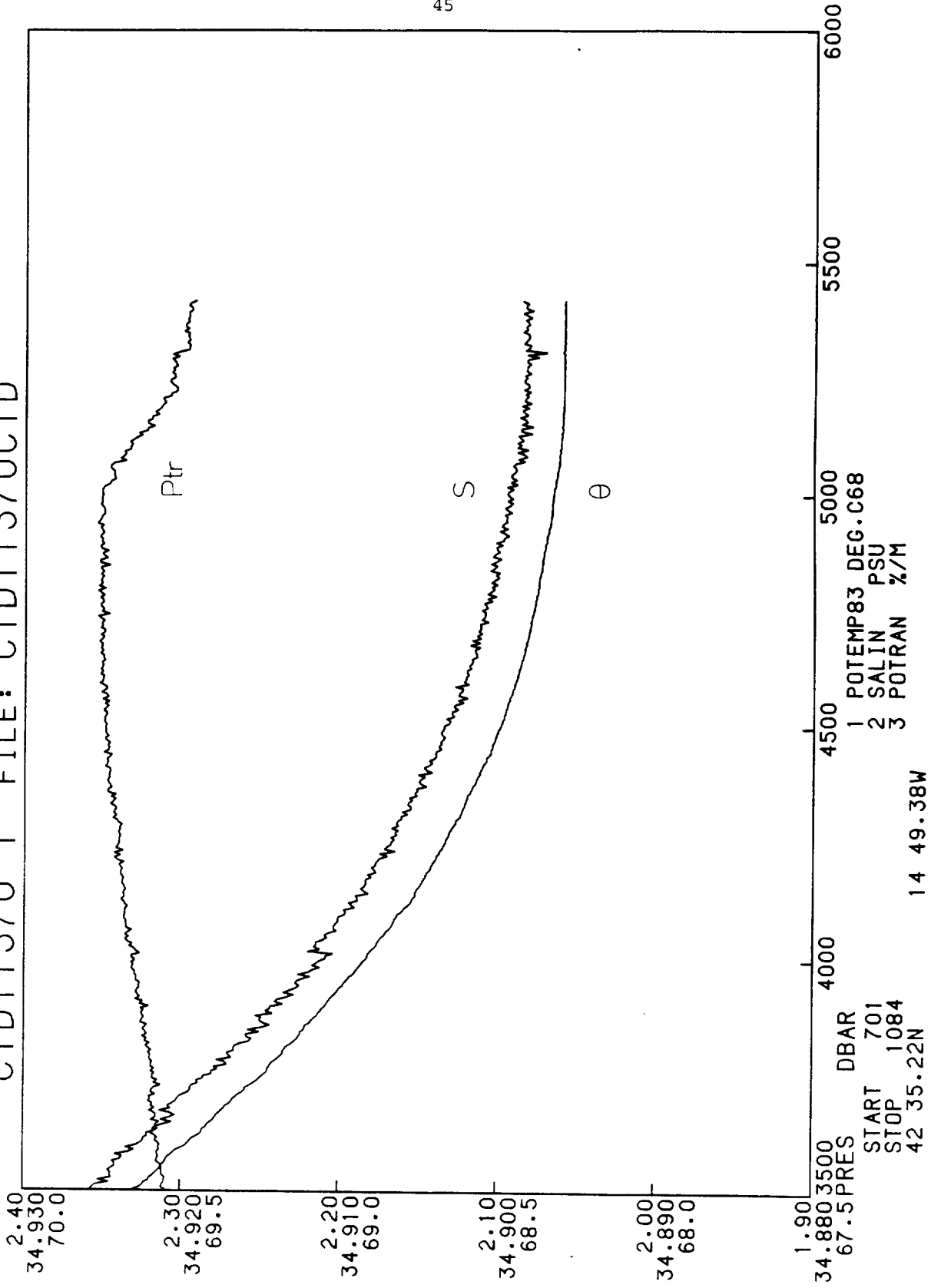
CTD11367 W FILE: CTD11367CTD



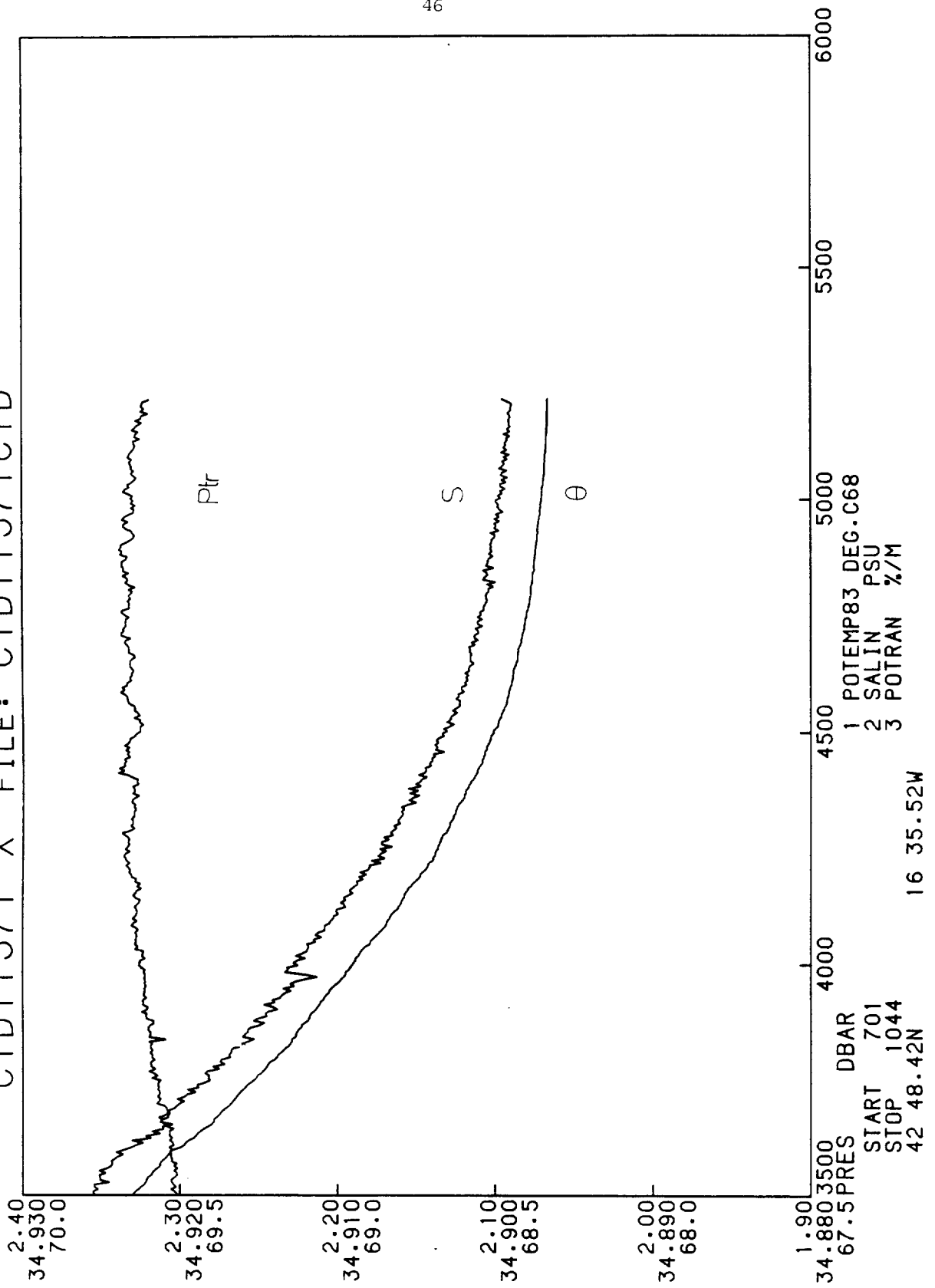
CTD11368 P FILE: CTD11368CTD



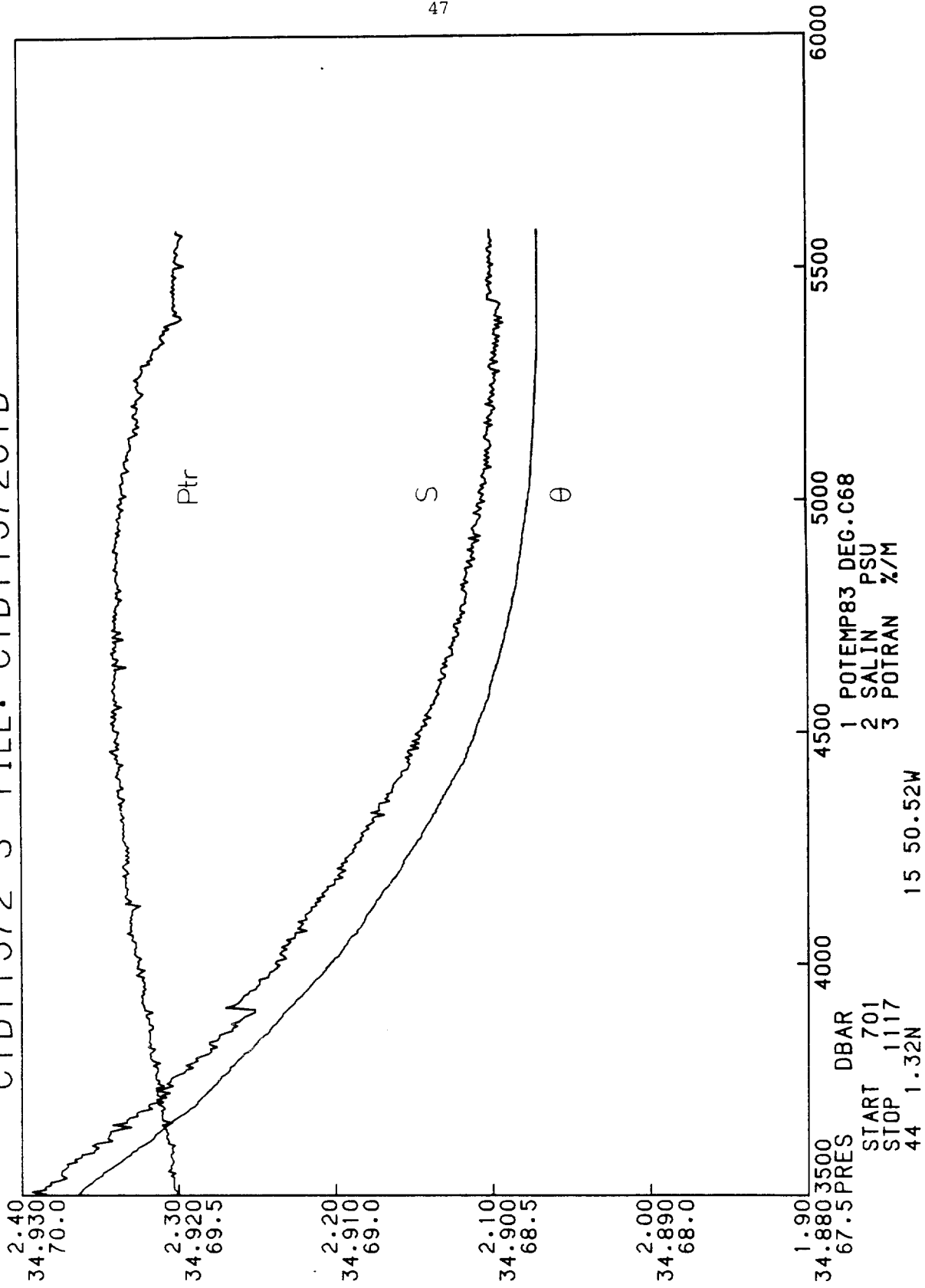
CTD11370 T FILE: CTD11370CTD



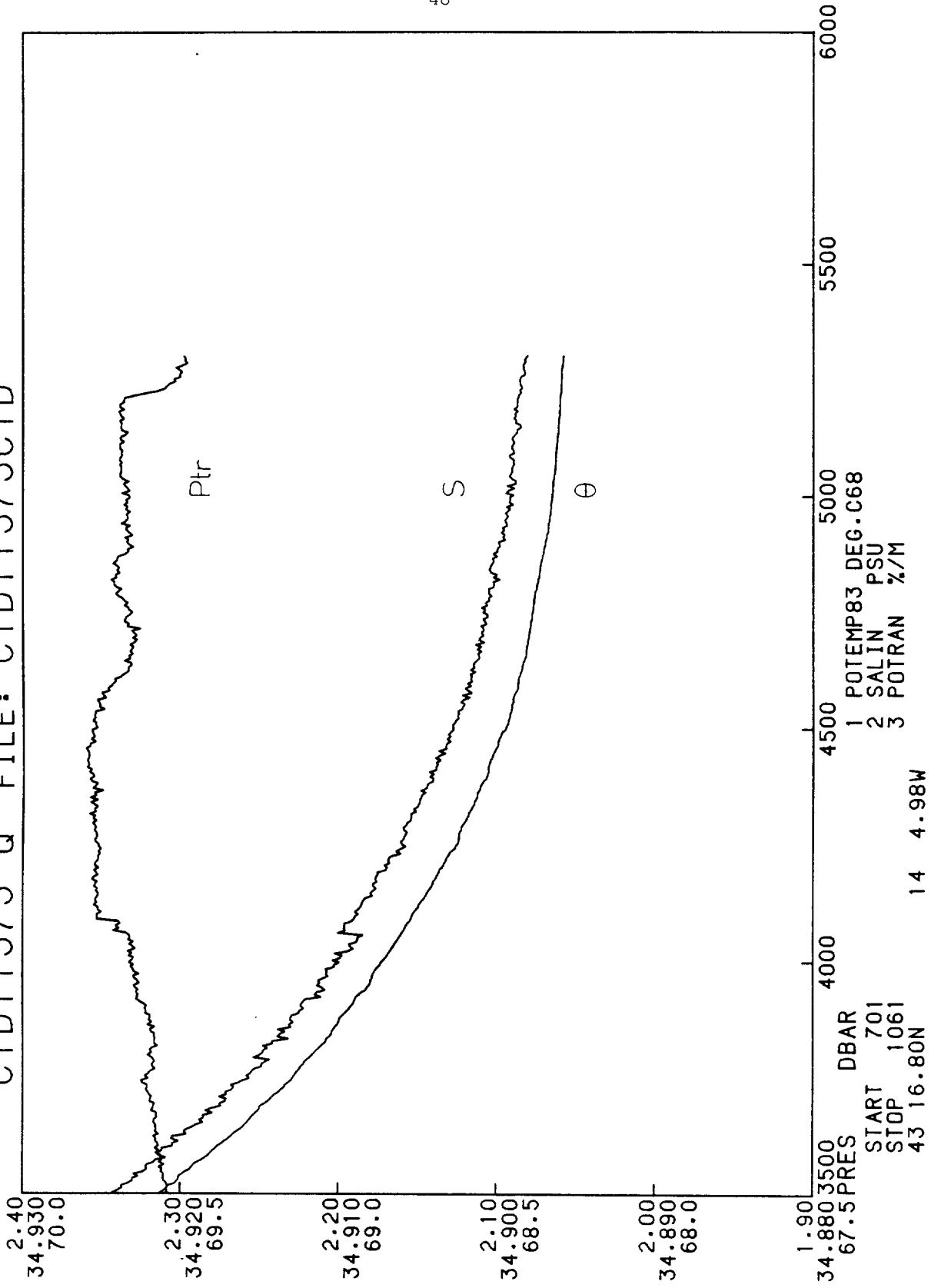
CTD11371 X FILE: CTD11371CTD



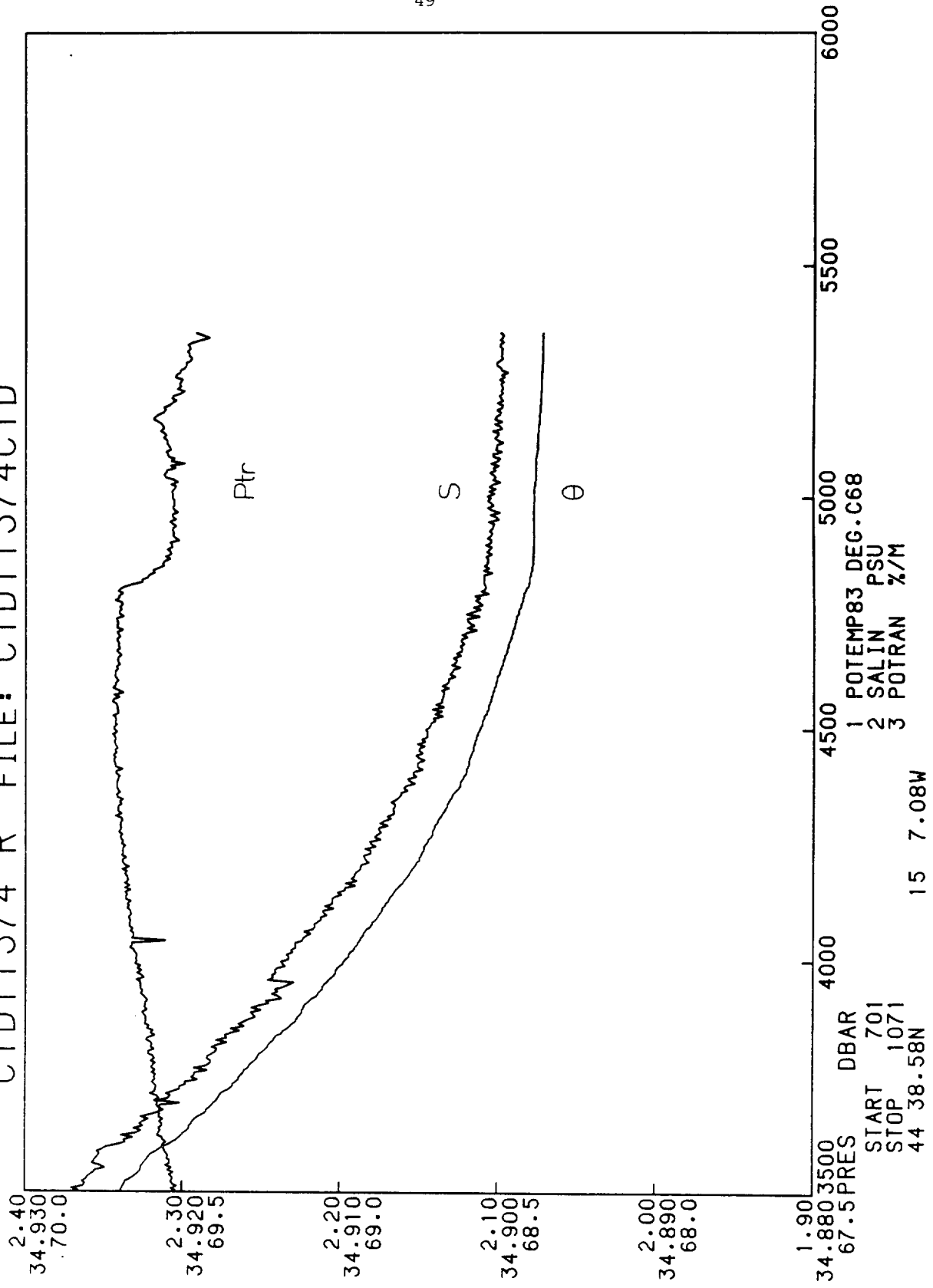
CTD11372 S FILE: CTD11372CTD



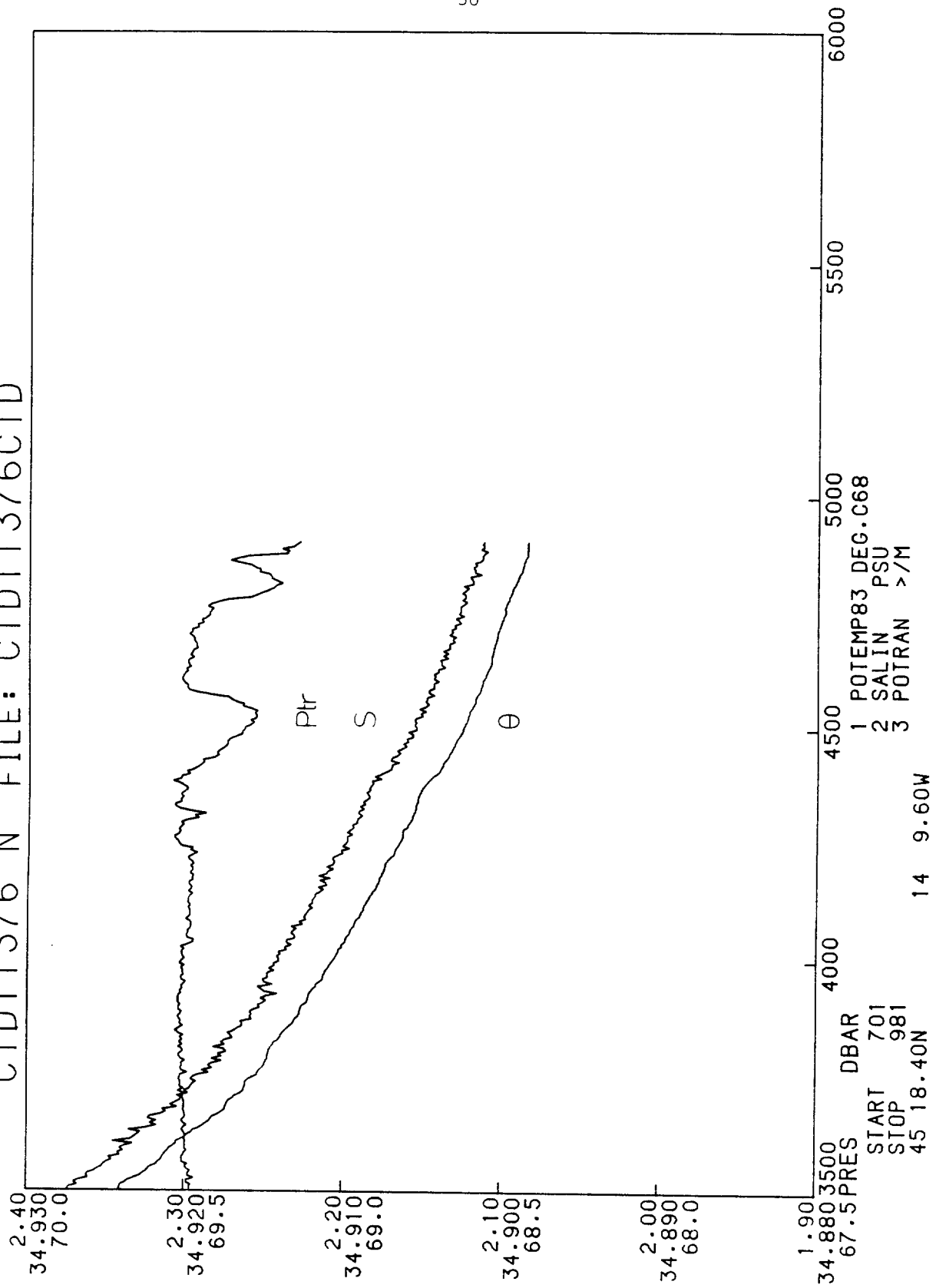
CTD11373 Q FILE: CTD11373CTD



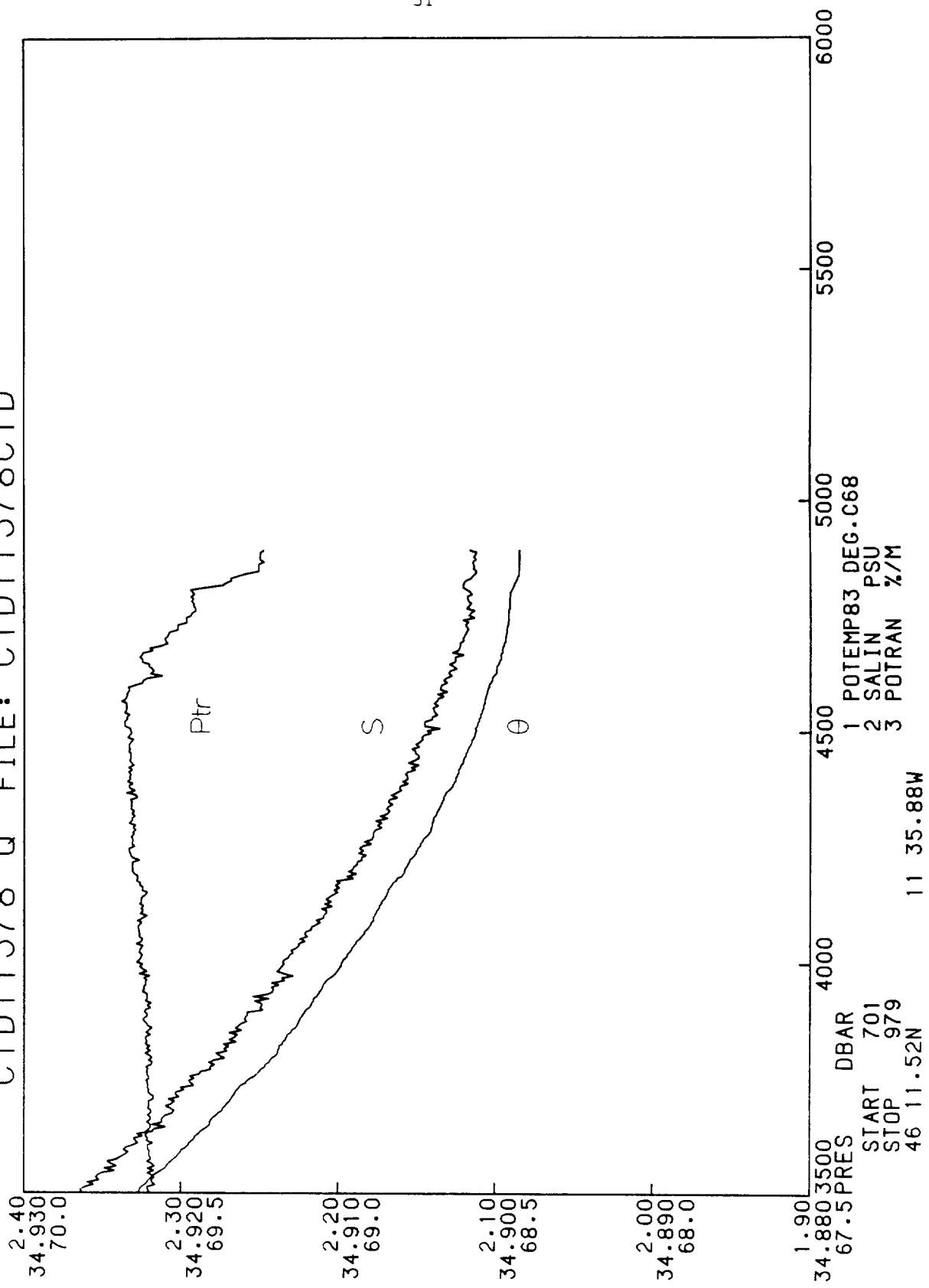
CTD11374 R FILE: CTD11374CTD



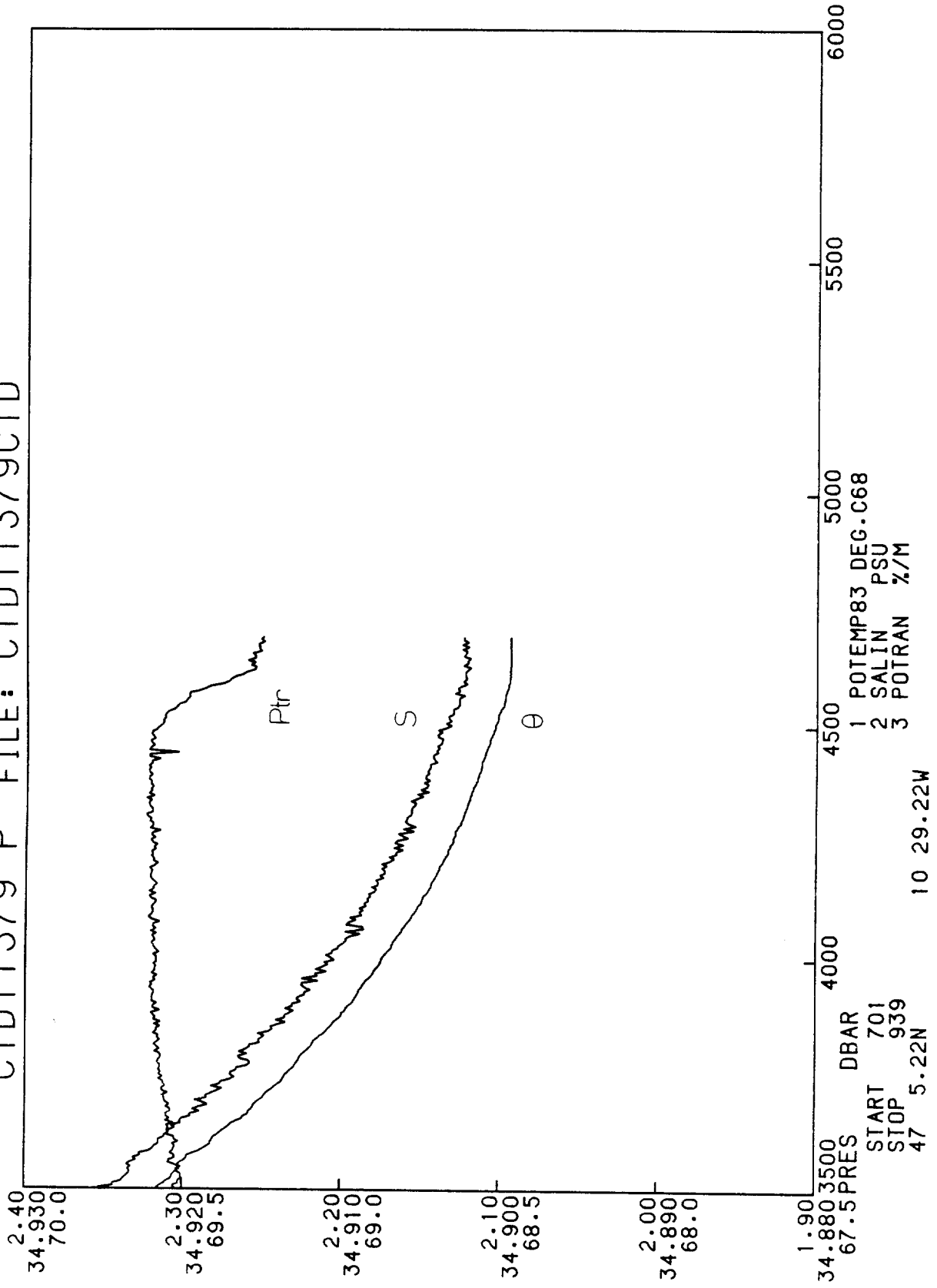
CTD11376 N FILE: CTD11376CTD



CTD11378 Q FILE: CTD11378CTD



CTD11379 P FILE: CTD11379CTD



DISCOVERY 162 STATION 11360

PRES	TEMP	SALIN	DO	POTEMP	POTRAN	SIGP0	SIGP4	DYNHT	SNDV	DEPTH	SVANOM	BVFR
DB	DEGC	PSU	ML/L	DEGC	%/M	KG/M ³	KG/M ³	DYN.M	M/S	M	10 ⁻⁸ KG/M ³	CY/HR
10.	24.331	36.786	4.53	24.328	66.01	24.898	41.156	0.030	1534.9	10.	304.99	0.461
20.	24.314	36.784	4.54	24.309	66.04	24.902	41.161	0.061	1535.0	20.	305.05	1.333
30.	24.188	36.802	4.56	24.182	65.89	24.954	41.219	0.091	1534.9	30.	300.58	4.770
50.	21.489	36.667	4.92	21.479	65.02	25.632	42.045	0.144	1528.2	50.	236.76	8.633
75.	19.708	36.560	4.94	19.694	65.56	26.034	42.552	0.198	1523.6	74.	199.48	7.209
100.	18.607	36.552	4.69	18.589	66.33	26.314	42.898	0.245	1521.0	99.	173.77	5.014
125.	18.292	36.581	4.54	18.270	66.27	26.417	43.020	0.287	1520.5	124.	164.92	3.262
150.	17.791	36.513	4.38	17.766	67.43	26.490	43.127	0.327	1519.4	149.	158.84	2.159
200.	17.077	36.400	4.30	17.044	68.26	26.580	43.265	0.405	1518.0	199.	151.98	2.156
250.	16.395	36.297	4.24	16.354	68.33	26.664	43.397	0.479	1516.6	248.	145.54	2.320
300.	15.452	36.128	4.30	15.405	68.33	26.752	43.553	0.550	1514.4	298.	138.48	2.532
400.	14.266	35.941	4.37	14.207	68.51	26.871	43.760	0.684	1512.1	397.	129.75	2.219
500.	12.993	35.757	4.36	12.923	68.59	26.996	43.982	0.809	1509.3	496.	119.93	2.216
600.	11.890	35.618	4.39	11.810	68.51	27.106	44.180	0.925	1507.1	595.	111.18	2.049
700.	10.947	35.524	4.35	10.858	68.53	27.210	44.361	1.032	1505.4	694.	102.74	1.938
800.	10.263	35.526	4.19	10.165	68.61	27.335	44.541	1.130	1504.6	793.	92.45	2.475
900.	9.442	35.508	4.22	9.337	68.63	27.461	44.736	1.217	1503.3	892.	81.45	2.039
1000.	8.749	35.525	4.39	8.636	68.65	27.588	44.922	1.293	1502.4	991.	70.27	1.782
1200.	7.585	35.485	4.68	7.459	68.73	27.736	45.173	1.419	1501.3	1188.	57.63	1.463
1400.	6.513	35.378	5.10	6.375	68.81	27.802	45.341	1.528	1500.4	1386.	51.65	1.132
1600.	5.578	35.271	5.42	5.429	68.86	27.839	45.468	1.626	1499.9	1583.	47.93	0.860
1800.	4.899	35.189	5.66	4.738	69.05	27.855	45.554	1.720	1500.3	1780.	46.18	0.864
2000.	4.226	35.102	5.85	4.055	69.10	27.862	45.630	1.811	1500.8	1977.	44.70	0.708
2200.	3.742	35.044	5.94	3.559	69.18	27.867	45.686	1.899	1502.1	2173.	43.71	0.712
2400.	3.387	35.006	5.97	3.189	69.22	27.872	45.731	1.986	1503.9	2370.	42.90	0.668
2600.	3.147	34.983	5.96	2.934	69.29	27.878	45.763	2.071	1506.3	2566.	42.49	0.508
2800.	2.963	34.963	5.96	2.733	69.33	27.880	45.787	2.156	1508.8	2762.	42.47	0.329
3000.	2.813	34.949	5.95	2.566	69.39	27.884	45.809	2.241	1511.6	2958.	42.45	0.511
3200.	2.703	34.937	5.91	2.438	69.53	27.885	45.824	2.326	1514.5	3154.	42.81	0.793
3400.	2.631	34.928	5.85	2.346	69.56	27.886	45.835	2.412	1517.6	3349.	43.38	0.355
3600.	2.563	34.919	5.83	2.258	69.61	27.886	45.844	2.500	1520.7	3545.	43.97	0.105
3800.	2.518	34.913	5.81	2.191	69.66	27.886	45.852	2.588	1524.0	3740.	44.72	0.132
4000.	2.493	34.908	5.78	2.145	69.71	27.886	45.857	2.679	1527.3	3935.	45.60	0.396
4200.	2.469	34.903	5.76	2.099	69.73	27.886	45.862	2.771	1530.6	4130.	46.50	0.491
4400.	2.454	34.899	5.73	2.060	69.74	27.886	45.866	2.865	1534.0	4325.	47.44	0.165
4500.	2.447	34.897	5.72	2.041	69.74	27.886	45.868	2.912	1535.7	4422.	47.91	0.053
4600.	2.442	34.895	5.71	2.024	69.76	27.886	45.870	2.960	1537.4	4519.	48.41	0.144
4700.	2.440	34.894	5.70	2.010	69.76	27.886	45.871	3.009	1539.2	4617.	48.93	-0.133
4800.	2.438	34.892	5.69	1.996	69.77	27.886	45.873	3.058	1540.9	4714.	49.43	0.281
4900.	2.440	34.891	5.68	1.985	69.76	27.886	45.874	3.108	1542.6	4811.	50.00	0.102
