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再冠水実験データ報告・Ⅳ

(シリーズ4)

1977年8月

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須藤高史・村尾良夫・井口　正・数土幸夫
杉本　純・新妻　泰・深谷好夫・平野見明

（１９７７年６月２８日受理）

この報告書は，１９７６年６月から７月にかけて行なわれた再冠水実験シリーズ４のデータをまとめたものである。

これまでに行なわれた実験結果を基に，装置の改良等を行なったのち，本実験では，①系圧力の影響，②発熱体の熱容量の影響，を検討することを主目的として，一定注水実験，システム注入実験の二種の実験を行なった。

本報告は，これらの実験の主要実験条件，測定データおよびそれらのデータから計算された温度応答特性，熱伝達挙動をまとめたものである。

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Data Report on Series 4 Reflood Experiment

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(Received June 28 , 1977)

Measured results and calculated heat transfer behavior of the Series 4 reflood experiment are presented.

Experiments were carried out in June and July 1976. The objective was to investigate the reflood process under different system pressures using heater rods of simulated heat capacity.

An analysis was given previously.

Keywords: Reflood , Quench , Heat transfer , LWR safety ,
System pressure dependence

目　　次

1. 序 …… 1
2. 実験装置と実験方法の概要 …… 2
2.1 装　　置 …… 2
2.2 実験方法 …… 5
3. 計測系およびデータ処理 …… 7
3.1 計測系の概略 …… 7
3.2 データ処理系への概要 …… 7
4. 実験条件 …… 11
5. データ集 …… 15
5.1 実験条件・温度プロフィール …… 15
5.2 温度・圧力等データ …… 15
5.3 発熱体熱伝達挙動図 …… 15
6. あとがき …… 16
参考文献 …… 17
データ集 …… 18

1. 序

加圧水型軽水炉の冷却材喪失事故時の再冠水過程における燃料体の安全解析を行うことを目的として，昭和４８年より，解析モデルや解析コードの開発，４×４本バンドルの実物長再冠水実験装置による実験が行われている。

本報告は，昭和５１年５月～７月に行なわれた一連の再冠水実験（ここではシリーズ４と呼ぶ。）により得られた発熱体温度，テスト部圧力等の応答および，発熱体温度応答から計算により得られた熱流束，熱伝達率，ターンアラウンドとクエンチ点の時間と温度等をまとめたものである。

これまでに，本装置を用いてシリーズ１，２，３実験が行なわれており，その結果は，次のレポートに報告されている。

JAERI－M 6551 [1)]
JAERI－M 6787 [2)]
JAERI－M 6788 [3)]
JAERI－M 6981 [4)]
JAERI－M 6982 [5)]

また，これらのレポートの他に，本装置の概要や，得られたデータ等が報告されている。[6)～10)]

シリーズ１，２実験により再冠水現象の定性的把握がなされ，シリーズ３実験により，一次系流動抵抗の影響，流路外管温度の影響が明らかにされた。シリーズ４実験に先だって，これらの実験結果に基づき，以下の諸点について，装置や実験方法の改善が行なわれた。

1） 系の加圧

格納容器圧力を模擬するために系圧力を実験パラメータに加えた。

2） 差圧測定点の増設

一次系流動抵抗模擬部オリフィス差圧，テスト部溢水タンク差圧，テスト部内差圧の測定を行い，テスト部出口蒸気量，キャリオーバ水量，炉心内ボイド率を定量的に把握できるようにした。

(3) 発熱体熱容量の増加

中空発熱管内部にマグネシアを充填し，その熱容量を実炉の燃料体の熱容量に近づけた。

(4) 流路壁温

シリーズ３の結果より，初期流路壁温を飽和温度＋２０℃に設定し，その影響を少なくした。

(5) 発熱体許容温度

シリーズ３により，発熱体およびその熱電対の耐熱性が確証されたので，使用上限温度を900～1000℃まで上げた。

これらの特徴を背景に，シリーズ４実験では，再冠水時の伝熱流動現象をより詳細に理解するとともに，

- 系圧力の影響
- 発熱体熱容量の影響

を検討することを目的とした。

実験は，炉心冷却水の注入方法により次の2項目に分類される。

1. 一定流量注入実験（Phase A実験）

テスト部下部プレナムにポンプより直接一定流量の冷却水を注入する。実験番号4000番台および4200番台の実験は，この方法により行なわれた。

2. システム効果実験（PhaseB実験）

ダウンカンマを経由して冷却水を下部プレナムに注入する方式であり，炉心への駆動力はダウンカマの水頭である。実験番号4500番台の実験は，この方法により行なわれた。

2. 実験装置と実験方法の概要

2.1 装　置

再冠水試験装置のフローシートをFig.2.1に示す。

再冠水試験装置における各構成機器の機能は次の通りである。

(1) テスト部：実炉の炉心を模擬する。

(2) 模擬抵抗部：実炉の上部プレナムから破断口までの流動抵抗を模擬する。

(3) 定圧タンク：実炉の格納容器を模擬する。

(4) 液滴ホールドタンク：キャリオーバー水を捕集し，キャリオーバー比の測定に用いる。

(5) ダウンカマー部：実炉のダウンカマー部を模擬する。

ループ部は，上記構成諸機器とこれらを接続する配管，弁，ポンプ等で構成され，注水系とシステム模擬部とに分類できる。

注水系では，予熱器，循環ポンプ，流量計，冷却器，弁等の機器からなっている。予熱タンク内に貯えられた冷却水は内装ヒーター（予熱器）により加熱される。冷却水は，循環ポンプでテスト部またはダウンカマー部に供給され，実験に供される。貯水タンクは，テスト部から戻る冷却水を貯えておくためのタンクである。

システム模擬部は，ダウンカマー部，下部プレナム部，テスト部，上部プレナム，模擬抵抗部，定圧タンクおよびダウンカマーオーバーフロータンク，液滴ホールドタンクからなる。

テスト部の上部プレナムは，液滴ホールドタンクと定圧タンクとに接続されており，上部プレナム内で分離された水と蒸気は，それぞれ液滴ホールドタンクと定圧タンクへ導かれる。なお定圧タンクへ至る配管には，原子炉の一次系を模擬した抵抗体が設けられている。定圧タンクには，圧力制御装置が付設されており，装置内を一定の圧力に保持できるように設計されている。またループのすべてのタンクには，液面計（定圧タンクを除く），計装用熱電対，圧力計等が付加されている。ループ各部の各機器の高さは，テスト部を基準にし，それぞれの目的もよく模擬するように設定され，注水系はピット内に，上部プレナムとの接続機器は架台上にそれぞれ設置され，各タンク連通管により結ばれている。

テスト部の概略をFig．2.2に示す。テスト部は4×4正方格子配列の発熱体バンドルを流路外管に収納した構造となっている。

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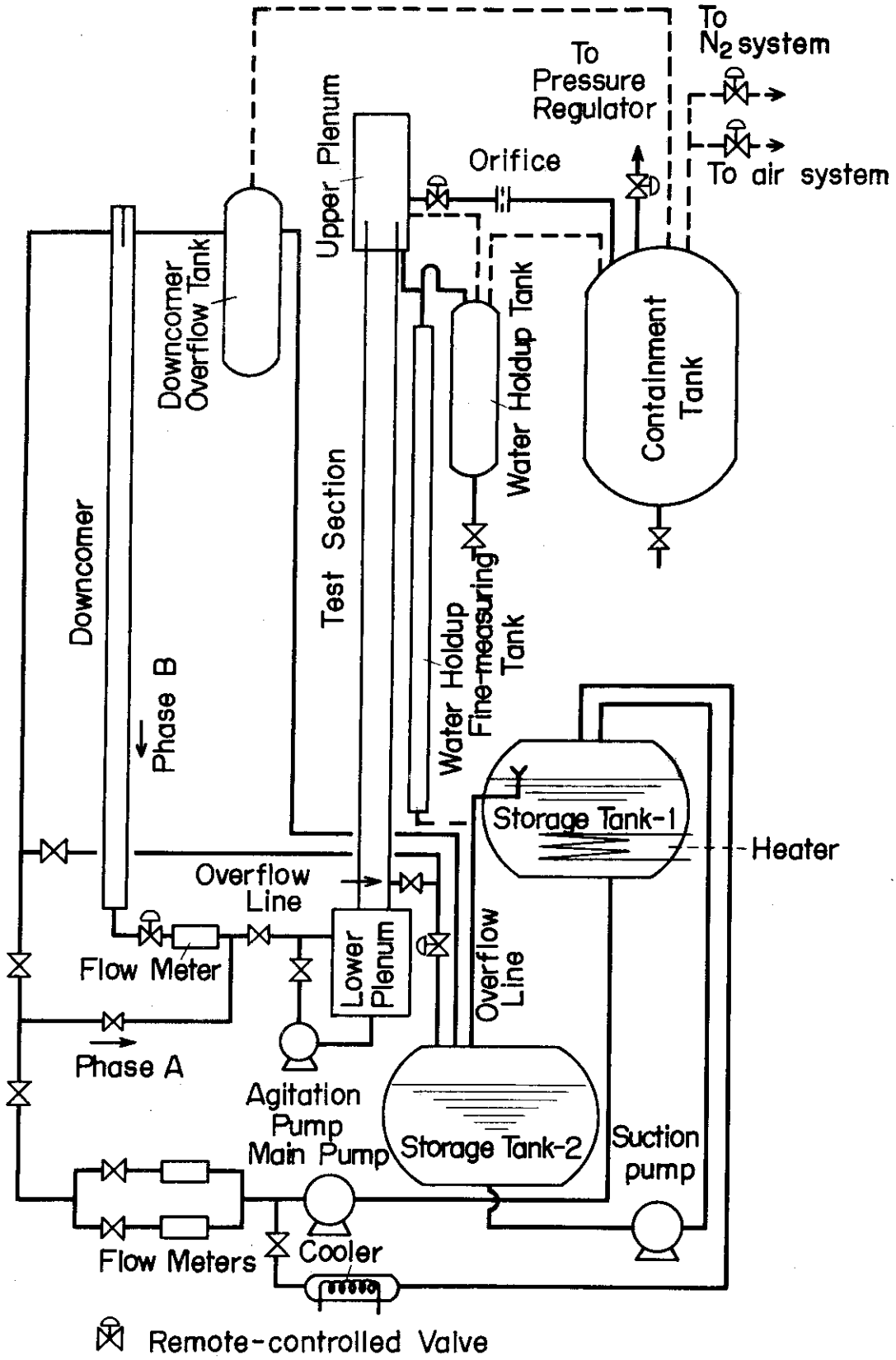


Fig. 2.1 Flow Sheet of Test Rig

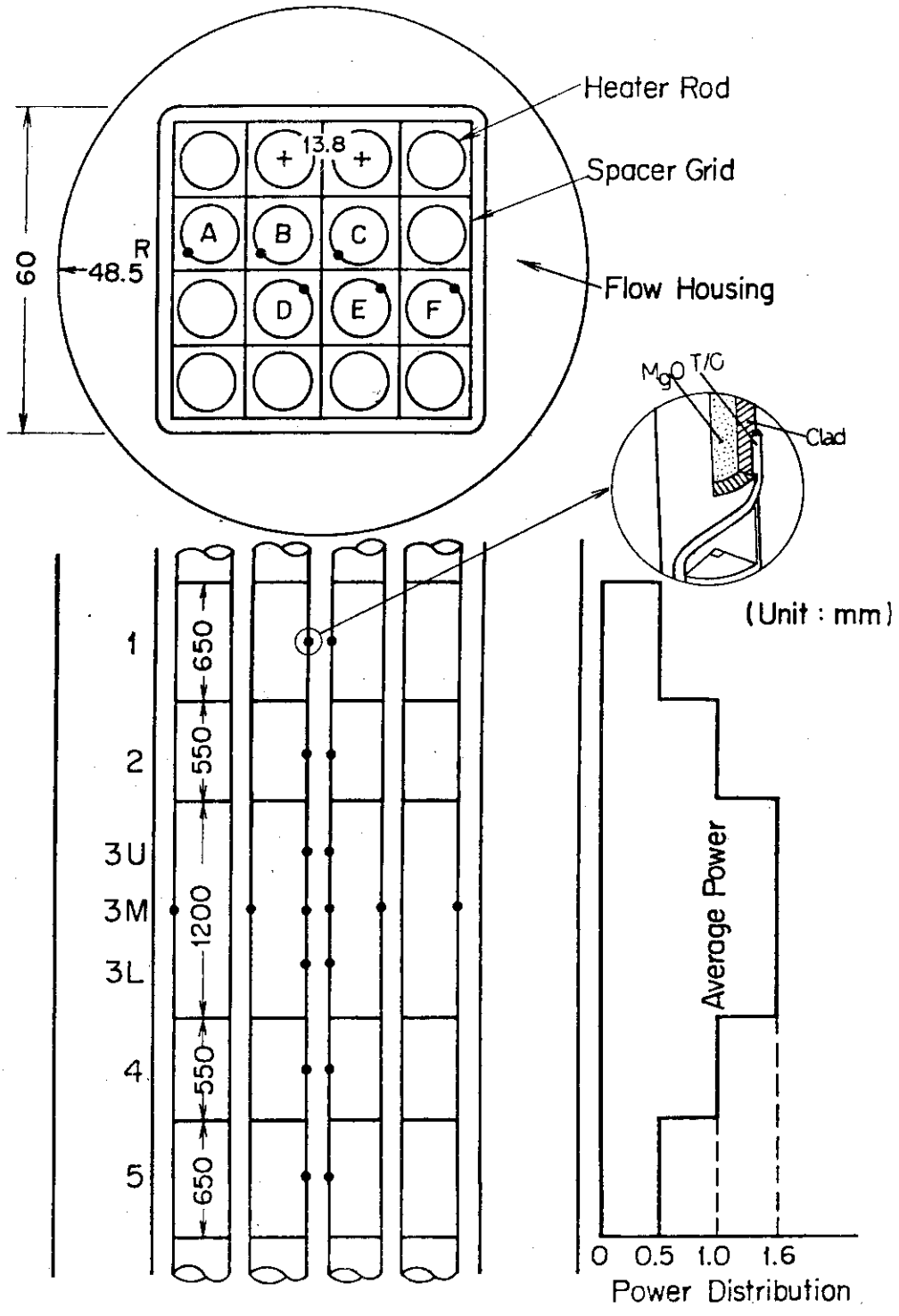


Fig. 2.2 Crosssection of Test Channel and Location of Thermocouples

発熱体はステンレス製の中空円筒とその内部に封入したMgOから成っている。発熱方式は直流による直接通電加熱方式である。軸方向の発熱分布は，階段状コサイン分布である。半径方向の発熱分布は一様である。

発熱体表面温度は熱電対により計測される。熱電対は外径0.5mm のシース型CA熱電対で，図に示したように発熱体表面に取付けられている。熱電対は，検出端の取付け位置から90° 円周上を回転した後，下部に引き出されている。

発熱体は600mm 間隔で取付けられたスペーサグリッドにより正方格子形に配列，保持されている。

発熱体バンドルを収納した流路外管は，8分割され，各々はフランジにより接続されている。流路外管にはヒータが取付けられ，またフランジ部も加熱用ヒータが取付けられ，任意の温度に設定することが可能である。

テスト部の上下には上部プレナムと下部プレナムとが付随している。

上部プレナムは，一次系出口側抵抗体模擬部を介して格納容器を模擬した定圧タンクに接続されている。また，発熱部から吹上げてくるキャリオーバー水を蒸気から分離する目的で，分離筒と反射板が設けられている。側面に取付けられている透明ガラス窓を通して，内部の流動状態の観察が可能である。

下部プレナムは，電極収納箱を兼ね，上部に流路外管と接続される角管が，下部に注水系と接続されるノズル2本がそれぞれ設けられている。内部には，各発熱体の熱膨張による伸びを考慮して，常に張力を付加するスプリングと，発熱体を加熱するための電気供給用平編導線が内蔵されている。さらに，テスト部注入水の温度を調節するための加熱ヒータと，温度測定用熱電対が取付けられている。下部プレナム内壁は，すべてテフロンシートで絶縁され，発熱体の温度測定用熱電対の取出しもテフロンチューブで保護され，下部プレナムの外に導かれている。

テスト部の電気絶縁には，各々の場所に適合した絶縁材が選ばれている。すなわち上部の電極には，気密性と耐熱性の優れたモンタニットが，スペーサグリッドには絶縁性の優れた石英ガラスが，また下部プレナム等の比較的低温部には，加工性の良いテフロンがそれぞれ用いられている。

上部プレナムを除くテスト部は，組立および据付時の破損や変形の防止と実験時の燃膨張を考慮して，水平方向の変位を抑制した取付台に固定されている。またテスト部は，すべて保温され，さらに保温カバーで保護されている。

テスト部は，プレナムを含めて全長約6mで，上端を架台に固定し，吊下げられている。

発熱体内部に充てんされたMgO の充てん率は，0.58であった。MgO 充てんにより軸方向位置の違いによる温度上昇率の差異が小さくなり，実炉の温度上昇率分布に近くなるように改善された。

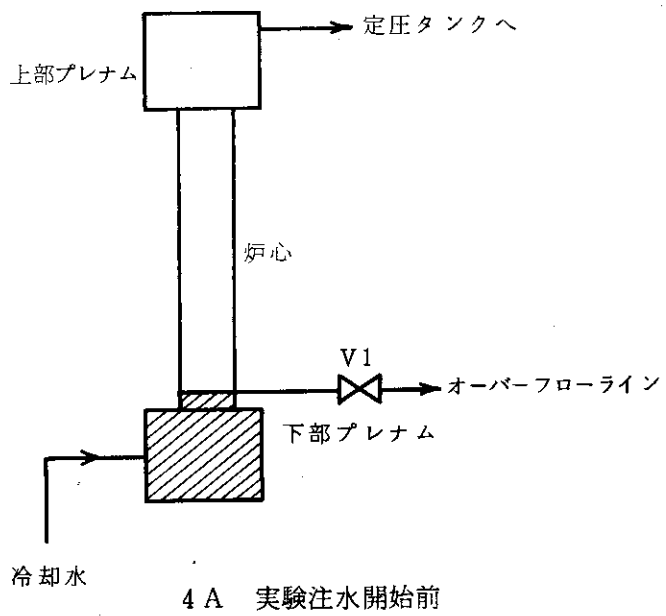
2.2 実験方法

実験方法には大別して，一定流量注入実験（略して4A実験）と，システム効果実験（4B実験）の2通りの実験モードがある。以下にそれぞれの実験方法の概略を述べる。

2.2.1　一定流量注入実験（４Ａ実験）

テスト部下部プレナムに直接一定流量の冷却水を注入する方式である。

図のオーバーフロー弁Ｖ１を閉じることにより注水は開始される。



４Ａ　実験注水開始前

2.2.2　システム効果実験（４Ｂ実験）

ダウンカマーを経由して冷却水を下部プレナムに注入する方式であり，炉心への駆動力はダウンカマーの水頭である。ダウンカマーをオーバーフローした水は，オーバーフロータンクに集められる。

４Ｂ実験には，次の３種の冷却水注入モードがある。

①　モードＢ１

②　モードＢ２

③　モードＢ３

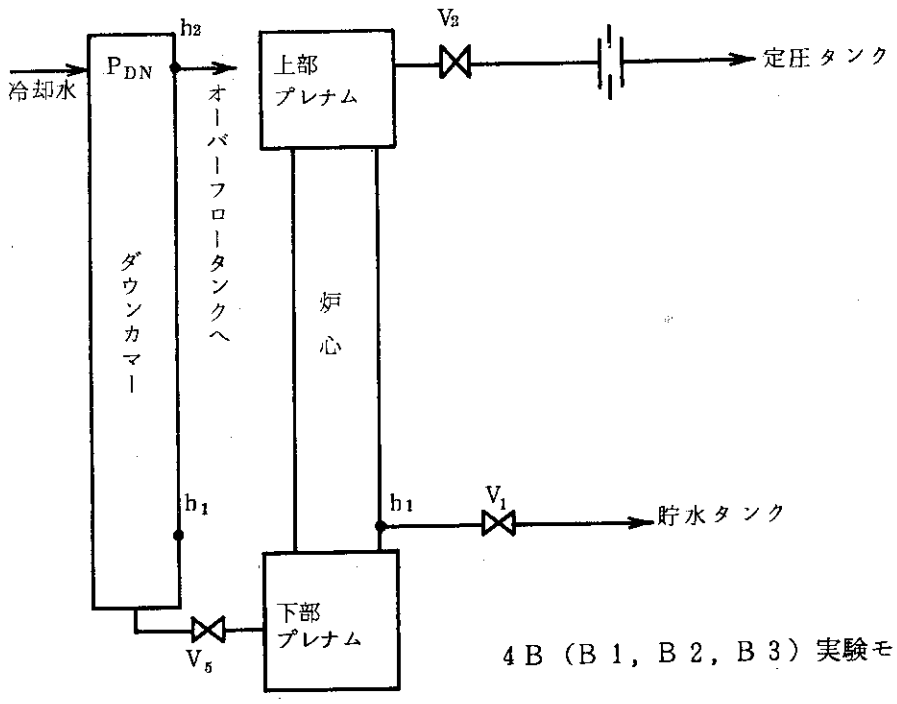
各モードは初期条件のみが異なっている。下表および下図を参照のこと。

モード	弁Ｖ１	弁Ｖ２	弁Ｖ５	初期ダウンカマー水位	初期炉心水位	上部プレナム圧	注水開始法
Ｂ１	閉	開	閉	h_2	h_1	$=P_{DN}$	Ｖ５開
Ｂ２	開	開	開	h_1	h_1	$=P_{DN}$	Ｖ１閉 Ｖ５開
Ｂ３	閉	閉	閉	h_2	h_1	$=P_{DN}+\gamma(h_2-h_1)$	Ｖ２開

＊ P_{DN}：ダウンカマー頂部圧力

＊ γ　：冷却水密度

B 2モード中で一例だけ初期に炉心を水で満たした状態から実験を行った。これはーB 2モードと名づけた。



4B（B 1，B 2，B 3）実験モード説明図

3. 計測系およびデータ処理

3.1 計測系の概略

本装置の計測点をTable 3.1に，その圧力，差圧への測定位置をFig. 3.1に示す。これら30点の検出信号は，増巾され，ノイズを除去されたのちに，高速収録装置に入力される。入力信号はディジタル化され磁気テープ上に記録される。本シリーズ実験でのデータ集録速度は，4A，4B実験ともに100Hz／CHである。

3.2 データ処理系の概要

(1) ディジタル量の変換

記録された磁気テープは，原研計算センタにおいて，処理される。テープには実験開始前に較正電圧が記録されており，これを用いて各チャンネルのディジタル量は物理量に変換され，平均化ののち別の磁気テープに記録編集される。

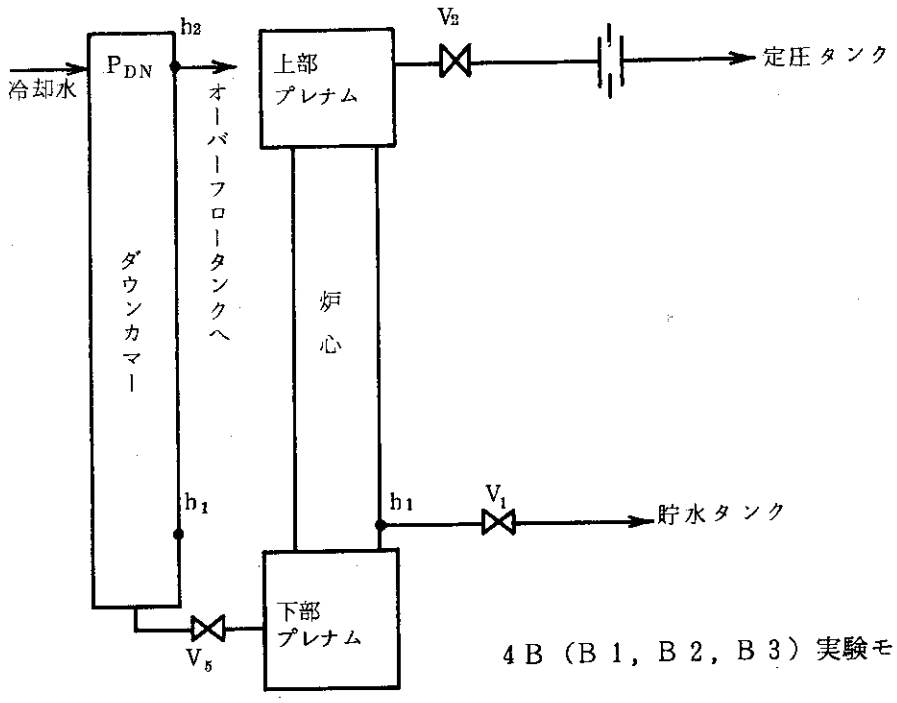
(2) 熱伝達率の計算

編集テープ上の発熱体温度応答データを用いて，熱伝達率が計算される。この計算に用いられた方法を以下に示す。

(a) 形状

本実験で用いた発熱体の形状をFig. 3.2に示す。SUS製のClad の外径は，10.5mm，

B 2モード中で一例だけ初期に炉心を水で満たした状態から実験を行った。これは－B 2モードと名づけた。



4B（B 1，B 2，B 3）実験モード説明図

3. 計測系およびデータ処理

3.1 計測系の概略

本装置の計測点をTable 3.1に，その圧力，差圧への測定位置をFig. 3.1に示す。これら30点の検出信号は，増巾され，ノイズを除去されたのちに，高速収録装置に入力される。入力信号はディジタル化され磁気テープ上に記録される。本シリーズ実験でのデータ集録速度は，4A，4B実験ともに100 Hz／CHである。

3.2 データ処理系の概要

(1) ディジタル量の変換

記録された磁気テープは，原研計算センタにおいて，処理される。テープには実験開始前に較正電圧が記録されており，これを用いて各チャンネルのディジタル量は物理量に変換され，平均化ののち別の磁気テープに記録編集される。

(2) 熱伝達率の計算

編集テープ上の発熱体温度応答データを用いて，熱伝達率が計算される。この計算に用いられた方法を以下に示す。

(a) 形状

本実験で用いた発熱体の形状をFig. 3.2に示す。SUS製のClad の外径は，10.5mm，

Table 3.1 List of Measuring Points and Symbols (Series 4B)

Ch. No.	Symbol	Item	Measuring Point
1	TC3U	Temperature	Heater Rod Surface
2	TC3M		
3	TC3L		
4	TC4		
5	TC5		
6	TD1		
7	TD2		
8	TD3M		
9	TD3L		
10	TF3M		
11	TCST		
12	TH3U	Temperature	Flow Housing
13	TH4		
14	TUG		Upper Plenum (Gas Phase)
15	TUL		Upper Plenum (Liquid Phase)
16	FMDN	Flow Rate	Core Injected Water
17	LDWN	Water Level	Downcomer Overflow Tank
18	PDWN	Pressure	Bottom of Downcomer
19	PPT		Containment
20	PLP		Bottom of Heated Length
21	PUP		Upper Plenum
22	DPL	Differential Pressure	Loop Pressure Difference
23	DPDN		Downcomer Pressure Difference
24	DPTL		Midplane Core Pressure Difference
25	DPTS		Full Core Pressure Difference
26	DPHT		Holdup Tank Pressure Difference
27	DPPM		Orifice Pressure Difference
28	FM	Flow Rate	Supplied Water to Downcomer
29	E	Voltage	Supplied Power
30	I	Current	

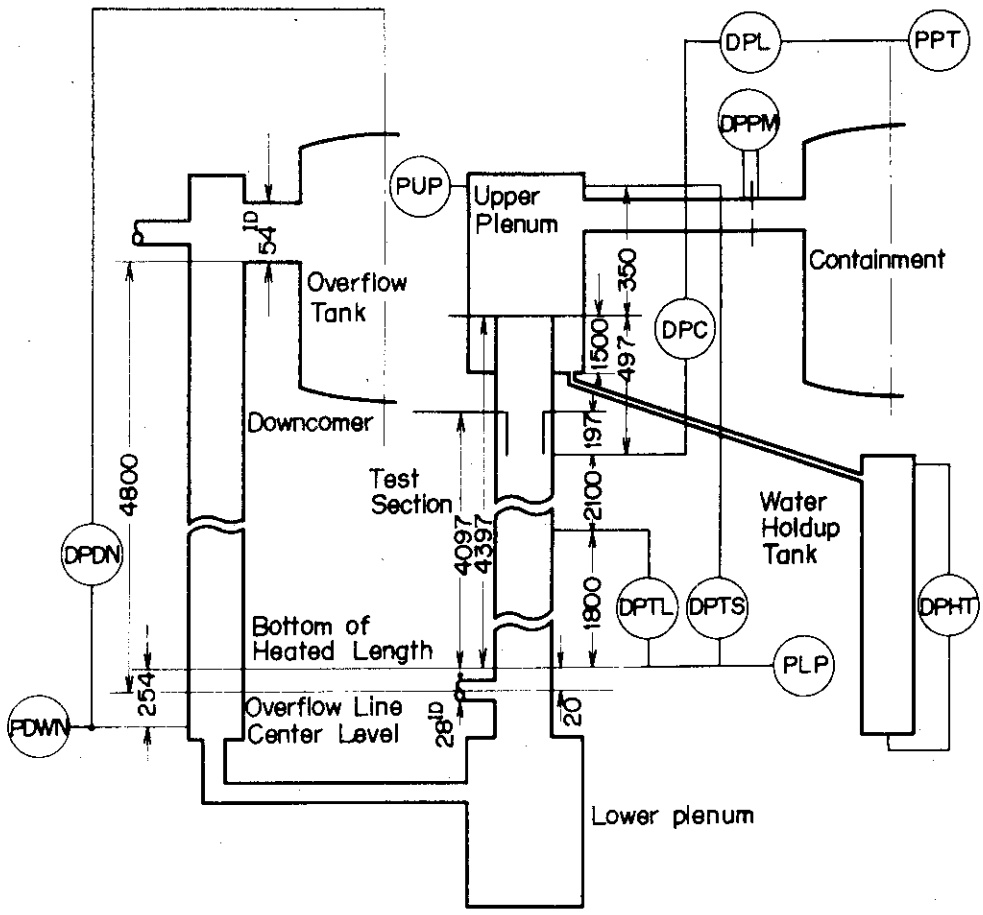


Fig. 3.1 Elevations of Instrumented Locations

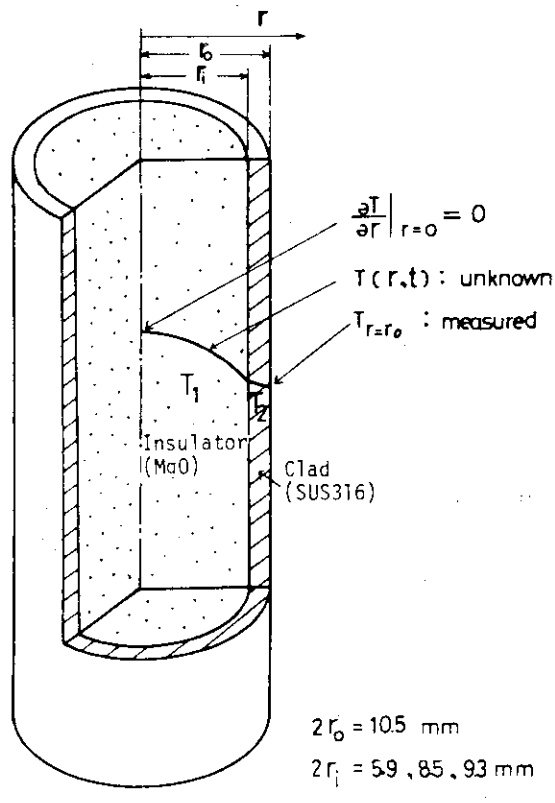


Fig. 3.2 Schematic of Rod and Temperature Profile

内径は軸方向に3種類あり，それぞれ5.3mm，8.5mm，9.3mmである。clad に直接電流を流すことにより発熱させ，肉厚の変化により軸方向に階段状コサイン発熱分布がつくようになっている。

(b) 計算の前提

発熱体の形状が軸対称であることや，clad 肉厚が小さいこと等の理由で，一般に周方向・軸方向の熱移動は，半径方向の熱移動に比し無視し得ると考えられる。したがって，温度分布関数Tは，半径方向位置rと時間tの関数と考えてよい。すなわち，

$$T = T(r, t) \tag{1}$$

ただし，温度が急激に変化するクエンチ点の近傍では，軸方向の熱移動は無視できないと思われるので，厳密には以下の議論はクエンチ点の近傍を除くものとする。

模擬燃料棒内部のマグネシアと外側のclad（SUS 316）との温度伝導率をそれぞれa_M，a_Sとすると，オーダー的には

$$a_M \sim 7\times10^{-4} \quad (m^2/h)$$

$$a_S \sim 1.7\times10^{-2} \quad (m^2/h)$$

であり，clad の温度の伝わり方は内部のマグネシアに比べて，25倍も大きい。マグネシア内の温度分布を$T_1(r, t)$，clad の温度分布を$T_2(r, t)$とすると，T_2 内の温度差 ΔT_2 は，T_1 内での温度差 ΔT_1 に比べて一般的に非常に小さいと言える。ここでは，簡単のため，クラッド内の温度分布$T_2(r, t)$がrによらないと仮定する。すなわち，

$$T_2(r, t) = T_2(t) \tag{2}$$

$$(r_1 \leqq r \leqq r_0)$$

r_1 ： clad の内径

r_0 ： clad の外径

(c) 基礎方程式

マグネシア内での温度分布を$T_1(r, t)$と書くと，発熱部はclad であるので次の熱伝導方程式が成り立つ。

$$(C_P \rho)_1 \frac{\partial T_1}{\partial t} = \lambda_1 \frac{1}{r} \frac{\partial}{\partial r}\left(r \frac{\partial T_1}{\partial r}\right) \tag{3}$$

$$(C_P \rho)_2 V_2 \frac{dT_2}{dt} = -Q_1 S_1 + q'' V_2 - Q_2 S_2 \tag{4}$$

ただし，ここで添字1はマグネシアを，添字2はSUS のcladを示している。

C_P： 定圧比熱

ρ ： 密度

λ ： 熱伝導率

V_2： clad 単位長さ当りの体積

S_1： clad 単位長さ当りの内表面積

q''： clad の熱出力密度

Q_1： clad 発熱部からマグネシアへの熱流束

Q_2： clad 〃 から外側への熱流束

S_2： clad 単位長さ当りの外表面積

(d) 境界条件

(3), (4)式の $T_1(r,t)$, Q, $T_2(t)$ の満たすべき境界条件は，体系の軸対称性から，

$$\left.\frac{\partial T_1(r,t)}{\partial r}\right|_{r=0} = 0 \tag{5}$$

熱流束の保存から，

$$Q_1 = \lambda_1 \left.\frac{\partial T_1}{\partial r}\right|_{r=r_i} \tag{6}$$

また，表面の温度は熱電対により計測されているので，

$$T_2(t) = f(t) : \text{given} \tag{7}$$

(e) 初期条件

発熱体への出力が供給される以前では，テスト部内は熱平衡に達しており，温度は一様であるとみなされる。

$$q = 0, \quad Q_2 = 0, \quad T_1(r,t) = T_2(t) = \text{const} \tag{8}$$

(f) 熱伝達率計算法

(3)式を差分法により解き，(3)～(7)式より T_1, Q_2 が求まる。

熱伝達率 h は　式により定義される。

$$Q_2 = h\,(T_{wall} - T_{sat})$$

T_{wall} ： 発熱体表面温度

T_{sat} ： 水の飽和温度

4. 実験条件

シリーズ4実験の実験パラメータの範囲をTable 4.1，Table 4.2に示す。

現在までに行われて来たシリーズ1，2，3に比へ，次のような特徴がある。

(1) 発熱体にMgOが封入されたことにより，発熱体の熱容量が大きくなった。

(2) 流路壁の熱的影響を減少させるため，初期設定温度は原則として飽和温度＋20℃とした。

(3) 加圧実験（1～4 kg/cm²a）が行われた。

(4) 発熱体の高温化がなされた。

- 初期設定発熱体温度は原則として400℃とした。
- 許容上限表面温度を1000℃とした。

(5) 供給水速度は，従来に比べ低速化され，実炉で想定される値に近づけた。

(6) 一次系抵抗係数は，健全ループ3ループおよび破断ループが有効と想定した時の値を使用した。

(7) 既述のように冷却水注入法を変えた。（ただし，システム効果実験の時）

本シリーズの個々の実験の実験条件の詳細をTable 4.3，Table 4.4に示す。

(d) 境界条件

(3), (4)式の $T_1(r,t)$, Q, $T_2(t)$ の満たすべき境界条件は，体系の軸対称性から，

$$\left.\frac{\partial T_1(r,t)}{\partial r}\right|_{r=0} = 0 \tag{5}$$

熱流束の保存から，

$$Q_1 = \lambda_1 \left.\frac{\partial T_1}{\partial r}\right|_{r=r_i} \tag{6}$$

また，表面の温度は熱電対により計測されているので，

$$T_2(t) = f(t) : \text{given} \tag{7}$$

(e) 初期条件

発熱体への出力が供給される以前では，テスト部内は熱平衡に達しており，温度は一様であるとみなされる。

$$q = 0, \quad Q_2 = 0, \quad T_1(r,t) = T_2(t) = \text{const} \tag{8}$$

(f) 熱伝達率計算法

(3)式を差分法により解き，(3)～(7)式より T_1, Q_2 が求まる。

熱伝達率 h は　式により定義される。

$$Q_2 = h\,(T_{wall} - T_{sat})$$

T_{wall} ： 発熱体表面温度

T_{sat} ： 水の飽和温度

4. 実験条件

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(1) 発熱体にMgOが封入されたことにより，発熱体の熱容量が大きくなった。

(2) 流路壁の熱的影響を減少させるため，初期設定温度は原則として飽和温度＋20℃とした。

(3) 加圧実験（1～4 kg／cm^2a）が行われた。

(4) 発熱体の高温化がなされた。

- 初期設定発熱体温度は原則として400℃とした。
- 許容上限表面温度を1000℃とした。

(5) 供給水速度は，従来に比べ低速化され，実炉で想定される値に近づけた。

(6) 一次系抵抗係数は，健全ループ3ループおよび破断ループが有効と想定した時の値を使用した。

(7) 既述のように冷却水注入法を変えた。（ただし，システム効果実験の時）

本シリーズの個々の実験の実験条件の詳細をTable 4.3，Table 4.4に示す。

TABLE 4.1 Parameters of Constant Injection Test Run Conditions

Series Number	Pressure (kg/cm^2)	Peak Power (kW/m)	Initial Heater Rod Temperature (°C)	Injection Rate (cm/s)	Coolant Temp.(°C)	Average Housing Temp. (°C)
1	1	1.8∿4	300	6∿16	50∿90	300
2A	1	1.8∿2.8	300∿500	4∿12	50∿90	150∿400
3A	1	1.4∿2.6	350∿550	5∿12	50∿80	300∿400
4A	1∿4	1.7∿2.8	300∿400	2∿10	50∿100	120∿400

TABLE 4.2 Parameters of System Effect Test

Series Number	Injection Mode	Pressure (kg/cm^2)	Peak power (kW/m)	Heat Rod Temperature (°C)		Injection Rate(cm/s)	Coolant Temp(°C)	Average Housing Temp(°C)	K-Factor Ratio(1)
				Initial	Maximum				
2B	Constant head downcomer is full initially	1∿1.5	0.34∿1.6	295∿400	600	13	50 70 80	300	1.25∿1.70
3B	Ditto	1∿2	0.4∿1.9	300∿550	800	5∿10	50 80	120∿300	2.4∿7.4
4B	Downcomer is empty initially	1∿4.5	1.4∿2.8	300∿600	1000	5∿10	50 80 90 100 120	120∿160	0.7∿0.9

(1) K-FACTOR RATIO is defined as follows; K-FACTOR of JAERI test rig/K-FACTOR of typical PWR

Table 4.3 Run-Conditions Summary of Constant Injection Test

Run No.	Peak Power (kW/m)	Inlet Water Temp. (°C)	Inlet Water Velocity (cm/s)	Initial Rod Temp. (°C)	Flow Housing Temp. (°C)	System Pressure (kg/cm^2)	Run Date
4201	0	30	10	30	30	1	510622-1-3
4202	0	35	2	30	30	1	510622-1-4
4203	0	80	8	100	100	1	510622-1-5
4204	0	60	6	120	120	1	510622-1-13
4205	0	50	6	80	80	4.5	510623-1-3
4206	1.7	54	8	400	120	1	510622-1-6
4207	1.7	80	8	400	120	1	510618-1-3
4208	1.7	56	6	400	120	1	510622-1-15
4209	1.7	54	6	400	120	1	510622-1-7
4210	1.7	80	6	400	120	1	510618-1-4
4211	1.7	50	4	400	120	1	510622-1-8
4212	1.7	80	4	400	120	1	510618-1-5
4213	1.7	80	2.5	400	120	1	510618-1-9
4214	1.7	80	2	400	120	1	510618-1-8
4215	2.2	53	8	400	120	1	510622-1-9
4216	2.2	80	8	400	120	1	510618-1-10
4217	2.8	50	6	400	120	1	510622-1-10
4218	2.2	80	6	400	120	1	510618-1-12
4219	2.2	53	4	400	120	1	510622-1-11
4220	2.2	80	4	400	120	1	510618-1-13
4221	2.2	56	2.5	400	120	1	510622-1-12
4222	2.2	80	2.5	400	120	1	510618-1-14
4223	2.2	80	6	400	130	2	510623-1-6
4224	2.2	80	6	400	130	4	510623-1-7
4225	2.2	93	6	400	130	2	510623-1-8
4226	2.2	102	6	400	160	4	510623-1-9

Table 4.4 Run Conditions Summary of System Effect Test

Run No.	Peak Power (kW/m)	Inlet Water Temp. (°C)	Supply Water Velocity (cm/s)	Initial Rod Temp. (°C)	Flow Housing Temp. (°C)	System Pressure (kg/cm^2)	Run Mode	Run Date
4501	0	80	-	80	80	1		510628-1-12
4502	0	80	5	80	80	1	B1	510628-1-13
4503	0	80	5	60	60	1	B2	510714-1-3
4504	0	80	5	60	60	1	B2	510714-1-4
4505	1.4	80	5	400	120	1	B1	510628-1-15
4506	1.4	50	5	500	120	1	B2	510707-1-3
4507	1.4	50	5	600	120	1	B2	510707-1-4
4508	1.7	80	10	400	120	1	B2	510714-1-5
4509	1.7	50	5	400	120	1	B2	510706-1-17
4510	1.7	80	5	400	120	1	B2	510706-1-3
4511	1.7	90	5	400	120	1	B2	510706-1-11
4512	1.7	50	5	500	120	1	B2	510706-1-18
4513	1.7	80	5	500	120	1	B2	510628-1-22
4514	1.7	80	5	500	120	1	B2	510628-1-24
4515	1.7	90	5	500	120	1	B2	510707-1-12
4516	1.7	80	5	600	120	1	B2	510628-1-23
4517	1.9	80	5	300	120	1	B2	510706-1-14
4518	1.9	50	5	400	120	1	B2	510706-1-19
4519	1.9	80	5	400	120	1	B2	510706-1-13
4520	2.0	55	5	110	120	1	-B2	510707-1-9
4521	2.0	50	5	300	120	1	B2	510707-1-8
4522	2.0	95	5	400	120	1	B2	510707-1-10
4523	2.0	80	5	400	120	1	B2	510706-1-12
4524	2.2	80	10	400	120	1	B2	510714-1-6
4525	2.2	80	5	300	120	1	B2	510706-1-11
4526	2.2	80	5	350	120	1	B2	510706-1-10
4527	2.2	50	5	400	120	1	B2	510707-1-3
4528	2.2	80	5	400	120	1	B1	510628-1-16
4529	2.2	80	5	400	120	1	B1	510628-1-20
4530	2.2	80	5	400	120	1	B2	510628-1-19
4531	2.2	80	5	400	120	1	B2	510706-1-8
4532	2.5	50	5	300	120	1	B2	510706-1-7
4533	2.8	80	5	500	120	1	B3	510528-1-21
4534	1.7	80	5	400	140	2	B2	510714-1-7
4535	1.7	100	5	400	140	2	B2	510714-1-20
4536	1.7	100	5	400	140	4	B2	510714-1-22
4537	1.7	80	5	400	160	4	B2	510714-1-15
4538	1.7	100	5	400	160	4	B2	510714-1-23
4539	2.2	80	5	400	140	2	B2	510714-1-11
4540	2.2	80	5	400	140	4	B2	510714-1-14
4541	2.2	105	5	400	140	2	B2	510714-1-21
4542	2.2	120	5	400	160	4	B2	510714-1-24

5. データ集

本報告書の本文の後に，得られた生データや発熱表面体熱伝達率の計算結果を図示する。1つの実験データは4ページより構成されている。

5.1 実験条件・温度プロフィール

1ページ目の上部に実験条件を示す。中央部のTemperature Profileには，発熱体各部の表面温度（初期温度，ターンアラウンド温度，クエンチ温度）やその時刻（ターンアラウンド時刻，クエンチ時刻）を示す。ただし，時刻で0.0（sec）とあるのは実験中では，まだクエンチあるいはターンアラウンドには至っていないことを示す。なお，クエンチの定義は，本報告では，次式によっている。

$$Q_{quench} = 2\times10^{5}\ \ kcal/m^{2}hr$$

すなわち表面熱流束が2×10^{5}kcal/m^{2}hrを越える点をクエンチ点とし，その時の温度・時刻ををそれぞれクエンチ温度・クエンチ時刻とした。

1ページ目の下部に上記のクエンチ時刻を高さ位置に対してプロットしたものを示す。横軸がクエンチ時刻（秒）である。

5.2 温度・圧力等データ

2ページ目に温度・圧力・流量・電流の生データを示す。

図中に用いられている測定点の記号については，3章を参照のこと。計測データは，1実験につき4枚の図にまとめられている。横軸は，いずれの図においても，注水開始後の時間（sec）である。4図のうち，1 of 4は発熱体の温度応答を示し，縦軸は温度（℃）である。
2 of 4は，発熱体以外の温度で，縦軸は前図と同様である。3 of 4と4 of 4は，装置各部の圧力，差圧，ダウンカマあいはテスト部への注水流量および発熱体の供給電流である。縦軸はそれぞれ，水頭（cm_{aq}），水頭差（cm_{aq}），テスト部換算流速（cm/sec），電流(A)を示す。

5.3 発熱体熱伝達挙動図

3.4ページ目に熱伝達挙動図を示す。

熱伝達挙動図には$q-\Delta_{sat}$曲線と，熱伝達応答の2種類がある。

$q-\Delta_{sat}$曲線の，縦軸は，発熱体温度応答より計算された表面熱流束（kcal/m^{2}hr）であり，横軸は壁過熱度（ΔT_{sat}：℃）である。但し，$\Delta T_{sat}=T_{w}-T_{sat}$であり，$T_{w}$：壁温，$T_{sat}$：コンテナ圧力における飽和温度を示す。両軸ともlogスケールである。

熱伝達率応答の，縦軸は，熱伝達率（$q/\Delta T_{sat}$：kcal/m^{2} hr ℃）であり，横軸は注水開始後の時間（sec）である。

注目した温度応答の測定位置を，図の右上に記号で示す。

6. あとがき

差圧に関する情報が増加したため，蒸気流量やテスト部内液位やその他の冷却水の挙動をより詳細に知ることができた。しかし，計測点が３０点に限られているために，流路外管温度等の計測点は逆に少くなった。現在，計測チャンネルの増設工事が行なわれており，計測チャンネルの不足は，今後の実験では解消され，テスト部内ボイド率分布等，さらに多くの情報が得られるものと思われる。

参 考 文 献

(1) Murao, Y., Iguchi, T., Sudoh, T., Sudo, Y., Sugimoto, J., Niitsuma, Y., Fukaya, Y., and Hirano, K. "Report on Reflood Series 1 Experiment", JAERI-M 6551, (June, 1976).

(2) Murao, Y., Iguchi, T., Sudoh, T., Sudo, Y., Sugimoto, J., Niitsuma, Y., Fukaya, Y., and Hirano, K. "Report on Series 2A Reflood Experiment", JAERI-M 6787, (November, 1976).

(3) Murao, Y., Iguchi, T., Sudoh, T., Sudo, Y., Sugimoto, J., Niitsuma, Y., Fukaya, Y., and Hirano, K. "Report on Series 2B Reflood Experiment", JAERI-M 6788, (December, 1976).

(4) Murao, Y., Iguchi, T., Sudoh, T., Sudo, Y., Sugimoto, J., Niitsuma, Y., Fukaya, Y., and Hirano, K. "Report on Series 3 Reflood Experiment", JAERI-M 6981, (March, 1977).

(5) Murao, Y., Iguchi, T., Sudoh, T., Sudo, Y., Sugimoto, J., Niitsuma, Y., Fukaya, Y., and Hirano, K. "Report on Series 4 Reflood Experiment" JAERI-M 6982 (March, 1977).

(6) Murao, Y., Iguchi, T., Sudoh, T., Sudo, Y., Niitsuma, Y., Fukaya, Y., and Hirano, K. "Reflooding Experimental Program and Summary of Series 1 Experiments" (March, 1975).

(7) Murao, Y., Iguchi, T., Sudoh, T., Sudo, Y., Sugimoto, J., Niitsuma, Y., Fukaya, Y., and Hirano, K. "Reflooding Test Data Report-I (Series 2A)", (November, 1975).

(8) Murao, Y., Iguchi, T., Sudoh, T., Sudo, Y., Sugimoto, J., Niitsuma, Y., Fukaya, Y., and Hirano, K. "Reflooding Test Data Report-II (Series 2B)", (November, 1975).

(9) Murao, Y., Iguchi, T., Sudoh, T., Sudo, Y., Sugimoto, J., Niitsuma, Y., Fukaya, Y., and Hirano, K., "Reflooding Test 2A Data Report (Heat Flux and Heat Transfer Coefficient)", (March, 1976).

(10) Murao, Y., Iguchi, T., Sudoh, T., Sudo, Y., Sugimoto, J., Niitsuma, Y., Fukaya, Y., and Hirano, K., "Reflooding Test Data Report (Series 1)", (March 1976).

****
* RUN NO. 4206 *
****

(DATE * 510622 - 1 - 6)

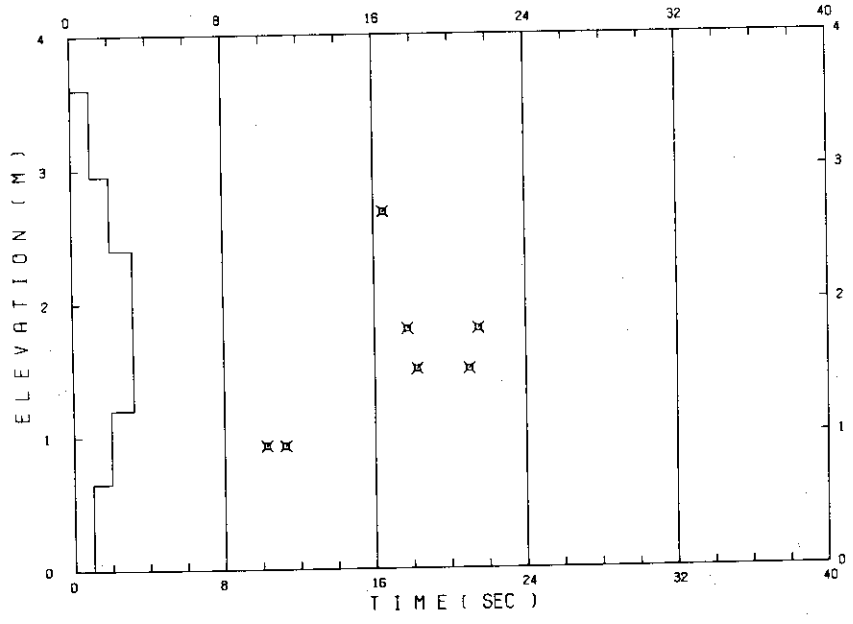
RUN CONDITIONS

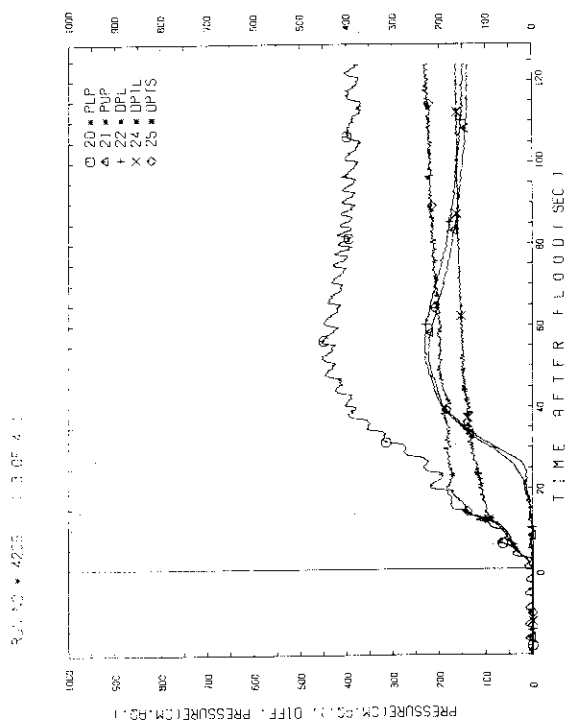
PEAK POWER	1.6	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	58	.C
INLET WATER VELOCITY	8	CM/SEC

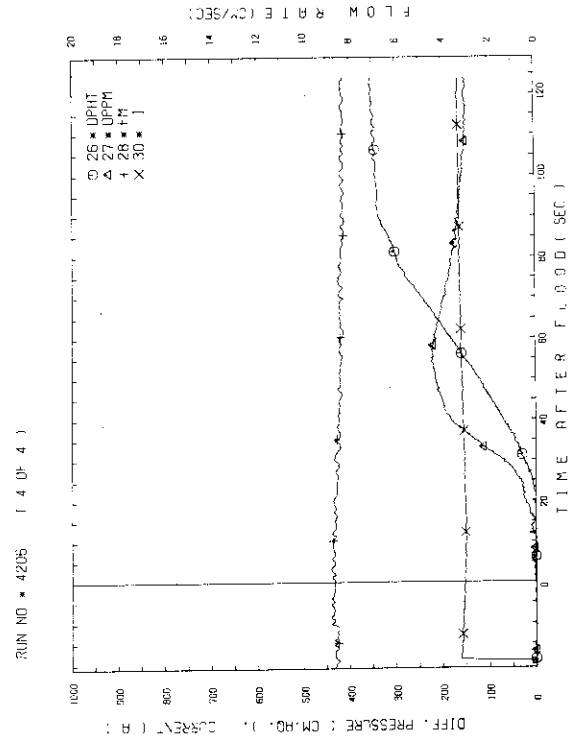
TEMPERATUR PROFILE

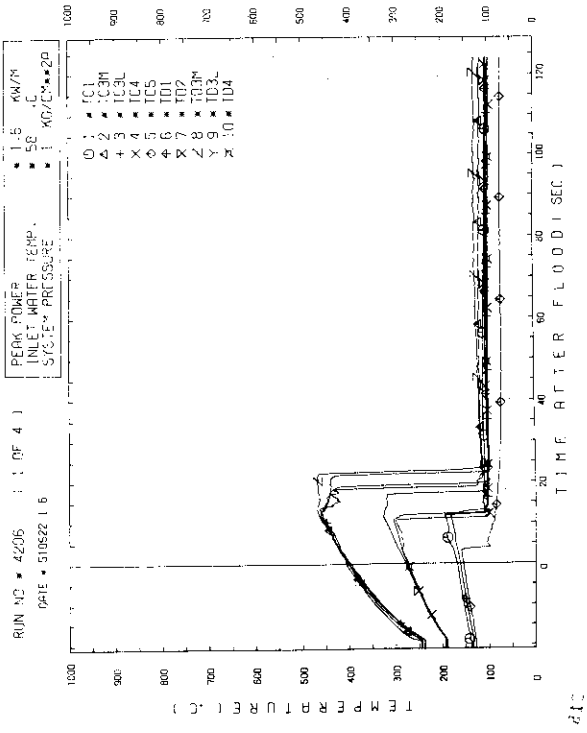
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
2	TC3M	402.	13.25	463.	17.75	425.
3	TC3L	396.	14.75	459.	18.25	433.
4	TC4	274.	10.50	300.	10.25	299.
7	TD2	277.	11.50	326.	16.50	319.
8	TD3M	407.	19.75	469.	21.50	468.
9	TD3L	401.	18.50	461.	21.00	437.
10	TD4	274.	10.75	304.	11.25	297.

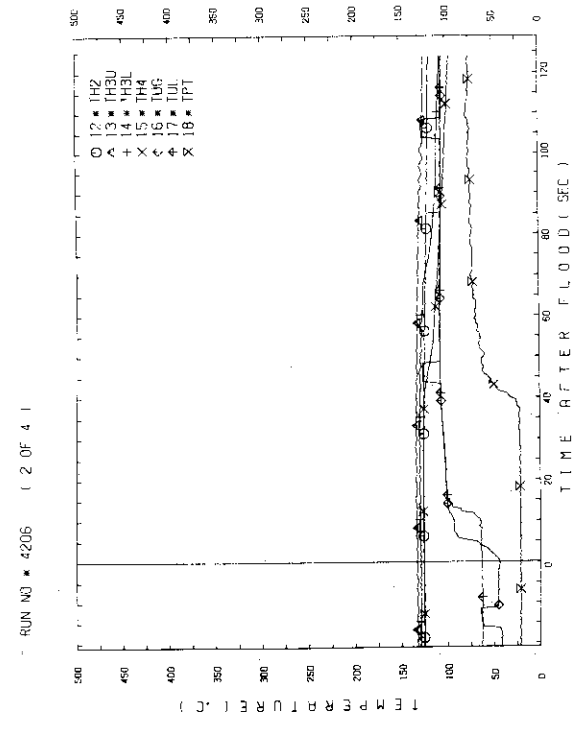
RUN NO. 4206 DATE * 510622-1-6

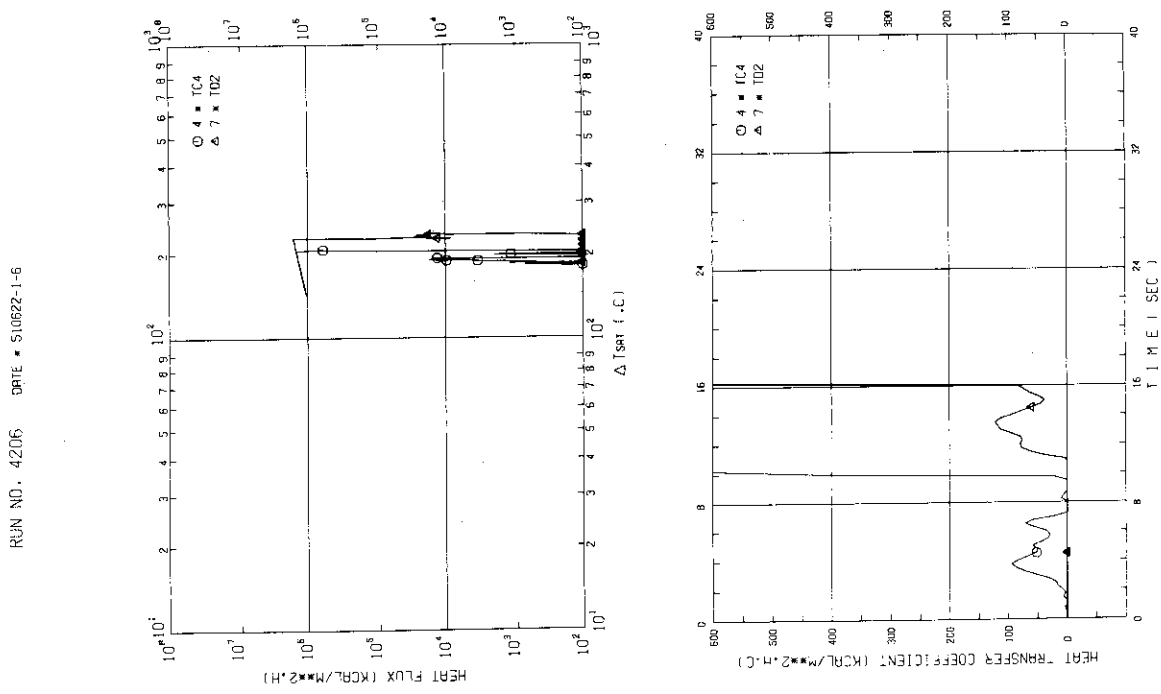


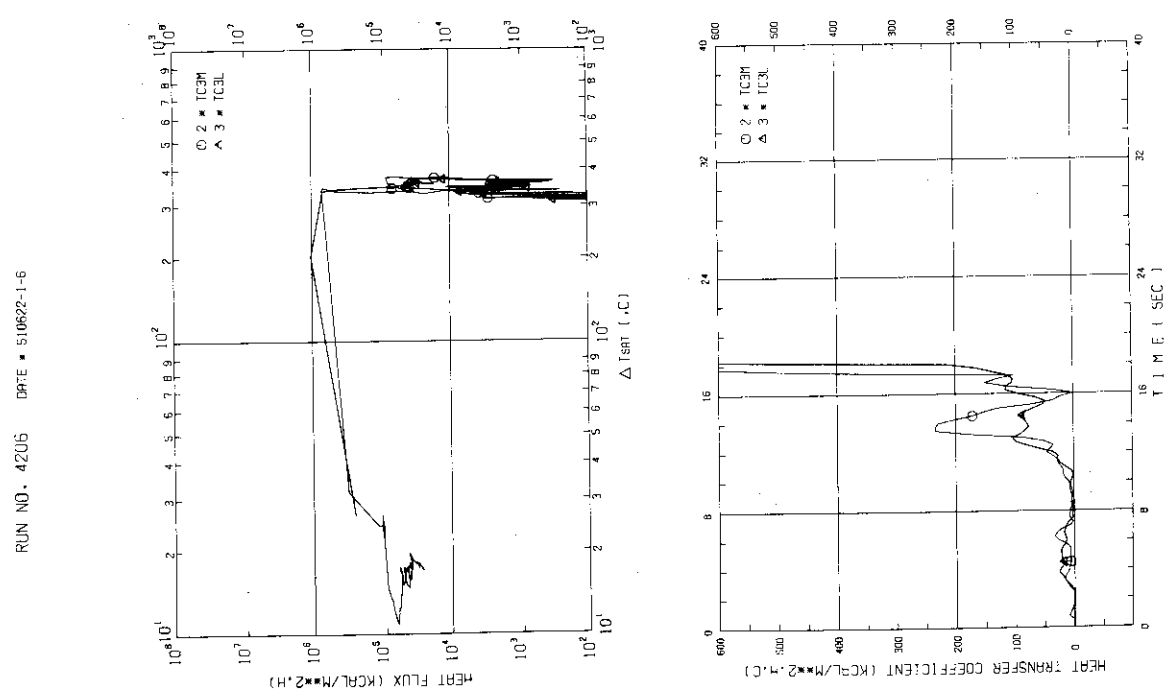

20 * PLP
21 * PUP
22 * DPL
24 * DP1L
25 * DP1S
TIME AFTER FLOOD(SEC)
DIFF. PRESSURE(CM.AQ.)

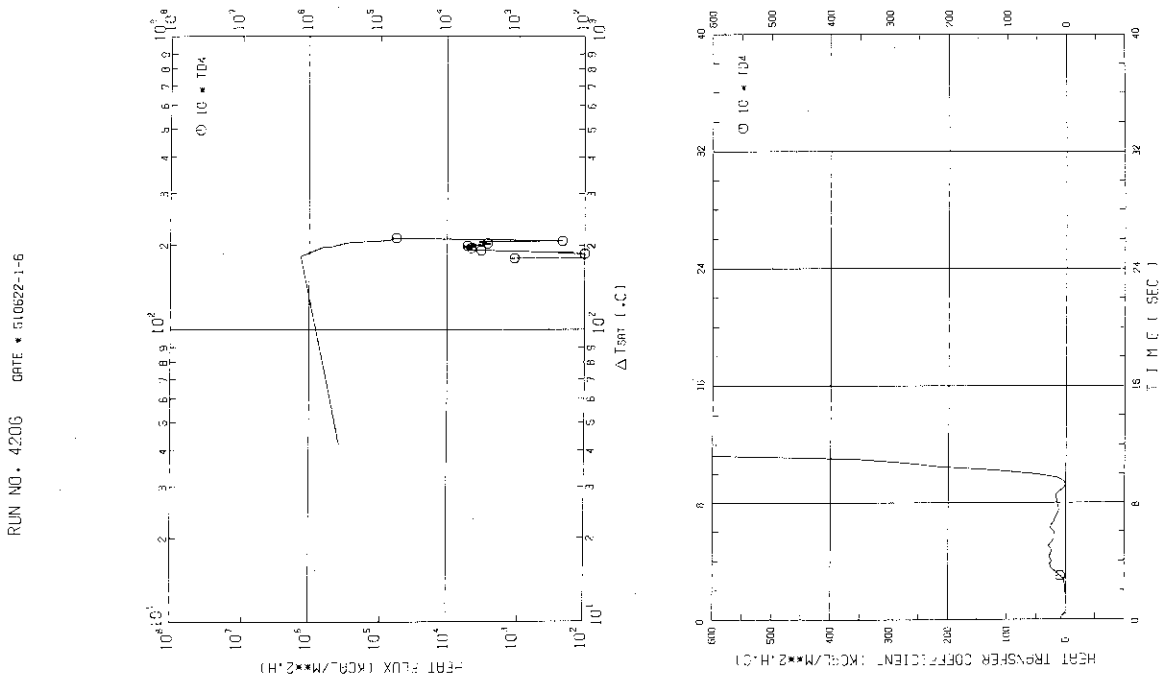

26 * DPHT
27 * DPPM
28 * FM
30 * T
FLOW RATE (CM/SEC)
TIME AFTER FLOOD(SEC)
DIFF. PRESSURE (CM.AQ.)

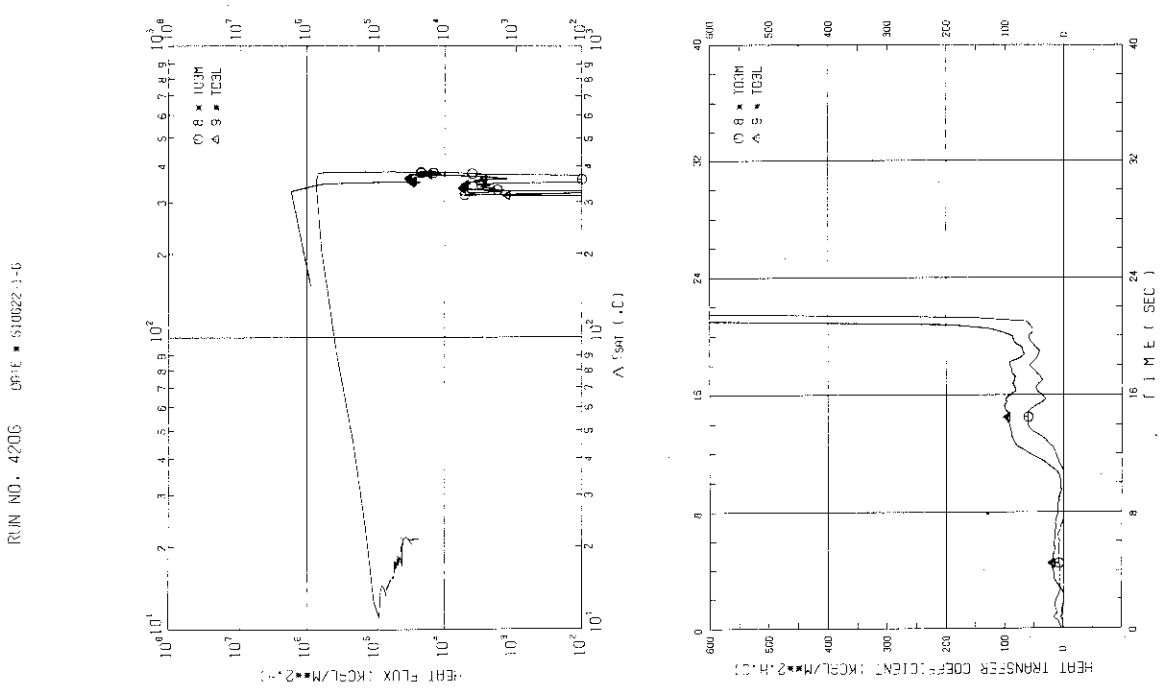

RUN NO = 4206 (1 OF 4)
DATE = 910822 16
PEAK POWER = 1.6 MW/M
INLET WATER TEMP. = 56 C
SYSTEM PRESSURE = 1 KG/CM**2G
1 TC1
2 TC3M
3 TC3L
4 TC4
5 TC5
6 TD1
7 TD2
8 TD3M
9 TD3L
10 TD4
TIME AFTER FLOOD(SEC)
TEMPERATURE (C)


RUN NO = 4206 (2 OF 4)
12 * TH2
13 * TH3U
14 * TH3L
15 * TH4
16 * TW5
17 * TUL
18 * TPT
TIME AFTER FLOOD(SEC)
TEMPERATURE (C)


RUN NO. 4206 DATE = 510622-1-6
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 4 = TC4
△ 7 = TD2
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4205 DATE = 510622-1-6
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 2 = TC3M
△ 3 = TC3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4206 DATE = 910622-1-6
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4206 DATE = 910622-1-6
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

****
* RUN NO. 4207 *
****

(DATE = 510618 - 1 - 3)

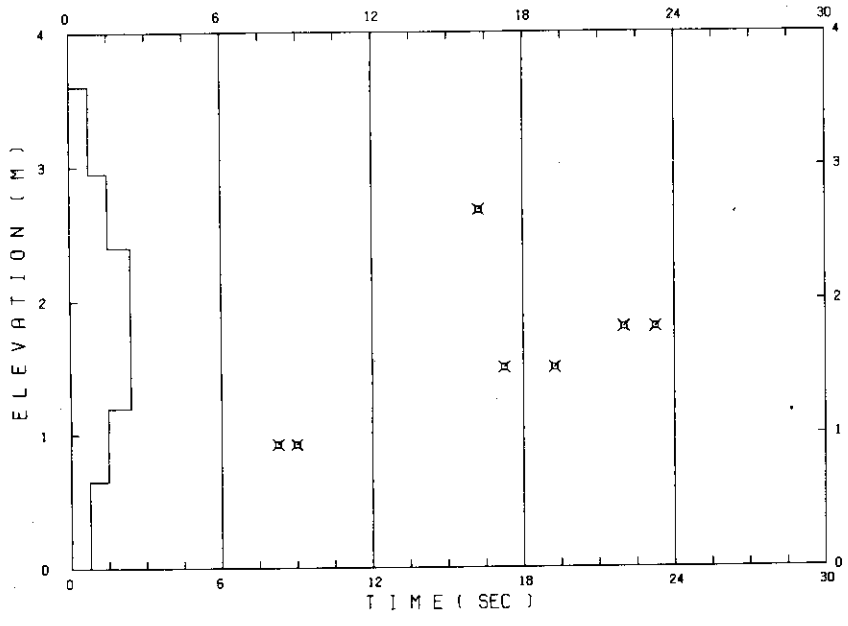
RUN CONDITIONS

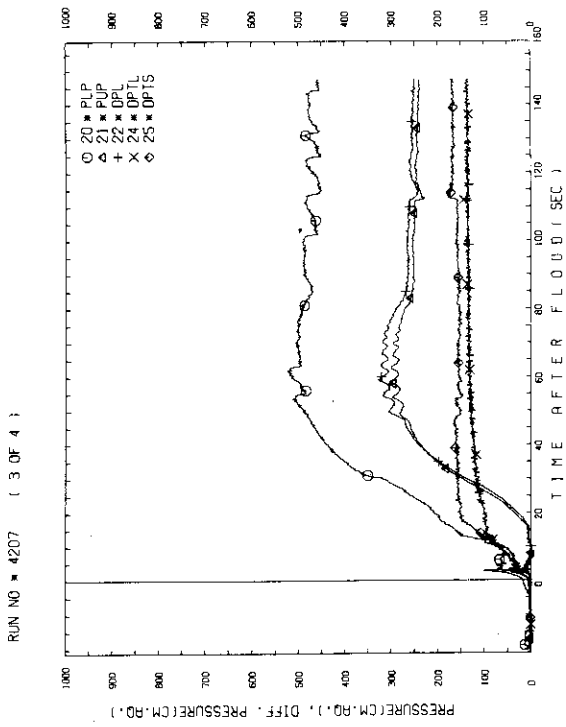
PEAK POWER	1.6	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	80	.C
INLET WATER VELOCITY	8	CM/SEC

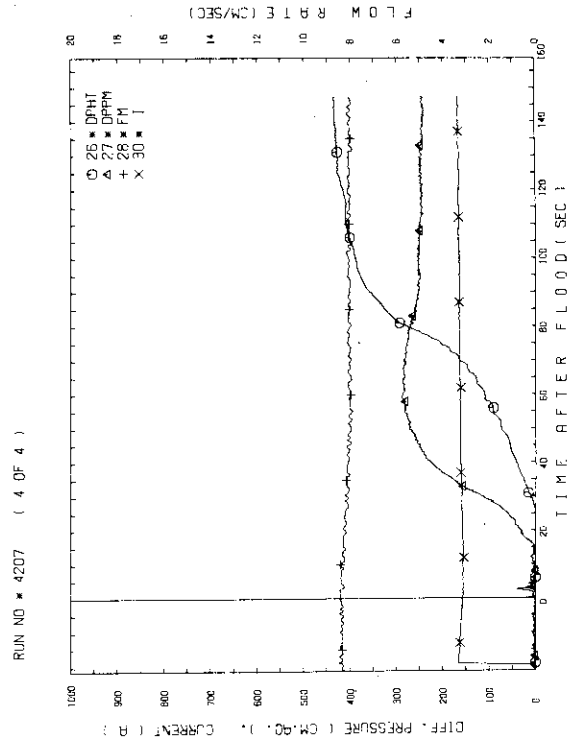
TEMPERATUR PROFILE

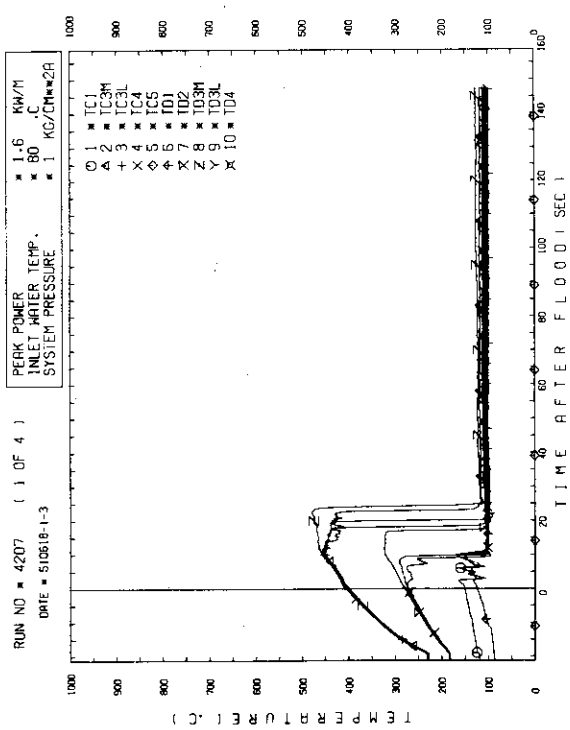
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
2	TC3M	399.	10.50	452.	22.00	431.
3	TC3L	404.	11.75	455.	17.25	439.
4	TC4	271.	6.25	276.	8.25	248.
7	TD2	279.	12.00	324.	16.25	320.
8	TD3M	406.	22.25	479.	23.25	474.
9	TD3L	406.	10.50	457.	19.25	435.
10	TD4	275.	8.00	291.	9.00	286.

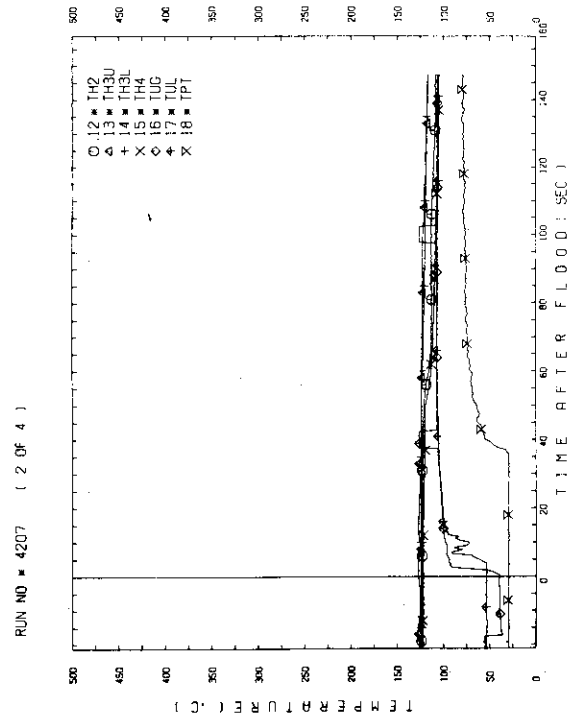
RUN NO. 4207 DATE = 510618-1-3

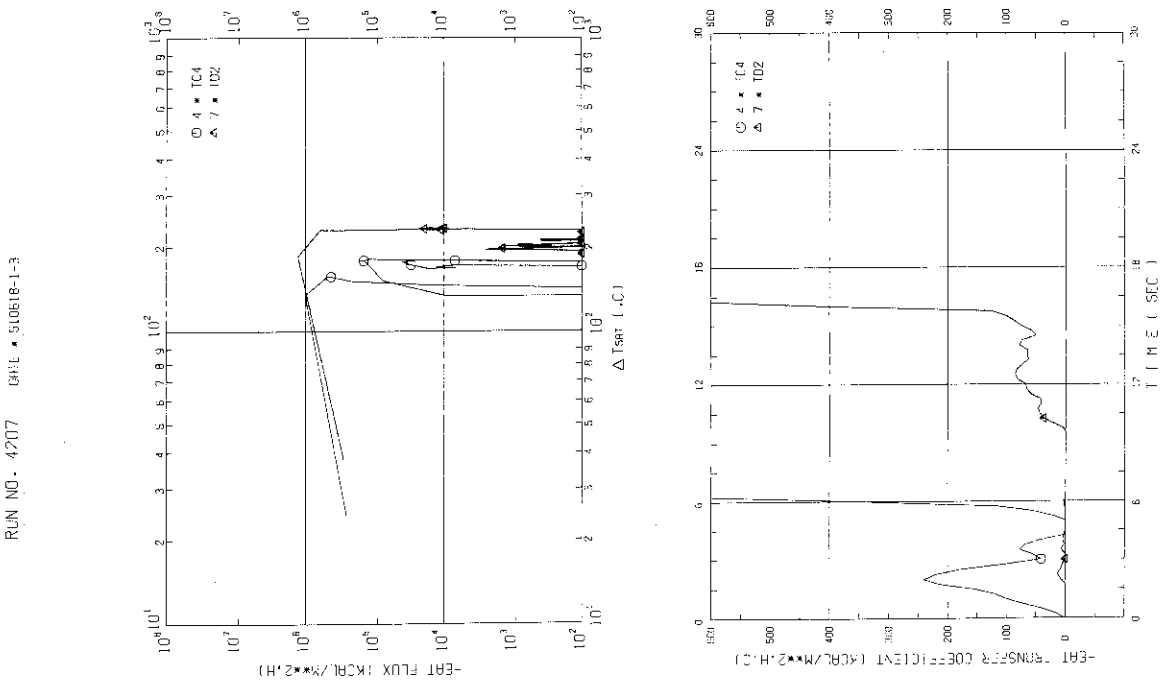


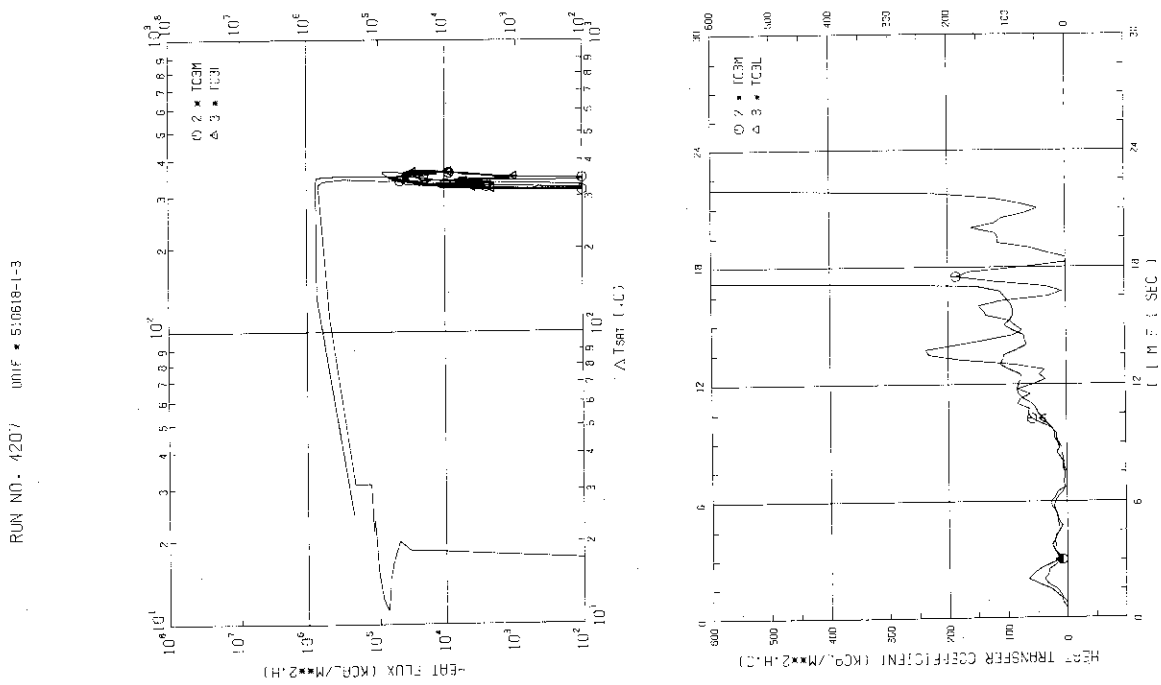

RUN NO = 4207 (3 OF 4)
20 = PLP
21 = PUP
22 = DPL
24 = DPTL
25 = DPTS
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD(SEC)

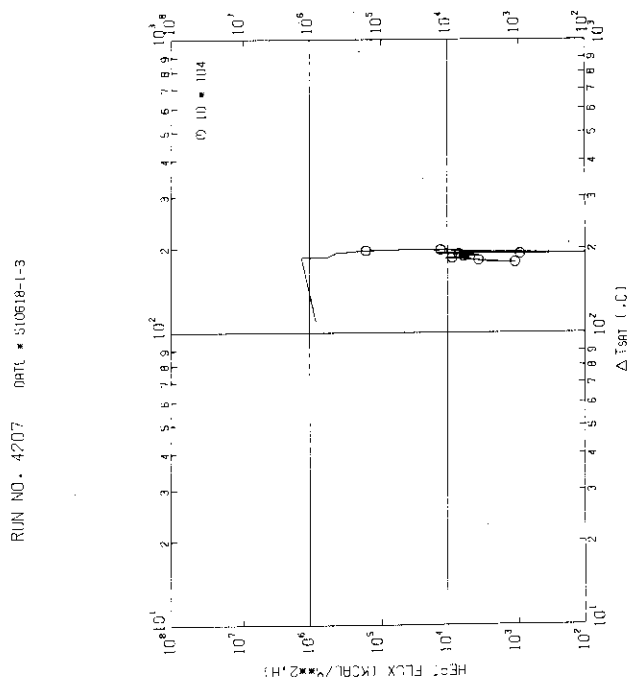

RUN NO = 4207 (4 OF 4)
26 = DPHT
27 = DPPM
28 = FM
30 = I
FLOW RATE (CM/SEC)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
TIME AFTER FLOOD(SEC)

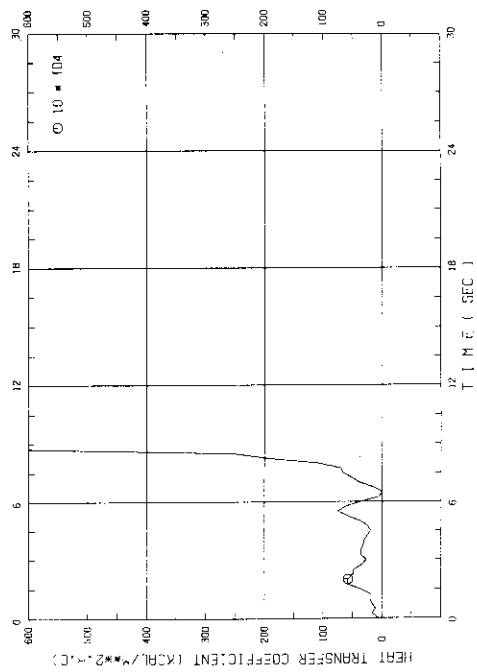

RUN NO = 4207 (1 OF 4)
DATE = 510618-1-3
PEAK POWER * 1.6 MW/M
INLET WATER TEMP. * 80 .C
SYSTEM PRESSURE * 1 KG/CM**2A
1 = TC1
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
7 = TD2
8 = TD3M
9 = TD3L
10 = TD4
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)

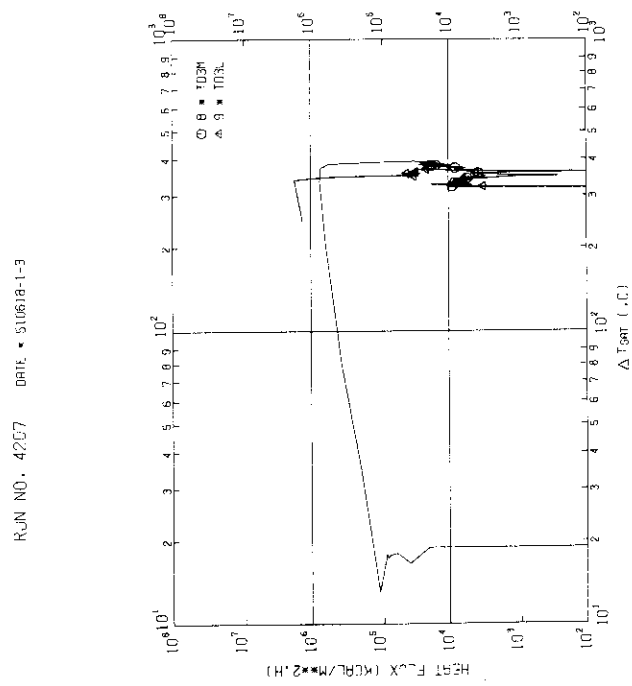

RUN NO = 4207 (2 OF 4)
12 = TH2
13 = TH3U
14 = TH3L
15 = TH4
16 = TUG
17 = TUL
18 = TPT
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)

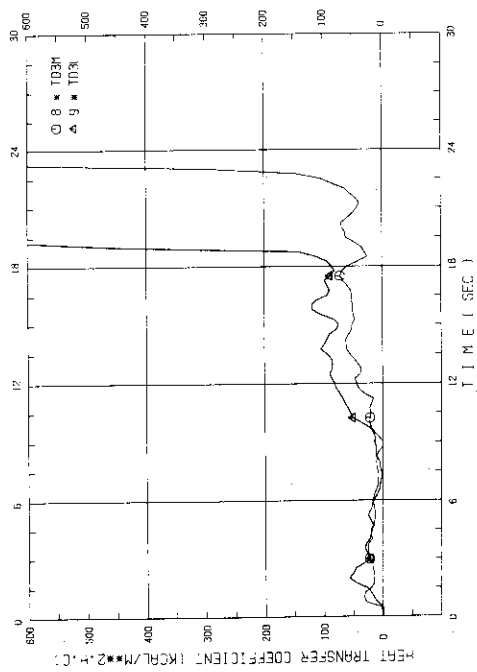

RUN NO- 4207
TIME = 510618-1-3
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 4 × TC4
△ 7 × TD2
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO- 4207
TIME = 510618-1-3
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 2 × TC3M
△ 3 × TC3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4207 DATE = 910618-1-3
○ 10 = 104
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)


○ 10 = 104
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4207 DATE = 910618-1-3
○ 8 = TD3M
△ 9 = TD3L
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)


○ 8 = TD3M
△ 9 = TD3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

****
* RUN NO. 4208 *
****

(DATE * 510622 - 1 -15)

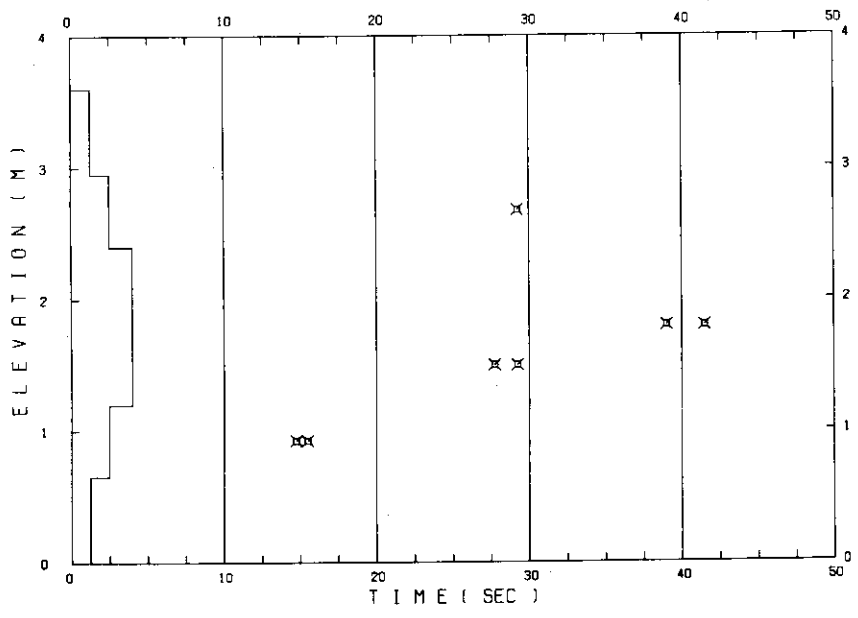
RUN CONDITIONS

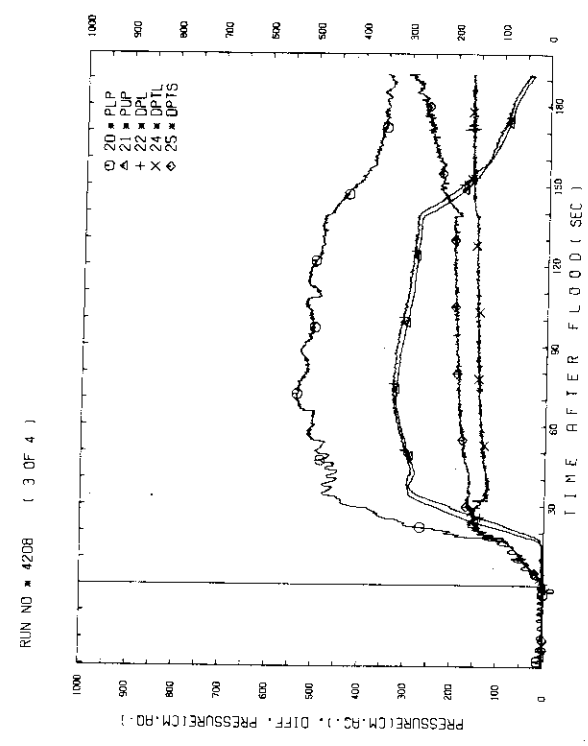
PEAK POWER	1.6	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	65	.C
INLET WATER VELOCITY	6	CM/SEC

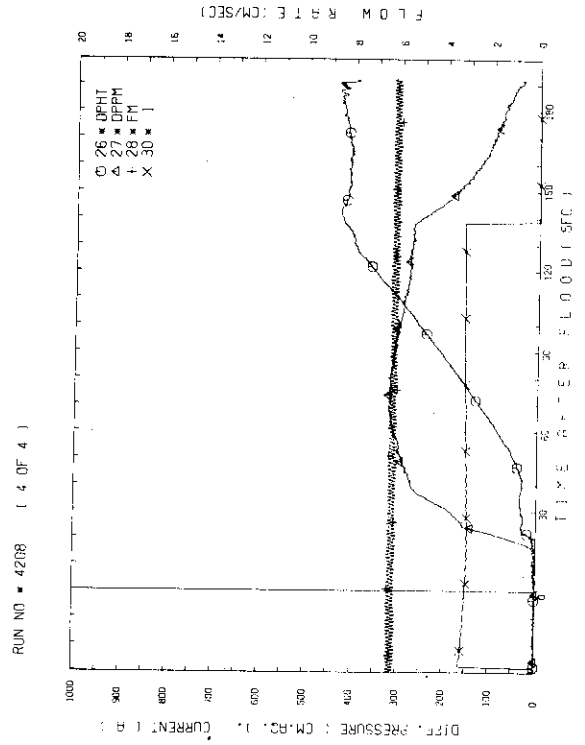
TEMPERATUR PROFILE

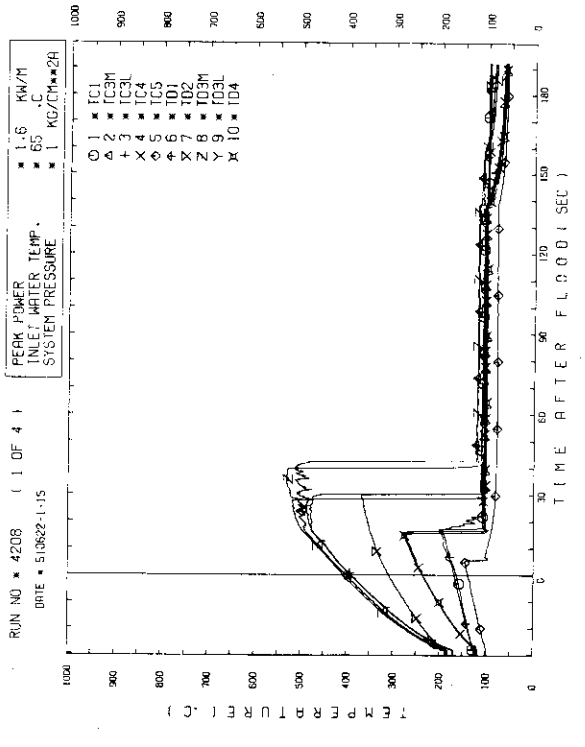
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
2	TC3M	399.	35.50	514.	41.50	497.
3	TC3L	392.	24.50	489.	27.75	484.
4	TC4	237.	14.75	274.	14.75	274.
7	TD2	310.	29.25	370.	29.25	370.
8	TD3M	409.	34.50	532.	39.00	530.
9	TD3L	391.	24.50	481.	29.25	473.
10	TD4	237.	15.25	278.	15.50	276.