5000.	2.445	34.890	5.66	1.977	69.77	27.885	45.874	3.158	1544.4	4908.	50.60	-0.117
5100.	2.450	34.889	5.65	1.969	69.77	27.885	45.875	3.209	1546.1	5005.	51.19	-0.016
5200.	2.457	34.888	5.63	1.964	69.76	27.885	45.876	3.261	1547.9	5102.	51.82	0.250
5300.	2.467	34.888	5.62	1.960	69.73	27.885	45.876	3.313	1549.7	5199.	52.45	0.270
5400.	2.478	34.887	5.61	1.958	69.70	27.885	45.876	3.365	1551.5	5296.	53.12	0.254
5500.	2.490	34.887	5.58	1.955	69.63	27.885	45.876	3.419	1553.3	5393.	53.78	-0.019

DISCOVERY 162 STATION 11361

PRES DB	TEMP DEGC	SALIN PSU	DO ML/L	POTEMP DEGC	POTRAN %/M	SIGP0 KG/M ³	SIGP4 KG/M ³	DYNHT DYN.M	SNDV M/S	DEPTH M	SVANOM 10 ⁻⁸ KG/M ³	BVFR CY/HR
10.	24.229	36.776	4.60	24.226	67.10	24.921	41.185	0.030	1534.6	10.	302.76	-0.045
20.	24.165	36.776	4.61	24.161	67.10	24.940	41.207	0.060	1534.6	20.	301.38	2.923
30.	24.090	36.768	4.74	24.083	67.14	24.957	41.229	0.091	1534.6	30.	300.20	0.358
50.	20.350	36.476	5.31	20.340	66.60	25.798	42.280	0.144	1524.9	50.	220.95	10.756
75.	18.449	36.441	4.95	18.435	67.08	26.268	42.865	0.193	1520.0	74.	177.12	5.277
100.	17.695	36.406	4.63	17.678	67.64	26.430	43.074	0.235	1518.1	99.	162.65	4.244
125.	17.236	36.357	4.59	17.215	68.43	26.506	43.181	0.275	1517.2	124.	156.31	2.157
150.	16.885	36.305	4.58	16.860	68.77	26.551	43.250	0.313	1516.5	149.	152.87	2.464
200.	16.291	36.224	4.56	16.259	69.12	26.630	43.371	0.388	1515.4	199.	146.94	2.119
250.	15.518	36.101	4.62	15.479	69.15	26.715	43.511	0.460	1513.7	248.	140.34	2.688
300.	14.821	36.002	4.66	14.776	69.27	26.795	43.643	0.529	1512.2	298.	134.06	1.991
400.	13.637	35.835	4.70	13.580	69.39	26.922	43.858	0.658	1509.9	397.	124.50	1.986
500.	12.650	35.699	4.60	12.581	69.46	27.019	44.033	0.779	1508.1	496.	117.38	1.802
600.	11.698	35.586	4.53	11.619	69.54	27.117	44.207	0.892	1506.4	595.	109.88	1.848
700.	10.808	35.514	4.42	10.721	69.64	27.227	44.389	0.998	1504.9	694.	100.96	1.877
800.	10.073	35.501	4.29	9.976	69.70	27.348	44.570	1.094	1503.9	793.	90.90	1.653
900.	9.448	35.507	4.40	9.343	69.69	27.459	44.734	1.180	1503.3	892.	81.60	1.759
1000.	8.889	35.526	4.53	8.775	69.70	27.567	44.888	1.256	1502.9	991.	72.61	1.739
1200.	7.942	35.531	4.84	7.813	69.74	27.719	45.124	1.388	1502.7	1188.	60.09	1.932
1400.	6.644	35.383	5.31	6.505	69.77	27.789	45.315	1.501	1500.9	1386.	53.30	1.516
1600.	5.613	35.260	5.60	5.464	69.80	27.826	45.453	1.603	1500.0	1583.	49.20	0.905
1800.	4.882	35.179	5.89	4.722	69.82	27.849	45.550	1.699	1500.3	1780.	46.66	0.562
2000.	4.212	35.096	6.02	4.041	69.85	27.858	45.628	1.790	1500.8	1977.	44.97	0.737
2200.	3.721	35.036	6.11	3.538	69.84	27.863	45.685	1.879	1502.0	2173.	43.95	0.696
2400.	3.363	34.999	6.17	3.166	69.87	27.868	45.730	1.966	1503.8	2370.	43.09	0.615
2600.	3.105	34.973	6.08	2.893	69.87	27.874	45.764	2.052	1506.1	2566.	42.56	0.480
2800.	2.923	34.958	6.03	2.694	69.88	27.879	45.790	2.137	1508.7	2762.	42.30	0.673
3000.	2.796	34.945	5.99	2.550	69.87	27.882	45.809	2.221	1511.5	2958.	42.51	0.370
3200.	2.691	34.935	5.94	2.426	69.90	27.884	45.824	2.306	1514.5	3154.	42.80	0.031
3400.	2.615	34.926	5.90	2.330	69.92	27.885	45.836	2.393	1517.5	3349.	43.29	0.516
3600.	2.559	34.919	5.86	2.254	69.93	27.886	45.845	2.480	1520.7	3545.	43.97	0.494
3800.	2.524	34.913	5.83	2.198	69.93	27.886	45.851	2.569	1524.0	3740.	44.78	0.007
4000.	2.488	34.907	5.80	2.140	69.94	27.886	45.857	2.659	1527.3	3935.	45.58	-0.037
4200.	2.463	34.903	5.78	2.092	69.95	27.887	45.863	2.751	1530.6	4130.	46.40	0.373
4400.	2.446	34.899	5.76	2.052	69.95	27.887	45.867	2.845	1534.0	4325.	47.31	0.303
4500.	2.441	34.897	5.74	2.035	69.94	27.887	45.869	2.892	1535.7	4422.	47.80	0.001
4600.	2.435	34.896	5.72	2.017	69.95	27.887	45.871	2.940	1537.4	4519.	48.26	0.034
4700.	2.427	34.894	5.69	1.998	69.94	27.887	45.874	2.988	1539.1	4617.	48.67	0.009
4800.	2.427	34.893	5.69	1.985	69.95	27.887	45.875	3.037	1540.8	4714.	49.19	0.079
4900.	2.430	34.892	5.68	1.975	69.93	27.887	45.876	3.087	1542.6	4811.	49.75	0.010
5000.	2.435	34.891	5.67	1.968	69.92	27.887	45.877	3.137	1544.4	4908.	50.35	-0.102
5100.	2.443	34.891	5.65	1.963	69.89	27.887	45.878	3.188	1546.1	5005.	50.95	-0.038
5200.	2.453	34.890	5.64	1.960	69.88	27.887	45.878	3.239	1547.9	5102.	51.60	0.019
5300.	2.464	34.890	5.63	1.957	69.85	27.887	45.878	3.291	1549.7	5199.	52.25	0.004
5400.	2.476	34.889	5.61	1.956	69.79	27.887	45.878	3.343	1551.5	5296.	52.95	-0.019
5500.	2.490	34.889	5.58	1.956	69.75	27.887	45.878	3.397	1553.3	5393.	53.64	-0.175

DISCOVERY 162 STATION 11363

PRES	TEMP	SALIN	DO	POTEMP	POTRAN	SIGP0	SIGP4	DYNHT	SNDV	DEPTH	SVANOM	BVFR
DB	DEGC	PSU	ML/L	DEGC	%/M	KG/M ³	KG/M ³	DYN.M	M/S	M	10 ⁻⁸ KG/M ³	CY/HR
10.	24.434	36.841	4.27	24.432	65.80	24.908	41.160	0.030	1535.2	10.	303.96	0.852
20.	24.364	36.854	4.28	24.360	65.65	24.939	41.194	0.061	1535.2	20.	301.48	3.542
30.	24.275	36.895	4.30	24.268	65.47	24.998	41.257	0.091	1535.2	30.	296.32	4.435
50.	21.998	36.690	4.76	21.988	64.77	25.507	41.891	0.147	1529.5	50.	248.73	11.566
75.	19.677	36.641	4.88	19.664	65.84	26.104	42.622	0.202	1523.7	74.	192.83	8.273
100.	18.440	36.579	4.57	18.423	66.46	26.377	42.971	0.246	1520.5	99.	167.81	3.979
125.	17.708	36.458	4.32	17.686	67.07	26.468	43.111	0.287	1518.7	124.	159.96	2.947
150.	17.327	36.414	4.23	17.302	67.70	26.528	43.197	0.326	1517.9	149.	155.12	2.865
200.	16.507	36.274	4.26	16.475	68.13	26.618	43.344	0.402	1516.1	199.	148.15	2.553
250.	15.781	36.181	4.22	15.741	68.23	26.717	43.494	0.474	1514.6	248.	140.28	2.885
300.	14.997	36.051	4.28	14.951	68.28	26.794	43.628	0.543	1512.8	298.	134.26	2.039
400.	13.808	35.865	4.60	13.749	68.46	26.910	43.833	0.673	1510.5	397.	125.79	2.030
500.	12.546	35.689	4.62	12.478	68.40	27.032	44.053	0.793	1507.8	496.	116.11	1.882
600.	11.575	35.578	4.40	11.497	68.49	27.134	44.234	0.905	1506.0	595.	108.11	1.919
700.	10.736	35.520	4.24	10.648	68.61	27.245	44.413	1.009	1504.6	694.	99.19	1.870
800.	9.970	35.487	4.13	9.874	68.64	27.355	44.586	1.104	1503.5	793.	90.08	1.725
900.	9.380	35.512	4.29	9.276	68.65	27.475	44.755	1.189	1503.1	892.	80.03	1.790
1000.	8.797	35.516	4.43	8.684	68.69	27.573	44.903	1.264	1502.6	991.	71.78	1.587
1200.	8.170	35.590	4.76	8.038	68.76	27.732	45.115	1.393	1503.7	1188.	59.53	1.356
1400.	6.311	35.343	5.28	6.175	68.89	27.801	45.359	1.503	1499.5	1386.	51.11	1.120
1600.	5.334	35.235	5.46	5.188	69.00	27.840	45.494	1.601	1498.8	1583.	46.89	1.026
1800.	4.664	35.155	5.71	4.507	69.10	27.855	45.577	1.692	1499.3	1780.	45.18	0.352
2000.	4.046	35.079	5.86	3.877	69.18	27.862	45.649	1.781	1500.0	1977.	43.77	0.794
2200.	3.659	35.035	5.88	3.477	69.25	27.867	45.696	1.868	1501.7	2173.	43.18	0.695
2400.	3.349	35.001	5.97	3.152	69.33	27.872	45.735	1.954	1503.8	2370.	42.69	0.637
2600.	3.114	34.977	5.99	2.902	69.39	27.876	45.765	2.039	1506.1	2566.	42.41	0.168
2800.	2.921	34.958	5.97	2.692	69.46	27.880	45.792	2.123	1508.7	2762.	42.21	0.451
3000.	2.785	34.944	5.95	2.539	69.53	27.882	45.810	2.208	1511.5	2958.	42.38	0.619
3200.	2.683	34.934	5.89	2.418	69.62	27.884	45.825	2.293	1514.4	3154.	42.71	0.443
3400.	2.603	34.924	5.87	2.319	69.67	27.885	45.837	2.379	1517.5	3350.	43.22	0.439
3600.	2.553	34.918	5.84	2.248	69.69	27.886	45.845	2.466	1520.7	3545.	43.90	-0.135
3800.	2.513	34.912	5.81	2.187	69.72	27.886	45.852	2.554	1524.0	3740.	44.69	0.001
4000.	2.484	34.907	5.79	2.136	69.78	27.886	45.858	2.645	1527.3	3935.	45.52	0.437
4200.	2.455	34.902	5.75	2.085	69.83	27.886	45.864	2.736	1530.6	4130.	46.34	0.557
4400.	2.435	34.898	5.73	2.042	69.85	27.887	45.869	2.830	1534.0	4325.	47.20	0.195
4500.	2.425	34.896	5.72	2.020	69.86	27.887	45.871	2.877	1535.6	4422.	47.63	0.032
4600.	2.419	34.894	5.72	2.002	69.86	27.887	45.873	2.925	1537.3	4519.	48.09	0.309
4700.	2.416	34.892	5.71	1.986	69.86	27.886	45.874	2.973	1539.1	4617.	48.59	-0.049
4800.	2.418	34.891	5.69	1.977	69.86	27.886	45.875	3.022	1540.8	4714.	49.15	-0.105
4900.	2.422	34.890	5.68	1.967	69.85	27.886	45.876	3.072	1542.6	4811.	49.72	0.322
5000.	2.428	34.889	5.67	1.961	69.83	27.886	45.877	3.122	1544.3	4908.	50.32	0.179
5100.	2.438	34.889	5.63	1.958	69.83	27.886	45.877	3.172	1546.1	5005.	50.96	-0.045
5200.	2.450	34.889	5.61	1.956	69.78	27.886	45.877	3.224	1547.9	5102.	51.64	-0.091