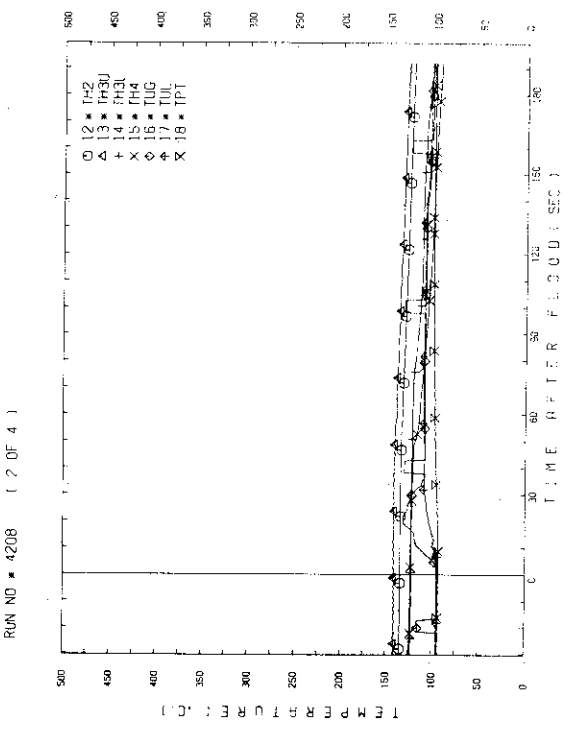
RUN NO. 4208 DATE * 510622-1-15

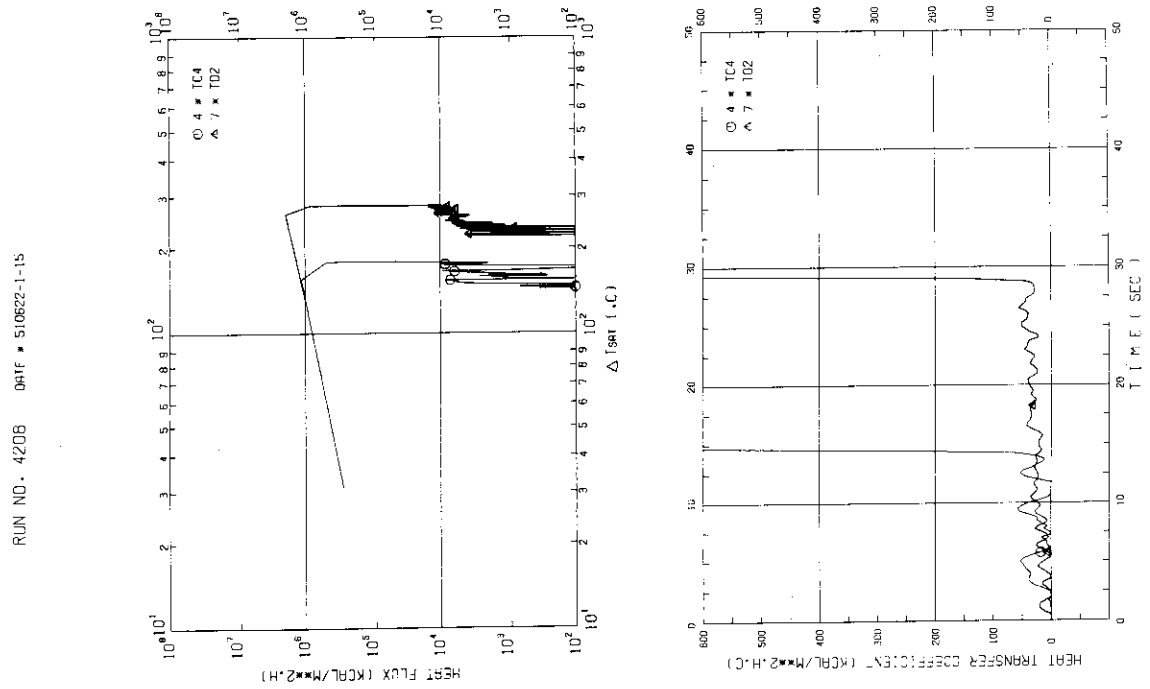


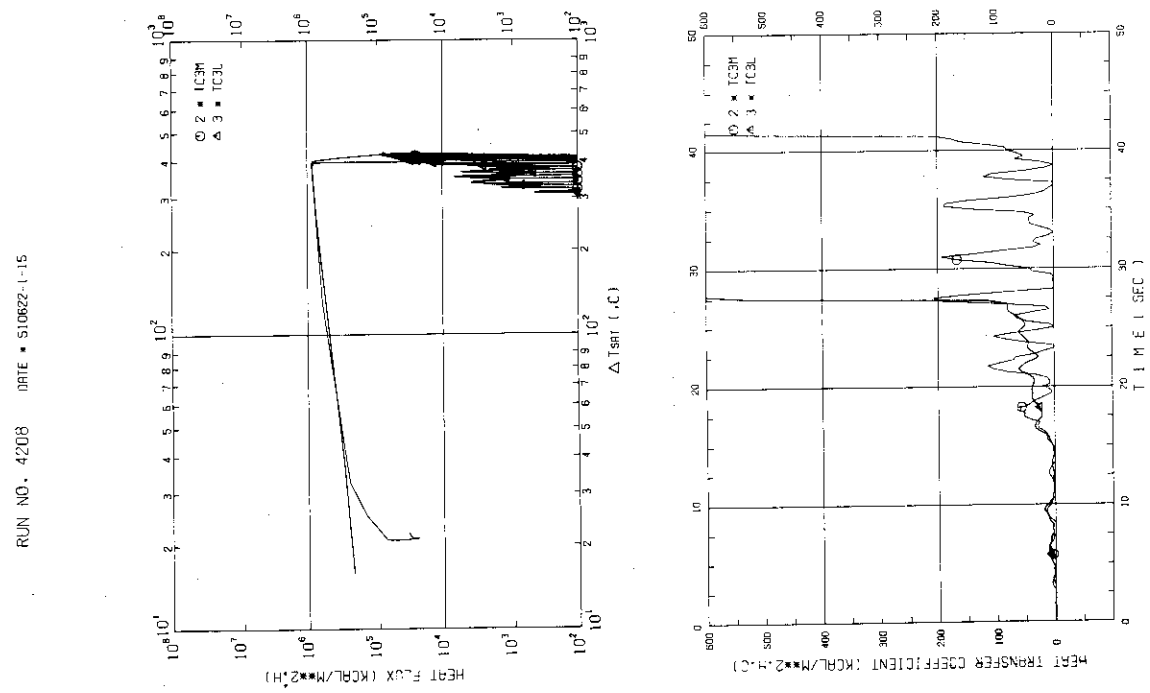

RUN NO = 4208 (3 OF 4)
PRESSURE(CM.AQ.). DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD(SEC)
20 = PLP
21 = PUP
22 = DPL
24 = DPTL
25 = DPTS

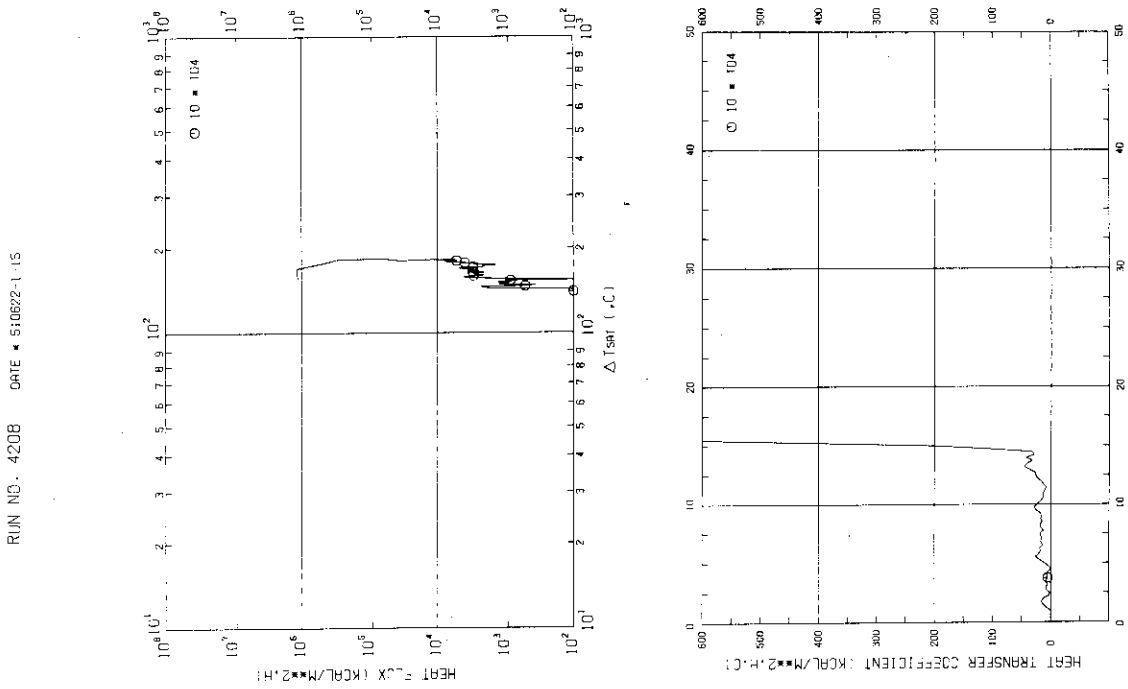

RUN NO = 4208 (4 OF 4)
DIFF. PRESSURE (CM.AQ.). CURRENT (A)
FLOW RATE (CM/SEC)
TIME AFTER FLOOD(SEC)
26 = DPHT
27 = DPPM
28 = FM
30 = I

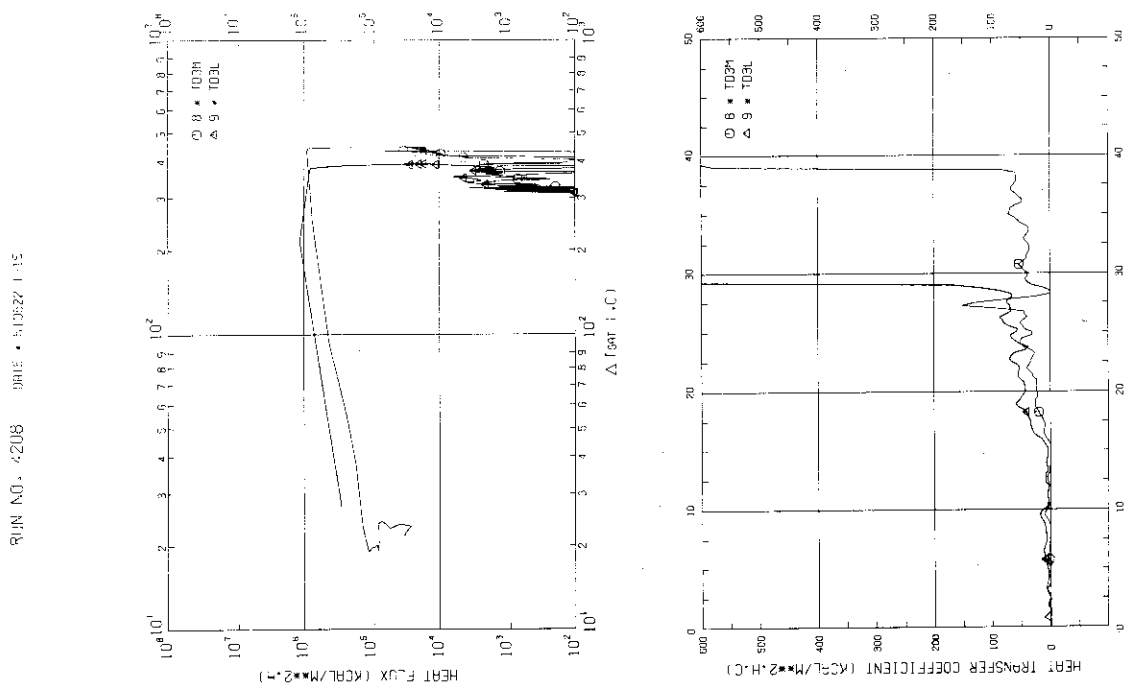

RUN NO = 4208 (1 OF 4)
DATE = 5/3622-1-15
PEAK POWER = 1.6 KW/M
INLET WATER TEMP. = 65 .C
SYSTEM PRESSURE = 1 KG/CM**2A
1 = TC1
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
7 = TD2
8 = TD3M
9 = TD3L
10 = TD4
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO = 4208 (2 OF 4)
12 = TH2
13 = TH3U
14 = TH3L
15 = TH4
16 = TUG
17 = TUL
18 = TPT
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO. 4208 DATE = 510622-1-15
Φ 4 × TC4
Δ 7 × TD2
ΔTsat (°C)
HEAT FLUX (KCAL/M**2·H)
HEAT TRANSFER COEFFICIENT (KCAL/M**2·H·C)
TIME (SEC)


RUN NO. 4208 DATE = 510622-1-15
Φ 2 × TC3M
Δ 3 × TC3L
ΔTsat (°C)
HEAT FLUX (KCAL/M**2·H)
HEAT TRANSFER COEFFICIENT (KCAL/M**2·H·C)
TIME (SEC)


RUN NO. 4208 DATE = 910622-1 15
Θ 10 = 104
HEAT FLUX (KCAL/M**2.H)
ΔTsat (°C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4208 DATE = 910622-1 15
Θ 8 = TD3M
Δ 9 = TD3L
HEAT FLUX (KCAL/M**2.H)
ΔTsat (°C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

****
* *
* RUN NO. 4209 *
* *
****

(DATE * 510622 - 1 - 7)

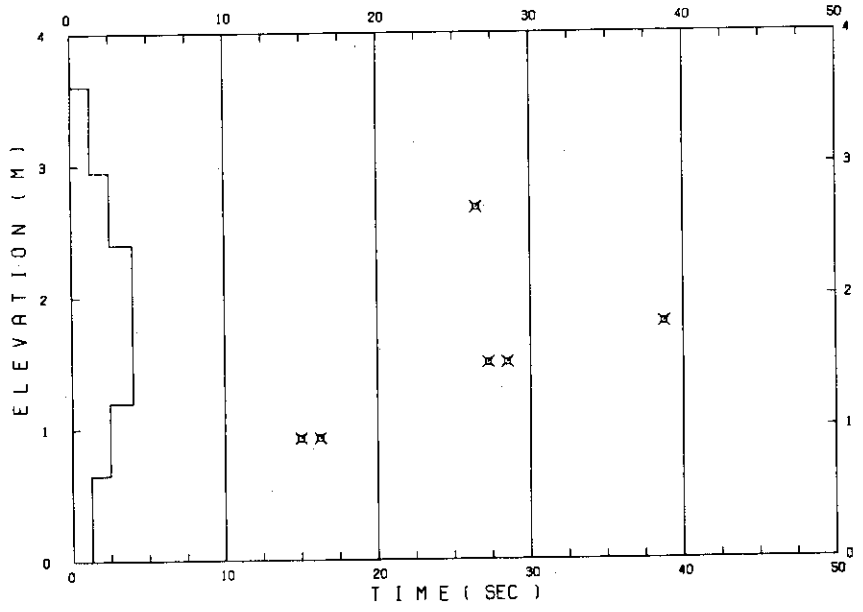
RUN CONDITIONS

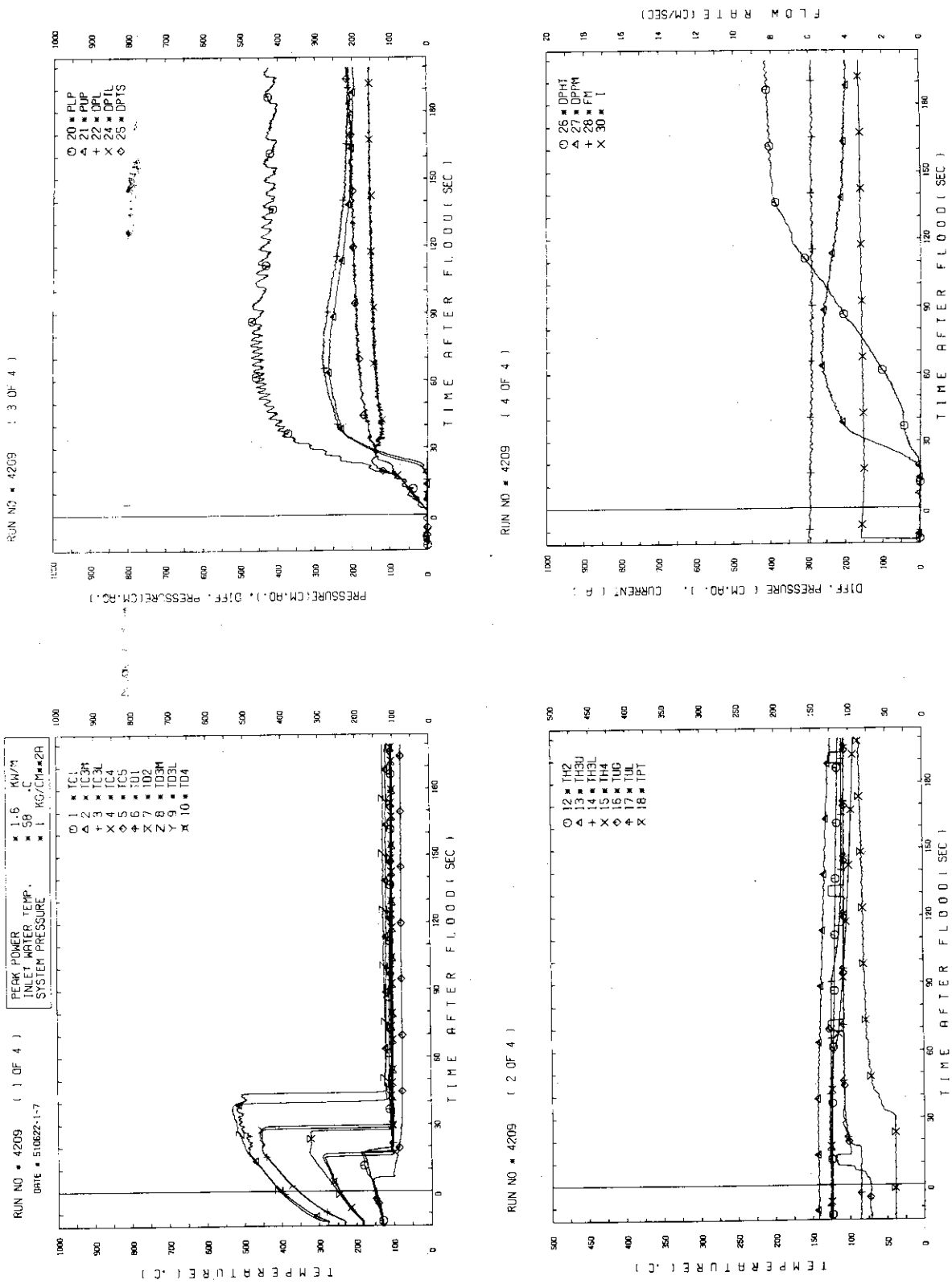
PEAK POWER	1.6	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	58	.C
INLET WATER VELOCITY	6	CM/SEC

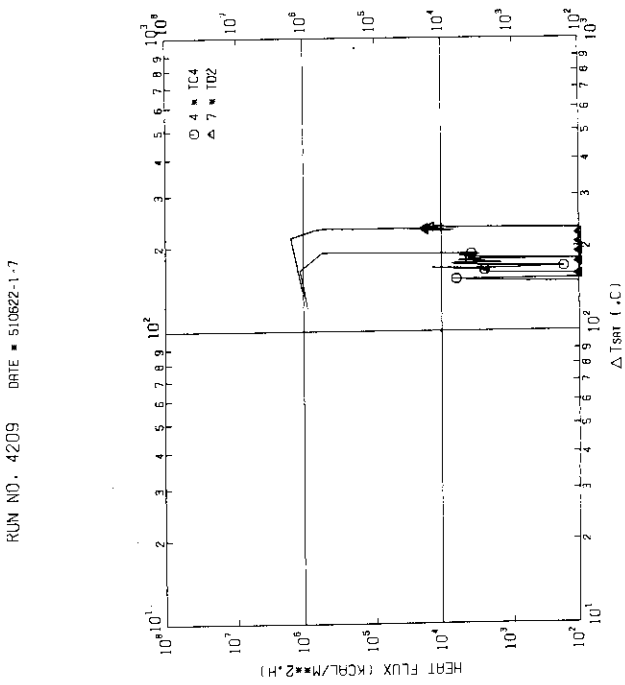
TEMPERATUR PROFILE

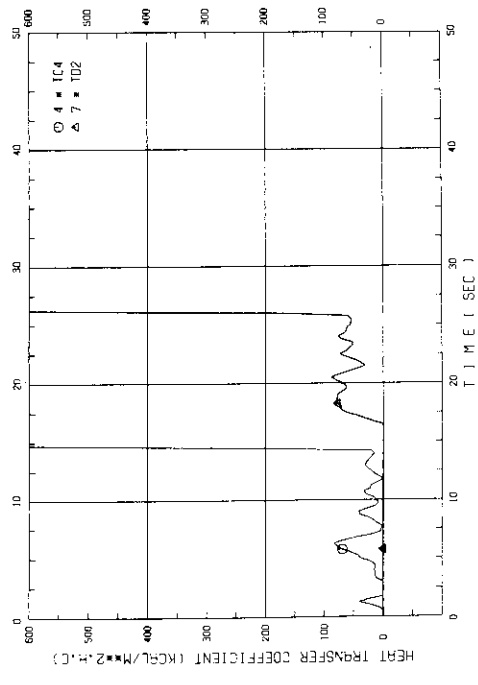
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
2	TC3M	398.	38.25	522.	0.0	0.
3	TC3L	355.	24.75	460.	27.25	453.
4	TC4	245.	15.00	285.	15.00	285.
7	TD2	251.	17.25	326.	26.50	323.
8	TD3M	407.	36.50	532.	38.75	525.
9	TD3L	357.	24.00	455.	28.50	448.
10	TD4	244.	15.25	291.	16.25	287.

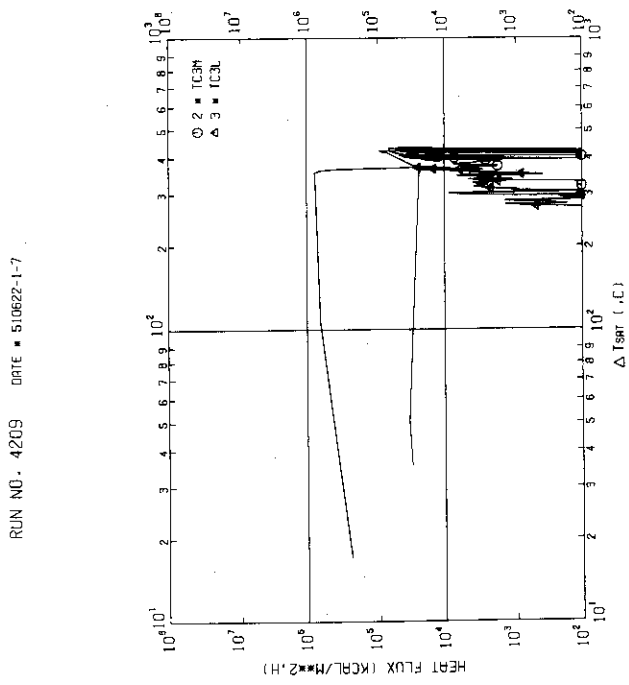
RUN NO. 4209 DATE * 510622-1-7

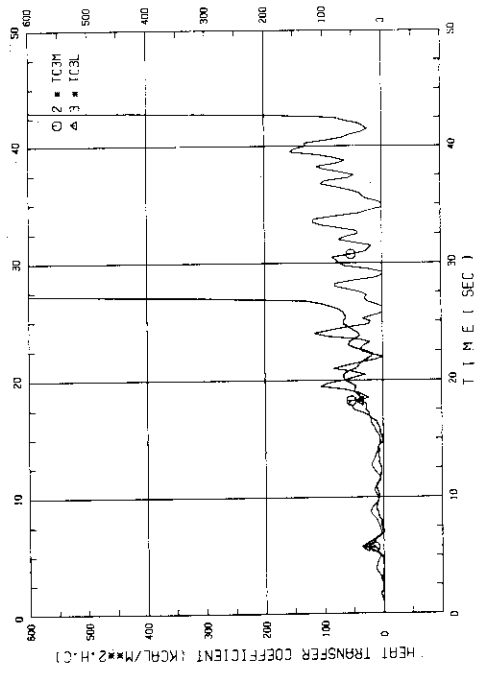


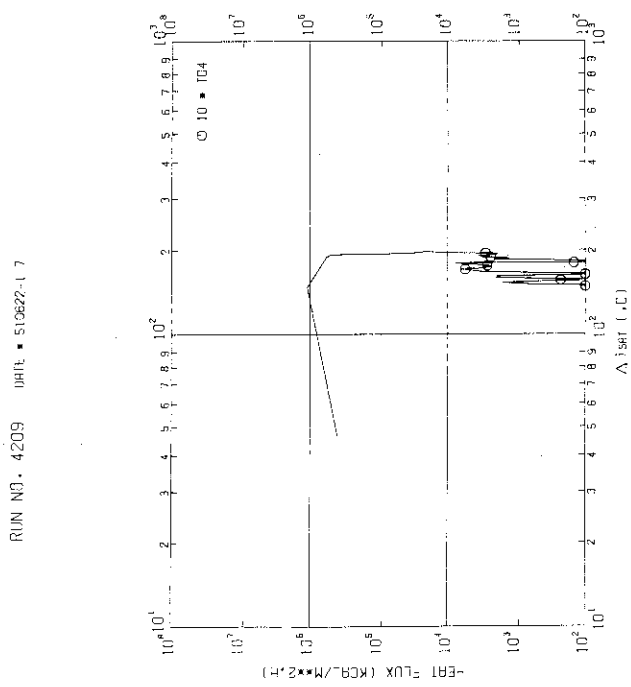

RUN NO = 4209 (1 OF 4)
DATE = 510622-1-7
PEAK POWER × 1.6 KW/M
INLET WATER TEMP. × 50 °C
SYSTEM PRESSURE × 1 KG/CM**2
TEMPERATURE (°C)
TIME AFTER FLOOD (SEC)
RUN NO = 4209 (2 OF 4)
TEMPERATURE (°C)
TIME AFTER FLOOD (SEC)
RUN NO = 4209 (3 OF 4)
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD (SEC)
RUN NO = 4209 (4 OF 4)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
FLOW RATE (CM/SEC)
TIME AFTER FLOOD (SEC)

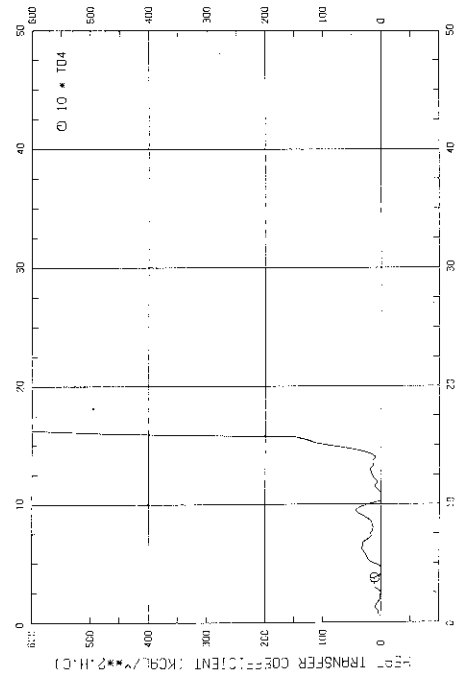

RUN NO. 4209 DATE = 510622-1-7
○ 4 = TC4
△ 7 = TD2
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)

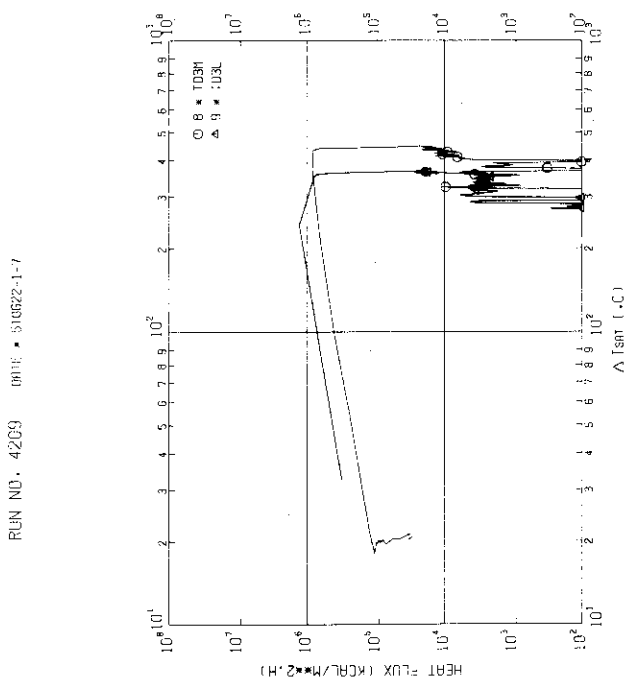

○ 4 = TC4
△ 7 = TD2
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

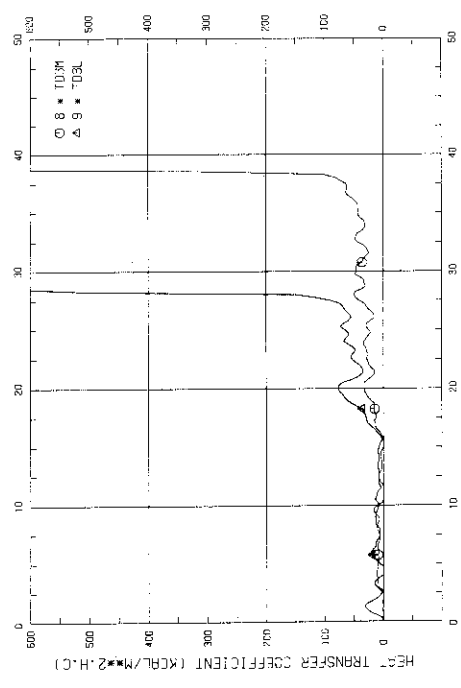

RUN NO. 4209 DATE = 510622-1-7
○ 2 = TC3M
△ 3 = TC3L
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)


○ 2 = TC3M
△ 3 = TC3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4209
○ 10 ● TD4
ΔTsat (°C)
HEAT FLUX (KCAL/M**2.H)


○ 10 ● TD4
TIME (SEC)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)


RUN NO. 4209
○ 8 ● TD3M
△ 9 ● TD3L
ΔTsat (°C)
HEAT FLUX (KCAL/M**2.H)


○ 8 ● TD3M
△ 9 ● TD3L
TIME (SEC)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)

****
* *
* RUN NO. 4210 *
* *
****

(DATE = 510618 - 1 - 4)

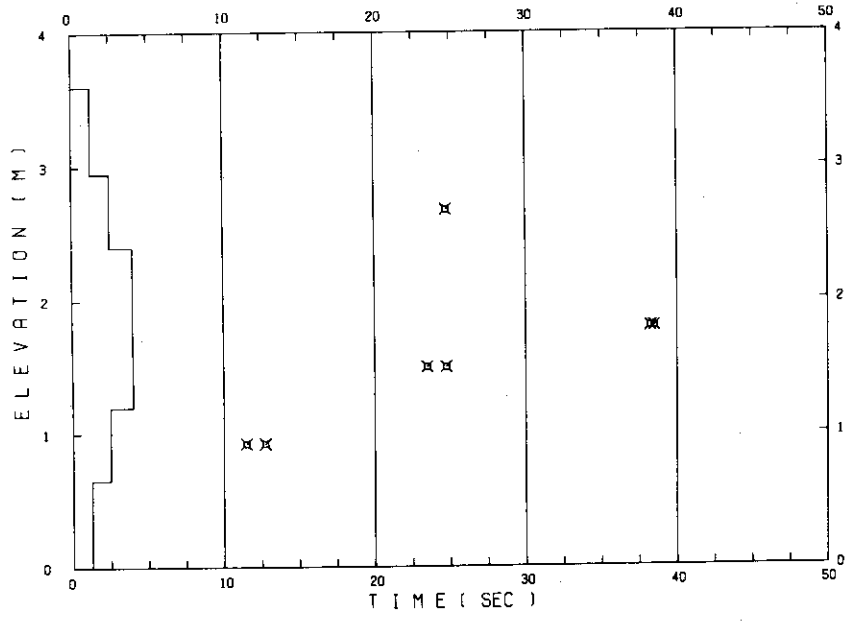
RUN CONDITIONS

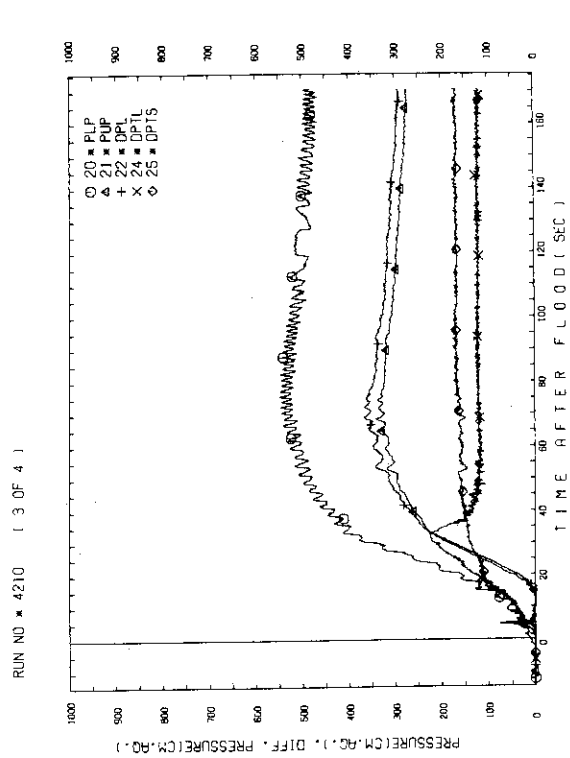
PEAK POWER	1.6	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	80	.C
INLET WATER VELOCITY	6	CM/SEC

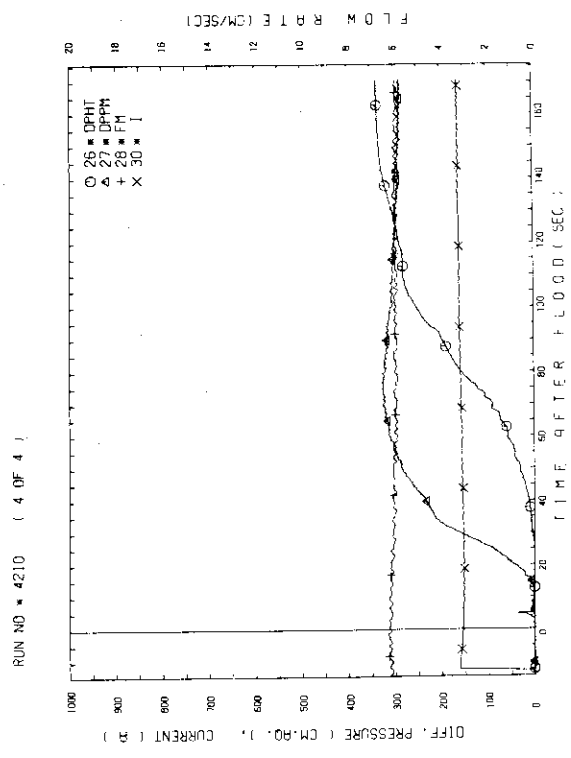
TEMPERATUR PROFILE

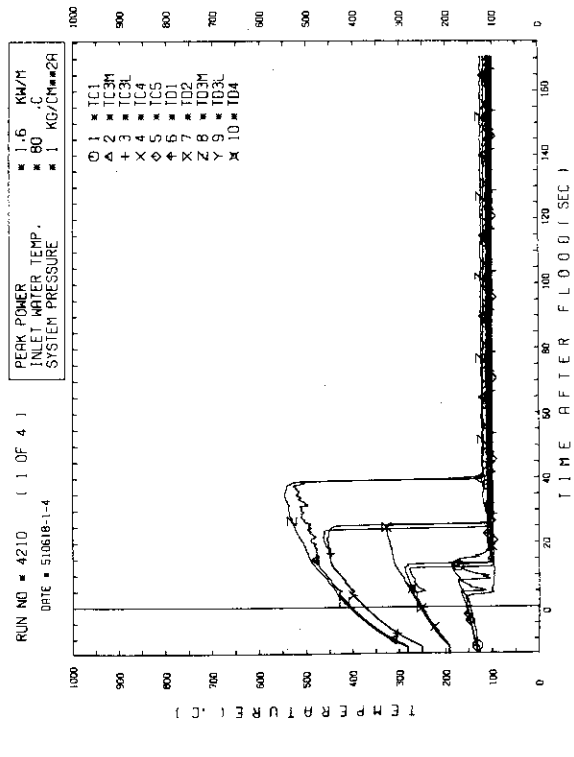
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
2	TC3M	402.	37.50	528.	38.50	502.
3	TC3L	373.	21.75	463.	23.50	461.
4	TC4	249.	12.00	278.	11.50	278.
7	TD2	253.	25.00	328.	24.75	328.
8	TD3M	406.	35.50	546.	38.25	533.
9	TD3L	374.	21.00	456.	24.75	445.
10	TD4	256.	12.25	288.	12.75	282.

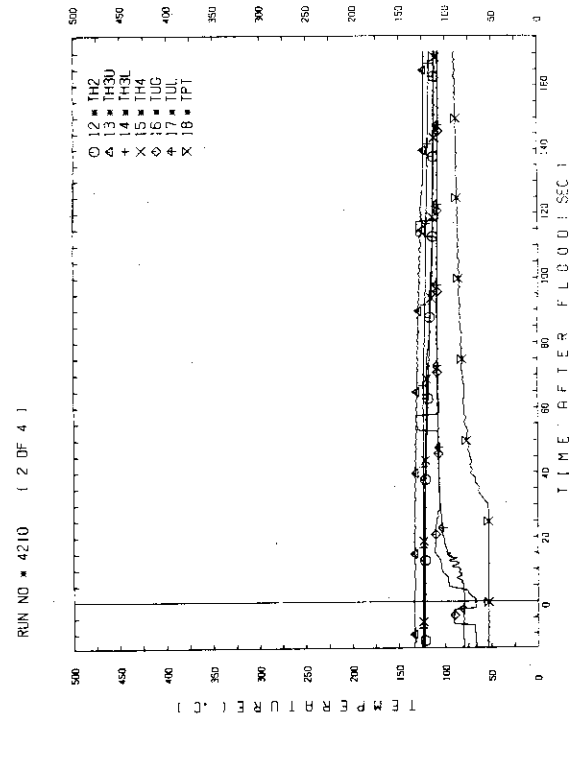
RUN NO. 4210 DATE = 510618-1-4

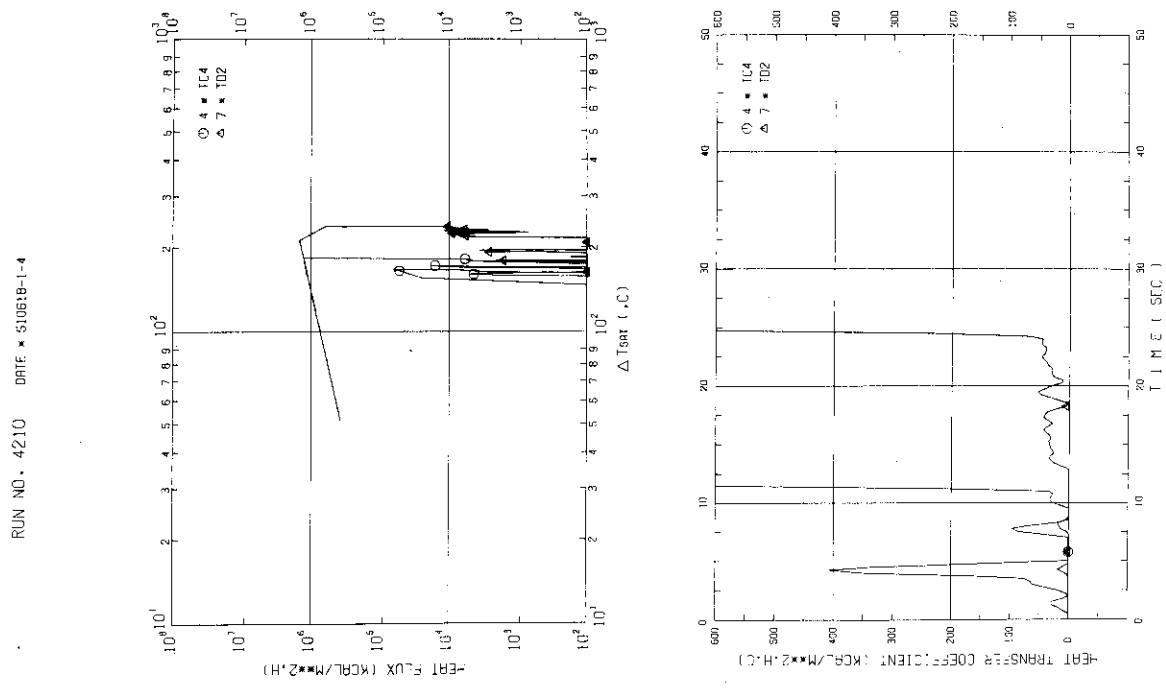


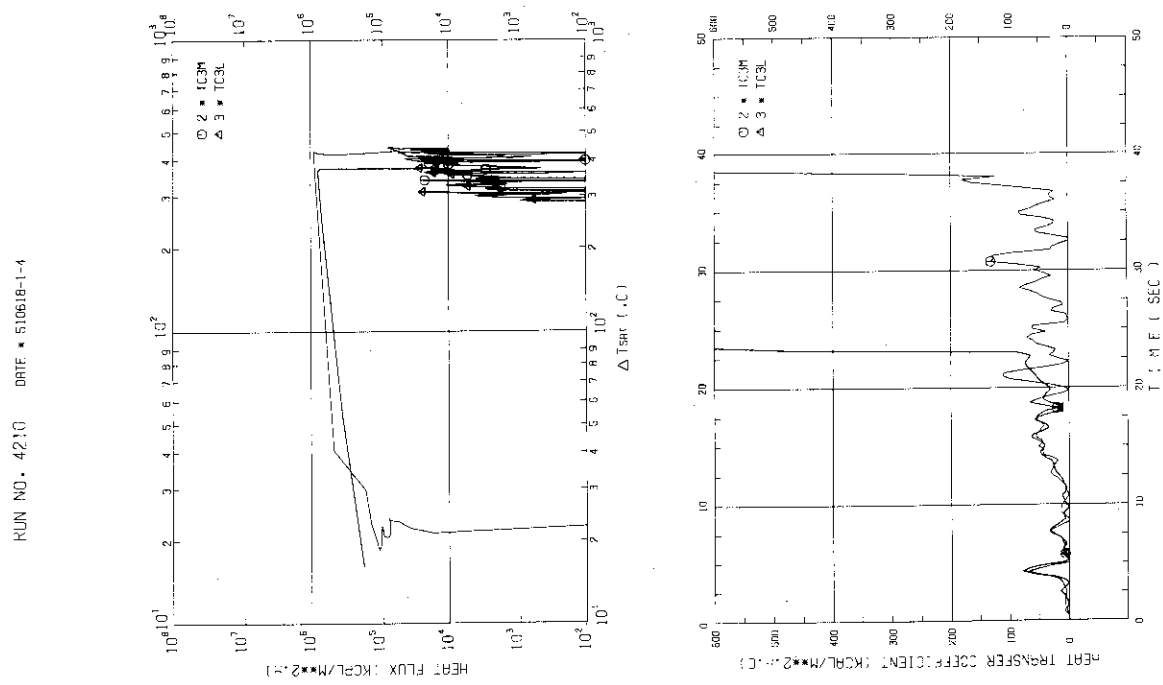

RUN NO = 4210 (3 OF 4)
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD(SEC)
20 = PLP
21 = PUP
22 = DPL
24 = DPTL
25 = DPTS

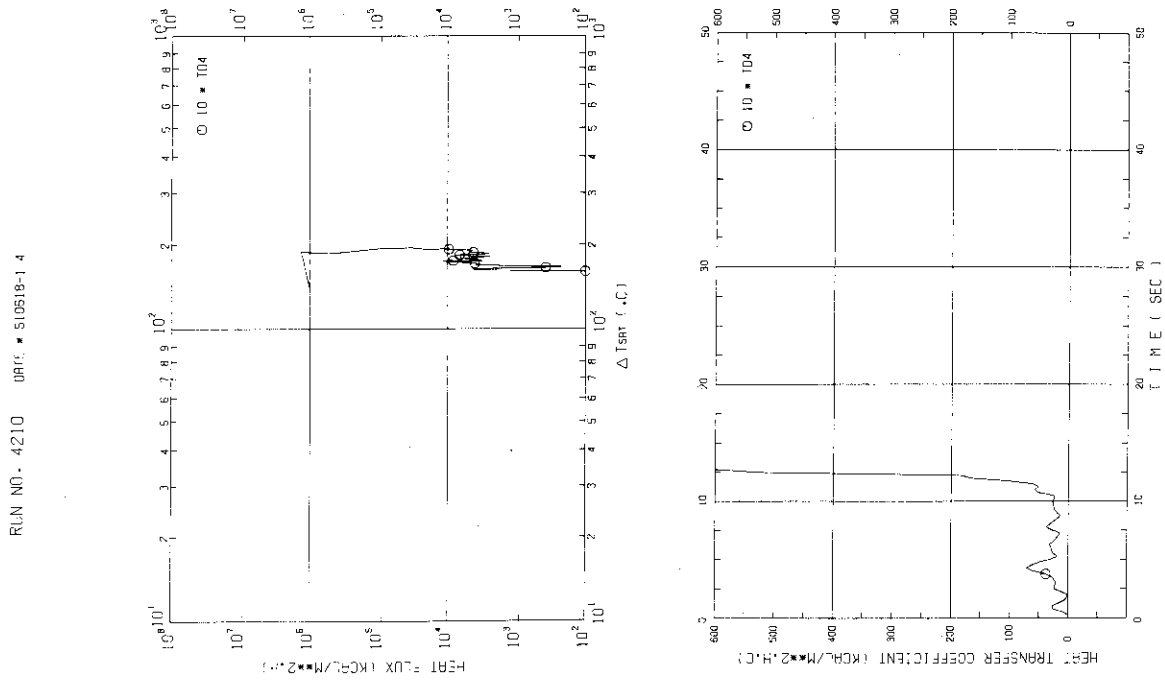

RUN NO = 4210 (4 OF 4)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
FLOW RATE (CM/SEC)
TIME AFTER FLOOD(SEC)
26 = DPHT
27 = DPPM
28 = FM
30 = I

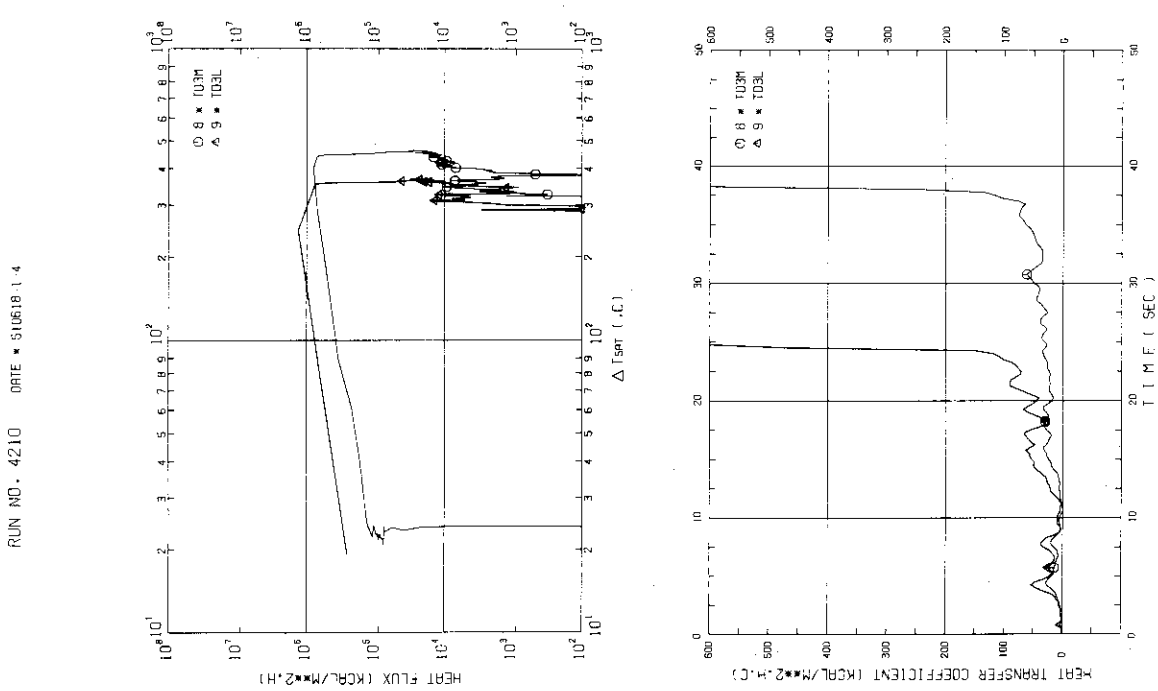

RUN NO = 4210 (1 OF 4)
DATE = 510618-1-4
PEAK POWER = 1.6 KW/M
INLET WATER TEMP. = 80 .C
SYSTEM PRESSURE = 1 KG/CM**2R
1 = TC1
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
7 = TD2
8 = TD3M
9 = TD3L
10 = TD4
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO = 4210 (2 OF 4)
12 = TH2
13 = TH3U
14 = TH3L
15 = TH4
16 = TUC
17 = TUL
18 = TPT
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO. 4210 DATE = 510618-1-4
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4210 DATE = 510618-1-4
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4210 DATE = 510618-14
Φ 10 = TD4
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4210 DATE = 510618-14
Φ 8 = TD3M
Δ 9 = TD3L
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

****
* *
* RUN NO. 4211 *
* *
****

(DATE * 510622 - 1 - 8)

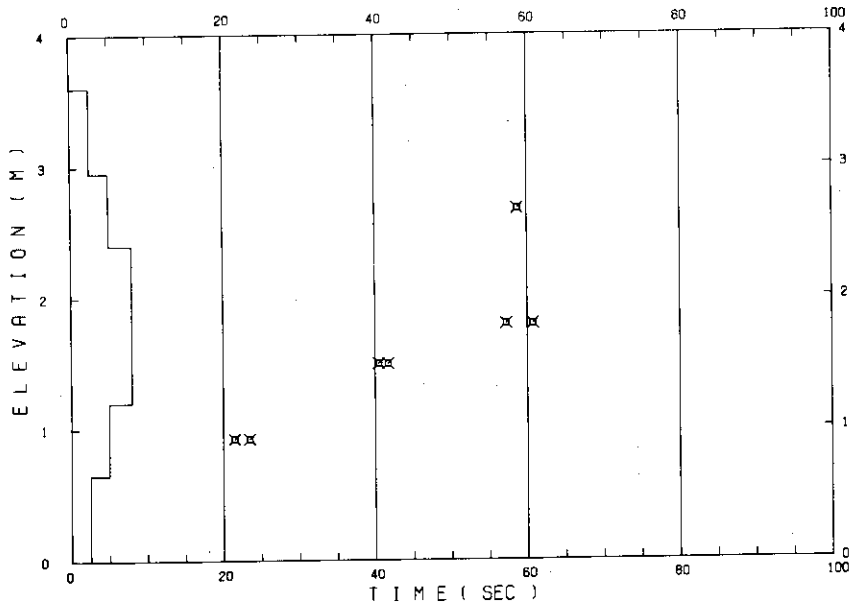
RUN CONDITIONS

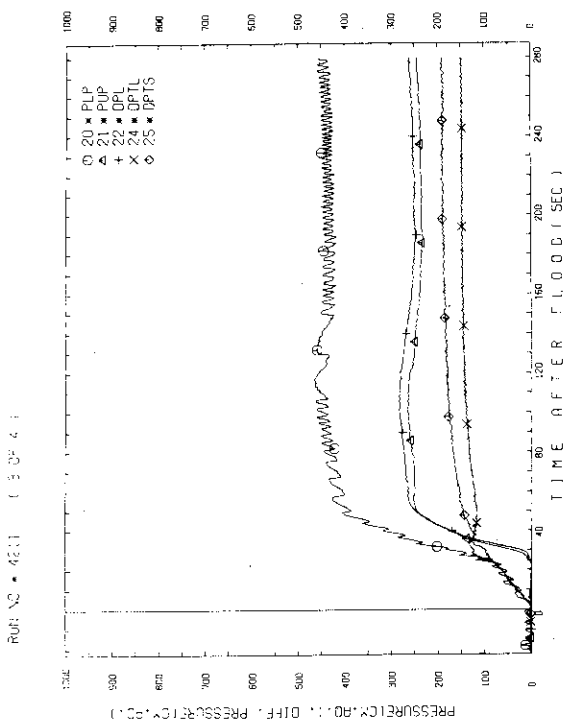
PEAK POWER	1.6	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	54	.C
INLET WATER VELOCITY	4	CM/SEC

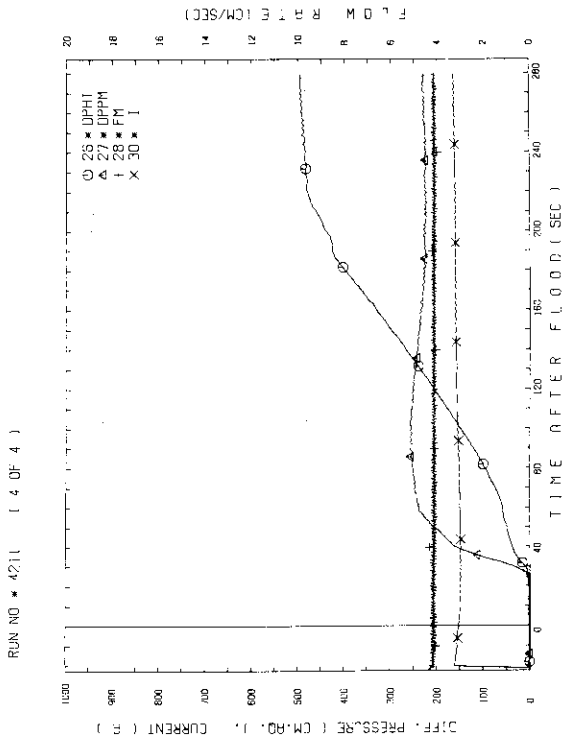
TEMPERATUR PROFILE

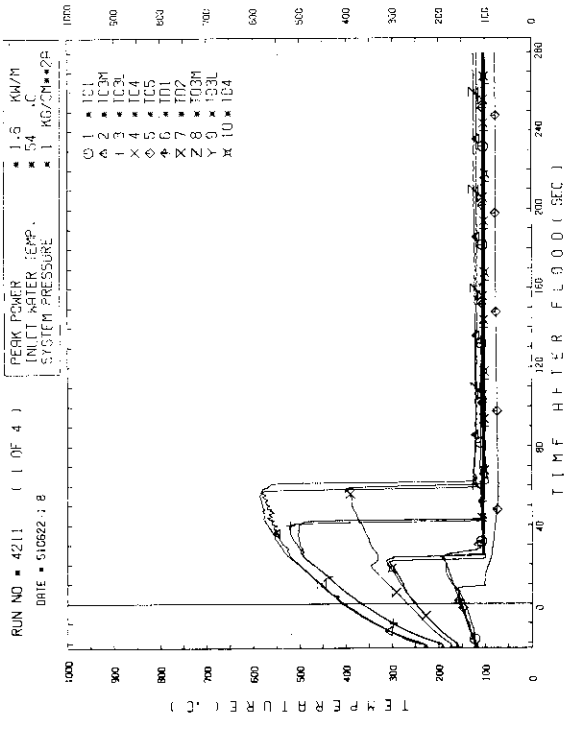
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
2	TC3M	403.	56.75	583.	60.75	560.
3	TC3L	364.	38.00	522.	40.50	513.
4	TC4	290.	21.50	306.	21.50	306.
7	TD2	266.	58.75	399.	58.75	399.
8	TD3M	407.	54.75	566.	57.25	577.
9	TD3L	365.	35.25	505.	41.75	491.
10	TD4	290.	22.25	313.	23.50	294.

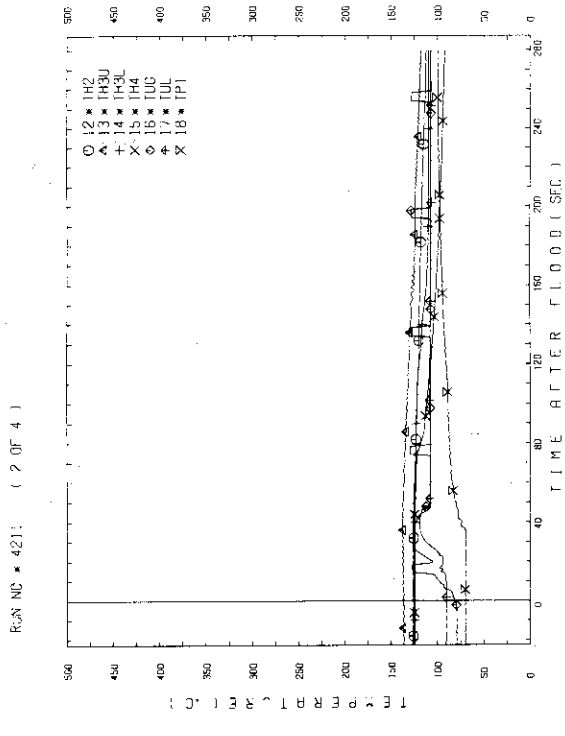
RUN NO. 4211 DATE * 510622-1-8

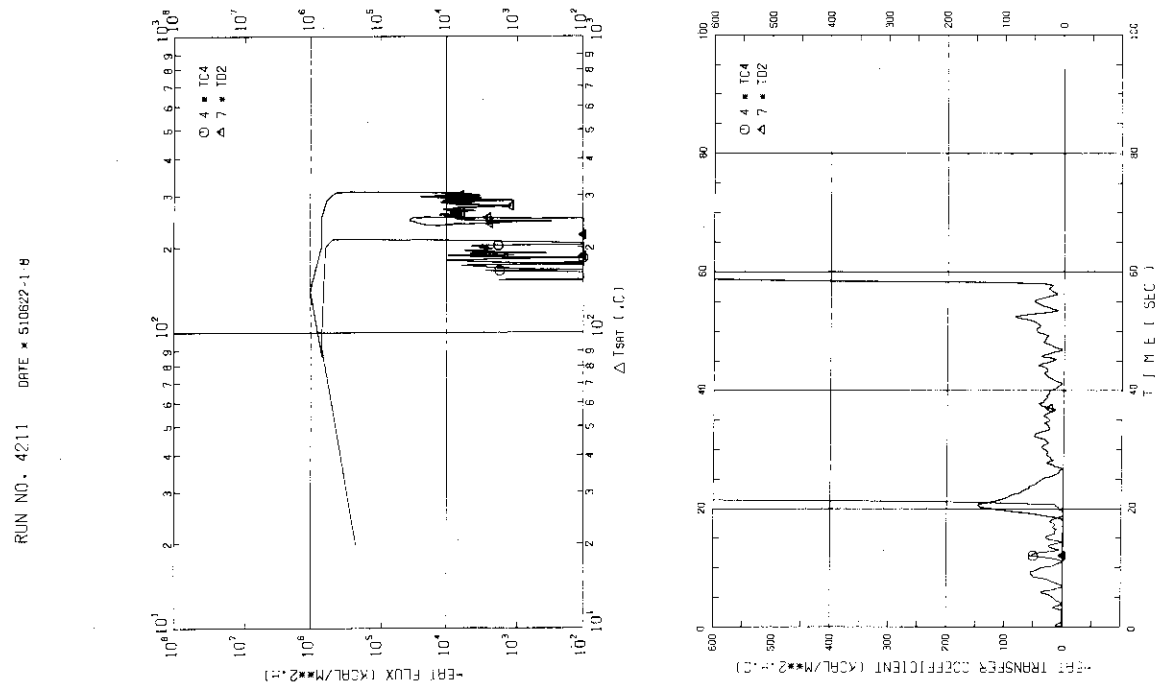


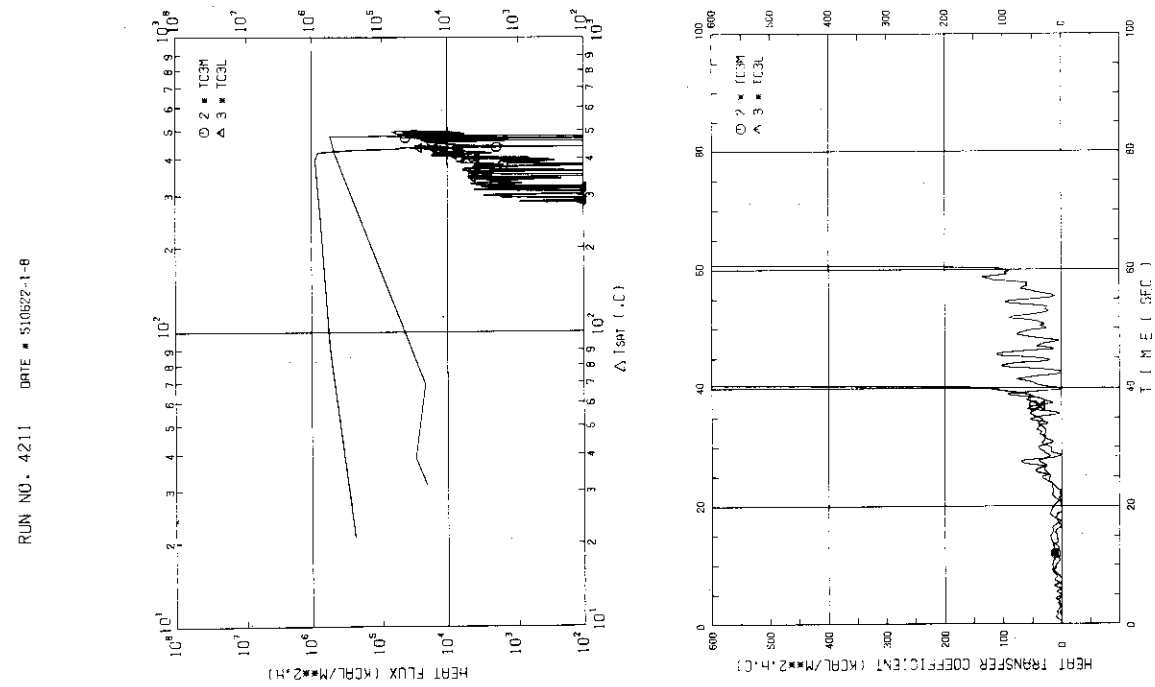

RUN NO = 4211 (3 OF 4)
PRESSURE(KG/CM.AB) , DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD(SEC)
20 * PLP
21 * PUP
22 * DPL
24 * DPTL
25 * DPTS

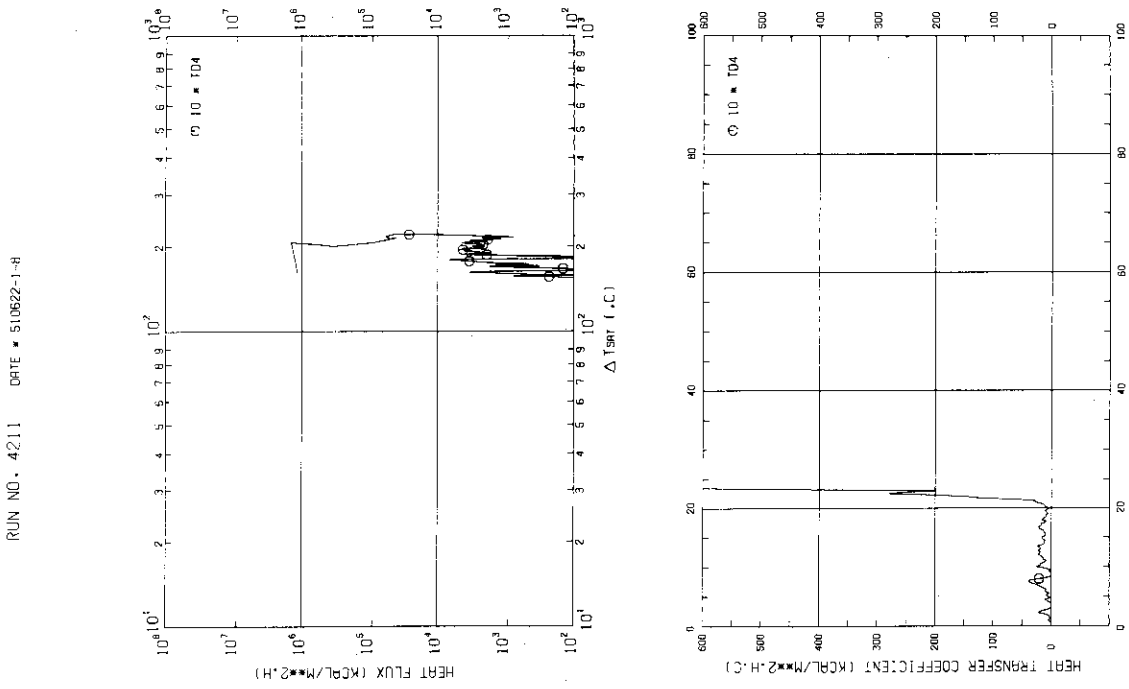

RUN NO = 4211 (4 OF 4)
DIFF. PRESSURE (CM.AQ.) , CURRENT (A)
FLOW RATE (CM/SEC)
TIME AFTER FLOOD(SEC)
26 * DPHI
27 * DPPM
28 * FM
30 * I

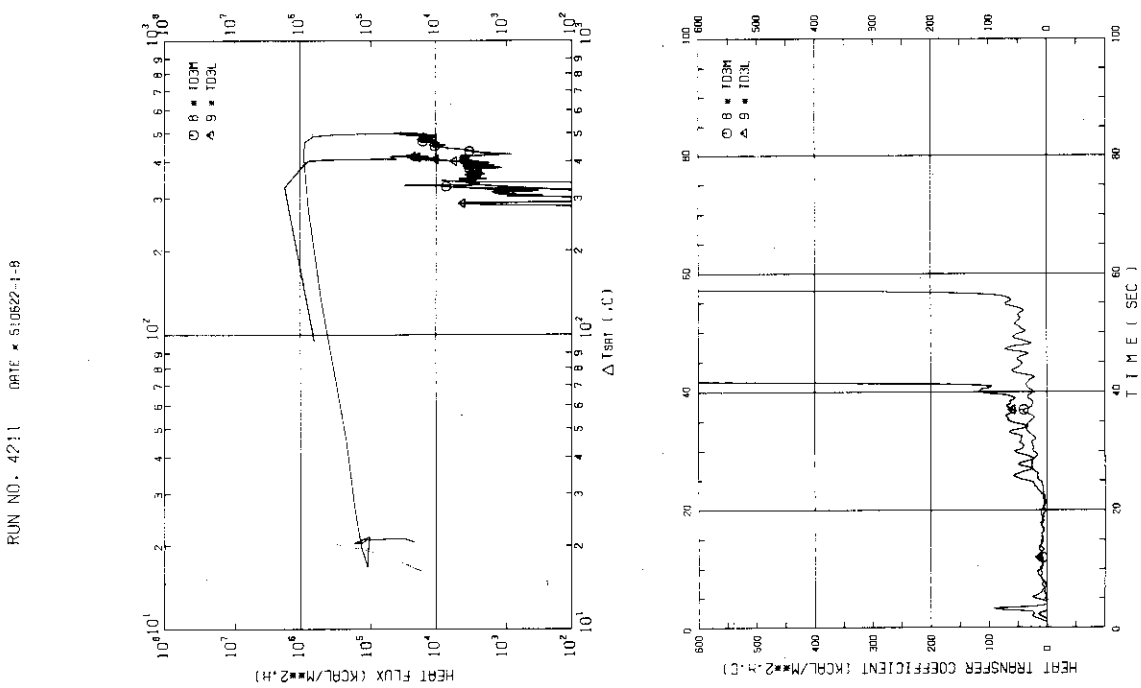

RUN NO = 4211 (1 OF 4)
DATE = 910622:18
PEAK POWER * 1.6 KW/M
INLET WATER TEMP. * 54 C
SYSTEM PRESSURE * 1 KG/CM**2
TEMPERATURE (C)
TIME AFTER FLOOD(SEC)
1 * TC1
2 * TC3M
3 * TC3L
4 * TC4
5 * TC5
6 * TD1
7 * TD2
8 * TD3M
9 * TD3L
10 * TD4


RUN NO = 4211 (2 OF 4)
TEMPERATURE (C)
TIME AFTER FLOOD(SEC)
12 * TH2
13 * TH3U
14 * TH3L
15 * TH4
16 * TUC
17 * TUL
18 * TP1


RUN NO. 4211 DATE = 510622-1-8
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 4 = TC4
△ 7 = TD2
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4211 DATE = 510622-1-8
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 2 = TC3M
△ 3 = TC3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4211 DATE = 510622-1-8
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (°C)
○ 10 = TD4
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4211 DATE = 510622-1-8
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (°C)
○ 8 = TD3M
△ 9 = TD3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

****
* RUN NO. 4212 *
****

(DATE = 510618 - 1 - 5)

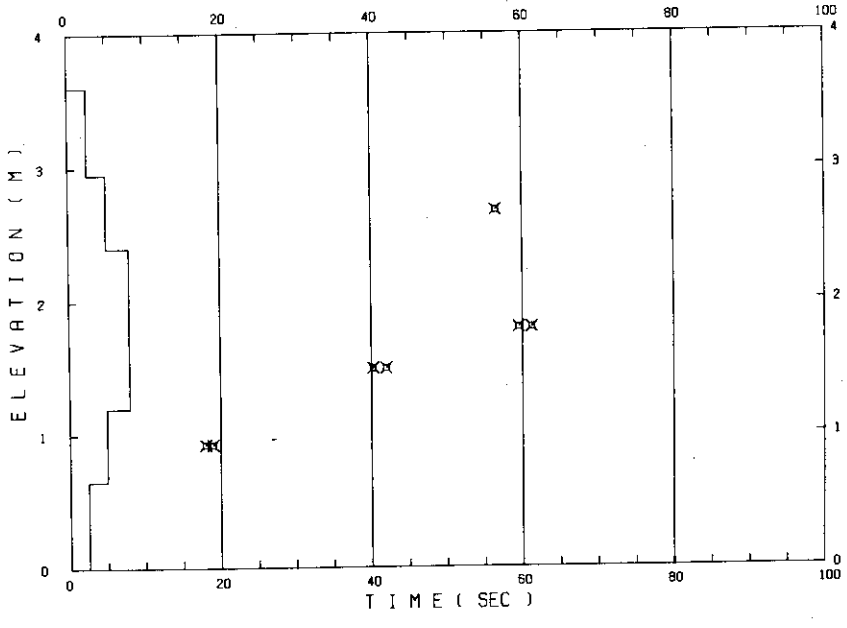
RUN CONDITIONS

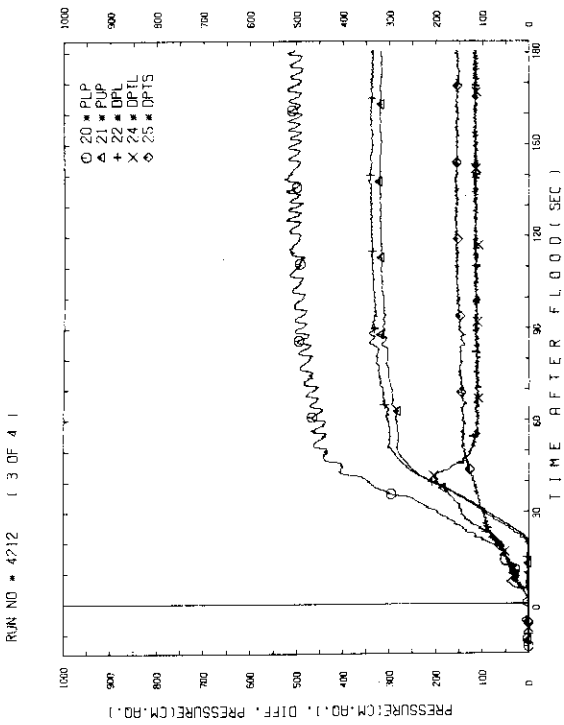
PEAK POWER	1.6	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	80	.C
INLET WATER VELOCITY	4	CM/SEC

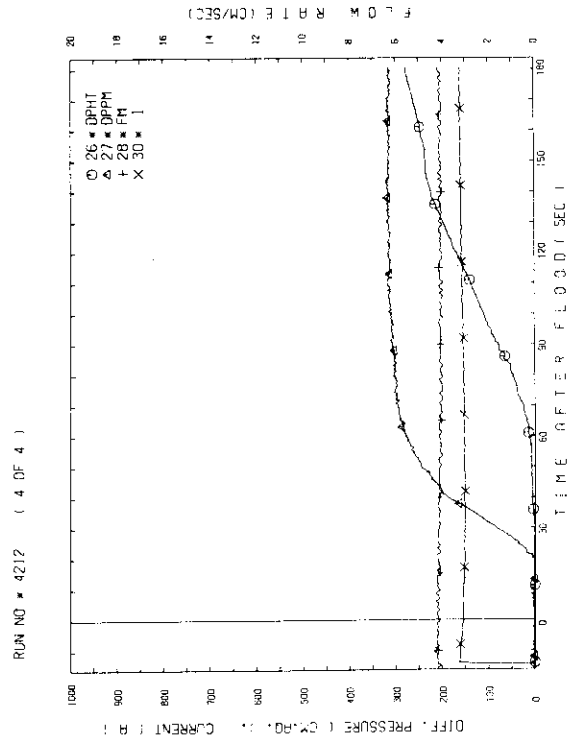
TEMPERATUR PROFILE

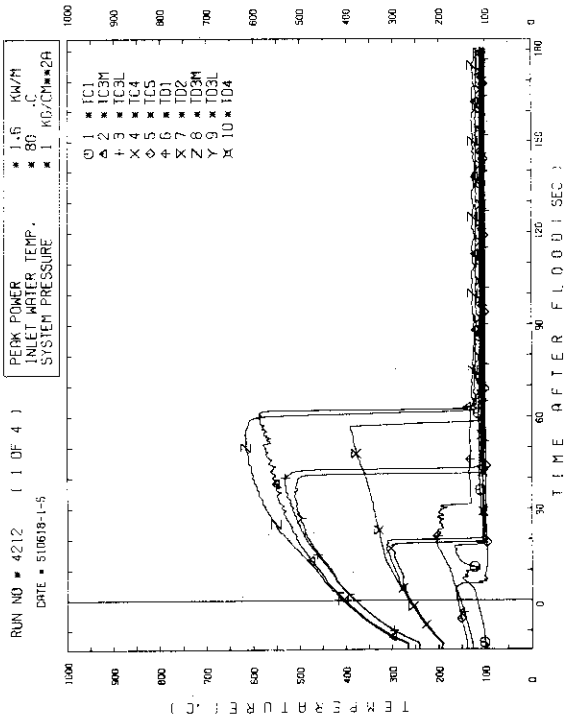
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
2	TC3M	403.	59.50	588.	61.25	586.
3	TC3L	381.	39.25	532.	42.00	514.
4	TC4	262.	17.00	304.	18.00	302.
7	TD2	264.	56.00	392.	56.50	392.
8	TD3M	407.	54.25	618.	59.50	599.
9	TD3L	379.	34.00	512.	40.25	499.
10	TD4	265.	17.00	313.	19.00	310.

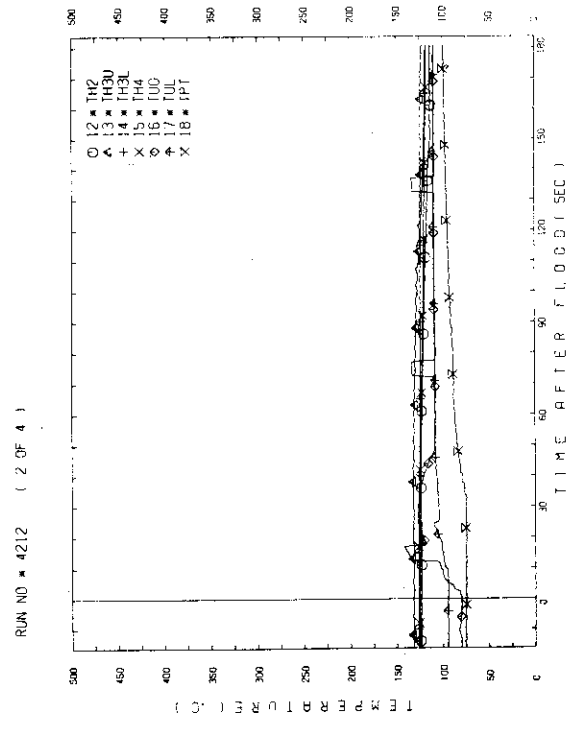
RUN NO. 4212 DATE = 510618-1-5

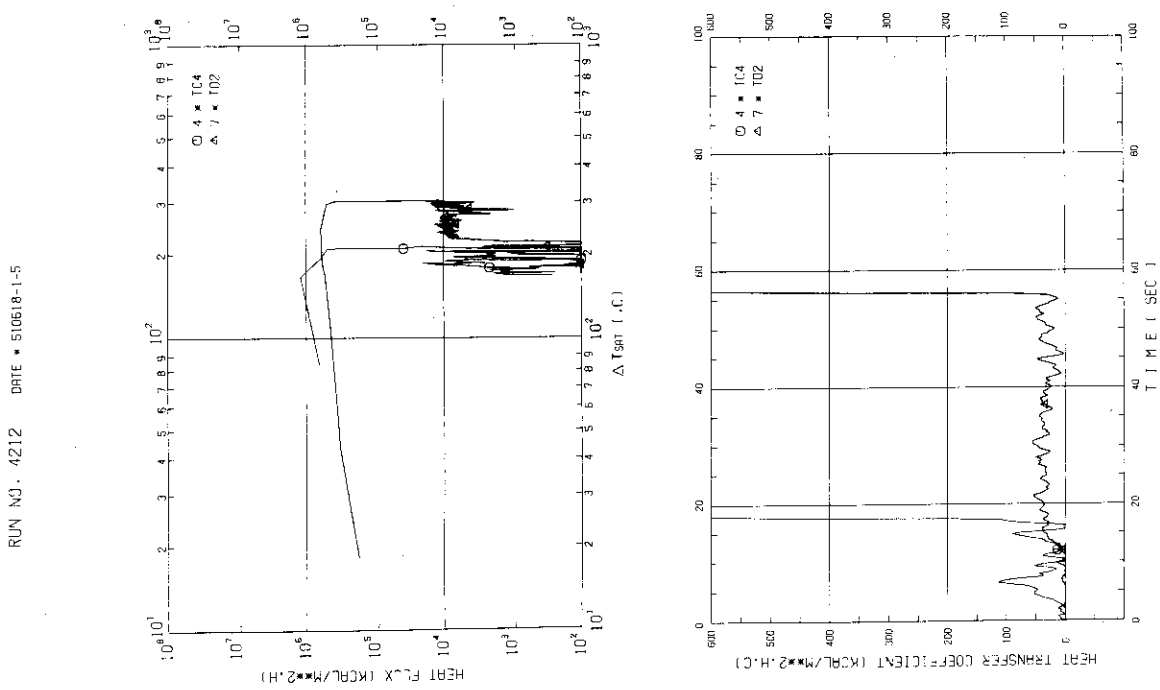


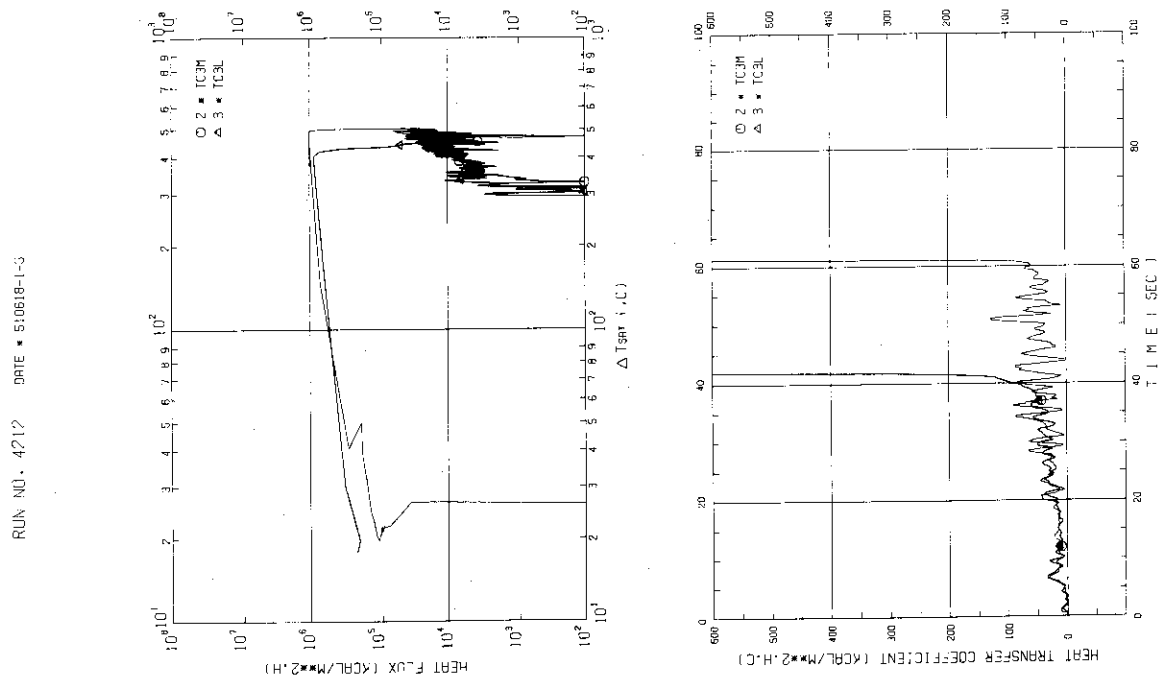

RUN NO = 4212 (3 OF 4)
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD(SEC)
20 * PLP
21 * PUP
22 * DPL
24 * DPTL
25 * DPTS

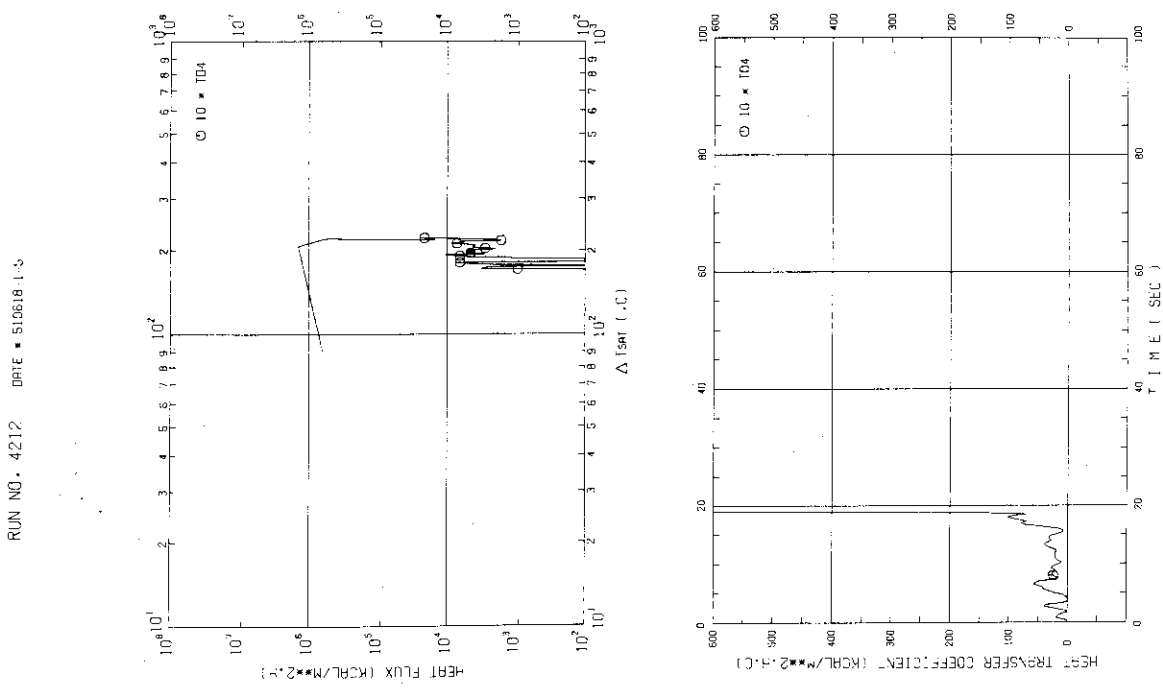

RUN NO = 4212 (4 OF 4)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
FLOW RATE (CM/SEC)
TIME AFTER FLOOD(SEC)
26 * DPHT
27 * DPPM
28 * FM
30 * I

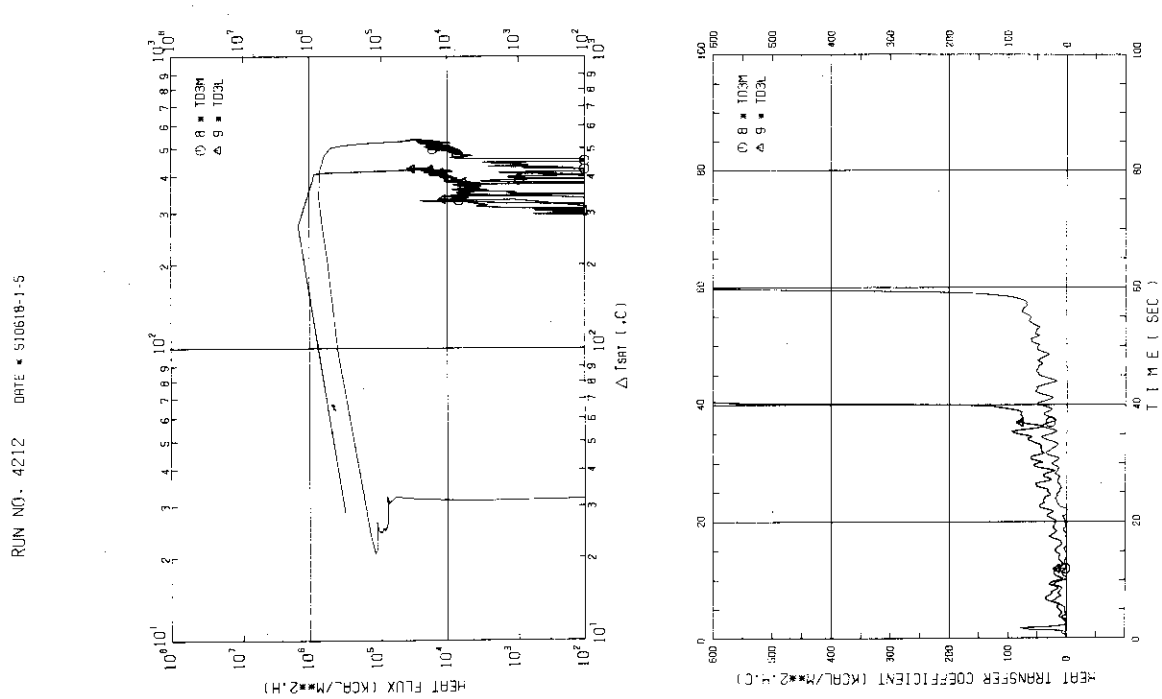

RUN NO = 4212 (1 OF 4)
DATE = 810618-1-S
PEAK POWER * 1.6 KW/M
INLET WATER TEMP. * 80 .C
SYSTEM PRESSURE * 1 KG/CM**2A
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)
1 * TC1
2 * TC3M
3 * TC3L
4 * TC4
5 * TC5
6 * TD1
7 * TD2
8 * TD3M
9 * TD3L
10 * TD4


RUN NO = 4212 (2 OF 4)
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)
12 * TH2
13 * TH3U
14 * TH3L
15 * TH4
16 * TUC
17 * TUL
18 * TPT


RUN NO. 4212 DATE = 510618-1-5
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 4 = TC4
△ 7 = TD2
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4212 DATE = 510618-1-3
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 2 = TC3M
△ 3 = TC3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4212 DATE = 510618-1-5
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 10 = TD4
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4212 DATE = 510618-1-5
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 8 = TD3M
△ 9 = TD3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

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* *
* RUN NO. 4213 *
* *
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(DATE * 510618 - 1 - 9)

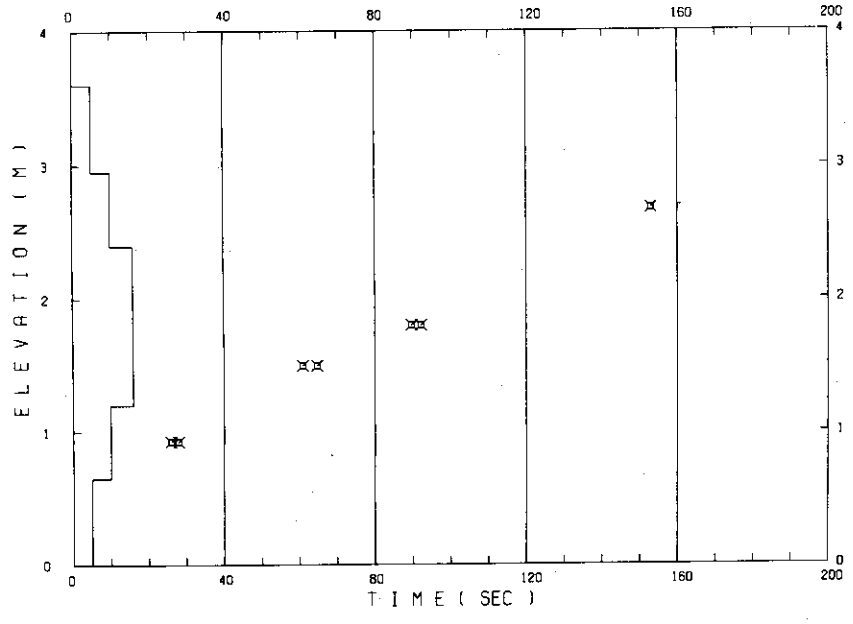
RUN CONDITIONS

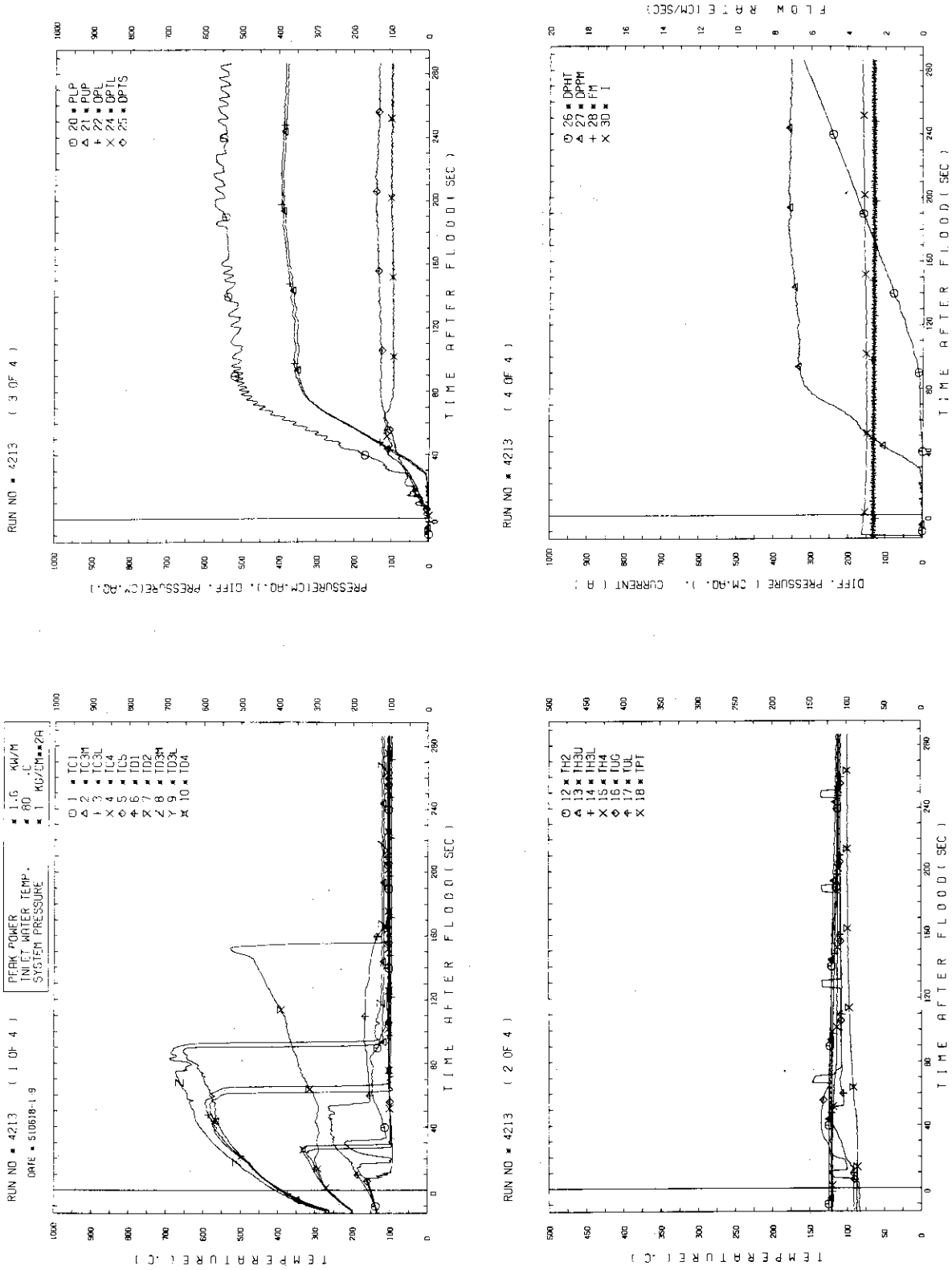
PEAK POWER	1.6	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	80	.C
INLET WATER VELOCITY	2.5	CM/SEC

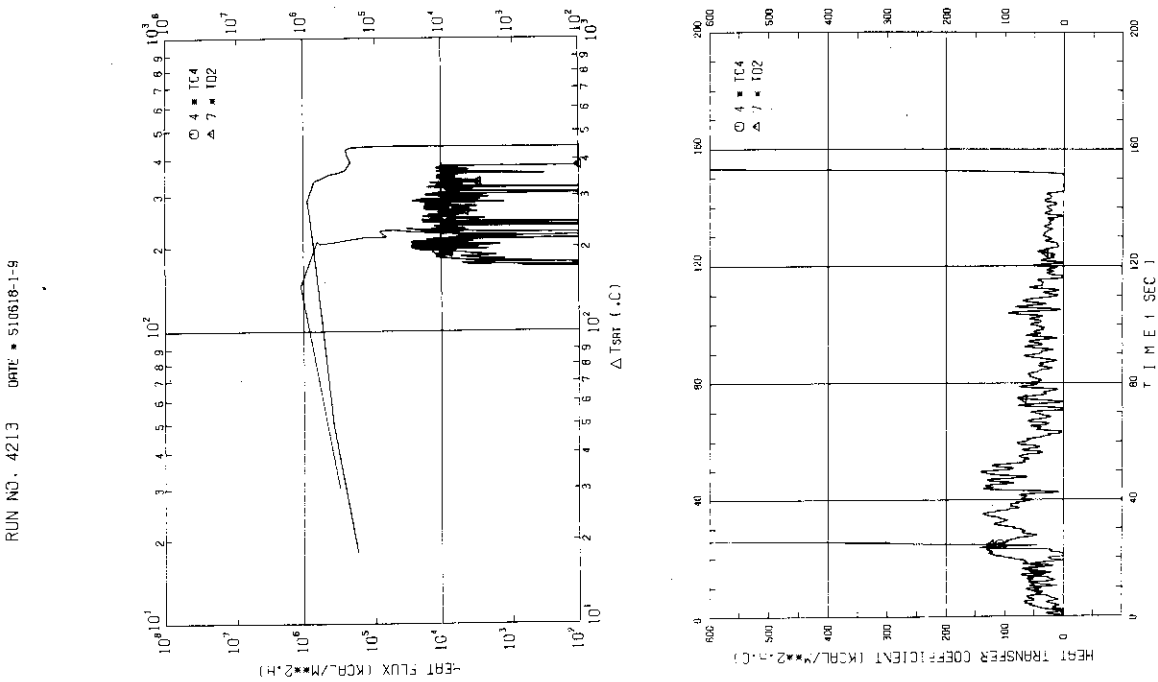
TEMPERATUR PROFILE

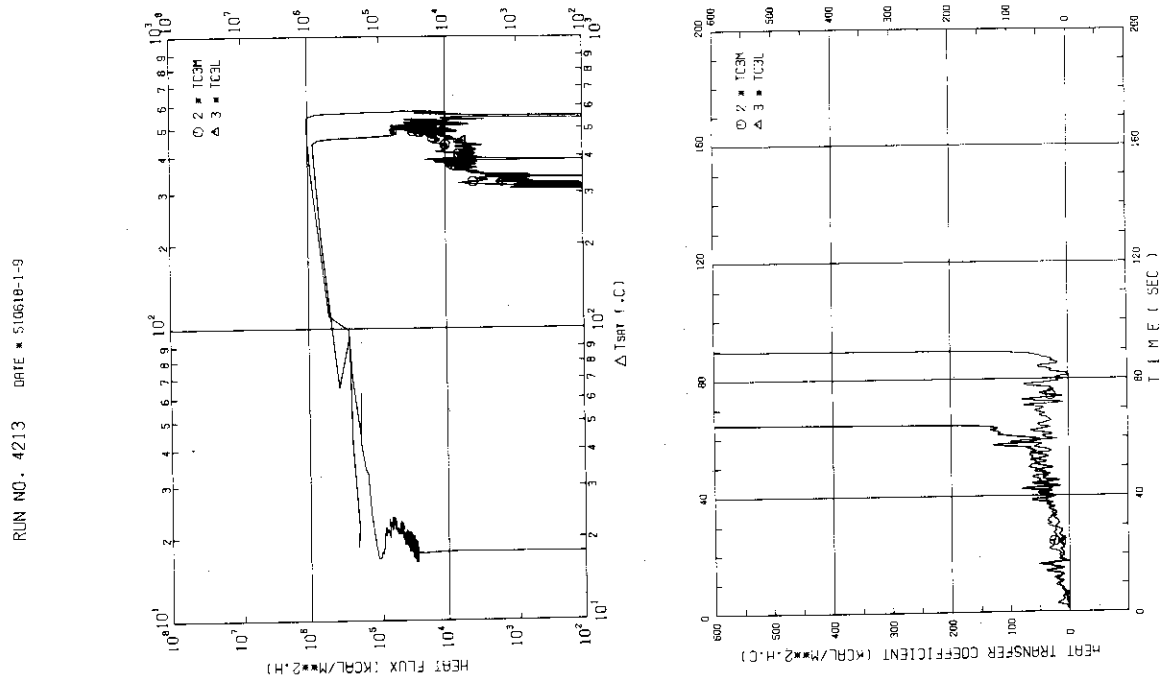
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
2	TC3M	392.	87.75	653.	89.75	645.
3	TC3L	389.	94.75	597.	64.75	544.
4	TC4	263.	23.50	324.	26.00	301.
7	TD2	268.	152.25	529.	153.00	523.
8	TD3M	405.	83.25	691.	92.25	639.
9	TD3L	367.	54.00	584.	61.00	539.
10	TD4	263.	26.50	333.	28.00	329.

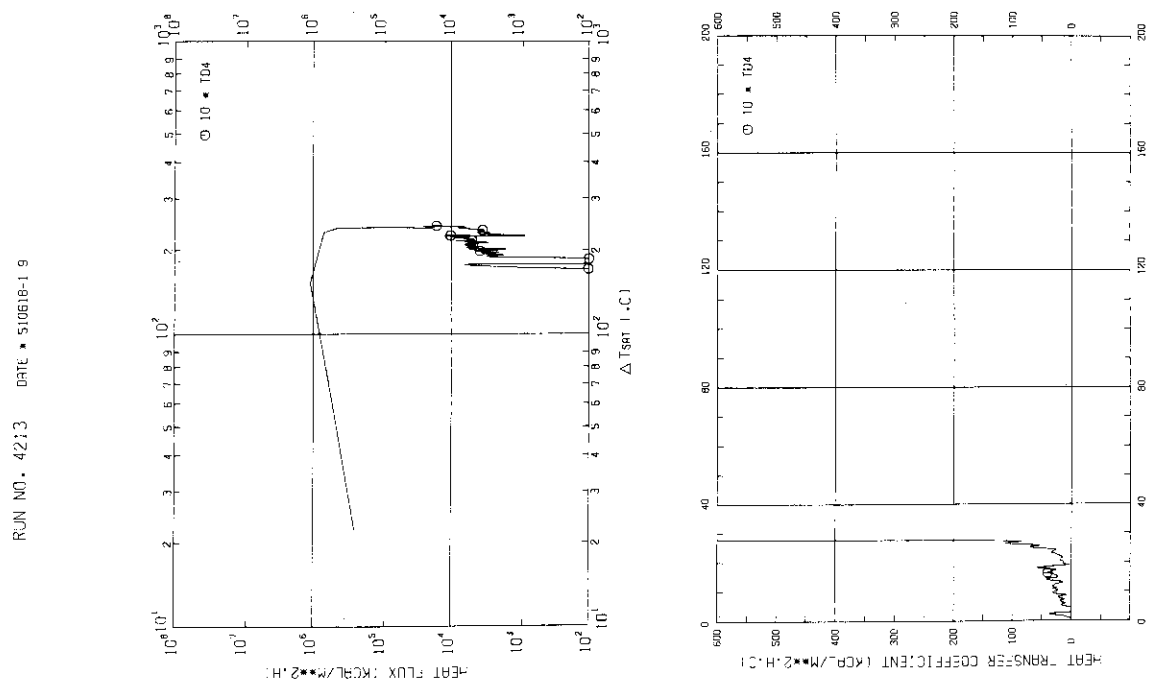
RUN NO. 4213 DATE * 510618-1-9

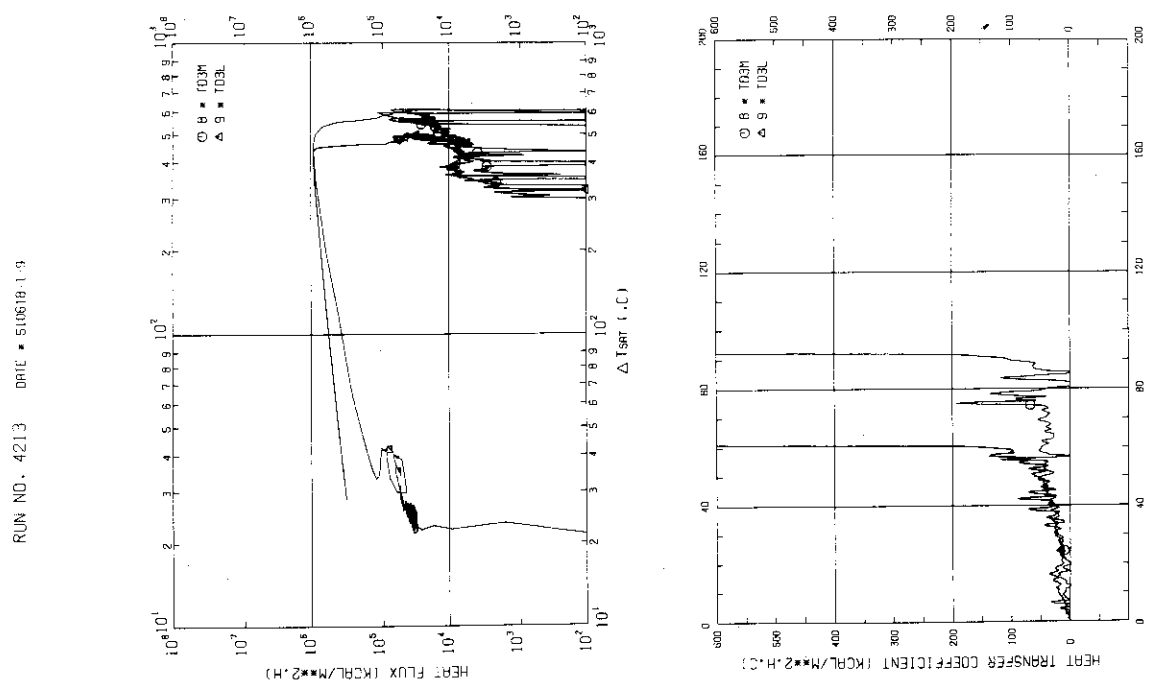



RUN NO = 4213 (1 OF 4)
DATE = 910618-19
PEAK POWER * 1.6 KW/M
INLET WATER TEMP. * 80 C
SYSTEM PRESSURE * 1 KG/CM**2A
TEMPERATURE (C)
TIME AFTER FLOOD (SEC)
RUN NO = 4213 (2 OF 4)
TEMPERATURE (C)
TIME AFTER FLOOD (SEC)
RUN NO = 4213 (3 OF 4)
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD (SEC)
RUN NO = 4213 (4 OF 4)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
FLOW RATE (CM/SEC)
TIME AFTER FLOOD (SEC)


RUN NO. 4213 DATE = 810618-1-9
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 4 = TC4
△ 7 = TD2
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4213 DATE = 810618-1-9
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 2 = TC3M
△ 3 = TC3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4213 DATE = 910618-19
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 10 = TD4
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)
○ 10 = TD4


RUN NO. 4213 DATE = 910618-19
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 8 = TD3M
△ 9 = TD3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)
○ 8 = TD3M
△ 9 = TD3L

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* *
* RUN NO. 4214 *
* *
****

(DATE = 510618 - 1 - 8)

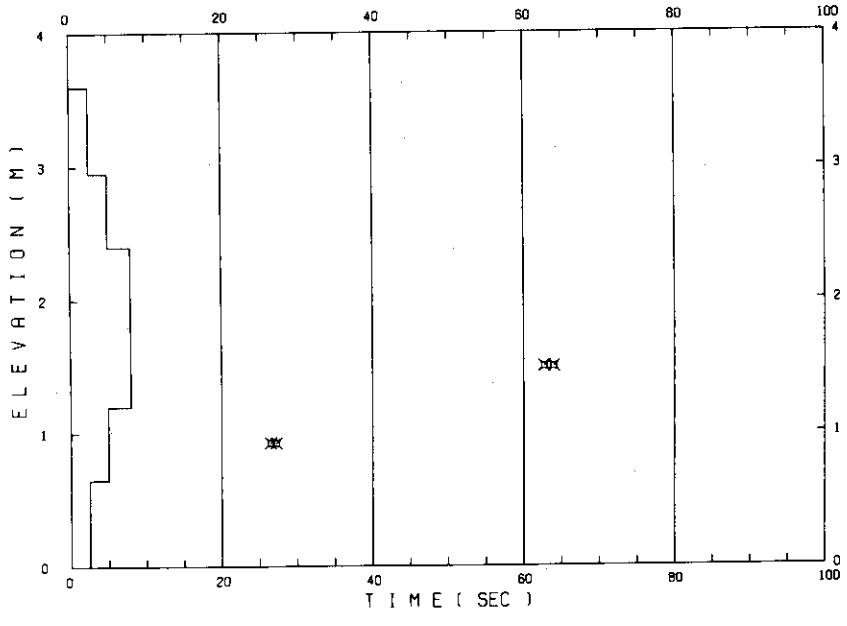
RUN CONDITIONS

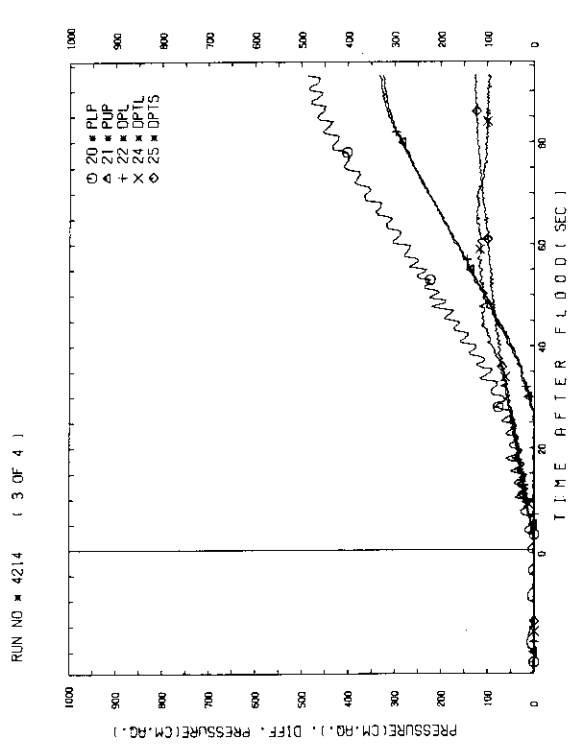
PEAK POWER	1.6	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	80	.C
INLET WATER VELOCITY	2	CM/SEC

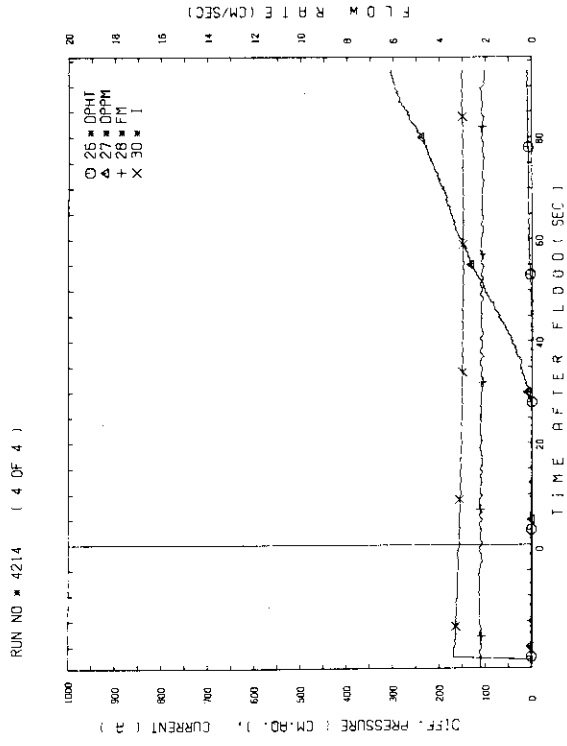
TEMPERATUR PROFILE

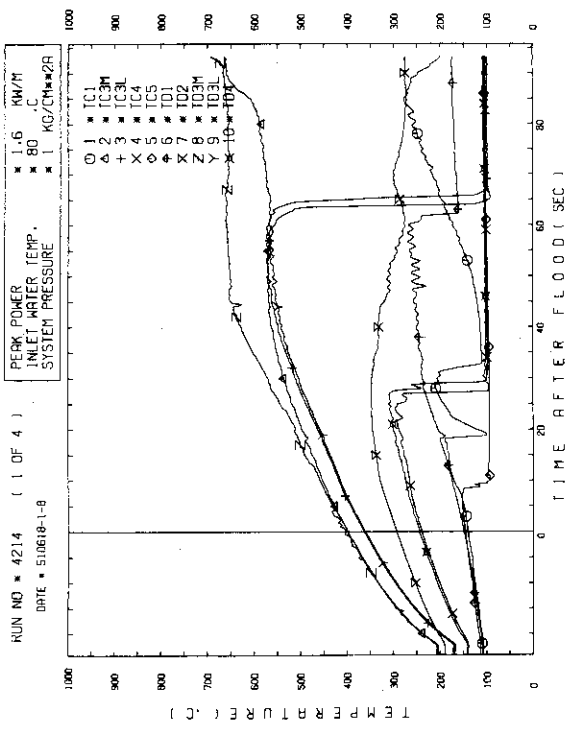
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
2	TC3M	393.	0.0	0.	0.0	0.
3	TC3L	363.	53.25	574.	64.00	531.
4	TC4	240.	24.00	297.	26.50	279.
7	TD2	293.	23.00	348.	0.0	0.
8	TD3M	402.	65.75	661.	0.0	0.
9	TD3L	360.	57.50	566.	62.75	517.
10	TD4	245.	25.00	310.	27.25	306.

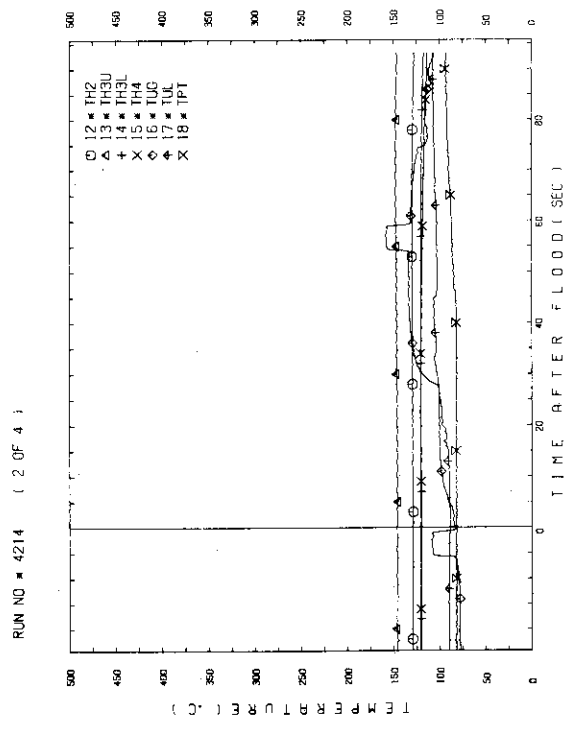
RUN NO. 4214 DATE = 510618-1-8

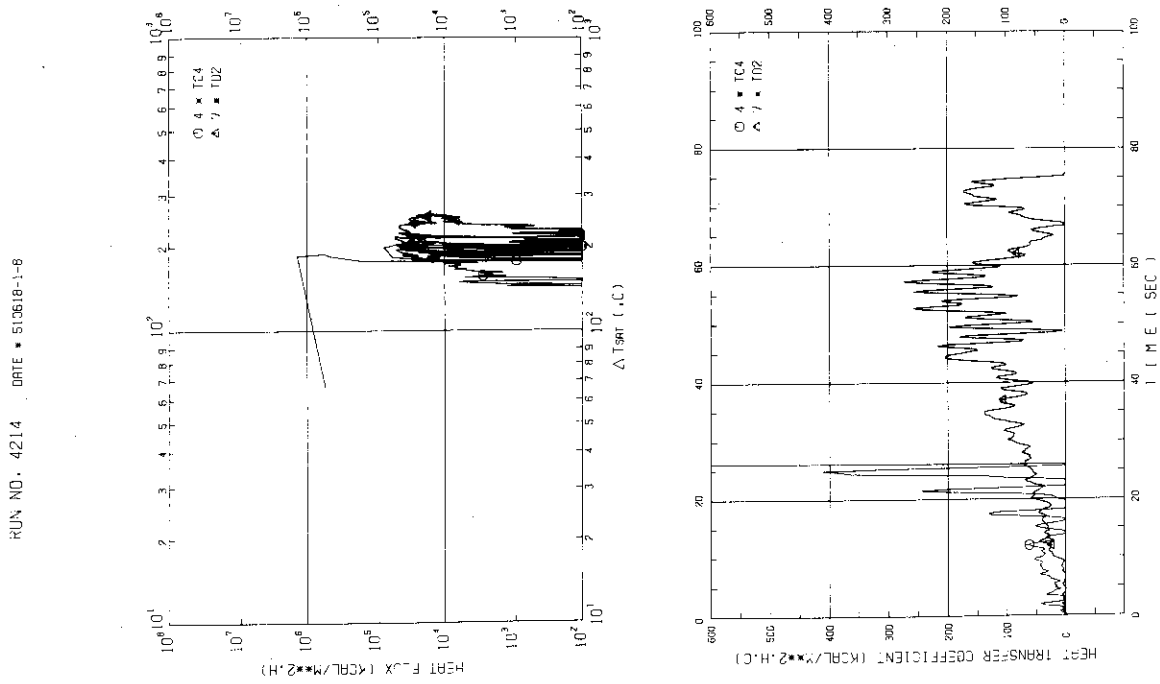


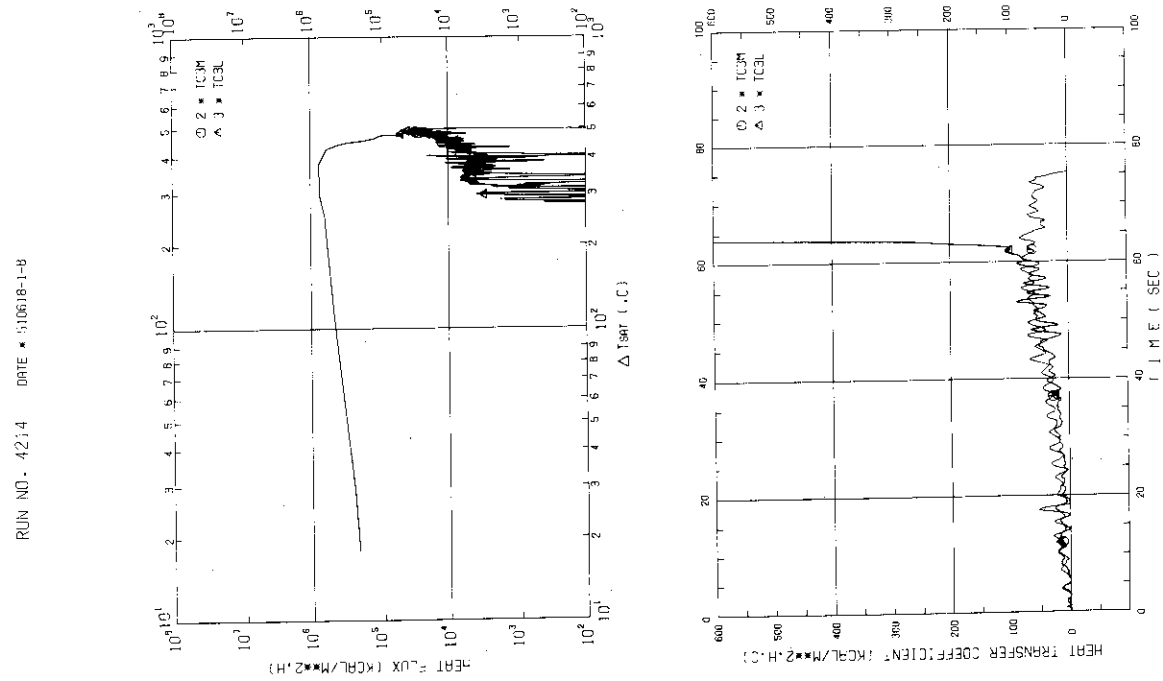

RUN NO = 4214 (3 OF 4)
20 = PLP
21 = PUP
22 = DPL
24 = DPTL
25 = DPTS
TIME AFTER FLOOD(SEC)
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)

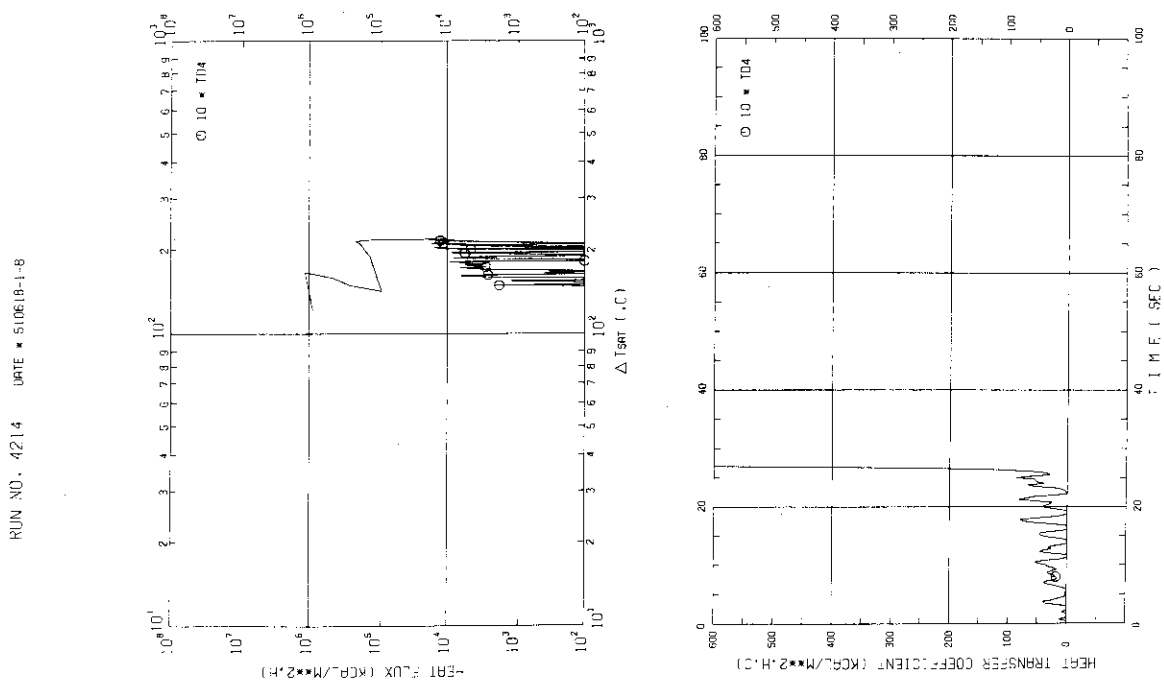

RUN NO = 4214 (4 OF 4)
26 = DPHJ
27 = DPPM
28 = FM
30 = I
TIME AFTER FLOOD(SEC)
FLOW RATE (CM/SEC)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)

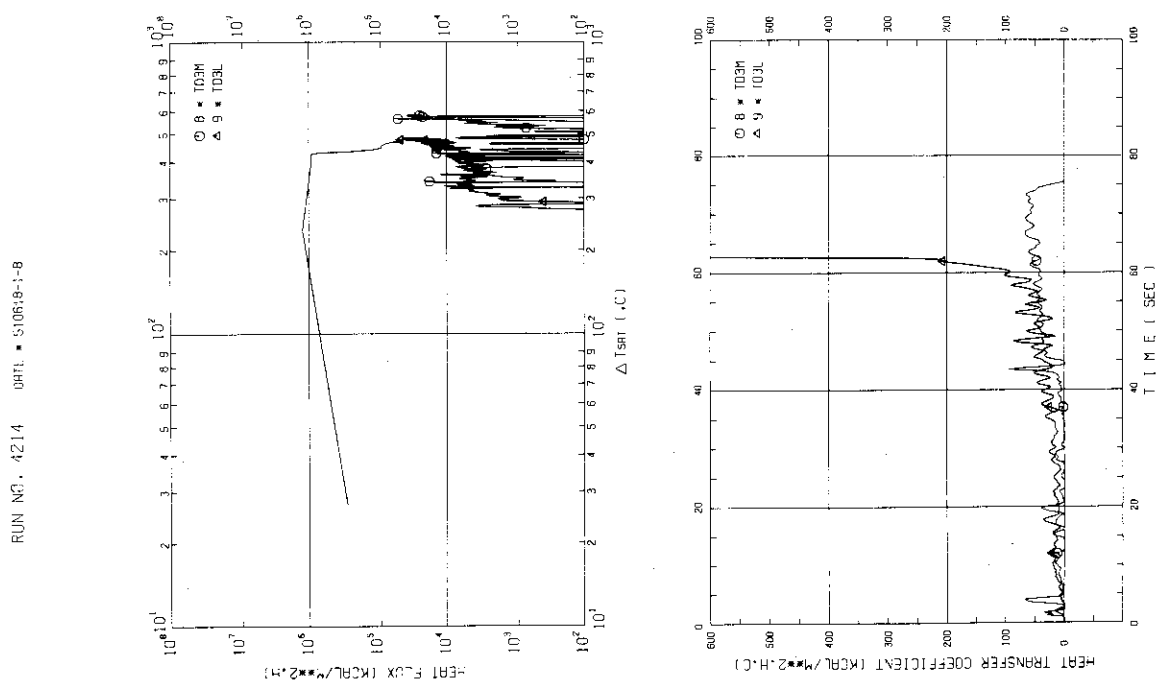

RUN NO = 4214 (1 OF 4)
DATE = 810618-1-8
PEAK POWER × 1.6 KW/M
INLET WATER TEMP. × 80 C
SYSTEM PRESSURE × 1 KG/CM**2A
1 = TC1
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
7 = TD2
8 = TD3M
9 = TD3L
10 = TD4
TIME AFTER FLOOD(SEC)
TEMPERATURE (C)


RUN NO = 4214 (2 OF 4)
12 = TH2
13 = TH3U
14 = TH3L
15 = TH4
16 = TUG
17 = TUL
18 = TPT
TIME AFTER FLOOD(SEC)
TEMPERATURE (C)


RUN NO. 4214 DATE = 810618-1-8
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 4 × TC4
△ 7 × TD2
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4214 DATE = 810618-1-8
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 2 × TC3M
△ 3 × TC3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4214 DATE = 5106(8-1-8
HEAT FLUX (KCAL/M**2.H)
△ TSAT (.C)
○ 10 = TD4
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4214 DATE = 5106(8-1-8
HEAT FLUX (KCAL/M**2.H)
△ TSAT (.C)
○ 8 = TD3M
△ 9 = TD3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

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* *
* RUN NO. 4215 *
* *
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(DATE * 510622 - 1 - 9)

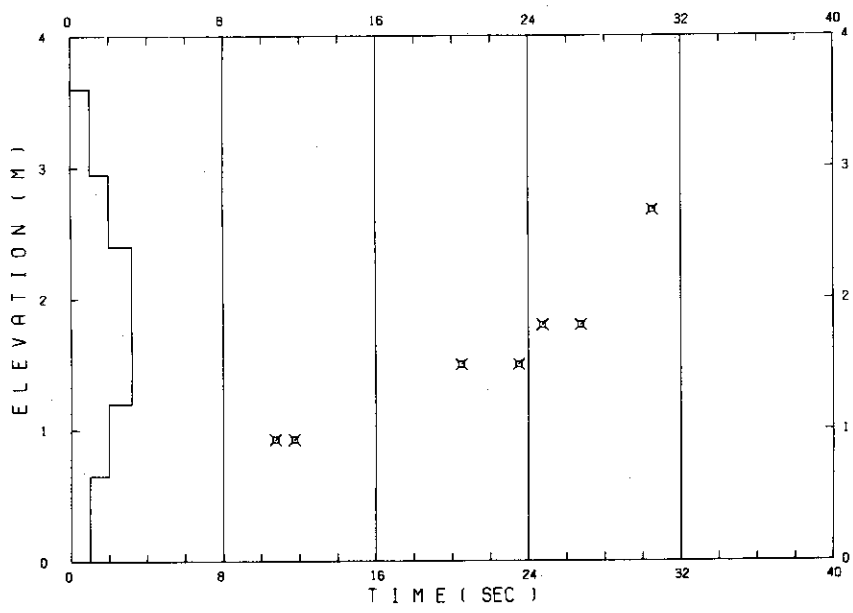
RUN CONDITIONS

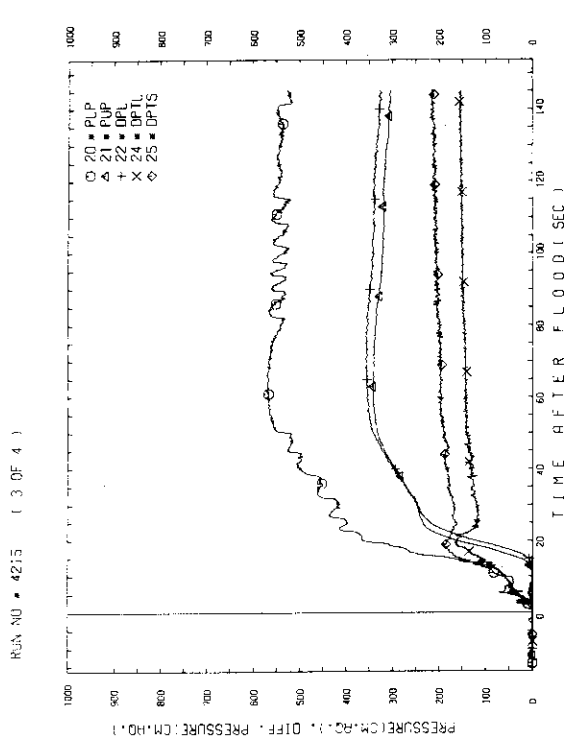
PEAK POWER	2.1	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	54	.C
INLET WATER VELOCITY	8	CM/SEC

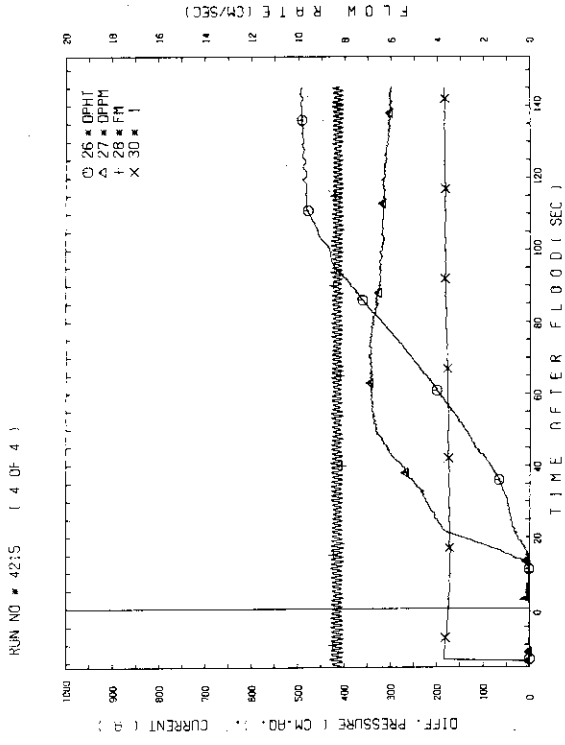
TEMPERATUR PROFILE

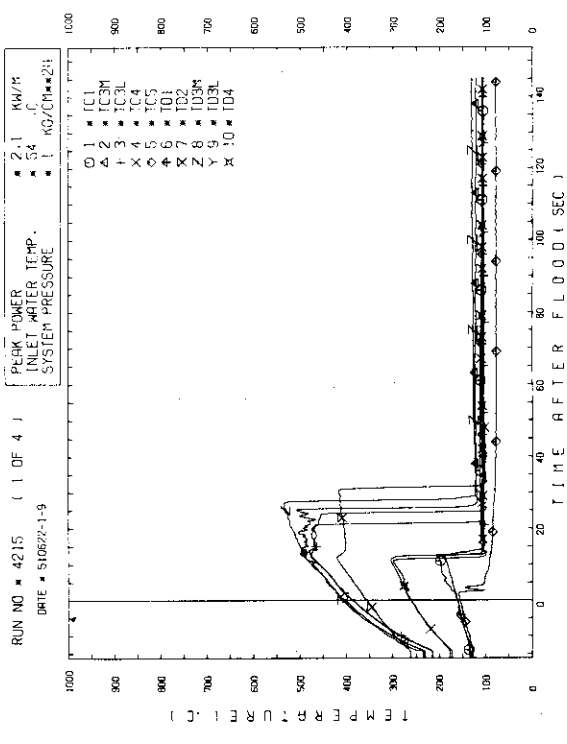
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
2	TC3M	403.	25.00	508.	24.75	501.
3	TC3L	386.	13.75	480.	20.50	468.
4	TC4	261.	11.00	299.	10.75	298.
7	TD2	397.	11.75	420.	30.50	417.
8	TD3M	408.	25.75	534.	26.75	533.
9	TD3L	387.	13.00	475.	23.50	456.
10	TD4	260.	11.00	304.	11.75	302.

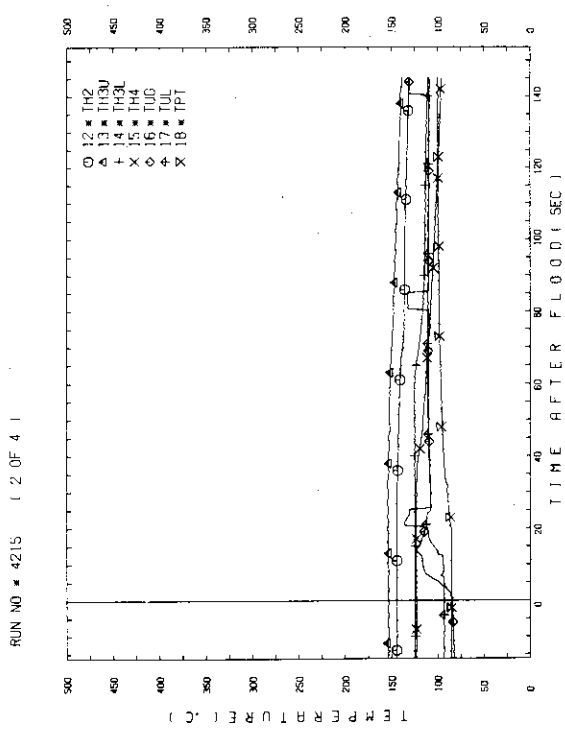
RUN NO. 4215 DATE * 510622-1-9

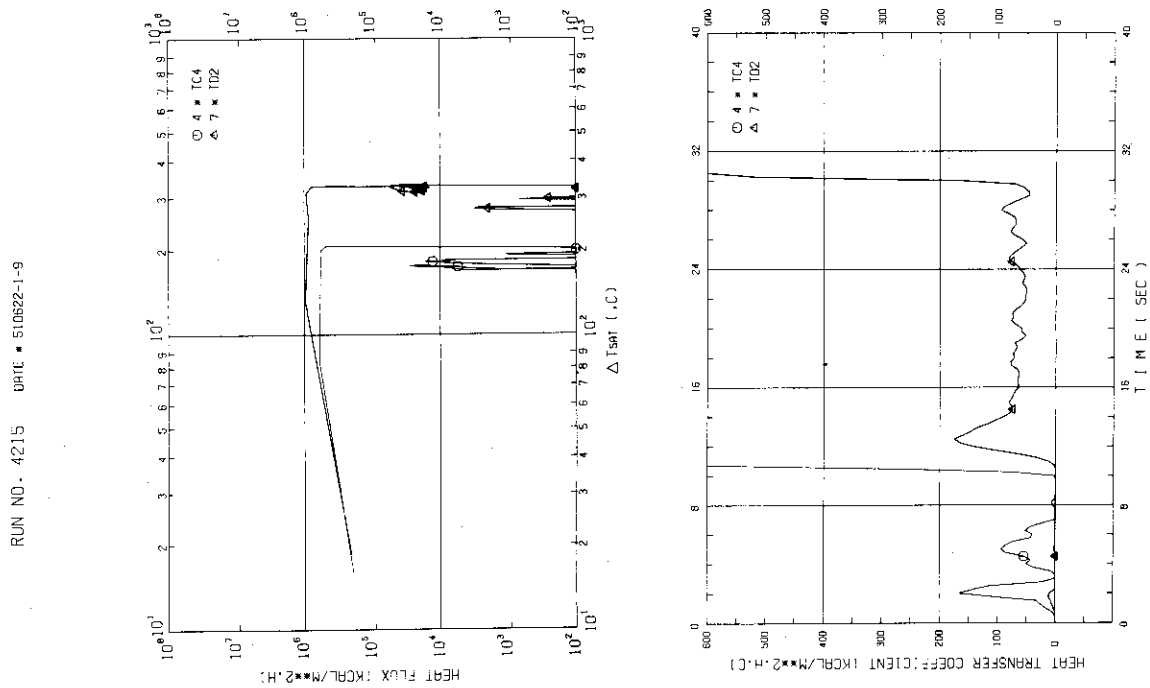


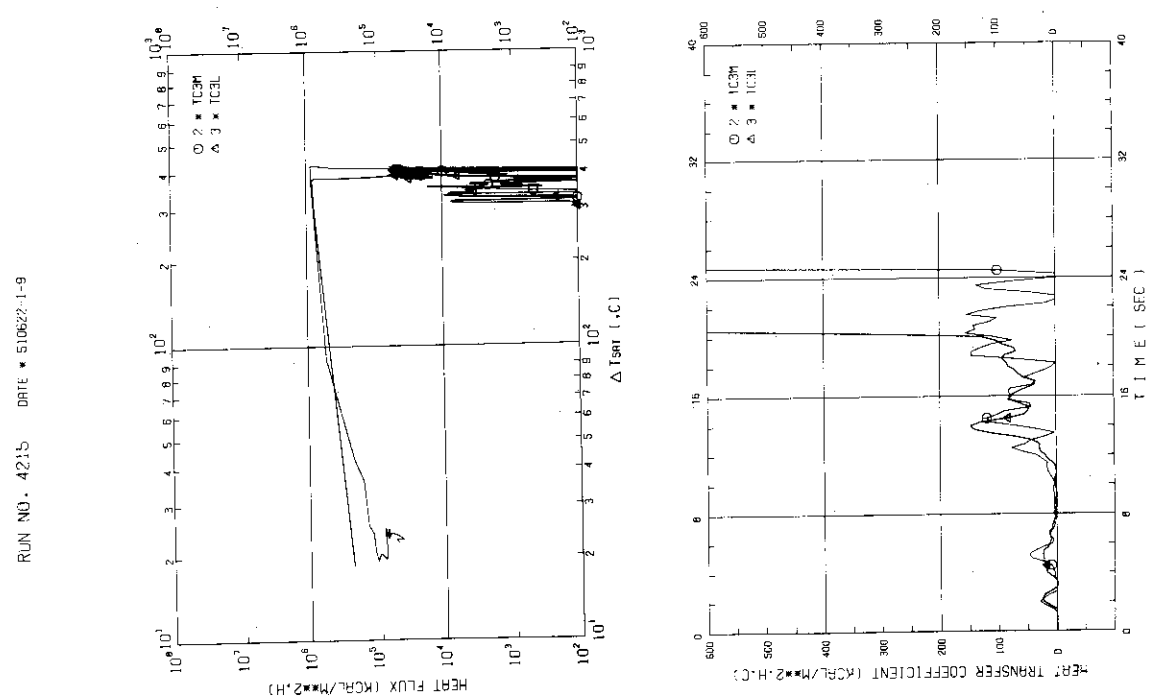

RUN NO = 4215 (3 OF 4)
20 = PLP
21 = PUP
22 = DPL
24 = DPTL
25 = DPTS
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.HQ.)
TIME AFTER FLOOD(SEC)

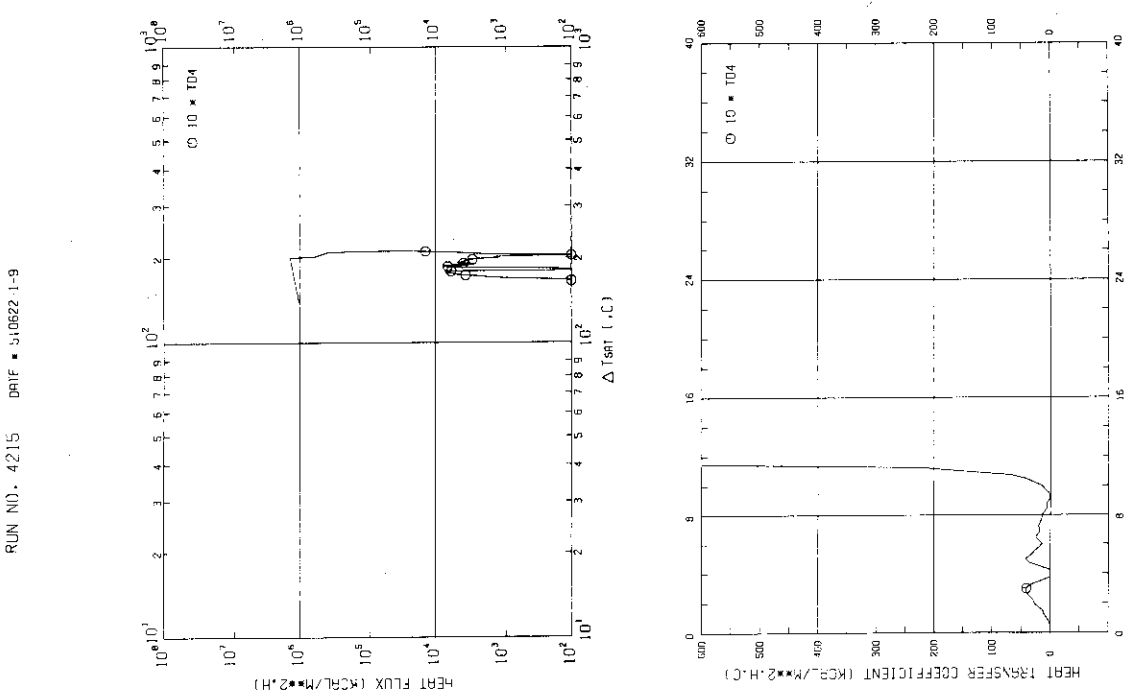

RUN NO = 4215 (4 OF 4)
26 = QPHT
27 = QPPM
28 = FM
30 = I
FLOW RATE (CM/SEC)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
TIME AFTER FLOOD(SEC)

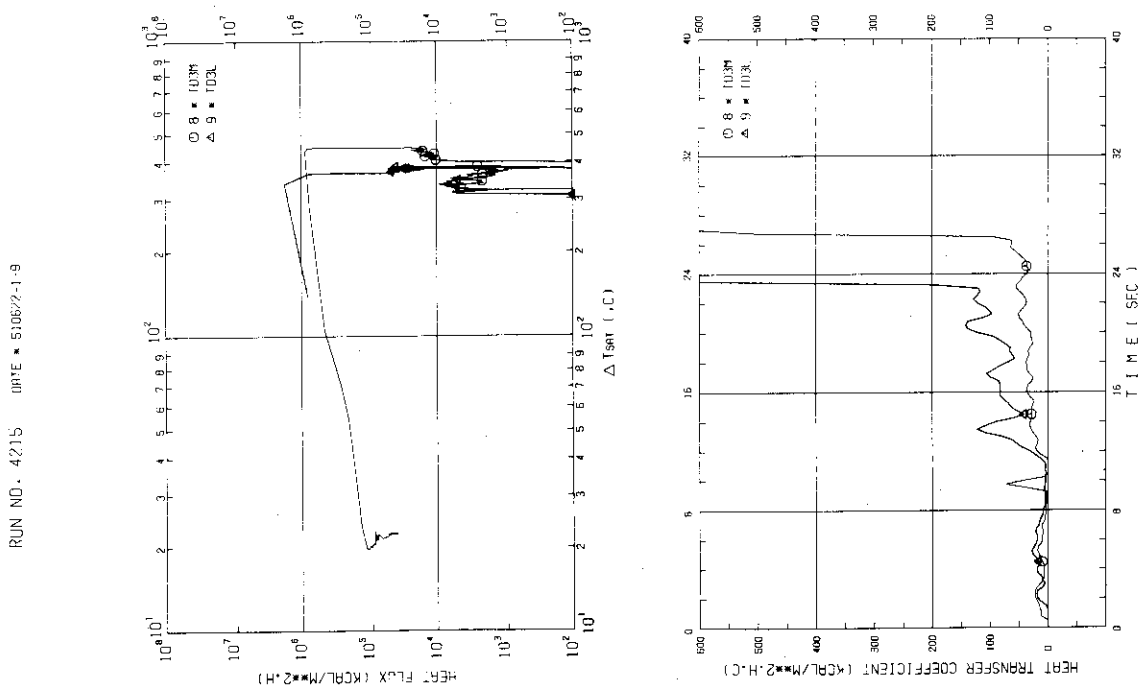

RUN NO = 4215 (1 OF 4)
DATE = 810622-1-9
PEAK POWER = 2.1 KW/M
INLET WATER TEMP. = 54 C
SYSTEM PRESSURE = 1 KG/CM**2
1 = TC1
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
7 = TD2
8 = TD3M
9 = TD3L
10 = TD4
TEMPERATURE (C)
TIME AFTER FLOOD(SEC)


RUN NO = 4215 (2 OF 4)
12 = TH2
13 = TH3U
14 = TH3L
15 = TH4
16 = TUG
17 = TUL
18 = TPT
TEMPERATURE (C)
TIME AFTER FLOOD(SEC)


RUN NO. 4215 DATE = 510622-1-9
Φ 4 = TC4
Δ 7 = TD2
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4215 DATE = 510622-1-9
Φ 2 = TC3M
Δ 3 = TC3L
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4215 DATE = 910622 1-9
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4215 DATE = 910622-1-9
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

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* *
* RUN NO. 4216 *
* *
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(DATE * 510618 - 1 -10)

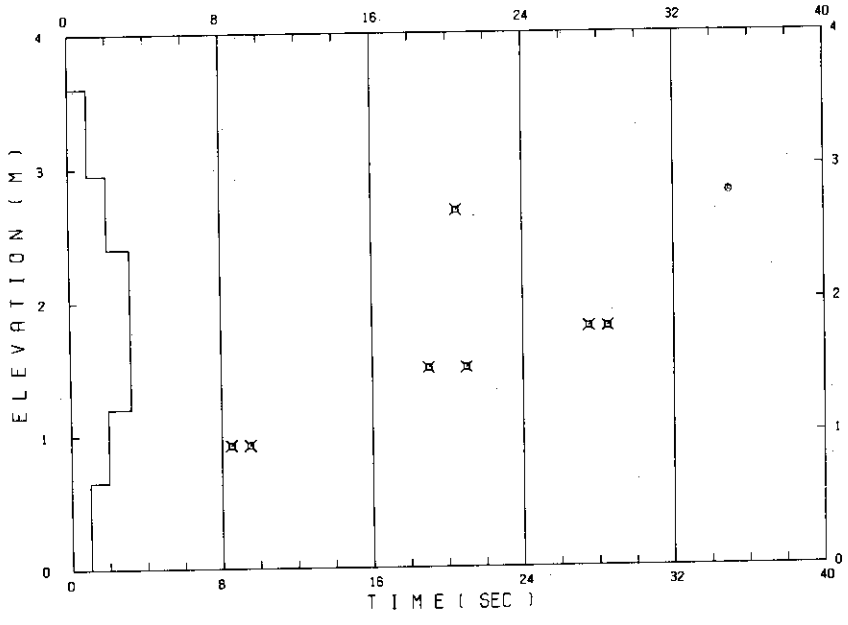
RUN CONDITIONS

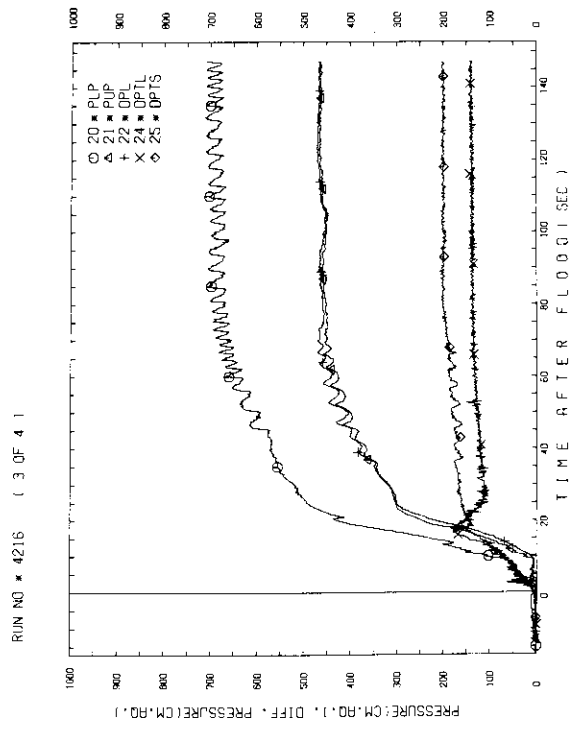
PEAK POWER	2.1	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	80	.C
INLET WATER VELOCITY	8	CM/SEC

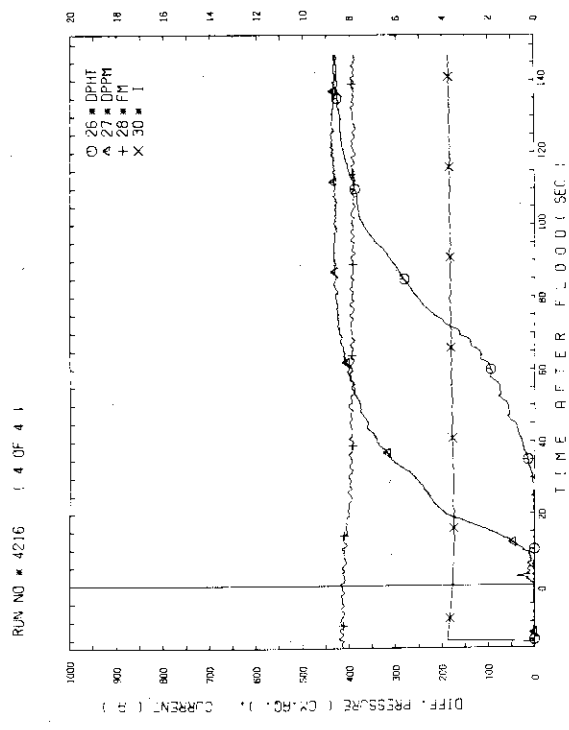
TEMPERATUR PROFILE

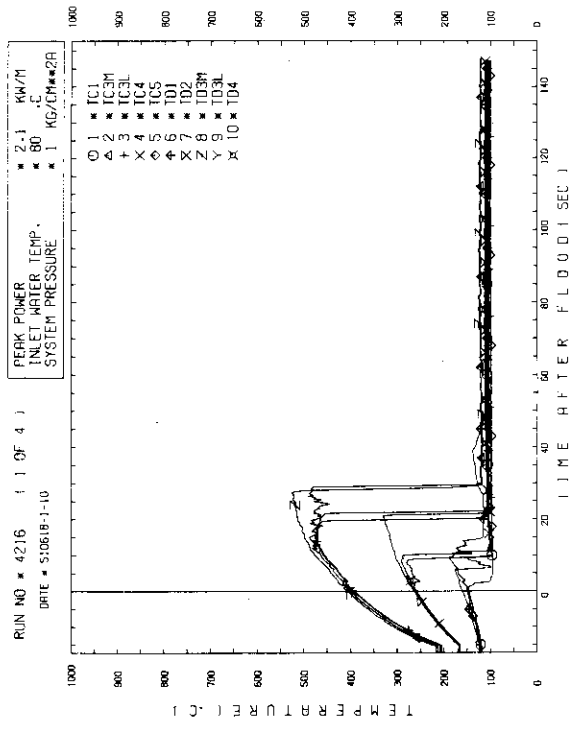
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
2	TC3M	399.	26.50	491.	28.50	484.
3	TC3L	391.	14.75	476.	19.00	464.
4	TC4	260.	8.00	281.	8.50	278.
7	TD2	263.	21.00	331.	20.50	330.
8	TD3M	406.	27.25	526.	27.50	525.
9	TD3L	393.	15.75	472.	21.00	461.
10	TD4	262.	8.75	292.	9.50	288.

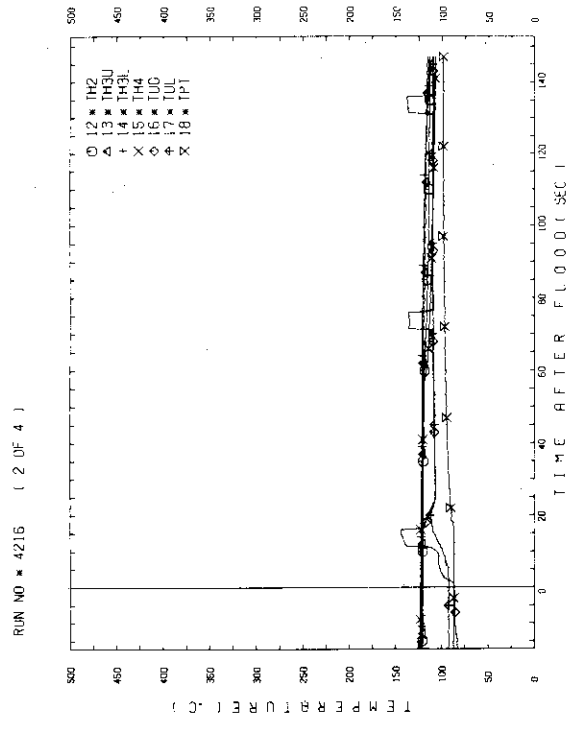
RUN NO. 4216 DATE * 510618-1-10

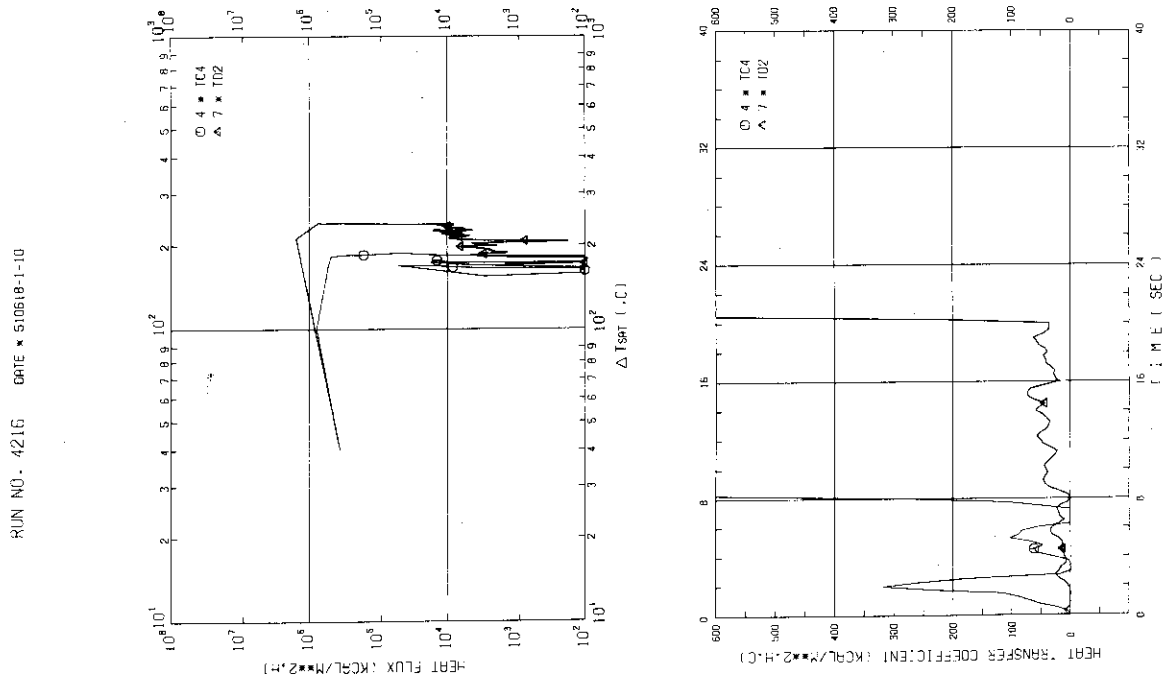


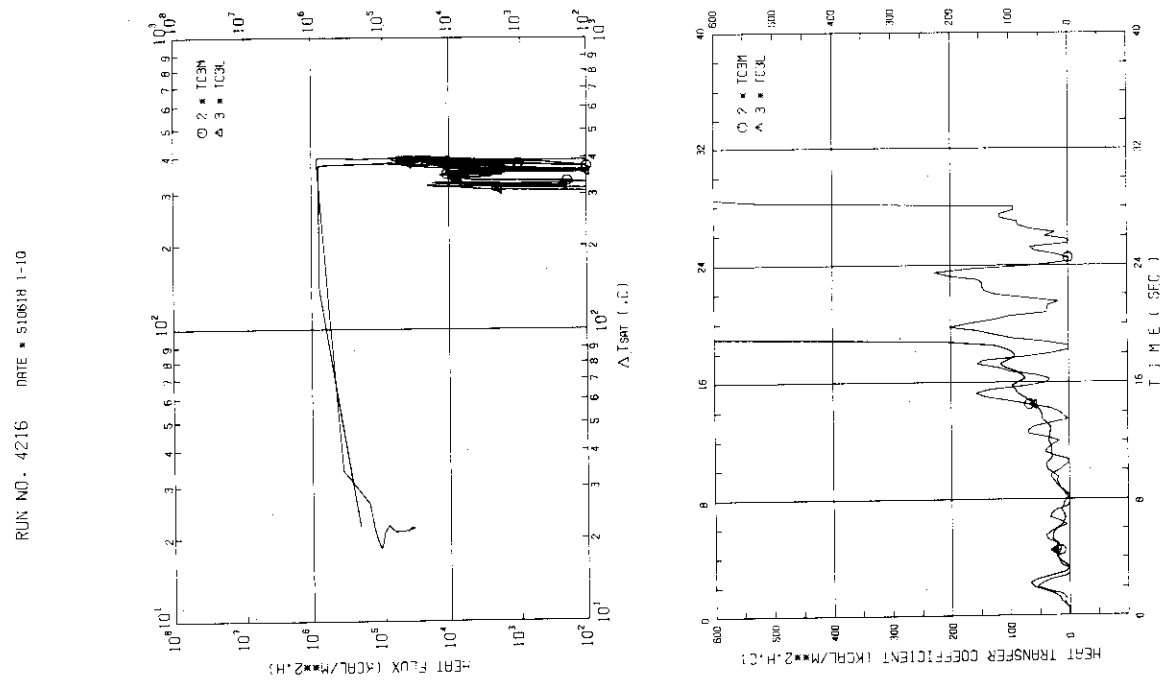

RUN NO = 4216 (3 OF 4)
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD(SEC)
20 = PLP
21 = PUP
22 = OPL
24 = OPTL
25 = OPTS

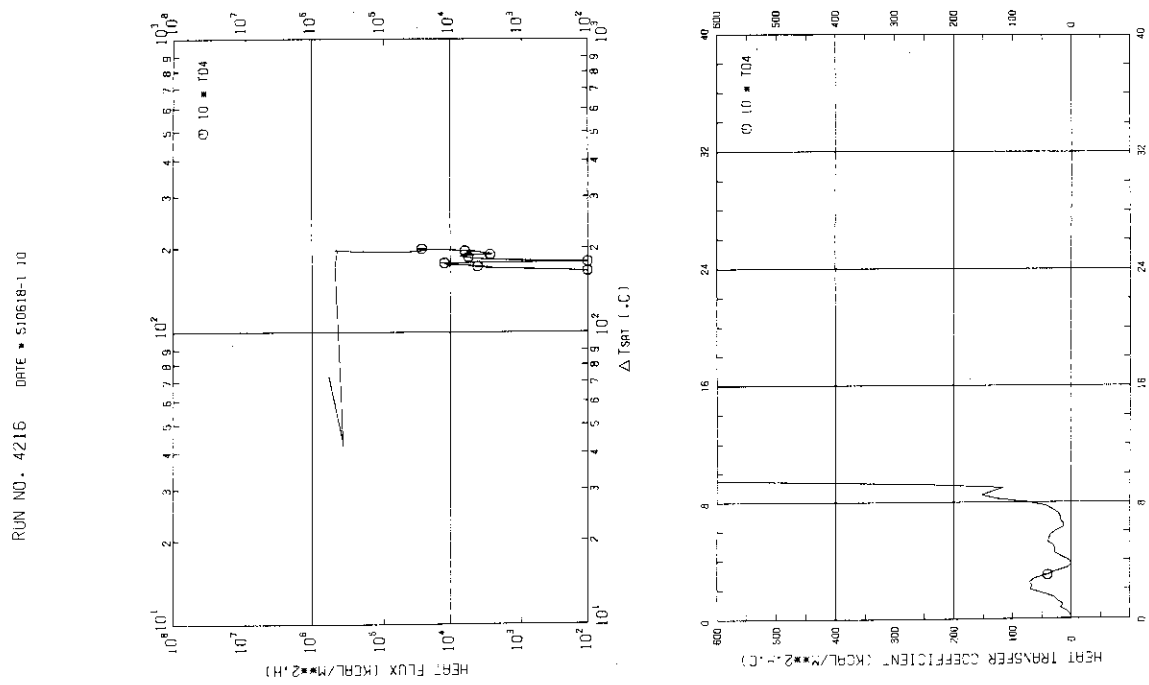

RUN NO = 4216 (4 OF 4)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
FLOW RATE (CM/SEC)
TIME AFTER FLOOD(SEC)
26 = DPHT
27 = DPPM
28 = FM
30 = I

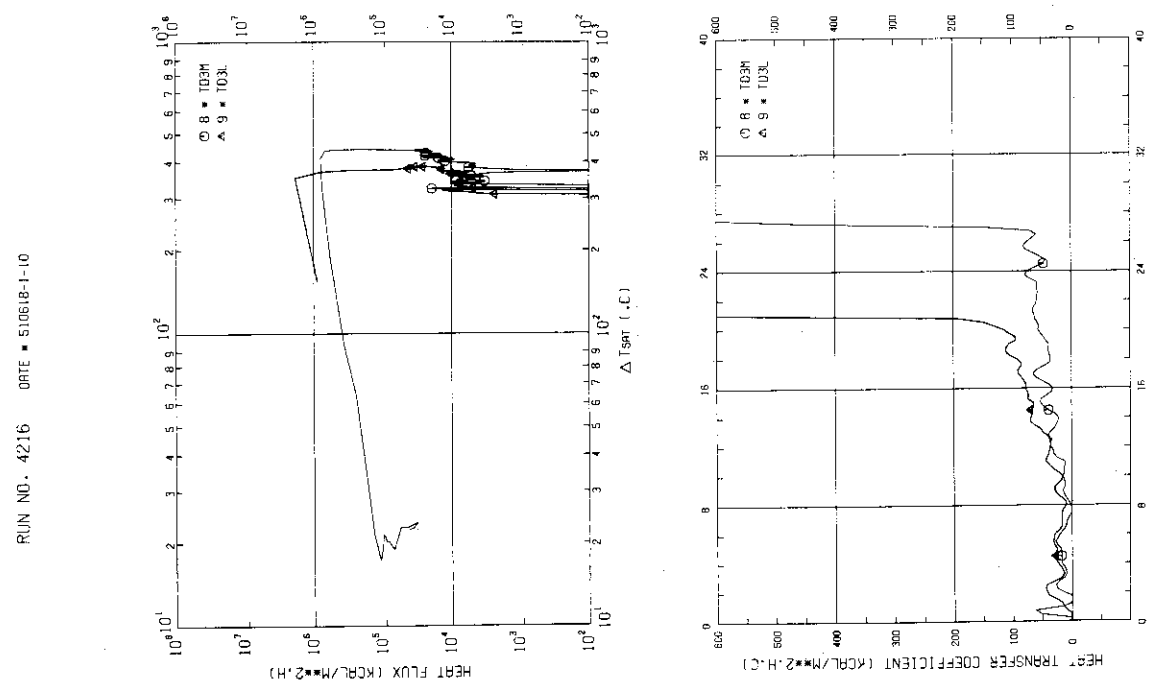

RUN NO = 4216 (1 OF 4)
DATE = 51061B-1-10
PEAK POWER = 2.1 KW/M
INLET WATER TEMP. = 80 C
SYSTEM PRESSURE = 1 KG/CM**2A
TEMPERATURE (C)
TIME AFTER FLOOD(SEC)
1 = TC1
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
7 = TD2
8 = TD3M
9 = TD3L
10 = TD4


RUN NO = 4216 (2 OF 4)
TEMPERATURE (C)
TIME AFTER FLOOD(SEC)
12 = TH2
13 = TH3U
14 = TH3L
15 = TH4
16 = TUC
17 = TUL
18 = TPT


RUN NO. 4216 DATE = 510618-1-10
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 4 * TC4
△ 7 * TD2
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4216 DATE = 510618-1-10
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 2 * TC3M
△ 3 * TC3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4216 DATE = 510618-1 10
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 10 = T04
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4216 DATE = 510618-1-10
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 8 = T03M
△ 9 = T03L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

****
* *
* RUN NO. 4217 *
* *
****

(DATE * 510622 - 1 -10)

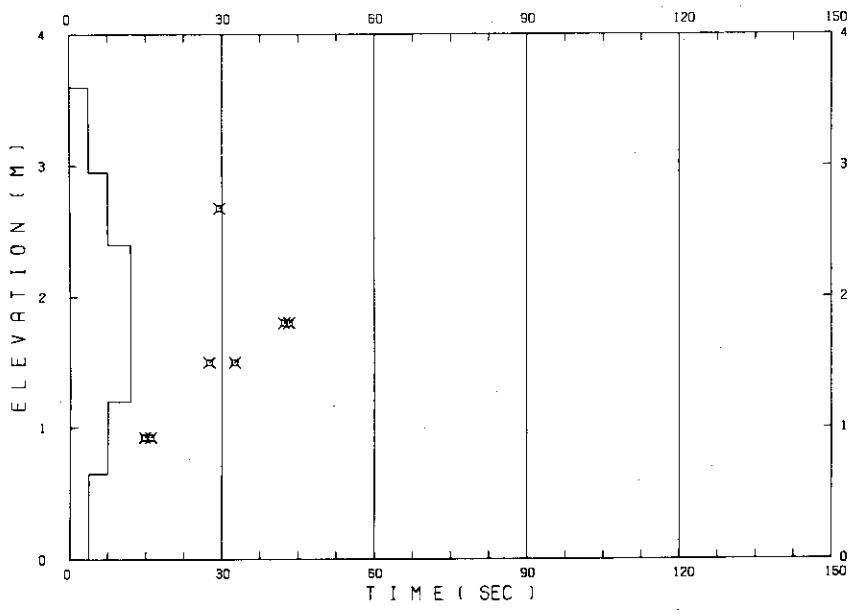
RUN CONDITIONS

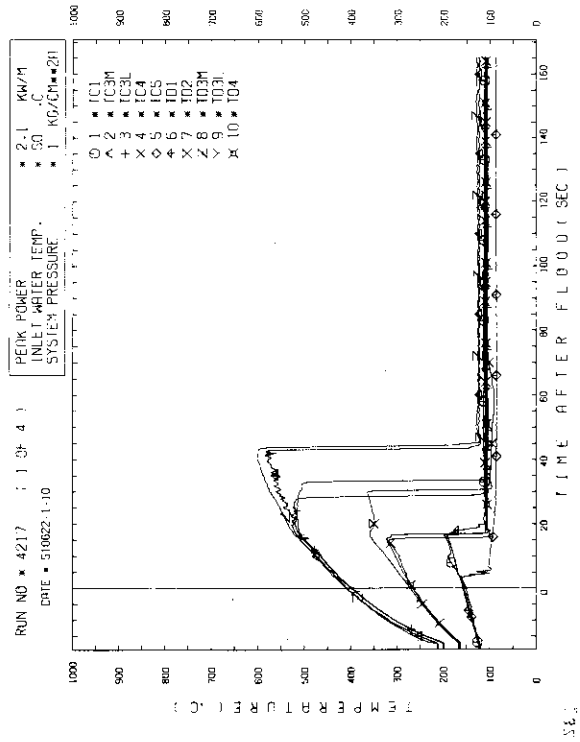
PEAK POWER	2.1	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	60	.C
INLET WATER VELOCITY	6	CM/SEC

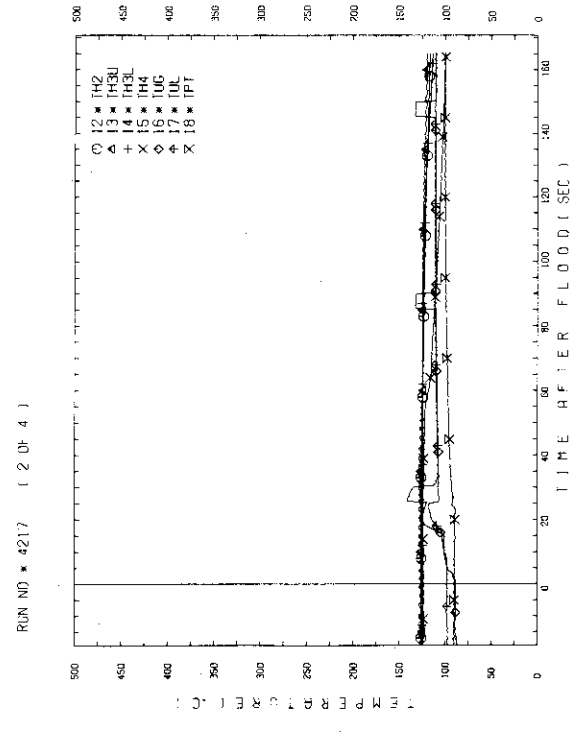
TEMPERATUR PROFILE

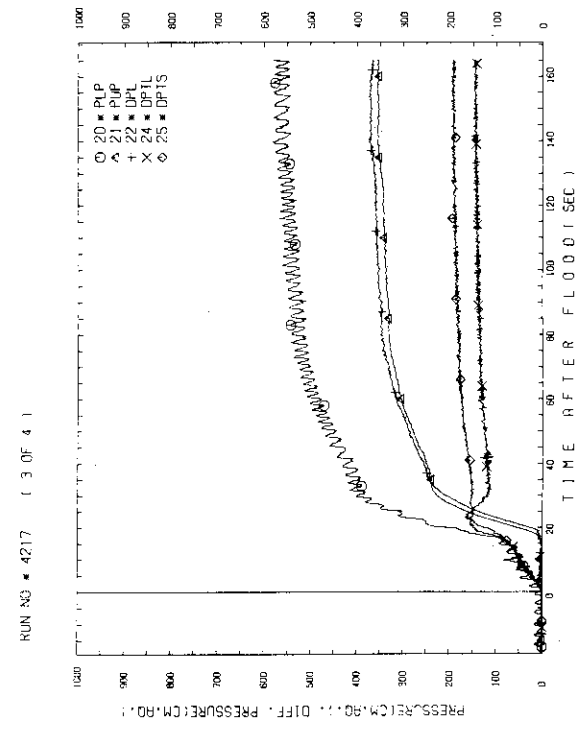
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
2	TC3M	407.	41.25	585.	42.25	579.
3	TC3L	397.	26.00	522.	27.50	518.
4	TC4	265.	15.00	317.	14.75	316.
7	TD2	271.	29.75	364.	29.50	363.
8	TD3M	409.	41.25	601.	43.25	596.
9	TD3L	398.	26.00	517.	32.50	503.
10	TD4	266.	15.25	321.	16.00	312.

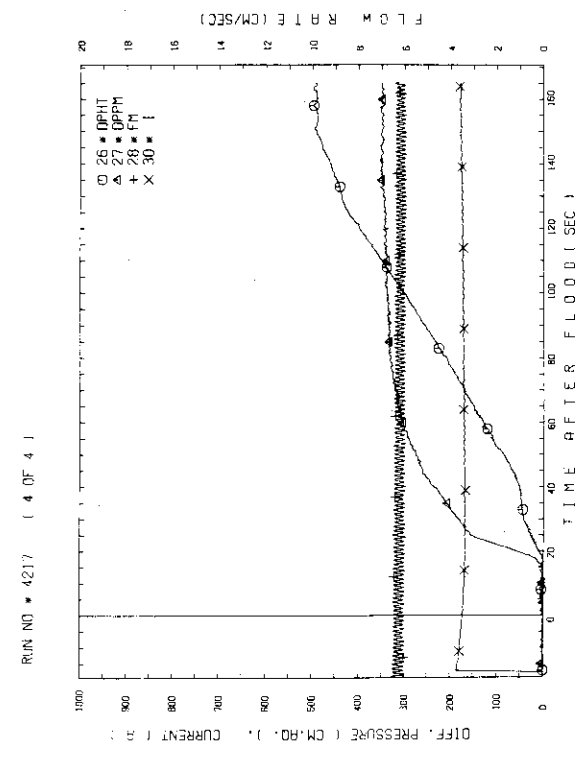
RUN NO. 4217 DATE * 510622-1-10

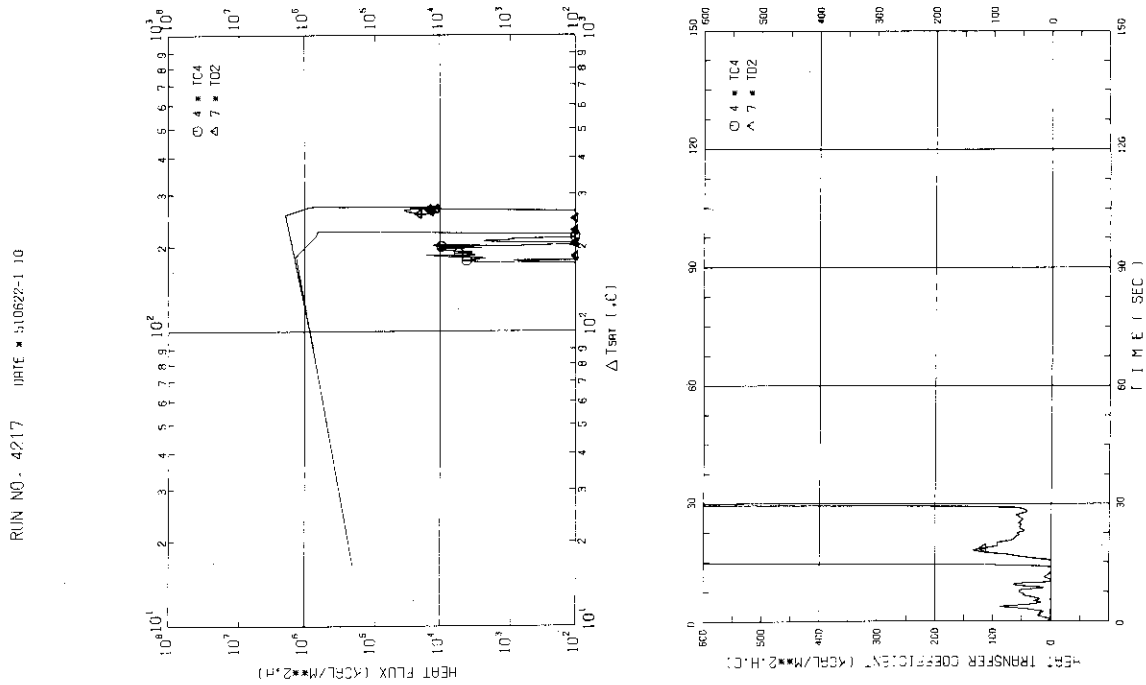


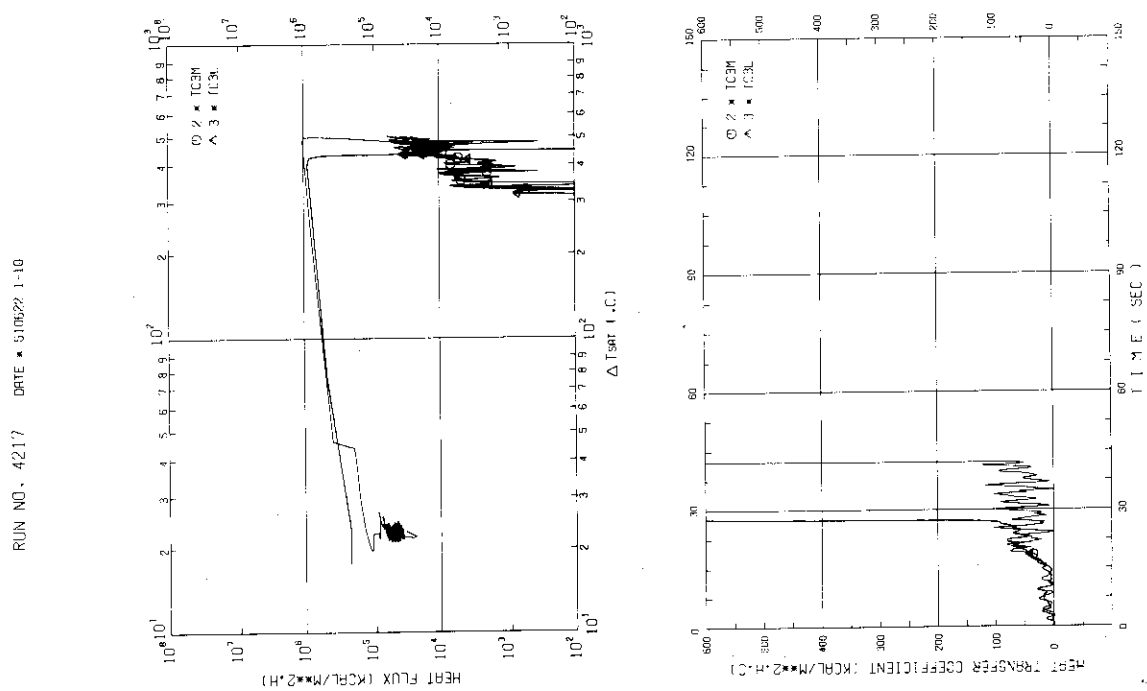

RUN NO = 4217 (1 OF 4)
DATE = 910622:1:10
PEAK POWER * 2:1 KW/M
INLET WATER TEMP. * 50 .C
SYSTEM PRESSURE * 1 KG/CM**2
1 * TC1
2 * TC3M
3 * TC3L
4 * TC4
5 * TC5
6 * TD1
7 * TD2
8 * TD3M
9 * TD3L
10 * TD4
TEMPERATURE (.C)
TIME AFTER FLOOD (SEC)

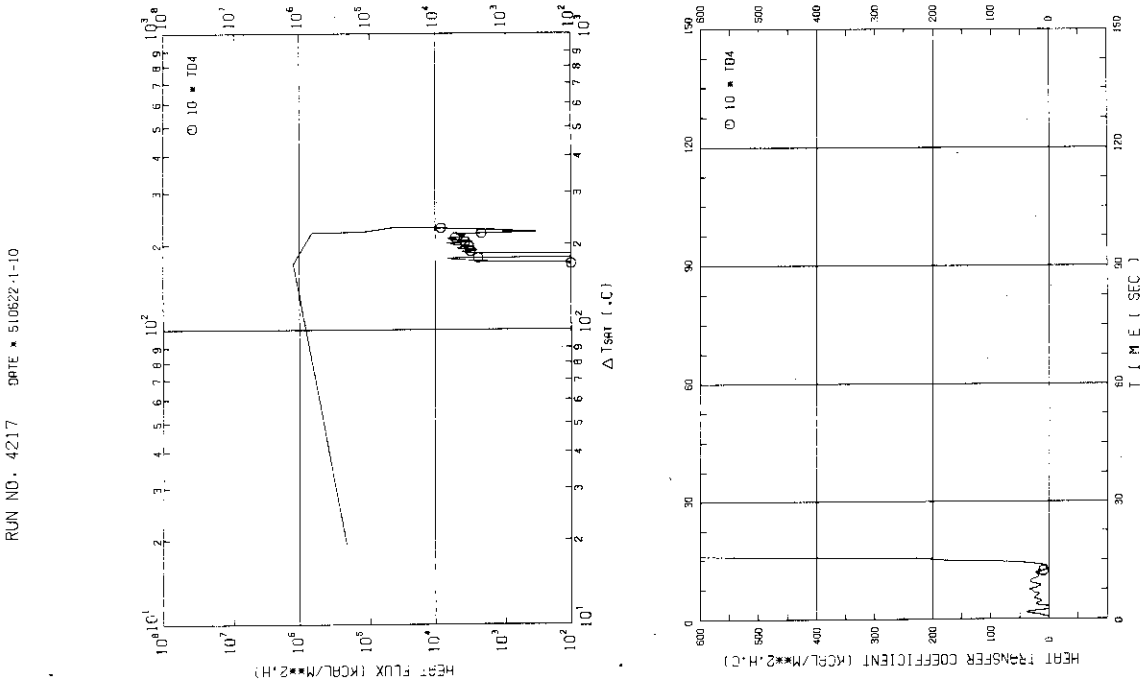

RUN NO = 4217 (2 OF 4)
12 * TH2
13 * TH3U
14 * TH3L
15 * TH4
16 * TUG
17 * TUL
18 * TPT
TEMPERATURE (.C)
TIME AFTER FLOOD (SEC)

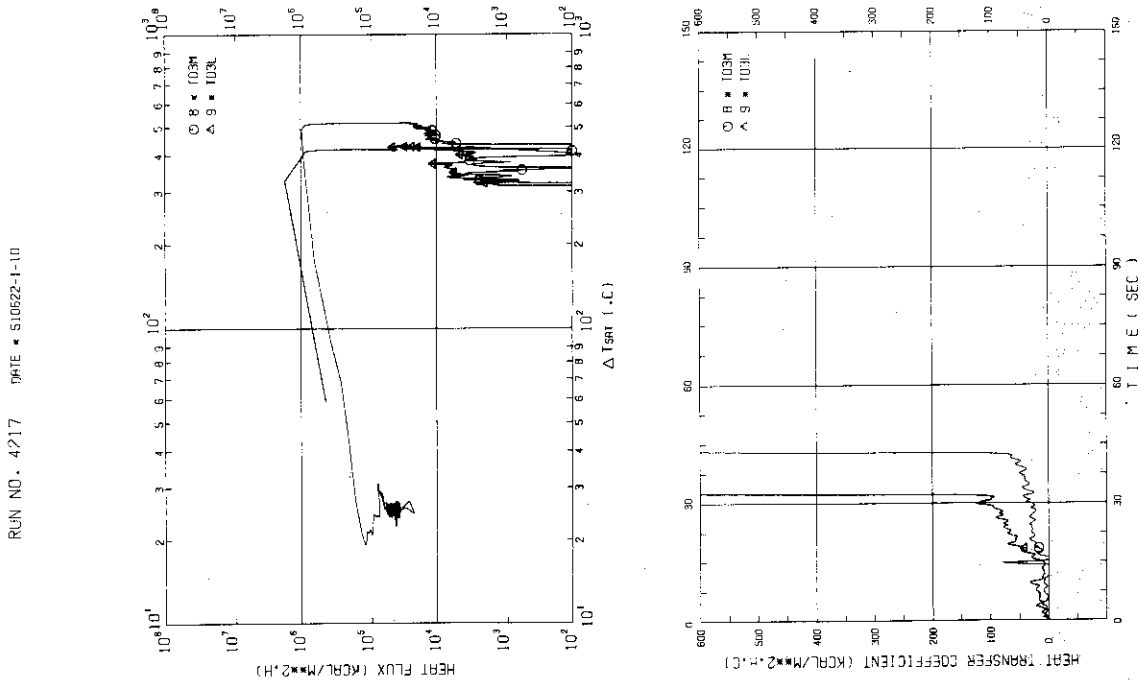

RUN NO = 4217 (3 OF 4)
20 * PLP
21 * PUP
22 * DPL
24 * DPTL
25 * DPTS
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD (SEC)


RUN NO = 4217 (4 OF 4)
26 * DPHT
27 * DPPM
28 * FM
30 * I
FLOW RATE (CM/SEC)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
TIME AFTER FLOOD (SEC)


RUN NO. 4217 DATE = 5106??-1 10
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 4 × TC4
△ 7 × TD2
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4217 DATE = 5106?? 1-10
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 2 × TC3M
△ 3 × TC3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4217 DATE = 510622-1-10
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4217 DATE = 510622-1-10
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

RUN NO. 4218

(DATE * 510618 - 1 -12)

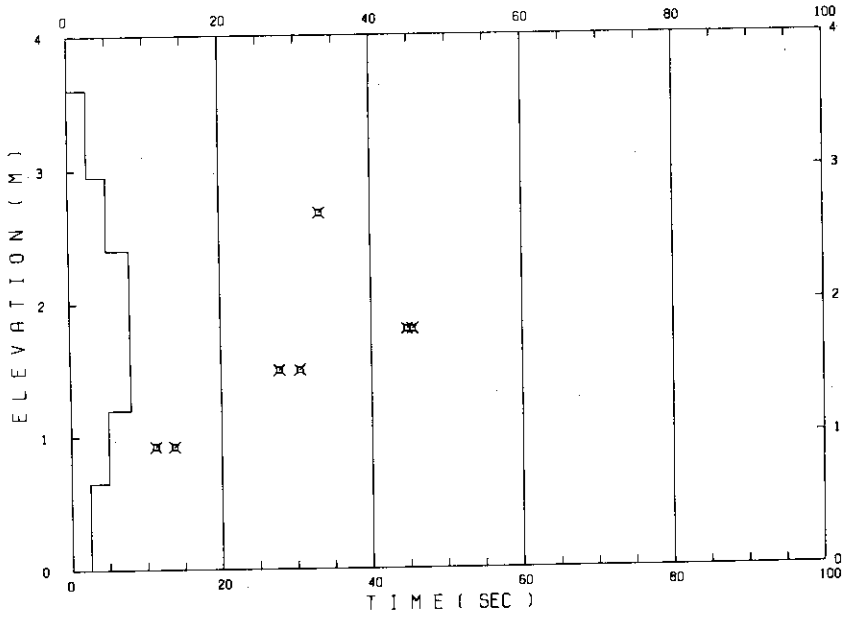
RUN CONDITIONS

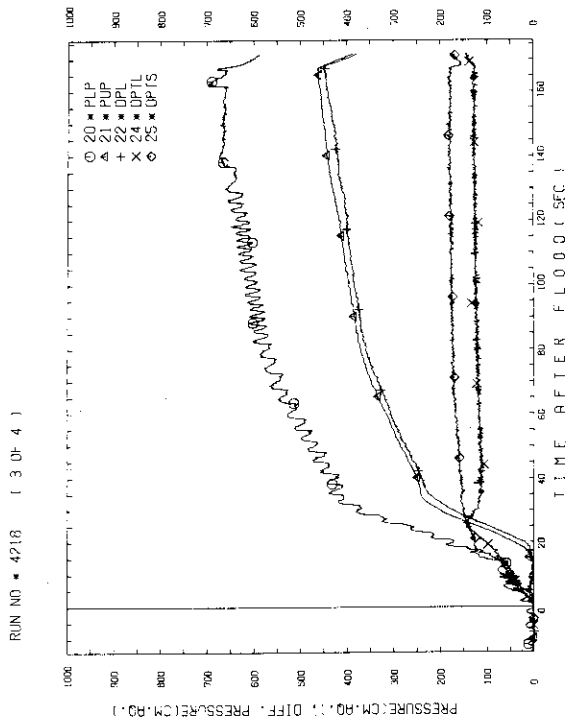
PEAK POWER	2.1	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	80	.C
INLET WATER VELOCITY	6	CM/SEC

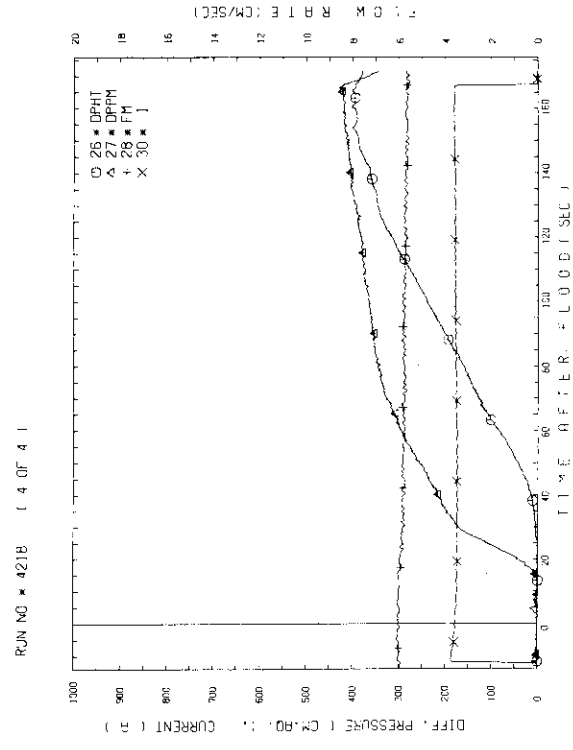
TEMPERATUR PROFILE

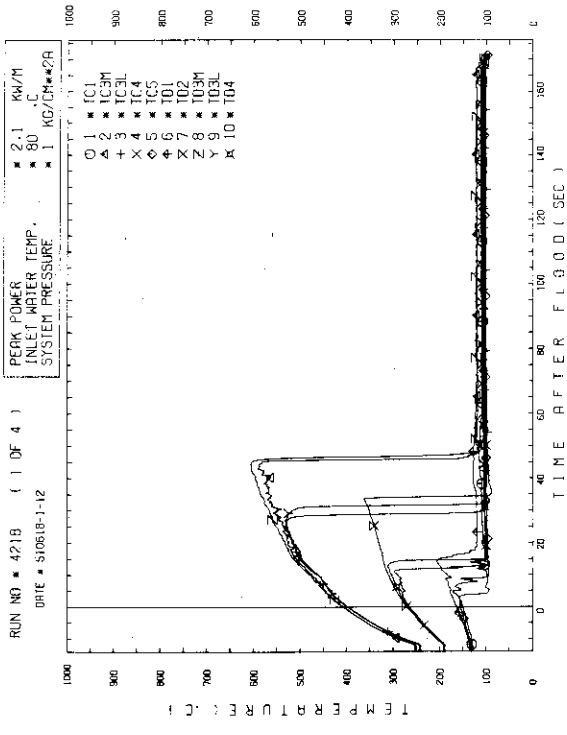
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
2	TC3M	406.	43.00	590.	44.75	582.
3	TC3L	397.	25.50	532.	27.75	521.
4	TC4	265.	11.25	297.	11.25	297.
7	TD2	269.	33.50	363.	33.25	361.
8	TD3M	407.	44.50	606.	45.50	600.
9	TD3L	396.	27.00	533.	30.50	510.
10	TD4	266.	12.75	312.	13.75	304.