DISCOVERY 162 STATION 11364

PRES DB	TEMP DEGC	SALIN PSU	DO ML/L	POTEMP DEGC	POTRAN %/M	SIGP0 KG/M ³	SIGP4 KG/M ³	DYNHT DYN.M	SNDV M/S	DEPTH M	SVANOM 10 ⁻⁸ KG/M ³	BVFR CY/HR
10.	18.393	35.707	5.42	18.391	57.86	25.717	42.334	0.023	1517.9	10.	226.93	-999.000
20.	17.851	35.713	5.28	17.848	60.78	25.857	42.507	0.045	1516.5	20.	214.04	6.641
30.	16.647	35.749	5.39	16.642	57.66	26.174	42.901	0.065	1513.1	30.	184.12	10.036
50.	14.059	35.860	5.43	14.051	63.05	26.842	43.744	0.095	1505.5	50.	121.34	10.279
75.	13.722	35.859	5.12	13.711	66.52	26.913	43.839	0.124	1504.8	74.	115.40	2.994
100.	13.390	35.825	5.03	13.376	67.90	26.956	43.908	0.152	1504.1	99.	112.00	2.359
125.	13.177	35.798	5.04	13.159	68.27	26.980	43.948	0.180	1503.8	124.	110.46	1.750
150.	13.047	35.780	5.01	13.026	68.36	26.992	43.971	0.208	1503.7	149.	109.98	1.278
200.	12.745	35.734	5.05	12.718	68.38	27.019	44.021	0.263	1503.5	198.	108.85	1.319
250.	12.445	35.690	5.08	12.412	68.39	27.046	44.072	0.317	1503.3	248.	107.63	1.334
300.	12.177	35.654	5.11	12.137	68.38	27.071	44.120	0.370	1503.2	297.	106.47	1.313
400.	11.846	35.622	5.37	11.793	68.30	27.113	44.188	0.476	1503.6	396.	105.09	1.177
500.	11.401	35.541	5.18	11.337	68.43	27.136	44.249	0.581	1503.7	495.	105.16	0.935
600.	10.832	35.459	5.00	10.757	68.50	27.177	44.338	0.685	1503.2	594.	103.15	1.238
700.	10.212	35.408	4.68	10.127	68.59	27.249	44.462	0.786	1502.6	693.	98.03	1.593
800.	9.384	35.389	4.23	9.291	68.61	27.376	44.658	0.879	1501.3	792.	87.08	2.109
900.	7.957	35.234	4.31	7.862	68.56	27.479	44.888	0.961	1497.4	891.	76.78	2.038
1000.	7.837	35.342	4.46	7.731	68.70	27.583	45.000	1.034	1498.8	990.	68.75	1.828
1200.	7.080	35.402	4.88	6.958	68.90	27.742	45.226	1.158	1499.3	1187.	55.65	1.679
1400.	4.854	35.063	5.80	4.733	68.91	27.757	45.459	1.262	1493.3	1384.	50.32	1.183
1600.	4.151	34.980	6.24	4.020	68.97	27.769	45.544	1.361	1493.7	1581.	48.81	0.799
1800.	3.805	34.950	6.43	3.660	69.06	27.781	45.594	1.458	1495.5	1778.	48.12	0.678
2000.	3.689	34.958	6.42	3.526	69.13	27.801	45.627	1.554	1498.4	1975.	47.55	0.647
2200.	3.531	34.961	6.36	3.351	69.23	27.821	45.665	1.648	1501.1	2171.	46.67	0.680
2400.	3.444	34.986	6.16	3.246	69.32	27.851	45.704	1.740	1504.1	2368.	45.16	0.750
2600.	3.199	34.973	6.10	2.985	69.38	27.865	45.746	1.829	1506.5	2564.	43.96	0.705
2800.	2.999	34.960	6.02	2.769	69.43	27.874	45.778	1.916	1509.0	2760.	43.26	0.628
3000.	2.838	34.948	5.92	2.590	69.47	27.880	45.803	2.002	1511.7	2955.	42.95	0.562
3200.	2.728	34.938	5.84	2.462	69.50	27.884	45.820	2.088	1514.6	3151.	43.13	0.470
3400.	2.647	34.930	5.73	2.361	69.56	27.886	45.833	2.175	1517.7	3346.	43.54	0.418
3600.	2.598	34.923	5.64	2.292	69.50	27.886	45.840	2.262	1520.9	3542.	44.32	0.330
3800.	2.578	34.918	5.58	2.250	69.47	27.886	45.845	2.352	1524.2	3737.	45.32	0.257
4000.	2.559	34.914	5.54	2.209	69.57	27.886	45.850	2.444	1527.6	3932.	46.27	0.275
4200.	2.519	34.908	5.49	2.147	69.70	27.886	45.857	2.537	1530.9	4126.	47.00	0.334
4400.	2.510	34.904	5.46	2.114	69.74	27.886	45.860	2.632	1534.3	4321.	48.04	0.236
4500.	2.511	34.903	5.45	2.104	69.74	27.886	45.861	2.680	1536.0	4418.	48.60	0.207
4600.	2.513	34.902	5.43	2.093	69.74	27.886	45.862	2.729	1537.7	4515.	49.21	0.167
4700.	2.520	34.901	5.41	2.087	69.74	27.886	45.863	2.779	1539.5	4612.	49.83	0.151
4800.	2.529	34.901	5.41	2.083	69.71	27.886	45.863	2.829	1541.3	4709.	50.48	0.131
4900.	2.538	34.901	5.39	2.080	69.76	27.886	45.863	2.879	1543.1	4807.	51.13	0.115

DISCOVERY 162 STATION 11366

PRES	TEMP	SALIN	DO	POTEMP	POTRAN	SIGP0	SIGP4	DYNHT	SNDV	DEPTH	SVANOM	BVFR
DB	DEGC	PSU	ML/L	DEGC	%/M	KG/M ³	KG/M ³	DYN.M	M/S	M	10 ⁻⁸ KG/M ³	CY/HR
10.	19.332	36.026	5.11	19.331	62.74	25.722	42.274	0.023	1520.9	10.	226.51	-999.000
20.	19.329	36.025	5.11	19.325	62.71	25.722	42.275	0.045	1521.1	20.	226.85	0.455
30.	19.249	36.020	5.19	19.243	62.82	25.740	42.297	0.068	1521.0	30.	225.60	2.338
50.	18.538	36.011	5.18	18.529	63.37	25.914	42.515	0.112	1519.3	50.	209.70	5.267
75.	14.110	35.885	5.08	14.099	64.67	26.851	43.749	0.151	1506.1	74.	121.28	10.906
100.	13.392	35.822	4.90	13.378	67.85	26.954	43.905	0.180	1504.1	99.	112.22	3.623
125.	13.126	35.791	4.83	13.109	68.29	26.985	43.957	0.208	1503.6	124.	109.97	2.002
150.	12.673	35.715	4.92	12.653	68.28	27.017	44.025	0.235	1502.4	149.	107.51	2.066
200.	12.362	35.679	4.88	12.335	68.43	27.052	44.085	0.288	1502.2	198.	105.54	1.510
250.	12.110	35.646	4.94	12.077	68.39	27.077	44.130	0.340	1502.1	248.	104.50	1.279
300.	11.949	35.629	5.11	11.910	68.36	27.096	44.162	0.393	1502.3	297.	104.03	1.116
400.	11.675	35.597	5.20	11.623	68.42	27.125	44.215	0.496	1503.0	396.	103.75	1.002
500.	11.066	35.506	4.81	11.003	68.58	27.169	44.310	0.599	1502.5	495.	101.65	1.259
600.	10.605	35.466	4.50	10.531	68.67	27.223	44.402	0.699	1502.4	594.	98.54	1.373
700.	10.040	35.424	4.41	9.957	68.66	27.291	44.517	0.796	1502.0	693.	93.84	1.544
800.	9.578	35.482	4.12	9.484	68.78	27.416	44.680	0.886	1502.1	792.	83.62	2.050
900.	9.317	35.598	4.15	9.212	68.77	27.552	44.835	0.963	1502.9	891.	72.68	2.106
1000.	8.631	35.558	4.27	8.520	68.80	27.632	44.975	1.033	1502.0	990.	65.90	1.732
1200.	7.998	35.604	4.64	7.868	68.98	27.768	45.166	1.154	1503.0	1187.	55.71	1.548
1400.	5.297	35.140	5.53	5.172	68.93	27.766	45.425	1.261	1495.2	1384.	50.91	1.167
1600.	4.265	34.996	6.14	4.132	68.96	27.769	45.533	1.361	1494.2	1581.	49.19	0.835
1800.	3.815	34.944	6.48	3.669	69.01	27.776	45.588	1.459	1495.6	1778.	48.67	0.659
2000.	3.729	34.960	6.46	3.566	69.12	27.799	45.621	1.555	1498.6	1975.	47.99	0.664
2200.	3.521	34.953	6.44	3.341	69.21	27.816	45.661	1.650	1501.1	2171.	47.12	0.681
2400.	3.395	34.967	6.35	3.197	69.29	27.840	45.700	1.743	1503.9	2368.	45.81	0.724
2600.	3.245	34.978	6.16	3.030	69.34	27.865	45.741	1.833	1506.7	2564.	44.28	0.743
2800.	3.059	34.965	6.05	2.827	69.38	27.873	45.771	1.921	1509.3	2760.	43.77	0.607
3000.	2.894	34.951	5.99	2.645	69.47	27.878	45.795	2.008	1511.9	2955.	43.54	0.553
3200.	2.784	34.943	5.90	2.517	69.51	27.883	45.813	2.095	1514.9	3151.	43.64	0.490
3400.	2.692	34.933	5.80	2.405	69.54	27.885	45.827	2.183	1517.9	3346.	43.98	0.437
3600.	2.633	34.926	5.72	2.326	69.64	27.886	45.837	2.272	1521.0	3542.	44.63	0.364
3800.	2.588	34.919	5.66	2.260	69.67	27.886	45.844	2.362	1524.3	3737.	45.43	0.322
4000.	2.548	34.914	5.63	2.199	69.73	27.886	45.851	2.453	1527.5	3932.	46.14	0.341
4200.	2.527	34.909	5.58	2.155	69.79	27.886	45.856	2.546	1530.9	4126.	47.07	0.276
4400.	2.516	34.905	5.55	2.120	69.77	27.886	45.859	2.641	1534.3	4321.	48.10	0.243
4500.	2.513	34.904	5.52	2.105	69.82	27.886	45.861	2.690	1536.0	4418.	48.60	0.256
4600.	2.511	34.902	5.52	2.091	69.82	27.886	45.863	2.739	1537.7	4515.	49.16	0.213
4700.	2.518	34.901	5.49	2.085	69.81	27.886	45.863	2.788	1539.5	4612.	49.80	0.124
4800.	2.524	34.900	5.49	2.079	69.82	27.885	45.863	2.838	1541.3	4710.	50.44	0.132
4900.	2.530	34.900	5.46	2.073	69.76	27.886	45.864	2.889	1543.0	4807.	51.04	0.181
5000.	2.540	34.899	5.45	2.069	69.77	27.886	45.865	2.940	1544.8	4904.	51.70	0.111
5100.	2.550	34.899	5.41	2.066	69.73	27.886	45.865	2.992	1546.6	5001.	52.37	0.109
5200.	2.563	34.899	5.39	2.065	69.70	27.885	45.865	3.045	1548.4	5097.	53.07	0.005
5300.	2.576	34.899	5.39	2.065	69.67	27.885	45.865	3.098	1550.2	5194.	53.78	-0.047
5400.	2.588	34.898	5.36	2.064	69.71	27.885	45.865	3.153	1552.0	5291.	54.49	-0.021
5500.	2.601	34.898	5.37	2.063	69.72	27.885	45.865	3.207	1553.8	5388.	55.18	0.084
5600.	2.615	34.899	5.33	2.063	69.72	27.886	45.865	3.263	1555.6	5485.	55.87	0.105

DISCOVERY 162 STATION 11367

PRES DB	TEMP DEGC	SALIN PSU	DO ML/L	POTEMP DEGC	POTRAN %/M	SIGP0 KG/M ³	SIGP4 KG/M ³	DYNHT DYN.M	SNDV M/S	DEPTH M	SVANOM 10 ⁻⁸ KG/M ³	BVFR CY/HR
10.	18.366	35.862	5.41	18.364	59.69	25.843	42.458	0.021	1518.0	10.	214.99	-999.000
20.	18.155	35.850	5.49	18.151	60.19	25.886	42.515	0.043	1517.5	20.	211.22	3.714
30.	17.405	35.829	5.57	17.400	61.39	26.055	42.731	0.063	1515.5	30.	195.56	7.302
50.	13.840	35.827	5.55	13.833	62.28	26.863	43.781	0.095	1504.7	50.	119.37	11.313
75.	13.237	35.818	5.19	13.227	67.85	26.981	43.944	0.123	1503.2	74.	108.83	3.883
100.	12.955	35.771	5.07	12.941	68.12	27.003	43.988	0.150	1502.6	99.	107.43	1.691
125.	12.769	35.745	5.08	12.752	68.25	27.021	44.020	0.176	1502.4	124.	106.47	1.506
150.	12.587	35.717	5.08	12.566	68.33	27.036	44.051	0.203	1502.1	149.	105.68	1.424
200.	12.235	35.668	5.08	12.208	68.42	27.068	44.111	0.255	1501.7	198.	103.96	1.451
250.	12.041	35.647	5.18	12.008	68.52	27.091	44.149	0.307	1501.9	248.	103.16	1.212
300.	11.819	35.615	5.18	11.780	68.55	27.109	44.186	0.359	1501.9	297.	102.66	1.121
400.	11.605	35.596	5.34	11.553	68.54	27.138	44.232	0.461	1502.8	396.	102.54	0.973
500.	11.371	35.561	5.30	11.307	68.63	27.157	44.271	0.564	1503.6	495.	103.17	0.823
600.	10.964	35.509	4.94	10.889	68.71	27.192	44.341	0.667	1503.8	594.	101.91	1.135
700.	10.564	35.503	4.54	10.477	68.74	27.262	44.444	0.767	1504.0	693.	97.35	1.538
800.	10.325	35.578	4.18	10.227	68.80	27.365	44.565	0.860	1504.9	792.	89.75	1.835
900.	10.477	35.768	4.04	10.365	68.76	27.489	44.672	0.946	1507.3	891.	80.88	1.949
1000.	9.829	35.744	4.06	9.708	68.88	27.584	44.821	1.023	1506.6	990.	73.08	1.851
1200.	9.088	35.761	4.28	8.948	68.94	27.723	45.024	1.159	1507.3	1187.	62.82	1.577
1400.	7.270	35.492	4.83	7.124	69.00	27.790	45.257	1.276	1503.4	1384.	55.26	1.394
1600.	5.249	35.173	5.90	5.104	69.06	27.801	45.465	1.380	1498.4	1581.	50.15	1.178
1800.	4.378	35.054	6.29	4.225	69.10	27.806	45.559	1.478	1498.0	1778.	48.43	0.837
2000.	3.970	35.016	6.39	3.803	69.16	27.819	45.616	1.574	1499.7	1975.	47.31	0.742
2200.	3.772	35.009	6.36	3.588	69.23	27.836	45.654	1.668	1502.2	2171.	46.68	0.665
2400.	3.437	34.983	6.30	3.239	69.29	27.849	45.704	1.760	1504.1	2368.	45.27	0.744
2600.	3.222	34.975	6.23	3.008	69.37	27.864	45.742	1.849	1506.6	2564.	44.19	0.691
2800.	3.041	34.965	6.11	2.810	69.44	27.874	45.773	1.937	1509.2	2760.	43.56	0.621
3000.	2.881	34.951	6.04	2.633	69.50	27.880	45.797	2.024	1511.9	2956.	43.34	0.551
3200.	2.763	34.941	5.94	2.496	69.57	27.884	45.816	2.110	1514.8	3151.	43.40	0.495
3400.	2.678	34.932	5.87	2.391	69.60	27.885	45.829	2.197	1517.8	3347.	43.87	0.410
3600.	2.619	34.925	5.79	2.313	69.67	27.886	45.839	2.286	1521.0	3542.	44.46	0.378
3800.	2.583	34.919	5.75	2.255	69.68	27.886	45.844	2.376	1524.3	3737.	45.36	0.291
4000.	2.545	34.913	5.68	2.195	69.75	27.886	45.851	2.467	1527.5	3932.	46.11	0.329
4200.	2.523	34.908	5.64	2.150	69.79	27.886	45.856	2.560	1530.9	4126.	47.03	0.281
4400.	2.509	34.905	5.61	2.113	69.79	27.886	45.860	2.655	1534.3	4321.	48.02	0.257
4500.	2.506	34.903	5.59	2.098	69.81	27.886	45.862	2.703	1536.0	4418.	48.54	0.239
4600.	2.507	34.902	5.57	2.088	69.82	27.886	45.863	2.752	1537.7	4515.	49.12	0.197
4700.	2.509	34.901	5.55	2.077	69.81	27.886	45.864	2.802	1539.5	4612.	49.66	0.221
4800.	2.515	34.900	5.54	2.070	69.81	27.886	45.865	2.852	1541.2	4710.	50.31	0.130
4900.	2.523	34.899	5.52	2.065	69.81	27.886	45.865	2.902	1543.0	4807.	50.93	0.150
5000.	2.530	34.898	5.52	2.060	69.80	27.886	45.866	2.953	1544.8	4904.	51.59	0.102
5100.	2.540	34.898	5.49	2.056	69.76	27.886	45.866	3.005	1546.5	5001.	52.25	0.126
5200.	2.551	34.898	5.47	2.054	69.70	27.886	45.866	3.058	1548.3	5097.	52.91	0.106
5300.	2.563	34.897	5.47	2.053	69.64	27.885	45.866	3.111	1550.1	5194.	53.63	-0.056
5400.	2.577	34.898	5.42	2.053	69.64	27.885	45.866	3.165	1551.9	5291.	54.32	0.079