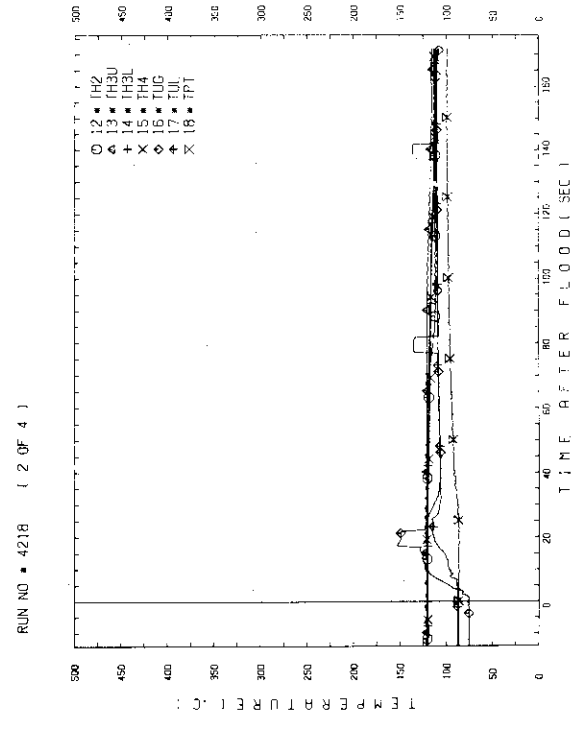
RUN NO. 4218 DATE * 510618-1-12

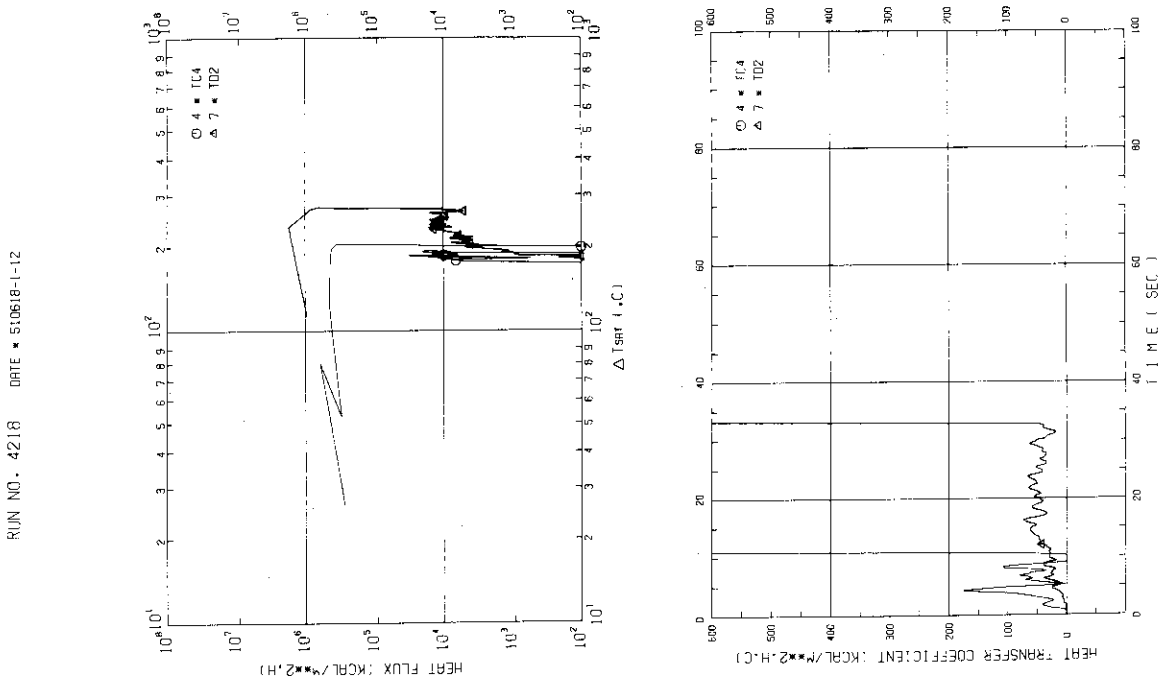


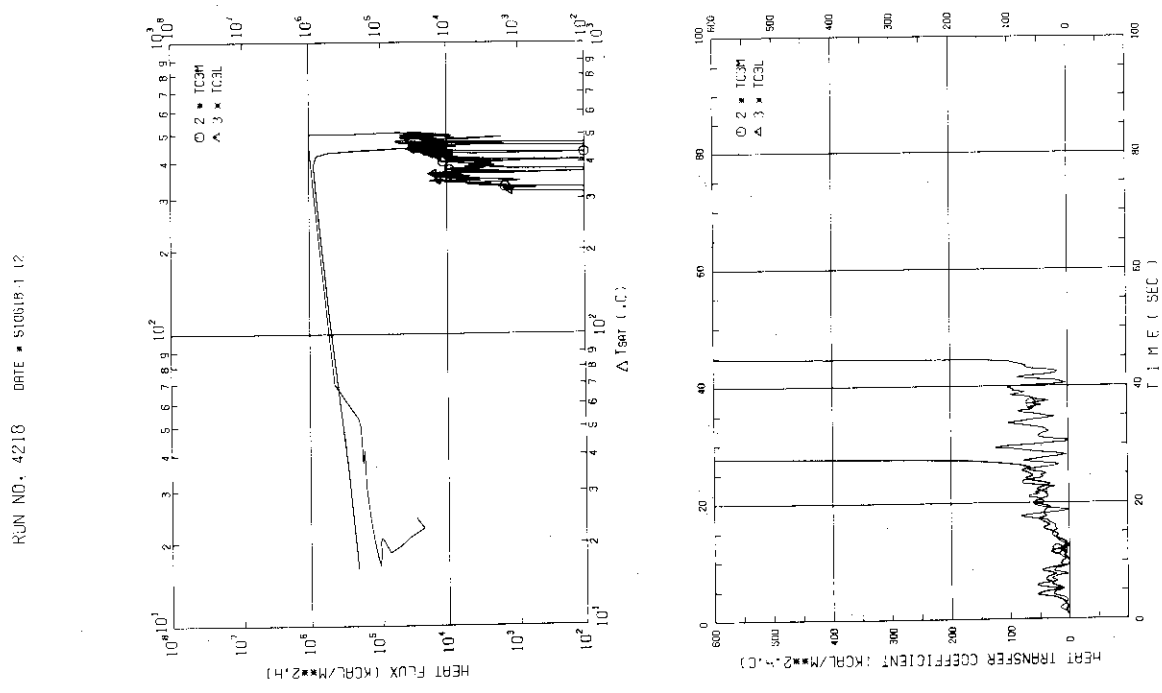

RUN NO = 4218 (3 OF 4)
20 * PLP
21 * PUP
22 * DPL
24 * DPTL
25 * DPTS
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD(SEC)

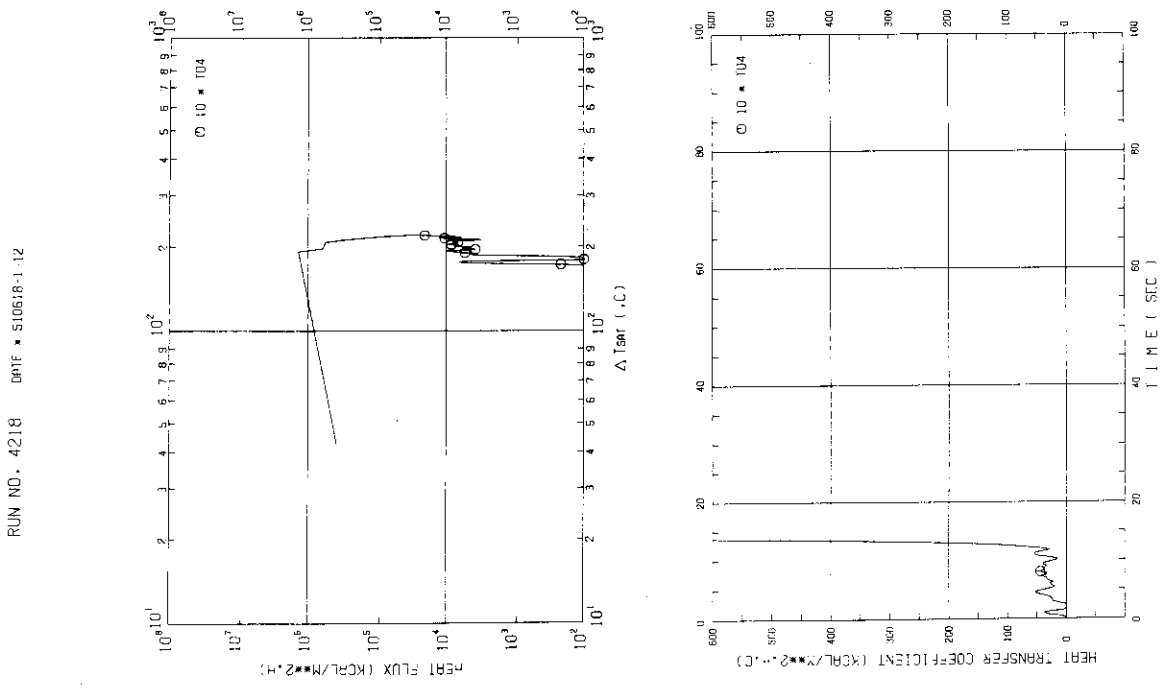

RUN NO = 4218 (4 OF 4)
26 * DPHT
27 * DPPM
28 * FM
30 * I
FLOW RATE (CM/SEC)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
TIME AFTER FLOOD(SEC)

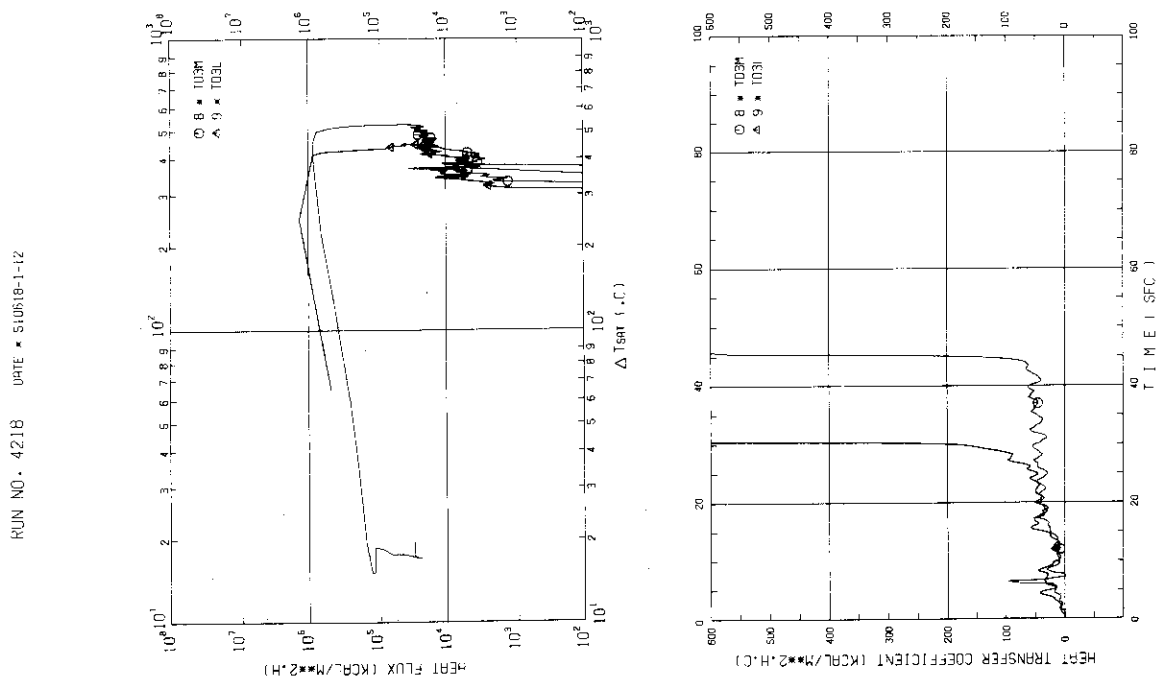

RUN NO = 4218 (1 OF 4)
DATE = 810618-1-12
PEAK POWER * 2.1 KW/M
INLET WATER TEMP. * 80 C
SYSTEM PRESSURE * 1 KG/CM**2A
1 * TC1
2 * TC3M
3 * TC3L
4 * TC4
5 * TC5
6 * TD1
7 * TD2
8 * TD3M
9 * TD3L
10 * TD4
TEMPERATURE(C)
TIME AFTER FLOOD(SEC)


RUN NO = 4218 (2 OF 4)
12 * TH2
13 * TH3U
14 * TH3L
15 * TH4
16 * TUG
17 * TUL
18 * TPT
TEMPERATURE(C)
TIME AFTER FLOOD(SEC)


RUN NO. 4218 DATE = S10618-1-12
HEAT FLUX (KCAL/M**2.H)
ΔTsat (°C)
○ 4 = TC4
△ 7 = TD2
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4218 DATE = S10618-1-12
HEAT FLUX (KCAL/M**2.H)
ΔTsat (°C)
○ 2 = TC3M
△ 3 = TC3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4218 DATE = 810618-1-12
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 10 = TD4
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4218 DATE = 810618-1-12
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 8 = TD3M
△ 9 = TD3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

****
* *
* RUN NO. 4219 *
* *
****

(DATE * 510622 - 1 -11)

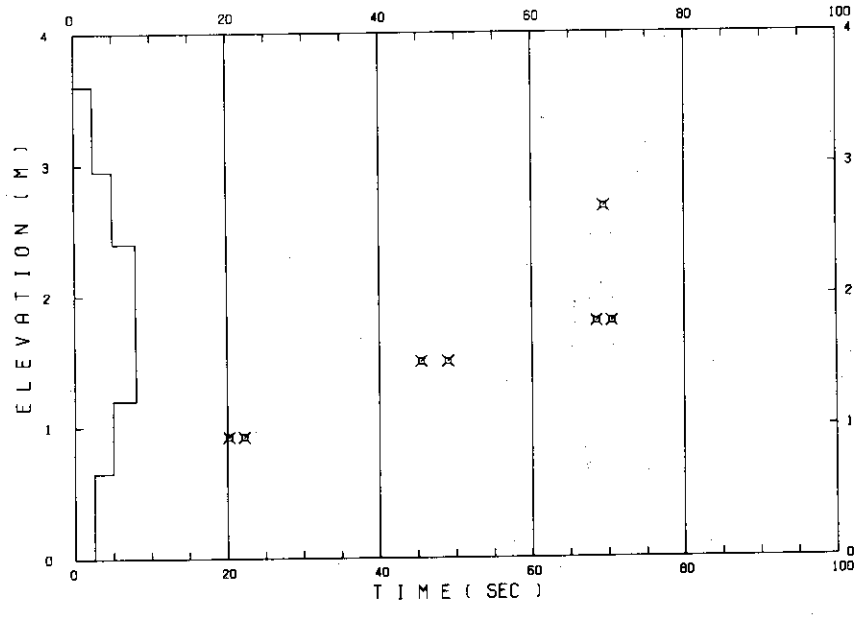
RUN CONDITIONS

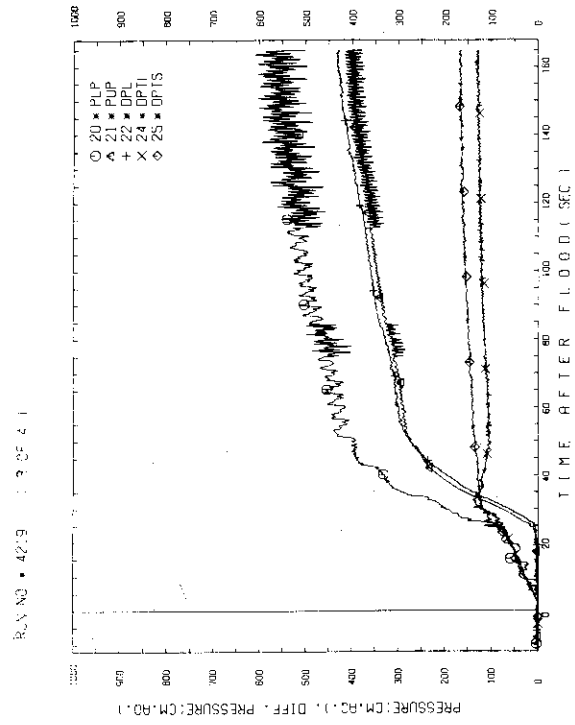
PEAK POWER	2.1	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	60	.C
INLET WATER VELOCITY	4	CM/SEC

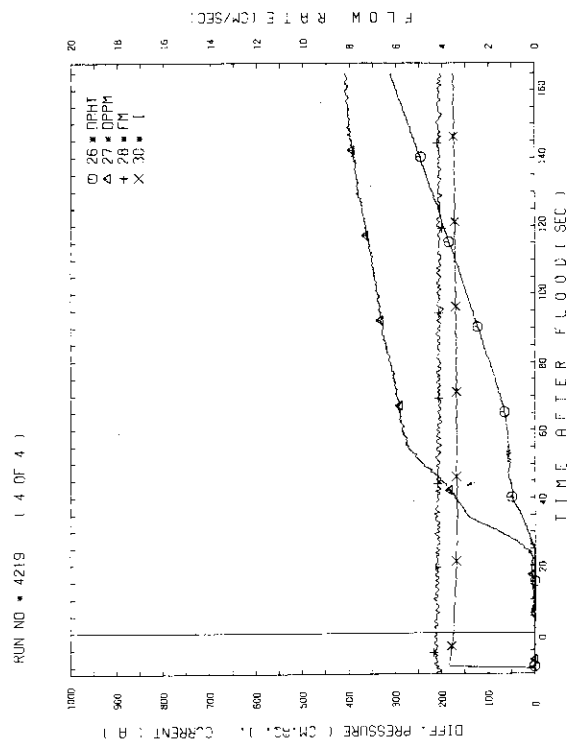
TEMPERATUR PROFILE

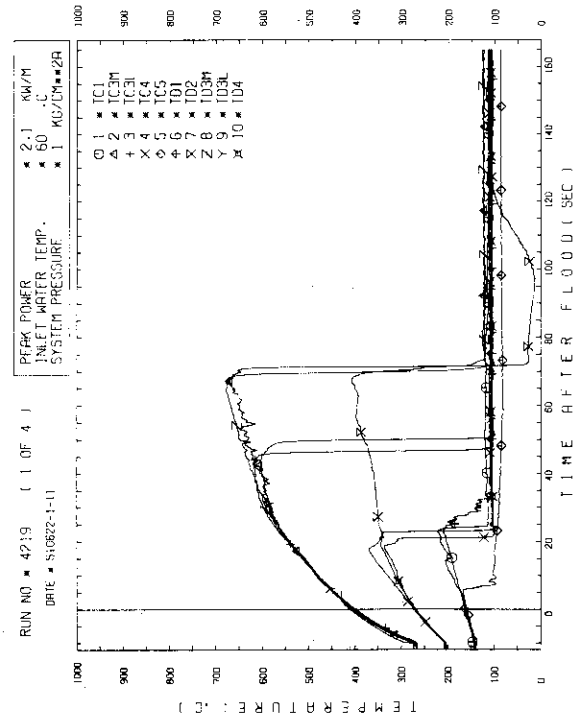
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
2	TC3M	406.	67.00	674.	70.50	652.
3	TC3L	399.	42.75	620.	45.50	607.
4	TC4	269.	18.75	337.	20.25	307.
7	TD2	272.	66.75	408.	69.50	381.
8	TD3M	410.	64.75	675.	68.50	667.
9	TD3L	401.	44.00	602.	49.00	569.
10	TC4	269.	18.75	344.	22.25	341.

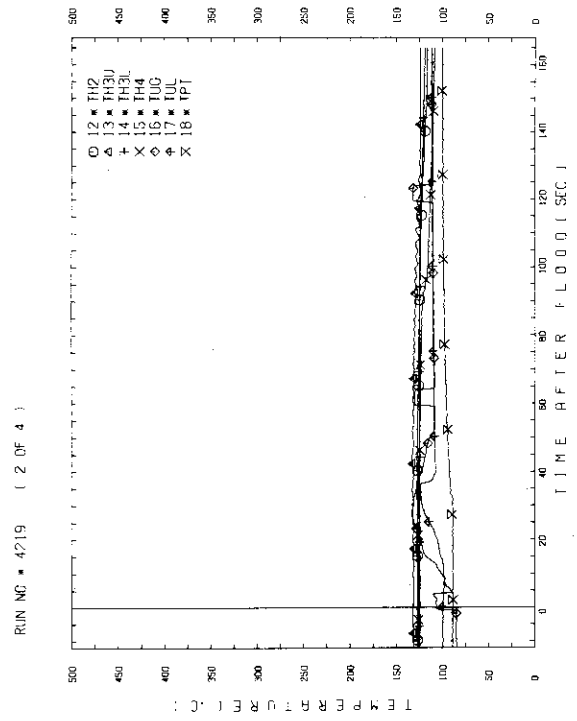
RUN NO. 4219 DATE * 510622-1-11

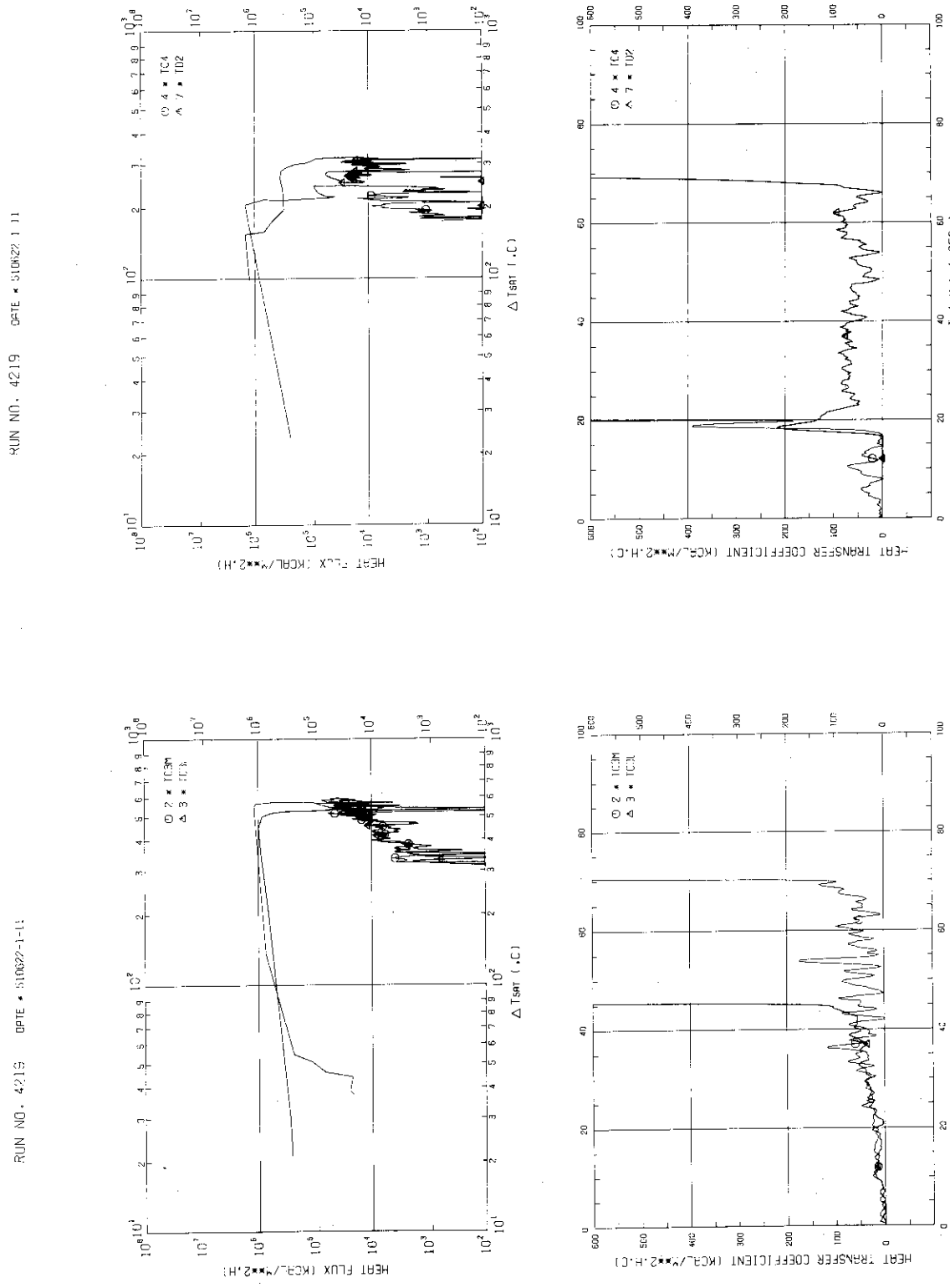


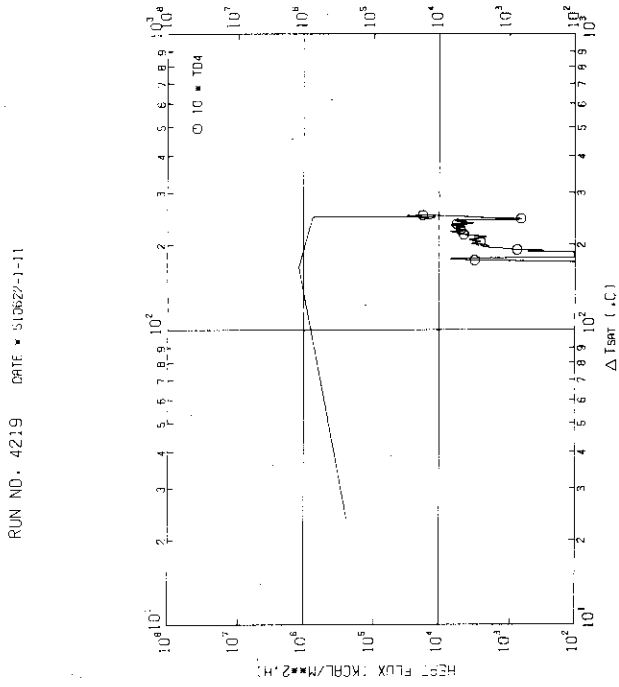

RUN NO = 4219 (3 OF 4)
20 * PLP
21 * PUP
22 * DPL
24 * DPTI
25 * DPTS
PRESSURE:CM.RC.). DIFF. PRESSURE:CM.AD.)
TIME AFTER FLOOD(SEC)

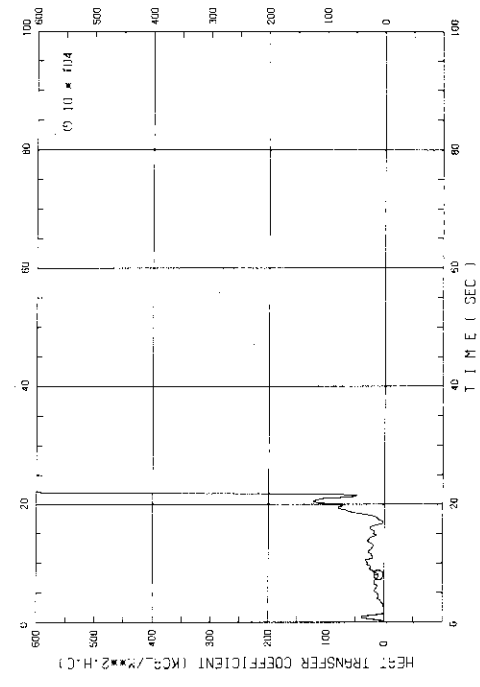

RUN NO = 4219 (4 OF 4)
26 * DPHT
27 * DPPM
28 * FM
30 * I
FLOW RATE (CM/SEC)
DIFF. PRESSURE (CM.AS.). CURRENT (A)
TIME AFTER FLOOD(SEC)

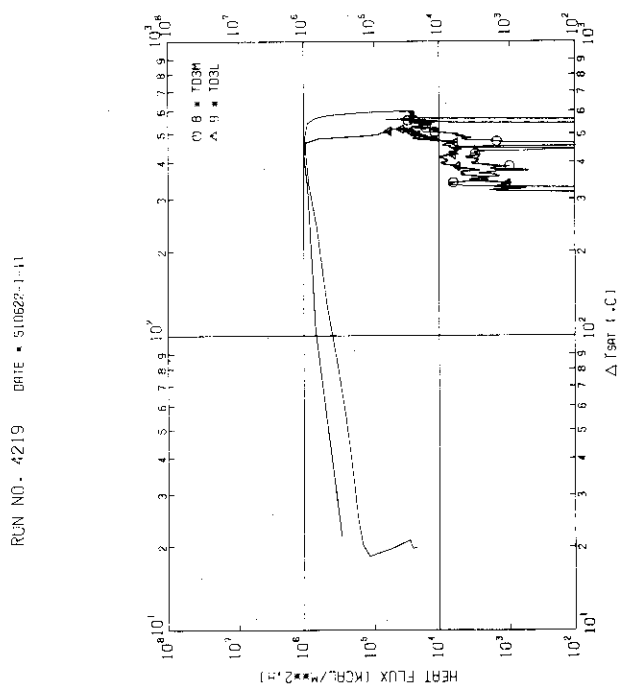

RUN NO = 4219 (1 OF 4)
DATE = 81/08/22-1-11
PEAK POWER * 2.1 KW/M
INLET WATER TEMP. * 60 C
SYSTEM PRESSURE * 1 KG/CM**2A
1 * TC1
2 * TC3M
3 * TC3I
4 * TC4
5 * TC5
6 * TD1
7 * TD2
8 * TD3M
9 * TD3L
10 * TD4
TEMPERATURE (C)
TIME AFTER FLOOD(SEC)

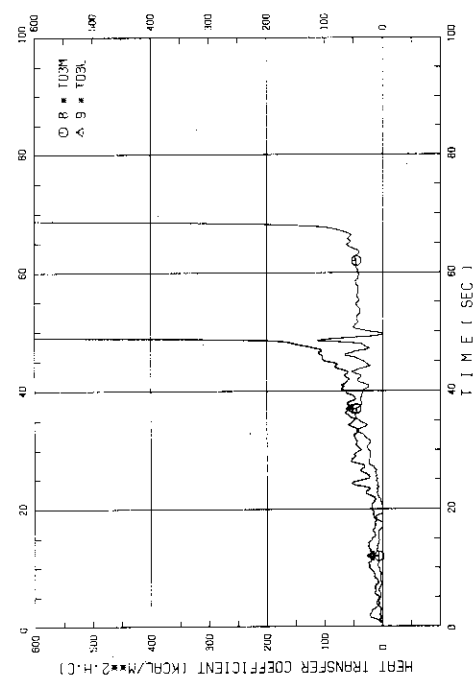

RUN NO = 4219 (2 OF 4)
12 * TH2
13 * TH3U
14 * TH3L
15 * TH4
16 * TUC
17 * TUL
18 * TPT
TEMPERATURE (C)
TIME AFTER FLOOD(SEC)


RUN NO. 4219 DATE = 810622 1 11
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)
RUN NO. 4219 DATE = 810622-1-11
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4219 DATE = 810622-1-11
○ 10 = TD4
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)


○ 10 = TD4
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4219 DATE = 810622-1-11
○ 8 = TD3M
△ 9 = TD3L
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)


○ 8 = TD3M
△ 9 = TD3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

****
* RUN NO. 4220 *
****

(DATE * 510618 - 1 -13)

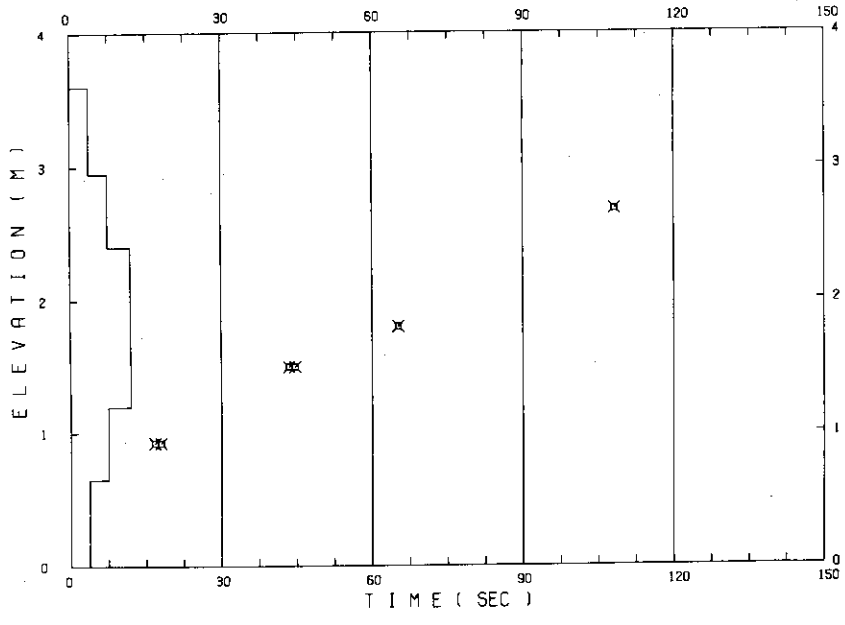
RUN CONDITIONS

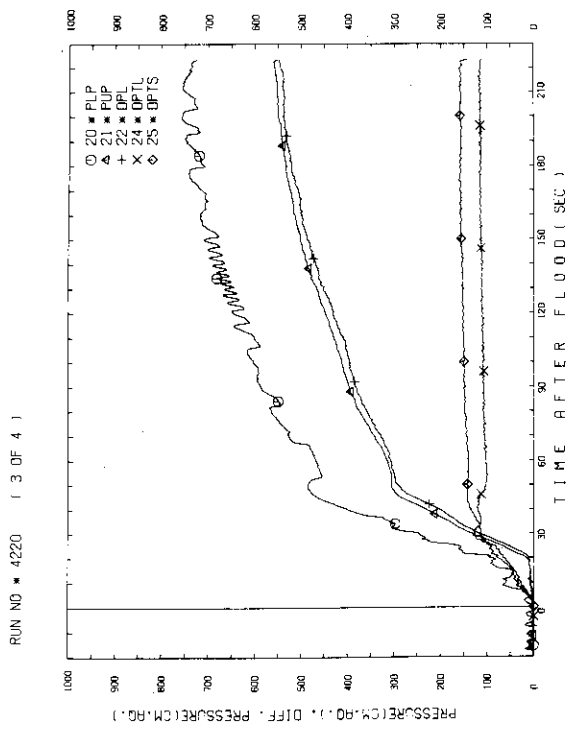
PEAK POWER	2.1	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	80	.C
INLET WATER VELOCITY	4	CM/SEC

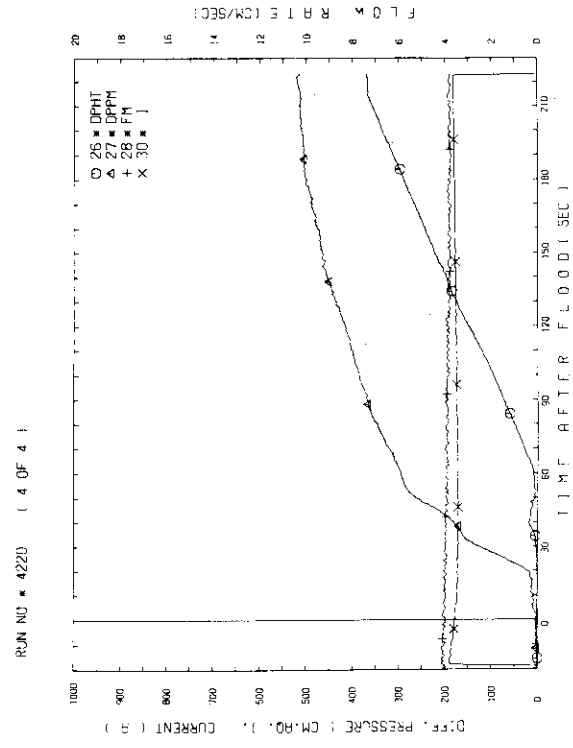
TEMPERATUR PROFILE

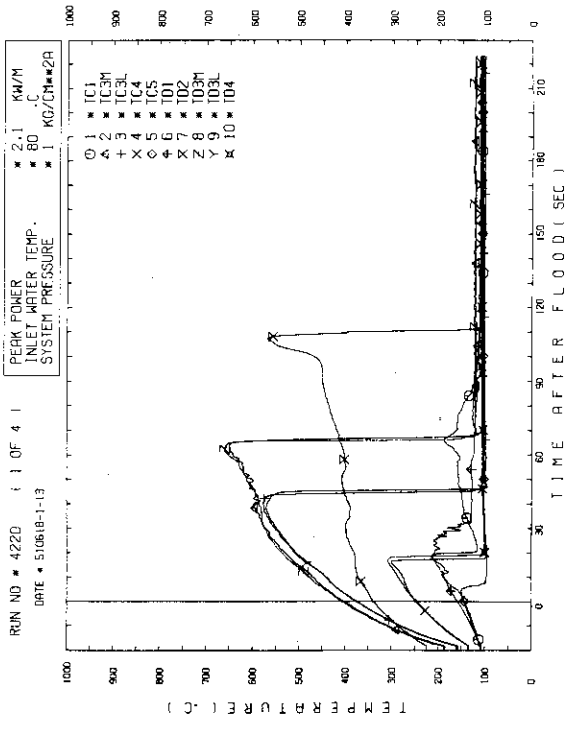
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
2	TC3M	401.	63.75	653.	65.25	641.
3	TC3L	374.	40.50	578.	43.50	563.
4	TC4	245.	16.50	302.	16.75	300.
7	TD2	338.	107.25	569.	108.25	560.
8	TD3M	403.	61.75	660.	65.25	645.
9	TD3L	374.	38.50	571.	44.75	543.
10	TD4	247.	17.00	309.	18.00	305.

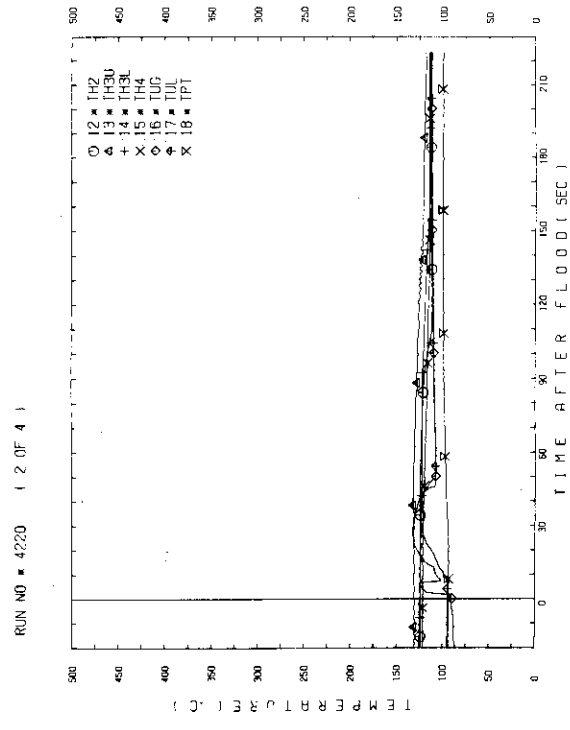
RUN NO. 4220 DATE * 510618-1-13

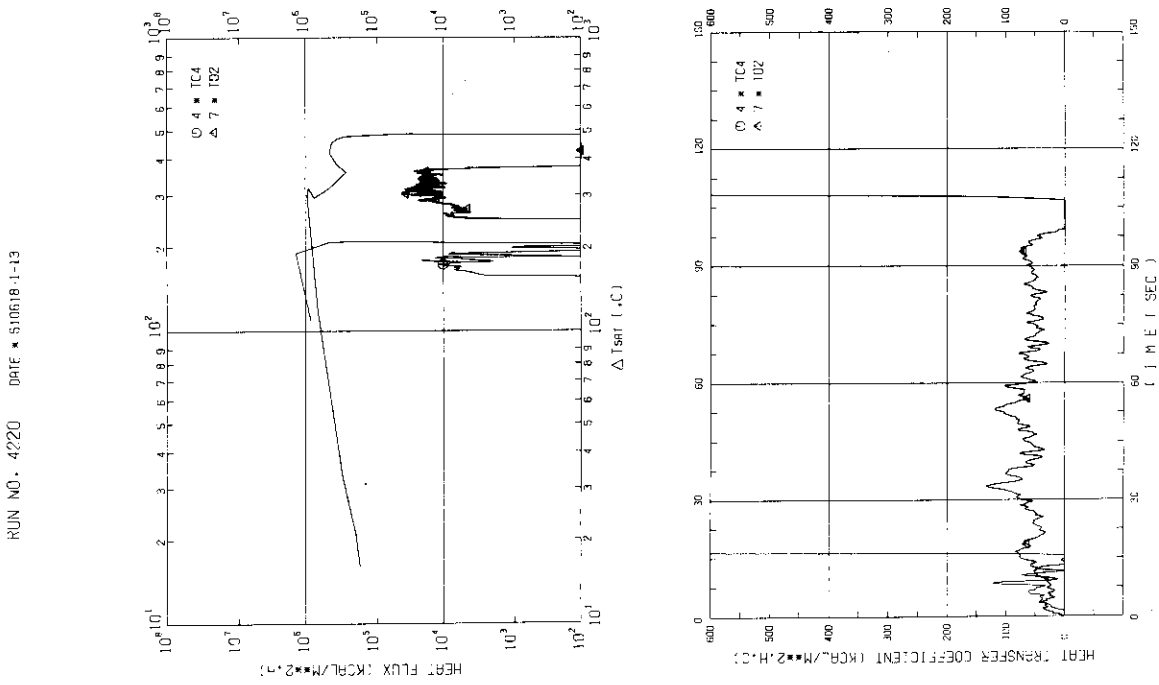


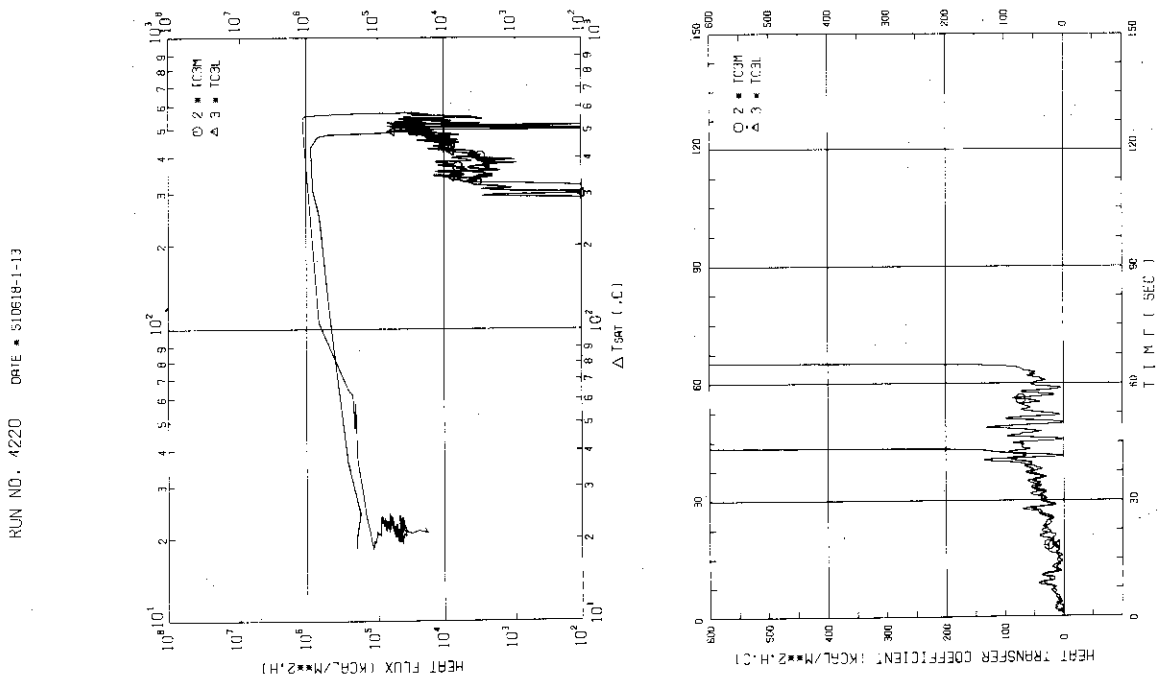

RUN NO = 4220 (3 OF 4)
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD(SEC)
20 = PLP
21 = PUP
22 = DPL
24 = DPTL
25 = DPTS

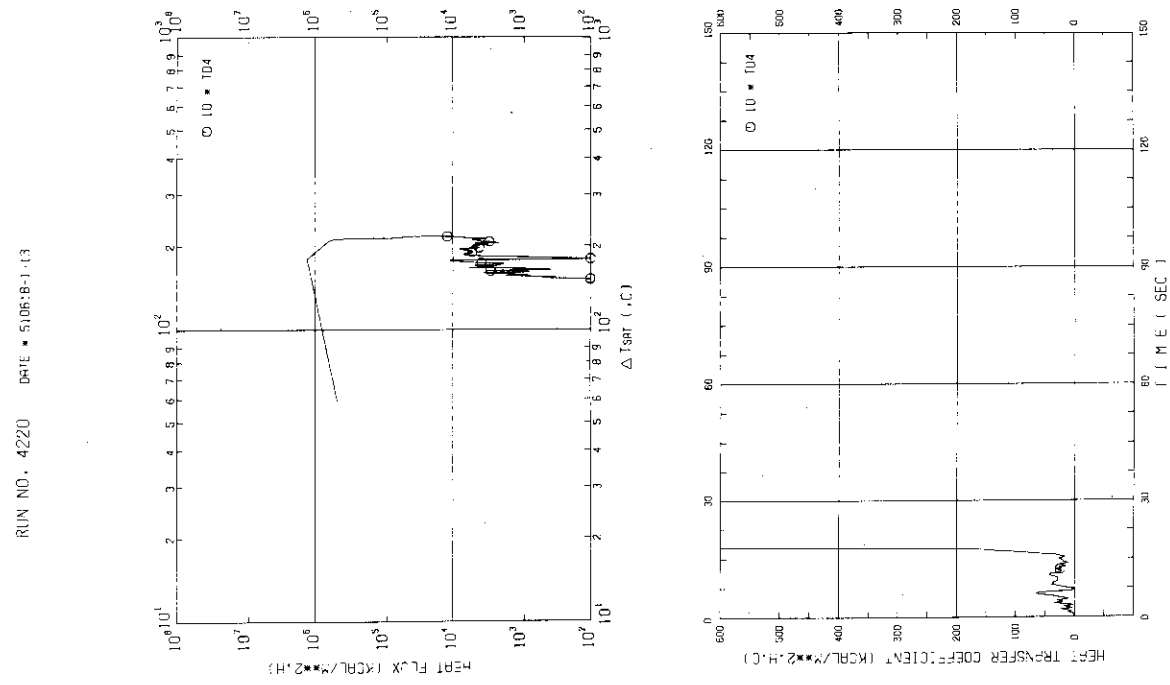

RUN NO = 4220 (4 OF 4)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
TIME AFTER FLOOD(SEC)
FLOW RATE (CM/SEC)
26 = DPHT
27 = DPPM
28 = FM
30 = I

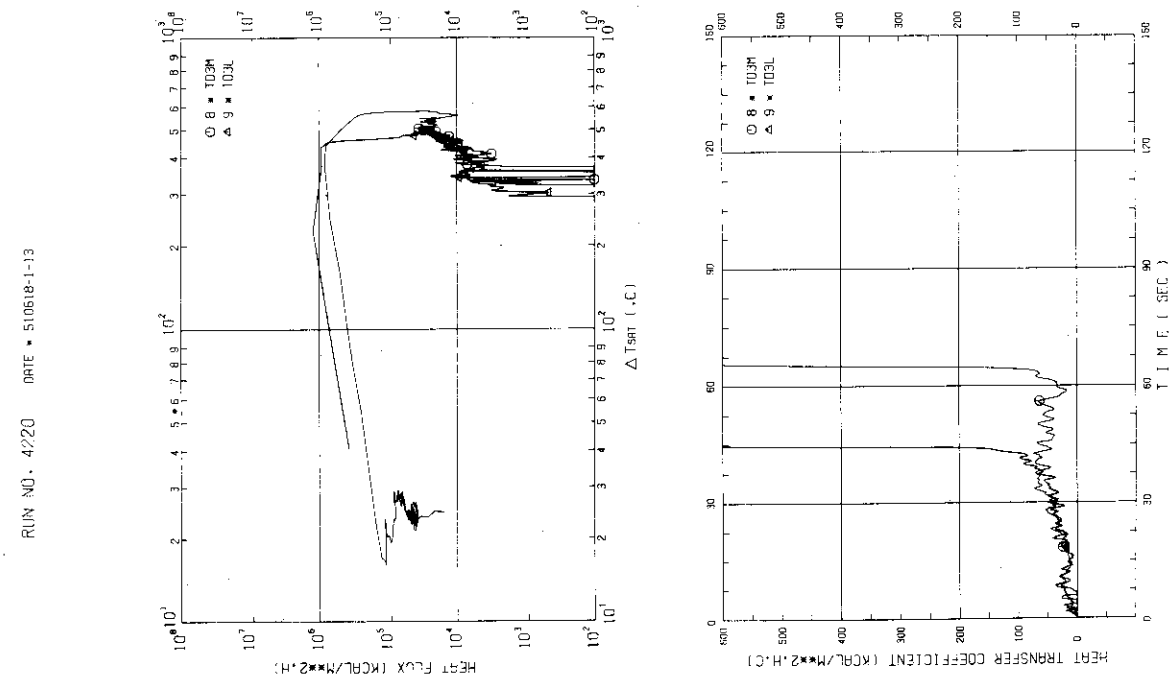

RUN NO = 4220 (1 OF 4)
DATE = 510618-1-13
PEAK POWER * 2.1 KW/M
INLET WATER TEMP. * 80 .C
SYSTEM PRESSURE * 1 KG/CM**2A
1 = TC1
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
7 = TD2
8 = TD3M
9 = TD3L
10 = TD4
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO = 4220 (2 OF 4)
12 = TH2
13 = TH3U
14 = TH3L
15 = TH4
16 = TUC
17 = TUL
18 = TPT
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO. 4220 DATE = 510618-1-13
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 4 × TC4
△ 7 × T02
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4220 DATE = 510618-1-13
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 2 × TC3M
△ 3 × TC3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4220 DATE = 5106-8-1-13
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 10 = TD4
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4220 DATE = 5106-8-1-13
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 8 = TD3M
△ 9 = TD3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

****
* *
* RUN NO. 4221 *
* *
****

(DATE * 510622 - 1 -12)

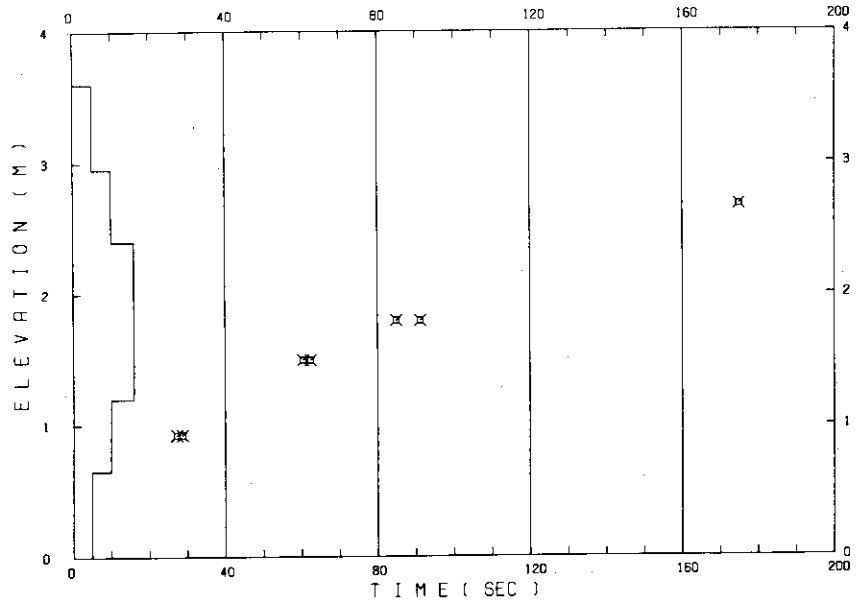
RUN CONDITIONS

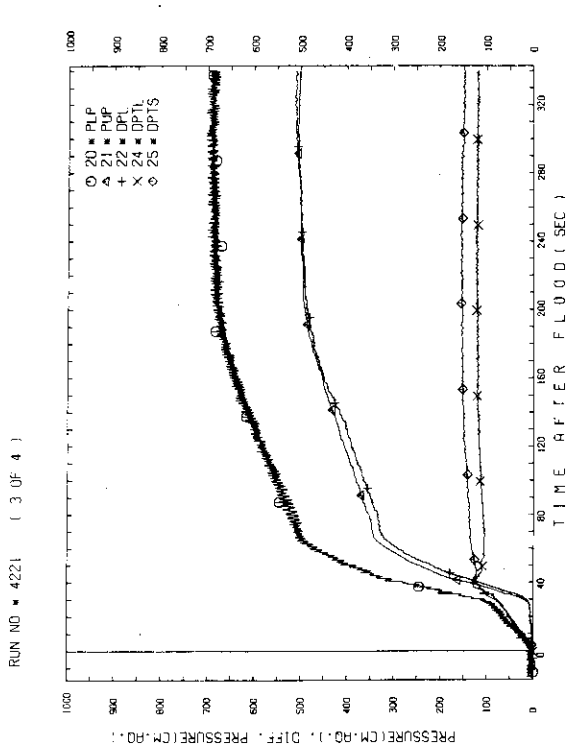
PEAK POWER	2.1	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	60	.C
INLET WATER VELOCITY	2.5	CM/SEC

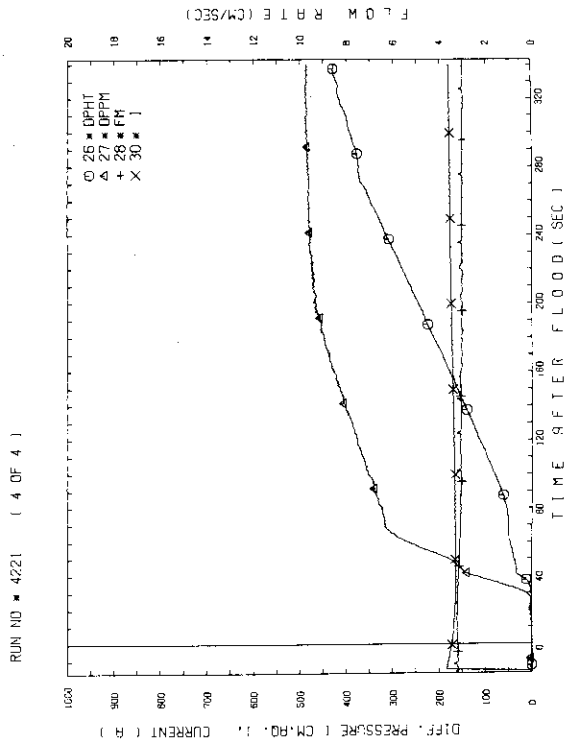
TEMPERATUR PROFILE

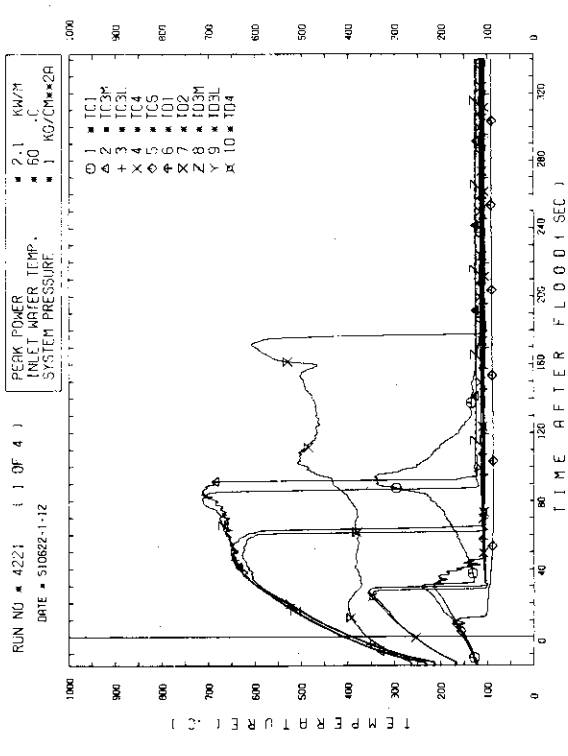
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
2	TC3M	407.	64.25	715.	91.25	688.
3	TC3L	390.	50.25	652.	62.50	592.
4	TC4	256.	26.50	347.	27.25	341.
7	TD2	359.	171.75	609.	175.00	572.
8	TD3M	409.	80.75	712.	85.00	694.
9	TD3L	390.	48.25	626.	60.50	595.
10	TD4	257.	27.25	356.	28.75	346.

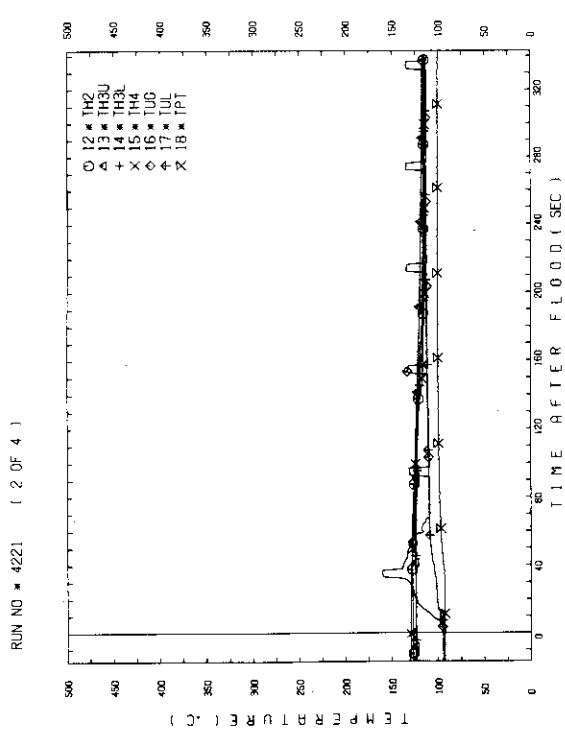
RUN NO. 4221 DATE * 510622-1-12

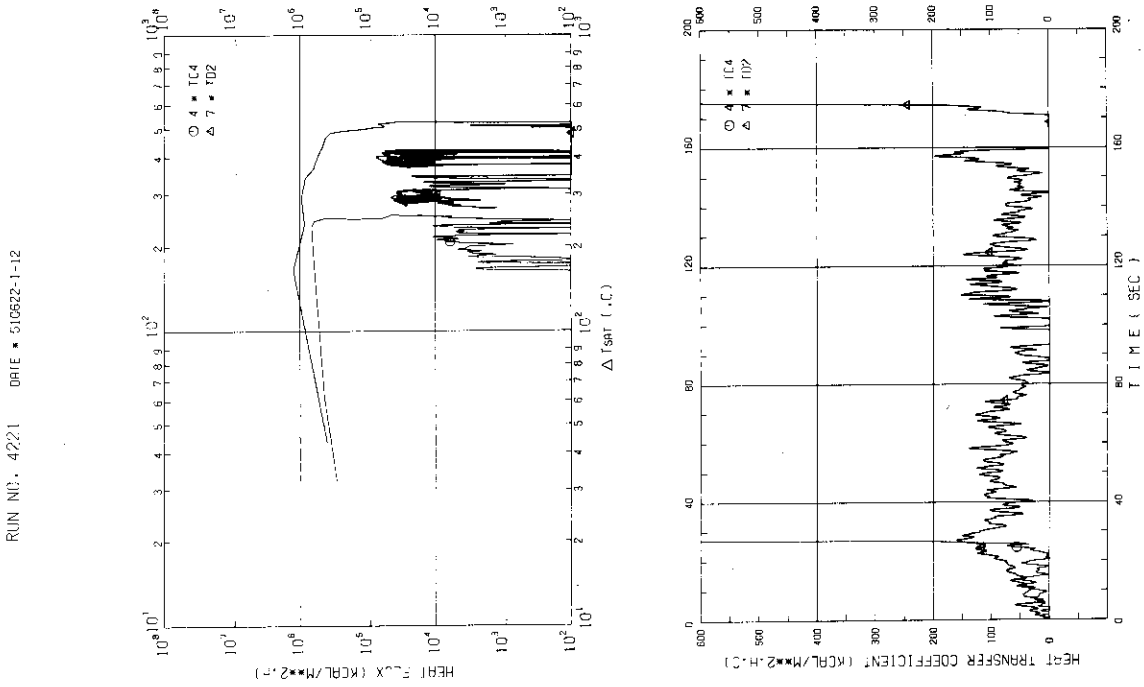


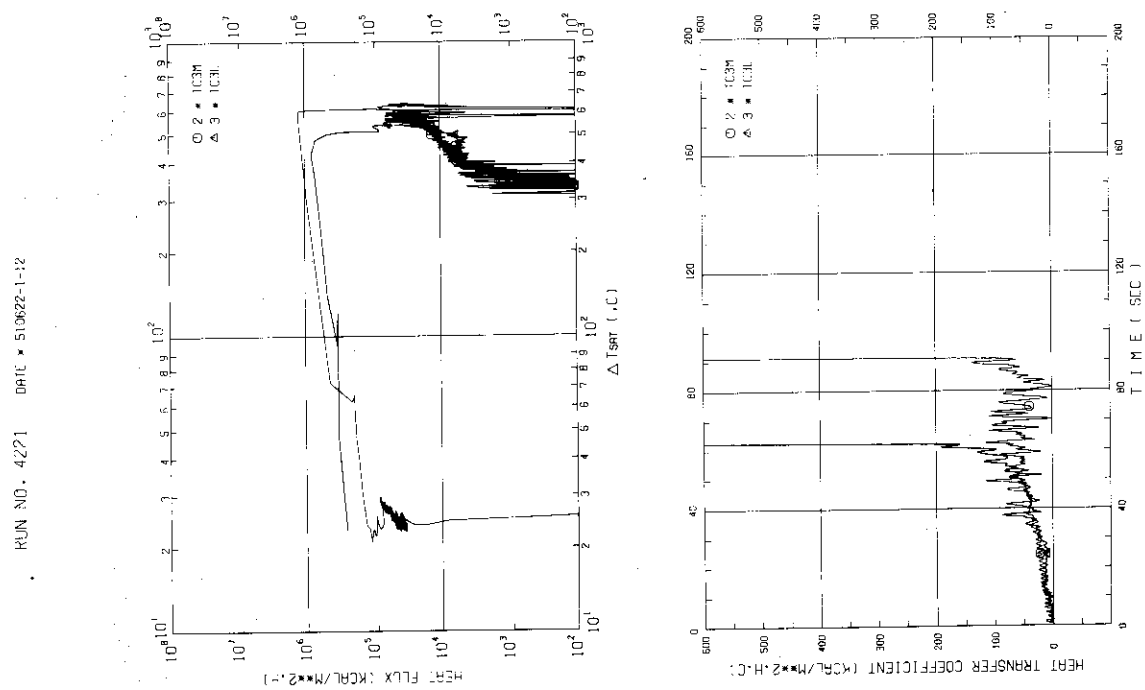

RUN NO = 4221 (3 OF 4)
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD(SEC)
20 = PLP
21 = PUP
22 = DPL
24 = DPTL
25 = DPTS

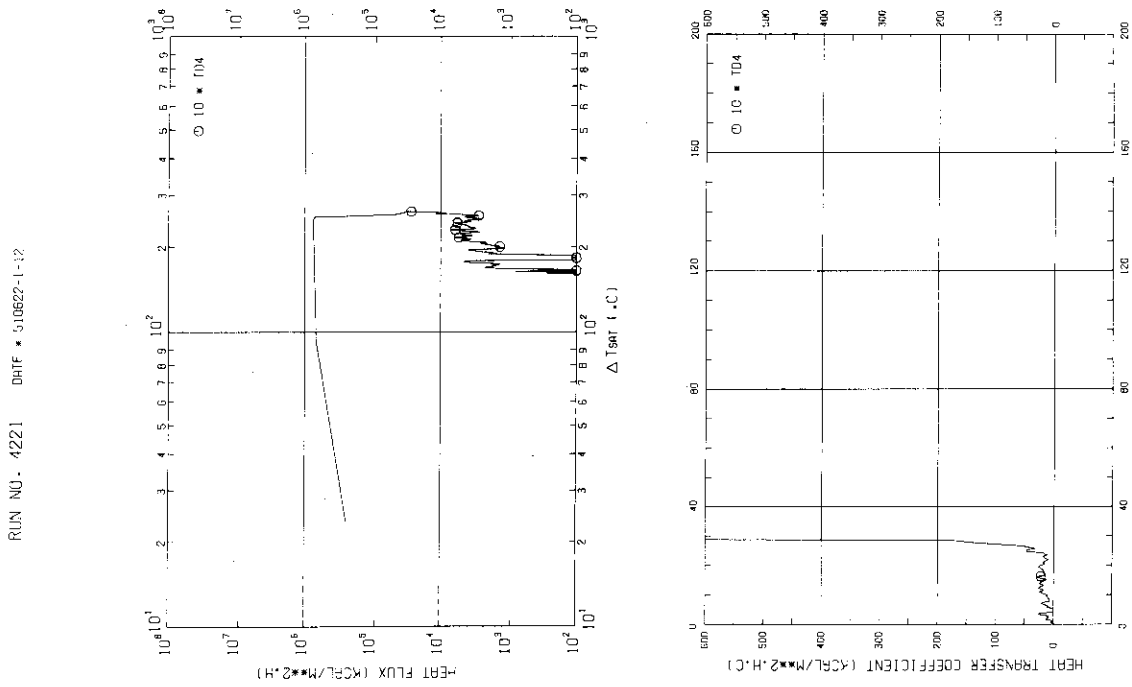

RUN NO = 4221 (4 OF 4)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
FLOW RATE (CM/SEC)
TIME AFTER FLOOD(SEC)
26 = DPHT
27 = DPPM
28 = FM
30 = I

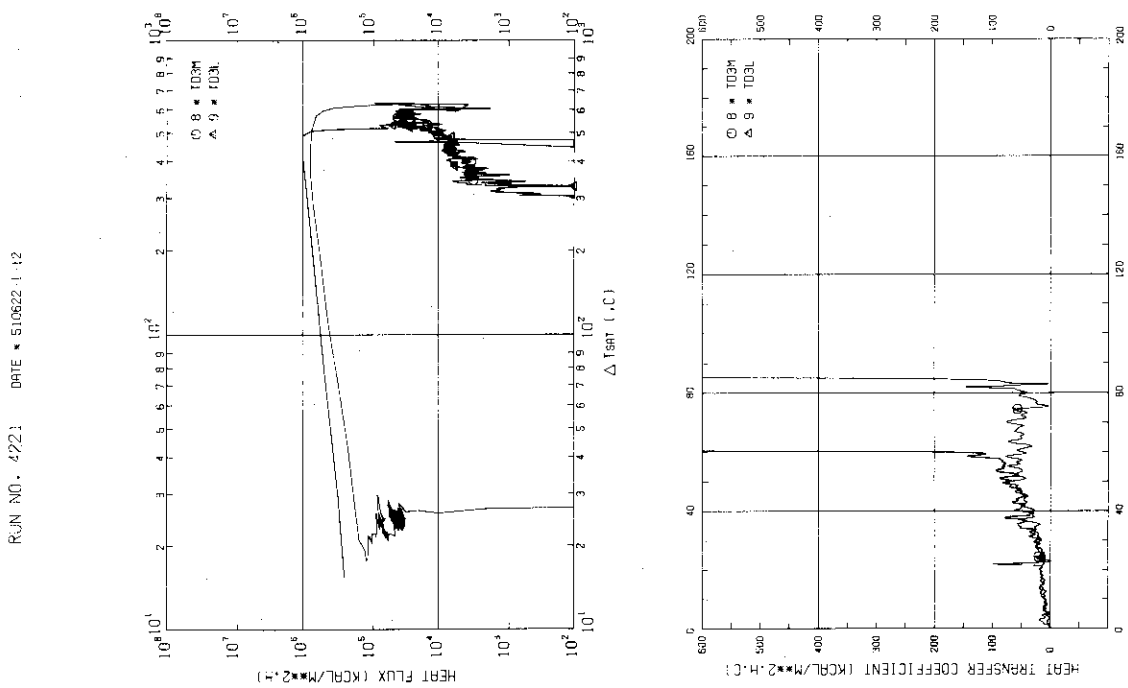

RUN NO = 4221 (1 OF 4)
DATE = 510622-1-12
PEAK POWER = 2.1 KW/M
INLET WATER TEMP. = 60 .C
SYSTEM PRESSURE = 1 KG/CM**2A
1 = TC1
2 = TC3U
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
7 = TD2
8 = TD3M
9 = TD3L
10 = TD4
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO = 4221 (2 OF 4)
12 = TH2
13 = TH3U
14 = TH3L
15 = TH4
16 = TUG
17 = TUL
18 = TPT
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO. 4221 DATE = 510622-1-12
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4221 DATE = 510622-1-12
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4221 DATE = 910622-1-12
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4221 DATE = 910622-1-12
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

****
* *
* RUN NO. 4223 *
* *
****

(DATE * 510623 - 1 - 6)

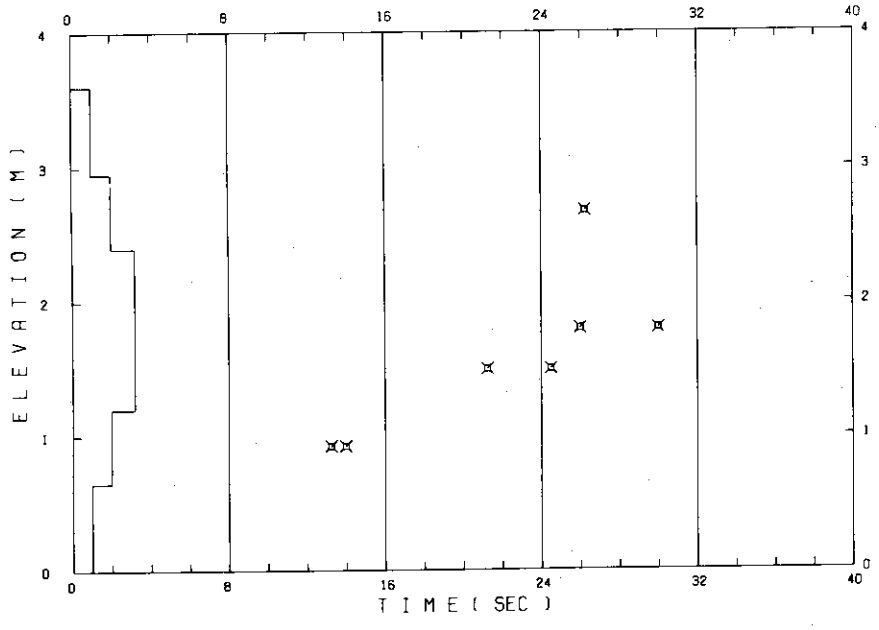
RUN CONDITIONS

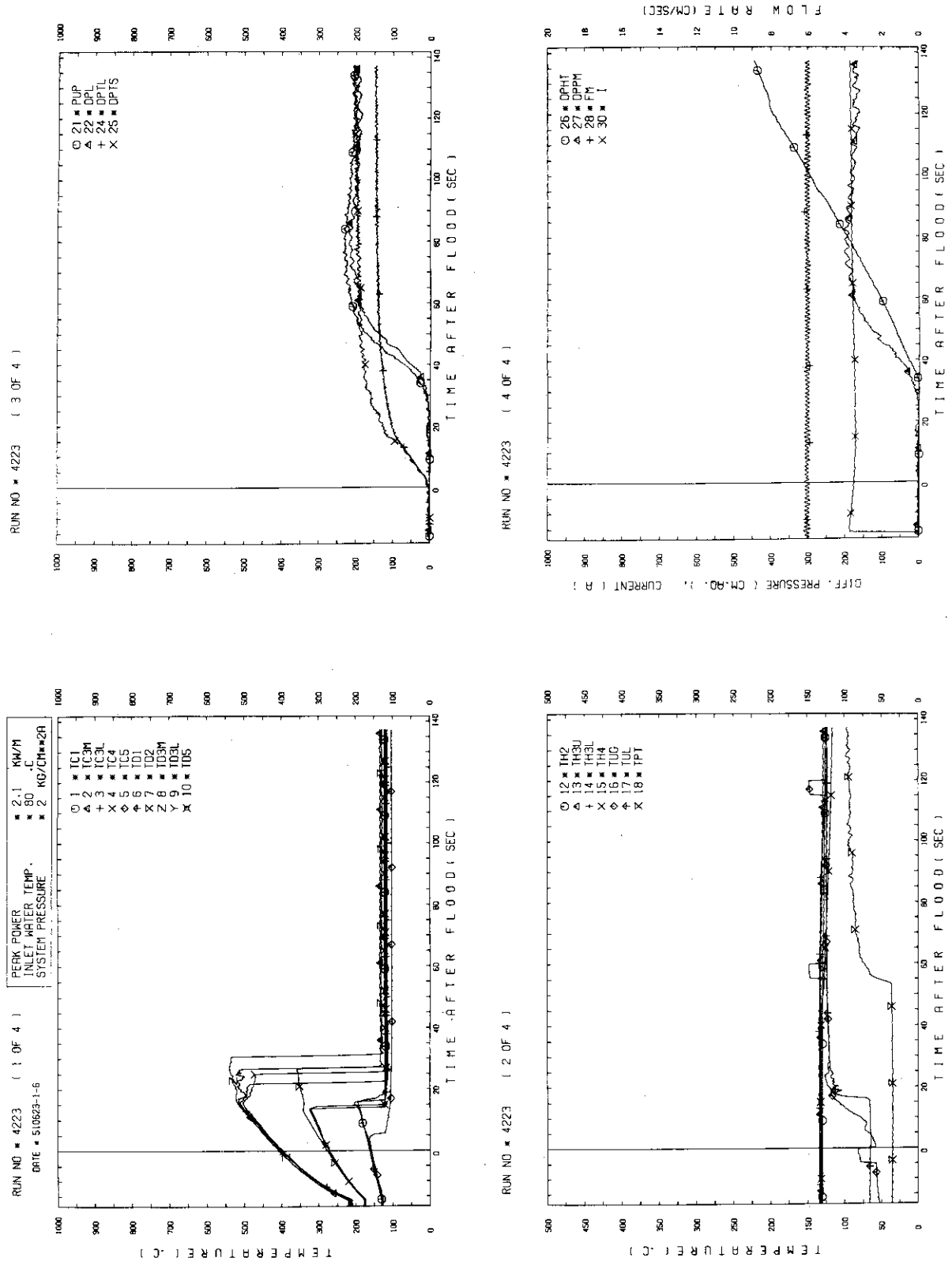
PEAK POWER	2.1	KW/M
SYSTEM PRESSURE	2	KG/CM**2A
INLET WATER TEMPERATURE	80	.C
INLET WATER VELOCITY	6	CM/SEC

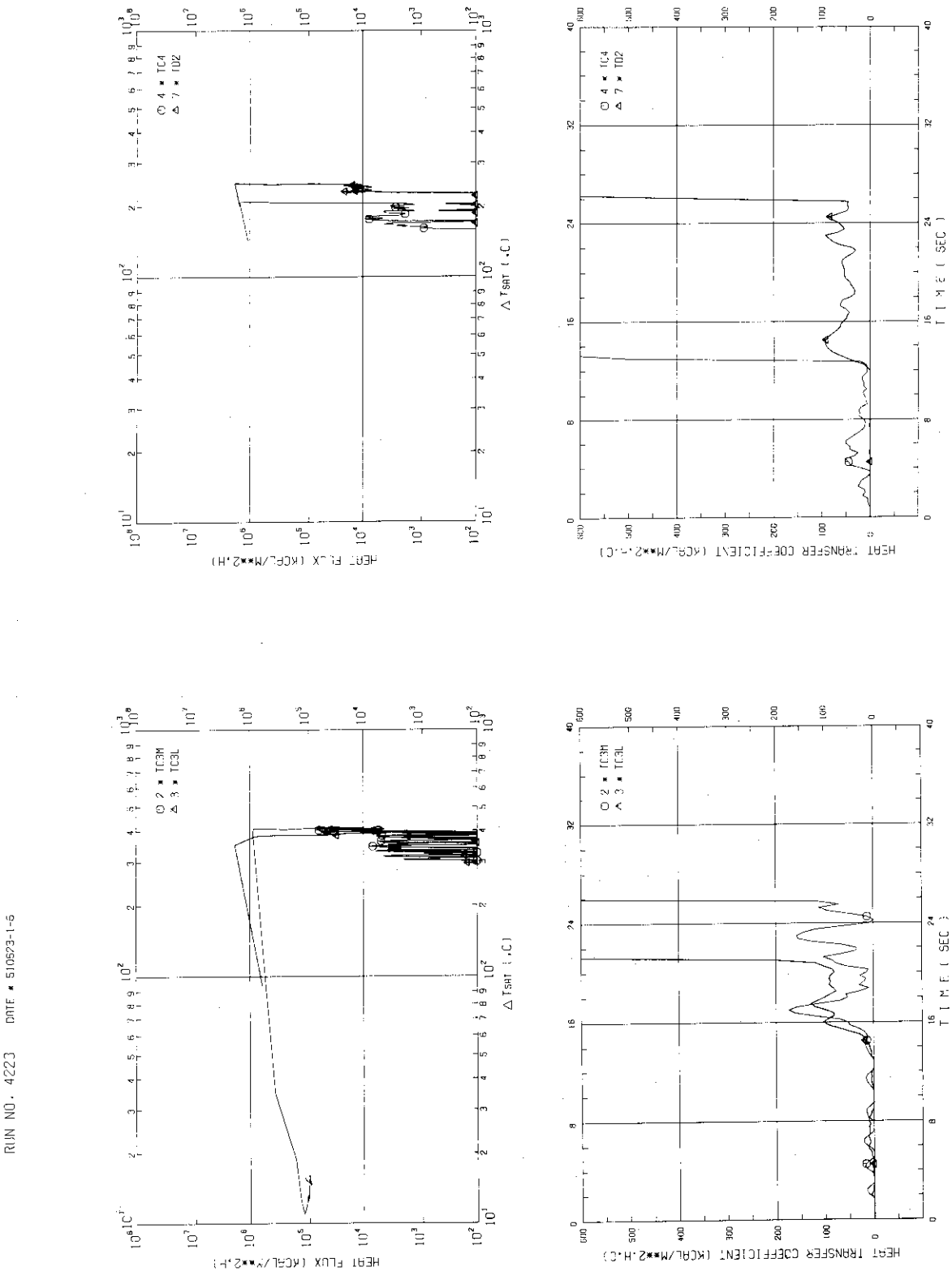
TEMPERATUR PROFILE

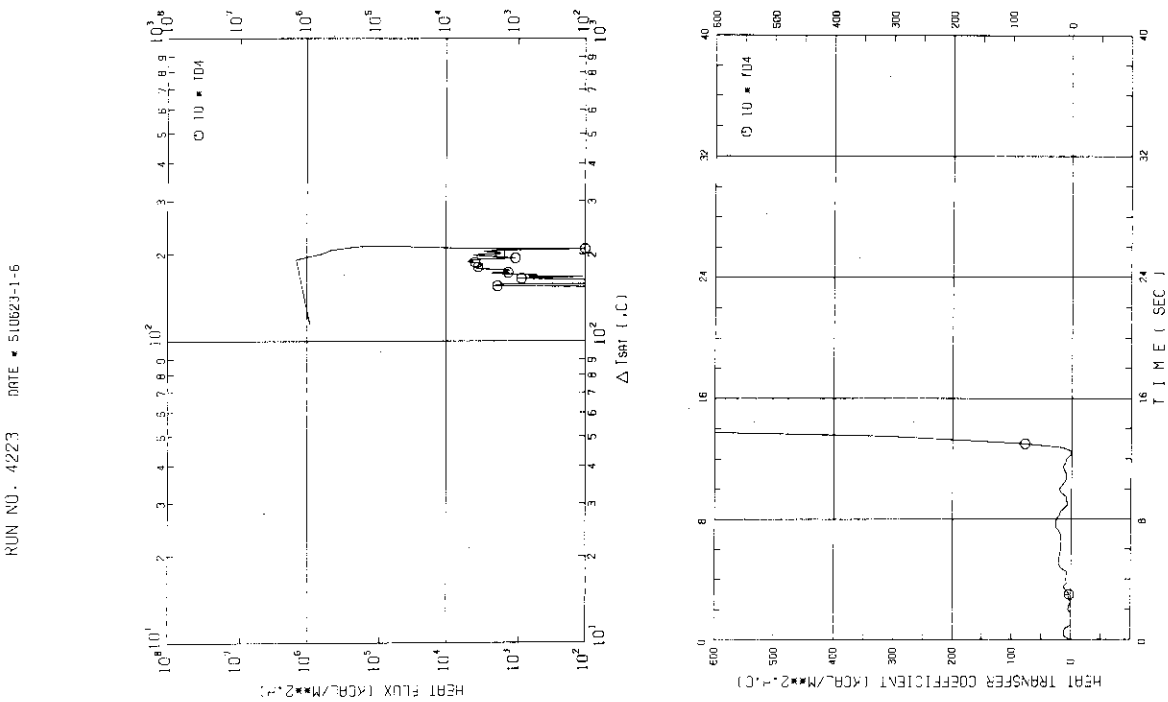
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
2	TC3M	406.	25.00	523.	26.00	511.
3	TC3L	399.	15.75	512.	21.25	491.
4	TC4	272.	13.50	322.	13.25	320.
7	TD2	276.	26.75	360.	26.25	357.
8	TD3M	407.	27.50	540.	30.00	536.
9	TD3L	396.	16.00	503.	24.50	471.
10	TD4	271.	13.50	325.	14.00	319.

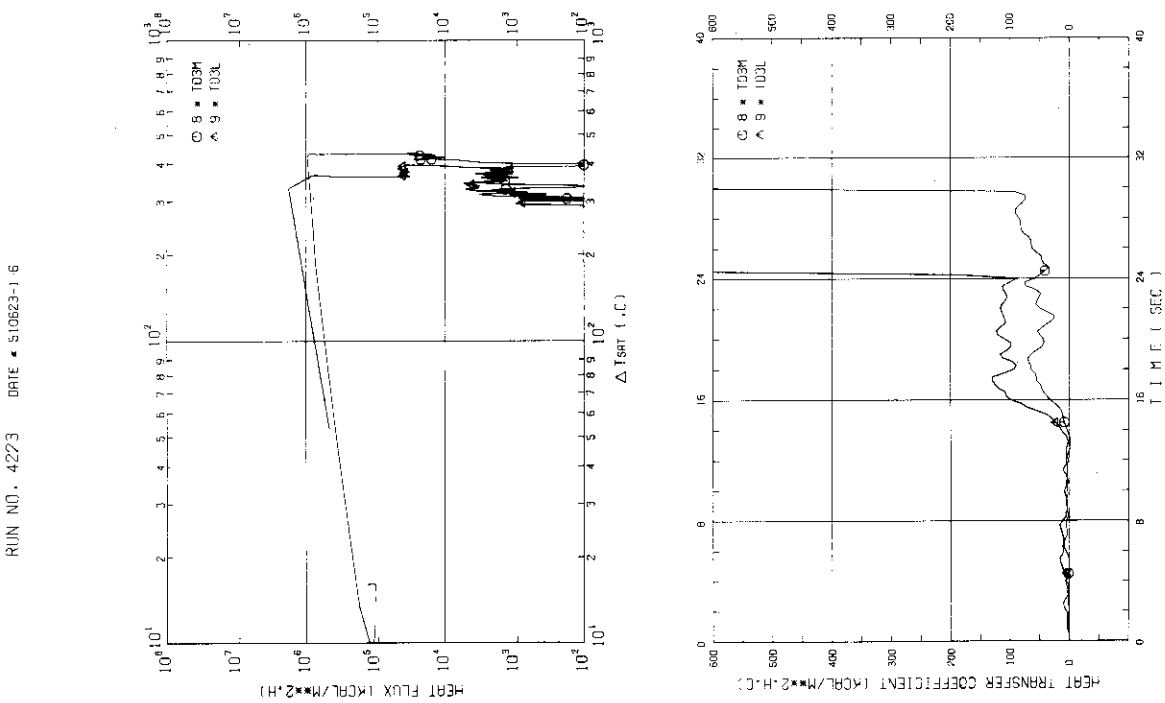
RUN NO. 4223 DATE * 510623-1-6




RUN NO = 4223 (1 OF 4)
DATE = 510623-1-6
PEAK POWER = 2.1 KW/M
INLET WATER TEMP. = 80 .C
SYSTEM PRESSURE = 2 KG/CM=*2
1 = TC1
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
7 = TD2
8 = TD3M
9 = TD3L
10 = TD5
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)
RUN NO = 4223 (2 OF 4)
12 = TH2
13 = TH3U
14 = TH3L
15 = TH4
16 = TUC
17 = TUL
18 = TPT
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)
RUN NO = 4223 (3 OF 4)
21 = PUP
22 = DPL
24 = DPTL
25 = DPTS
TIME AFTER FLOOD(SEC)
RUN NO = 4223 (4 OF 4)
26 = DPHT
27 = DPPM
28 = FM
30 = I
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
FLOW RATE (CM/SEC)
TIME AFTER FLOOD(SEC)


RUN NO. 4223 DATE = 510523-1-6
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (°C)
○ 4 × TC4
△ 7 × TC2
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)
○ 2 × TC3M
△ 3 × TC3L


RUN NO. 4223 DATE = 910623-1-6
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4223 DATE = 910623-1-6
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

****
* *
* RUN NO. 4224 *
* *
****

(DATE * 510623 - 1 - 7)

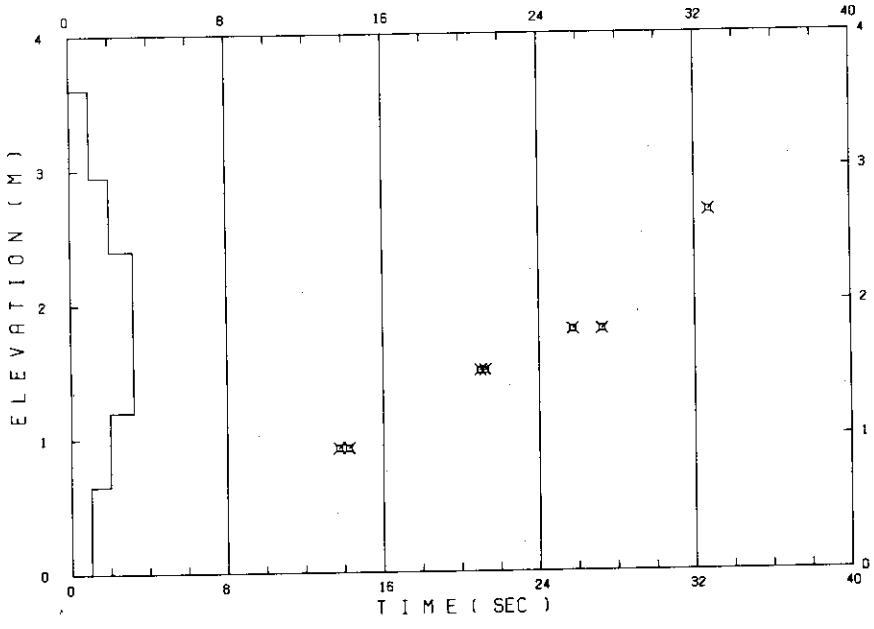
RUN CONDITIONS

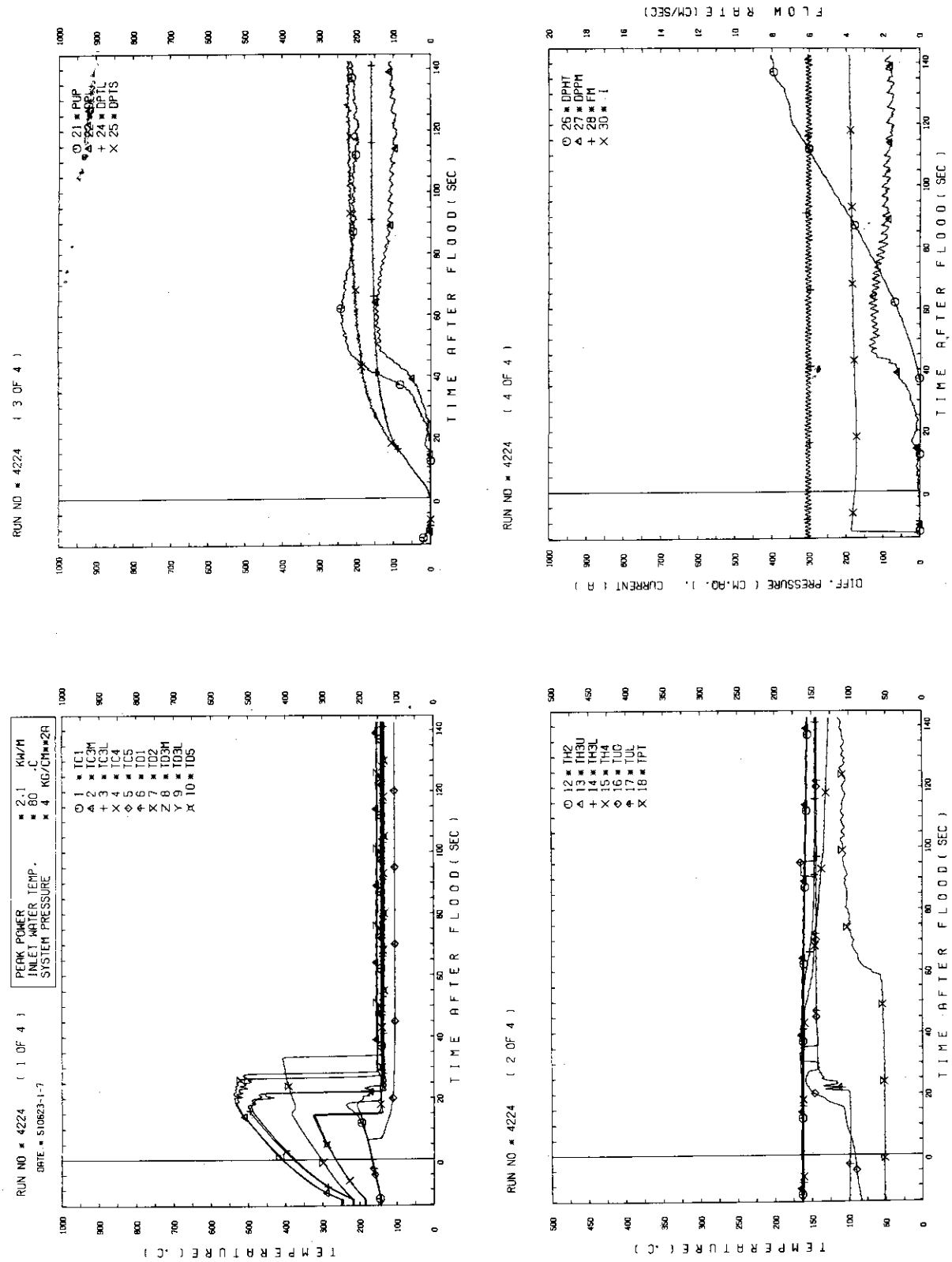
PEAK POWER	2.1	KW/M
SYSTEM PRESSURE	4	KG/CM**2A
INLET WATER TEMPERATURE	80	,C
INLET WATER VELOCITY	6	CM/SEC

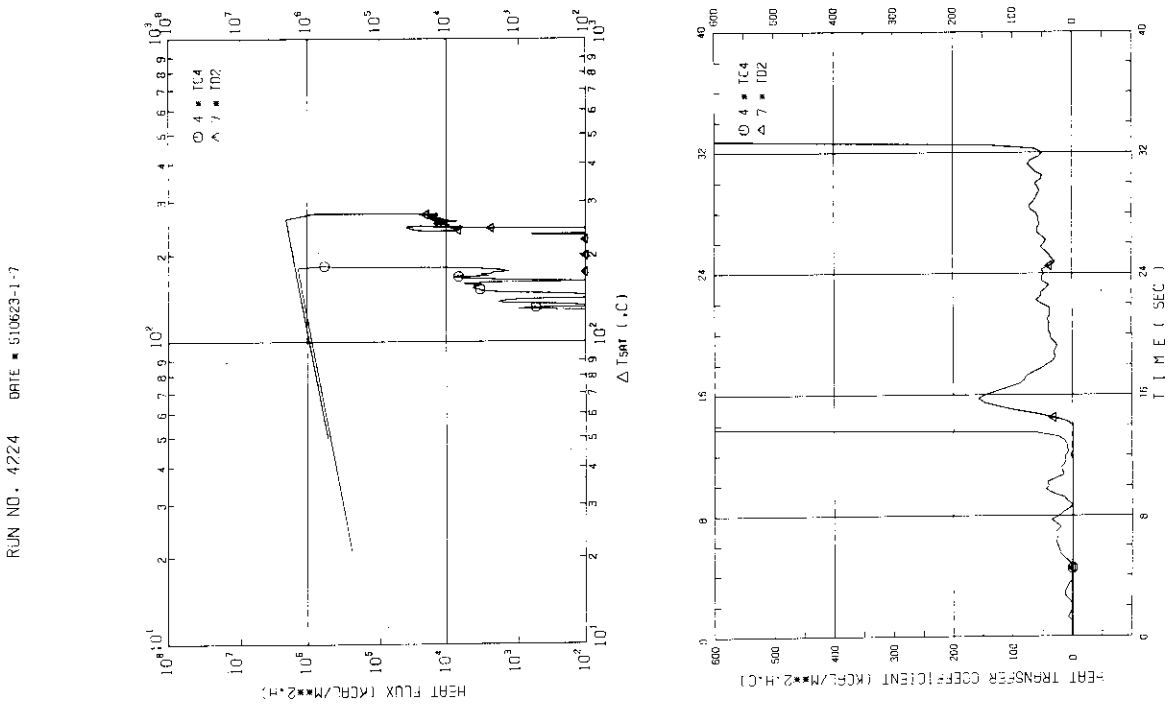
TEMPERATUR PROFILE

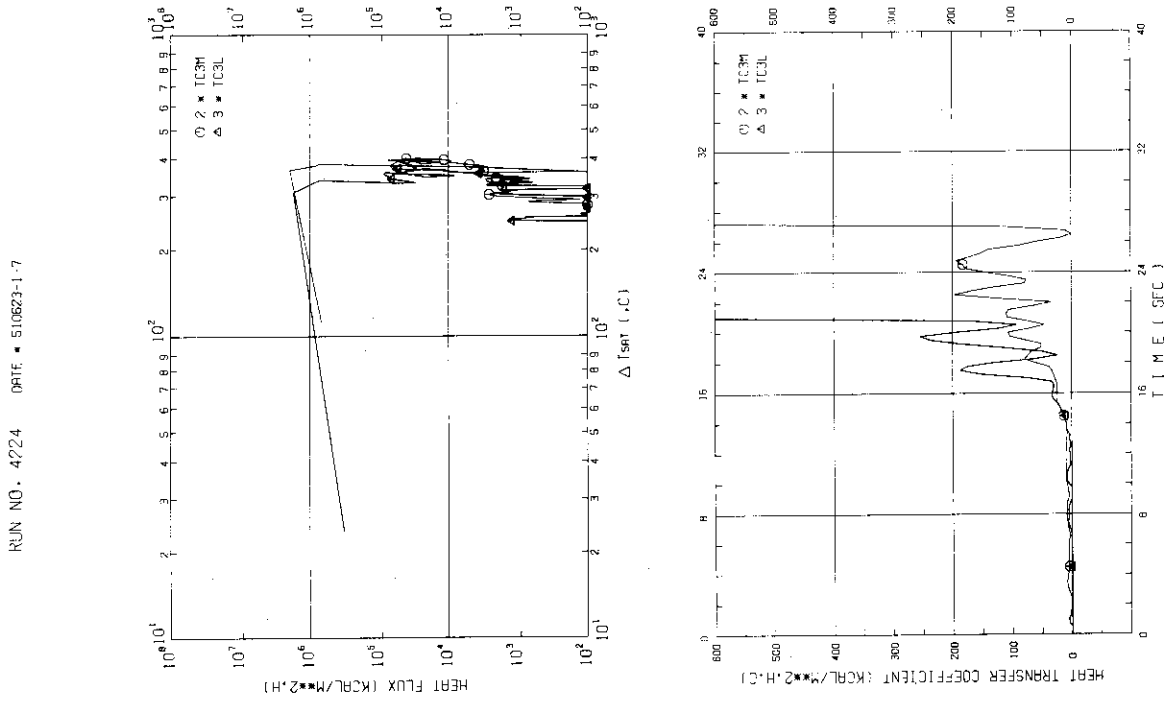
CH.NO.	SYMBOL	INITIAL TEMP. (,C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (,C)	@UENCH TIME (SEC)	@UENCH TEMP. (,C)
2	TC3M	408.	18.75	530.	27.25	512.
3	TC3L	377.	17.50	500.	21.00	469.
4	TC4	265.	14.25	320.	13.75	319.
7	TD2	304.	33.00	408.	32.75	407.
8	TD3M	408.	21.75	539.	25.75	523.
9	TD3L	374.	17.50	491.	21.25	453.
10	TD4	265.	14.25	326.	14.25	326.

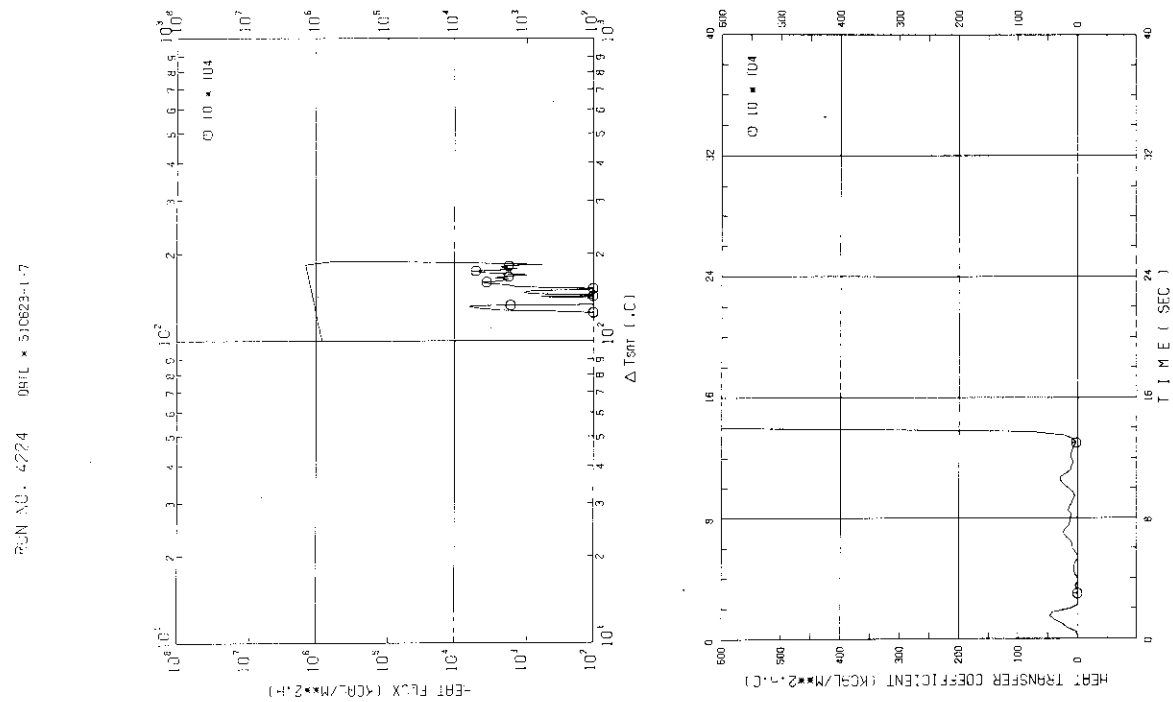
RUN NO. 4224 DATE * 510623-1-7

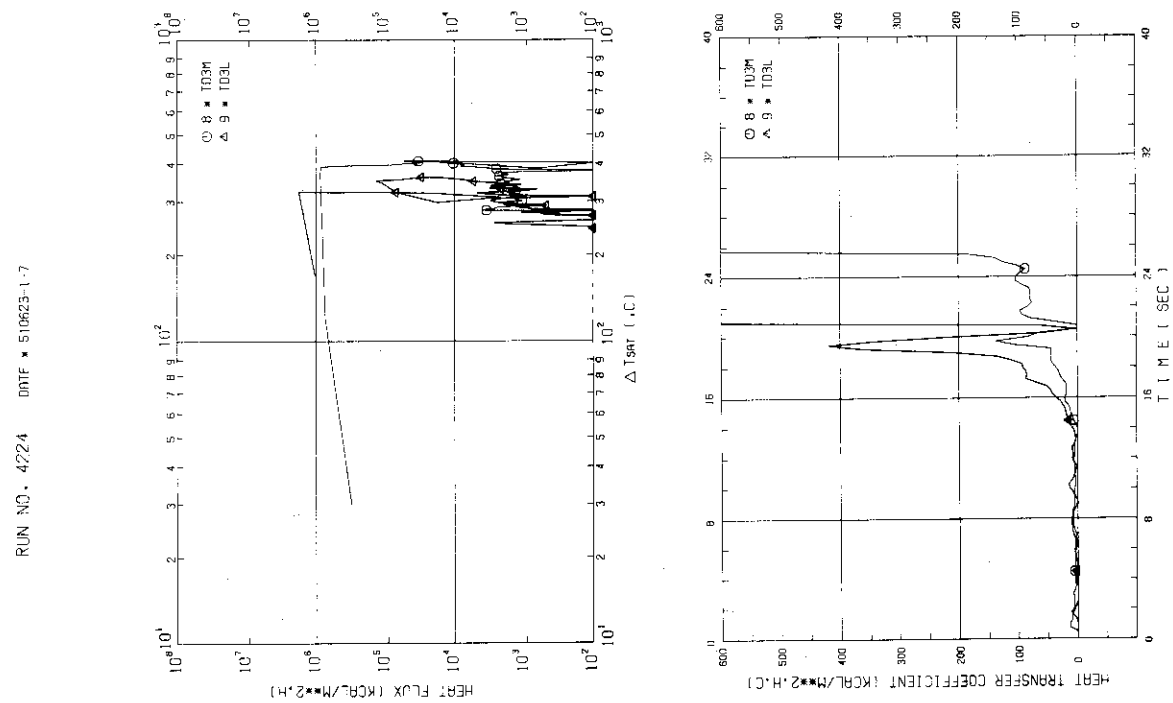



RUN NO = 4224 (1 OF 4)
DATE = 510623-1-7
PEAK POWER = 2.1 KW/M
INLET WATER TEMP. = 80 C
SYSTEM PRESSURE = 4 KG/CM**2R
1 = TC1
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
7 = TD2
8 = TD3M
9 = TD3L
10 = TD5
TEMPERATURE (C)
TIME AFTER FLOOD (SEC)
RUN NO = 4224 (2 OF 4)
12 = TH2
13 = TH3U
14 = TH3L
15 = TH4
16 = TUC
17 = TUL
18 = TPT
TEMPERATURE (C)
TIME AFTER FLOOD (SEC)
RUN NO = 4224 (3 OF 4)
21 = PUP
24 = DPTL
25 = DPTS
TIME AFTER FLOOD (SEC)
RUN NO = 4224 (4 OF 4)
26 = DPHT
27 = DPPM
28 = FM
30 = I
DIFF. PRESSURE (CM.AQ.) , CURRENT (A)
FLOW RATE (CM/SEC)
TIME AFTER FLOOD (SEC)


RUN NO. 4224 DATE = 910623-1-7
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 4 = TC4
△ 7 = TD2
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4224 DATE = 910623-1-7
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 2 = TC3M
△ 3 = TC3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4724 DATE = 510623-1-7
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 10 = TU4
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4724 DATE = 510623-1-7
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 8 = TU3M
△ 9 = TU3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

****
* *
* RUN NO. 4225 *
* *
****

(DATE * 510623 - 1 - 8)

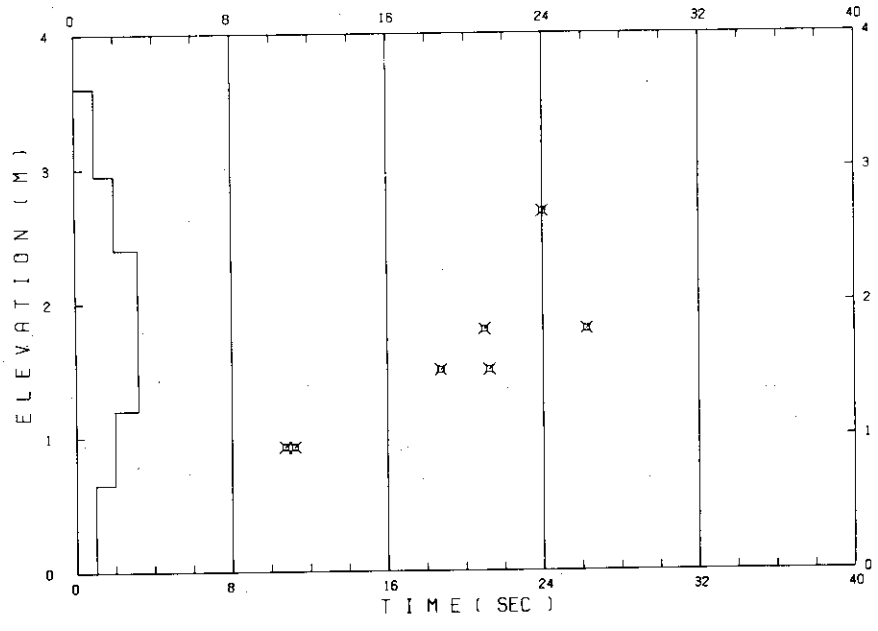
RUN CONDITIONS

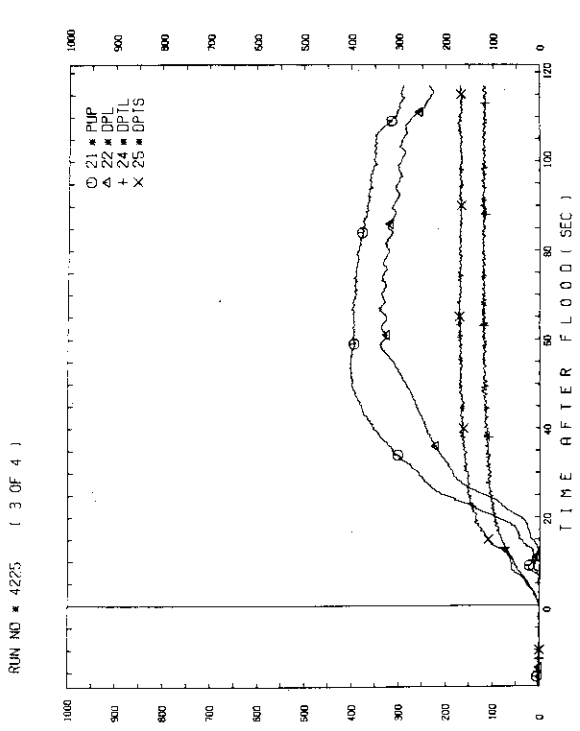
PEAK POWER	2.1	KW/M
SYSTEM PRESSURE	2	KG/CM**2A
INLET WATER TEMPERATURE	100	.C
INLET WATER VELOCITY	6	CM/SEC

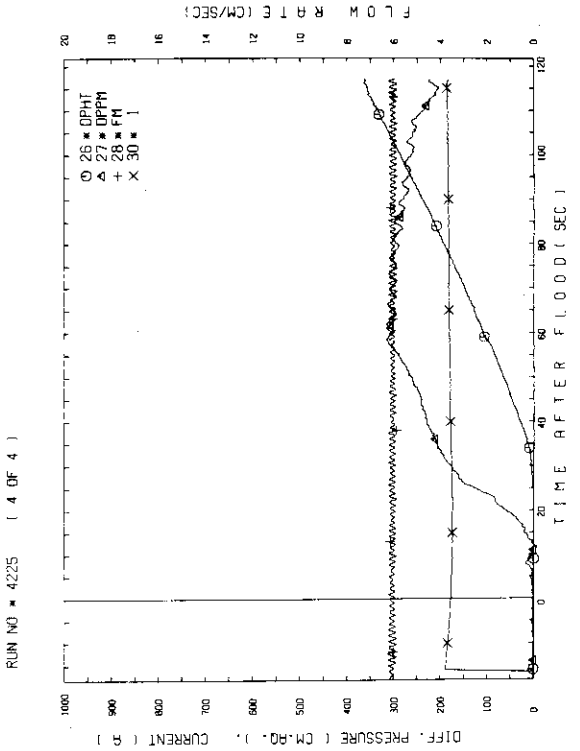
TEMPERATUR PROFILE

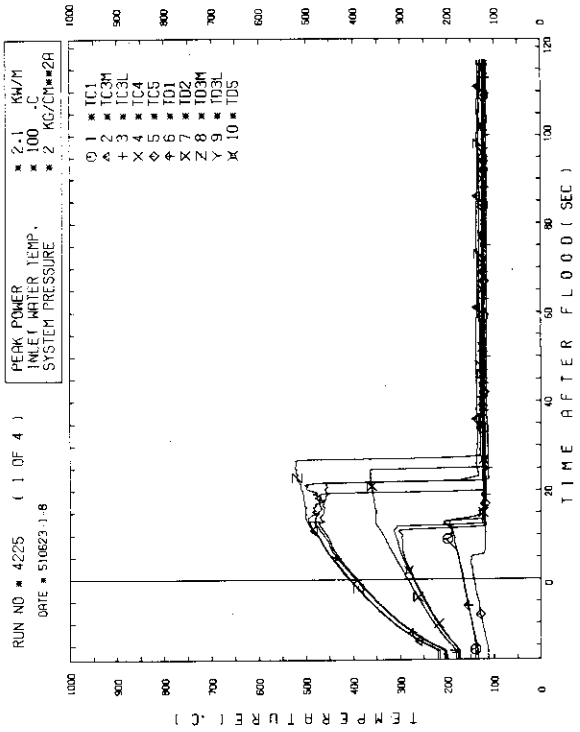
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
2	TC3U	408.	21.25	502.	21.00	495.
3	TC3L	393.	12.75	461.	18.75	471.
4	TC4	270.	11.00	304.	10.75	303.
7	TD2	253.	22.75	364.	24.00	363.
8	TD3U	407.	25.25	523.	26.25	522.
9	TD3L	391.	12.75	473.	21.25	457.
10	TD4	272.	11.00	313.	11.25	312.

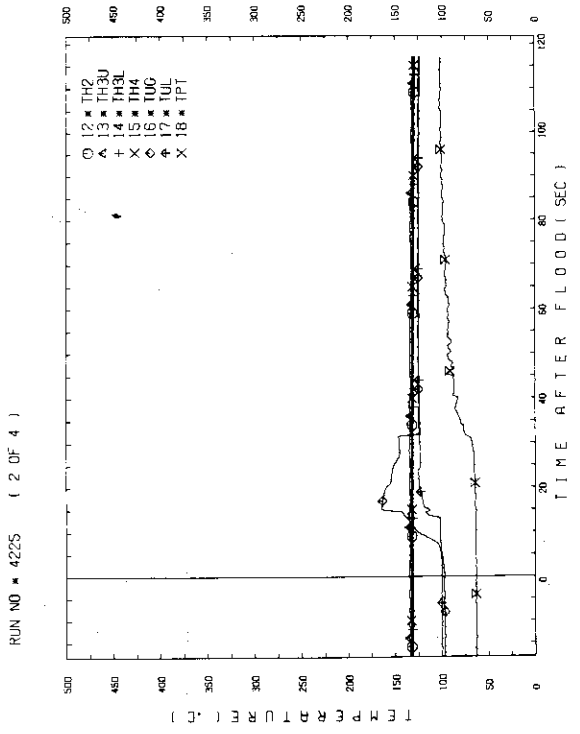
RUN NO. 4225 DATE * 510623-1-8

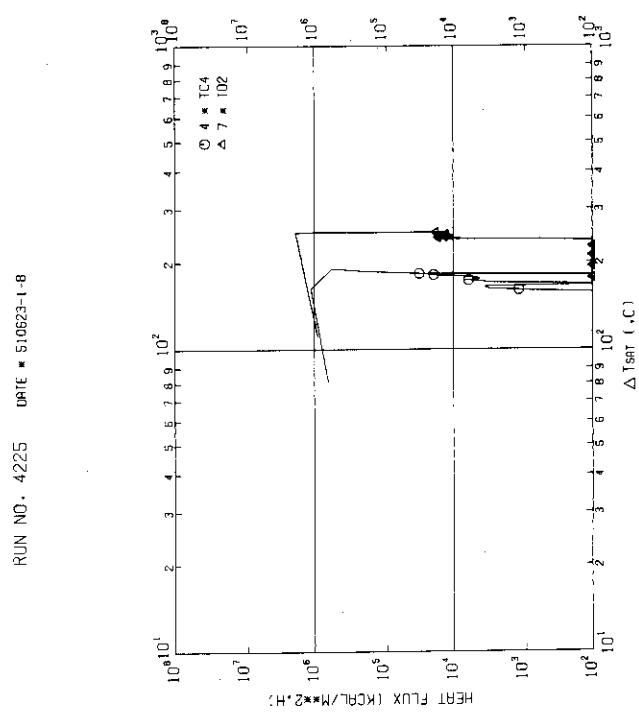


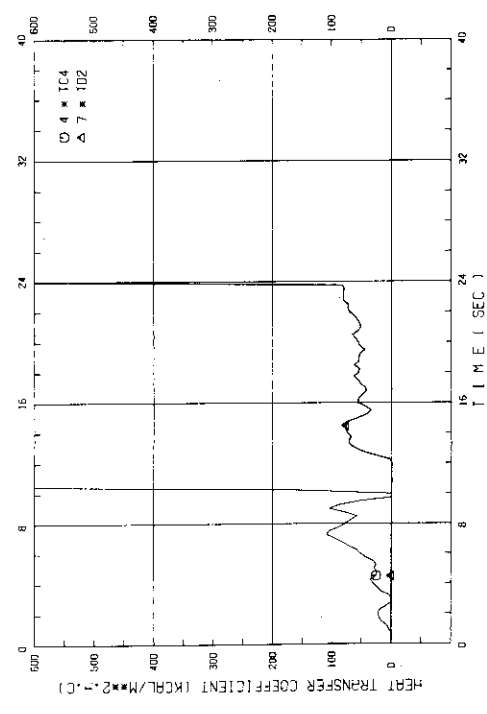

RUN NO = 4225 (3 OF 4)
21 = PUP
22 = DPL
24 = DPTL
25 = DPTS
TIME AFTER FLOOD (SEC)

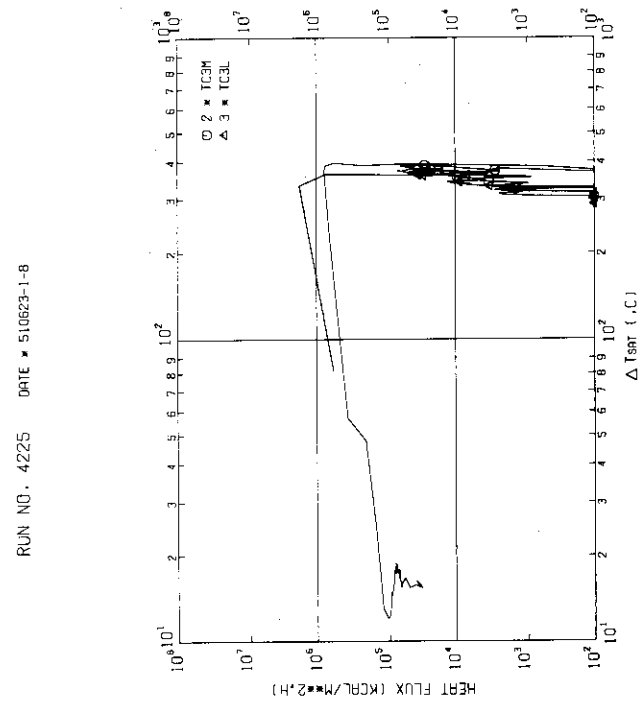

RUN NO = 4225 (4 OF 4)
26 = DPHT
27 = DPPM
28 = FM
30 = 1
FLOW RATE (CM/SEC)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
TIME AFTER FLOOD (SEC)

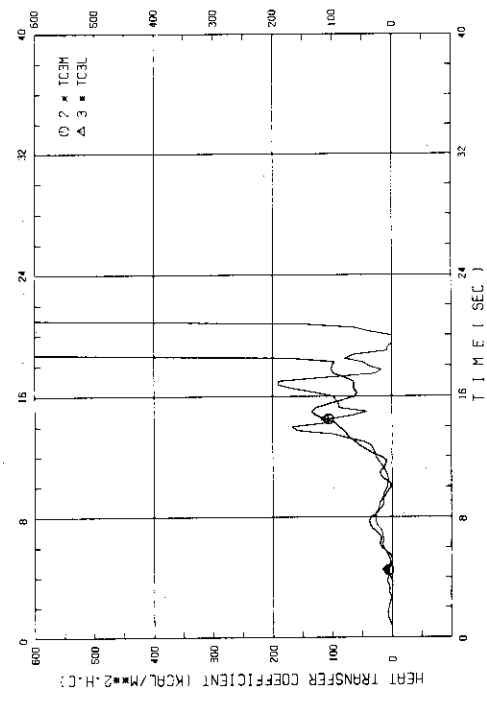

RUN NO = 4225 (1 OF 4)
DATE = 510623 1:8
PEAK POWER = 2:1 KW/M
INLET WATER TEMP. = 100 .C
SYSTEM PRESSURE = 2 KG/CM**2A
1 = TC1
2 = TC2M
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
7 = TD2
8 = TD3M
9 = TD3L
10 = TD5
TEMPERATURE (.C)
TIME AFTER FLOOD (SEC)

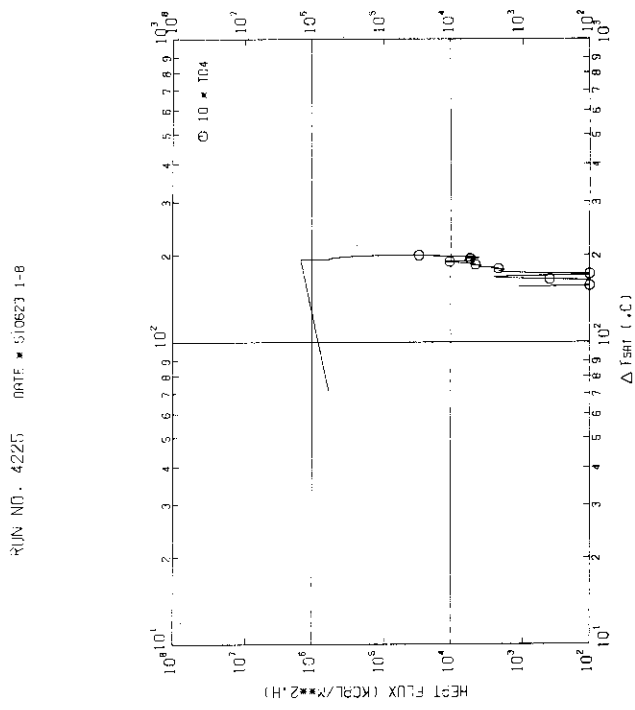

RUN NO = 4225 (2 OF 4)
12 = TH2
13 = TH3U
14 = TH3L
15 = TH4
16 = TUG
17 = TUL
18 = TPT
TEMPERATURE (.C)
TIME AFTER FLOOD (SEC)

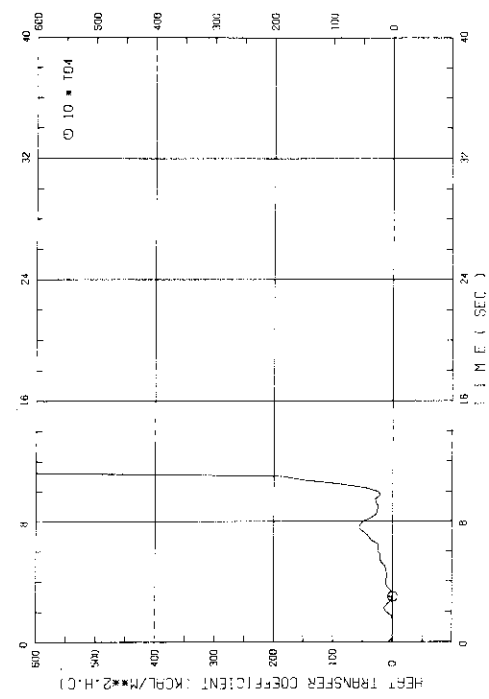

RUN NO. 4225 DATE = 510623-1-8
○ 4 = TC4
△ 7 = TD2
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)

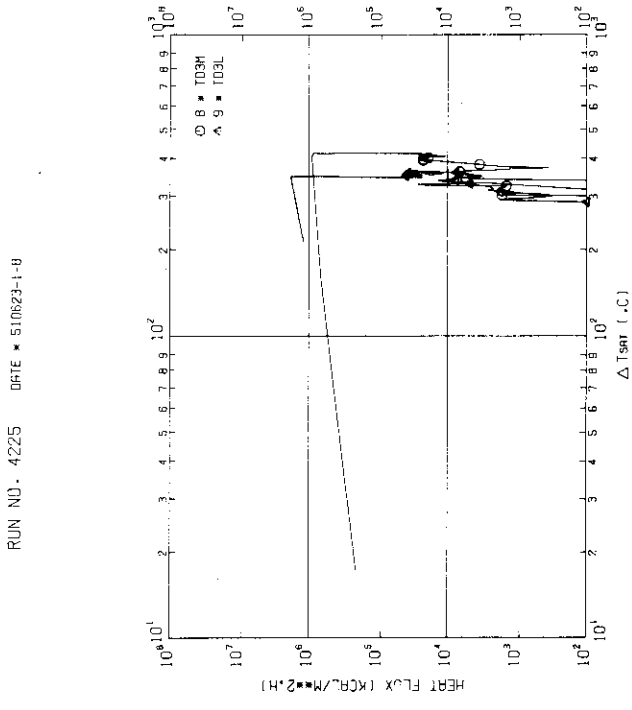

○ 4 = TC4
△ 7 = TD2
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

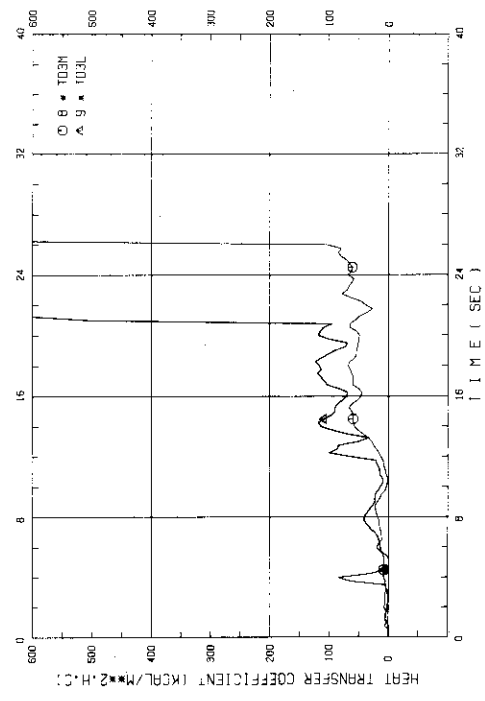

RUN NO. 4225 DATE = 510623-1-8
○ 2 = TC3M
△ 3 = TC3L
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)


○ 2 = TC3M
△ 3 = TC3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4225 DATE = 510623 1-8
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 10 = TD4


HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)
○ 10 = TD4


RUN NO. 4225 DATE = 510623-1-8
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 8 = TD3M
△ 9 = TD3L


HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)
○ 8 = TD3M
△ 9 = TD3L

RUN NO. 4226 (DATE * 510623 - 1 - 9)

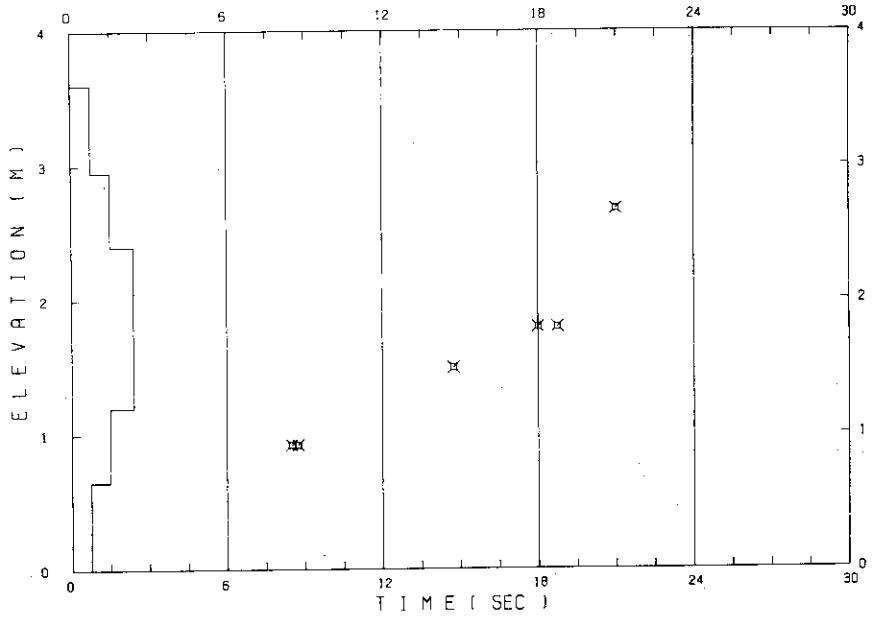
RUN CONDITIONS

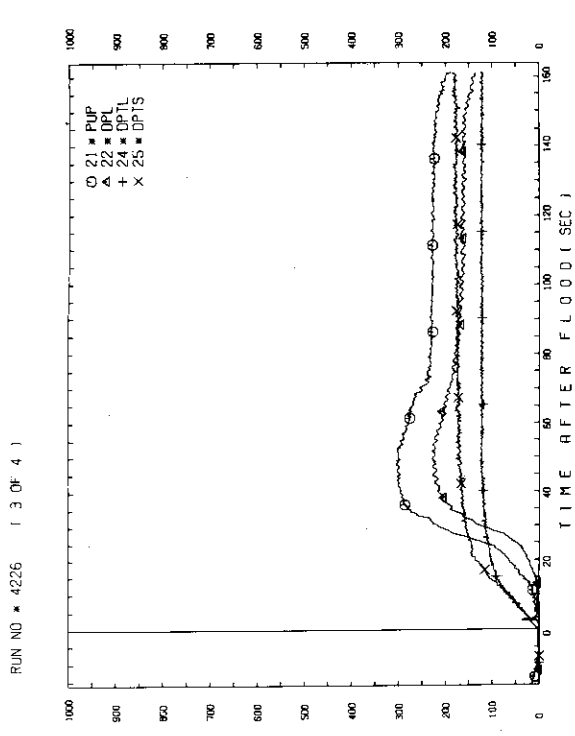
PEAK POWER	2.1	KW/M
SYSTEM PRESSURE	4	KG/CM**2A
INLET WATER TEMPERATURE	120	.C
INLET WATER VELOCITY	6	CM/SEC

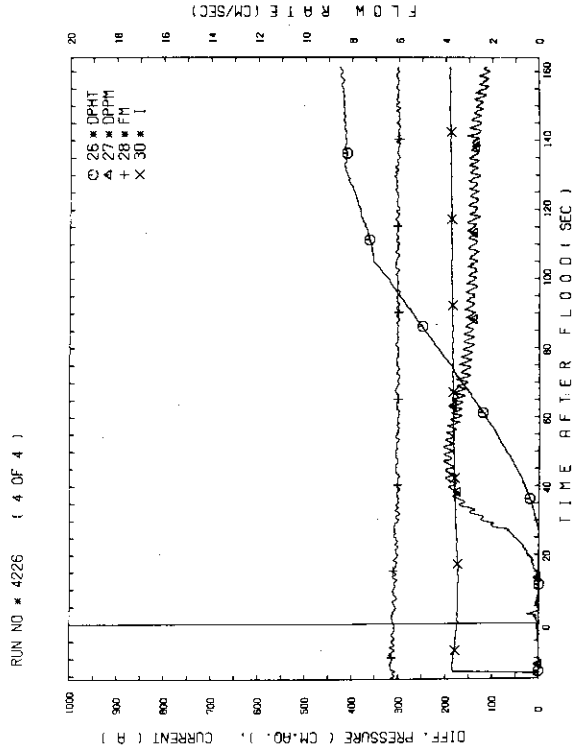
TEMPERATUR PROFILE

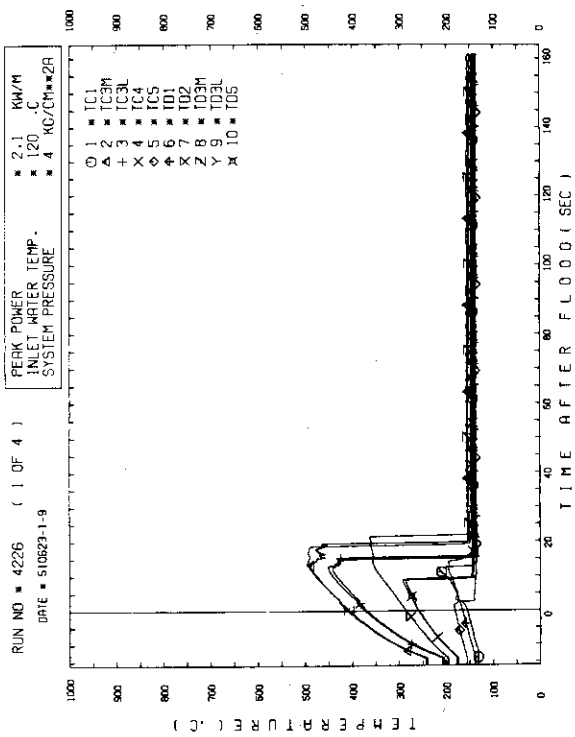
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
2	TC3M	410.	13.50	489.	18.75	454.
3	TC3L	372.	12.75	452.	14.75	432.
4	TC4	259.	8.75	287.	8.50	287.
7	TD2	295.	21.25	364.	21.00	362.
8	TD3M	406.	13.75	496.	18.00	492.
9	TD3L	368.	12.00	442.	0.0	0.
10	TD4	259.	9.00	294.	8.75	293.

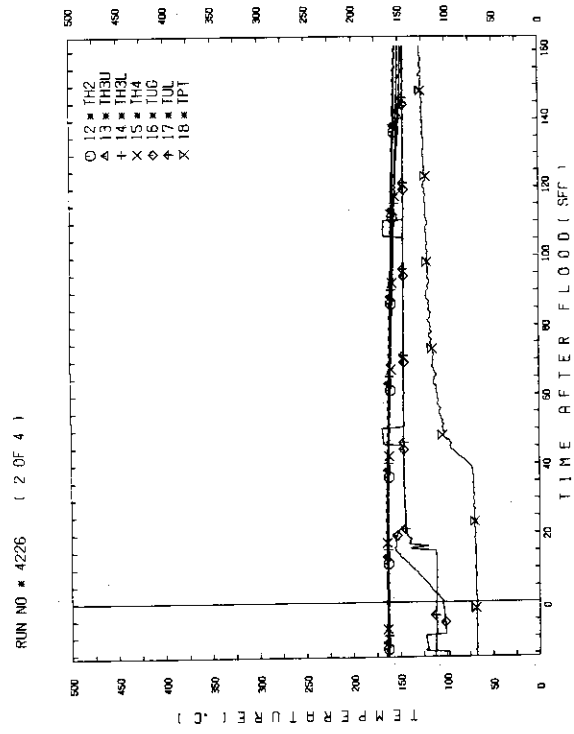
RUN NO. 4226 DATE * 510623-1-9

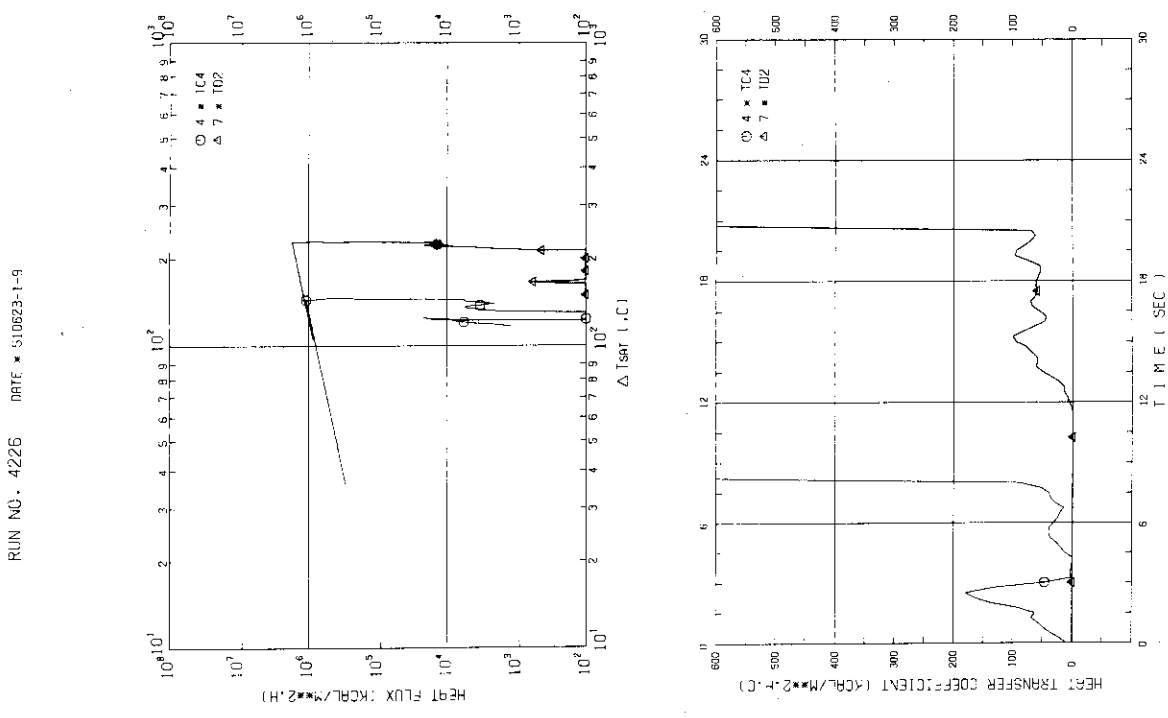


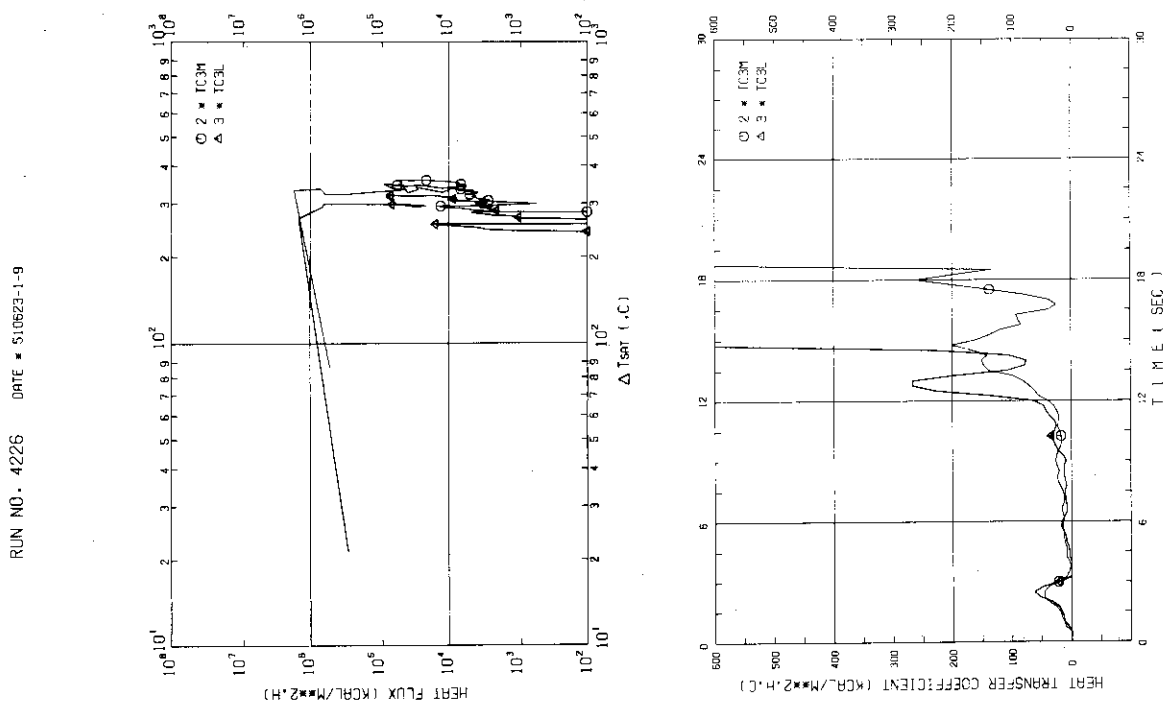

RUN NO = 4226 (3 OF 4)
21 = PUP
22 = DPL
24 = DPTL
25 = DPTS
TIME AFTER FLOOD(SEC)

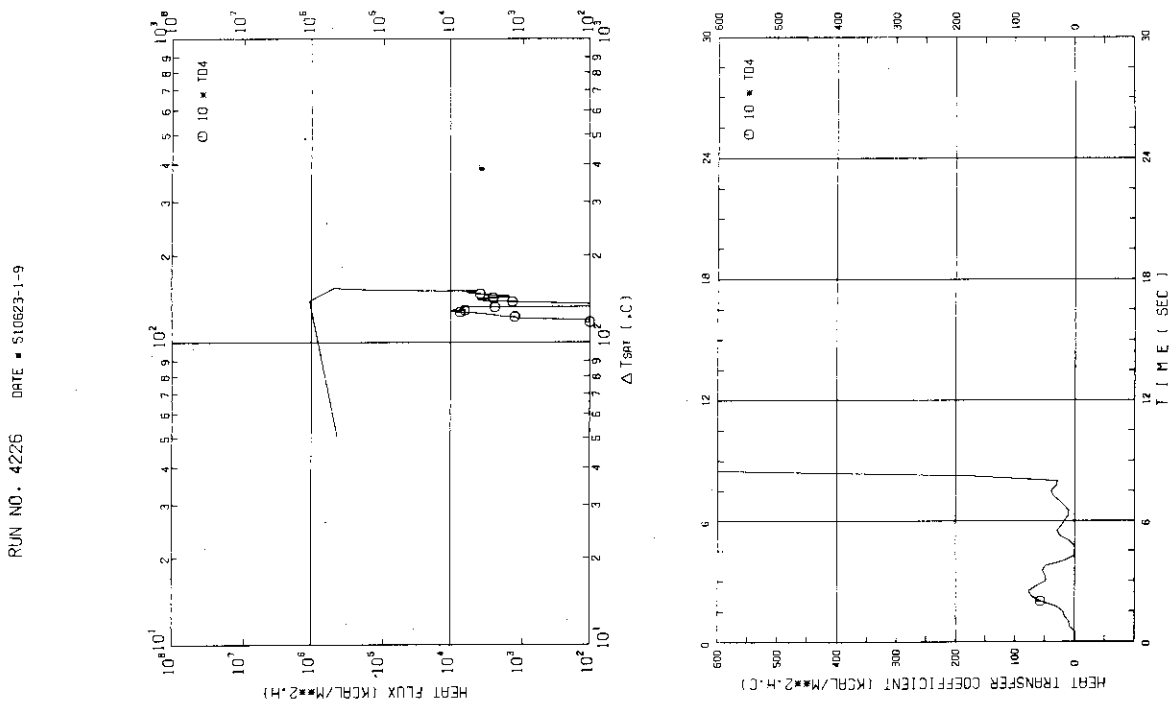

RUN NO = 4226 (4 OF 4)
26 = DPHT
27 = DPPM
28 = FM
30 = I
FLOW RATE (CM/SEC)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
TIME AFTER FLOOD(SEC)

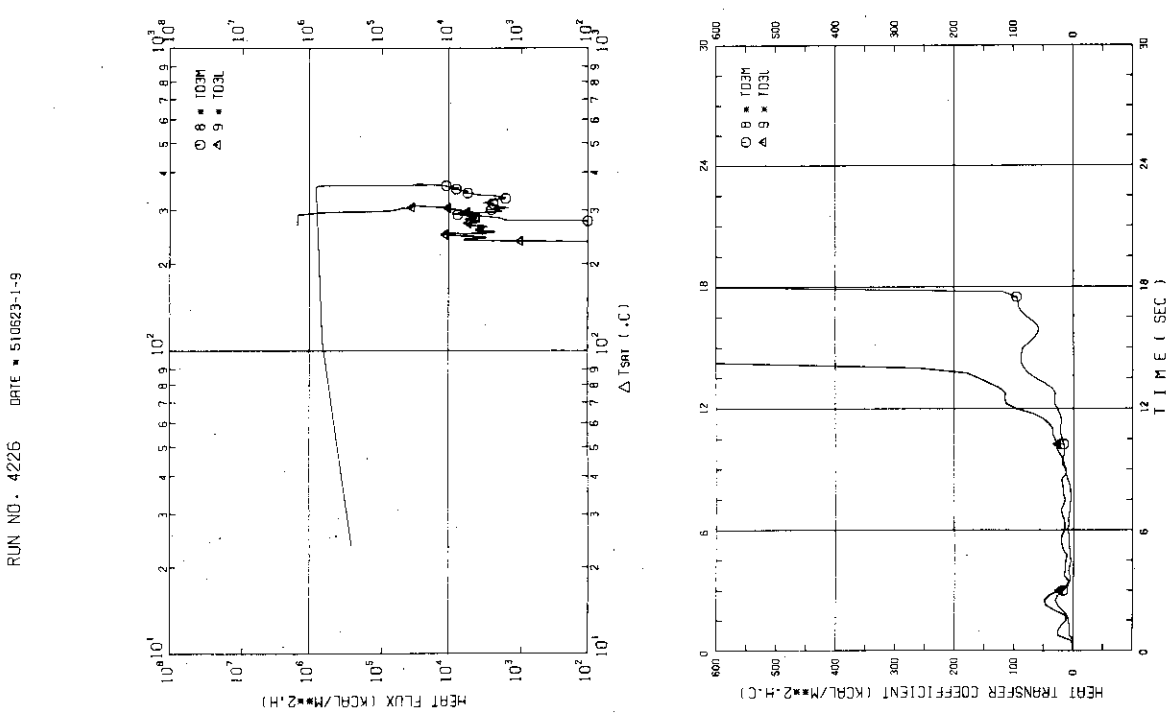

RUN NO = 4226 (1 OF 4)
DATE = 510623-1-9
PEAK POWER = 2.1 KW/M
INLET WATER TEMP. = 120 .C
SYSTEM PRESSURE = 4 KG/CM**2A
1 = TC1
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
7 = TD2
8 = TD3M
9 = TD3L
10 = TD5
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO = 4226 (2 OF 4)
12 = TH2
13 = TH3U
14 = TH3L
15 = TH4
16 = TUC
17 = TUL
18 = TPT
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO. 4226 DATE = 510623-1-9
Φ 4 = TC4
Δ 7 = T02
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4226 DATE = 510623-1-9
Φ 2 = TC3M
Δ 3 = TC3L
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4226 DATE = 810623-1-9
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
Ø 10 * TD4
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4226 DATE = 810623-1-9
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
Ø 8 * TD3M
Δ 9 * TD3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

****
* *
* RUN NO. 4505 *
* *
****

(DATE * 510628 - 1 -15)

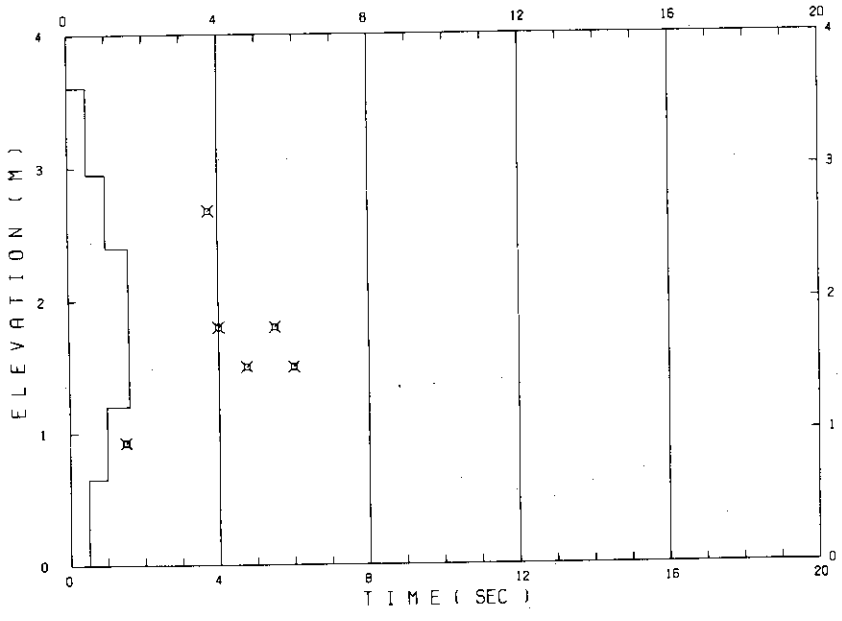
RUN CONDITIONS

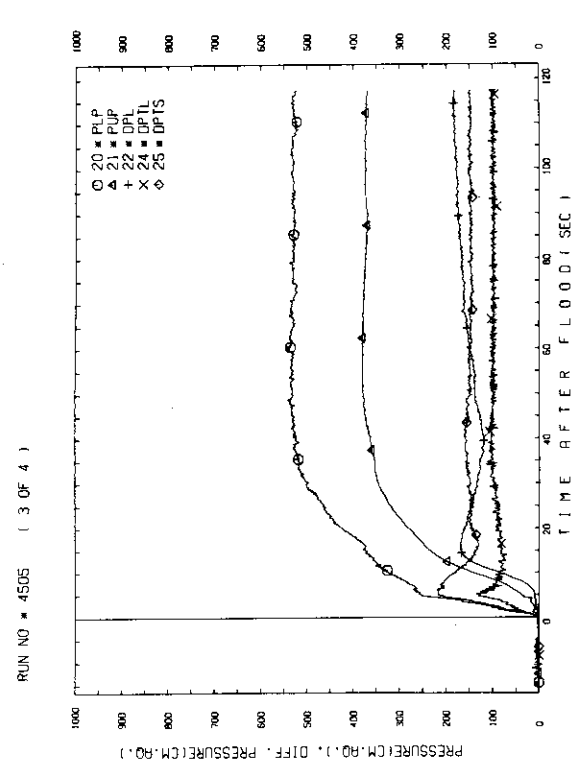
PEAK POWER	1.4	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	80	.C
INLET WATER VELOCITY	5	CM/SEC

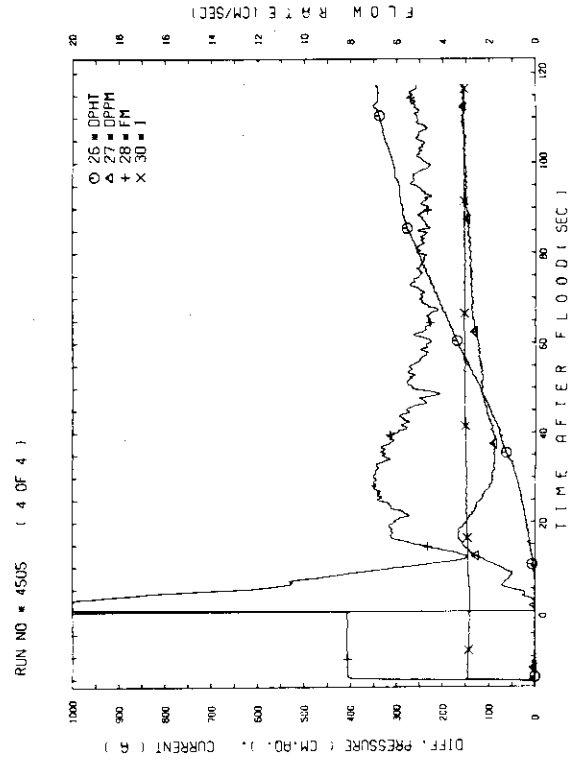
TEMPERATUR PROFILE

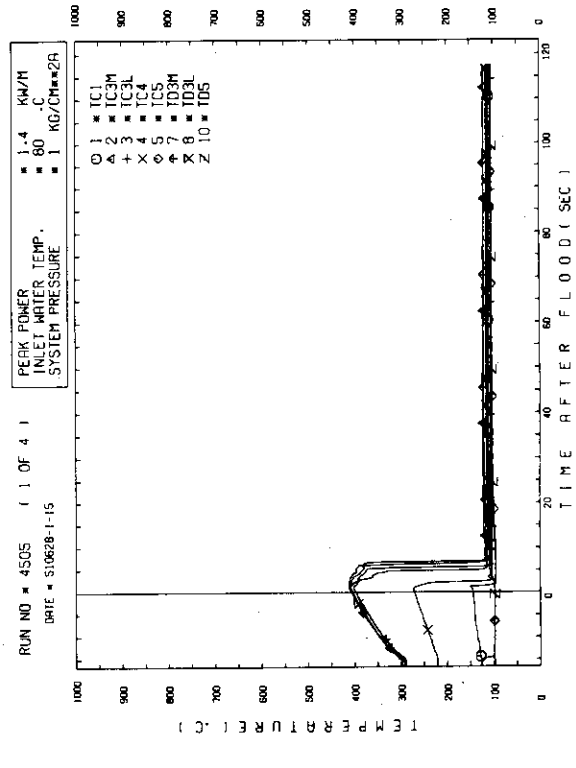
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
2	TC3M	407.	1.00	412.	4.00	355.
3	TC3L	396.	1.00	402.	4.75	376.
4	TC4	271.	1.00	272.	1.50	258.
6	TD2	277.	1.50	282.	3.75	273.
7	TD3M	406.	1.75	411.	5.50	394.
8	TD3L	404.	1.00	409.	6.00	380.

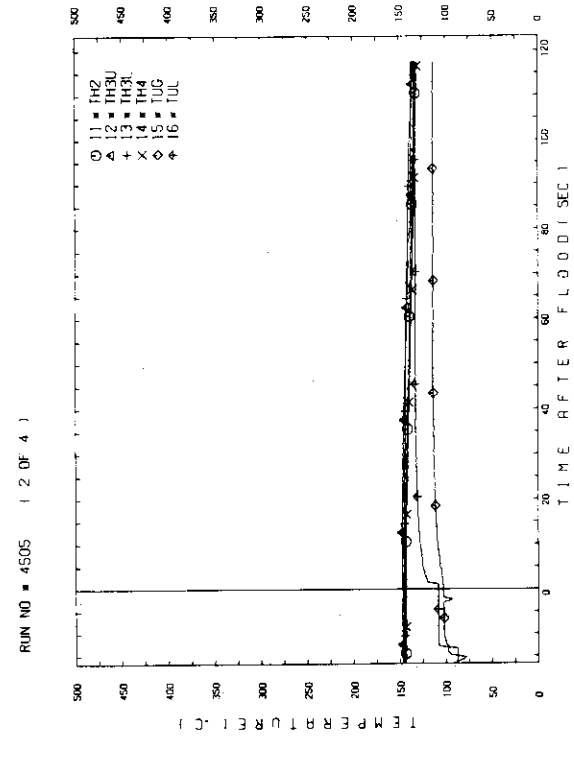
RUN NO. 4505 DATE * 510628-1-15

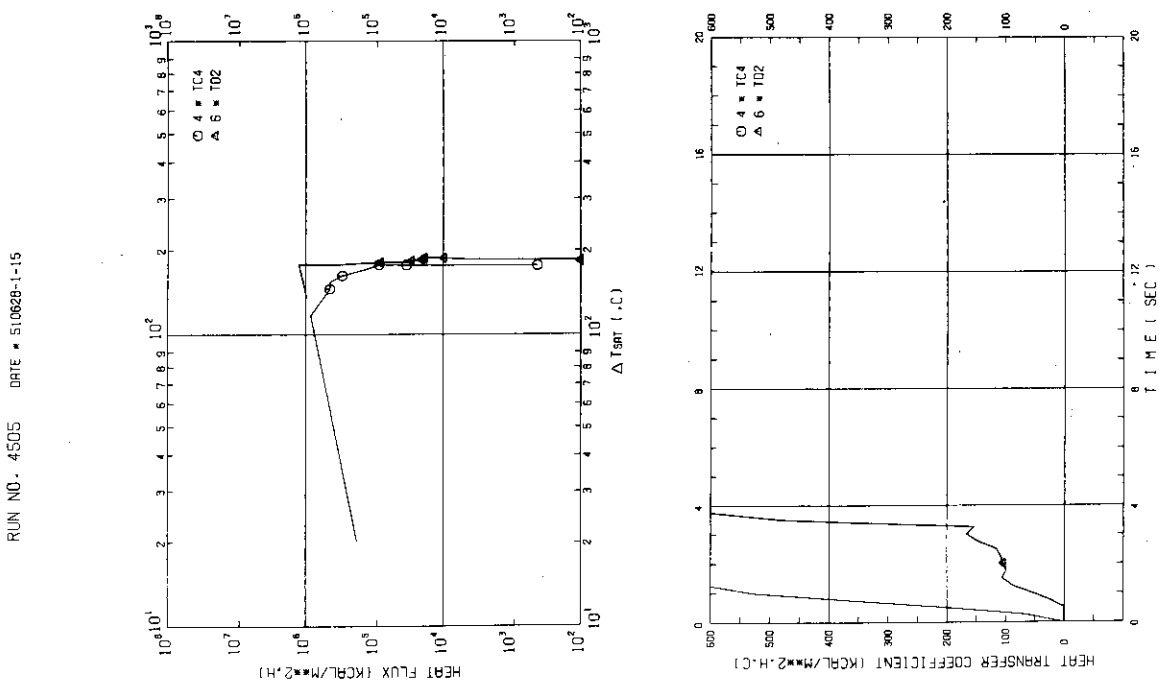


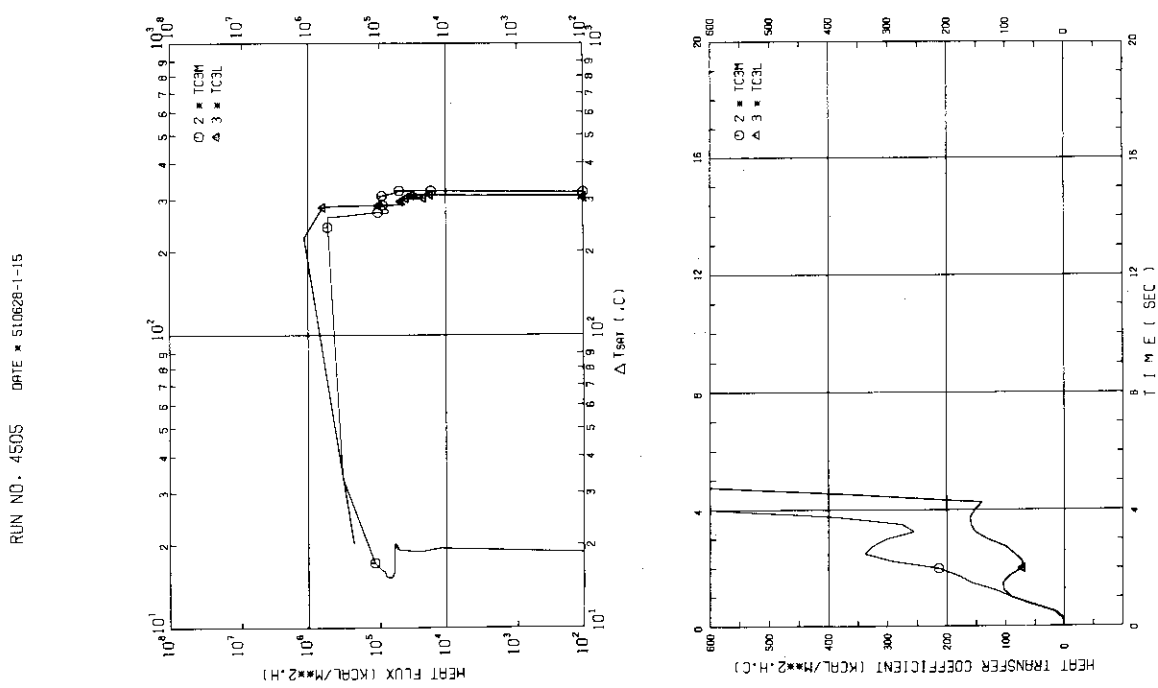

RUN NO = 4505 (3 OF 4)
20 = PLP
21 = PUP
22 = DPL
24 = DPTL
25 = DPTS
TIME AFTER FLOOD(SEC)
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)

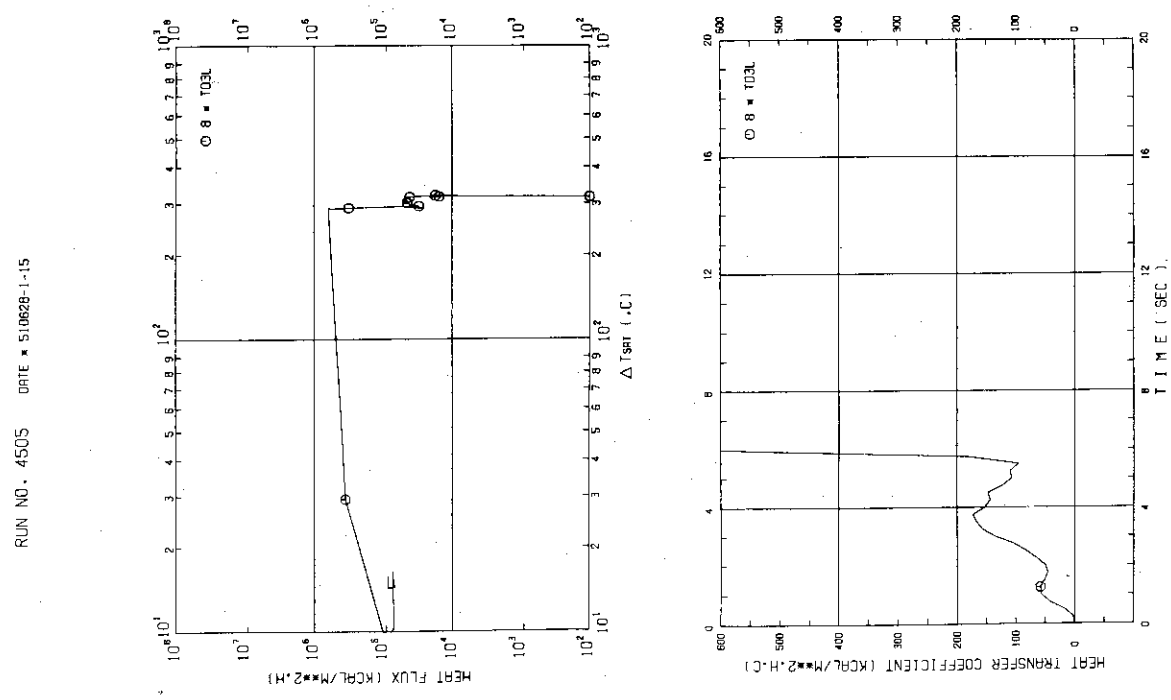

RUN NO = 4505 (4 OF 4)
26 = DPHT
27 = DPPM
28 = FM
30 = I
TIME AFTER FLOOD(SEC)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
FLOW RATE (CM/SEC)

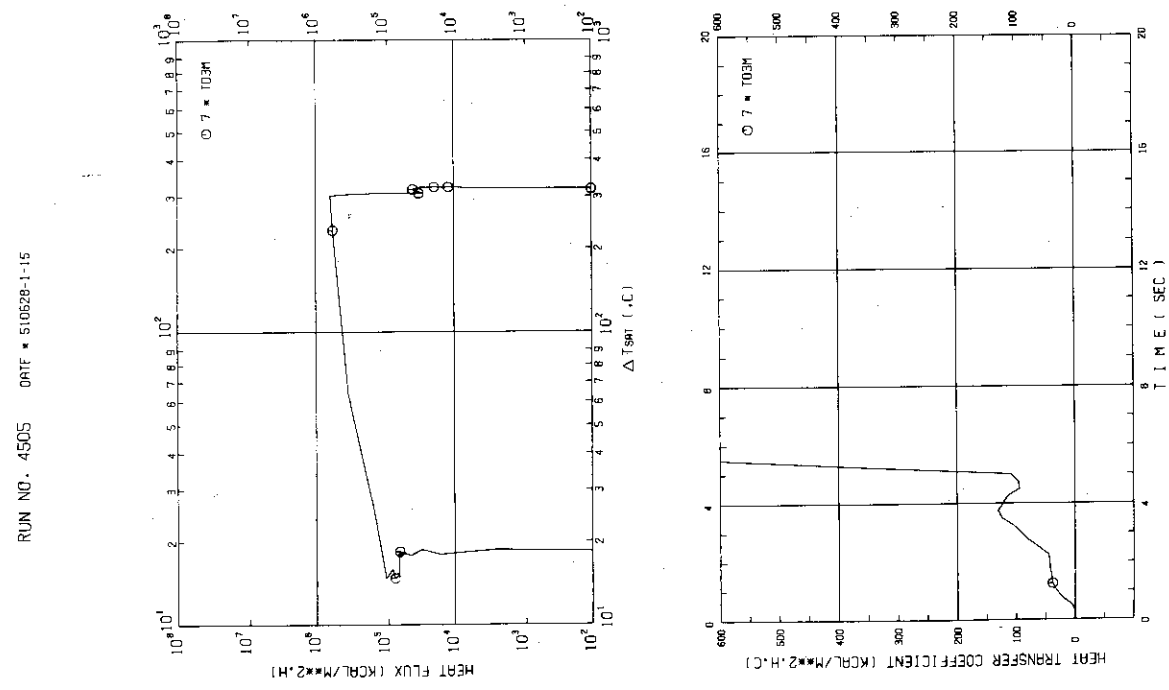

RUN NO = 4505 (1 OF 4)
DATE = 910628-1-15
PEAK POWER = 1-4 KW/M
INLET WATER TEMP. = 80 C
SYSTEM PRESSURE = 1 KG/CM**2A
1 = TC1
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
7 = TD3M
8 = TD3L
10 = TD5
TIME AFTER FLOOD(SEC)
TEMPERATURE (C)


RUN NO = 4505 (2 OF 4)
11 = TH2
12 = TH3U
13 = TH3L
14 = TH4
15 = TUG
16 = TUL
TIME AFTER FLOOD(SEC)
TEMPERATURE (C)


RUN NO. 4505 DATE = 810628-1-15
Φ 4 = TC4
Δ 6 = TC2
HEAT FLUX (KCAL/M**2.H)
ΔTsat (,C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4505 DATE = 810628-1-15
Φ 2 = TC3M
Δ 3 = TC3L
HEAT FLUX (KCAL/M**2.H)
ΔTsat (,C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4505 DATE = 510628-1-15
⊙ 8 = T03L
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4505 DATE = 510628-1-15
⊙ 7 = T03M
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

****
* *
* RUN NO. 4506 *
* *
****

(DATE * 510707 - 1 - 4)

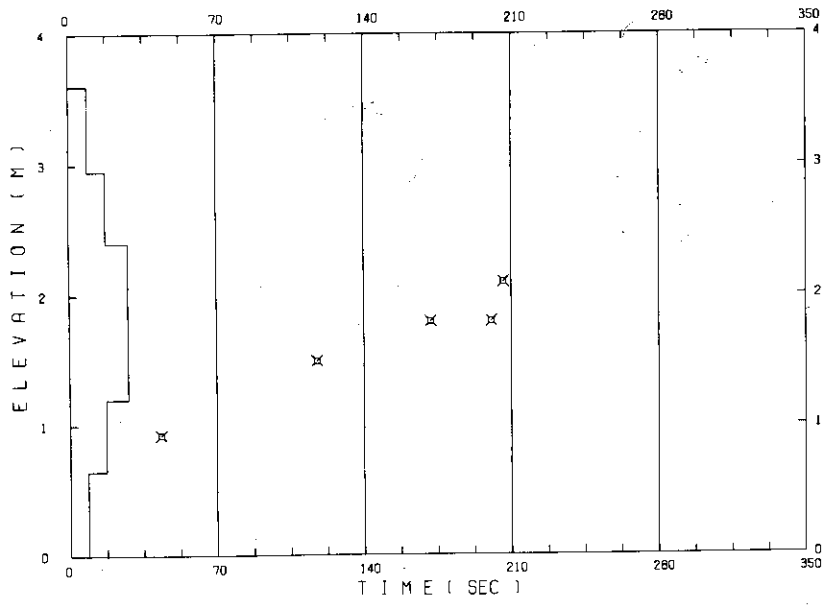
RUN CONDITIONS

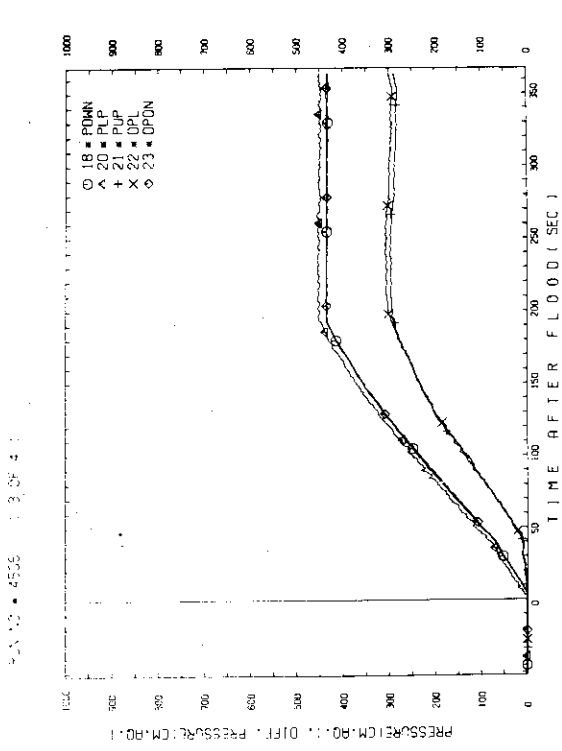
PEAK POWER	1.4	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	50	.C
INLET WATER VELOCITY	5	CM/SEC

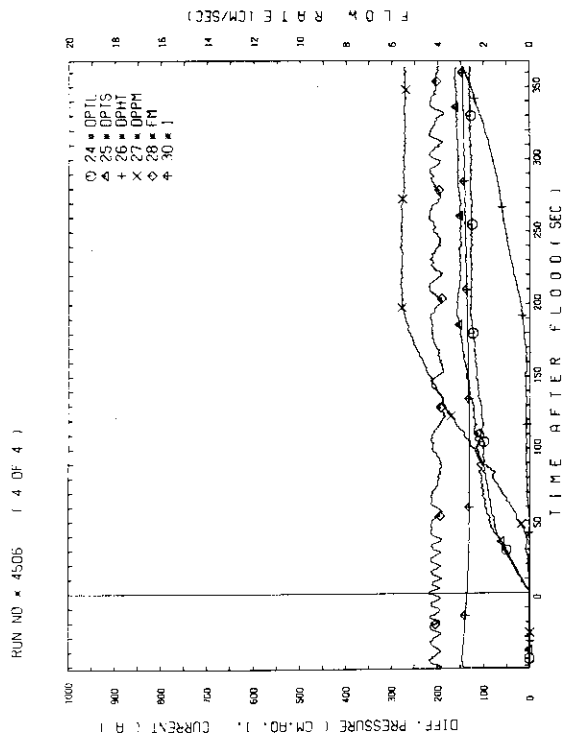
TEMPERATUR PROFILE

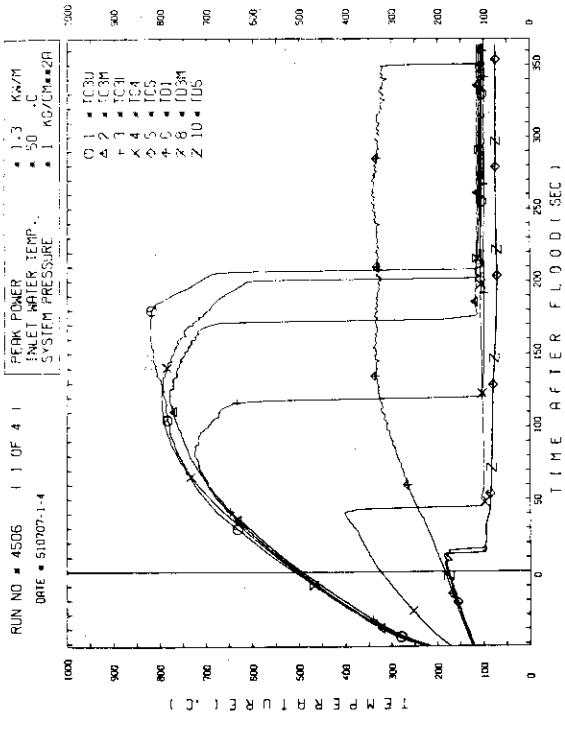
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	@UENCH TIME (SEC)	@UENCH TEMP. (.C)
1	TC3U	506.	163.75	823.	206.25	671.
2	TC3M	499.	123.25	781.	171.75	673.
3	TC3L	492.	81.75	726.	117.75	605.
4	TC4	323.	40.75	403.	43.50	377.
6	TD1	184.	259.25	346.	0.0	0.
8	TD3M	506.	119.75	798.	200.50	608.

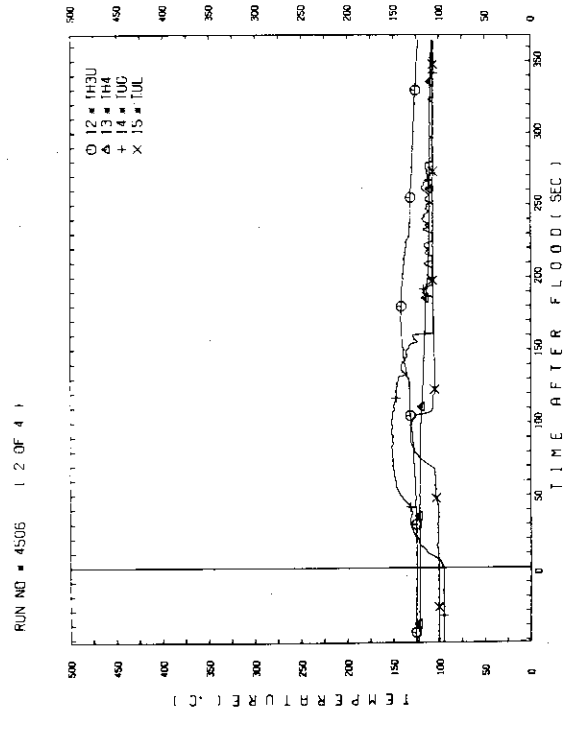
RUN NO. 4506 DATE * 510707-1-4

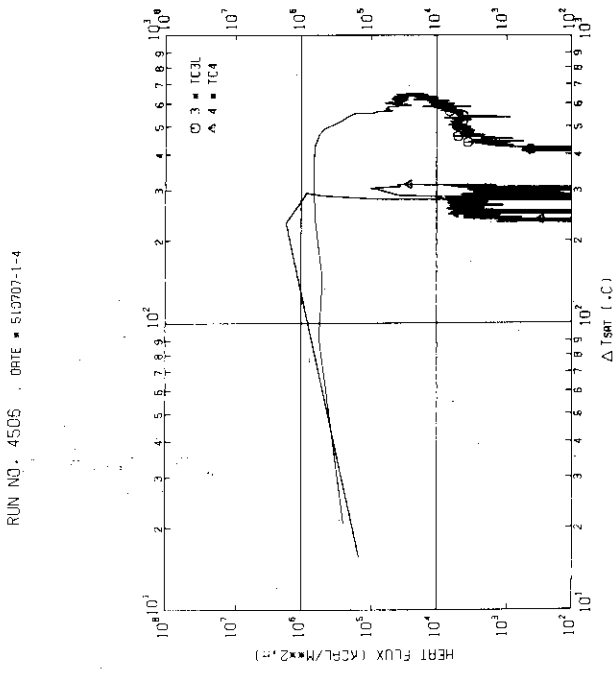


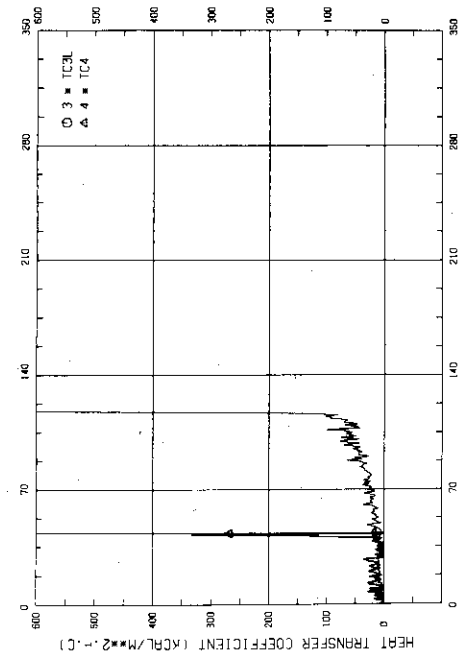

PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD(SEC)
18 = PDWN
20 = PLP
21 = PUP
22 = OPL
23 = OPDN

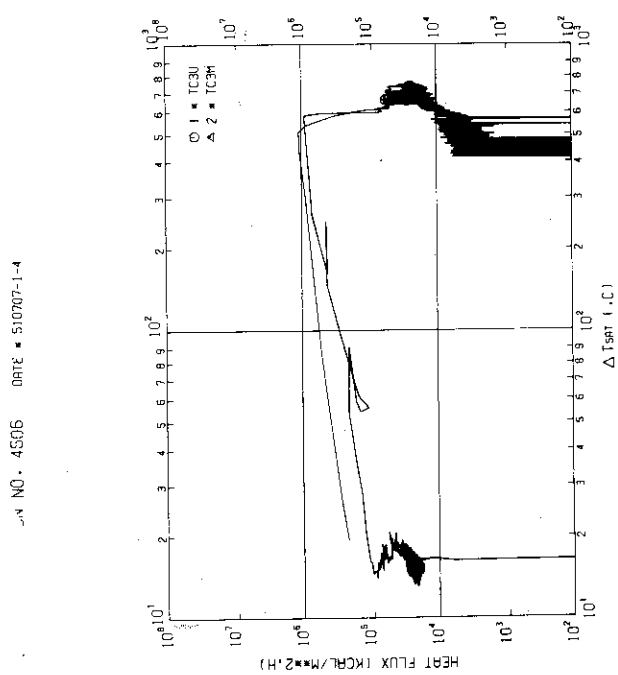

DIFF. PRESSURE (CM.AQ.), CURRENT (A)
TIME AFTER FLOOD(SEC)
FLOW RATE(CM/SEC)
24 = DPTL
25 = DPTS
26 = DPHT
27 = DPPM
28 = FM
30 = I

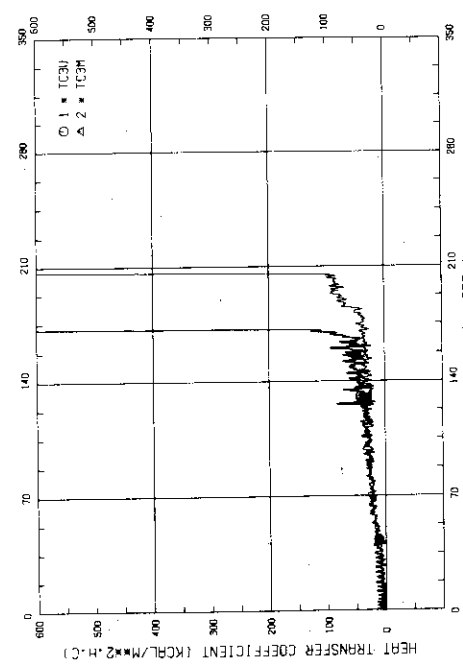

RUN NO = 4506 (1 OF 4)
DATE = 910707-1-4
PEAK POWER = 1.3 Kw/M
INLET WATER TEMP. = 50 .C
SYSTEM PRESSURE = 1 KG/CM**2A
1 = TC3U
2 = TC3M
3 = TC9
4 = TC4
5 = TC5
6 = TC1
7 = TC3M
8 = TC6
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)

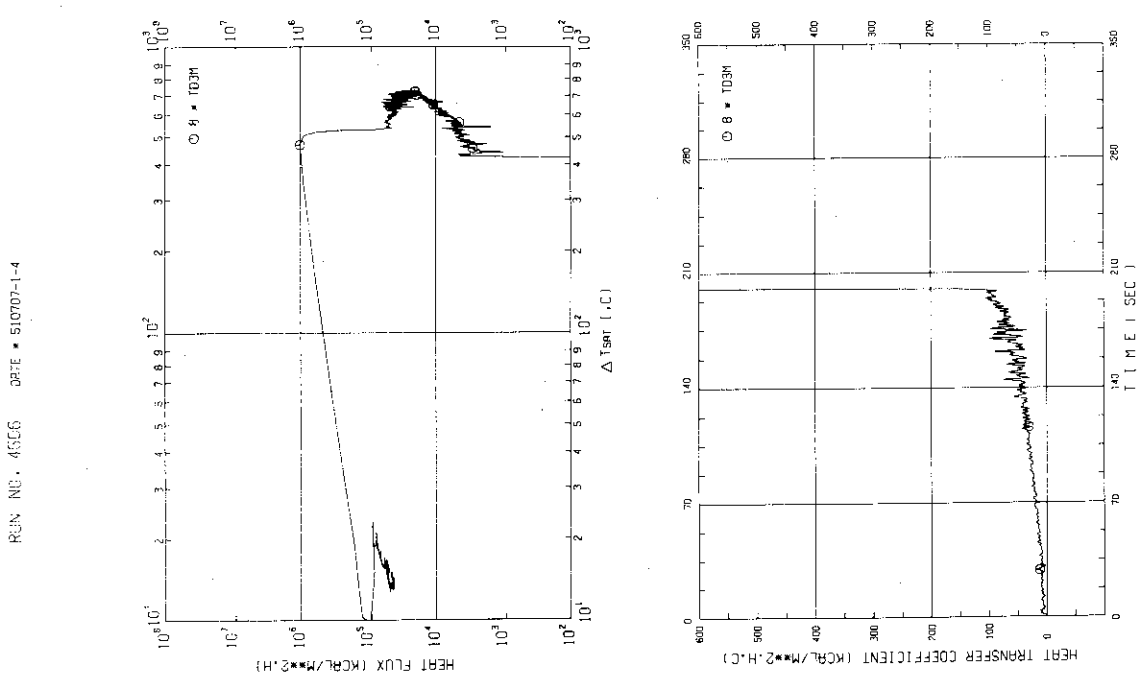

RUN NO = 4506 (2 OF 4)
12 = TH3U
13 = TH4
14 = TUC
15 = TUL
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO. 4505 DATE = 510707-1-4
Ø 3 = TC3L
Δ 4 = TC4
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)


Ø 3 = TC3L
Δ 4 = TC4
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


NO. 4506 DATE = 510707-1-4
Ø 1 = TC3U
Δ 2 = TC3M
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)


Ø 1 = TC3U
Δ 2 = TC3M
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 45503 DATE = 510707-1-4
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

****
* *
* RUN NO. 4508 *
* *
****

(DATE * 510714 - 1 - 5)

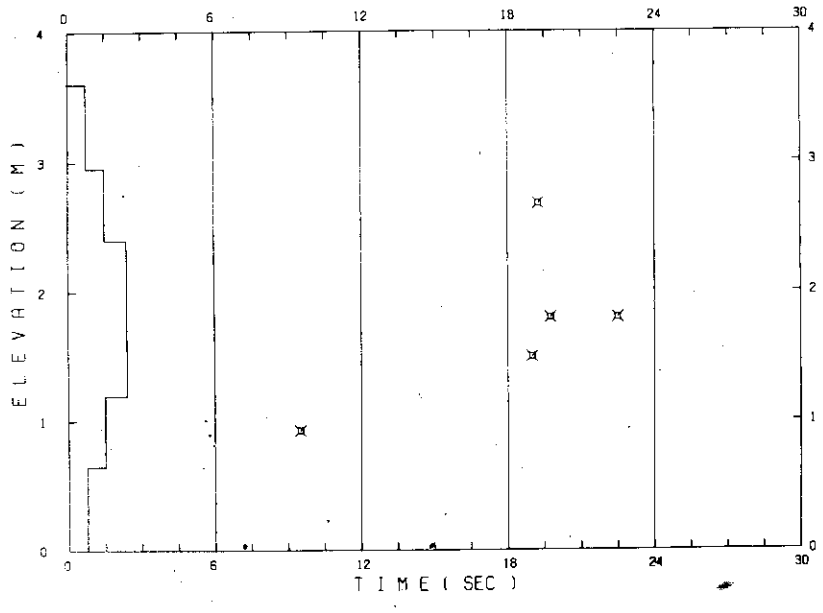
RUN CONDITIONS

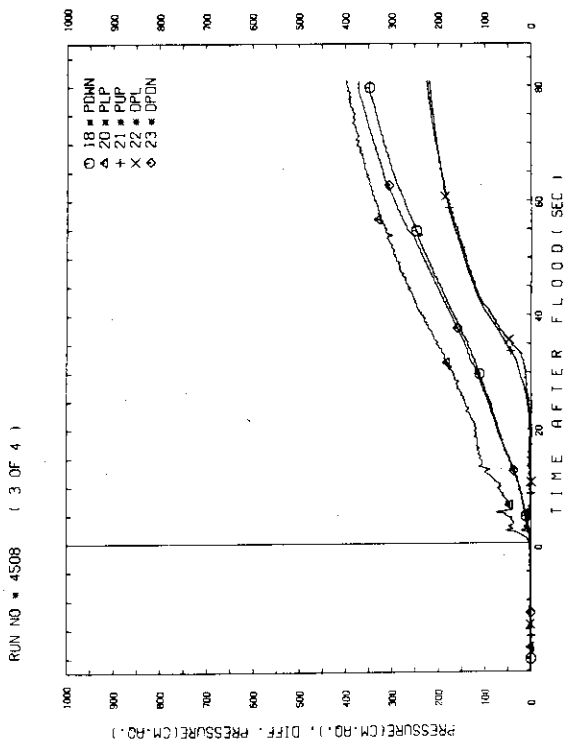
PEAK POWER	1.7	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	80	.C
INLET WATER VELOCITY	10	CM/SEC

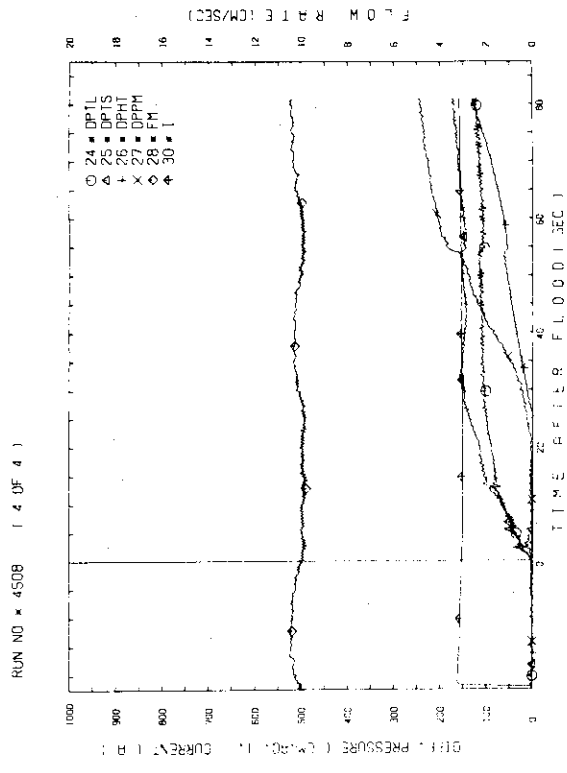
TEMPERATUR PROFILE

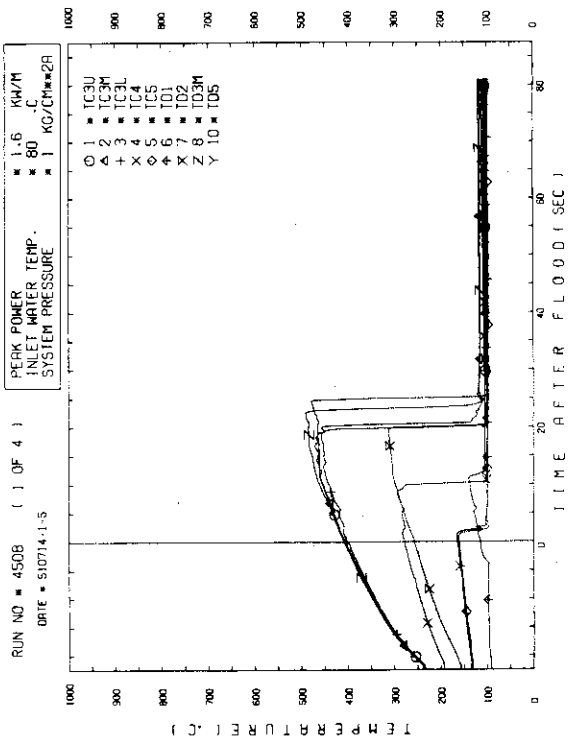
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
1	TC3U	407.	24.50	479.	0.0	0.
2	TC3M	408.	16.75	471.	19.75	455.
3	TC3L	400.	18.75	457.	19.00	455.
4	TC4	279.	8.75	294.	9.50	282.
7	TD2	258.	19.50	311.	19.25	311.
8	TD3M	408.	22.50	491.	22.50	491.