DISCOVERY 162 STATION 11368

PRES DB	TEMP DEGC	SALIN PSU	DO ML/L	POTEMP DEGC	POTRAN %/M	SIGP0 KG/M ³	SIGP4 KG/M ³	DYNHT DYN.M	SNDV M/S	DEPTH M	SVANOM 10 ⁻⁸ KG/M ³	BVFR CY/HR
10.	19.297	35.858	5.09	19.295	61.24	25.602	42.160	0.024	1520.6	10.	237.87	-999.000
20.	19.248	35.853	5.14	19.244	61.11	25.612	42.173	0.048	1520.7	20.	237.37	1.727
30.	18.267	35.856	5.27	18.262	60.96	25.861	42.483	0.071	1518.0	30.	213.75	8.934
50.	14.292	35.806	5.53	14.284	61.20	26.750	43.637	0.103	1506.2	50.	130.07	11.850
75.	13.293	35.823	5.08	13.283	67.46	26.974	43.932	0.132	1503.4	74.	109.51	5.334
100.	12.935	35.769	4.96	12.921	68.22	27.006	43.992	0.159	1502.5	99.	107.21	2.019
125.	12.724	35.739	4.96	12.707	68.33	27.025	44.028	0.186	1502.2	124.	106.08	1.579
150.	12.586	35.717	4.97	12.566	68.43	27.036	44.051	0.212	1502.1	149.	105.68	1.226
200.	12.270	35.673	4.97	12.244	68.56	27.065	44.105	0.265	1501.8	198.	104.29	1.373
250.	12.023	35.641	5.08	11.990	68.52	27.090	44.149	0.316	1501.8	248.	103.25	1.276
300.	11.809	35.618	5.15	11.770	68.57	27.114	44.191	0.368	1501.9	297.	102.23	1.266
400.	11.401	35.565	4.81	11.350	68.60	27.152	44.263	0.470	1502.0	396.	101.02	1.142
500.	10.924	35.529	4.60	10.861	68.71	27.213	44.364	0.569	1502.0	495.	97.40	1.443
600.	10.781	35.613	4.24	10.706	68.77	27.306	44.467	0.663	1503.2	594.	90.98	1.731
700.	10.590	35.686	4.07	10.503	68.89	27.400	44.575	0.751	1504.3	693.	84.46	1.740
800.	10.610	35.797	4.00	10.510	68.91	27.485	44.657	0.833	1506.2	792.	78.97	1.636
900.	10.076	35.789	4.02	9.966	68.91	27.575	44.790	0.908	1505.9	891.	72.06	1.774
1000.	9.978	35.867	4.06	9.856	68.95	27.654	44.877	0.978	1507.3	990.	66.81	1.601
1200.	8.991	35.817	4.34	8.852	69.04	27.783	45.090	1.100	1507.0	1187.	57.01	1.554
1400.	6.698	35.437	4.98	6.558	69.10	27.825	45.344	1.207	1501.2	1384.	50.18	1.341
1600.	5.135	35.189	5.59	4.991	69.10	27.826	45.500	1.303	1498.0	1581.	47.36	0.988
1800.	4.388	35.080	5.95	4.235	69.12	27.825	45.577	1.397	1498.1	1778.	46.69	0.721
2000.	3.980	35.046	6.03	3.813	69.18	27.842	45.637	1.490	1499.7	1975.	45.28	0.775
2200.	3.646	35.017	6.05	3.464	69.26	27.854	45.685	1.579	1501.7	2171.	44.30	0.706
2400.	3.354	34.993	6.04	3.157	69.30	27.865	45.727	1.667	1503.8	2368.	43.36	0.683
2600.	3.149	34.976	6.00	2.936	69.36	27.872	45.757	1.753	1506.3	2564.	43.04	0.585
2800.	2.983	34.961	5.96	2.754	69.41	27.877	45.782	1.839	1508.9	2760.	42.93	0.540
3000.	2.843	34.949	5.90	2.595	69.47	27.881	45.803	1.925	1511.7	2956.	42.94	0.511
3200.	2.749	34.939	5.81	2.483	69.51	27.883	45.817	2.011	1514.7	3151.	43.34	0.429
3400.	2.673	34.931	5.76	2.387	69.56	27.885	45.829	2.098	1517.8	3347.	43.86	0.398
3600.	2.623	34.925	5.69	2.317	69.63	27.886	45.838	2.187	1521.0	3542.	44.55	0.351
3800.	2.583	34.918	5.65	2.255	69.69	27.886	45.844	2.277	1524.3	3737.	45.38	0.315
4000.	2.549	34.914	5.58	2.199	69.72	27.886	45.851	2.368	1527.5	3932.	46.15	0.325
4200.	2.520	34.908	5.54	2.148	69.76	27.886	45.857	2.461	1530.9	4126.	46.99	0.304
4400.	2.505	34.904	5.54	2.110	69.79	27.886	45.861	2.556	1534.3	4321.	47.99	0.253
4500.	2.502	34.903	5.52	2.094	69.79	27.886	45.863	2.605	1536.0	4418.	48.48	0.259
4600.	2.503	34.902	5.48	2.083	69.80	27.886	45.864	2.653	1537.7	4515.	49.04	0.211
4700.	2.506	34.900	5.45	2.074	69.80	27.886	45.864	2.703	1539.5	4613.	49.66	0.150
4800.	2.511	34.899	5.43	2.066	69.78	27.886	45.865	2.753	1541.2	4710.	50.26	0.172
4900.	2.519	34.899	5.41	2.062	69.78	27.886	45.866	2.803	1543.0	4807.	50.87	0.170
5000.	2.527	34.899	5.40	2.057	69.76	27.886	45.866	2.854	1544.7	4904.	51.53	0.109
5100.	2.536	34.898	5.41	2.052	69.74	27.886	45.867	2.906	1546.5	5001.	52.18	0.125
5200.	2.547	34.897	5.37	2.050	69.67	27.885	45.866	2.959	1548.3	5098.	52.89	-0.051
5300.	2.558	34.897	5.37	2.048	69.69	27.886	45.867	3.012	1550.1	5194.	53.54	0.135
5400.	2.570	34.897	5.36	2.046	69.60	27.885	45.867	3.066	1551.9	5291.	54.25	-0.035

DISCOVERY 162 STATION 11370

PRES	TEMP	SALIN	DO	POTEMP	POTRAN	SIGP0	SIGP4	DYNHT	SNDV	DEPTH	SVANOM	BVFR
DB	DEGC	PSU	ML/L	DEGC	%/M	KG/M ³	KG/M ³	DYN.M	M/S	M	10 ⁻⁸ KG/M ³	CY/HR
10.	18.195	35.824	5.55	18.194	61.67	25.856	42.482	0.021	1517.4	10.	213.74	-999.000
20.	18.195	35.824	5.59	18.191	61.76	25.857	42.483	0.043	1517.6	20.	214.02	0.564
30.	18.051	35.832	5.58	18.046	61.50	25.899	42.535	0.064	1517.4	30.	210.38	3.658
50.	15.490	35.832	5.61	15.482	62.71	26.504	43.308	0.103	1510.0	50.	153.28	9.808
75.	13.510	35.792	5.26	13.499	66.27	26.905	43.848	0.135	1504.0	74.	116.09	7.117
100.	13.128	35.793	5.10	13.114	68.08	26.985	43.957	0.163	1503.2	99.	109.17	3.200
125.	12.921	35.763	5.04	12.904	68.31	27.005	43.992	0.190	1502.9	124.	108.05	1.576
150.	12.737	35.737	5.03	12.716	68.41	27.021	44.024	0.217	1502.7	149.	107.14	1.482
200.	12.450	35.694	5.06	12.423	68.49	27.047	44.072	0.270	1502.5	198.	106.11	1.286
250.	12.200	35.659	5.06	12.167	68.52	27.070	44.115	0.323	1502.4	248.	105.25	1.235
300.	11.988	35.635	5.15	11.949	68.60	27.093	44.156	0.375	1502.5	297.	104.28	1.257
400.	11.582	35.589	5.28	11.530	68.61	27.137	44.234	0.478	1502.7	396.	102.56	1.218
500.	11.154	35.529	5.06	11.090	68.68	27.172	44.304	0.581	1502.8	495.	101.53	1.107
600.	10.815	35.514	4.69	10.740	68.77	27.224	44.384	0.681	1503.2	594.	98.78	1.332
700.	10.614	35.575	4.30	10.527	68.81	27.310	44.486	0.777	1504.3	693.	92.94	1.672
800.	10.923	35.767	4.10	10.821	68.87	27.406	44.553	0.867	1507.2	792.	86.92	1.692
900.	10.121	35.705	4.07	10.011	68.92	27.502	44.716	0.950	1506.0	891.	78.98	1.870
1000.	9.644	35.713	4.13	9.525	68.94	27.590	44.844	1.025	1505.9	990.	72.06	1.764
1200.	8.968	35.758	4.40	8.829	69.00	27.740	45.051	1.157	1506.8	1187.	60.90	1.622
1400.	7.135	35.482	4.95	6.991	69.01	27.801	45.280	1.270	1502.9	1384.	53.83	1.361
1600.	5.123	35.156	5.69	4.980	69.06	27.801	45.477	1.373	1497.9	1581.	49.62	1.106
1800.	4.465	35.071	6.09	4.311	69.07	27.810	45.554	1.471	1498.4	1778.	48.45	0.779
2000.	4.022	35.025	6.25	3.854	69.12	27.822	45.613	1.567	1499.9	1975.	47.36	0.742
2200.	3.591	34.986	6.34	3.410	69.21	27.835	45.672	1.660	1501.4	2171.	45.72	0.779
2400.	3.388	34.987	6.26	3.191	69.25	27.857	45.716	1.750	1503.9	2368.	44.31	0.739
2600.	3.149	34.972	6.19	2.936	69.34	27.869	45.755	1.837	1506.3	2564.	43.31	0.678
2800.	2.983	34.959	6.06	2.754	69.38	27.875	45.780	1.924	1508.9	2760.	43.07	0.560
3000.	2.844	34.949	5.99	2.596	69.44	27.881	45.802	2.009	1511.7	2955.	42.97	0.528
3200.	2.742	34.939	5.91	2.476	69.50	27.883	45.818	2.096	1514.7	3151.	43.26	0.450
3400.	2.659	34.930	5.85	2.374	69.54	27.885	45.831	2.183	1517.7	3346.	43.70	0.413
3600.	2.602	34.923	5.77	2.296	69.57	27.886	45.840	2.271	1520.9	3541.	44.37	0.358
3800.	2.563	34.917	5.71	2.235	69.60	27.886	45.847	2.360	1524.2	3736.	45.16	0.321
4000.	2.533	34.911	5.69	2.184	69.65	27.886	45.852	2.451	1527.5	3931.	46.06	0.285
4200.	2.514	34.908	5.65	2.142	69.70	27.886	45.857	2.544	1530.8	4126.	46.94	0.293
4400.	2.507	34.905	5.60	2.111	69.73	27.886	45.861	2.639	1534.3	4321.	47.99	0.235
4500.	2.506	34.903	5.59	2.099	69.74	27.886	45.862	2.687	1536.0	4418.	48.52	0.229
4600.	2.508	34.902	5.56	2.088	69.75	27.886	45.863	2.736	1537.7	4515.	49.11	0.182
4700.	2.513	34.901	5.55	2.080	69.75	27.886	45.864	2.786	1539.5	4612.	49.71	0.172
4800.	2.519	34.900	5.53	2.074	69.76	27.886	45.864	2.836	1541.2	4709.	50.35	0.139
4900.	2.527	34.900	5.52	2.069	69.76	27.886	45.865	2.886	1543.0	4806.	50.98	0.151
5000.	2.535	34.899	5.51	2.065	69.76	27.886	45.865	2.937	1544.8	4903.	51.62	0.128
5100.	2.544	34.898	5.47	2.060	69.67	27.886	45.865	2.989	1546.6	5000.	52.30	0.087
5200.	2.556	34.898	5.46	2.059	69.56	27.885	45.866	3.042	1548.3	5097.	52.99	0.059
5300.	2.570	34.898	5.43	2.059	69.53	27.885	45.865	3.095	1550.1	5194.	53.71	-0.083
5400.	2.583	34.898	5.40	2.059	69.48	27.885	45.866	3.149	1551.9	5291.	54.40	0.082