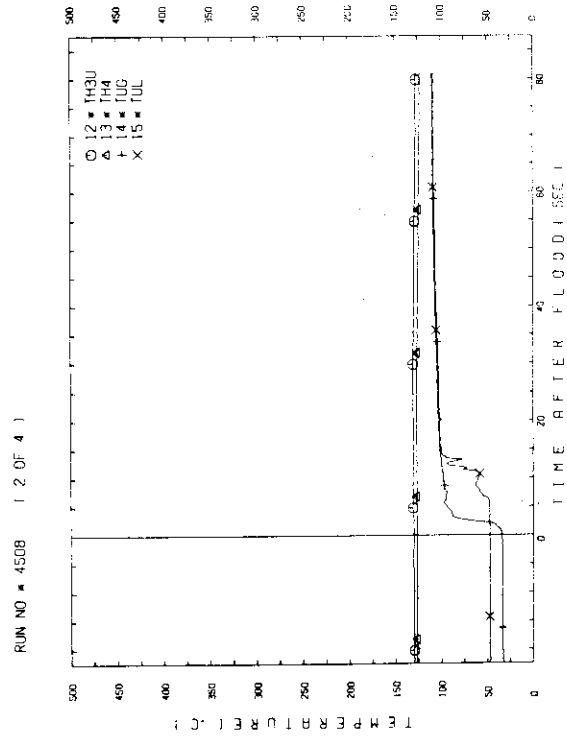
RUN NO. 4508 DATE * 510714-1-5

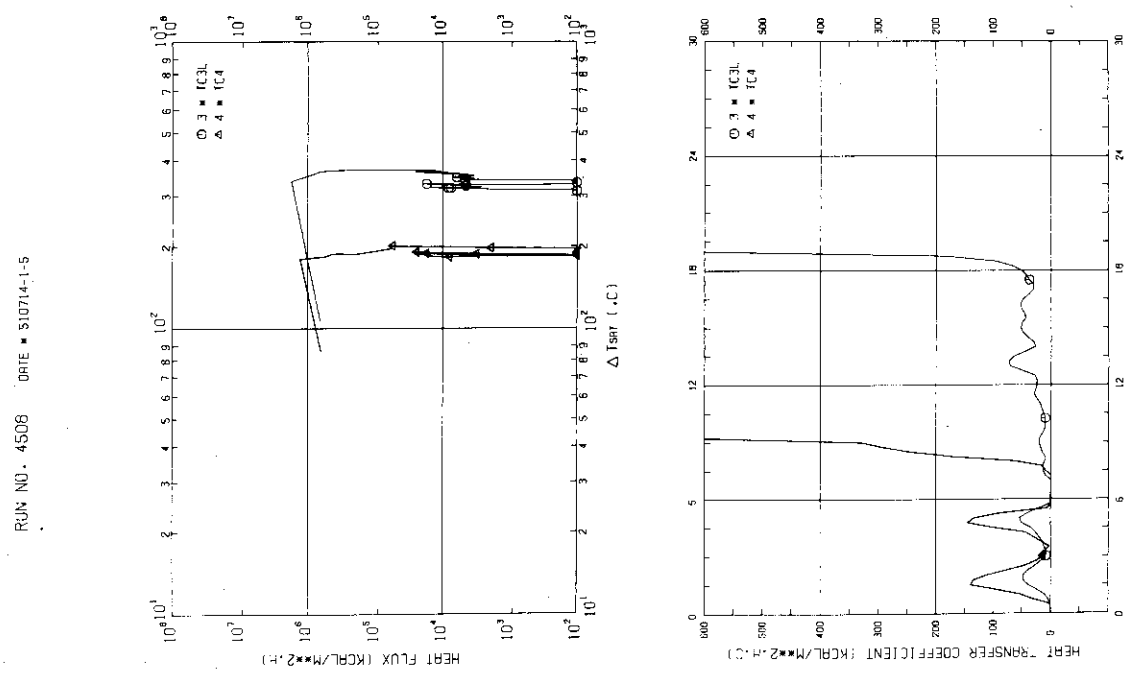


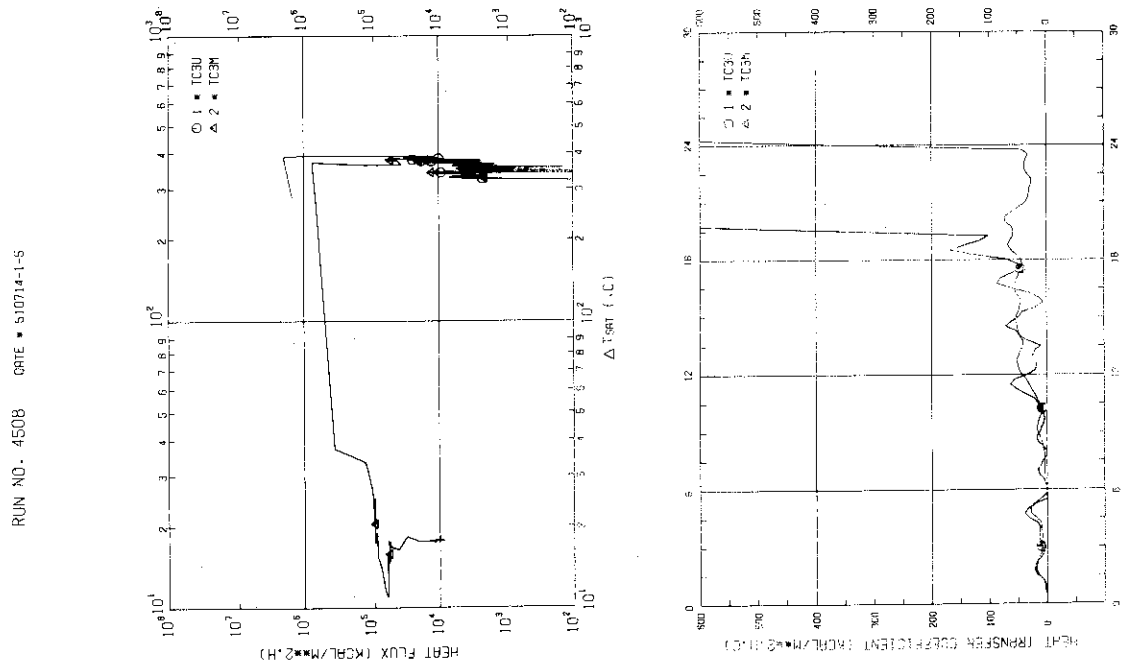

RUN NO = 4508 (3 OF 4)
18 = PDWN
20 = PLP
21 = PUP
22 = DPL
23 = DPDN
TIME AFTER FLOOD(SEC)
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)

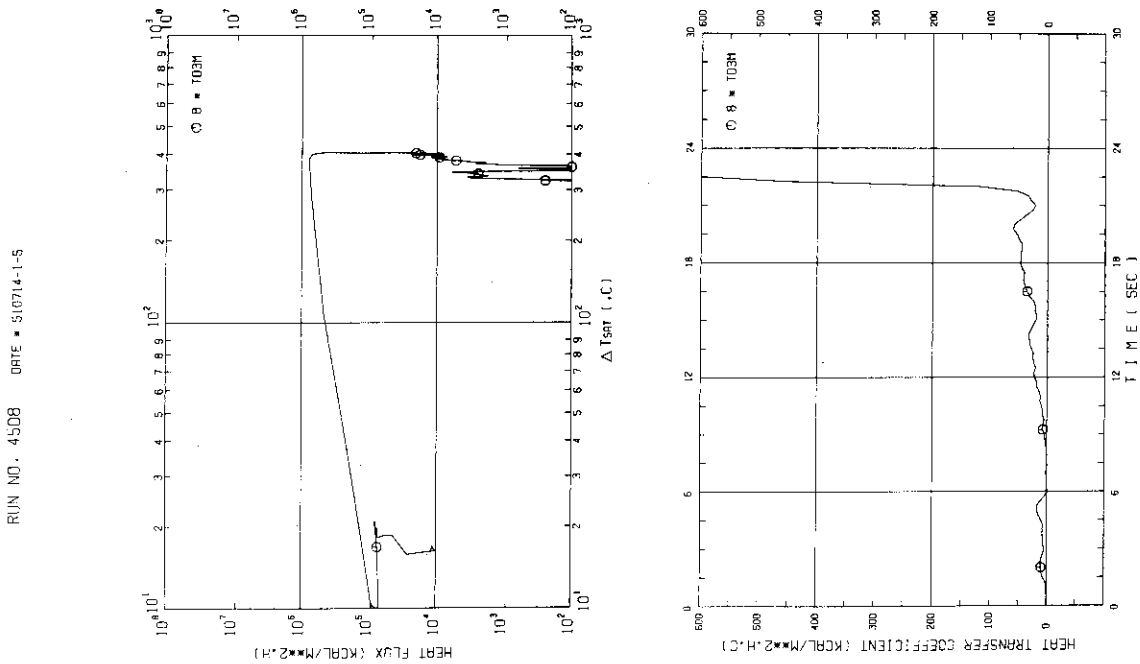

RUN NO = 4508 (4 OF 4)
24 = DPTL
25 = DPTS
26 = DPHT
27 = DPPM
28 = FM
30 = I
TIME AFTER FLOOD(SEC)

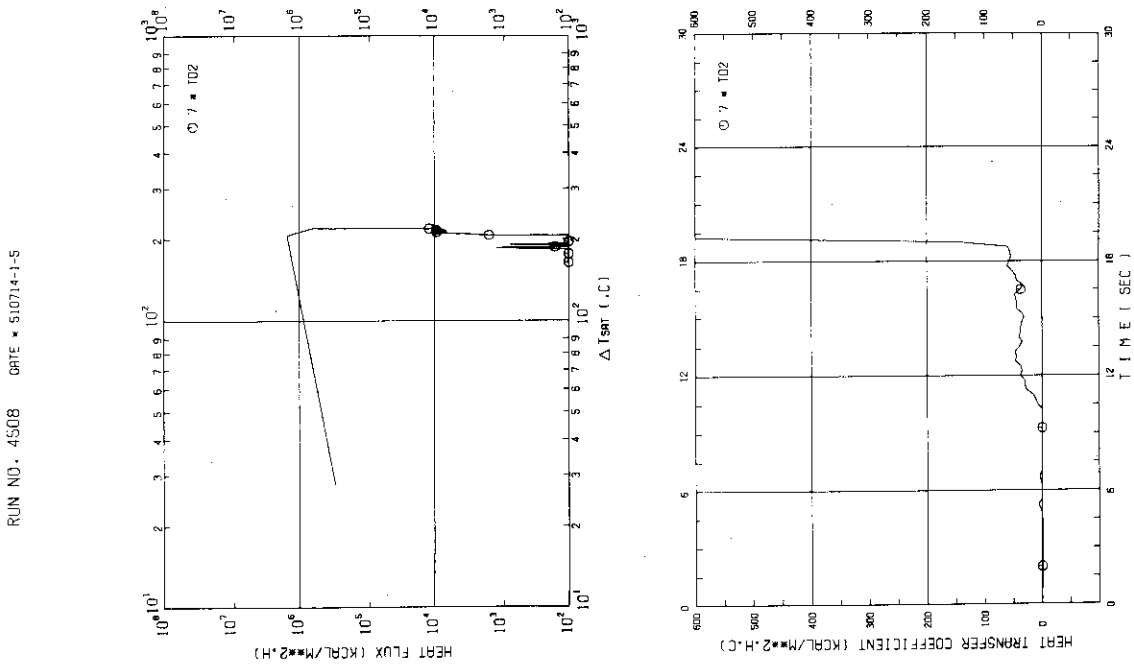

RUN NO = 4508 (1 OF 4)
DATE = 810714-1-5
PEAK POWER = 1.6 KW/M
INLET WATER TEMP. = 80 .C
SYSTEM PRESSURE = 1 KG/CM**2R
1 = TC3U
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
7 = TD2
8 = TD3M
10 = TD5
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO = 4508 (2 OF 4)
12 = TH3U
13 = TH4
14 = TUG
15 = TUL
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO. 4508 DATE = 910714-1-5
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 3 = TC3L
△ 4 = TC4
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4508 DATE = 910714-1-5
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 1 = TC3U
△ 2 = TC3M
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4508 DATE = 510714-1-5
HEAT FLUX (KCAL/M**2.H)
Δ Tsat (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4508 DATE = 510714-1-5
HEAT FLUX (KCAL/M**2.H)
Δ Tsat (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

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* *
* RUN NO. 4509 *
* *
****

(DATE * 510706 - 1 -17)

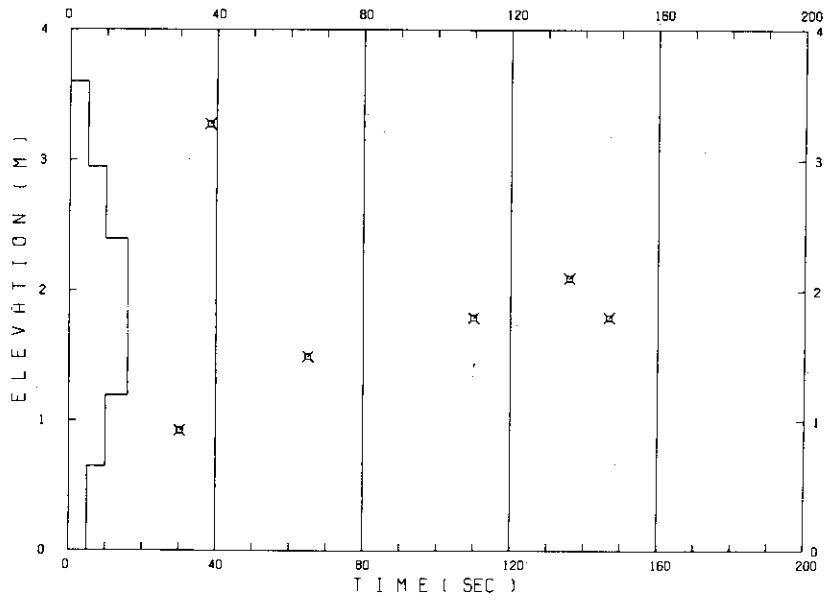
RUN CONDITIONS

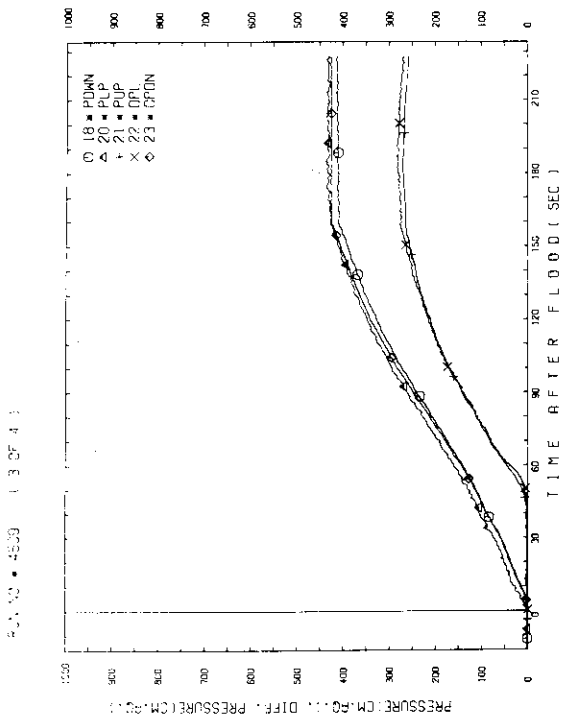
PEAK POWER	1.7	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	50	.C
INLET WATER VELOCITY	5	CM/SEC

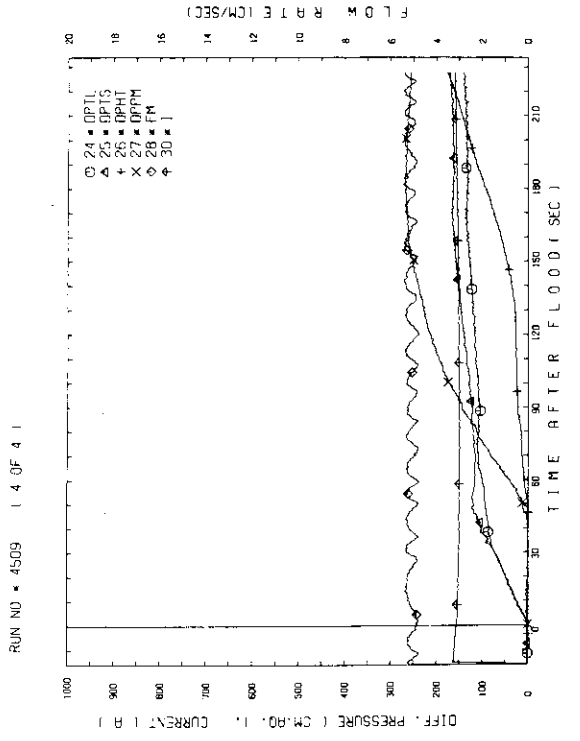
TEMPERATUR PROFILE

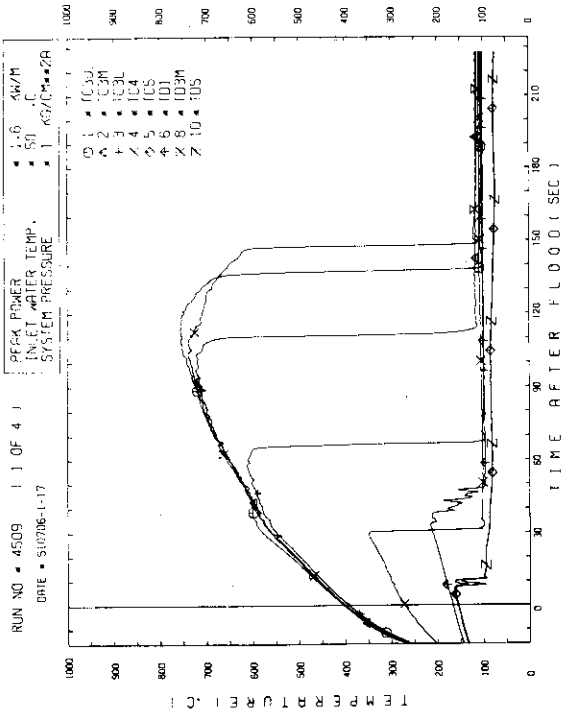
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
1	TC3U	399.	113.25	757.	136.00	660.
2	TC3M	398.	97.00	724.	110.00	672.
3	TC3L	391.	57.75	613.	65.00	597.
4	TC4	271.	29.50	349.	30.25	347.
6	TD1	167.	33.50	216.	38.25	209.
8	TD3M	402.	103.75	740.	146.75	612.

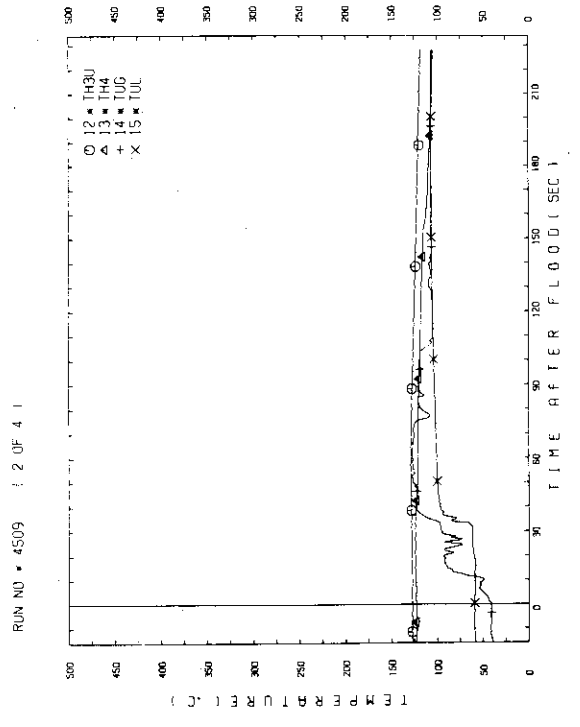
RUN NO. 4509 DATE * 510706-1-17

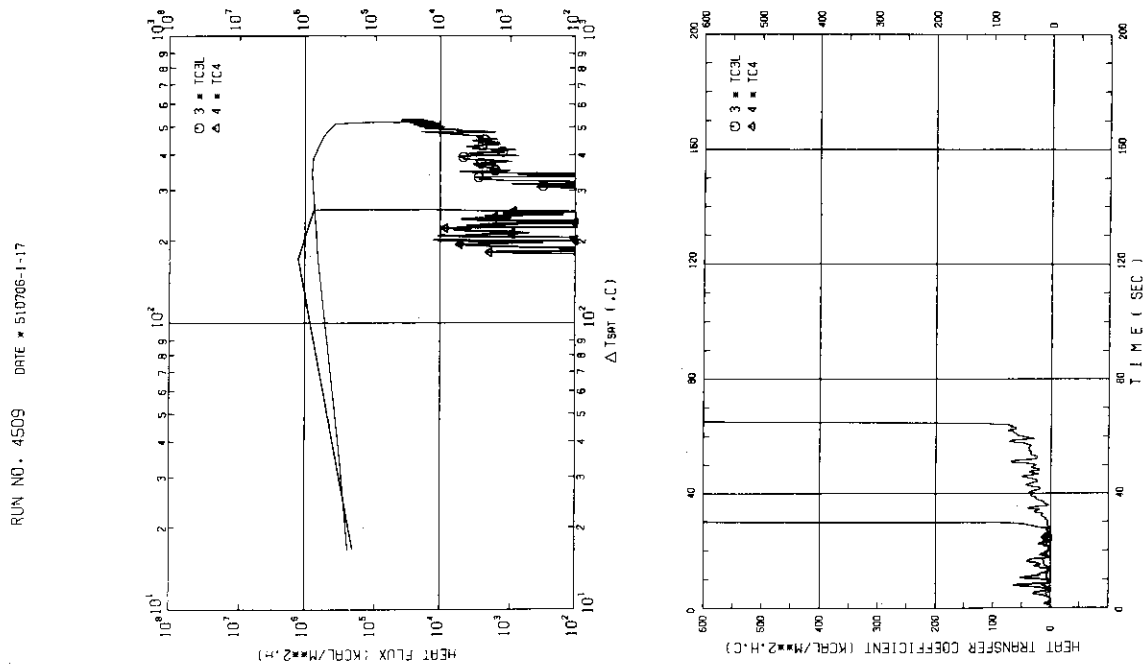


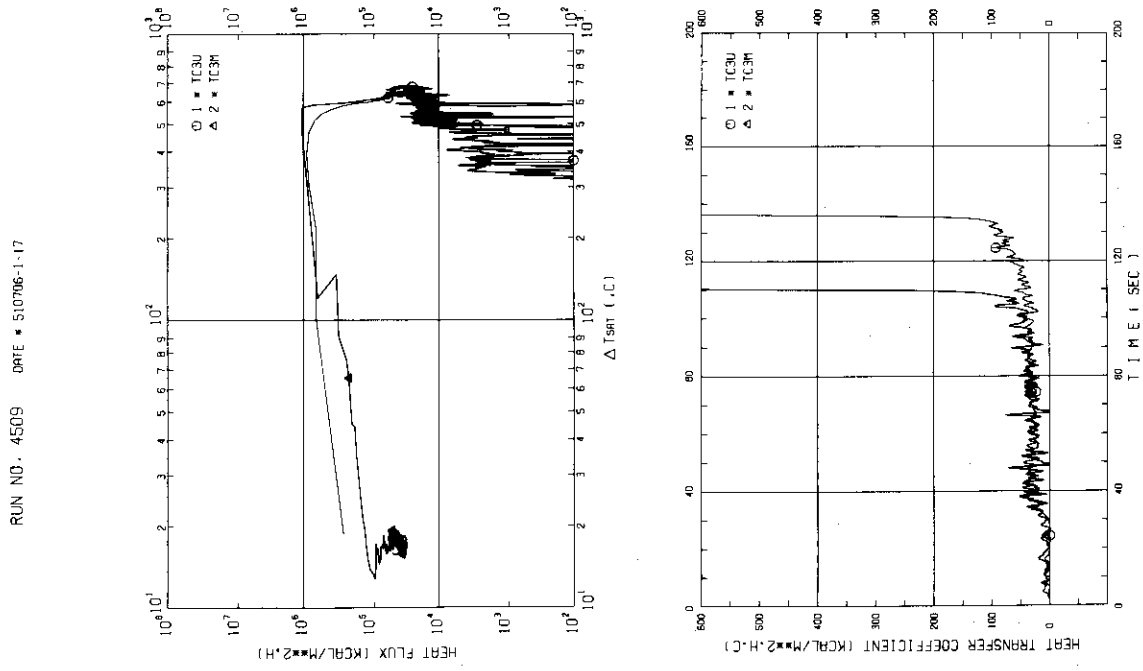

RUN NO = 4509 1 3 OF 4 1
18 = PDWN
20 = PLP
21 = PUP
22 = DPL
23 = DPDN
TIME AFTER FLOOD(SEC)

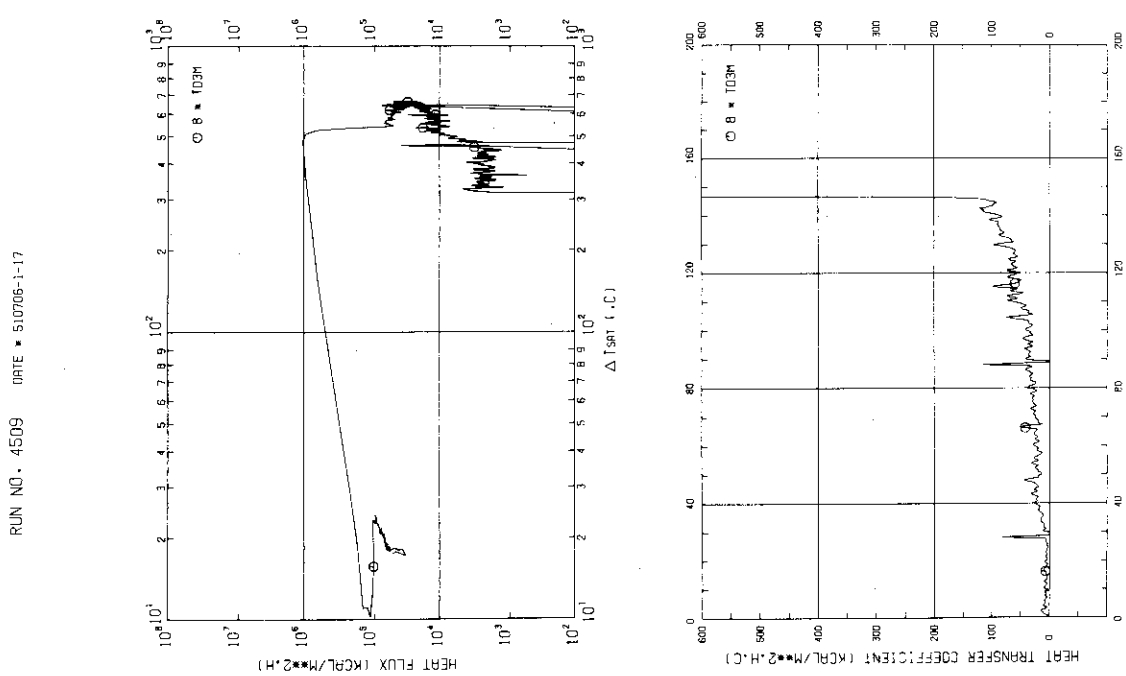

RUN NO = 4509 1 4 OF 4 1
24 = DPTL
25 = DPTS
26 = DPHT
27 = DPPM
28 = FM
30 = 1
TIME AFTER FLOOD(SEC)


RUN NO = 4509 1 1 OF 4 1
PEAK POWER
INLET WATER TEMP.
SYSTEM PRESSURE
1 = TC3U
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
8 = TD3M
10 = TD5
TIME AFTER FLOOD(SEC)


RUN NO = 4509 1 2 OF 4 1
12 = TH3U
13 = TH4
14 = TUG
15 = TUL
TIME AFTER FLOOD(SEC)


RUN NO. 4509 DATE = 510706-1-17
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (°C)
○ 3 = TC3L
△ 4 = TC4
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4509 DATE = 510706-1-17
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (°C)
○ 1 = TC3U
△ 2 = TC3M
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4509 DATE = 510706-1-17
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
∅ 8 × 103M
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

****
* *
* RUN NO. 4510 *
* *
****

(DATE * 510706 - 1 - 3)

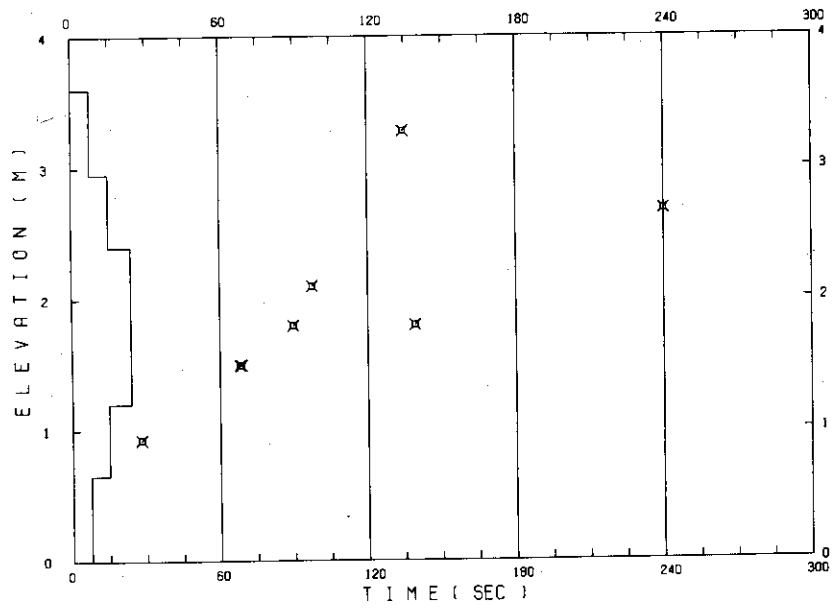
RUN CONDITIONS

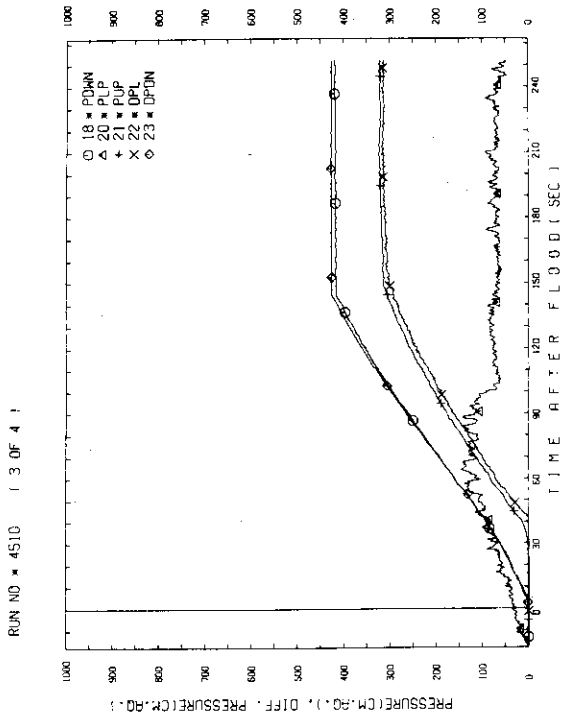
PEAK POWER	1.7	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	80	.C
INLET WATER VELOCITY	5	CM/SEC

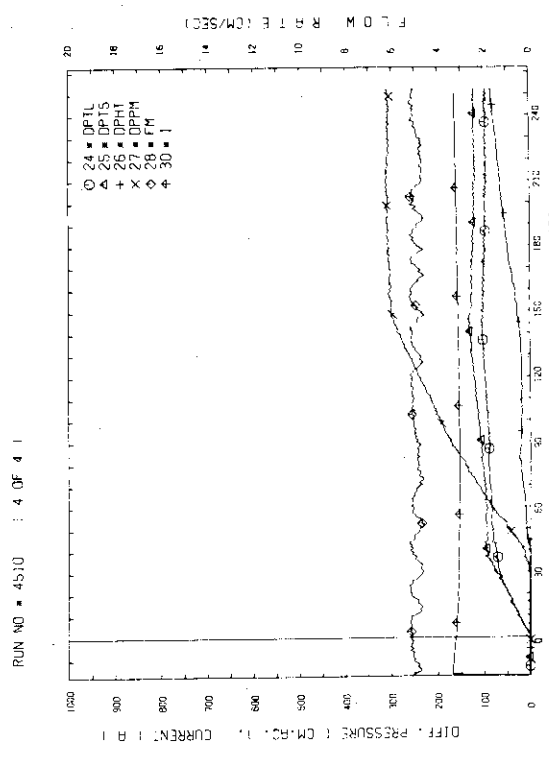
TEMPERATUR PROFILE

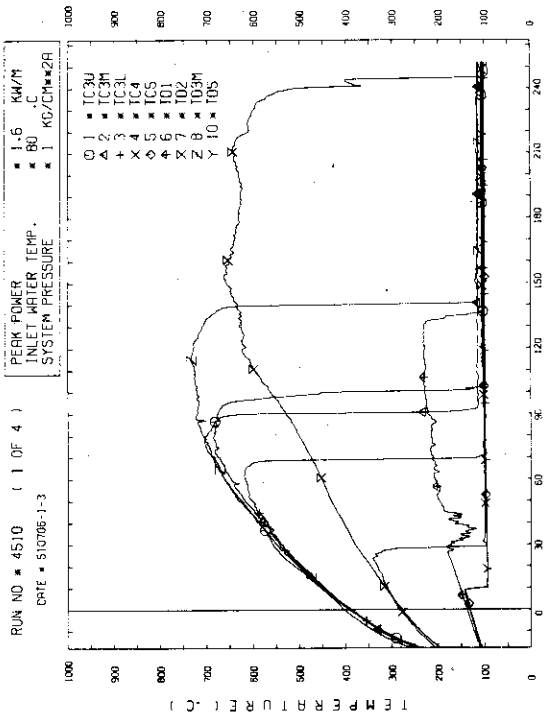
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
1	TC3U	389.	77.25	705.	97.50	581.
2	TC3M	391.	79.75	686.	89.75	653.
3	TC3L	389.	62.00	620.	68.25	592.
4	TC4	281.	24.00	342.	28.00	298.
6	TD1	138.	122.75	233.	134.50	185.
7	TD2	277.	153.75	664.	240.00	521.
8	TD3M	403.	117.00	734.	139.25	659.
9	TD3L	388.	61.75	609.	68.75	562.

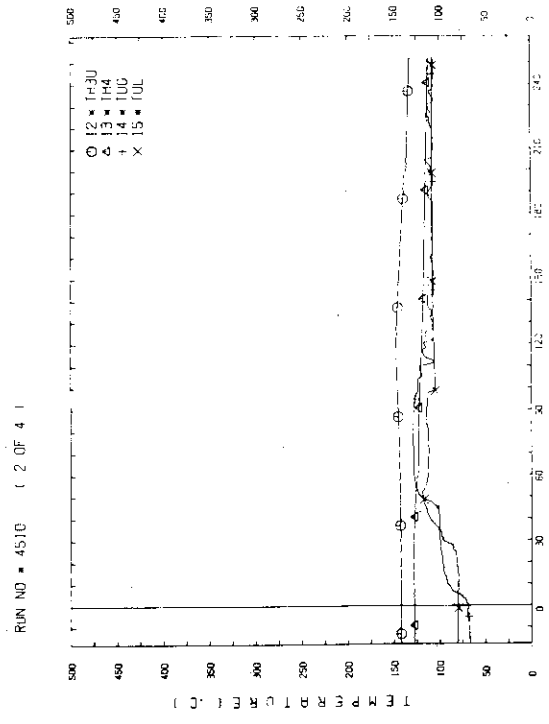
RUN NO. 4510 DATE * 510706-1-3

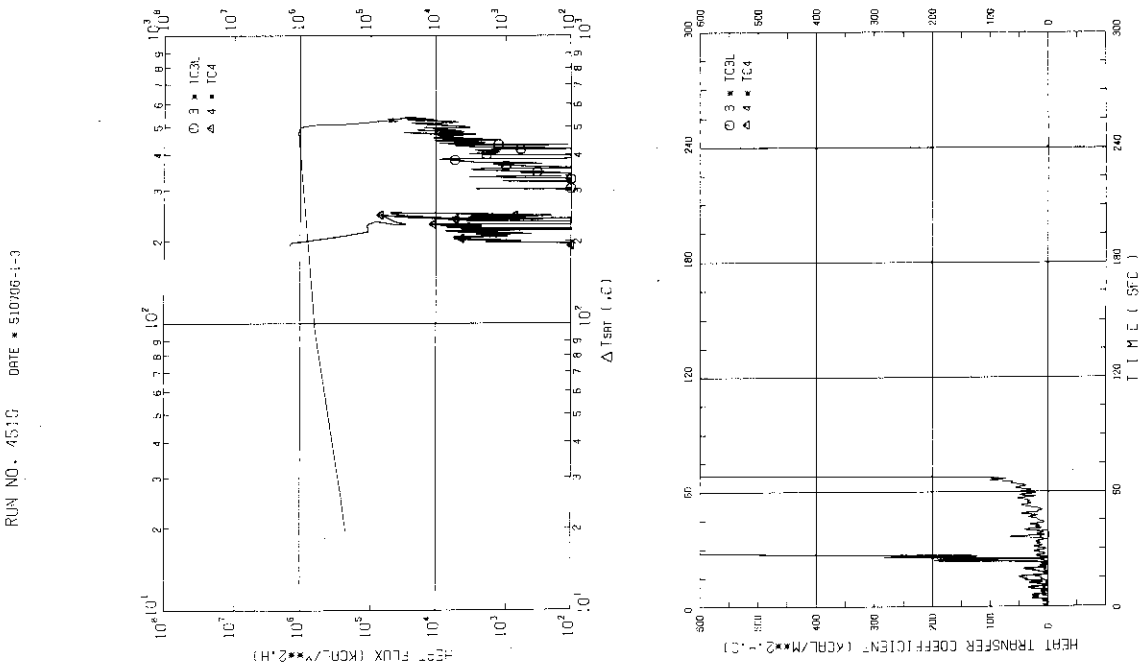


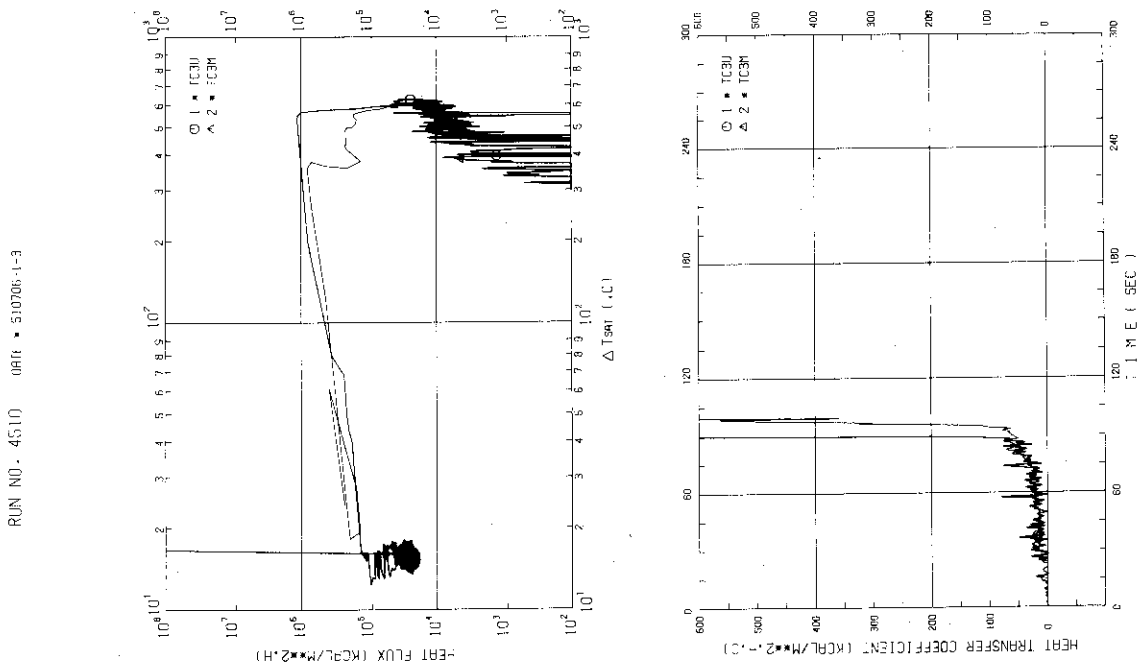

RUN NO = 4510 (3 OF 4)
18 = PDWN
20 = PLP
21 = PUP
22 = DPL
23 = DPDN
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD(SEC)

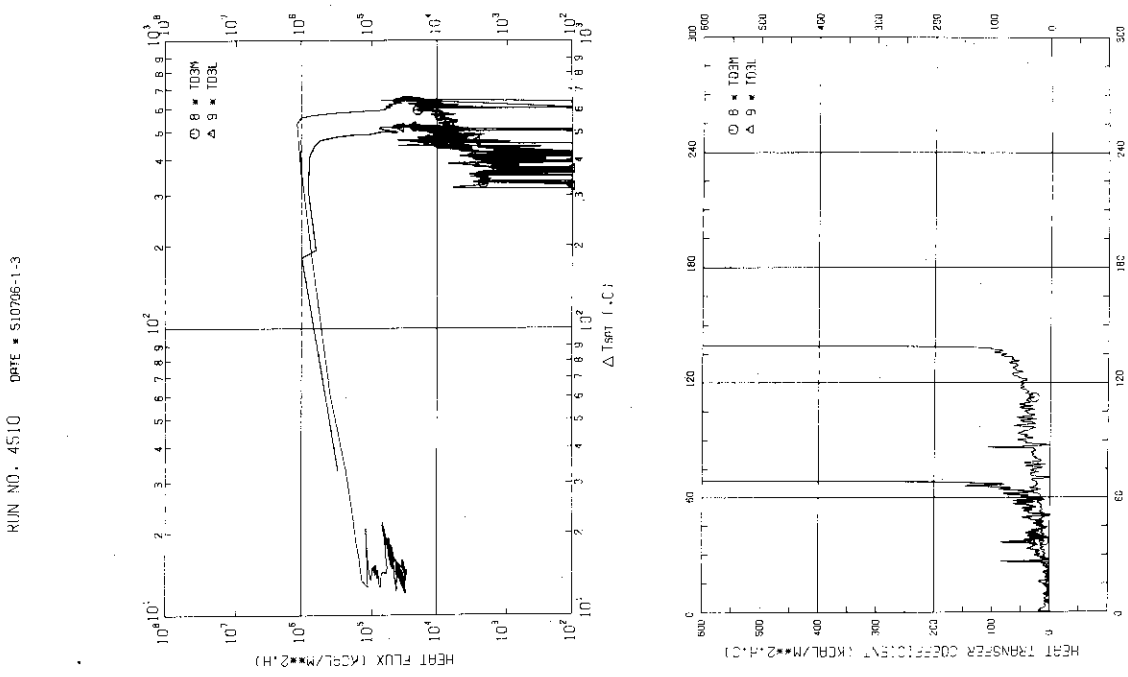

RUN NO = 4510 (4 OF 4)
24 = DPTL
25 = DPTS
26 = DPHT
27 = DPPM
28 = FM
30 = 1
FLOW RATE (CM/SEC)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
TIME AFTER FLOOD(SEC)

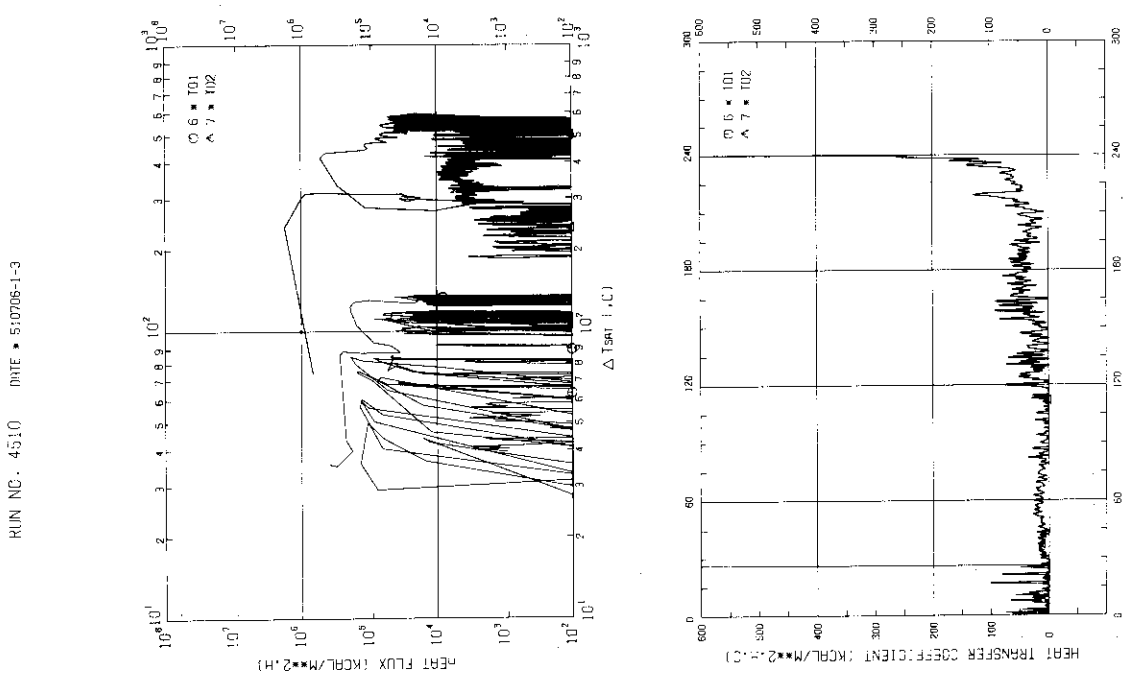

RUN NO = 4510 (1 OF 4)
DATE = 510706-1-3
PEAK POWER = 1.6 KW/M
INLET WATER TEMP. = 80 .C
SYSTEM PRESSURE = 1 KG/CM**2A
1 = TC3U
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
7 = TD2
8 = TD3M
10 = TD5
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO = 4510 (2 OF 4)
12 = TH3U
13 = TH4
14 = TUC
15 = TUL
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO. 4510 DATE = 810706-1-3
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 3 = TC3L
△ 4 = TC4
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4510 DATE = 810706-1-3
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 1 = TC3U
△ 2 = TC3M
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4510 DATE = 510706-1-3
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
T I M E (SEC)
8 TD3M
9 TD3L


RUN NO. 4510 DATE = 510706-1-3
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
T I M E (SEC)
6 TD1
7 TD2

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* *
* RUN NO. 4511 *
* *
****

(DATE * 510707 - 1 -11)

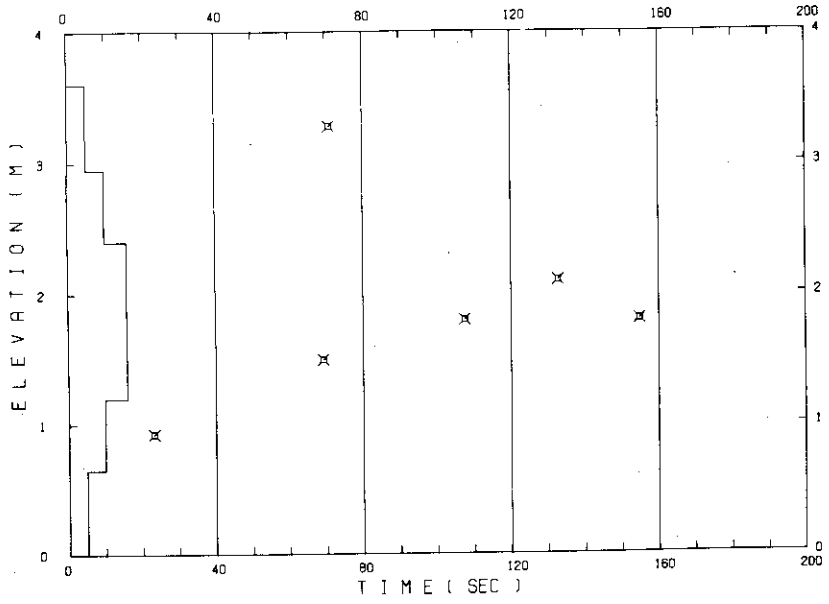
RUN CONDITIONS

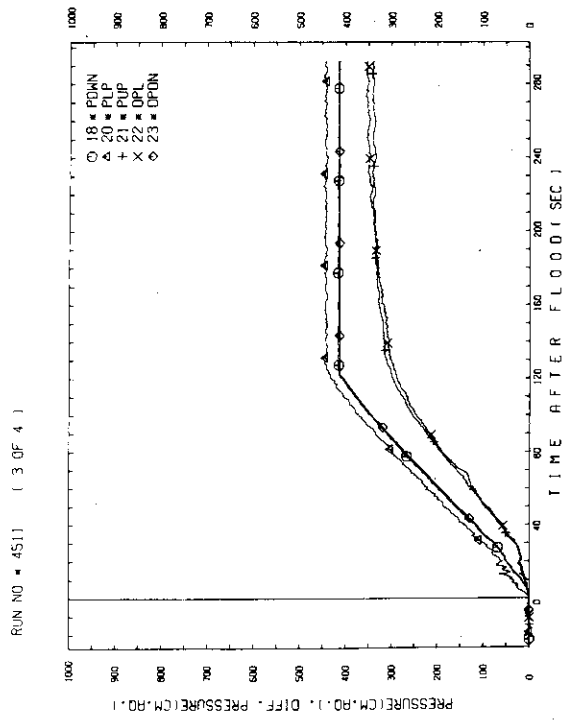
PEAK POWER	1.7	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	90	.C
INLET WATER VELOCITY	5	CM/SEC

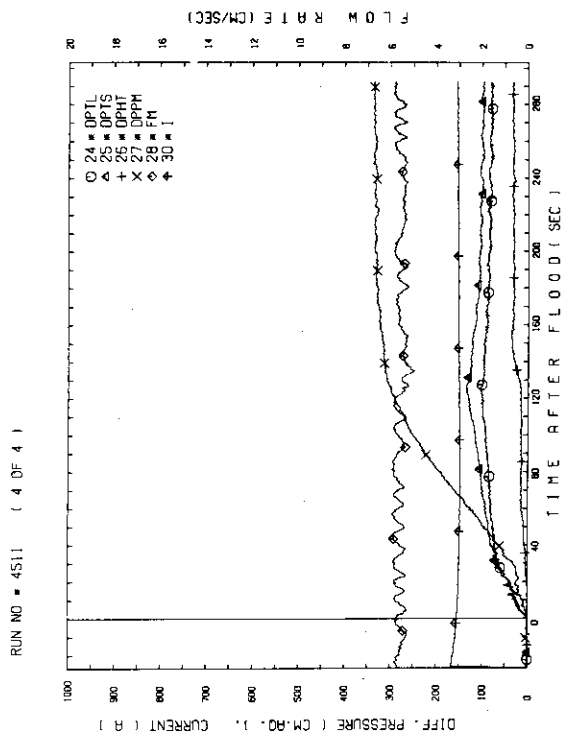
TEMPERATUR PROFILE

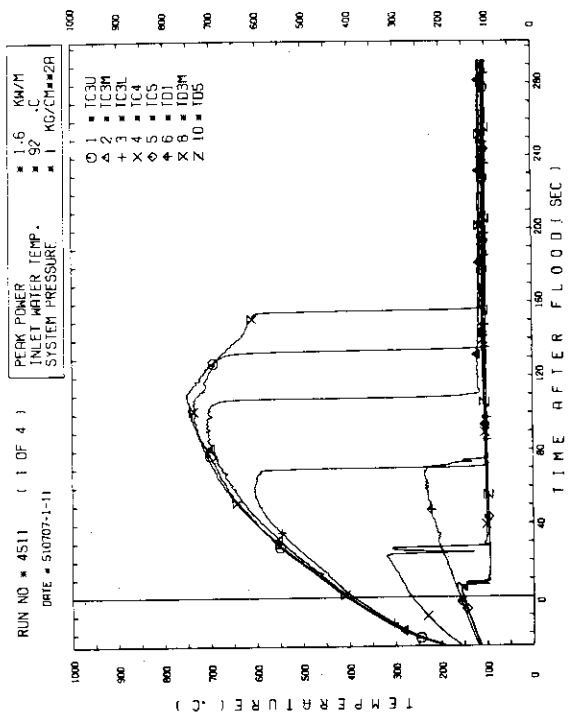
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	@UENCH TIME (SEC)	@UENCH TEMP. (.C)
1	TC3U	404.	110.25	753.	132.75	646.
2	TC3M	398.	93.50	710.	107.50	666.
3	TC3L	389.	58.75	606.	69.25	590.
4	TC4	264.	22.75	319.	23.25	309.
6	TD1	159.	66.75	237.	71.00	220.
8	TD3M	400.	105.00	737.	154.75	597.

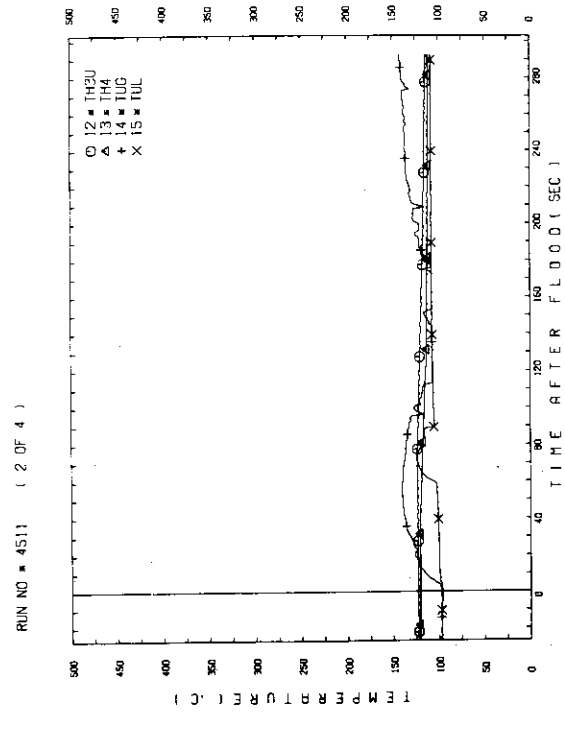
RUN NO. 4511 DATE * 510707-1-11

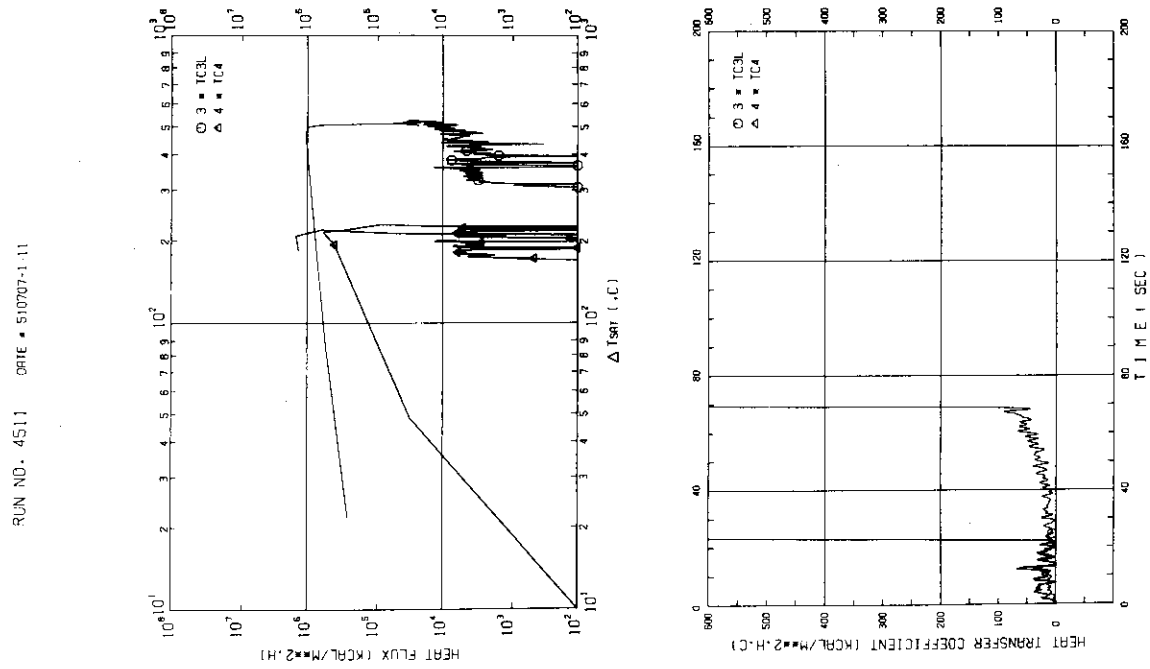


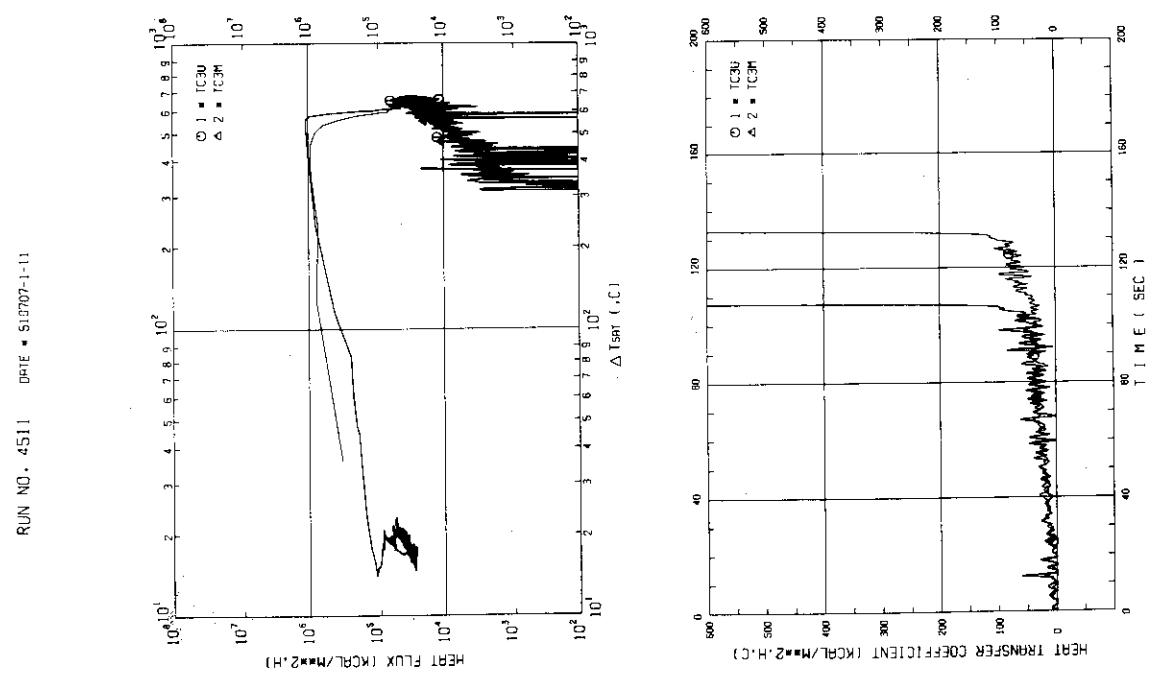

RUN NO = 4511 (3 OF 4)
18 = PDWN
20 = PLP
21 = PUP
22 = OPL
23 = OPDN
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD(SEC)

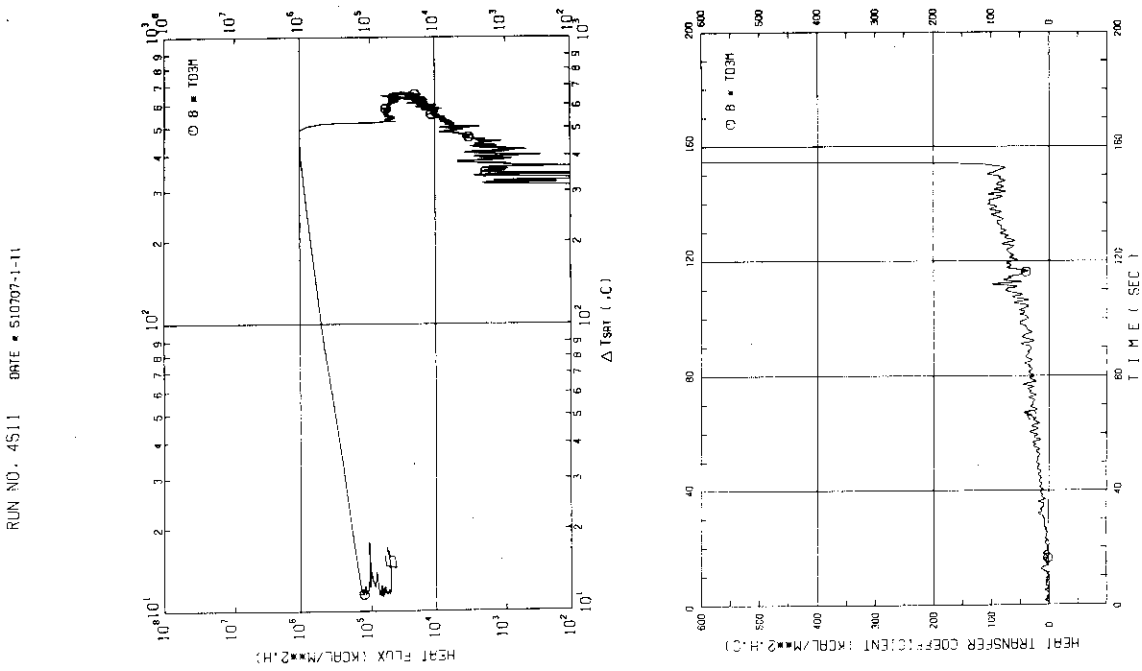

RUN NO = 4511 (4 OF 4)
24 = DPTL
25 = DPTS
26 = DPHT
27 = DPPH
28 = FM
30 = I
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
FLOW RATE (CM/SEC)
TIME AFTER FLOOD(SEC)

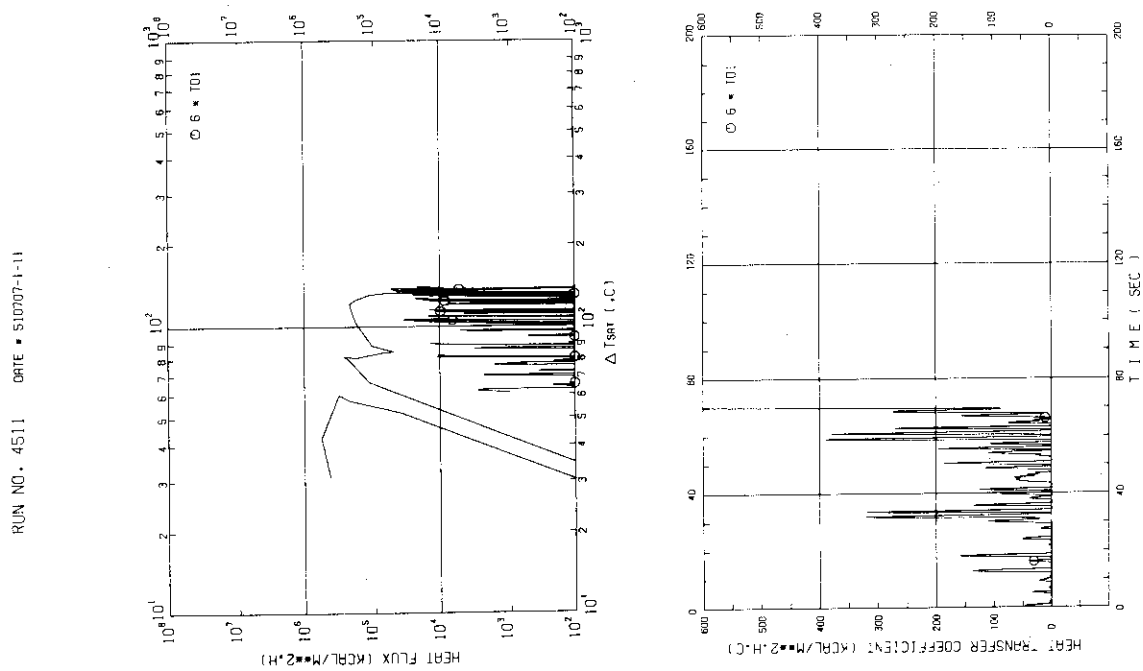

RUN NO = 4511 (1 OF 4)
DATE = 810707-1-11
PEAK POWER = 1.6 KW/M
INLET WATER TEMP. = 92 .C
SYSTEM PRESSURE = 1 KG/CM**2A
1 = TC3U
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
8 = TD3M
10 = TD5
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO = 4511 (2 OF 4)
12 = TH3U
13 = TH4
14 = TUO
15 = TUL
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO. 4511 DATE = 510707-1-11
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 3 = TC3L
△ 4 = TC4
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4511 DATE = 510707-1-11
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 1 = TC3U
△ 2 = TC3M
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4511 DATE = 510707-1-11
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4511 DATE = 510707-1-11
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

****
* *
* RUN NO. 4514 *
* *
****

(DATE * 510628 - 1 -24)

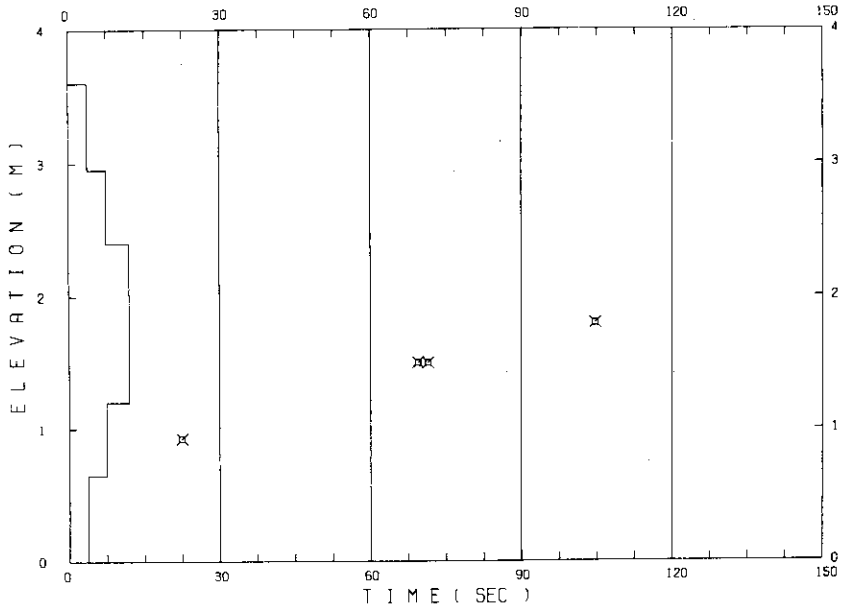
RUN CONDITIONS

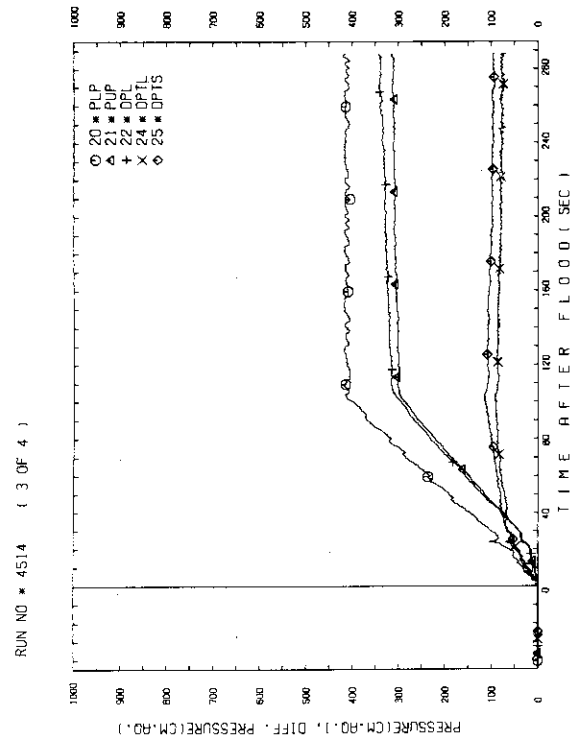
PEAK POWER	1.7	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	80	.C
INLET WATER VELOCITY	5	CM/SEC

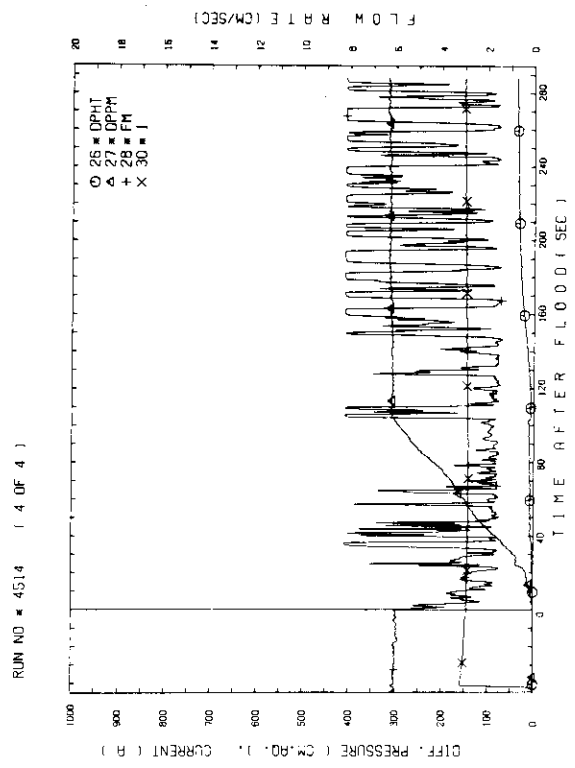
TEMPERATUR PROFILE

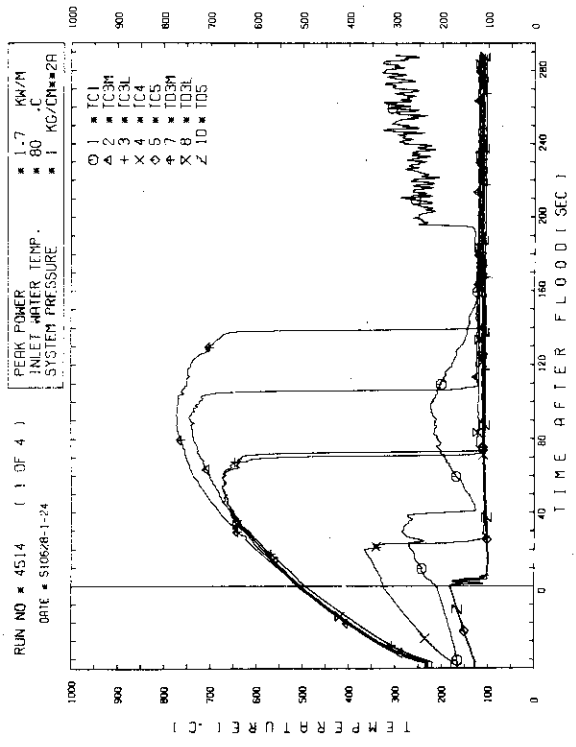
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	@UENCH TIME (SEC)	@UENCH TEMP. (.C)
2	TC3M	503.	91.50	746.	104.75	695.
3	TC3L	493.	59.25	674.	71.50	611.
4	TC4	326.	20.00	367.	22.50	338.
7	TD3M	511.	93.50	774.	0.0	0.
8	TD3L	508.	54.75	675.	69.50	595.

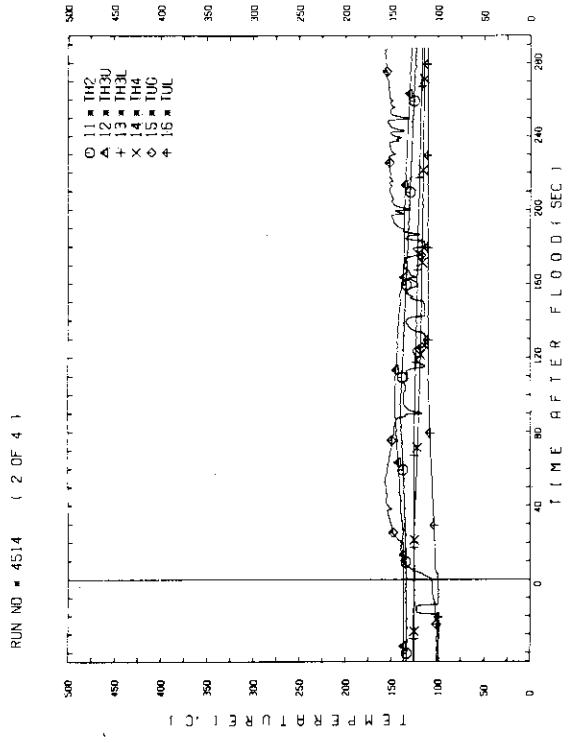
RUN NO. 4514 DATE * 510628-1-24

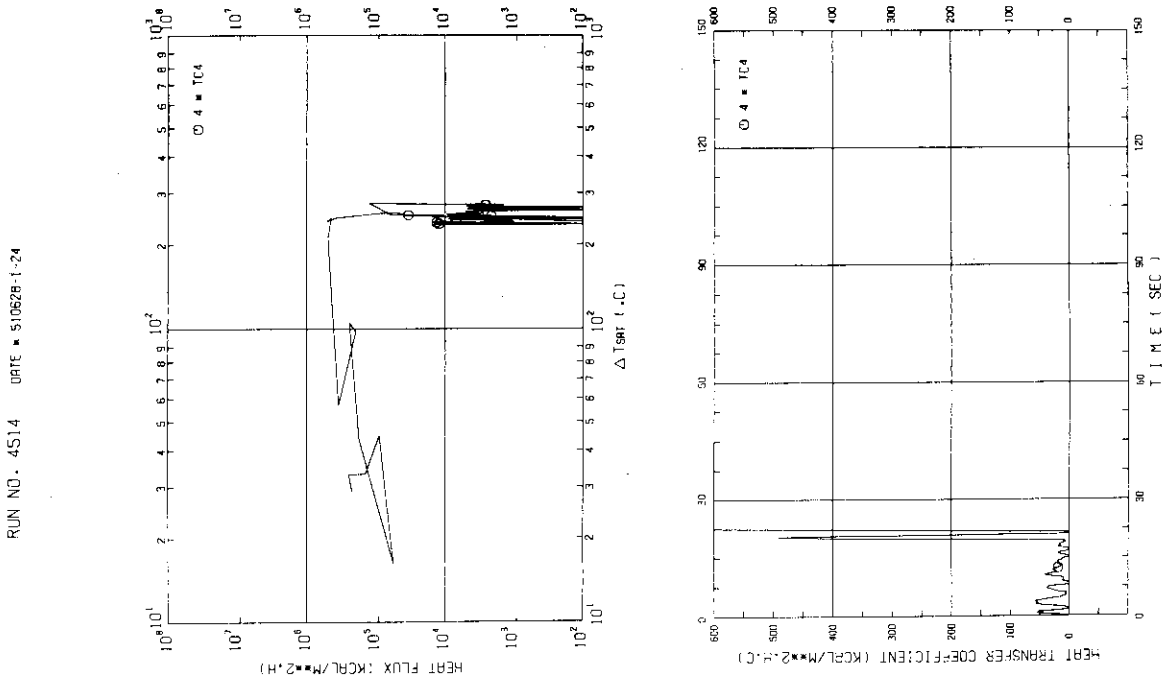


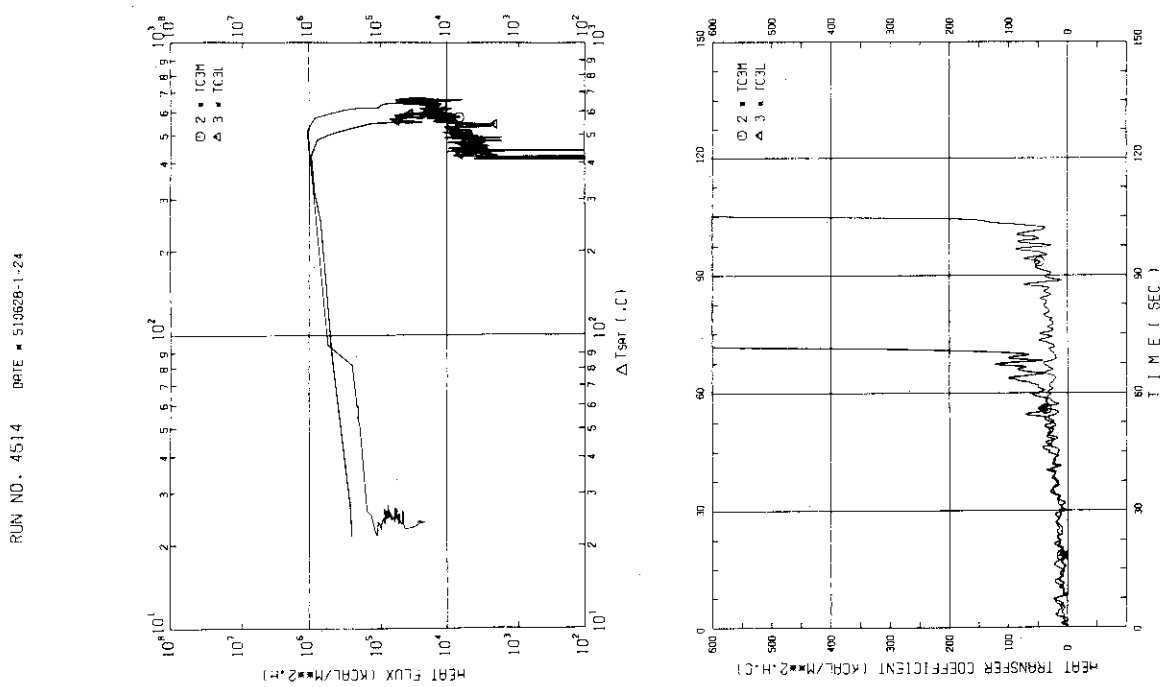

RUN NO = 4514 (3 OF 4)
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD(SEC)
20 = PLP
21 = PUP
22 = DPL
24 = DPIL
25 = DPIS

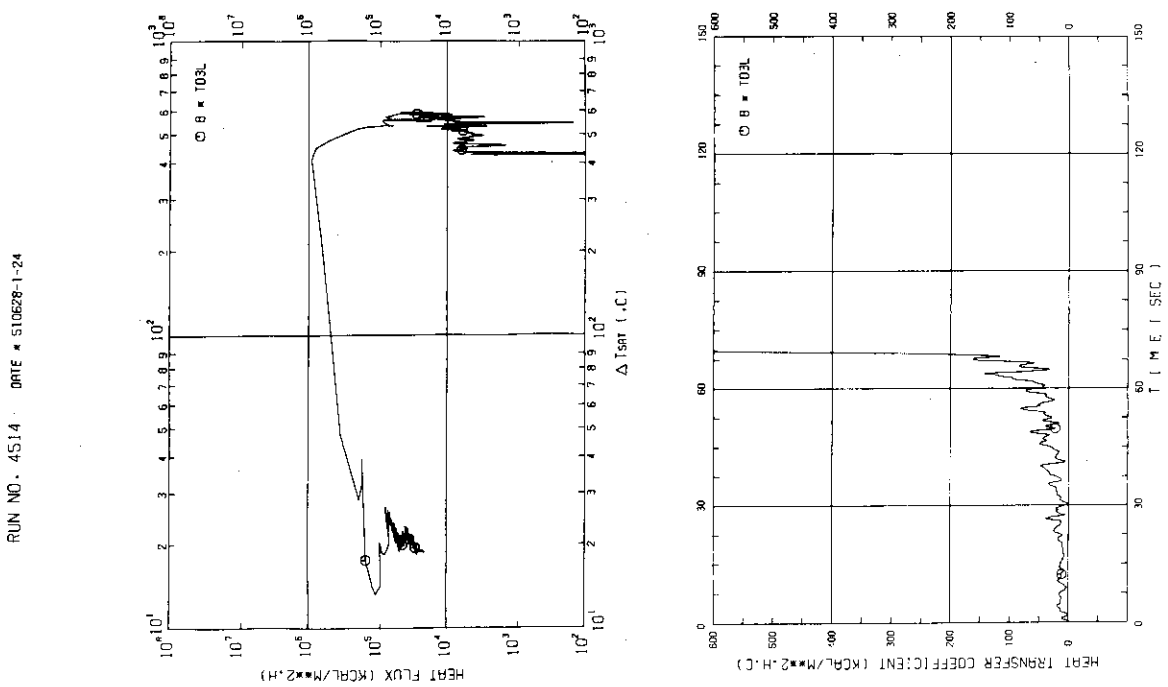

RUN NO = 4514 (4 OF 4)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
FLOW RATE (CM/SEC)
TIME AFTER FLOOD(SEC)
26 = DPHT
27 = DPPM
28 = FM
30 = I

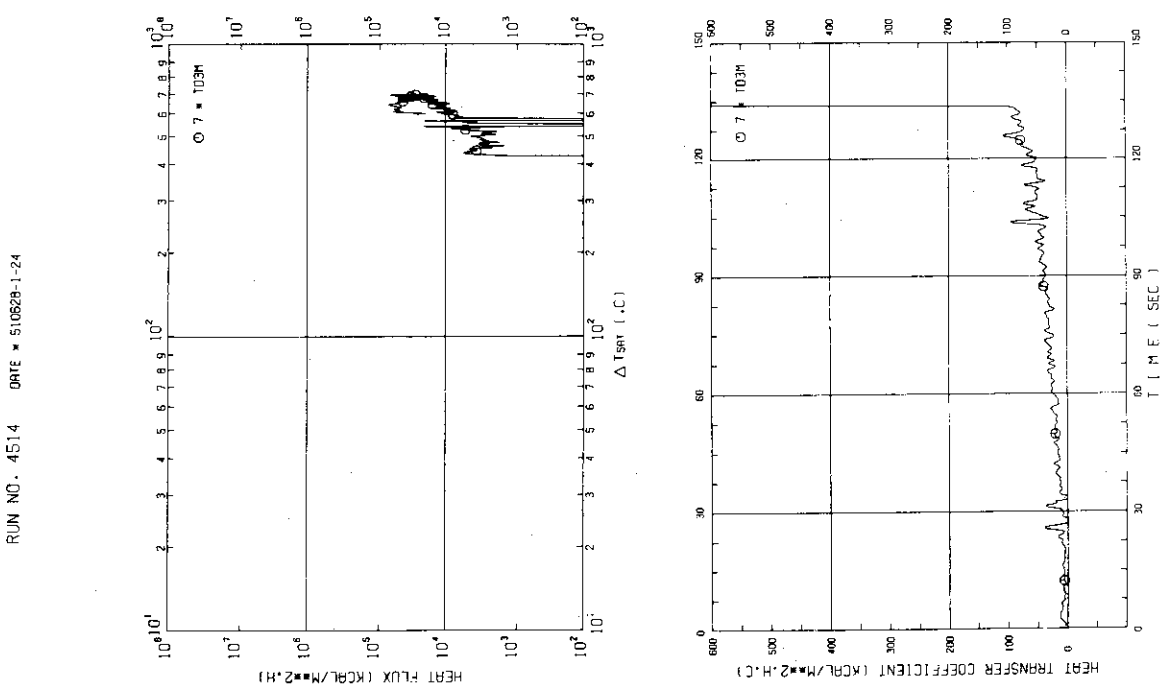

RUN NO = 4514 (1 OF 4)
DATE = S106/8-1-24
PEAK POWER * 1.7 KW/M
INLET WATER TEMP. * 80 .C
SYSTEM PRESSURE * 1 KG/CM**2A
1 = TC1
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
7 = TD3M
8 = TD3L
10 = TD5
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO = 4514 (2 OF 4)
11 = TH2
12 = TH3U
13 = TH3L
14 = TH4
15 = TUG
16 = TUL
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO. 4514 DATE = 510628-1-24
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 4 = TC4
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4514 DATE = 510628-1-24
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 2 = TC3M
△ 3 = TC3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4514 DATE = 910628-1-24
⊙ 8 = T03L
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4514 DATE = 910628-1-24
⊙ 7 = T03M
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

****
* *
* RUN NO. 4517 *
* *
****

(DATE = 510706 - 1 -14)

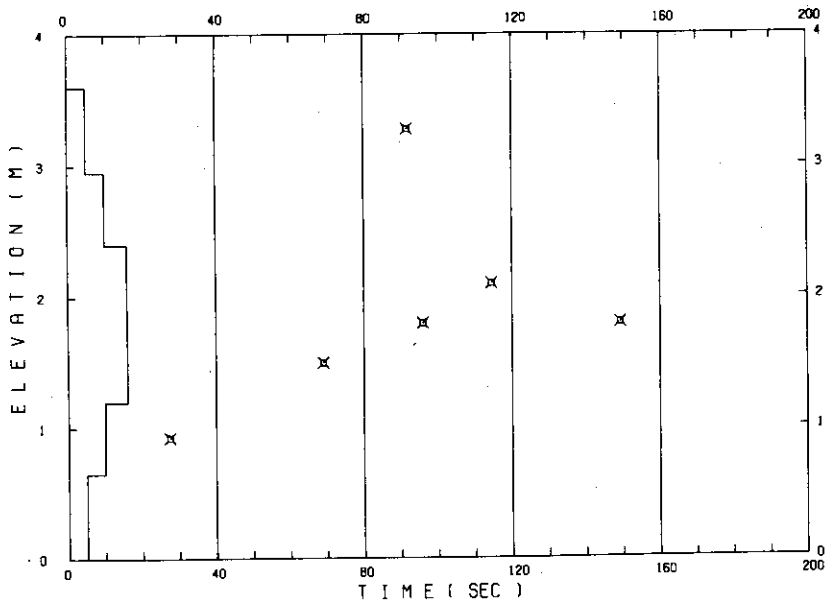
RUN CONDITIONS

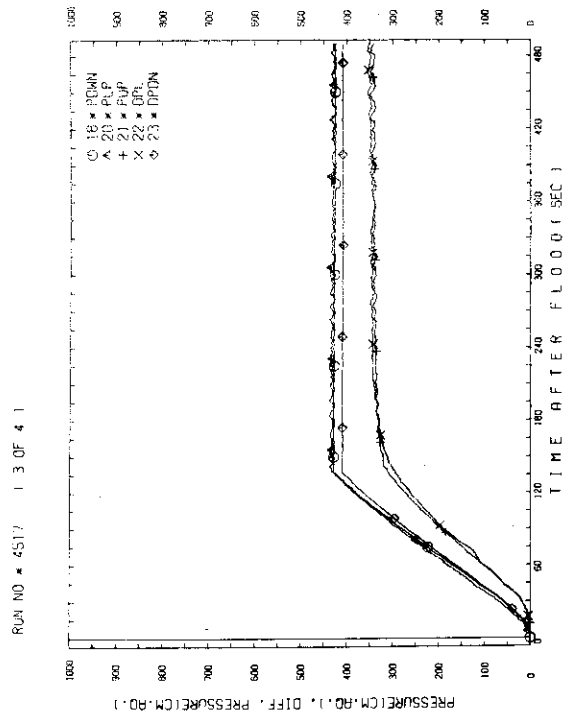
PEAK POWER	1.9	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	20	.C
INLET WATER VELOCITY	5	CM/SEC

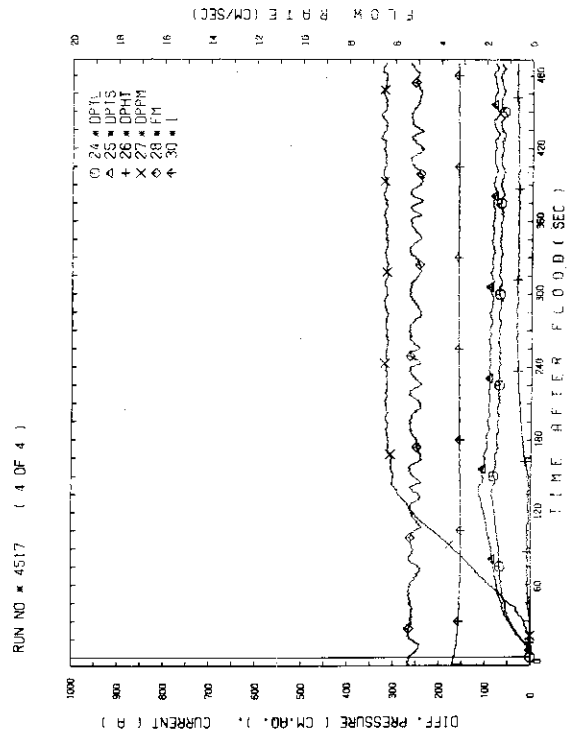
TEMPERATUR PROFILE

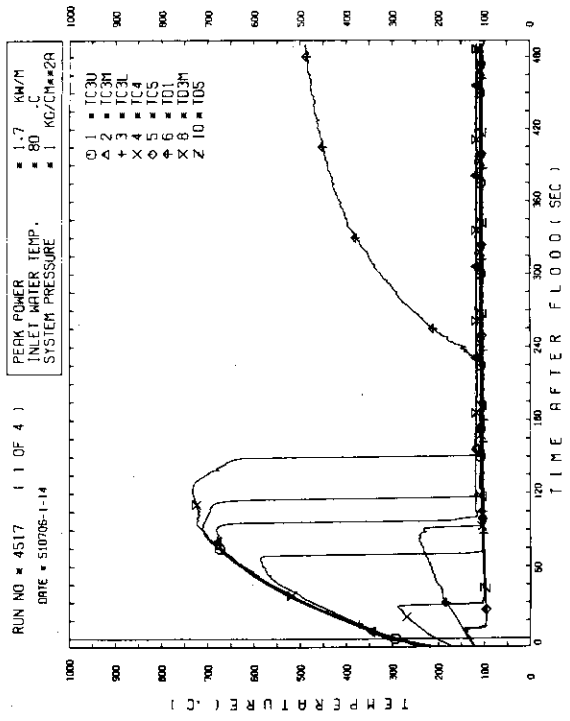
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
1	TC3U	291.	91.00	713.	114.50	643.
2	TC3M	292.	91.25	684.	96.00	646.
3	TC3L	285.	66.00	587.	69.00	579.
4	TC4	203.	26.00	288.	27.50	288.
6	TD1	133.	83.50	244.	91.75	231.
8	TD3M	309.	123.25	735.	149.25	632.

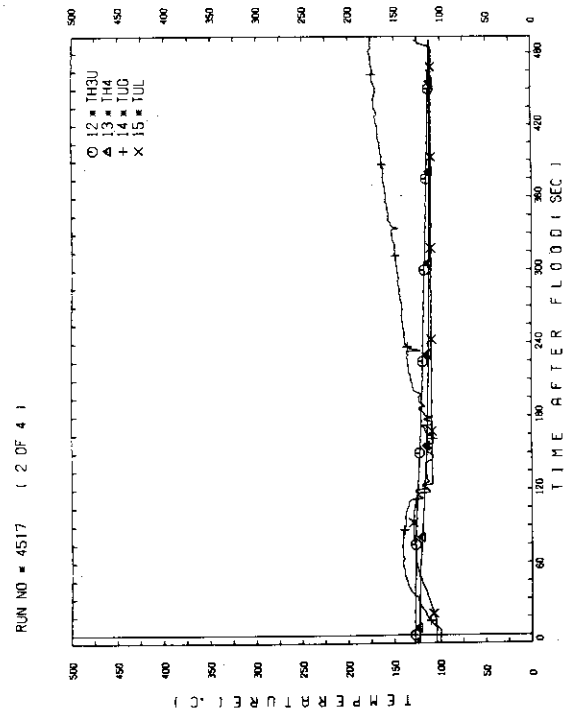
RUN NO. 4517 DATE = 510706-1-14

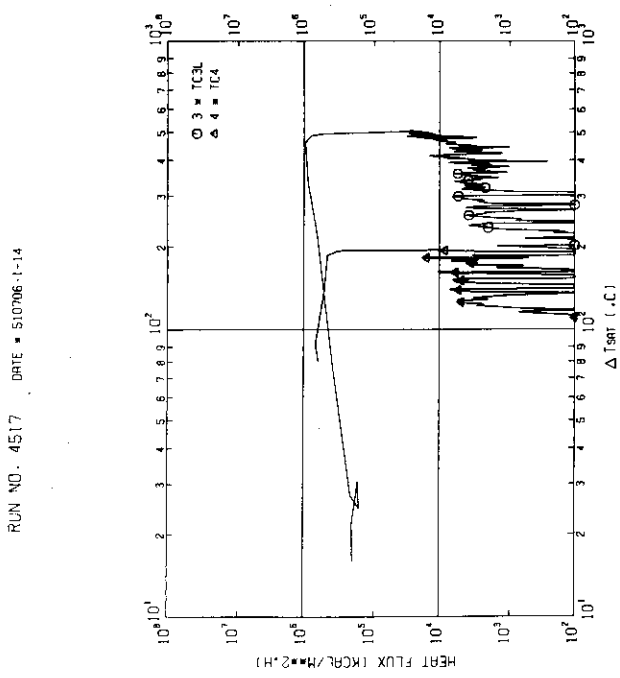


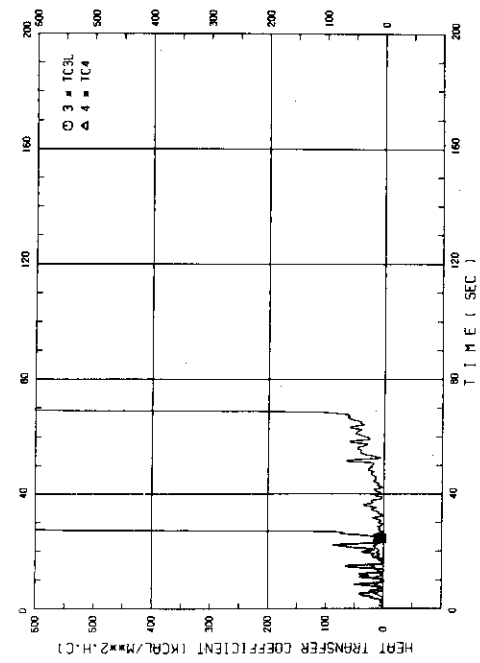

RUN NO = 4517 (3 OF 4)
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD(SEC)
16 = PDWN
20 = PLP
21 = PUP
22 = DPL
23 = DPDN

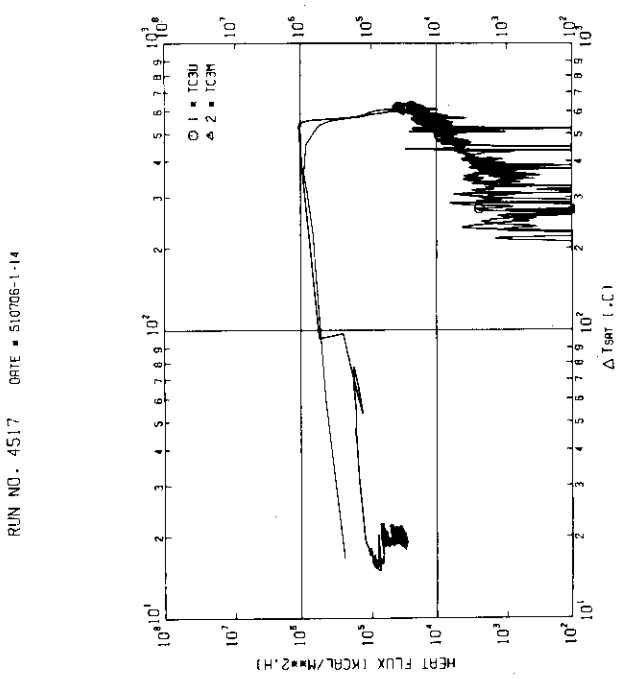

RUN NO = 4517 (4 OF 4)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
TIME AFTER FLOOD(SEC)
FLOW RATE (CM/SEC)
24 = DPTL
25 = DPTS
26 = DPHT
27 = DPPM
28 = FM
30 = I

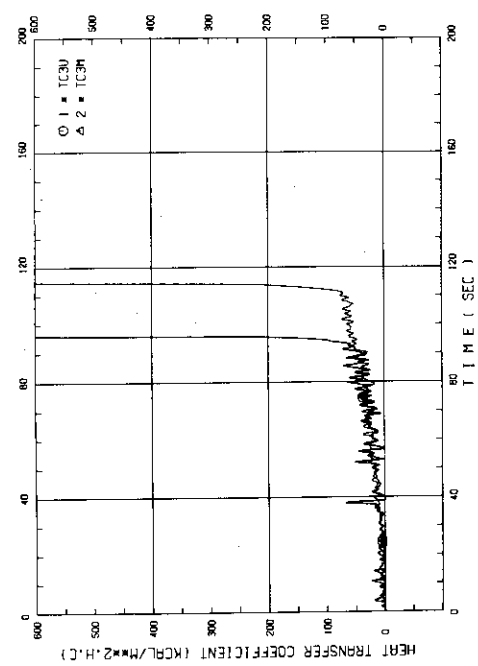

RUN NO = 4517 (1 OF 4)
DATE = 510706-1-14
PEAK POWER = 1.7 KW/M
INLET WATER TEMP. = 80 C
SYSTEM PRESSURE = 1 KG/CM**2A
1 = TC3U
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
8 = TD3M
10 = TD5
TEMPERATURE (C)
TIME AFTER FLOOD(SEC)

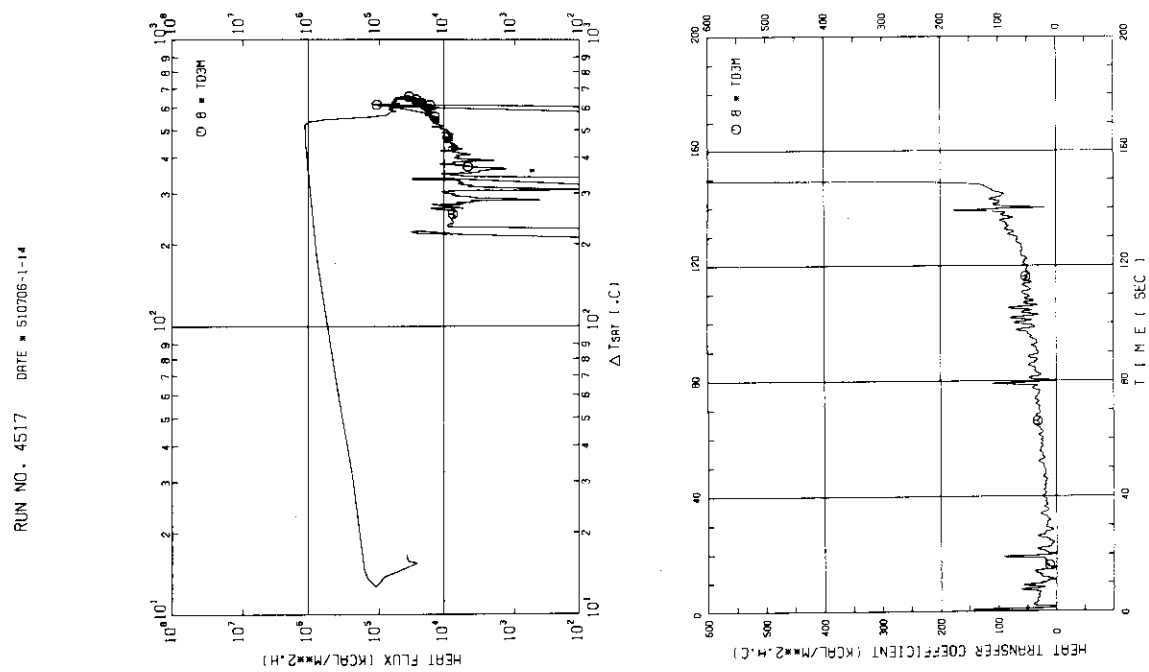

RUN NO = 4517 (2 OF 4)
12 = TH3U
13 = TH4
14 = TUC
15 = TUL
TEMPERATURE (C)
TIME AFTER FLOOD(SEC)


RUN NO. 4517 DATE = 510706-1-14
○ 3 = TC3L
△ 4 = TC4
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)


○ 3 = TC3L
△ 4 = TC4
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4517 DATE = 510706-1-14
○ 1 = TC3U
△ 2 = TC3M
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)


○ 1 = TC3U
△ 2 = TC3M
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4517 DATE = 510706-1-14
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

****
* *
* RUN NO. 4518 *
* *
****

(DATE * 510706 - 1 -19)

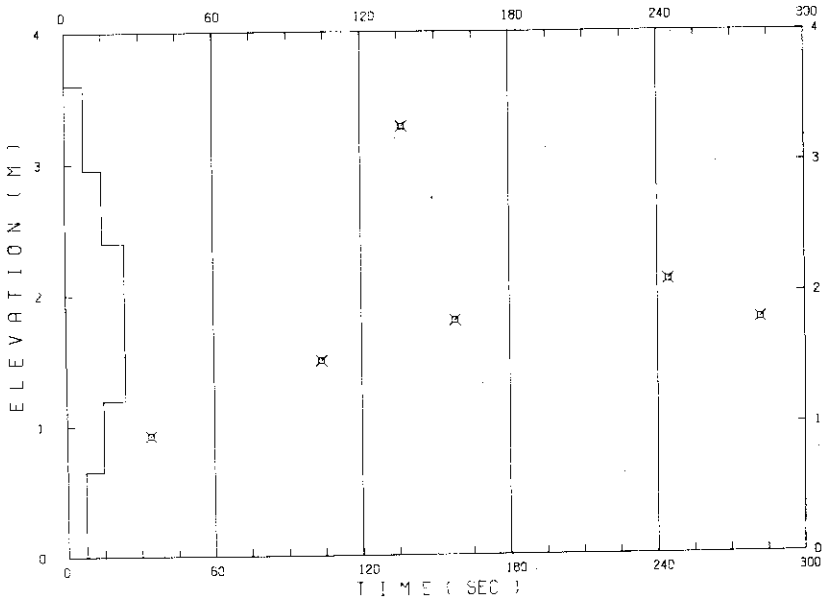
RUN CONDITIONS

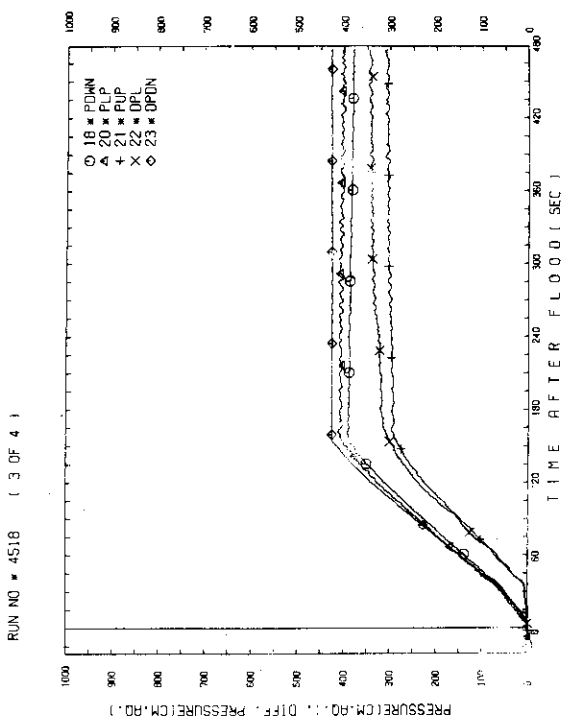
PEAK POWER	1.9	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	50	.C
INLET WATER VELOCITY	5	CM/SEC

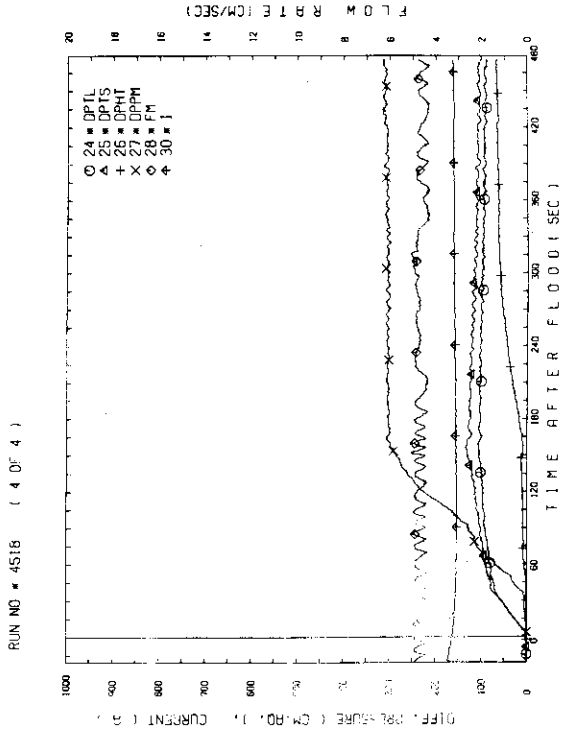
TEMPERATUR PROFILE

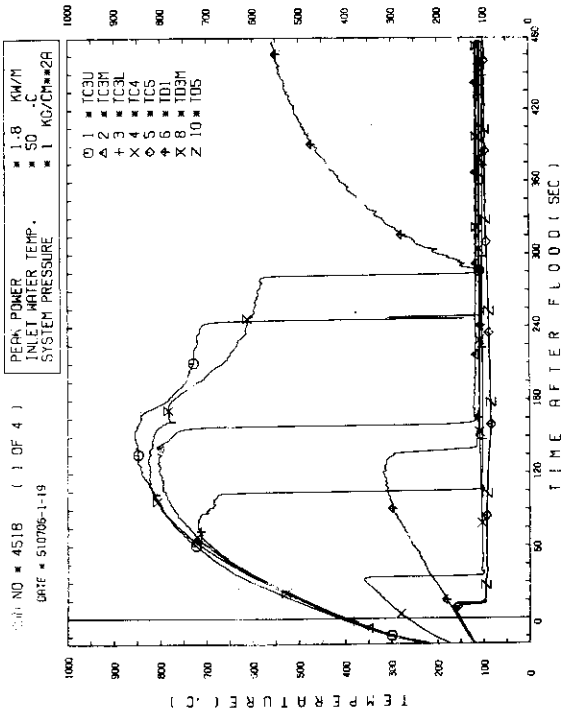
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
1	TC3U	407.	150.50	658.	244.50	677.
2	TC3M	396.	136.00	806.	158.00	710.
3	TC3L	395.	75.50	720.	103.75	667.
4	TC4	264.	32.50	361.	34.25	356.
6	TD1	155.	121.00	319.	136.75	289.
8	TD3M	404.	131.75	827.	282.00	565.

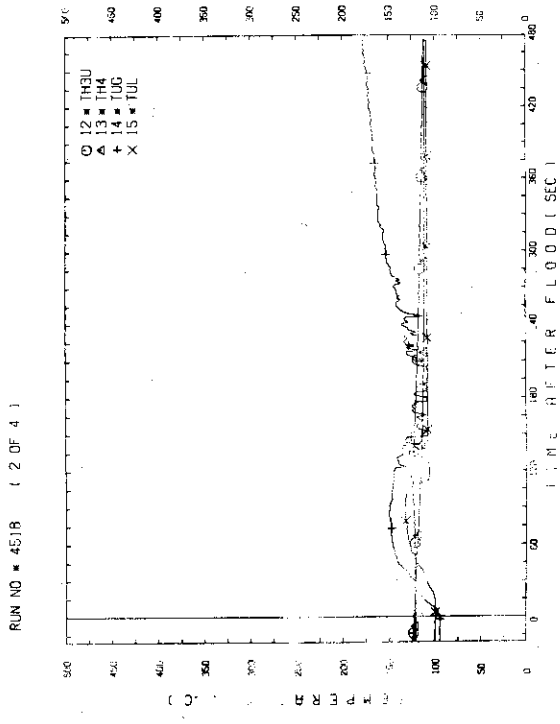
RUN NO. 4518 DATE * 510706-1-19

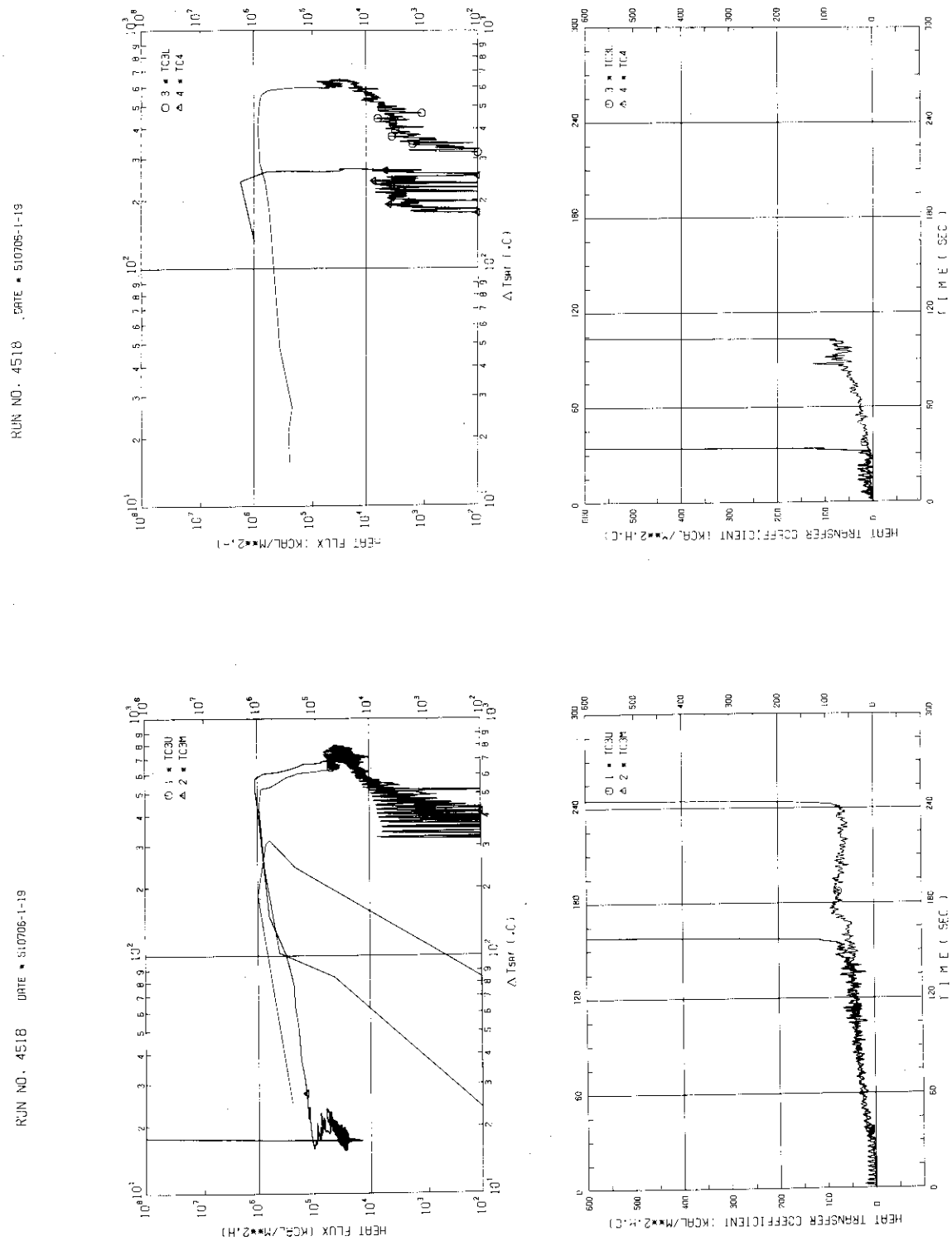


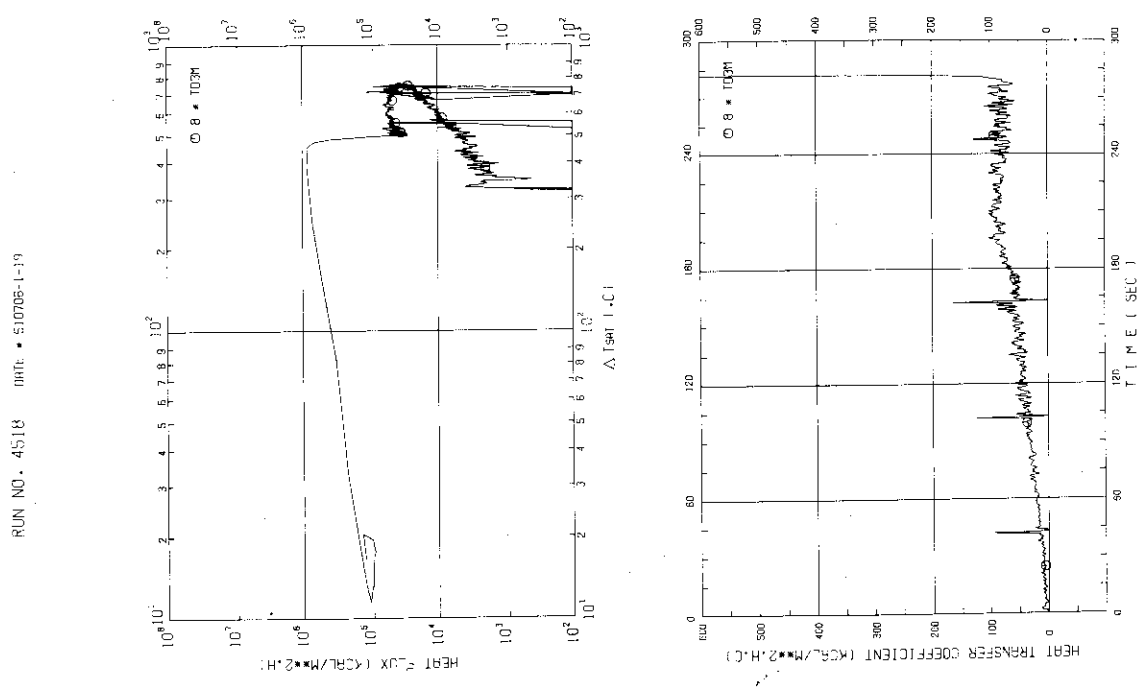

RUN NO = 4518 (3 OF 4)
18 = PDWN
20 = PLP
21 = PUP
22 = DPL
23 = DPDN
TIME AFTER FLOOD(SEC)
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)


RUN NO = 4518 (4 OF 4)
24 = DPIL
25 = DPTS
26 = DPHT
27 = DPPM
28 = FM
30 = 1
TIME AFTER FLOOD(SEC)
FLOW RATE (CM/SEC)


RUN NO = 4518 (1 OF 4)
DATE = 810706-1-19
PEAK POWER = 1.8 KW/M
INLET WATER TEMP. = 50 C
SYSTEM PRESSURE = 1 KG/CM**2A
1 = TC3U
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
8 = TD3M
10 = TD5
TIME AFTER FLOOD(SEC)
TEMPERATURE (C)


RUN NO = 4518 (2 OF 4)
12 = TH3U
13 = TH4
14 = TUG
15 = TUL
TIME AFTER FLOOD(SEC)
TEMPERATURE (C)


RUN NO. 4518 DATE = 510706-1-19
HEAT FLUX (KCAL/M**2,H)
ΔTsat (°C)
○ 1 = TC3U
△ 2 = TC3M
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)
○ 3 = TC3L
△ 4 = TC4


RUN NO. 45118 DATE = 810706-1-19
HEAT FLUX (KCAL/M**2.H)
Ø 8 * T03M
ΔTsat (C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
Ø 8 * T03M
TIME (SEC)

****
* *
* RUN NO. 4519 *
* *
****

(DATE = 510706 - 1 -13)

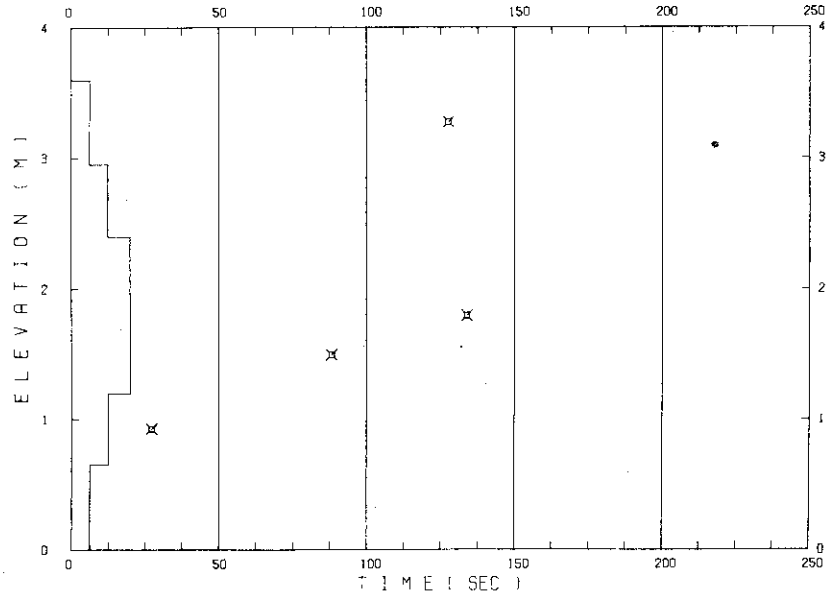
RUN CONDITIONS

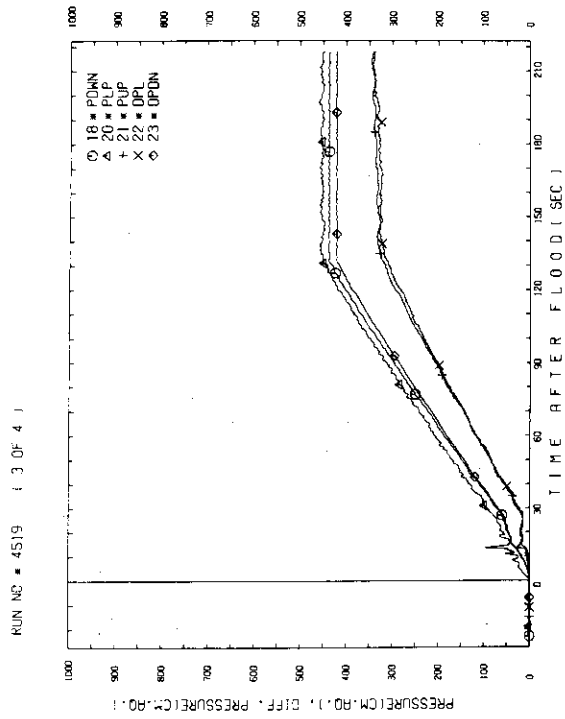
PEAK POWER	1.9	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	20	.C
INLET WATER VELOCITY	5	CM/SEC

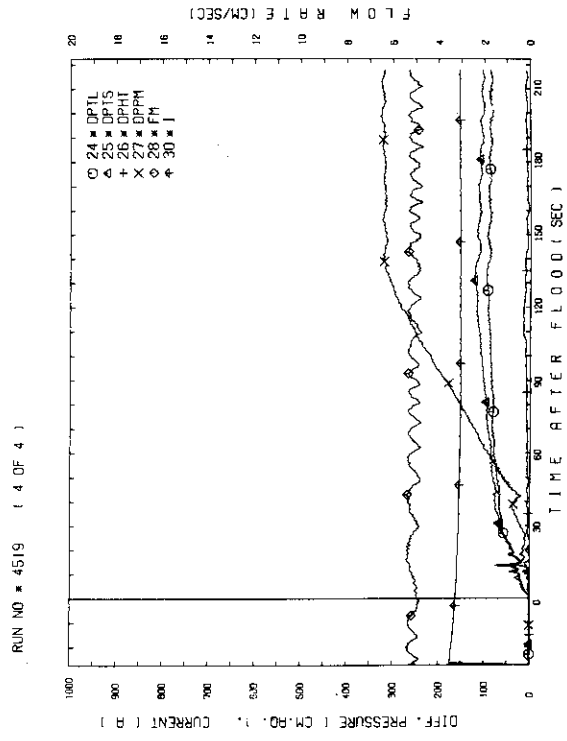
TEMPERATUR PROFILE

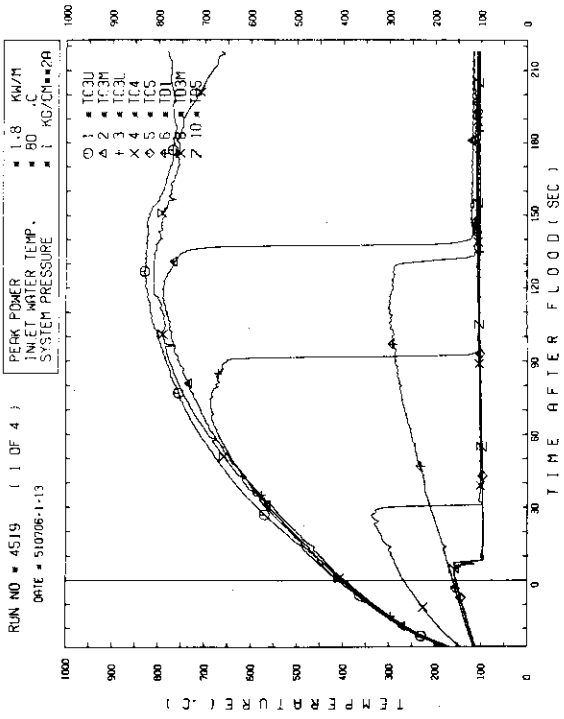
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
1	TC3U	424.	124.00	831.	0.0	0.
2	TC3H	414.	117.00	791.	134.00	714.
3	TC3L	409.	72.25	668.	88.25	651.
4	TC4	275.	34.50	338.	27.25	316.
5	TD1	164.	109.50	303.	127.75	277.
6	TD3H	426.	123.75	812.	0.0	0.

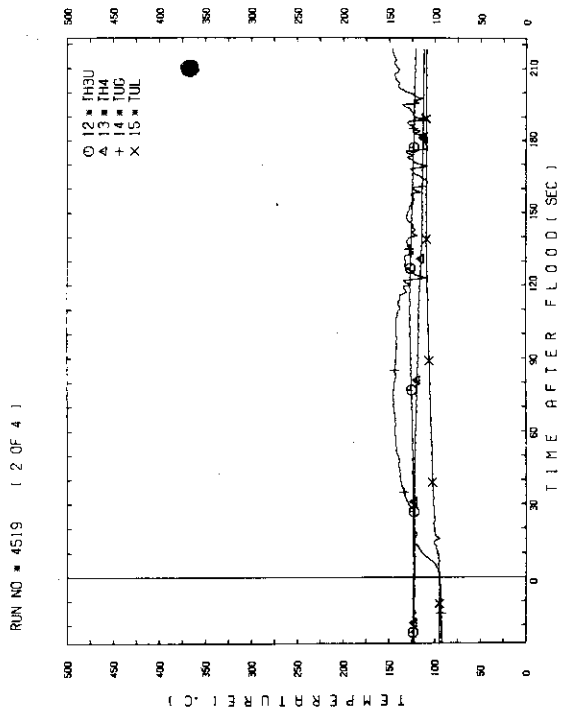
RUN NO. 4519 DATE = 510706-1-13

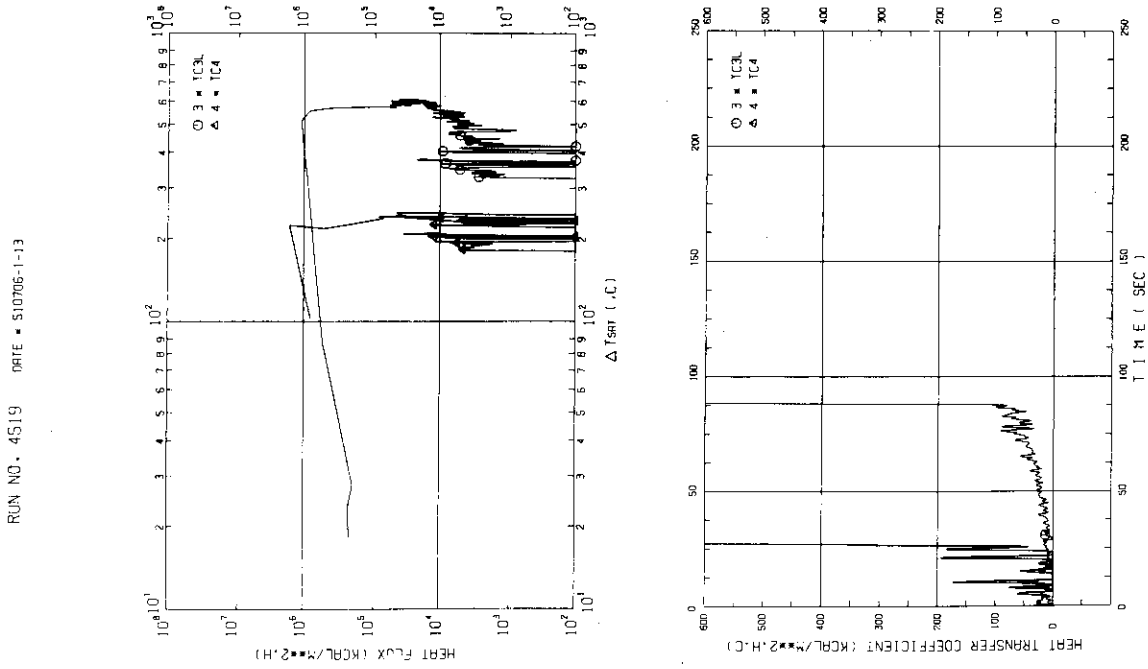


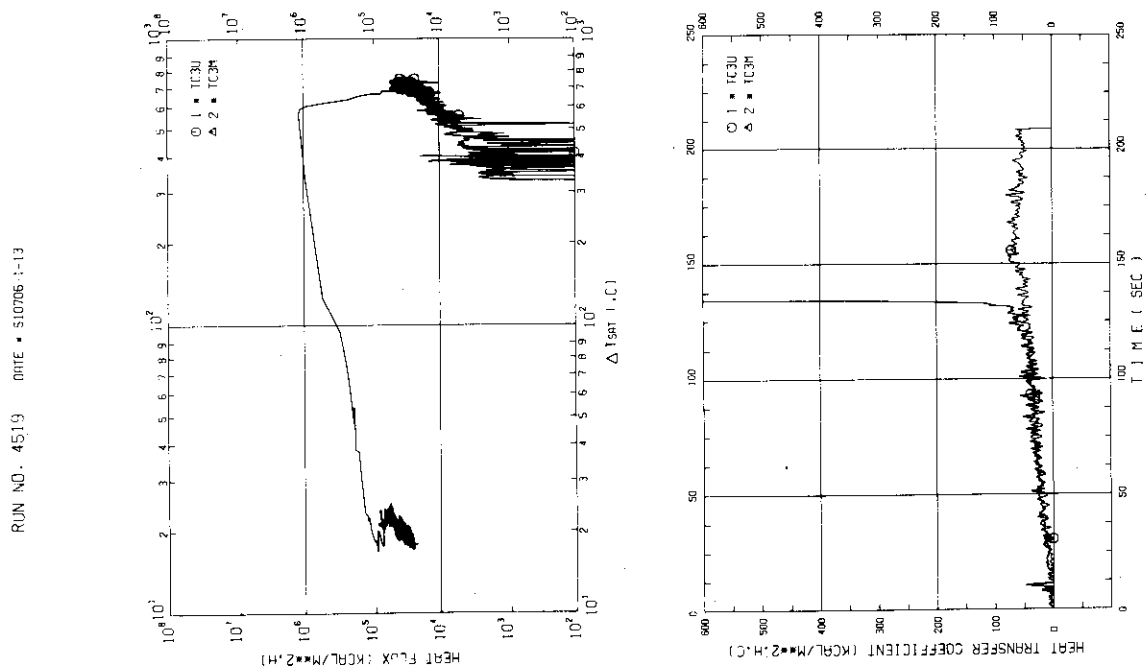

RUN NO = 4519 (3 OF 4)
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD(SEC)
18 = PDWN
20 = PLP
21 = PUP
22 = DPL
23 = DPDN

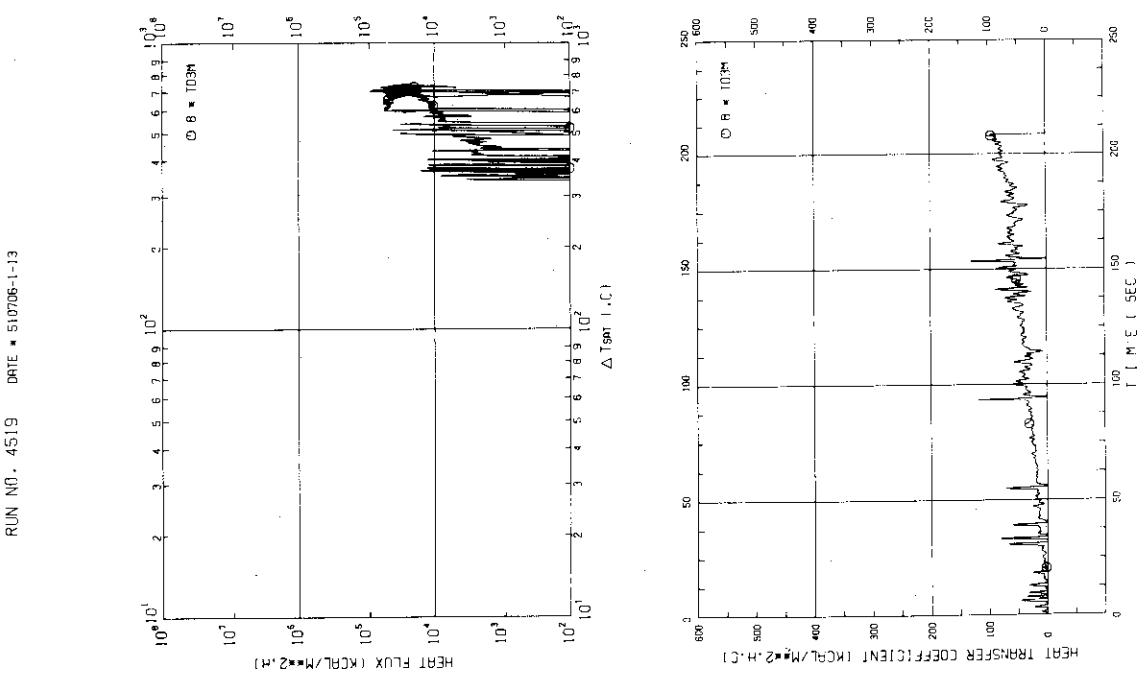

RUN NO = 4519 (4 OF 4)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
FLOW RATE (CM/SEC)
TIME AFTER FLOOD(SEC)
24 = DPTL
25 = DPTS
26 = DPHT
27 = DPPM
28 = FM
30 = I


RUN NO = 4519 (1 OF 4)
DATE = 5107/06-1-13
PEAK POWER = 1.8 KW/M
INLET WATER TEMP. = 80 .C
SYSTEM PRESSURE = 1 KG/CM**2A
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)
1 = TC3U
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
8 = TD3M
10 = TD5


RUN NO = 4519 (2 OF 4)
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)
12 = TH3U
13 = TH4
14 = TUG
15 = TUL


RUN NO. 4519 DATE = 910706-1-13
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 3 = TC3L
△ 4 = TC4
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4519 DATE = 910706-1-13
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 1 = TC3U
△ 2 = TC3M
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4519 DATE = 510706-1-13
HEAT FLUX (KCAL/M**2.H)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)
ΔTsat (.C)
B = 103M

****
* *
* RUN NO. 4521 *
* *
****

(DATE * 510707 - 1 - 8)

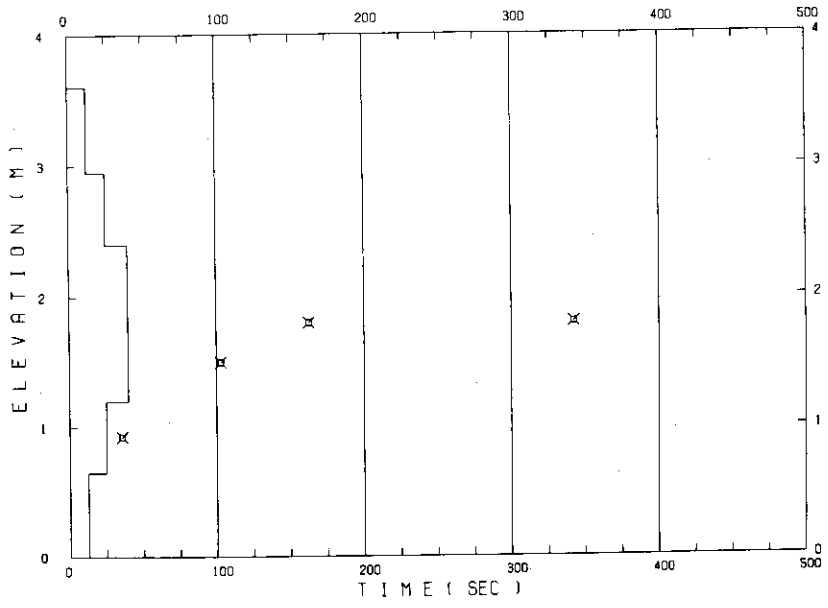
RUN CONDITIONS

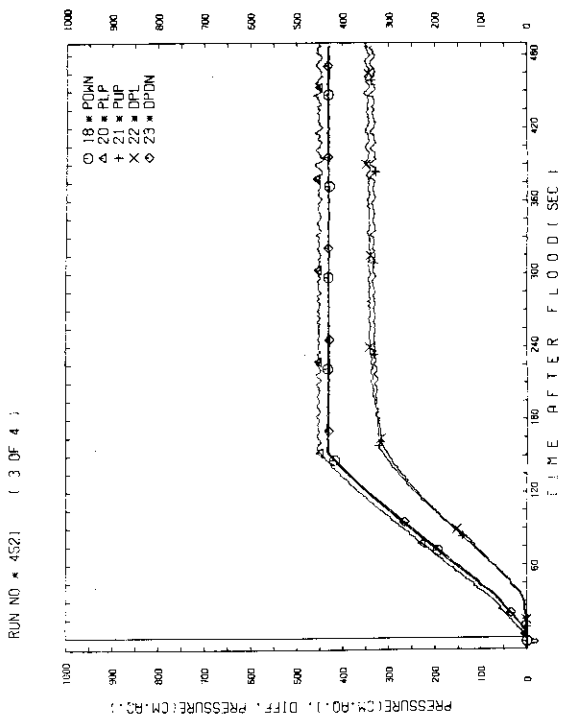
PEAK POWER	2.0	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	50	.C
INLET WATER VELOCITY	5	CM/SEC

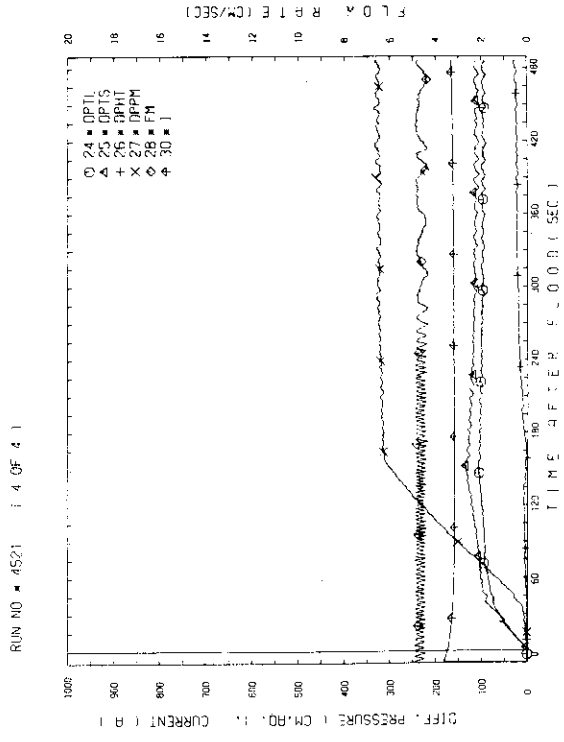
TEMPERATUR PROFILE

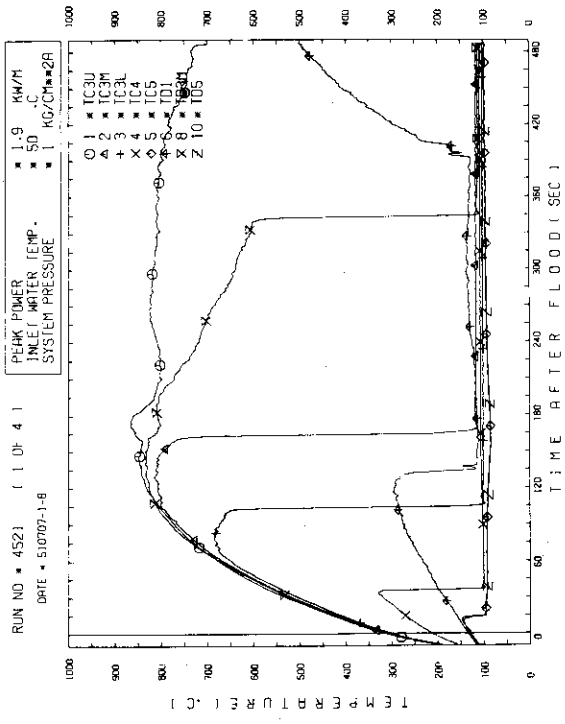
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	@UENCH TIME (SEC)	@UENCH TEMP. (.C)
1	TC3U	311.	173.50	867.	0.0	0.
2	TC3M	308.	129.50	816.	162.75	729.
3	TC3L	301.	80.50	688.	103.00	649.
4	TC4	211.	34.50	331.	35.75	321.
6	TD1	134.	0.0	0.	0.0	0.
8	TD3M	306.	151.00	836.	342.25	564.

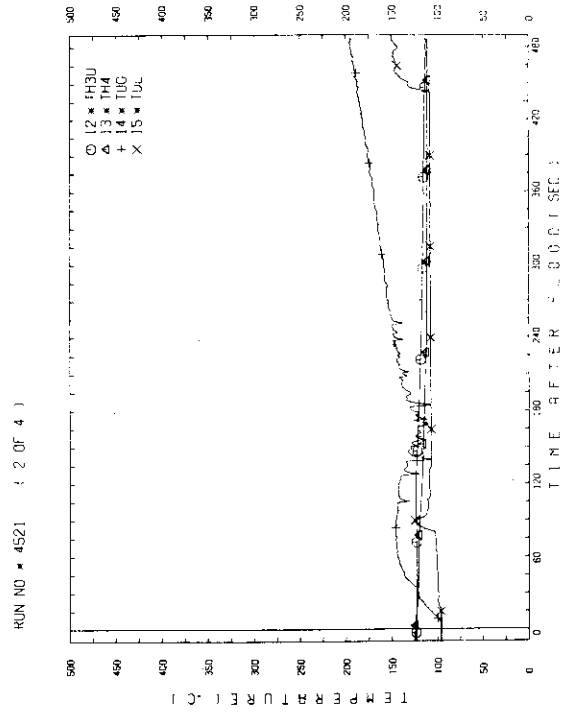
RUN NO. 4521 DATE * 510707-1-8

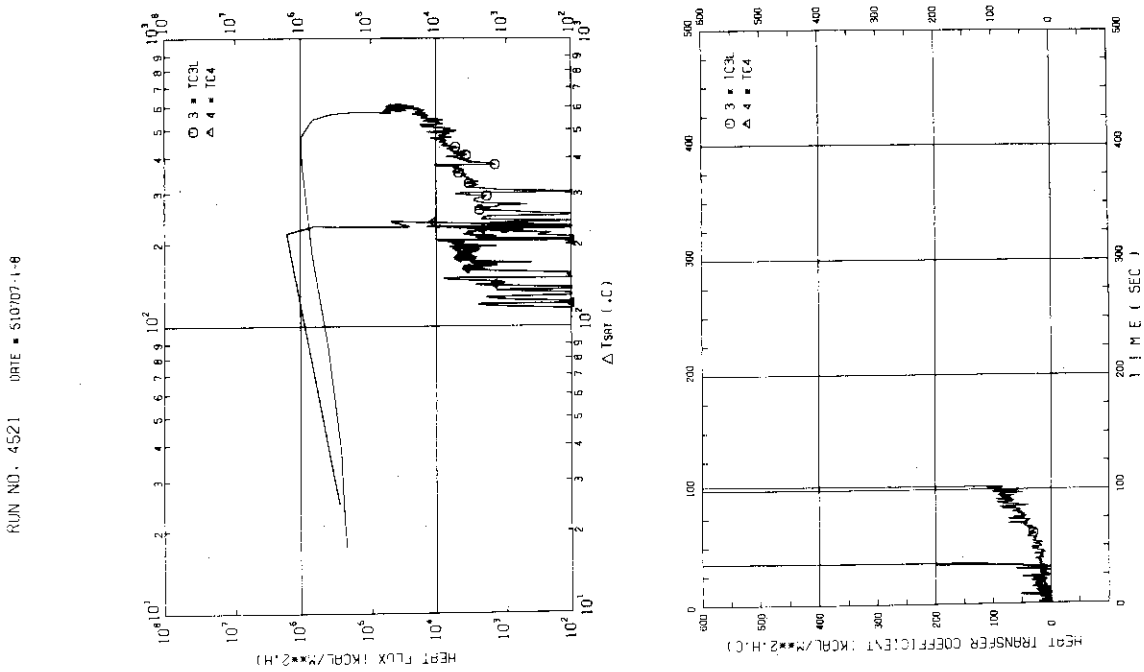


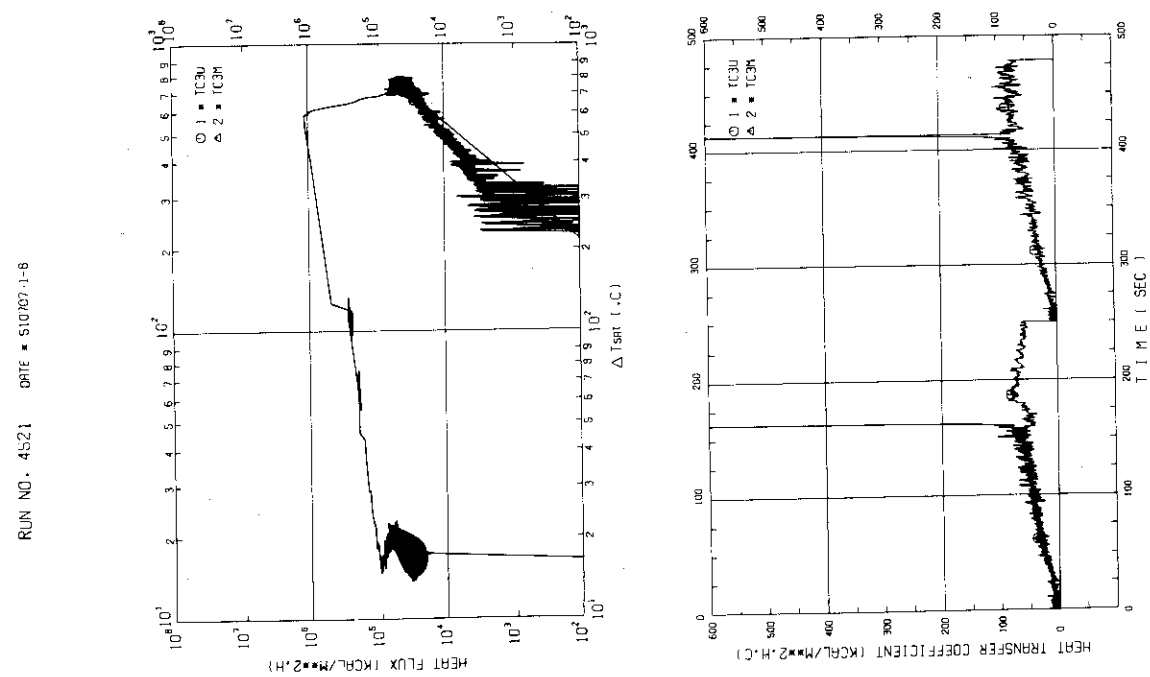

RUN NO = 4521 (3 OF 4)
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD(SEC)
1 8 = PDWN
2 0 = PLP
2 1 = PUP
2 2 = DPL
2 3 = DPDN

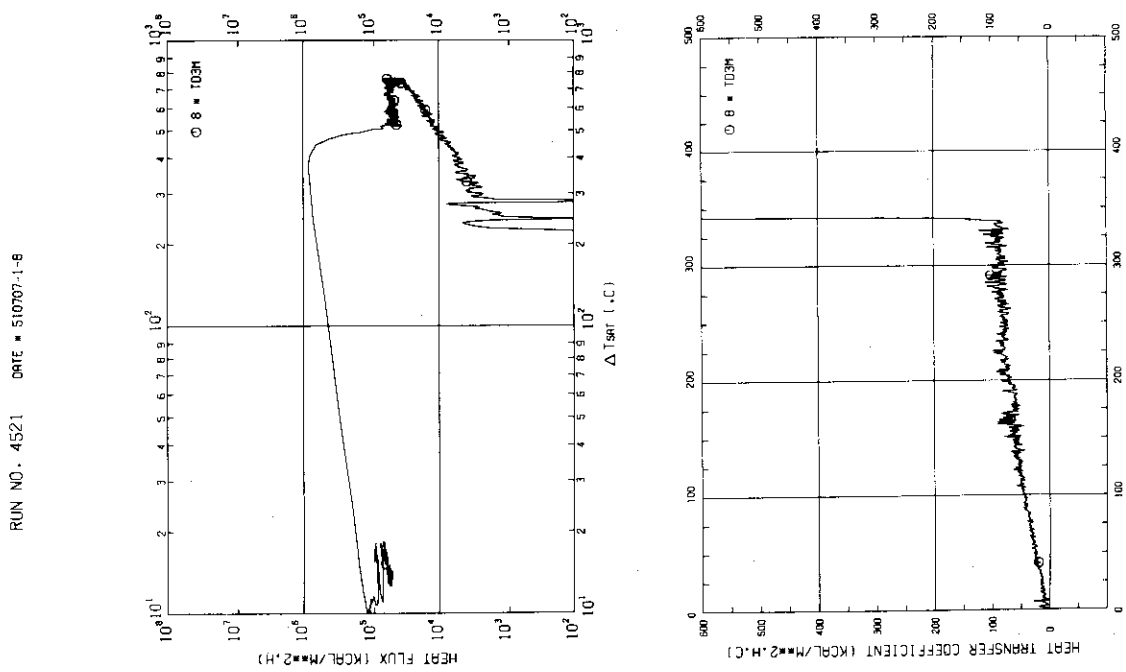

RUN NO = 4521 (4 OF 4)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
FLOW RATE (CM/SEC)
TIME AFTER FLOOD(SEC)
2 4 = DPTL
2 5 = DPTS
2 6 = DPHT
2 7 = DPPM
2 8 = FM
3 0 = I


RUN NO = 4521 (1 OF 4)
DATE = 510707-1-8
PEAK POWER = 1.9 KW/M
INLET WATER TEMP. = 50 .C
SYSTEM PRESSURE = 1 KG/CM**2A
1 = TC3U
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
8 = TD3M
10 = TD5
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO = 4521 (2 OF 4)
12 = FH3U
13 = TH4
14 = TUC
15 = TUL
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO. 4521 DATE = S10707-1-8
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 3 = TC3L
△ 4 = TC4
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4521 DATE = S10707-1-8
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 1 = TC3U
△ 2 = TC3M
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4521 DATE = 510707-1-8
⊙ 8 = TD3M
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
⊙ 8 = TD3M
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

****
* *
* RUN NO. 4524 *
* *
****

(DATE * 510714 - 1 - 6)

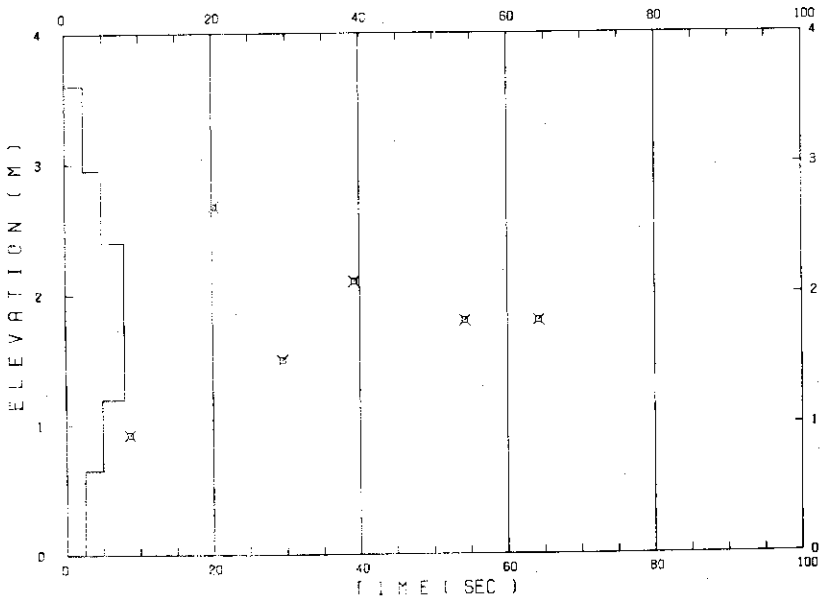
RUN CONDITIONS

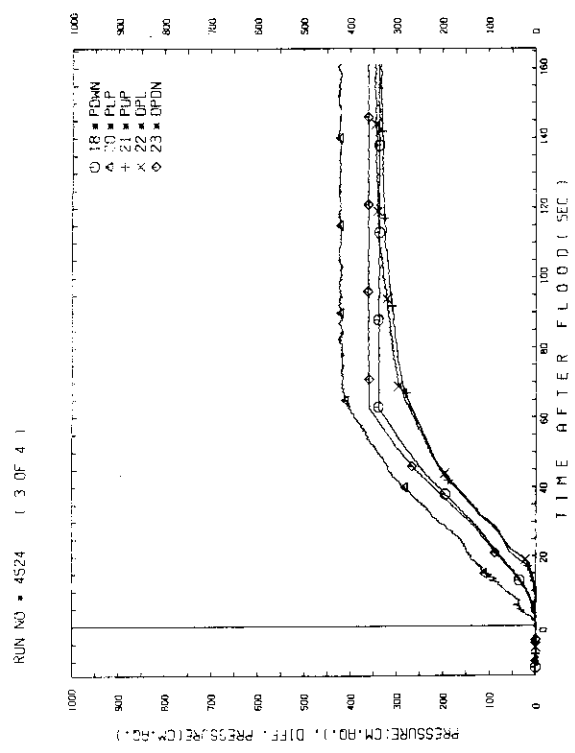
PEAK POWER	2.2	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	80	.C
INLET WATER VELOCITY	5	CM/SEC

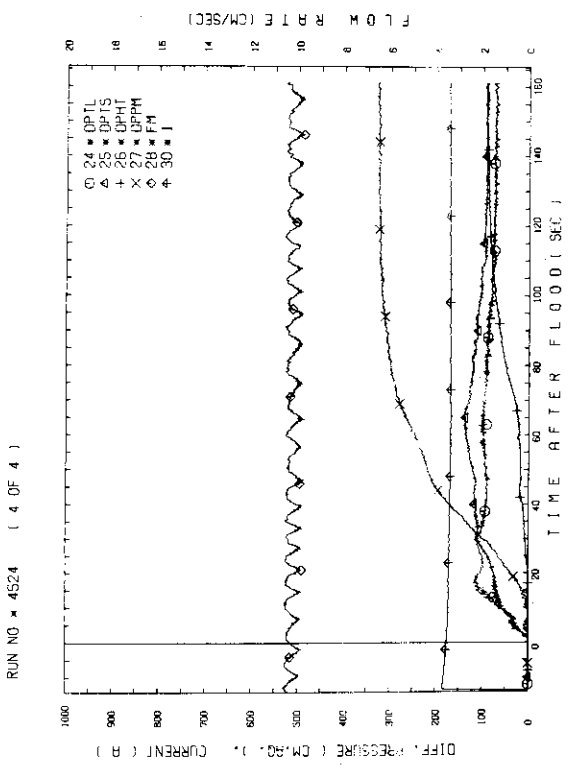
TEMPERATUR PROFILE

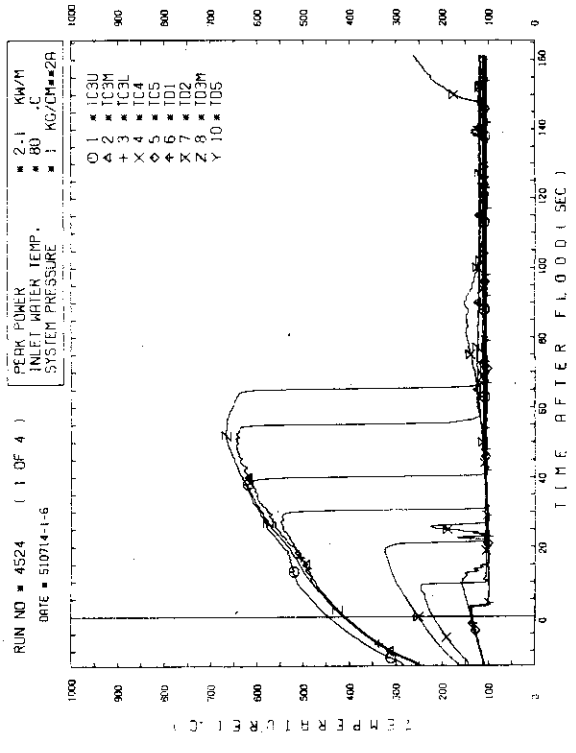
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
1	TC3U	446.	37.50	619.	39.25	604.
2	TC3M	413.	51.25	645.	54.25	636.
3	TC3L	413.	27.25	549.	29.50	542.
4	TC4	219.	6.00	247.	8.75	246.
7	TD2	251.	18.75	324.	20.25	315.
8	TD3M	410.	52.75	667.	64.25	638.

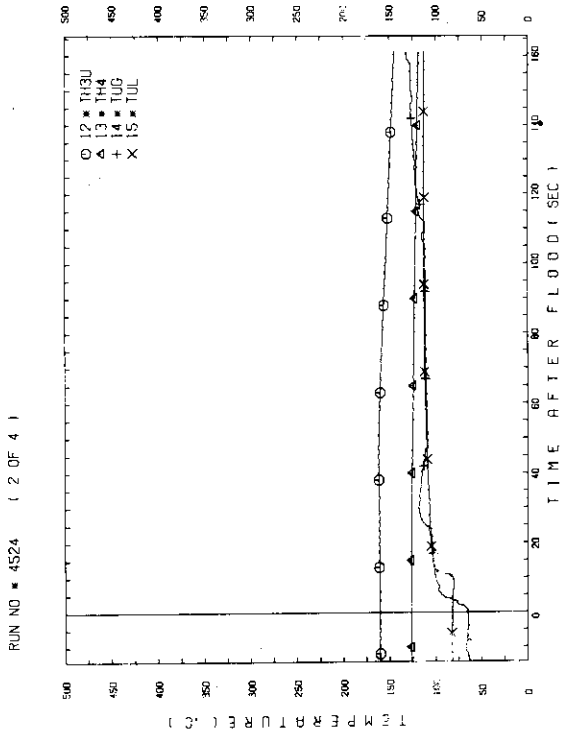
RUN NO. 4524 DATE * 510714-1-6

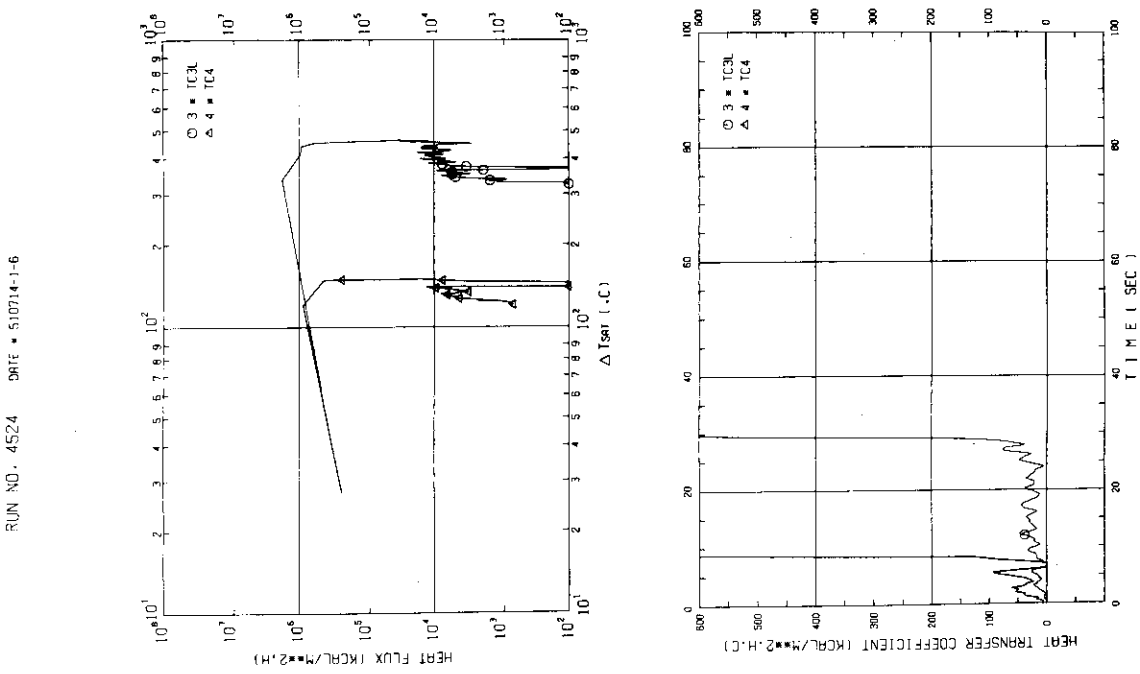


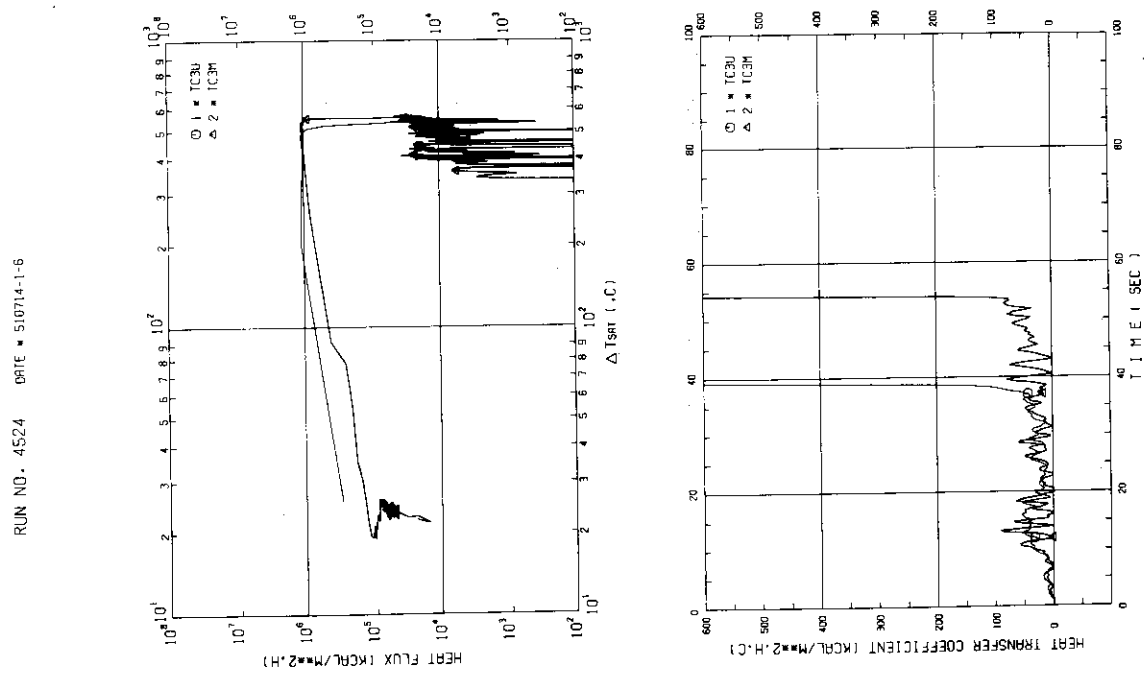

RUN NO = 4524 (3 OF 4)
TIME AFTER FLOOD(SEC)
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
18 = PDWN
19 = PLP
21 = PUP
22 = DPL
23 = DPDN

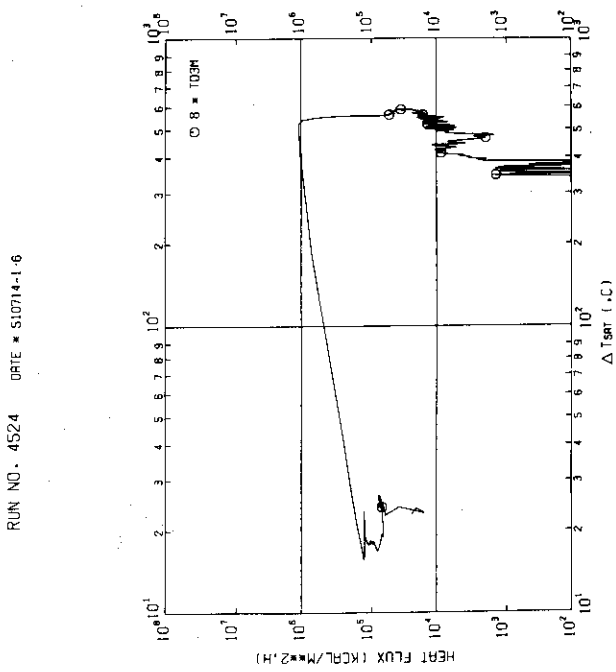

RUN NO = 4524 (4 OF 4)
TIME AFTER FLOOD(SEC)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
FLOW RATE (CM/SEC)
24 = DPTL
25 = DPTS
26 = DPHT
27 = DPPM
28 = FM
30 = I

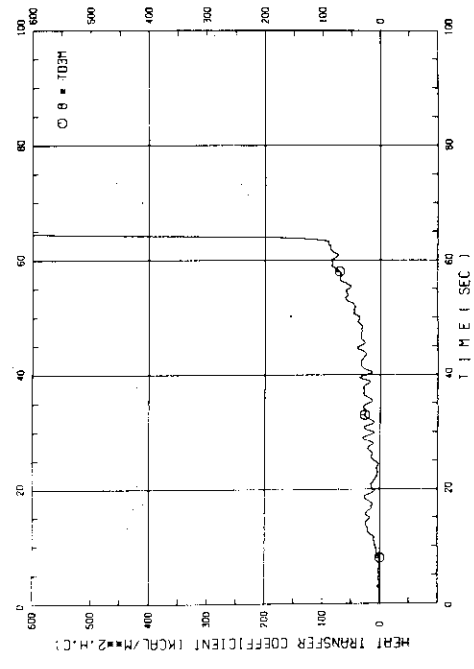

RUN NO = 4524 (1 OF 4)
DATE = 810714-1-6
PEAK POWER = 2.1 KW/M
INLET WATER TEMP. = 80 .C
SYSTEM PRESSURE = 1 KG/CM**2A
TIME AFTER FLOOD(SEC)
TEMPERATURE (.C)
1 = TC3U
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
7 = TD2
8 = TD3M
10 = TD5

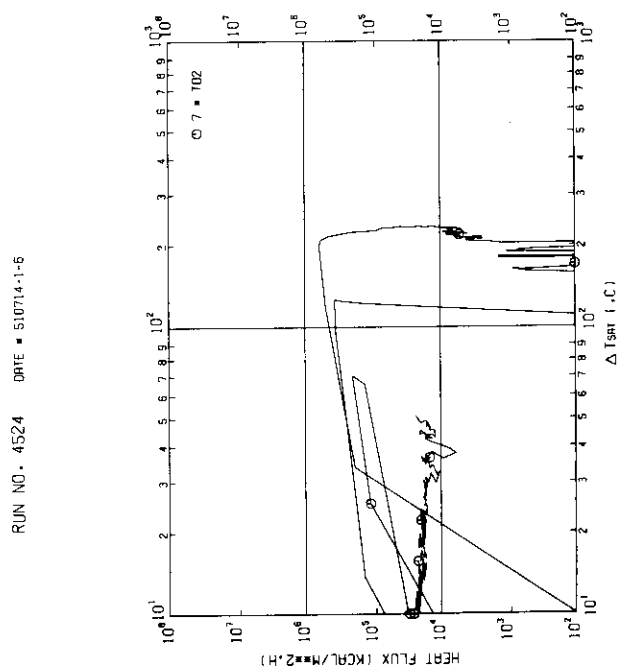

RUN NO = 4524 (2 OF 4)
TIME AFTER FLOOD(SEC)
TEMPERATURE (.C)
12 = TH3U
13 = TH4
14 = TUG
15 = TUL

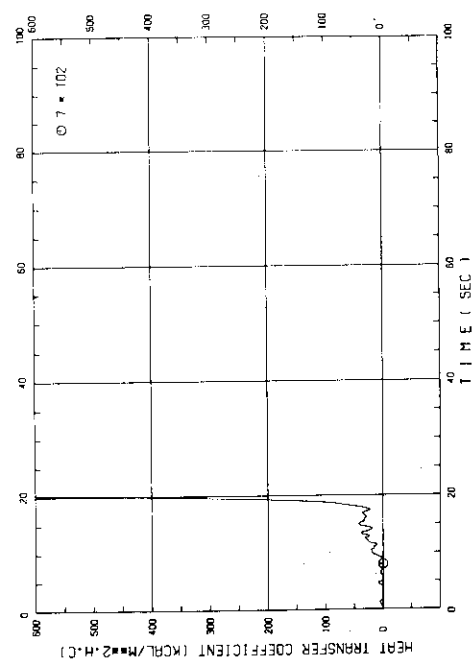

RUN NO. 4524 DATE = 510714-1-6
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 3 = TC3L
△ 4 = TC4
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4524 DATE = 510714-1-6
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 1 = TC3U
△ 2 = TC3M
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4524 DATE = 810714-1-6
Ø 8 = T03M
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)


Ø 8 = T03M
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4524 DATE = 810714-1-5
Ø 7 = T02
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)


Ø 7 = T02
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

****
* *
* RUN NO. 4528 *
* *
****

(DATE * 510628 - 1 -16)

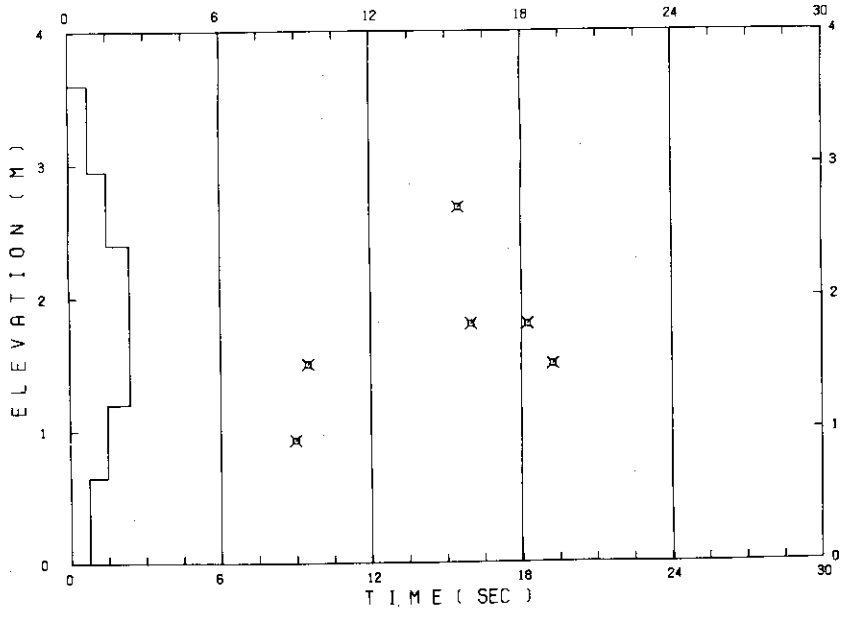
RUN CONDITIONS

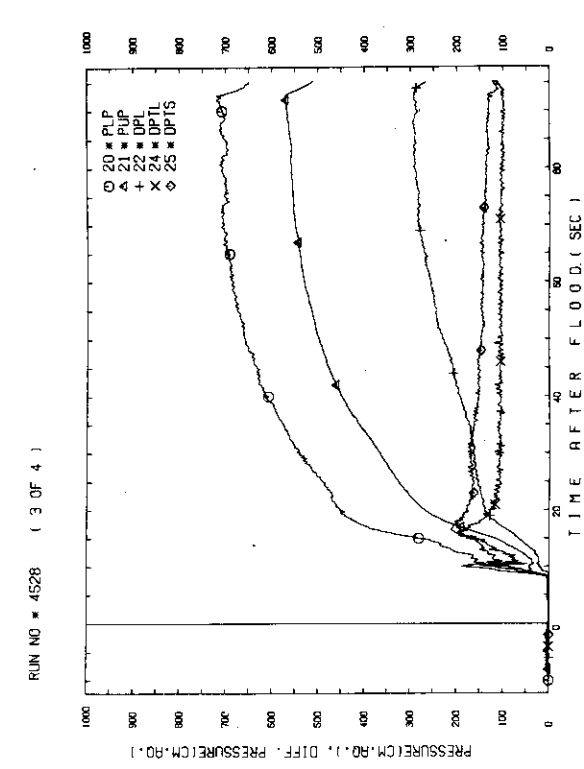
PEAK POWER	2.2	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	80	.C
INLET WATER VELOCITY	5	CM/SEC

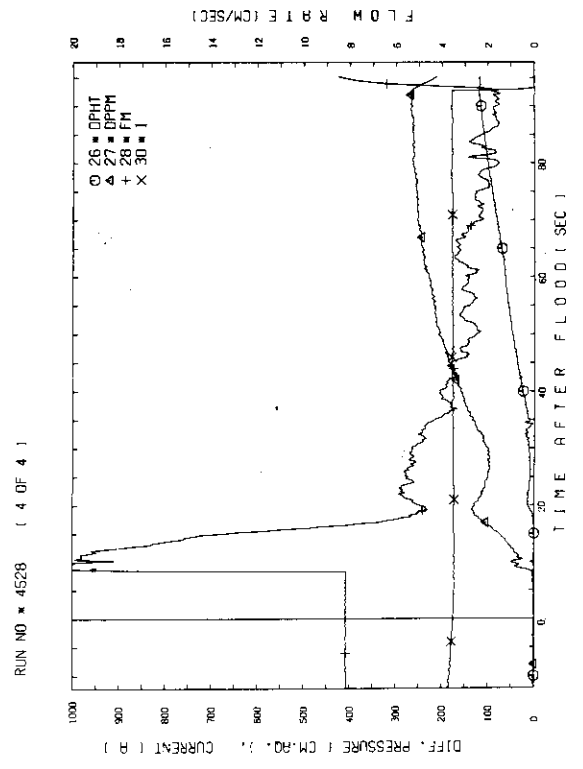
TEMPERATUR PROFILE

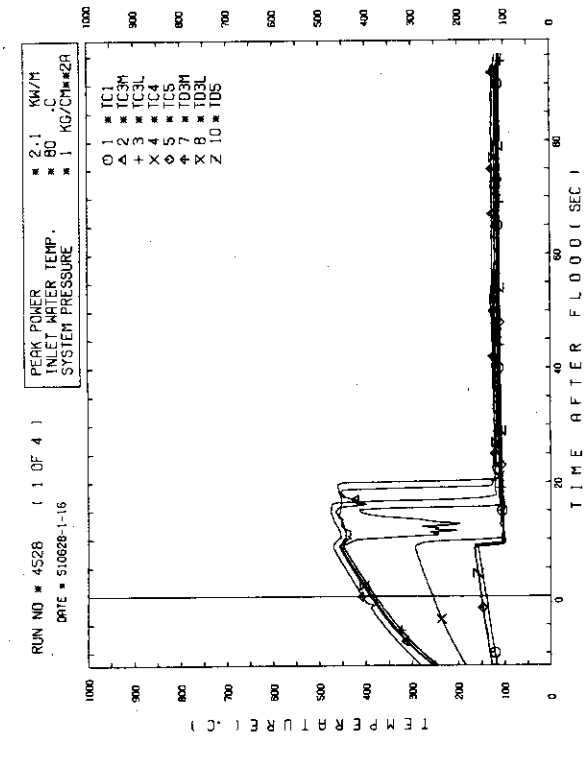
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
2	TC3M	390.	14.75	464.	18.25	454.
3	TC3L	379.	8.75	449.	9.50	433.
4	TC4	254.	8.25	293.	9.00	290.
6	TD2	260.	15.50	313.	15.50	313.
7	TD3M	407.	14.75	475.	16.00	472.
8	TD3L	386.	19.50	461.	19.25	461.

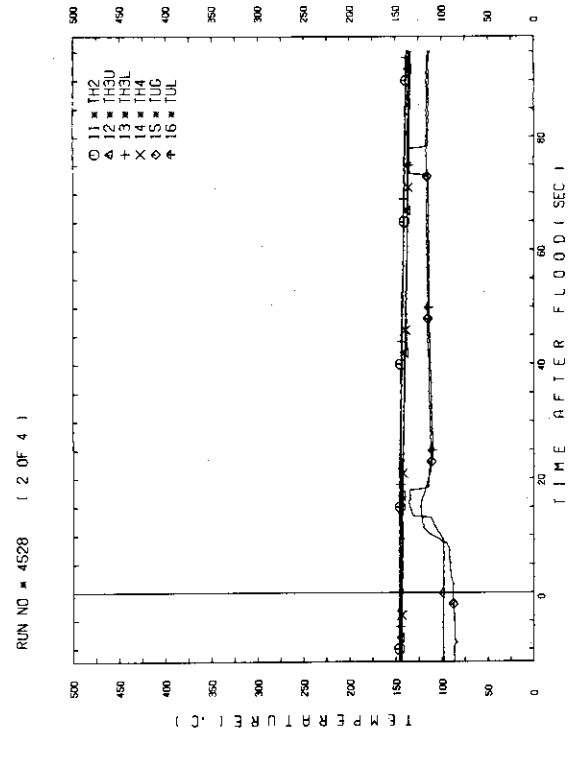
RUN NO. 4528 DATE * 510628-1-16

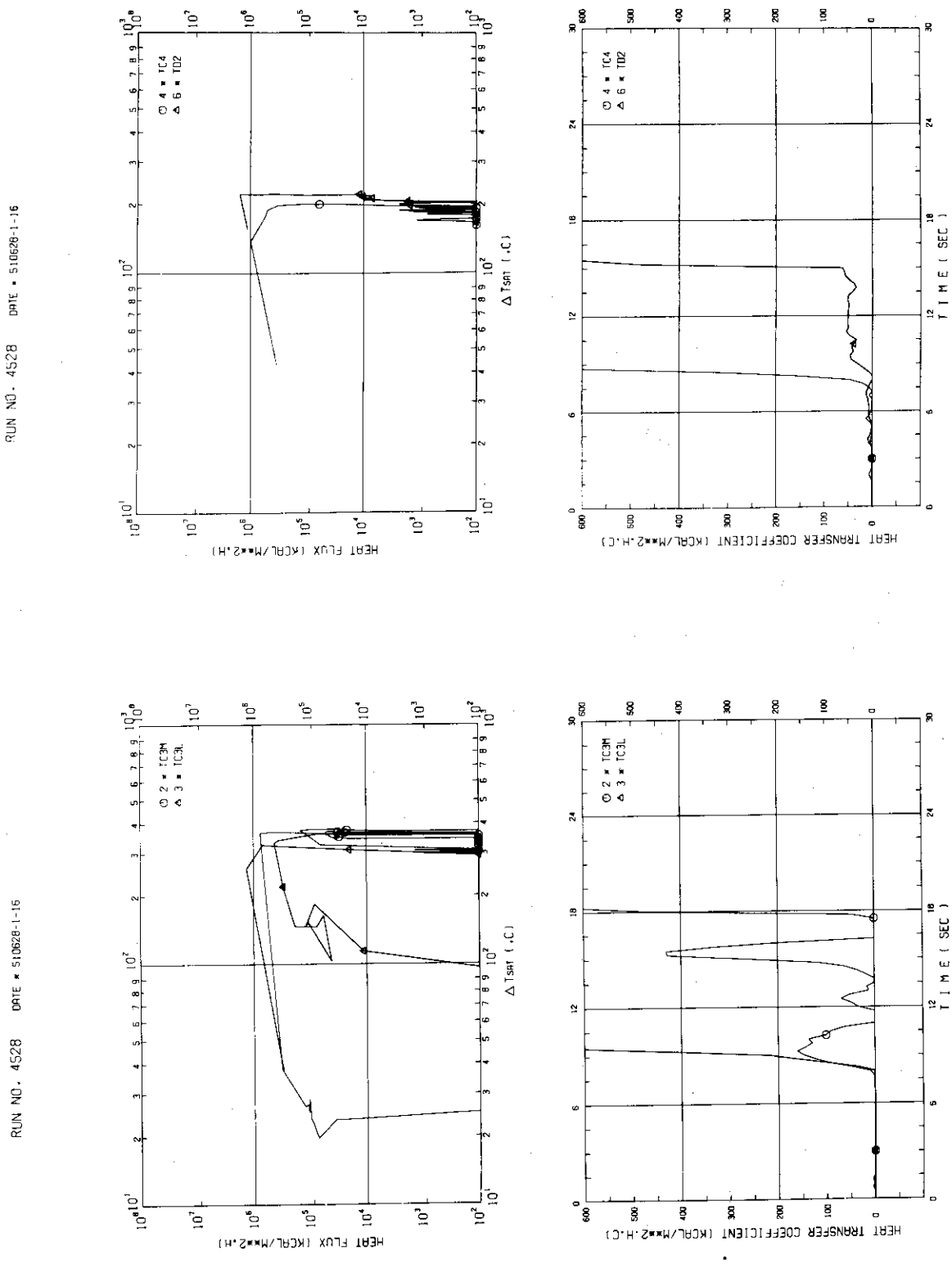


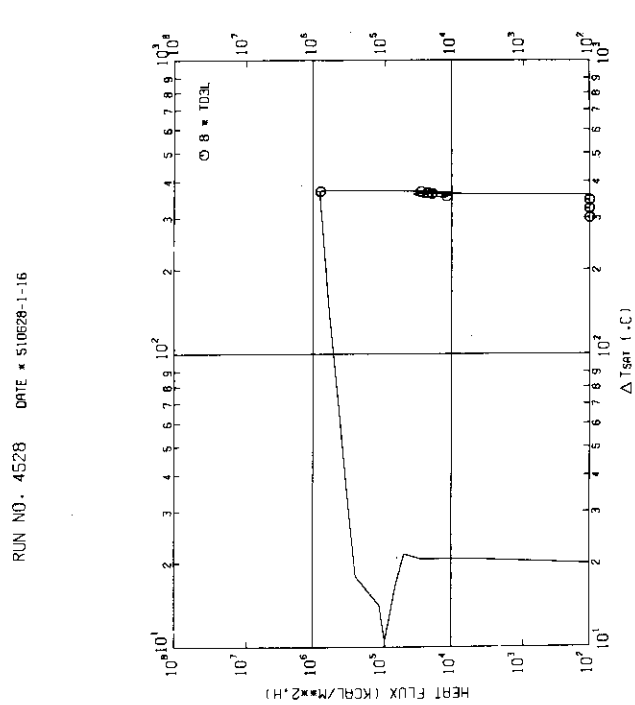

RUN NO = 4528 (3 OF 4)
20 = PLP
21 = PUP
22 = DPL
24 = DPTL
25 = DPTS
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD.(SEC)

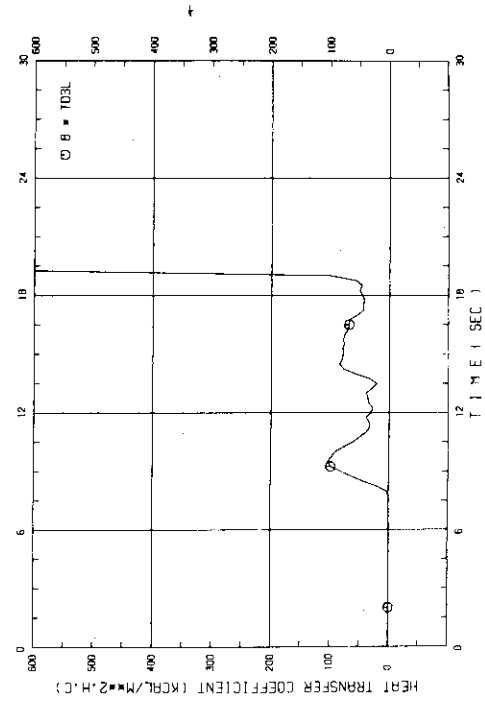

RUN NO = 4528 (4 OF 4)
26 = DPHT
27 = DPPM
28 = FM
30 = I
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
FLOW RATE (CM/SEC)
TIME AFTER FLOOD(SEC)

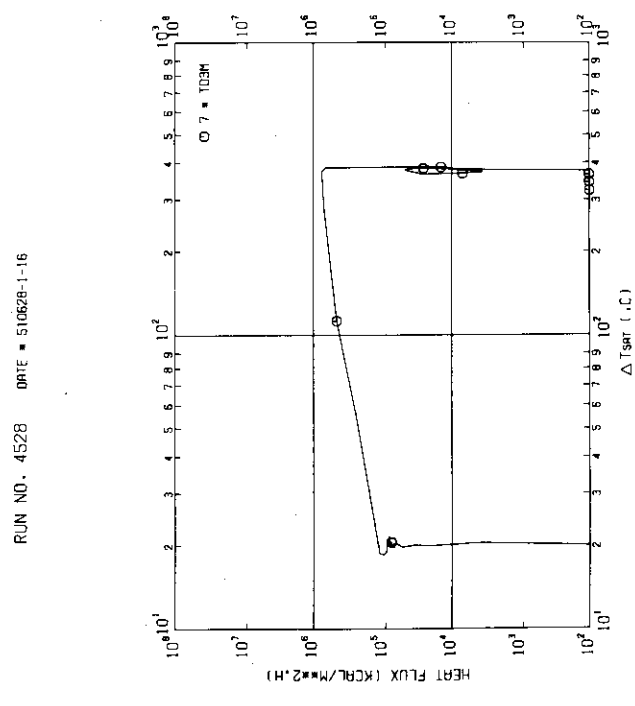

RUN NO = 4528 (1 OF 4)
DATE = 510628-1-16
PEAK POWER = 2.1 KW/M
INLET WATER TEMP. = 80 .C
SYSTEM PRESSURE = 1 KG/CM**2A
1 = TC1
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
7 = TD3M
8 = TD3L
10 = TD5
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)

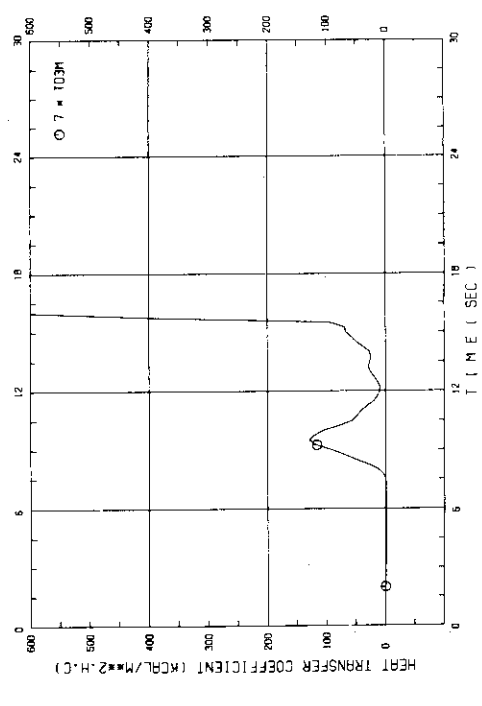

RUN NO = 4528 (2 OF 4)
11 = TH2
12 = TH3U
13 = TH3L
14 = TH4
15 = TUC
16 = TUL
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO. 4528 DATE = 510628-1-16
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 4 = TC4
△ 6 = TD2
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)
RUN NO. 4528 DATE = 510628-1-16
○ 2 = TC3M
△ 3 = TC3L


RUN NO. 4528 DATE = 510628-1-16
⊙ 8 = TD3L
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)


⊙ 8 = TD3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4528 DATE = 510628-1-16
⊙ 7 = TD3M
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)


⊙ 7 = TD3M
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

****
* *
* RUN NO. 4529 *
* *
****

(DATE * 510628 - 1 -20)

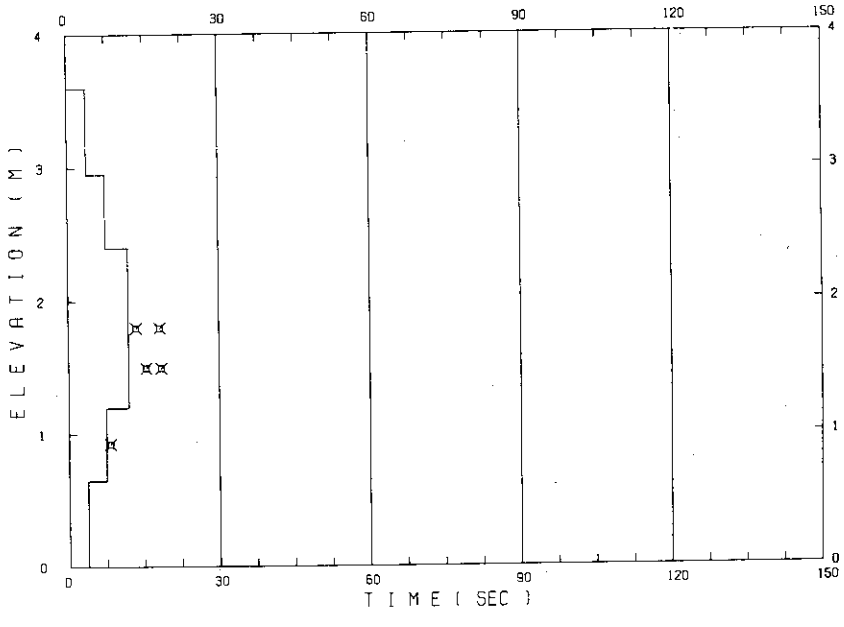
RUN CONDITIONS

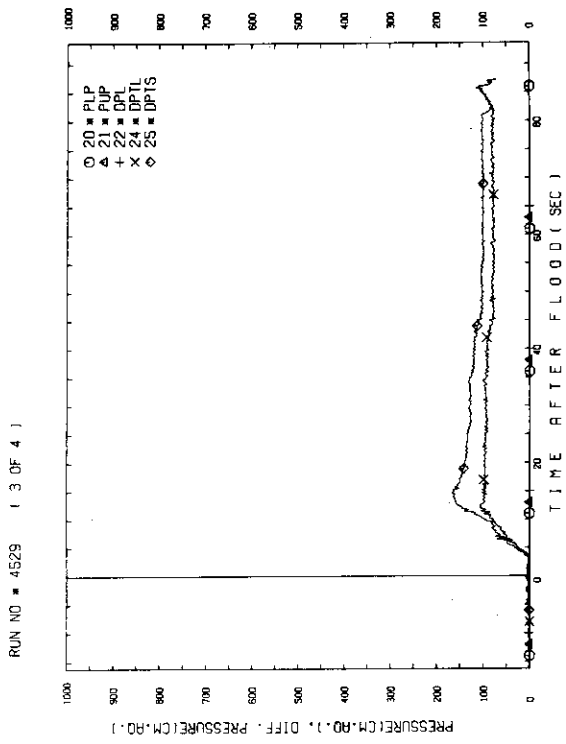
PEAK POWER	2.2	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	80	.C
INLET WATER VELOCITY	5	CM/SEC

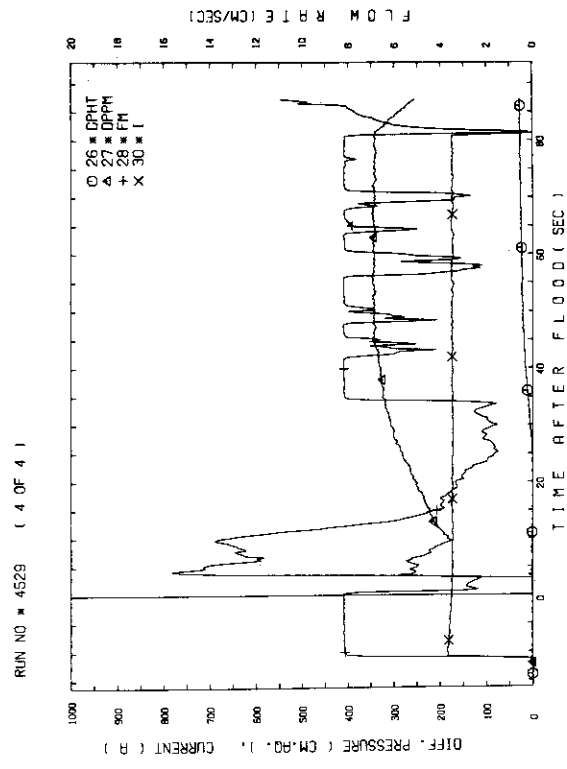
TEMPERATUR PROFILE

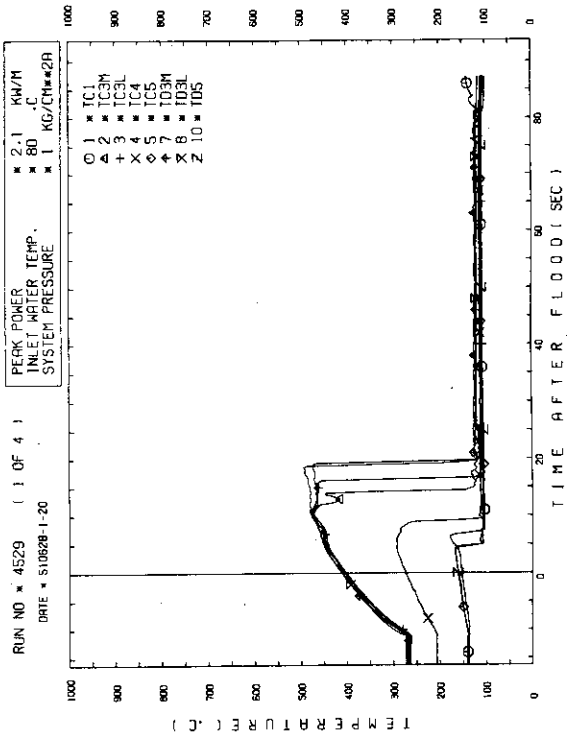
CH.NO.	SYMBOL	INITIAL TEMP, (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP, (.C)	QUENCH TIME (SEC)	QUENCH TEMP, (.C)
2	TC3M	402.	10.50	475.	13.50	432.
3	TC3L	402.	11.00	473.	15.50	465.
4	TC4	273.	4.50	292.	8.25	276.
7	TD3M	410.	18.50	493.	18.25	490.
8	TD3L	411.	10.50	477.	18.50	473.