DISCOVERY 162 STATION 11371

PRES	TEMP	SALIN	DO	POTEMP	POTRAN	SIGP0	SIGP4	DYNHT	SNDV	DEPTH	SVANOM	BVFR
DB	DEGC	PSU	ML/L	DEGC	%/M	KG/M ³	KG/M ³	DYN.M	M/S	M	10 ⁻⁸ KG/M ³	CY/HR
10.	18.430	35.799	5.34	18.428	59.63	25.779	42.391	0.022	1518.1	10.	221.09	-999.000
20.	18.438	35.799	5.45	18.435	59.56	25.777	42.389	0.044	1518.3	20.	221.64	-0.745
30.	18.410	35.850	5.47	18.404	60.86	25.823	42.436	0.066	1518.4	30.	217.61	3.829
50.	15.638	35.758	5.40	15.630	63.00	26.413	43.208	0.105	1510.3	50.	161.86	9.694
75.	13.214	35.690	5.14	13.203	66.43	26.887	43.854	0.139	1502.9	74.	117.77	7.734
100.	12.548	35.677	5.11	12.534	67.94	27.012	44.029	0.166	1501.1	99.	106.56	3.992
125.	12.268	35.664	5.09	12.252	68.38	27.057	44.096	0.192	1500.6	124.	102.92	2.412
150.	12.103	35.646	5.08	12.084	68.41	27.075	44.128	0.218	1500.4	149.	101.85	1.538
200.	11.906	35.624	5.10	11.880	68.43	27.097	44.166	0.269	1500.5	198.	101.09	1.199
250.	11.762	35.607	5.14	11.729	68.54	27.113	44.194	0.319	1500.9	248.	100.89	1.023
300.	11.601	35.583	5.15	11.562	68.57	27.126	44.220	0.370	1501.1	297.	100.94	0.935
400.	10.990	35.488	4.91	10.940	68.64	27.167	44.313	0.470	1500.5	396.	99.22	1.205
500.	10.773	35.484	5.20	10.711	68.64	27.206	44.370	0.568	1501.4	495.	97.91	1.135
600.	10.186	35.424	4.60	10.114	68.70	27.264	44.478	0.665	1500.9	594.	94.18	1.439
700.	9.689	35.447	4.27	9.606	68.79	27.369	44.623	0.755	1500.8	693.	86.00	1.878
800.	9.213	35.462	4.24	9.121	68.73	27.461	44.755	0.838	1500.7	792.	78.84	1.776
900.	9.001	35.556	4.30	8.898	68.79	27.571	44.881	0.912	1501.7	891.	70.33	1.895
1000.	9.009	35.667	4.37	8.894	68.92	27.658	44.966	0.979	1503.6	990.	64.37	1.653
1200.	8.166	35.647	4.69	8.035	68.99	27.777	45.159	1.099	1503.7	1187.	55.34	1.490
1400.	6.144	35.320	5.35	6.010	69.04	27.804	45.378	1.205	1498.8	1384.	50.24	1.206
1600.	4.766	35.101	5.99	4.627	69.02	27.799	45.511	1.303	1496.4	1581.	48.47	0.873
1800.	4.182	35.029	6.31	4.032	69.04	27.806	45.579	1.399	1497.2	1778.	47.57	0.732
2000.	3.754	34.982	6.48	3.590	69.09	27.814	45.633	1.494	1498.7	1975.	46.71	0.699
2200.	3.502	34.976	6.44	3.323	69.17	27.835	45.681	1.586	1501.0	2171.	45.23	0.752
2400.	3.269	34.964	6.45	3.074	69.24	27.850	45.722	1.675	1503.4	2367.	44.22	0.686
2600.	3.095	34.962	6.35	2.884	69.29	27.866	45.757	1.762	1506.0	2564.	43.21	0.673
2800.	2.929	34.955	6.18	2.701	69.35	27.877	45.788	1.848	1508.7	2759.	42.55	0.619
3000.	2.823	34.947	6.05	2.576	69.40	27.881	45.805	1.933	1511.6	2955.	42.78	0.469
3200.	2.722	34.937	5.97	2.457	69.46	27.883	45.820	2.019	1514.6	3151.	43.09	0.445
3400.	2.652	34.930	5.90	2.367	69.49	27.885	45.832	2.106	1517.7	3346.	43.63	0.392
3600.	2.608	34.923	5.82	2.302	69.53	27.886	45.839	2.194	1520.9	3541.	44.42	0.326
3800.	2.566	34.917	5.77	2.238	69.59	27.886	45.846	2.283	1524.2	3736.	45.20	0.323
4000.	2.540	34.913	5.72	2.190	69.63	27.886	45.852	2.375	1527.5	3931.	46.06	0.298
4200.	2.517	34.908	5.67	2.145	69.66	27.887	45.857	2.468	1530.9	4126.	46.96	0.288
4400.	2.509	34.905	5.65	2.114	69.64	27.886	45.860	2.563	1534.3	4321.	48.03	0.226
4500.	2.509	34.903	5.62	2.101	69.63	27.886	45.861	2.611	1536.0	4418.	48.58	0.215
4600.	2.510	34.902	5.61	2.090	69.68	27.886	45.863	2.660	1537.7	4515.	49.15	0.204
4700.	2.516	34.901	5.59	2.083	69.66	27.886	45.863	2.709	1539.5	4612.	49.76	0.158
4800.	2.522	34.900	5.57	2.077	69.65	27.886	45.864	2.759	1541.3	4709.	50.39	0.141
4900.	2.532	34.900	5.56	2.074	69.69	27.886	45.864	2.810	1543.0	4806.	51.03	0.137
5000.	2.541	34.900	5.55	2.070	69.65	27.886	45.865	2.861	1544.8	4903.	51.70	0.100
5100.	2.552	34.899	5.53	2.068	69.66	27.886	45.865	2.913	1546.6	5000.	52.38	0.078
5200.	2.564	34.899	5.47	2.067	69.62	27.885	45.865	2.966	1548.4	5097.	53.08	0.021

DISCOVERY 162 STATION 11372

PRES	TEMP	SALIN	DO	POTEMP	POTRAN	SIGP0	SIGP4	DYNHT	SNDV	DEPTH	SVANOM	BVFR
DB	DEGC	PSU	ML/L	DEGC	%/M	KG/M ³	KG/M ³	DYN.M	M/S	M	10 ⁻⁸ KG/M ³	CY/HR
10.	17.604	35.736	5.60	17.602	61.41	25.935	42.600	0.021	1515.6	10.	206.24	-999.000
20.	17.529	35.737	5.70	17.525	62.29	25.954	42.625	0.041	1515.6	20.	204.79	2.464
30.	17.372	35.742	5.70	17.367	63.52	25.996	42.677	0.062	1515.3	30.	201.12	3.662
50.	15.446	35.715	5.70	15.438	63.29	26.426	43.234	0.099	1509.7	50.	160.90	8.253
75.	12.836	35.710	5.34	12.826	67.42	26.979	43.974	0.130	1501.7	74.	108.99	8.381
100.	12.382	35.681	5.20	12.368	68.32	27.047	44.077	0.157	1500.6	99.	103.19	2.951
125.	12.077	35.647	5.11	12.060	68.51	27.081	44.135	0.182	1499.9	124.	100.65	2.080
150.	11.960	35.638	5.08	11.940	68.53	27.097	44.160	0.207	1499.9	149.	99.80	1.437
200.	11.751	35.611	5.06	11.725	68.53	27.117	44.198	0.257	1500.0	198.	99.15	1.163
250.	11.581	35.589	5.06	11.549	68.66	27.133	44.228	0.306	1500.2	248.	98.89	1.039
300.	11.340	35.557	5.11	11.302	68.66	27.154	44.270	0.356	1500.2	297.	98.11	1.189
400.	10.976	35.508	5.09	10.926	68.70	27.185	44.331	0.454	1500.5	396.	97.53	1.032
500.	10.633	35.474	5.19	10.571	68.76	27.223	44.398	0.550	1500.9	495.	96.20	1.136
600.	10.131	35.442	4.68	10.059	68.79	27.288	44.505	0.644	1500.7	594.	91.88	1.503
700.	10.071	35.556	4.23	9.987	68.86	27.389	44.609	0.733	1502.3	693.	84.70	1.790
800.	10.242	35.721	4.11	10.145	68.95	27.490	44.693	0.814	1504.8	792.	77.88	1.759
900.	9.882	35.753	4.17	9.774	68.88	27.580	44.812	0.889	1505.2	891.	71.24	1.741
1000.	9.403	35.755	4.25	9.285	68.98	27.663	44.936	0.957	1505.1	990.	64.76	1.719
1200.	8.351	35.652	4.59	8.218	69.04	27.753	45.119	1.079	1504.4	1187.	58.10	1.357
1400.	5.607	35.192	5.44	5.479	69.00	27.770	45.398	1.188	1496.5	1384.	51.61	1.293
1600.	4.355	35.005	6.17	4.221	68.93	27.767	45.521	1.288	1494.5	1581.	49.81	0.852
1800.	3.944	34.964	6.47	3.797	68.97	27.779	45.577	1.387	1496.1	1778.	49.00	0.702
2000.	3.762	34.962	6.54	3.598	69.06	27.797	45.616	1.485	1498.7	1975.	48.29	0.673
2200.	3.553	34.966	6.50	3.373	69.16	27.823	45.664	1.580	1501.2	2171.	46.63	0.773
2400.	3.381	34.972	6.41	3.184	69.22	27.846	45.706	1.671	1503.9	2367.	45.27	0.731
2600.	3.179	34.968	6.30	2.965	69.26	27.863	45.746	1.760	1506.4	2563.	43.99	0.713
2800.	2.999	34.959	6.19	2.769	69.35	27.874	45.777	1.848	1509.0	2759.	43.34	0.622
3000.	2.867	34.949	6.09	2.619	69.39	27.879	45.798	1.934	1511.8	2955.	43.30	0.519
3200.	2.762	34.941	6.00	2.495	69.44	27.883	45.816	2.021	1514.8	3150.	43.44	0.482
3400.	2.692	34.933	5.91	2.405	69.49	27.884	45.827	2.108	1517.9	3346.	44.01	0.386
3600.	2.633	34.925	5.83	2.326	69.52	27.885	45.836	2.197	1521.0	3541.	44.69	0.359
3800.	2.588	34.919	5.78	2.260	69.59	27.885	45.844	2.287	1524.3	3736.	45.44	0.335
4000.	2.554	34.914	5.72	2.204	69.63	27.886	45.850	2.379	1527.6	3931.	46.22	0.323
4200.	2.532	34.910	5.68	2.159	69.66	27.886	45.855	2.472	1530.9	4126.	47.12	0.288
4400.	2.521	34.906	5.64	2.125	69.68	27.886	45.859	2.567	1534.3	4320.	48.13	0.252
4500.	2.519	34.905	5.62	2.111	69.69	27.887	45.861	2.615	1536.0	4417.	48.64	0.246
4600.	2.521	34.903	5.61	2.101	69.70	27.886	45.862	2.664	1537.8	4514.	49.26	0.165
4700.	2.525	34.902	5.58	2.092	69.69	27.886	45.863	2.714	1539.5	4611.	49.84	0.188
4800.	2.531	34.902	5.57	2.085	69.69	27.886	45.863	2.764	1541.3	4709.	50.47	0.157
4900.	2.539	34.901	5.55	2.081	69.70	27.886	45.864	2.815	1543.1	4806.	51.11	0.137
5000.	2.547	34.901	5.55	2.076	69.67	27.886	45.864	2.866	1544.8	4903.	51.76	0.118
5100.	2.558	34.900	5.52	2.074	69.66	27.886	45.864	2.918	1546.6	4999.	52.43	0.107
5200.	2.570	34.900	5.50	2.072	69.62	27.886	45.864	2.971	1548.4	5096.	53.14	-0.052
5300.	2.582	34.900	5.47	2.071	69.58	27.886	45.865	3.025	1550.2	5193.	53.82	0.104
5400.	2.595	34.900	5.47	2.070	69.50	27.886	45.865	3.079	1552.0	5290.	54.53	0.036
5500.	2.609	34.900	5.44	2.071	69.50	27.886	45.865	3.134	1553.8	5387.	55.22	0.087

DISCOVERY 162 STATION 11373

PRES	TEMP	SALIN	DO	POTEMP	POTRAN	SIGP0	SIGP4	DYNHT	SNDV	DEPTH	SVANOM	BVFR
DB	DEGC	PSU	ML/L	DEGC	%/M	KG/M ³	KG/M ³	DYN.M	M/S	M	10 ⁻⁸ KG/M ³	CY/HR
10.	18.290	35.855	5.30	18.288	62.60	25.857	42.476	0.021	1517.8	10.	213.67	-999.000
20.	18.292	35.856	5.31	18.289	62.61	25.857	42.476	0.043	1517.9	20.	214.04	0.219
30.	18.290	35.855	5.25	18.285	62.61	25.857	42.477	0.064	1518.1	30.	214.37	0.394
50.	16.435	35.842	5.47	16.427	60.85	26.296	43.035	0.105	1512.9	50.	173.25	8.344
75.	13.558	35.779	5.15	13.547	65.45	26.885	43.825	0.139	1504.2	74.	117.97	8.647
100.	13.042	35.776	5.01	13.029	68.07	26.989	43.967	0.167	1502.9	99.	108.82	3.636
125.	12.750	35.734	5.00	12.733	68.39	27.016	44.017	0.194	1502.3	124.	106.95	1.865
150.	12.536	35.706	4.99	12.516	68.53	27.038	44.056	0.220	1502.0	149.	105.54	1.691
200.	12.191	35.661	5.04	12.165	68.57	27.071	44.117	0.272	1501.6	198.	103.66	1.485
250.	11.912	35.625	5.03	11.880	68.67	27.098	44.167	0.324	1501.4	248.	102.37	1.338
300.	11.737	35.606	5.16	11.698	68.68	27.119	44.202	0.375	1501.6	297.	101.74	1.157
400.	11.296	35.543	5.29	11.245	68.70	27.154	44.274	0.476	1501.7	396.	100.76	1.104
500.	10.868	35.487	5.09	10.805	68.77	27.191	44.347	0.577	1501.7	495.	99.45	1.141
600.	10.675	35.497	4.64	10.601	68.87	27.235	44.407	0.675	1502.7	594.	97.53	1.217
700.	10.355	35.529	4.32	10.269	68.91	27.319	44.517	0.770	1503.3	693.	91.68	1.668
800.	9.716	35.503	4.23	9.622	68.82	27.410	44.661	0.858	1502.6	792.	84.51	1.789
900.	9.474	35.603	4.22	9.368	68.83	27.531	44.800	0.937	1503.5	891.	75.03	1.987
1000.	8.991	35.605	4.32	8.877	68.88	27.613	44.924	1.009	1503.4	990.	68.54	1.710
1200.	8.466	35.676	4.58	8.331	69.03	27.755	45.110	1.133	1504.9	1187.	58.23	1.563
1400.	6.422	35.350	5.21	6.285	69.07	27.792	45.340	1.243	1500.0	1384.	52.26	1.274
1600.	4.708	35.069	5.94	4.570	69.03	27.780	45.498	1.344	1496.1	1581.	50.00	0.923
1800.	4.094	34.994	6.32	3.944	68.98	27.787	45.570	1.443	1496.8	1778.	48.89	0.751
2000.	3.860	34.991	6.37	3.694	69.05	27.811	45.619	1.540	1499.2	1975.	47.57	0.753
2200.	3.591	34.985	6.34	3.410	69.12	27.834	45.671	1.633	1501.4	2171.	45.81	0.788
2400.	3.309	34.975	6.28	3.113	69.21	27.855	45.722	1.723	1503.6	2367.	44.00	0.781
2600.	3.137	34.972	6.16	2.924	69.28	27.870	45.757	1.810	1506.2	2563.	43.11	0.662
2800.	2.960	34.958	6.07	2.730	69.34	27.877	45.784	1.895	1508.8	2759.	42.79	0.571
3000.	2.816	34.946	6.00	2.569	69.37	27.880	45.805	1.981	1511.6	2955.	42.78	0.513
3200.	2.715	34.937	5.90	2.449	69.44	27.884	45.821	2.067	1514.6	3151.	43.01	0.460
3400.	2.638	34.928	5.85	2.353	69.52	27.885	45.833	2.153	1517.6	3346.	43.51	0.398
3600.	2.583	34.921	5.77	2.277	69.58	27.886	45.842	2.241	1520.8	3541.	44.19	0.351
3800.	2.543	34.915	5.72	2.216	69.60	27.886	45.849	2.330	1524.1	3736.	44.97	0.321
4000.	2.521	34.910	5.70	2.172	69.66	27.886	45.853	2.421	1527.4	3931.	45.93	0.266
4200.	2.507	34.907	5.65	2.136	69.77	27.886	45.858	2.514	1530.8	4126.	46.88	0.268
4400.	2.502	34.904	5.58	2.106	69.78	27.886	45.861	2.608	1534.2	4320.	47.92	0.238
4500.	2.502	34.903	5.56	2.095	69.77	27.886	45.862	2.657	1536.0	4418.	48.49	0.199
4600.	2.506	34.902	5.54	2.087	69.71	27.886	45.863	2.705	1537.7	4515.	49.10	0.160
4700.	2.512	34.901	5.52	2.080	69.65	27.886	45.864	2.755	1539.5	4612.	49.72	0.154
4800.	2.520	34.900	5.52	2.075	69.69	27.886	45.864	2.805	1541.2	4709.	50.35	0.140
4900.	2.527	34.900	5.50	2.069	69.67	27.886	45.865	2.855	1543.0	4806.	50.98	0.152
5000.	2.536	34.899	5.49	2.065	69.66	27.886	45.865	2.907	1544.8	4903.	51.65	0.097
5100.	2.546	34.899	5.45	2.062	69.69	27.886	45.866	2.959	1546.6	5000.	52.30	0.130
5200.	2.557	34.899	5.43	2.060	69.69	27.886	45.866	3.011	1548.4	5097.	52.98	0.087
5300.	2.568	34.898	5.39	2.058	69.49	27.885	45.866	3.065	1550.1	5194.	53.68	0.030

DISCOVERY 162 STATION 11374

PRES	TEMP	SALIN	DO	POTEMP	POTRAN	SIGP0	SIGP4	DYNHT	SNDV	DEPTH	SVANOM	BVFR
DB	DEGC	PSU	ML/L	DEGC	%/M	KG/M ³	KG/M ³	DYN.M	M/S	M	10 ⁻⁸ KG/M ³	CY/HR
10.	17.094	35.614	5.75	17.092	56.25	25.964	42.666	0.020	1514.0	10.	203.43	-999.000
20.	16.951	35.606	5.78	16.947	56.36	25.993	42.704	0.041	1513.7	20.	201.10	2.995
30.	16.683	35.587	5.77	16.678	58.88	26.042	42.771	0.060	1513.0	30.	196.76	3.952
50.	16.286	35.578	5.55	16.278	60.61	26.129	42.885	0.099	1512.2	50.	189.16	3.715
75.	12.954	35.656	5.27	12.944	67.38	26.913	43.900	0.135	1502.0	74.	115.25	9.977
100.	12.546	35.688	5.14	12.532	68.08	27.020	44.038	0.163	1501.1	99.	105.73	3.698
125.	12.241	35.663	5.14	12.225	68.23	27.061	44.102	0.189	1500.5	124.	102.55	2.281
150.	12.021	35.640	5.15	12.002	68.34	27.087	44.146	0.214	1500.1	149.	100.73	1.836
200.	11.819	35.620	5.20	11.793	68.35	27.111	44.186	0.264	1500.2	198.	99.77	1.251
250.	11.727	35.608	5.22	11.695	68.41	27.121	44.204	0.314	1500.7	248.	100.18	0.798
300.	11.456	35.564	5.25	11.418	68.52	27.138	44.244	0.364	1500.6	297.	99.73	1.095
400.	10.990	35.498	5.26	10.940	68.69	27.175	44.320	0.463	1500.5	396.	98.49	1.134
500.	10.623	35.458	5.27	10.561	68.71	27.212	44.388	0.561	1500.8	495.	97.21	1.128
600.	10.274	35.443	5.45	10.201	68.72	27.263	44.469	0.657	1501.2	594.	94.36	1.332
700.	9.614	35.401	4.43	9.533	68.67	27.345	44.607	0.749	1500.5	693.	88.15	1.694
800.	9.476	35.493	4.18	9.382	68.69	27.442	44.714	0.834	1501.7	792.	81.07	1.770
900.	9.910	35.732	4.13	9.801	68.84	27.558	44.789	0.911	1505.3	891.	73.31	1.839
1000.	9.797	35.807	4.14	9.676	68.84	27.638	44.877	0.981	1506.6	990.	67.91	1.614
1200.	8.223	35.645	4.55	8.091	69.01	27.767	45.145	1.104	1503.9	1187.	56.40	1.633
1400.	5.966	35.259	5.23	5.833	69.00	27.779	45.371	1.212	1498.1	1384.	52.00	1.154
1600.	4.510	35.029	5.94	4.374	68.92	27.769	45.508	1.314	1495.2	1581.	50.16	0.869
1800.	4.018	34.978	6.25	3.870	68.96	27.783	45.573	1.413	1496.5	1778.	48.95	0.754
2000.	3.871	34.984	6.32	3.706	69.03	27.804	45.611	1.511	1499.2	1974.	48.26	0.676
2200.	3.708	34.991	6.25	3.525	69.11	27.828	45.652	1.606	1501.9	2171.	47.07	0.729
2400.	3.394	34.972	6.24	3.196	69.19	27.844	45.703	1.698	1503.9	2367.	45.46	0.764
2600.	3.182	34.967	6.15	2.969	69.26	27.862	45.745	1.788	1506.4	2563.	44.11	0.721
2800.	2.994	34.959	6.06	2.764	69.33	27.874	45.778	1.875	1509.0	2759.	43.27	0.647
3000.	2.848	34.949	5.93	2.600	69.39	27.880	45.802	1.961	1511.7	2955.	43.03	0.551
3200.	2.753	34.940	5.85	2.487	69.44	27.883	45.817	2.048	1514.7	3150.	43.37	0.443
3400.	2.672	34.931	5.75	2.386	69.50	27.885	45.829	2.135	1517.8	3346.	43.82	0.414
3600.	2.617	34.924	5.70	2.311	69.56	27.886	45.838	2.223	1521.0	3541.	44.48	0.359
3800.	2.578	34.918	5.66	2.250	69.61	27.886	45.845	2.313	1524.2	3736.	45.33	0.308
4000.	2.547	34.914	5.59	2.197	69.65	27.886	45.851	2.404	1527.5	3931.	46.12	0.319
4200.	2.526	34.909	5.56	2.154	69.68	27.886	45.856	2.497	1530.9	4125.	47.08	0.268
4400.	2.517	34.905	5.51	2.121	69.71	27.886	45.859	2.593	1534.3	4320.	48.11	0.245
4500.	2.519	34.904	5.51	2.111	69.72	27.886	45.861	2.641	1536.0	4417.	48.67	0.205
4600.	2.521	34.903	5.49	2.101	69.71	27.886	45.862	2.690	1537.8	4514.	49.27	0.183
4700.	2.524	34.902	5.47	2.091	69.70	27.886	45.863	2.740	1539.5	4611.	49.85	0.193
4800.	2.527	34.901	5.45	2.082	69.70	27.886	45.863	2.790	1541.3	4708.	50.46	0.171
4900.	2.535	34.901	5.42	2.077	69.54	27.886	45.864	2.840	1543.0	4805.	51.07	0.162
5000.	2.548	34.901	5.41	2.077	69.53	27.886	45.864	2.892	1544.8	4902.	51.77	0.027
5100.	2.559	34.900	5.40	2.075	69.55	27.886	45.864	2.944	1546.6	4999.	52.47	-0.020
5200.	2.570	34.900	5.38	2.073	69.54	27.886	45.864	2.997	1548.4	5096.	53.14	0.109
5300.	2.583	34.900	5.35	2.072	69.48	27.886	45.864	3.050	1550.2	5193.	53.84	0.059

DISCOVERY 162 STATION 11376

PRES DB	TEMP DEGC	SALIN PSU	DO ML/L	POTEMP DEGC	POTRAN %/M	SIGP0 KG/M ³	SIGP4 KG/M ³	DYNHT DYN.M	SNDV M/S	DEPTH M	SVANOM 10 ⁻⁸ KG/M ³	BVFR CY/HR
10.	17.378	35.657	5.42	17.376	60.98	25.929	42.611	0.021	1514.9	10.	206.79	0.280
20.	17.280	35.659	5.53	17.276	61.26	25.955	42.644	0.041	1514.7	20.	204.67	2.903
30.	17.203	35.662	5.52	17.198	62.07	25.976	42.670	0.062	1514.7	30.	203.01	2.835
50.	16.529	35.670	5.47	16.521	63.95	26.142	42.880	0.101	1513.0	50.	187.93	7.253
75.	12.818	35.662	5.35	12.808	66.82	26.945	43.943	0.137	1501.6	74.	112.18	6.246
100.	12.185	35.638	5.21	12.172	67.81	27.052	44.098	0.163	1499.9	99.	102.67	3.393
125.	11.910	35.623	5.13	11.894	68.29	27.094	44.161	0.188	1499.3	124.	99.35	1.539
150.	11.753	35.608	5.13	11.734	68.44	27.113	44.193	0.213	1499.2	149.	98.19	1.199
200.	11.591	35.592	5.11	11.566	68.50	27.132	44.226	0.262	1499.4	198.	97.64	0.962
250.	11.481	35.583	5.15	11.449	68.58	27.147	44.250	0.311	1499.9	248.	97.53	0.946
300.	11.375	35.572	5.16	11.337	68.50	27.159	44.271	0.360	1500.3	297.	97.66	0.916
400.	11.122	35.556	4.84	11.071	68.32	27.196	44.329	0.457	1501.1	396.	96.62	1.363
500.	10.696	35.504	4.87	10.635	68.61	27.234	44.404	0.553	1501.2	495.	95.14	0.390
600.	10.647	35.560	4.67	10.572	68.71	27.289	44.462	0.647	1502.7	594.	92.42	1.408
700.	10.686	35.691	4.38	10.599	68.74	27.387	44.554	0.736	1504.7	693.	85.82	1.727
800.	10.637	35.789	4.26	10.537	68.82	27.475	44.644	0.819	1506.3	792.	80.03	1.155
900.	9.958	35.738	4.27	9.850	68.87	27.555	44.781	0.896	1505.4	891.	73.70	1.616
1000.	10.039	35.860	4.29	9.917	68.88	27.639	44.856	0.967	1507.5	989.	68.39	1.594
1200.	8.136	35.566	4.61	8.005	68.93	27.718	45.105	1.096	1503.5	1187.	60.71	1.656
1400.	5.556	35.153	5.29	5.428	68.89	27.745	45.379	1.209	1496.3	1384.	53.74	1.078
1600.	4.406	34.999	5.79	4.271	68.92	27.757	45.507	1.313	1494.7	1581.	50.92	0.811
1800.	3.960	34.957	6.04	3.812	68.95	27.772	45.569	1.413	1496.2	1778.	49.68	0.967
2000.	3.721	34.945	6.13	3.558	69.03	27.788	45.611	1.512	1498.5	1974.	48.95	0.095
2200.	3.624	34.960	6.09	3.443	69.15	27.811	45.646	1.609	1501.5	2171.	48.08	0.840
2400.	3.464	34.969	6.02	3.265	69.22	27.835	45.687	1.704	1504.2	2367.	46.69	0.555
2600.	3.253	34.968	5.93	3.039	69.25	27.856	45.732	1.795	1506.7	2563.	45.09	0.855
2800.	3.042	34.960	5.82	2.811	69.31	27.870	45.770	1.884	1509.2	2759.	43.91	0.768
3000.	2.885	34.949	5.75	2.637	69.36	27.878	45.795	1.971	1511.9	2955.	43.54	0.480
3200.	2.764	34.940	5.68	2.497	69.41	27.882	45.814	2.058	1514.8	3150.	43.55	0.090
3400.	2.673	34.931	5.62	2.387	69.45	27.885	45.829	2.146	1517.8	3345.	43.81	0.060
3600.	2.613	34.924	5.56	2.306	69.50	27.885	45.838	2.234	1521.0	3541.	44.48	0.094
3800.	2.575	34.918	5.50	2.247	69.51	27.886	45.845	2.323	1524.2	3736.	45.30	-0.059
4000.	2.556	34.914	5.48	2.206	69.51	27.886	45.850	2.415	1527.6	3930.	46.24	0.219
4200.	2.547	34.911	5.44	2.174	69.48	27.886	45.854	2.508	1531.0	4125.	47.28	0.112
4400.	2.539	34.908	5.43	2.143	69.50	27.886	45.857	2.604	1534.4	4320.	48.32	0.456
4500.	2.533	34.905	5.41	2.125	69.32	27.886	45.859	2.653	1536.1	4417.	48.85	-0.086
4600.	2.533	34.904	5.41	2.112	69.51	27.886	45.860	2.702	1537.8	4514.	49.40	-0.053
4700.	2.536	34.903	5.40	2.103	69.49	27.886	45.861	2.751	1539.6	4611.	50.00	0.116
4800.	2.539	34.902	5.38	2.093	69.23	27.886	45.862	2.802	1541.3	4708.	50.57	-0.179
4900.	2.542	34.901	5.34	2.084	69.15	27.886	45.863	2.852	1543.1	4805.	51.16	0.058

DISCOVERY 162 STATION 11378

PRES	TEMP	SALIN	DO	POTEMP	POTRAN	SIGP0	SIGP4	DYNHT	SNDV	DEPTH	SVANOM	BVFR
DB	DEGC	PSU	ML/L	DEGC	%/M	KG/M ³	KG/M ³	DYN.M	M/S	M	10 ⁻⁸ KG/M ³	CY/HR
10.	17.030	35.665	5.70	17.028	60.09	26.019	42.723	0.020	1513.8	10.	198.22	-999.000
20.	16.939	35.668	5.77	16.936	59.76	26.044	42.754	0.040	1513.7	20.	196.27	2.774
30.	16.889	35.671	5.79	16.884	60.90	26.058	42.772	0.059	1513.8	30.	195.20	2.173
50.	15.735	35.648	5.69	15.727	64.21	26.309	43.100	0.097	1510.5	50.	172.00	6.307
75.	12.536	35.612	5.51	12.526	67.27	26.963	43.983	0.131	1500.6	74.	110.47	9.113
100.	11.915	35.604	5.29	11.902	68.19	27.078	44.146	0.157	1498.9	99.	100.15	3.835
125.	11.705	35.601	5.20	11.689	68.43	27.116	44.200	0.181	1498.6	124.	97.20	2.204
150.	11.571	35.589	5.18	11.552	68.52	27.133	44.228	0.205	1498.5	149.	96.26	1.469
200.	11.417	35.574	5.18	11.391	68.55	27.151	44.259	0.253	1498.8	198.	95.84	1.083
250.	11.145	35.532	5.29	11.114	68.37	27.170	44.300	0.301	1498.6	248.	95.25	1.129
300.	11.046	35.530	5.18	11.009	68.68	27.187	44.326	0.349	1499.1	297.	94.83	1.071
400.	10.722	35.491	5.28	10.673	68.71	27.218	44.384	0.443	1499.6	396.	94.27	1.020
500.	10.509	35.485	5.06	10.448	68.78	27.253	44.438	0.537	1500.5	495.	93.23	1.086
600.	10.220	35.483	4.72	10.147	68.85	27.304	44.513	0.629	1501.1	594.	90.51	1.314
700.	10.090	35.576	4.21	10.006	68.80	27.402	44.620	0.717	1502.4	693.	83.55	1.770
800.	10.055	35.684	4.16	9.958	68.91	27.494	44.713	0.797	1504.1	792.	77.22	1.710
900.	9.722	35.705	4.17	9.614	68.94	27.569	44.816	0.871	1504.5	891.	71.91	1.604
1000.	9.212	35.685	4.27	9.096	68.93	27.640	44.930	0.940	1504.3	989.	66.52	1.603
1200.	8.111	35.591	4.58	7.980	69.06	27.742	45.130	1.064	1503.4	1187.	58.46	1.436
1400.	6.089	35.272	5.23	5.955	69.05	27.773	45.354	1.175	1498.6	1384.	52.92	1.234
1600.	4.621	35.057	5.96	4.484	69.02	27.779	45.507	1.277	1495.7	1581.	49.70	0.998
1800.	3.993	34.986	6.22	3.845	69.05	27.791	45.584	1.375	1496.4	1778.	48.06	0.805
2000.	3.877	35.000	6.17	3.711	69.12	27.816	45.622	1.470	1499.2	1974.	47.12	0.706
2200.	3.626	34.996	6.10	3.445	69.19	27.840	45.673	1.563	1501.6	2171.	45.49	0.776
2400.	3.334	34.978	6.02	3.138	69.18	27.855	45.720	1.652	1503.7	2367.	44.13	0.732
2600.	3.107	34.964	6.02	2.895	69.33	27.866	45.757	1.740	1506.1	2563.	43.25	0.659
2800.	2.963	34.956	5.96	2.734	69.42	27.875	45.782	1.826	1508.8	2759.	42.98	0.564
3000.	2.838	34.947	5.89	2.591	69.47	27.880	45.802	1.912	1511.7	2954.	42.99	0.508
3200.	2.737	34.939	5.80	2.471	69.52	27.883	45.819	1.998	1514.7	3150.	43.20	0.465
3400.	2.660	34.930	5.73	2.374	69.56	27.885	45.831	2.085	1517.7	3345.	43.68	0.406
3600.	2.602	34.923	5.65	2.296	69.61	27.886	45.840	2.173	1520.9	3540.	44.33	0.361
3800.	2.567	34.918	5.61	2.239	69.61	27.886	45.847	2.262	1524.2	3735.	45.17	0.308
4000.	2.547	34.913	5.55	2.198	69.63	27.886	45.851	2.353	1527.5	3930.	46.13	0.267
4200.	2.530	34.909	5.53	2.157	69.66	27.886	45.856	2.447	1530.9	4125.	47.11	0.263
4400.	2.521	34.906	5.48	2.125	69.66	27.886	45.859	2.542	1534.3	4319.	48.16	0.238
4500.	2.520	34.904	5.45	2.112	69.66	27.886	45.860	2.590	1536.1	4416.	48.71	0.212
4600.	2.524	34.903	5.42	2.104	69.66	27.886	45.861	2.639	1537.8	4513.	49.30	0.185
4700.	2.526	34.902	5.42	2.093	69.55	27.886	45.862	2.689	1539.5	4611.	49.89	0.185
4800.	2.536	34.902	5.41	2.090	69.46	27.886	45.862	2.739	1541.3	4708.	50.56	0.094

DISCOVERY 162 STATION 11379

PRES DB	TEMP DEGC	SALIN PSU	DO ML/L	POTEMP DEGC	POTRAN %/M	SIGP0 KG/M ³	SIGP4 KG/M ³	DYNHT DYN.M	SNDV M/S	DEPTH M	SVANOM 10 ⁻⁸ KG/M ³	BVFR CY/HR
10.	16.722	35.611	5.79	16.720	56.30	26.051	42.777	0.020	1512.8	10.	195.18	-999.000
20.	16.575	35.604	5.86	16.572	55.55	26.080	42.816	0.039	1512.6	20.	192.77	3.033
30.	16.162	35.576	5.88	16.157	57.97	26.155	42.919	0.058	1511.4	30.	185.94	4.885
50.	14.796	35.540	5.66	14.789	64.64	26.436	43.294	0.093	1507.5	50.	159.91	6.667
75.	12.647	35.573	5.45	12.637	66.95	26.910	43.923	0.126	1500.9	74.	115.46	7.763
100.	11.960	35.604	5.25	11.946	67.86	27.070	44.134	0.153	1499.1	99.	100.97	4.502
125.	11.700	35.588	5.21	11.684	68.01	27.107	44.192	0.177	1498.6	124.	98.04	2.197
150.	11.467	35.564	5.21	11.448	68.11	27.132	44.236	0.202	1498.1	149.	96.26	1.809
200.	11.245	35.541	5.25	11.220	68.21	27.157	44.279	0.249	1498.2	198.	95.15	1.277
250.	11.062	35.525	5.28	11.031	68.34	27.179	44.316	0.297	1498.3	248.	94.31	1.196
300.	10.994	35.523	5.30	10.957	68.46	27.192	44.335	0.344	1498.9	297.	94.36	0.914
400.	10.840	35.521	5.24	10.790	68.59	27.220	44.377	0.438	1500.0	396.	94.11	0.968
500.	10.493	35.478	5.21	10.432	68.73	27.251	44.437	0.532	1500.4	495.	93.41	1.035
600.	10.351	35.502	4.81	10.278	68.83	27.296	44.494	0.625	1501.6	594.	91.38	1.224
700.	10.108	35.547	4.34	10.024	68.72	27.376	44.593	0.714	1502.4	693.	85.99	1.617
800.	9.926	35.632	4.17	9.830	68.76	27.475	44.706	0.796	1503.5	792.	78.73	1.797
900.	9.951	35.755	4.12	9.842	68.80	27.570	44.796	0.871	1505.4	891.	72.32	1.717
1000.	9.166	35.665	4.21	9.051	68.87	27.632	44.926	0.941	1504.1	989.	67.18	1.579
1200.	7.631	35.488	4.61	7.504	68.92	27.731	45.164	1.065	1501.5	1187.	58.15	1.484
1400.	5.978	35.251	5.18	5.846	68.73	27.771	45.362	1.176	1498.1	1384.	52.78	1.213
1600.	4.711	35.069	5.74	4.573	68.64	27.779	45.498	1.278	1496.1	1581.	50.03	0.957
1800.	4.151	35.013	6.03	4.001	68.86	27.797	45.573	1.376	1497.0	1777.	48.28	0.822
2000.	3.858	35.002	6.02	3.692	68.80	27.820	45.627	1.471	1499.2	1974.	46.74	0.779
2200.	3.592	34.992	5.98	3.411	68.88	27.839	45.676	1.563	1501.4	2170.	45.35	0.748
2400.	3.276	34.972	6.01	3.081	69.11	27.855	45.726	1.652	1503.4	2367.	43.78	0.754
2600.	3.083	34.963	5.94	2.872	69.22	27.867	45.760	1.739	1506.0	2563.	43.02	0.641
2800.	2.949	34.955	5.88	2.720	69.29	27.875	45.784	1.825	1508.8	2758.	42.87	0.544
3000.	2.825	34.945	5.79	2.578	69.35	27.879	45.803	1.911	1511.6	2954.	42.93	0.499
3200.	2.724	34.936	5.72	2.458	69.47	27.883	45.819	1.997	1514.6	3150.	43.18	0.458
3400.	2.640	34.928	5.65	2.355	69.51	27.885	45.833	2.083	1517.7	3345.	43.54	0.428
3600.	2.588	34.922	5.60	2.282	69.52	27.886	45.841	2.171	1520.9	3540.	44.22	0.351
3800.	2.549	34.916	5.54	2.222	69.58	27.887	45.849	2.260	1524.1	3735.	44.98	0.329
4000.	2.523	34.911	5.51	2.174	69.59	27.886	45.853	2.351	1527.4	3930.	45.93	0.267
4200.	2.509	34.907	5.46	2.137	69.59	27.886	45.858	2.444	1530.8	4124.	46.89	0.268
4400.	2.509	34.905	5.43	2.113	69.61	27.886	45.860	2.539	1534.3	4319.	48.02	0.203
4500.	2.511	34.903	5.41	2.103	69.58	27.886	45.861	2.587	1536.0	4416.	48.61	0.176
4600.	2.514	34.902	5.39	2.094	69.36	27.886	45.862	2.636	1537.8	4513.	49.20	0.181

DISCOVERY 162 STATION 11380/1

PRES DB	TEMP DEGC	SALIN PSU	DO ML/L	POTEMP DEGC	POTRAN %/M	SIGP0 KG/M ³	SIGP4 KG/M ³	DYNHT DYN.M	SNDV M/S	DEPTH M	SVANOM 10 ⁻⁸ KG/M ³	BVFR CY/HR
10.	15.067	35.554	6.33	15.066	43.55	26.386	43.224	0.016	1507.7	10.	163.38	-999.000
20.	14.838	35.551	6.42	14.835	46.27	26.434	43.289	0.033	1507.1	20.	159.11	4.635
30.	14.587	35.547	6.15	14.582	56.50	26.486	43.358	0.048	1506.5	30.	154.52	3.345
50.	14.143	35.534	5.88	14.136	64.19	26.572	43.476	0.078	1505.4	50.	146.93	3.349
75.	11.917	35.531	5.39	11.908	66.89	27.020	44.089	0.110	1498.4	74.	104.98	7.468
100.	11.253	35.534	5.15	11.240	63.29	27.148	44.269	0.134	1496.5	99.	93.38	0.495
125.	11.252	35.509	5.08	11.236	63.00	27.130	44.251	0.158	1496.9	124.	95.80	-0.966
150.	11.250	35.533	5.12	11.232	62.82	27.149	44.270	0.182	1497.4	149.	94.62	0.059

DISCOVERY 162 STATION 11380/2

PRES DB	TEMP DEGC	SALIN PSU	DO ML/L	POTEMP DEGC	POTRAN %/M	SIGP0 KG/M ³	SIGP4 KG/M ³	DYNHT DYN.M	SNDV M/S	DEPTH M	SVANOM 10 ⁻⁸ KG/M ³	BVFR CY/HR
10.	15.031	35.520	6.30	15.029	49.40	26.367	43.209	0.017	1507.5	10.	165.16	0.445
20.	14.917	35.515	6.32	14.914	52.81	26.389	43.239	0.033	1507.3	20.	163.39	3.098
30.	14.770	35.500	6.38	14.766	55.26	26.410	43.270	0.049	1507.0	30.	161.76	2.349
50.	14.322	35.466	6.07	14.315	64.78	26.481	43.375	0.081	1505.9	50.	155.55	3.434
75.	12.384	35.505	5.44	12.374	67.06	26.910	43.944	0.115	1500.0	74.	115.49	6.387
100.	11.153	35.530	5.18	11.141	62.81	27.163	44.292	0.140	1496.2	99.	91.92	2.401
125.	11.139	35.530	5.08	11.123	62.03	27.167	44.297	0.163	1496.5	124.	92.25	-0.049
150.	11.142	35.530	5.00	11.123	61.76	27.167	44.297	0.186	1497.0	149.	92.92	0.049

DISCOVERY 162 STATION 11380/3

PRES DB	TEMP DEGC	SALIN PSU	DO ML/L	POTEMP DEGC	POTRAN %/M	SIGP0 KG/M ³	SIGP4 KG/M ³	DYNHT DYN.M	SNDV M/S	DEPTH M	SVANOM 10 ⁻⁸ KG/M ³	BVFR CY/HR
10.	14.973	35.494	6.77	14.972	47.25	26.360	43.207	0.017	1507.3	10.	165.81	0.932
20.	14.657	35.492	6.49	14.654	59.41	26.428	43.297	0.033	1506.5	20.	159.67	4.562
30.	14.489	35.496	6.15	14.485	62.36	26.468	43.348	0.049	1506.1	30.	156.22	3.664
50.	13.578	35.467	5.57	13.571	66.53	26.638	43.585	0.079	1503.5	50.	140.61	7.009
75.	11.312	35.521	5.32	11.302	64.11	27.126	44.242	0.108	1496.3	74.	94.84	7.459
100.	11.175	35.523	5.23	11.162	62.02	27.154	44.281	0.132	1496.3	99.	92.82	0.125
125.	11.164	35.523	5.18	11.149	61.24	27.156	44.284	0.155	1496.6	124.	93.26	0.001
150.	11.161	35.526	5.12	11.142	60.92	27.160	44.289	0.178	1497.0	149.	93.55	1.128

DISCOVERY 162 STATION 11380/4

PRES DB	TEMP DEGC	SALIN PSU	DO ML/L	POTEMP DEGC	POTRAN %/M	SIGP0 KG/M ³	SIGP4 KG/M ³	DYNHT DYN.M	SNDV M/S	DEPTH M	SVANOM 10 ⁻⁸ KG/M ³	BVFR CY/HR
10.	14.993	35.520	6.30	14.991	40.11	26.376	43.221	0.016	1507.4	10.	164.29	1.298
20.	14.967	35.518	6.35	14.964	41.61	26.380	43.227	0.033	1507.5	20.	164.21	1.300
30.	14.846	35.518	6.32	14.841	46.28	26.407	43.262	0.049	1507.3	30.	161.97	2.937
50.	14.153	35.506	5.98	14.146	65.79	26.548	43.453	0.080	1505.4	50.	149.19	3.860
75.	11.623	35.532	5.44	11.613	65.29	27.077	44.168	0.112	1497.4	74.	99.56	8.055
100.	11.354	35.534	5.11	11.342	63.01	27.129	44.242	0.136	1496.9	99.	95.21	0.996
125.	11.347	35.533	5.03	11.331	62.33	27.131	44.244	0.160	1497.3	124.	95.72	0.081
150.	11.351	35.534	5.03	11.332	62.16	27.131	44.244	0.184	1497.7	149.	96.35	-0.082

DISCOVERY 162 STATION 11380/5

PRES DB	TEMP DEGC	SALIN PSU	DO ML/L	POTEMP DEGC	POTRAN %/M	SIGP0 KG/M ³	SIGP4 KG/M ³	DYNHT DYN.M	SNDV M/S	DEPTH M	SVANOM 10 ⁻⁸ KG/M ³	BVFR CY/HR
10.	14.939	35.499	6.21	14.938	47.37	26.371	43.220	0.017	1507.2	10.	164.78	1.844
20.	14.584	35.500	6.22	14.581	58.45	26.450	43.323	0.033	1506.3	20.	157.63	4.941
30.	14.326	35.505	6.10	14.322	63.65	26.510	43.402	0.048	1505.6	30.	152.20	4.200
50.	13.304	35.511	5.78	13.297	66.95	26.729	43.695	0.077	1502.6	50.	131.95	6.787
75.	11.525	35.534	5.30	11.515	64.69	27.097	44.196	0.105	1497.1	74.	97.62	4.648
100.	11.444	35.537	5.10	11.431	63.65	27.115	44.220	0.130	1497.2	99.	96.59	0.242
125.	11.441	35.537	5.00	11.425	63.21	27.116	44.222	0.154	1497.6	124.	97.16	0.156

DISCOVERY 162 STATION 11380/6

PRES DB	TEMP DEGC	SALIN PSU	DO ML/L	POTEMP DEGC	POTRAN %/M	SIGP0 KG/M ³	SIGP4 KG/M ³	DYNHT DYN.M	SNDV M/S	DEPTH M	SVANOM 10 ⁻⁸ KG/M ³	BVFR CY/HR
10.	14.920	35.514	6.36	14.919	40.47	26.387	43.237	0.016	1507.2	10.	163.25	2.715
20.	14.506	35.515	6.27	14.503	55.98	26.478	43.357	0.032	1506.0	20.	154.91	5.824
30.	14.314	35.518	6.05	14.309	64.66	26.522	43.415	0.048	1505.6	30.	151.04	2.616
50.	13.923	35.503	5.80	13.916	66.33	26.594	43.515	0.077	1504.6	50.	144.80	4.047
75.	13.218	35.507	5.50	13.207	66.99	26.745	43.717	0.112	1502.7	74.	131.24	5.632
100.	11.420	35.535	5.18	11.408	64.53	27.118	44.225	0.140	1497.1	99.	96.31	3.528
125.	11.354	35.534	5.06	11.338	63.46	27.130	44.243	0.164	1497.3	124.	95.78	0.762

DISCOVERY 162 STATION 11380/7

PRES DB	TEMP DEGC	SALIN PSU	DO ML/L	POTEMP DEGC	POTRAN %/M	SIGP0 KG/M ³	SIGP4 KG/M ³	DYNHT DYN.M	SNDV M/S	DEPTH M	SVANOM 10 ⁻⁸ KG/M ³	BVFR CY/HR
10.	14.853	35.506	6.33	14.852	46.30	26.395	43.250	0.016	1507.0	10.	162.47	2.557
20.	14.452	35.493	6.18	14.449	62.11	26.473	43.356	0.032	1505.8	20.	155.40	4.555
30.	14.374	35.504	6.09	14.370	63.91	26.499	43.387	0.048	1505.8	30.	153.28	2.292
50.	12.553	35.523	5.82	12.546	66.94	26.889	43.910	0.075	1500.1	50.	116.76	8.179
75.	11.344	35.534	5.31	11.334	64.30	27.130	44.244	0.100	1496.4	74.	94.42	1.214
100.	11.329	35.534	5.16	11.317	64.03	27.134	44.248	0.124	1496.8	99.	94.78	0.770
125.	11.254	35.533	5.10	11.239	63.92	27.147	44.268	0.148	1497.0	124.	94.14	1.481