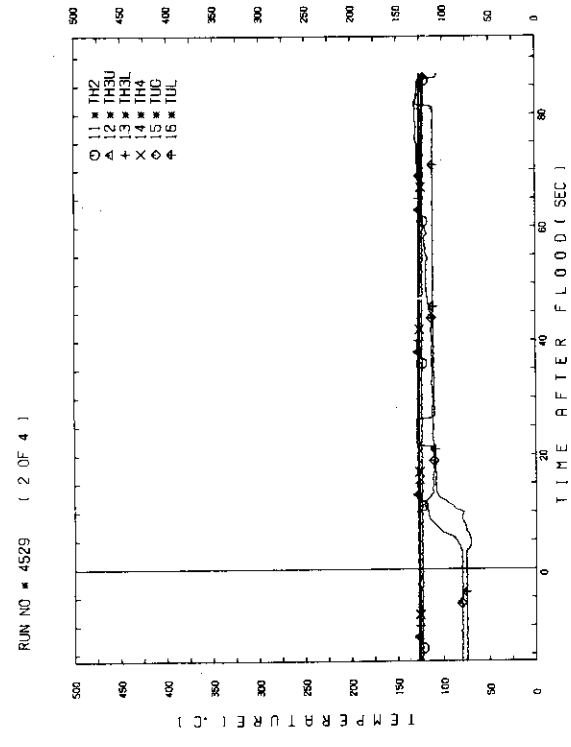
RUN NO. 4529 DATE * 510628-1-20

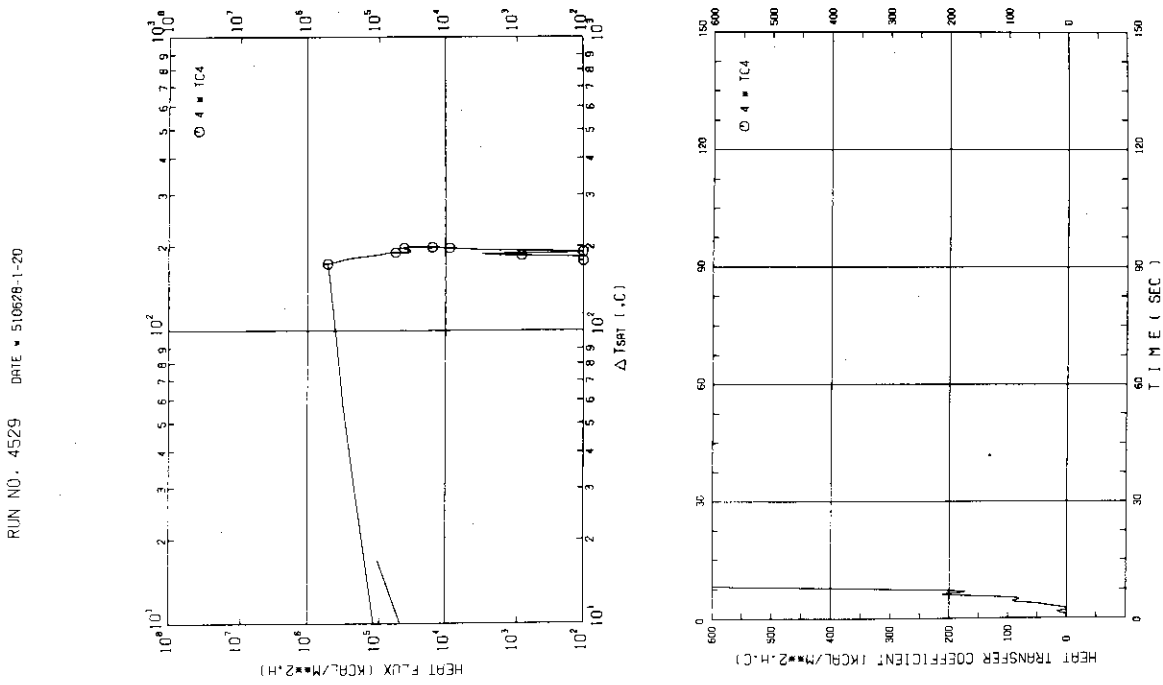


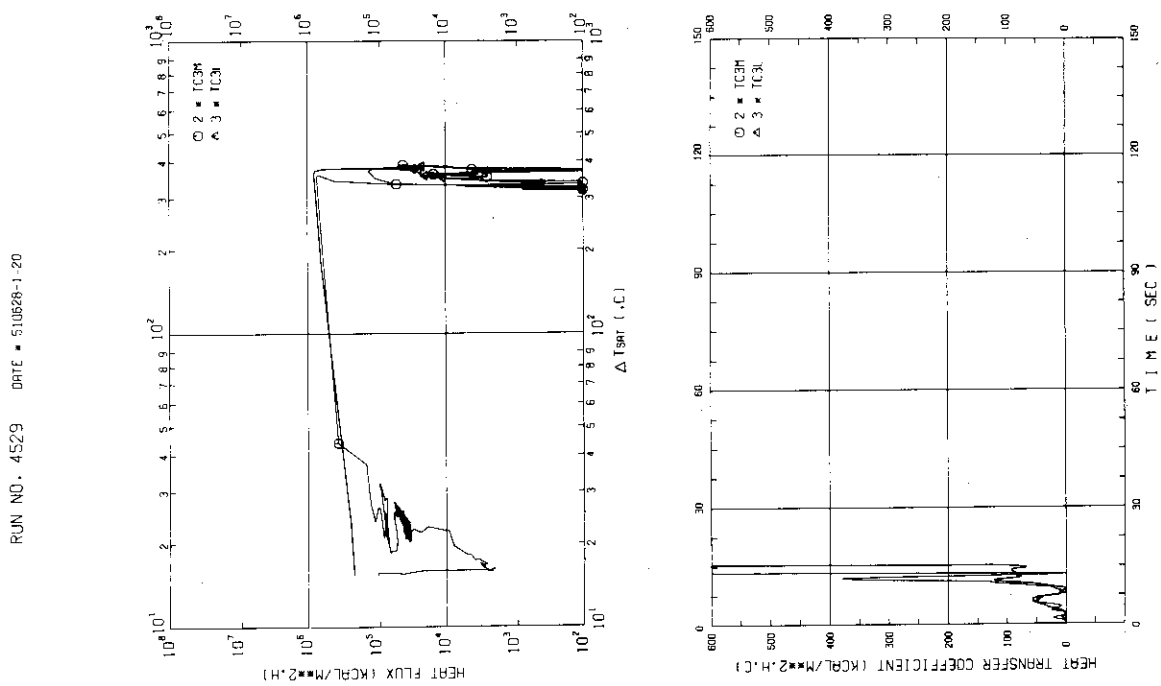

RUN NO = 4529 (3 OF 4)
20 = PLP
21 = PUP
22 = DPL
24 = DPTL
25 = DPTS
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD(SEC)

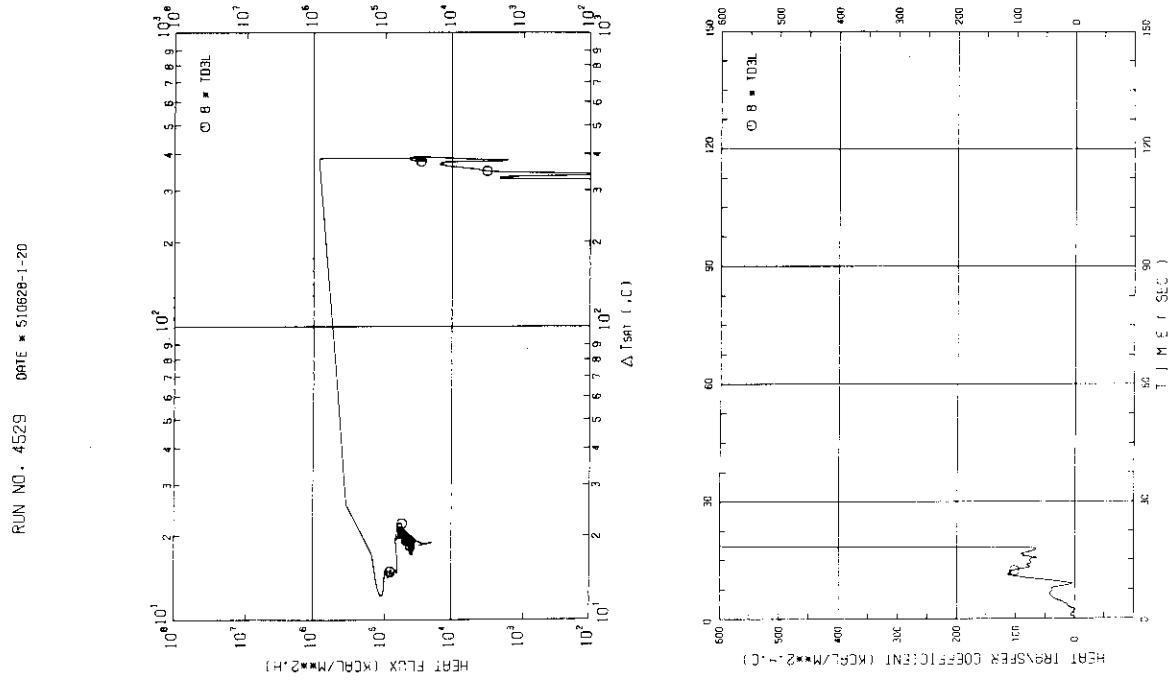

RUN NO = 4529 (4 OF 4)
26 = DPHT
27 = DPPM
28 = FM
30 = I
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
FLOW RATE (CM/SEC)
TIME AFTER FLOOD(SEC)

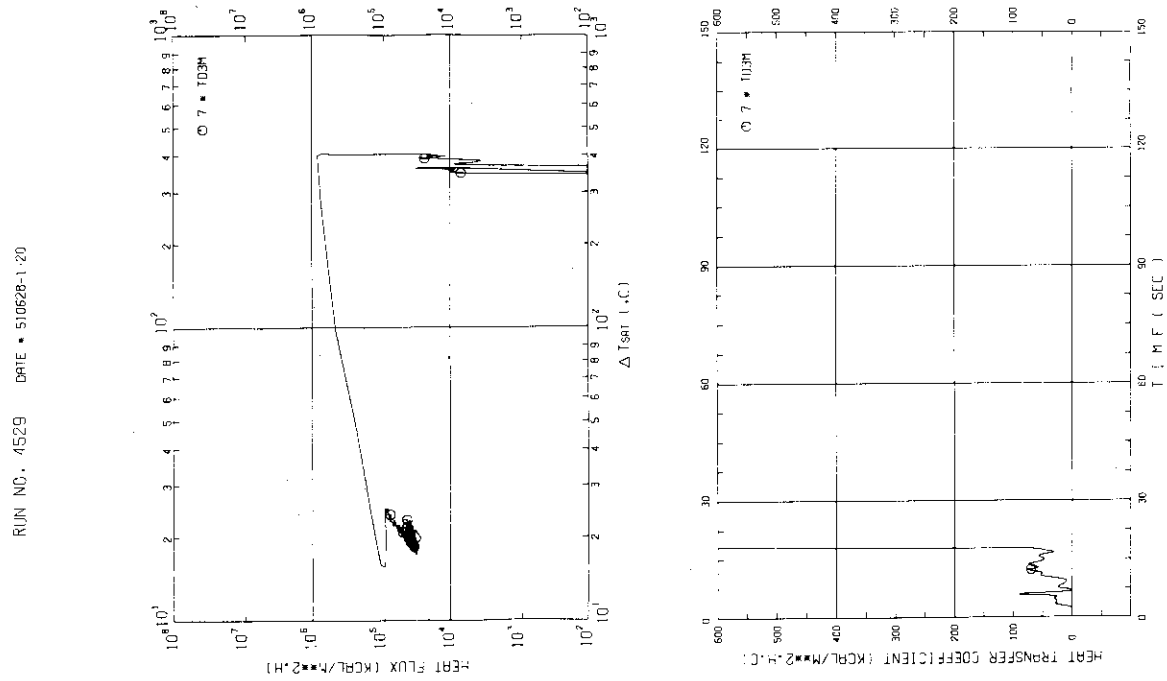

RUN NO = 4529 (1 OF 4)
DATE = S10628-I-20
PEAK POWER * 2.1 KW/M
INLET WATER TEMP. * 80 .C
SYSTEM PRESSURE * 1 KG/CM**2A
1 = TC1
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
7 = TD3M
8 = TD3L
10 = TD5
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO = 4529 (2 OF 4)
11 = TH2
12 = TH3U
13 = TH3L
14 = TH4
15 = TUC
16 = TUL
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO. 4529 DATE = 510628-1-20
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 4 = TC4
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4529 DATE = 510628-1-20
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
○ 2 = TC3M
△ 3 = TC3L
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4529 DATE = 510628-1-20
⊙ 8 = TD3L
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4529 DATE = 510628-1-20
⊙ 7 = TD3M
HEAT FLUX (KCAL/h**2.H)
ΔTsat (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

****
* *
* RUN NO. 4530 *
* *
****

(DATE * 510628 - 1 -19)

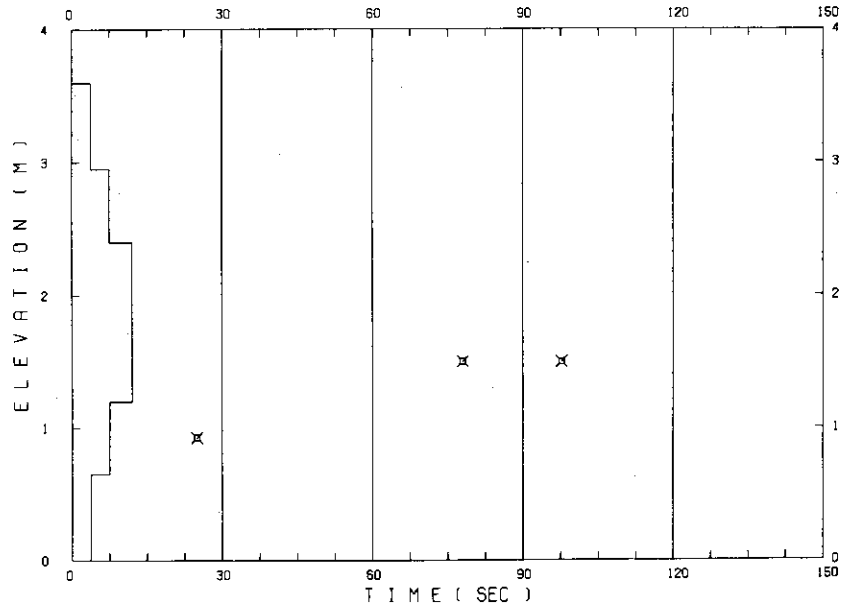
RUN CONDITIONS

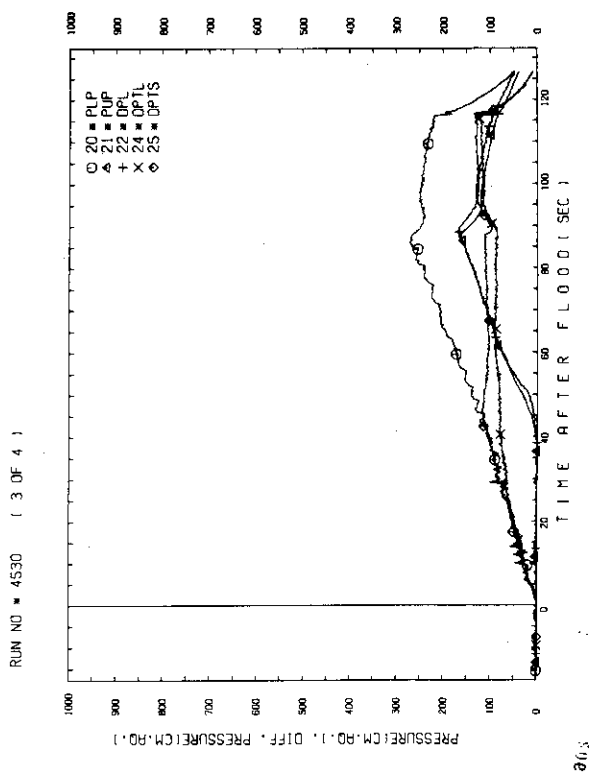
PEAK POWER	2.2	KW/M
SYSTEM PRESSURE	1	KG/CM**2A
INLET WATER TEMPERATURE	80	,C
INLET WATER VELOCITY	5	CM/SEC

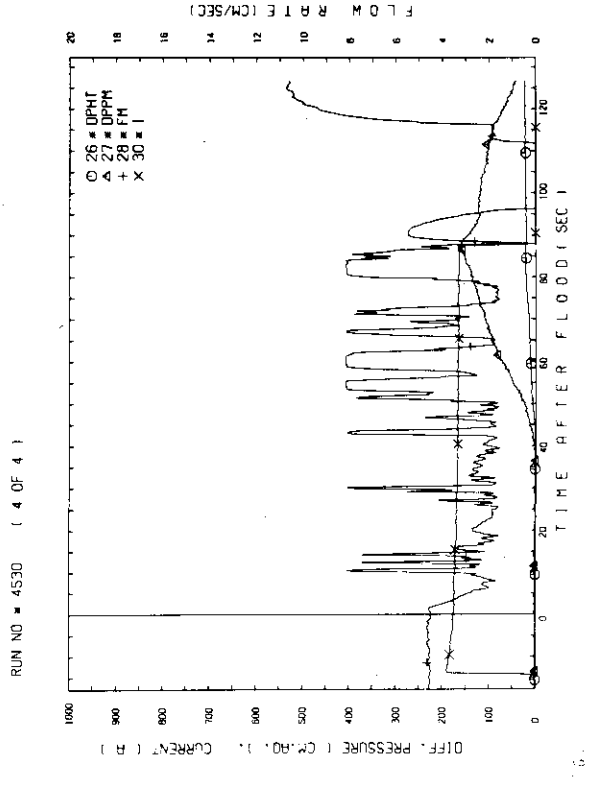
TEMPERATUR PROFILE

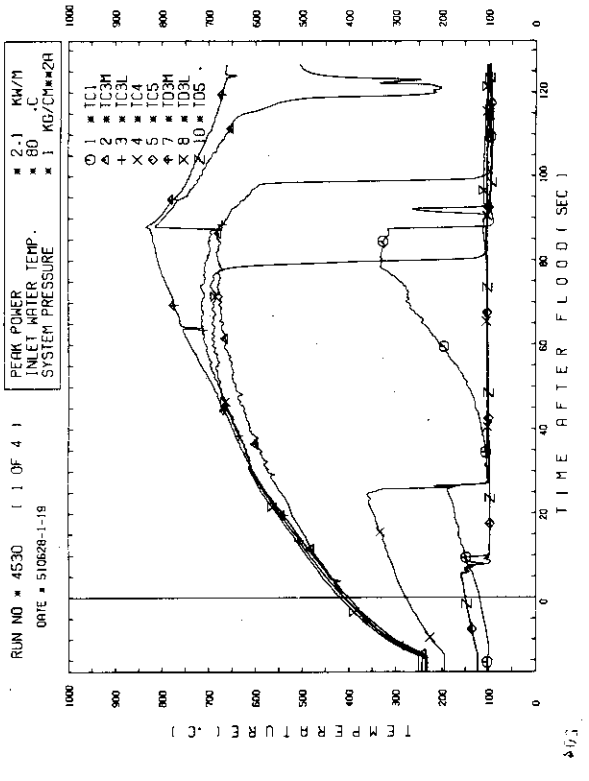
CH.NO.	SYMBOL	INITIAL TEMP. (,C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (,C)	QUENCH TIME (SEC)	QUENCH TEMP. (,C)
2	TC3M	399.	88.00	816.	0.0	0.
3	TC3L	410.	74.00	718.	97.75	595.
4	TC4	277.	24.50	361.	25.00	352.
7	TD3M	409.	88.00	834.	0.0	0.
8	TD3L	418.	74.00	697.	78.00	665.

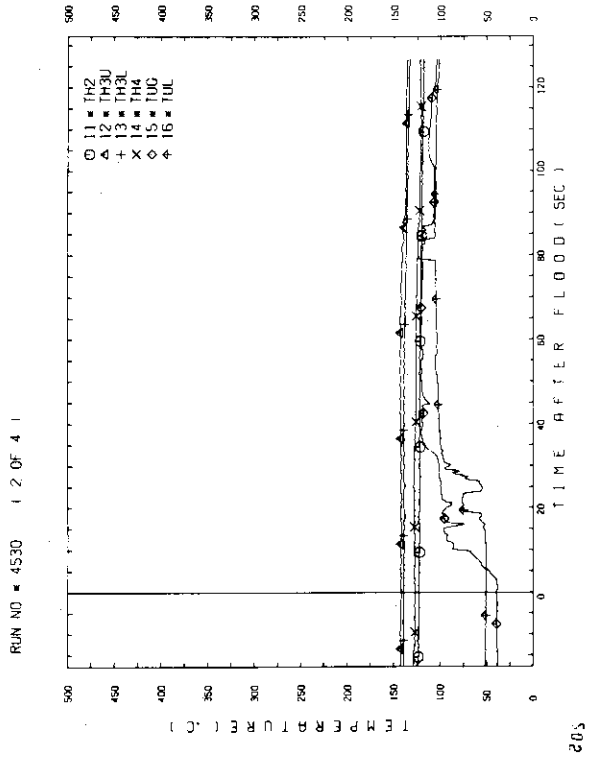
RUN NO. 4530 DATE * 510628-1-19

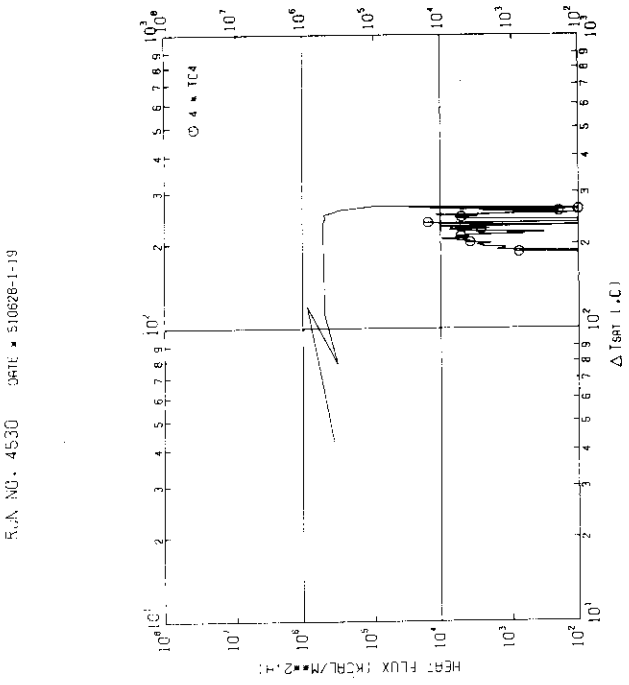


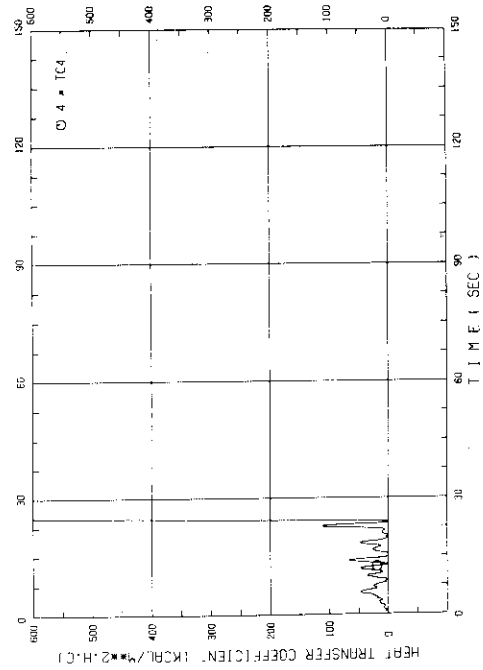

RUN NO = 4530 (3 OF 4)
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD(SEC)
20 = PLP
21 = PUP
22 = DPL
24 = DPTL
25 = DPTS

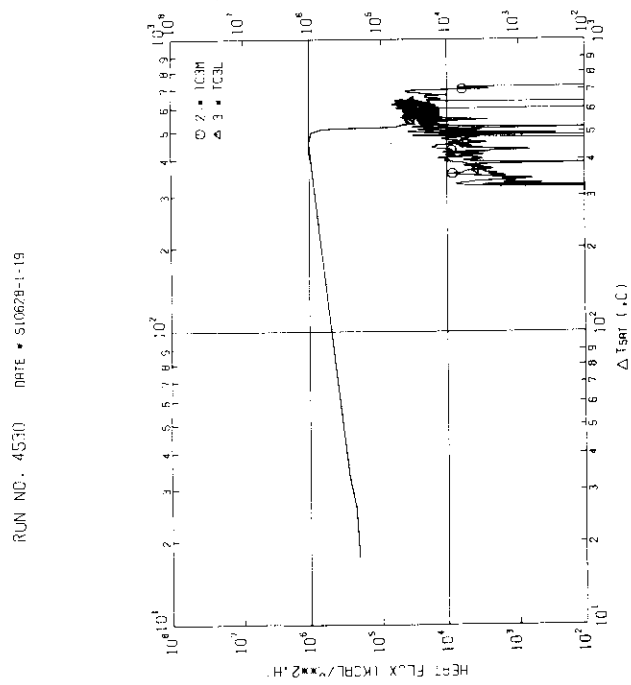

RUN NO = 4530 (4 OF 4)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
FLOW RATE (CM/SEC)
TIME AFTER FLOOD(SEC)
26 = DPHT
27 = DPPM
28 = FM
30 = I

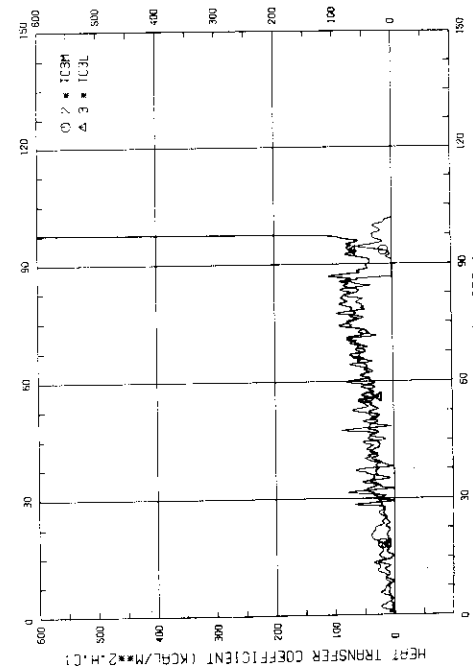

RUN NO = 4530 (1 OF 4)
DATE = 510628-1-19
PEAK POWER = 2.1 KW/M
INLET WATER TEMP. = 80 .C
SYSTEM PRESSURE = 1 KG/CM**2A
1 = TC1
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
7 = TD3M
8 = TD3L
10 = TD5
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)

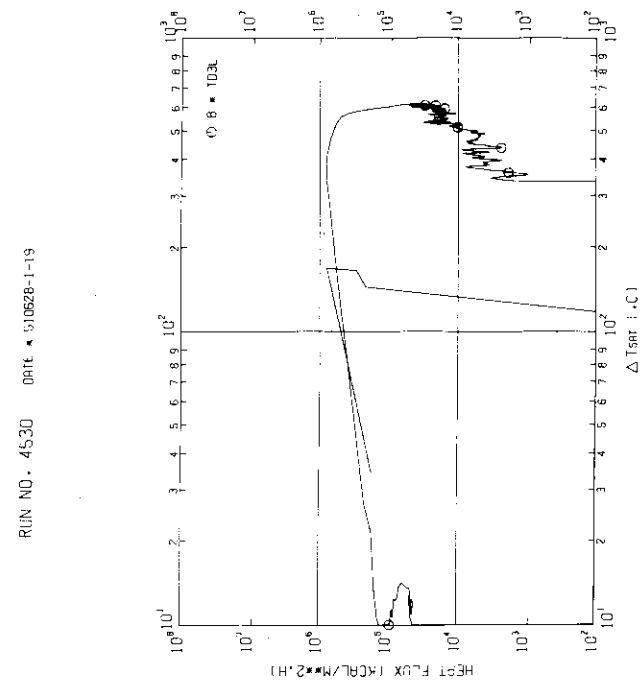

RUN NO = 4530 (2 OF 4)
11 = TH2
12 = TH3U
13 = TH3L
14 = TH4
15 = TUC
16 = TUL
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)

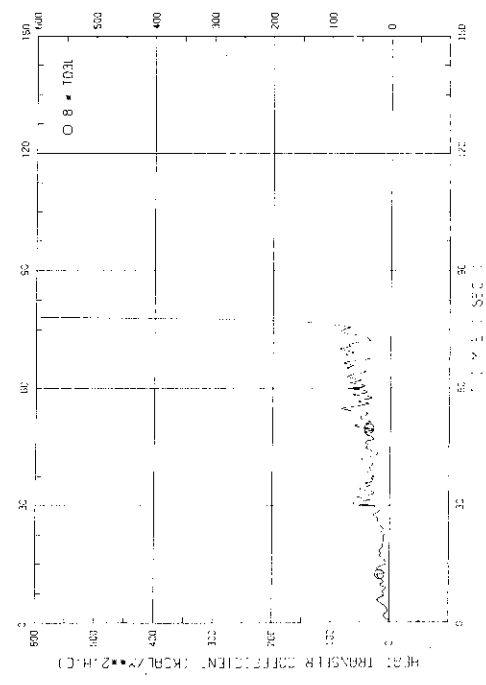

RUN NO. 4530 DATE = 810628-1-19
HEAT FLUX (KCAL/M**2.H)
ΔTsat (°C)
○ 4 = TC4

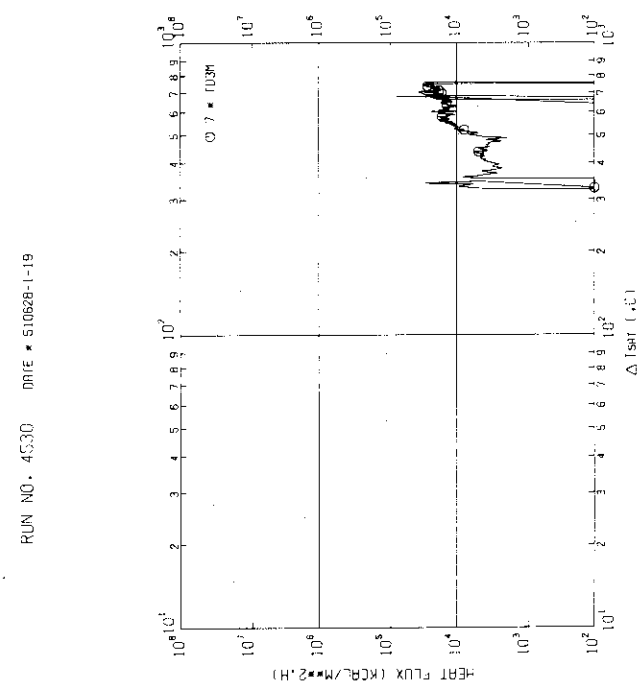

HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)
○ 4 = TC4

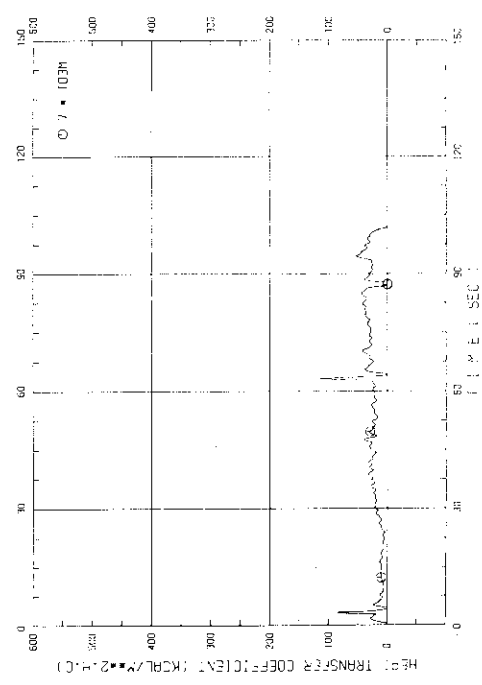

RUN NO. 4530 DATE = 810628-1-19
HEAT FLUX (KCAL/M**2.H)
ΔTsat (°C)
○ 2 = TC3M
△ 3 = TC3L


HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)
○ 2 = TC3M
△ 3 = TC3L


RUN NO. 4530 DATE = 510628-1-19
HEAT FLUX (KCAL/M**2.H)
ΔTsat (°C)
○ 8 = TD3L


HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)
○ 8 = TD3L


RUN NO. 4530 DATE = 510628-1-19
HEAT FLUX (KCAL/M**2.H)
ΔTsat (°C)
○ 7 = TD3M


HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)
○ 7 = TD3M

****
* *
* RUN NO. 4534 *
* *
****

(DATE * 510714 - 1 - 7)

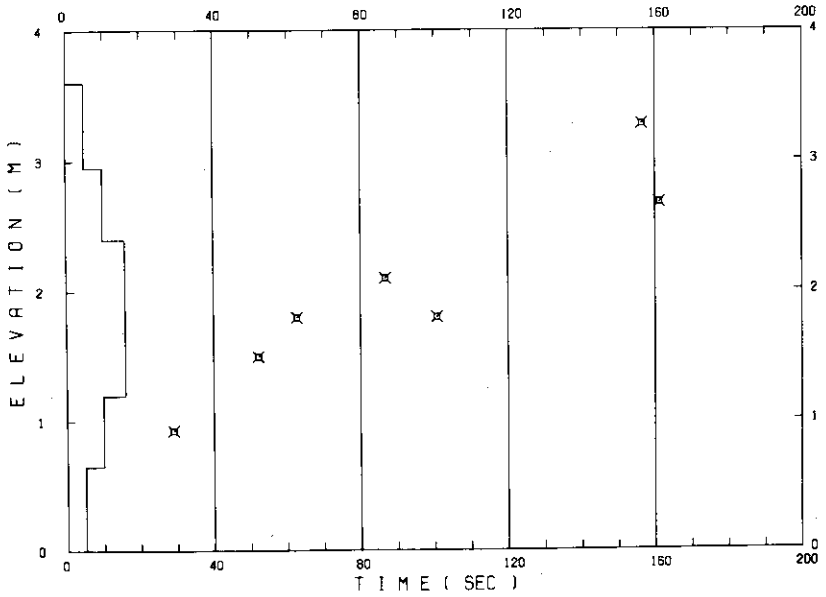
RUN CONDITIONS

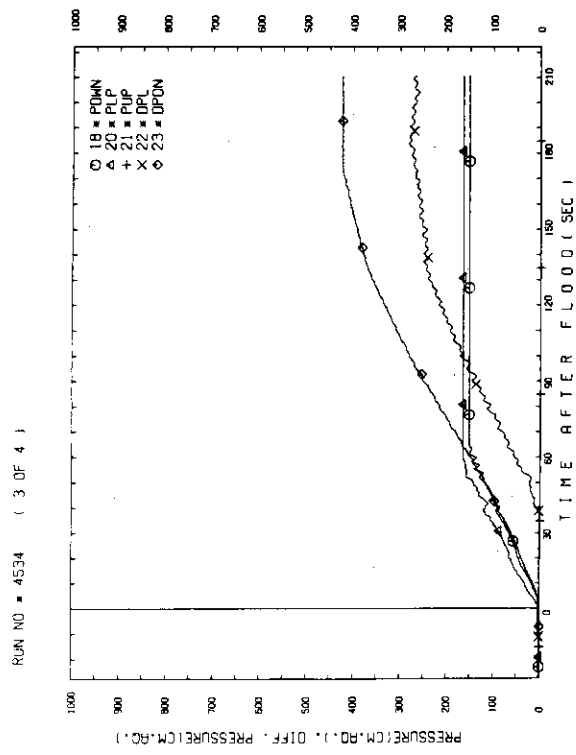
PEAK POWER	1.7	KW/M
SYSTEM PRESSURE	2	KG/CM**2A
INLET WATER TEMPERATURE	80	.C
INLET WATER VELOCITY	5	CM/SEC

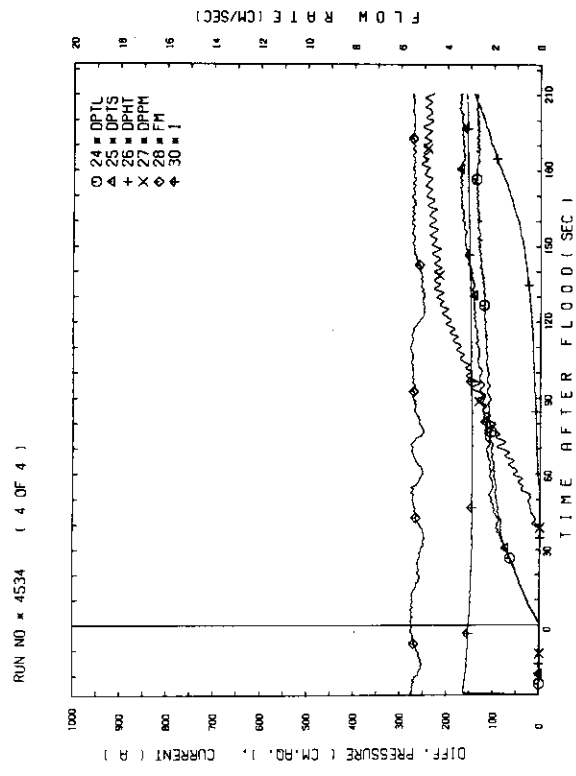
TEMPERATUR PROFILE

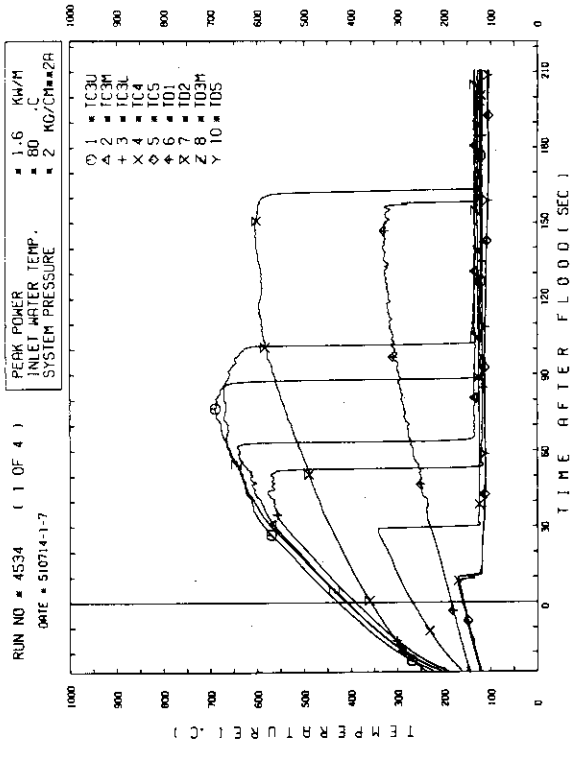
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
1	TC3U	426.	76.00	690.	86.75	655.
2	TC3M	406.	61.50	643.	62.75	633.
3	TC3L	389.	44.00	577.	52.25	559.
4	TC4	266.	28.50	342.	29.00	342.
6	TD1	185.	140.25	332.	156.50	329.
7	TD2	356.	148.50	606.	161.25	572.
8	TD3M	409.	73.00	673.	100.75	624.

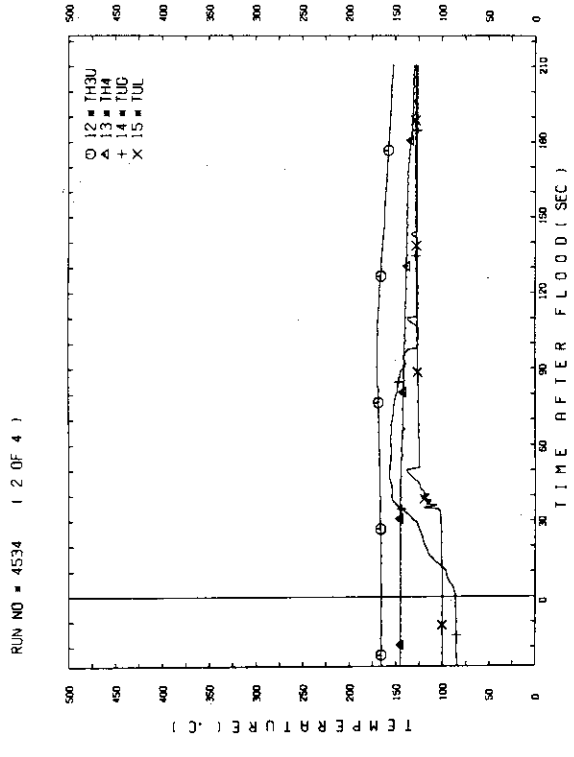
RUN NO. 4534 DATE * 510714-1-7

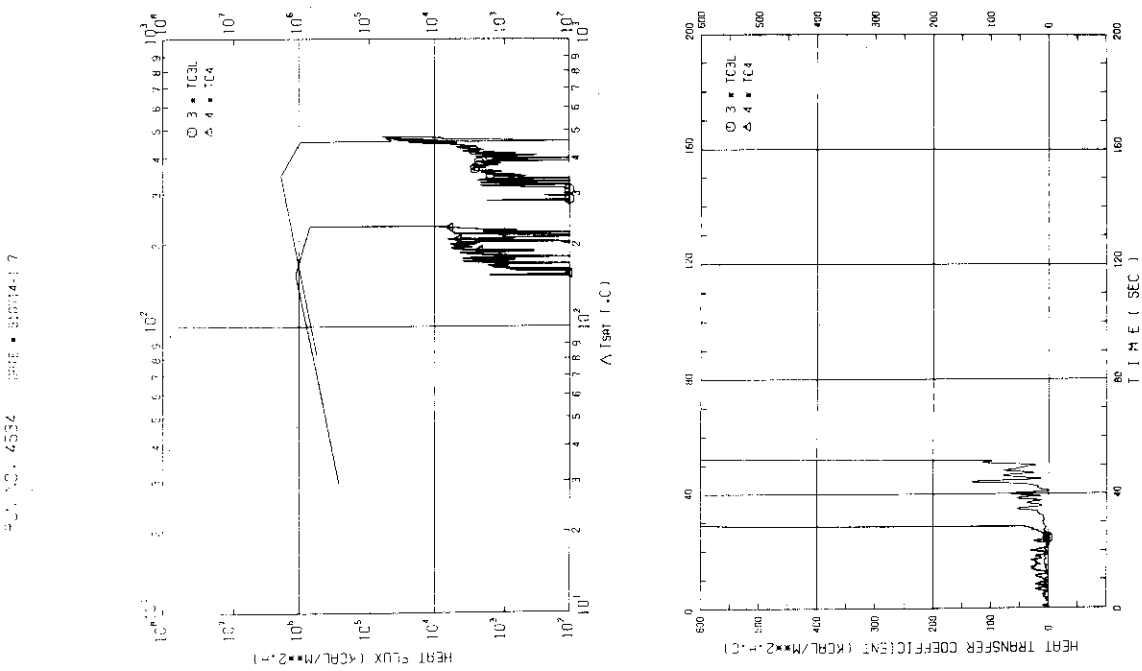


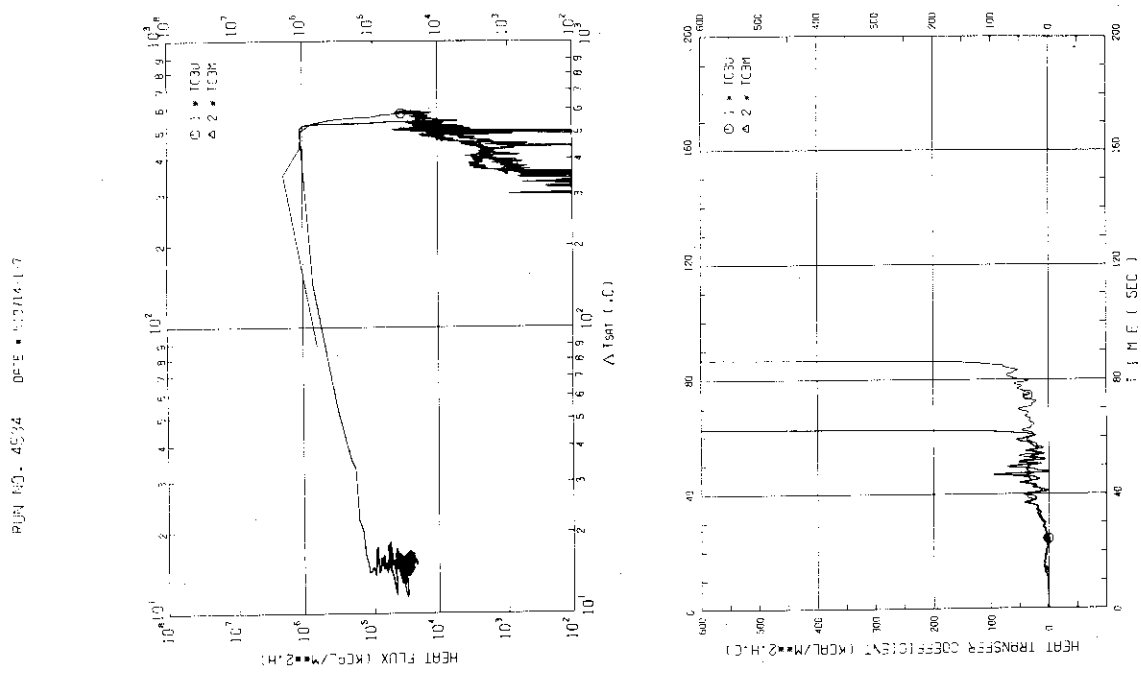

RUN NO = 4534 (3 OF 4)
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD(SEC)
18 = PDWN
20 = PLP
21 = PUP
22 = DPL
23 = DPDN

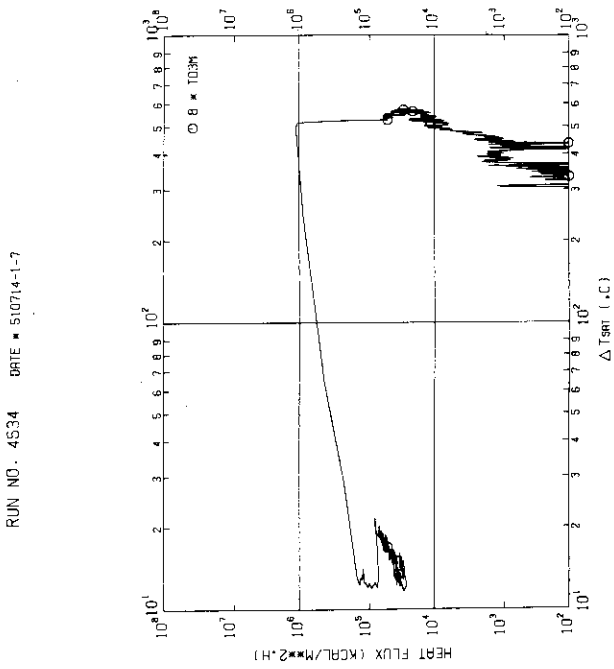

RUN NO = 4534 (4 OF 4)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
FLOW RATE (CM/SEC)
TIME AFTER FLOOD(SEC)
24 = DPTL
25 = DPTS
26 = DPHT
27 = DPPM
28 = FM
30 = I

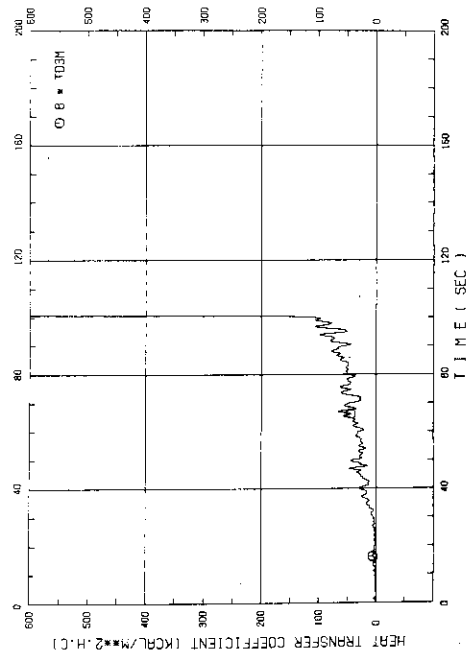

RUN NO = 4534 (1 OF 4)
DATE = 810714-1-7
PEAK POWER = 1.6 KW/M
INLET WATER TEMP. = 80 C
SYSTEM PRESSURE = 2 KG/CM**2A
1 = TC3U
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
7 = TD2
8 = TD3M
10 = TD5
TEMPERATURE (C)
TIME AFTER FLOOD(SEC)

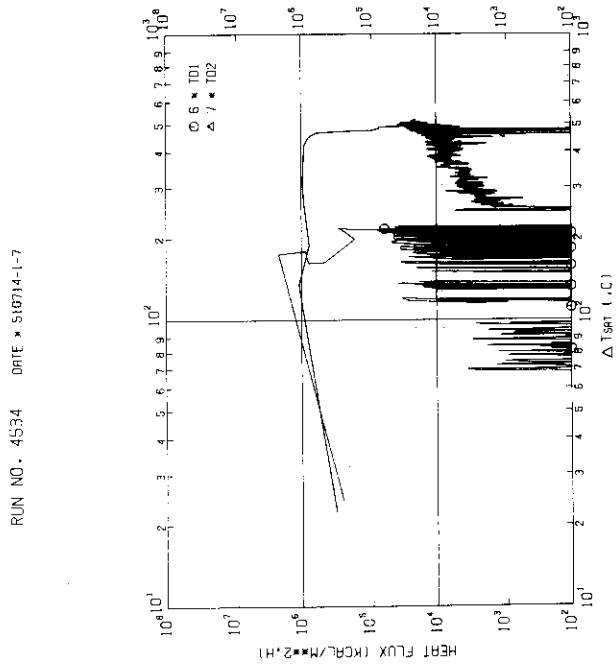

RUN NO = 4534 (2 OF 4)
12 = TH3U
13 = TH4
14 = TUC
15 = TUL
TEMPERATURE (C)
TIME AFTER FLOOD(SEC)

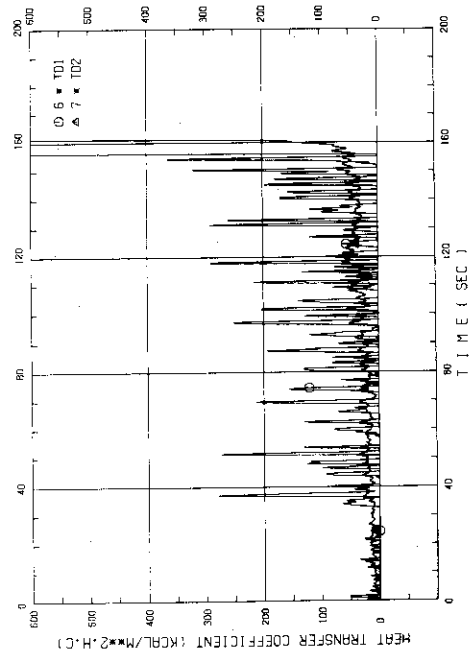

HEAT FLUX (KCAL/M**2.H)
ΔTsat (°C)
○ 3 ■ TC3L
△ 4 ■ TC4
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


HEAT FLUX (KCAL/M**2.H)
ΔTsat (°C)
○ 1 ■ TC3U
△ 2 ■ TC3M
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4534 DATE = 510714-1-7
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
θ 8 = TD3M


HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)
θ 8 = TD3M


RUN NO. 4534 DATE = 510714-1-7
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
θ 6 = TD1
Δ 7 = TD2


HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)
θ 6 = TD1
Δ 7 = TD2

****
* *
* RUN NO. 4535 *
* *
****

(DATE * 510714 - 1 -20)

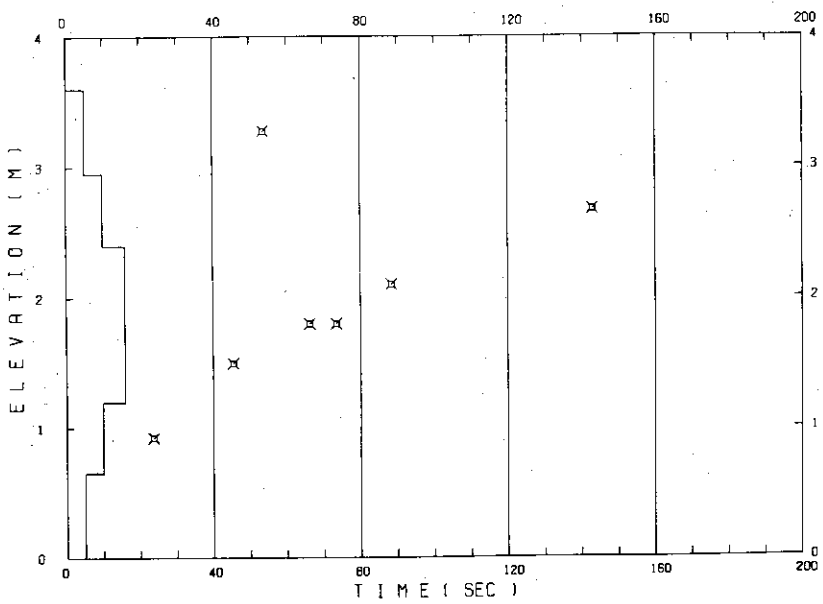
RUN CONDITIONS

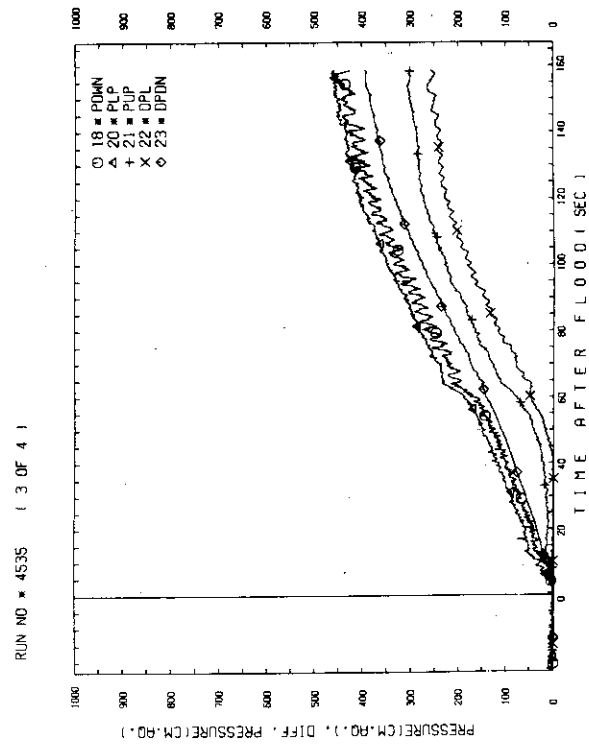
PEAK POWER	1.7	KW/M
SYSTEM PRESSURE	2	KG/CM**2A
INLET WATER TEMPERATURE	100	.C
INLET WATER VELOCITY	5	CM/SEC

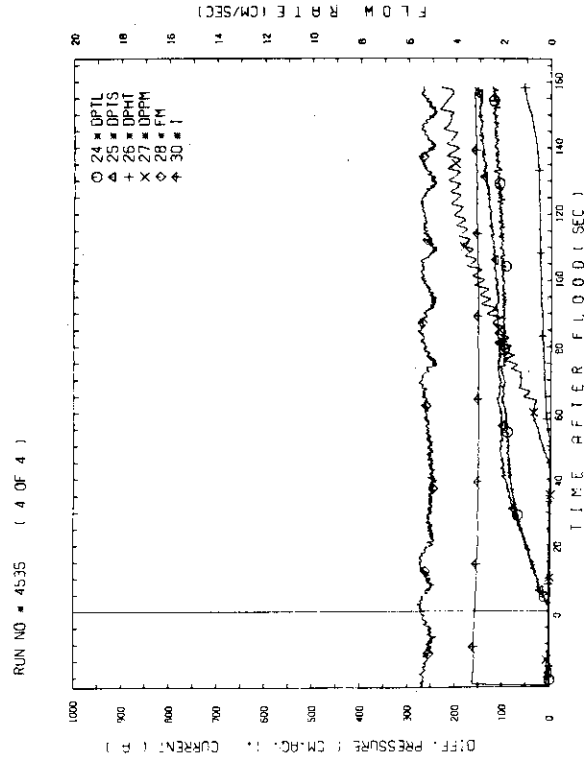
TEMPERATUR PROFILE

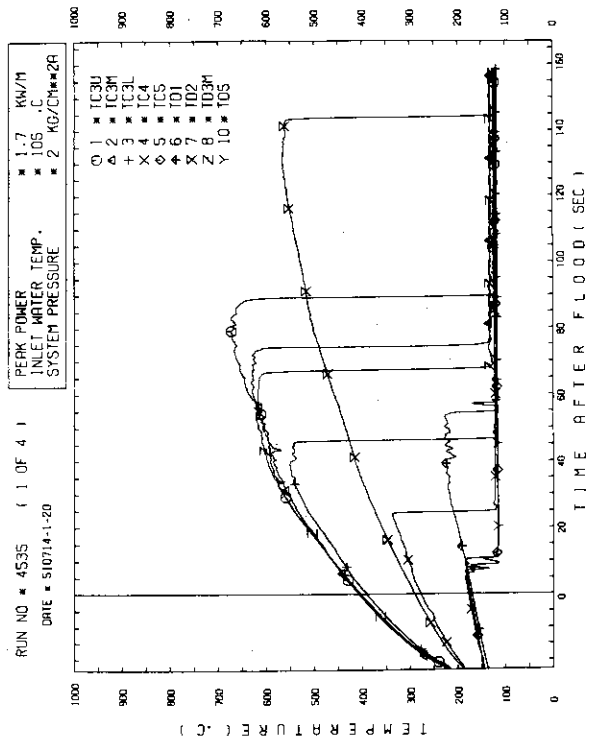
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
1	TC3U	405.	83.00	673.	88.50	644.
2	TC3M	407.	64.00	631.	73.50	613.
3	TC3L	391.	39.00	551.	45.50	542.
4	TC4	278.	23.50	337.	23.75	336.
6	TD1	170.	50.50	227.	53.75	224.
7	TD2	292.	130.50	566.	143.00	556.
8	TD3M	404.	52.75	621.	66.25	608.

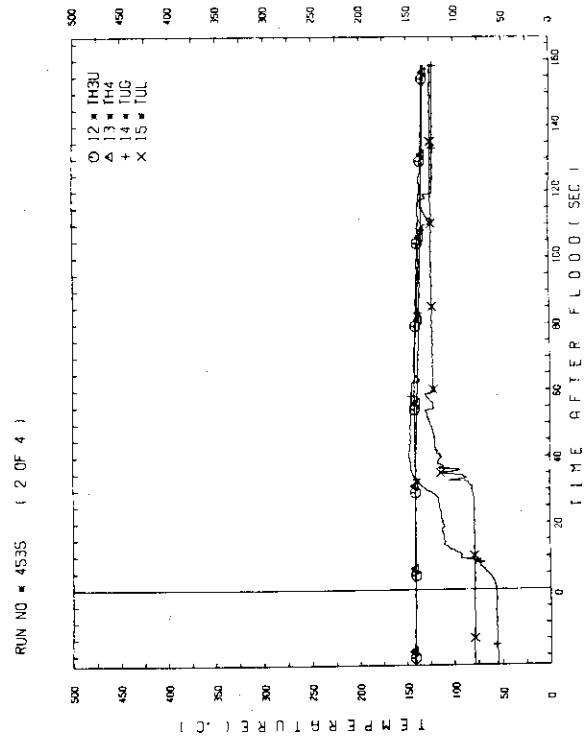
RUN NO. 4535 DATE * 510714-1-20

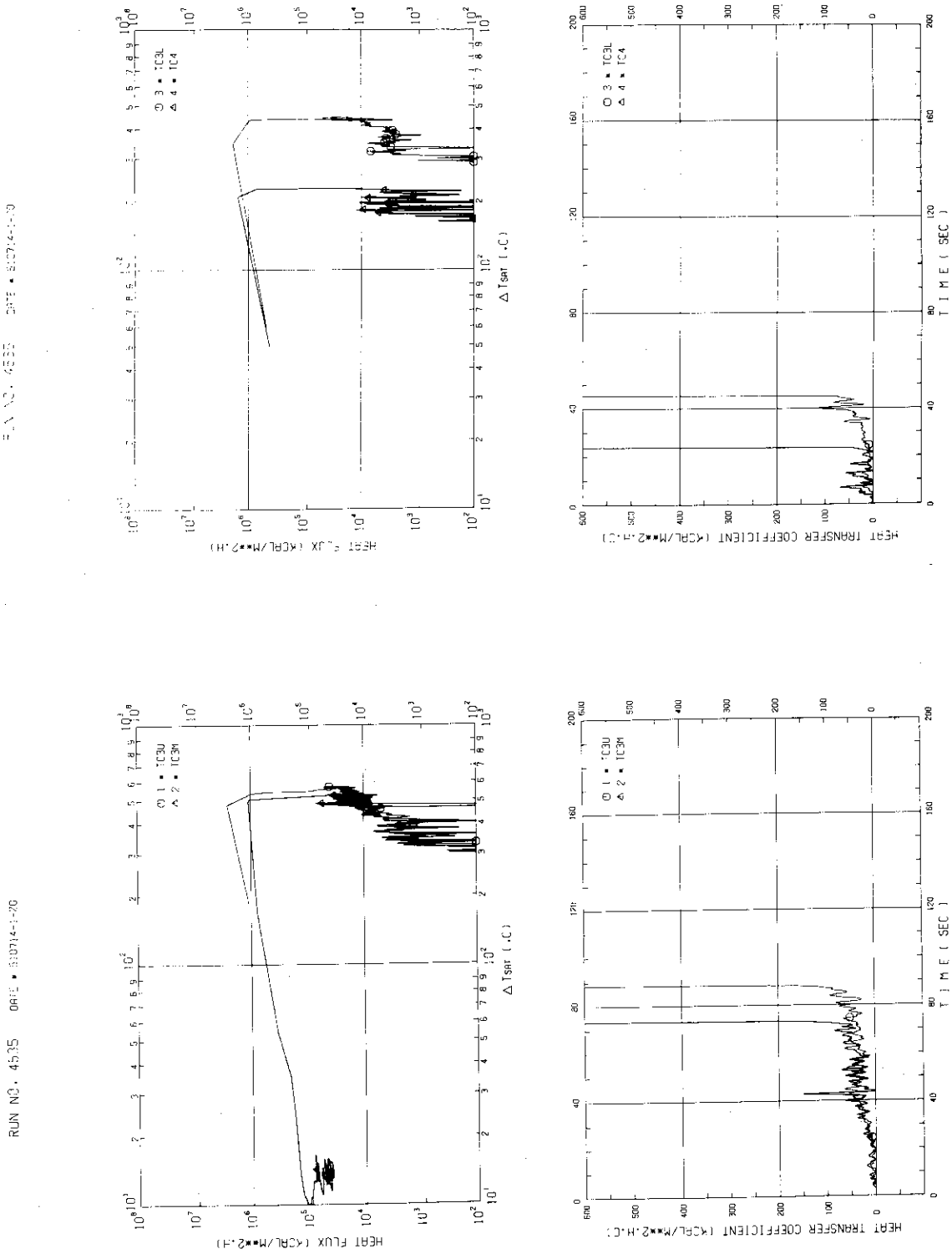


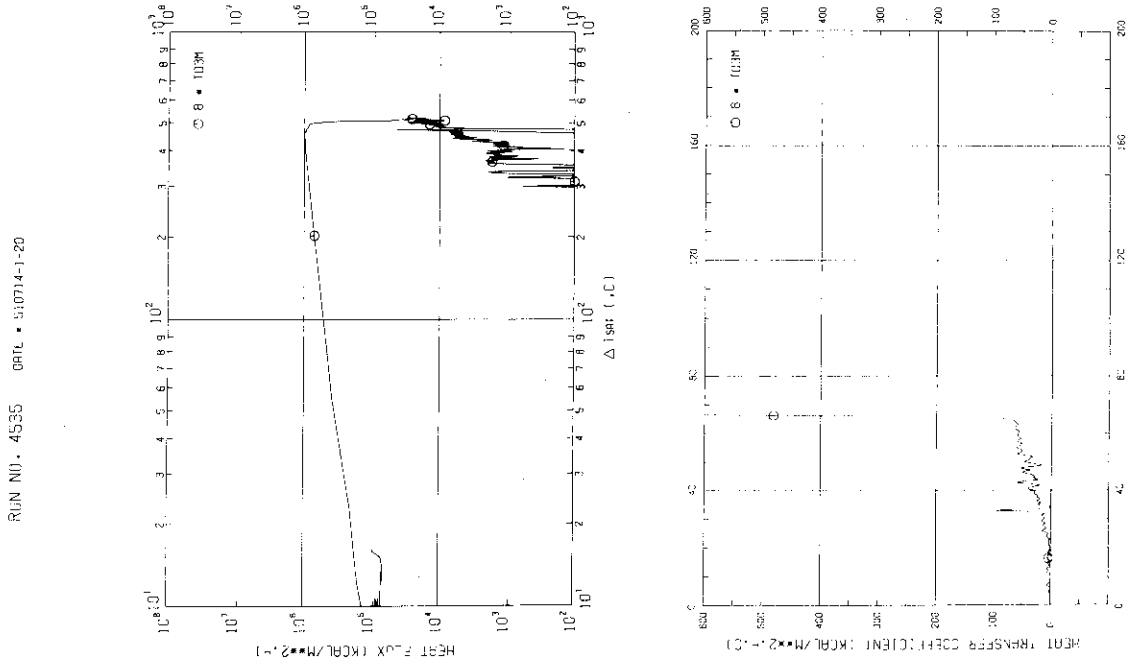

RUN NO = 4535 (3 OF 4)
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD(SEC)
18 = PDWN
20 = PLP
21 = PUP
22 = DPL
23 = DPDN

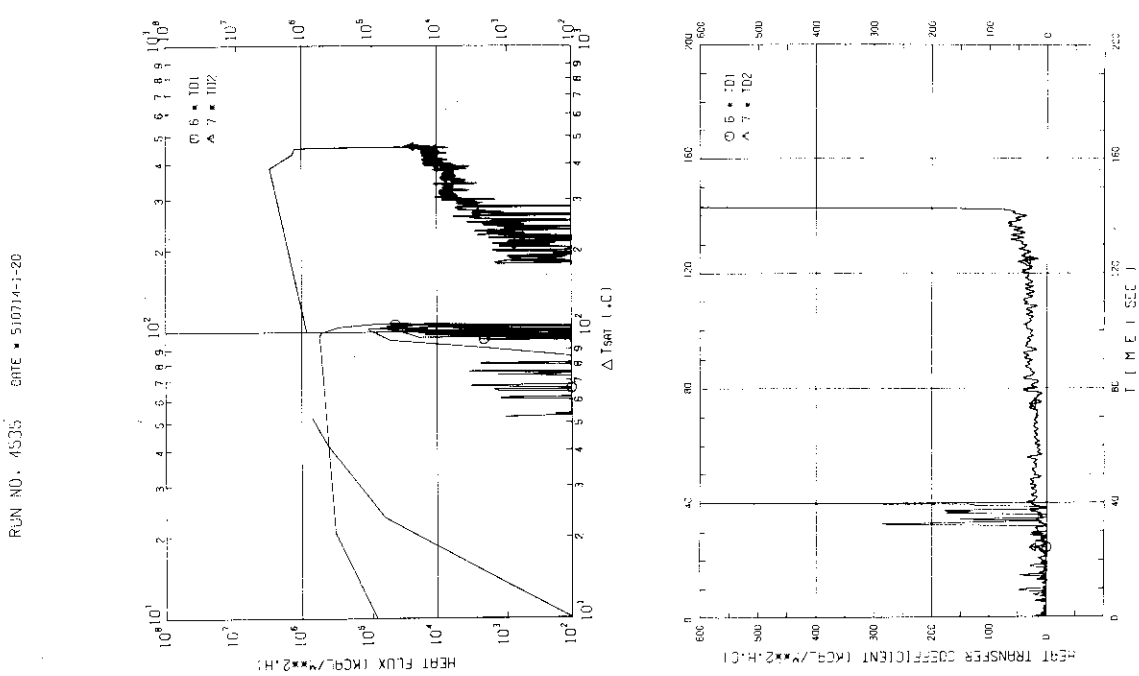

RUN NO = 4535 (4 OF 4)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
FLOW RATE (CM/SEC)
TIME AFTER FLOOD(SEC)
24 = DPTL
25 = DPIS
26 = DPHT
27 = DPPM
28 = FM
30 = I


RUN NO = 4535 (1 OF 4)
DATE = 810714-1-20
PEAK POWER * 1.7 KW/M
INLET WATER TEMP. * 105 .C
SYSTEM PRESSURE * 2 KG/CM**2A
1 = TC3U
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
7 = TD2
8 = TD3M
10 = TD5
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO = 4535 (2 OF 4)
12 = TH3U
13 = TH4
14 = TUG
15 = TUL
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO. 4535
○ 3 ▪ TC3L
△ 4 ▪ TC4
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)
○ 1 ▪ TC3U
△ 2 ▪ TC3M


RUN NO. 4535 DATE = 910714-1-20
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4535 DATE = 910714-1-20
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

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* *
* RUN NO. 4536 *
* *
****

(DATE * 510714 - 1 -22)

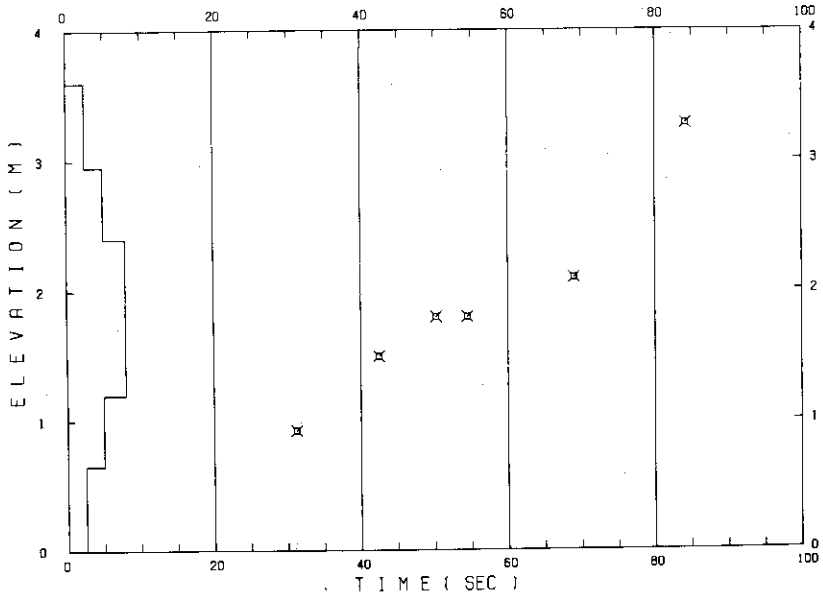
RUN CONDITIONS

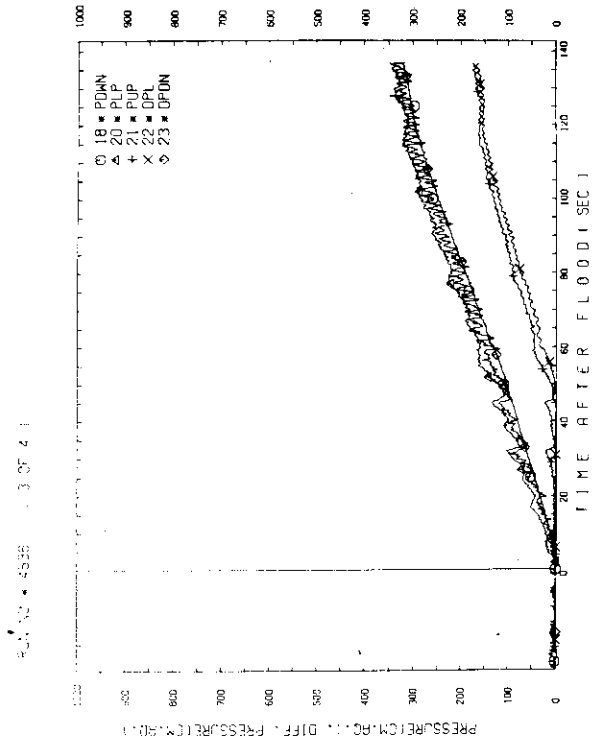
PEAK POWER	1.7	Kw/M
SYSTEM PRESSURE	4	KG/CM**2A
INLET WATER TEMPERATURE	100	.C
INLET WATER VELOCITY	5	CM/SEC

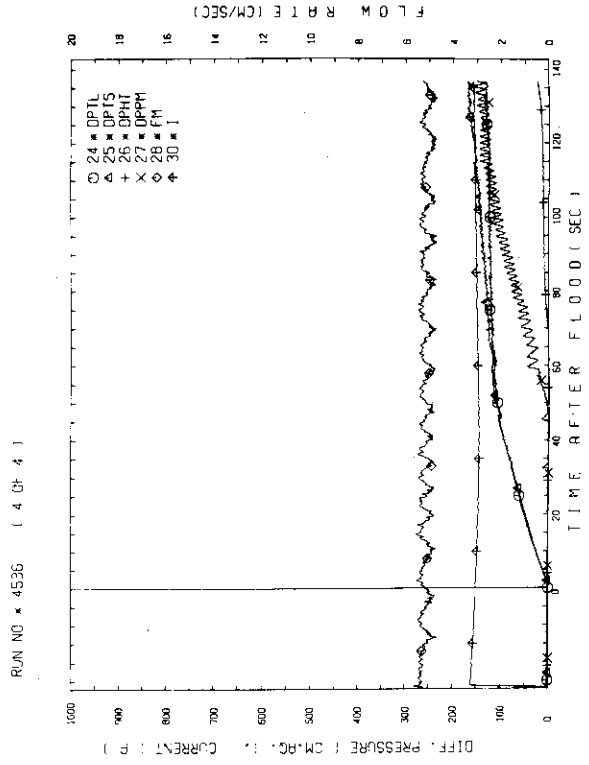
TEMPERATUR PROFILE

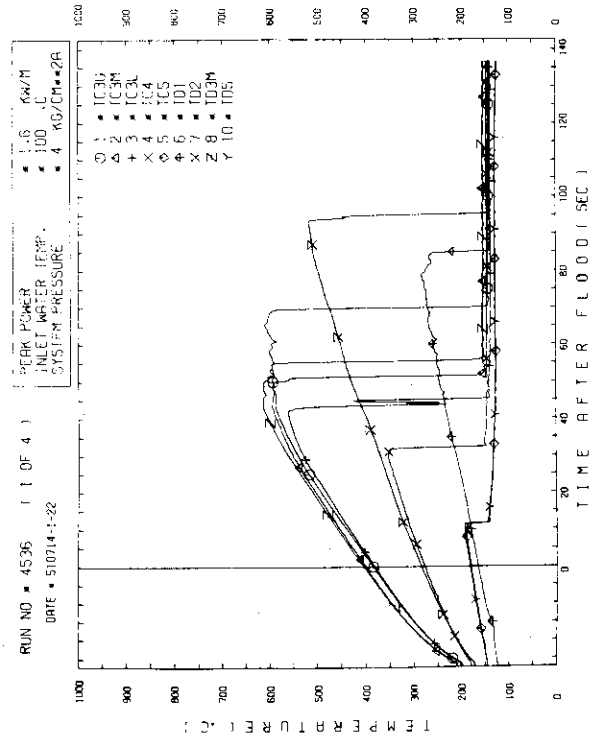
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
1	TC3U	384.	65.25	611.	69.00	595.
2	TC3M	399.	43.50	596.	50.25	567.
3	TC3L	382.	41.50	562.	42.50	551.
4	TC4	276.	29.50	353.	31.25	351.
6	TD1	163.	78.75	282.	84.25	263.
8	TD3M	404.	45.00	614.	54.50	596.

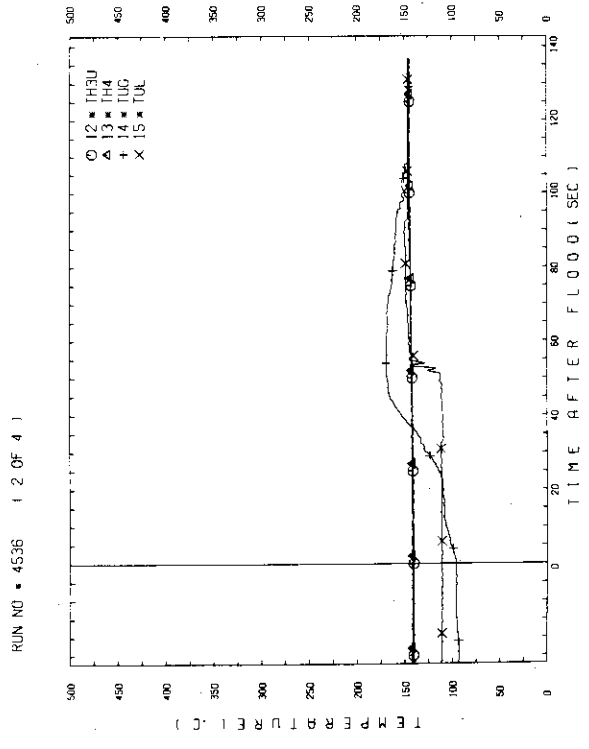
RUN NO. 4536 DATE * 510714-1-22

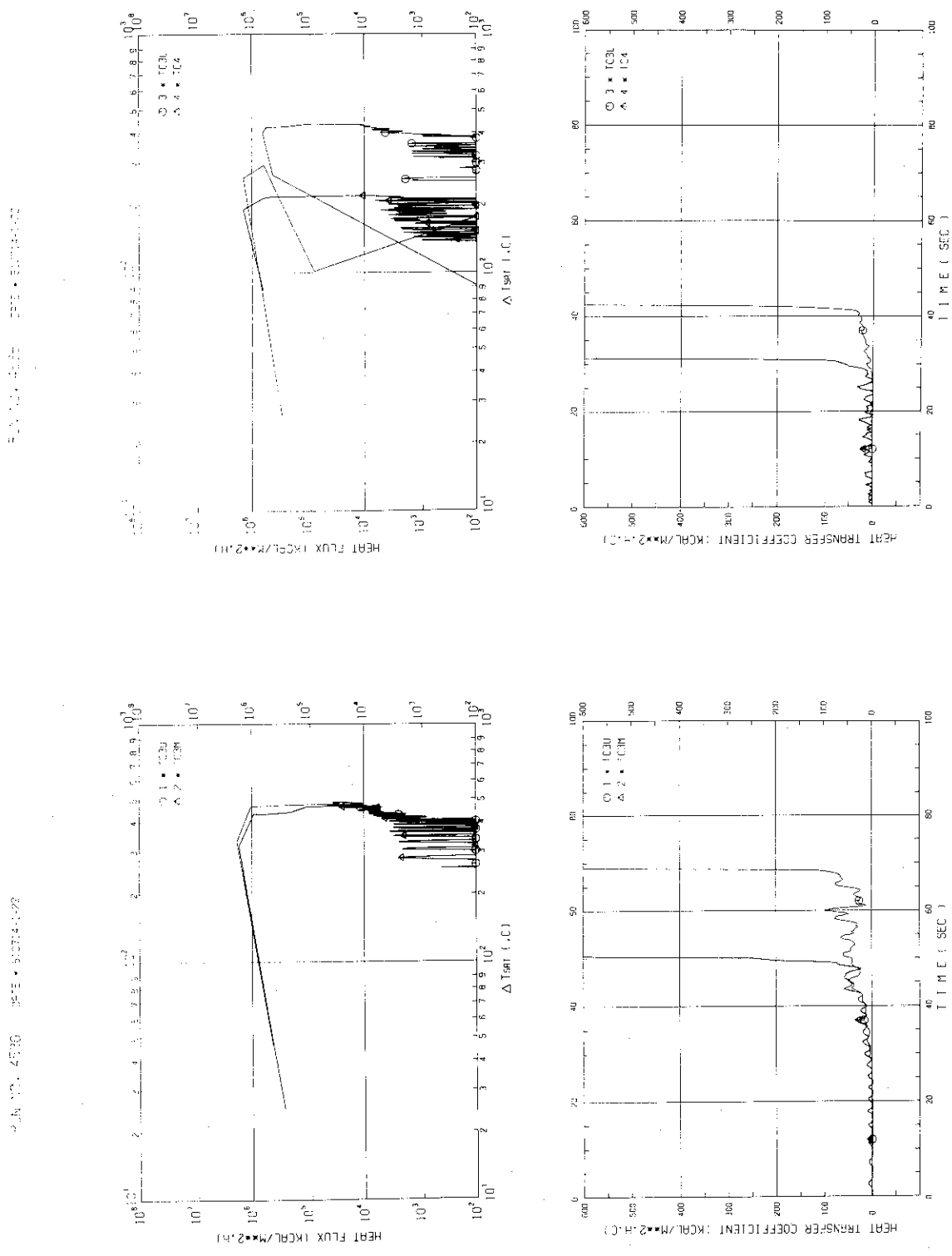


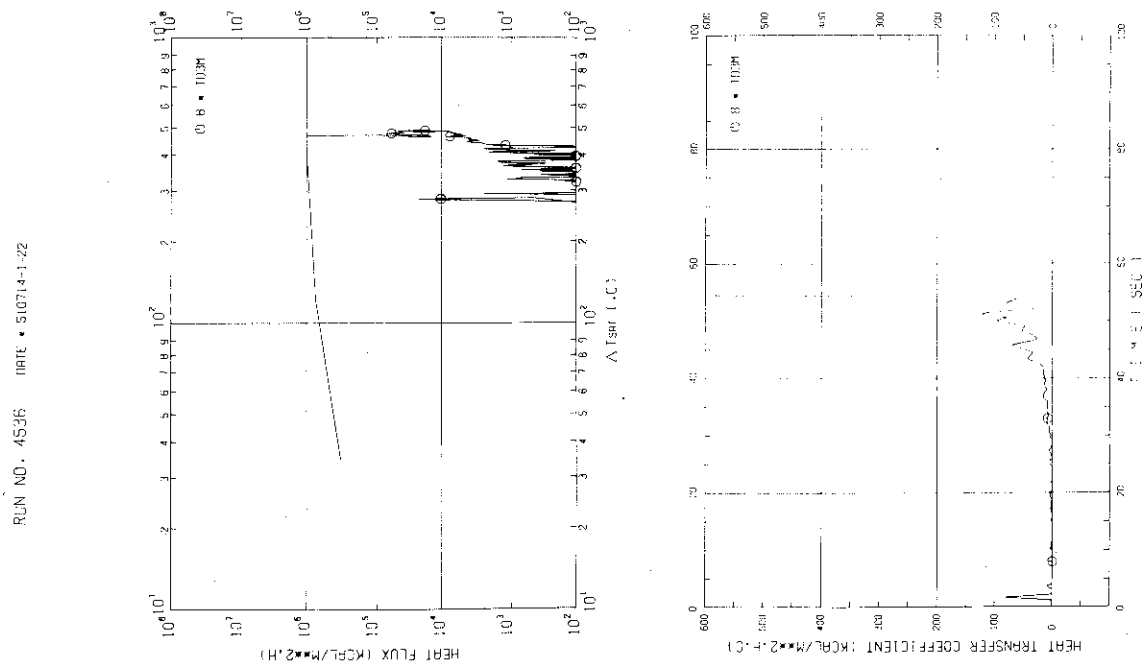

18 * PDWN
20 * PLP
21 * PUP
22 * DPL
23 * DPDN
TIME AFTER FLOOD(SEC)


24 * DPTL
25 * DPTS
26 * DPHT
27 * DPPM
28 * FM
30 * I
FLOW RATE (CM/SEC)
TIME AFTER FLOOD(SEC)


RUN NO = 4536 (1 OF 4)
DATE = 510714-1-22
PEAK POWER = 1.6 KW/M
INLET WATER TEMP. = 100 C
SYSTEM PRESSURE = 4 KG/CM**2A
1 * TC3U
2 * TC3M
3 * TC3L
4 * TC4
5 * TC5
6 * TD1
7 * TD2
8 * TD3M
10 * TD5
TEMPERATURE (C)
TIME AFTER FLOOD(SEC)


RUN NO = 4536 (2 OF 4)
12 * TH3U
13 * TH4
14 * TUG
15 * TUL
TEMPERATURE (C)
TIME AFTER FLOOD(SEC)




RUN NO. 4536 DATE = 910714-1-22
HEAT FLUX (KCAL/M**2.H)
ΔTsat (°C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.°C)
TIME (SEC)

****
* *
* RUN NO. 4537 *
* *
****

(DATE = 810714 - 1 -15)

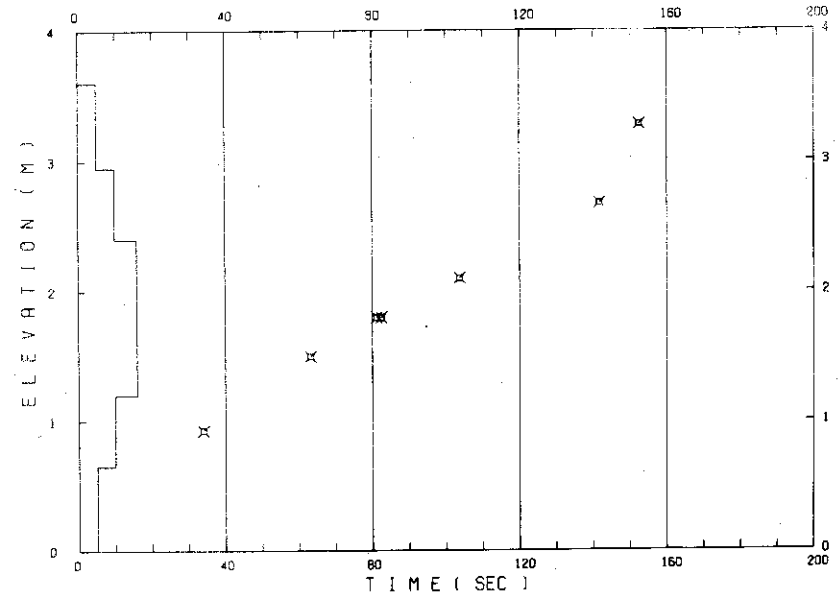
RUN CONDITIONS

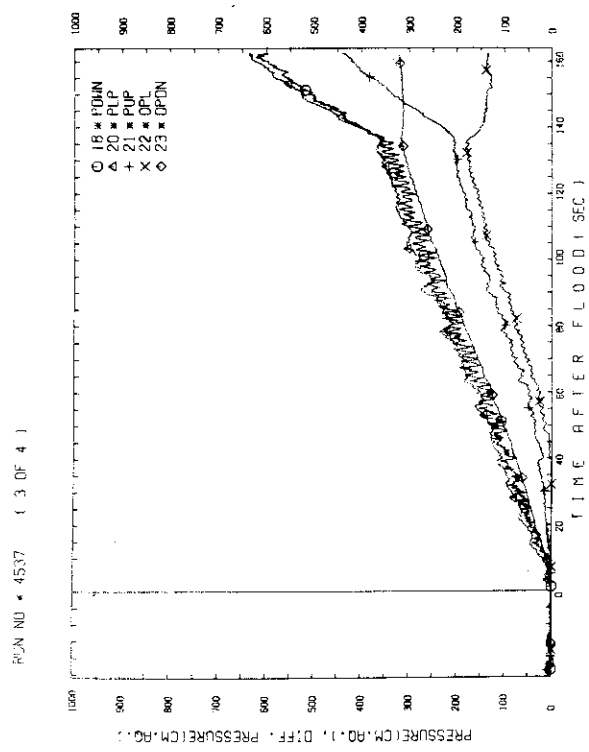
PEAK POWER	1.7	KW/M
SYSTEM PRESSURE	4	KG/CM**2A
INLET WATER TEMPERATURE	80	.C
INLET WATER VELOCITY	5	CM/SEC

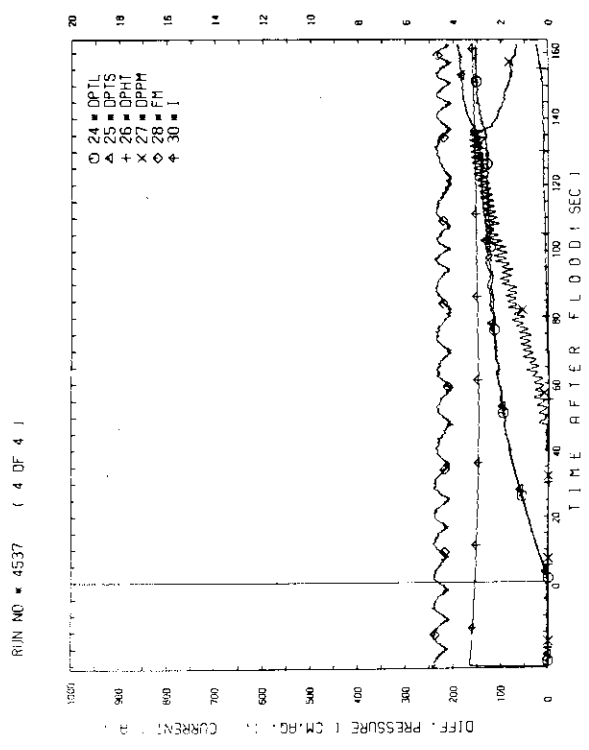
TEMPERATUR PROFILE

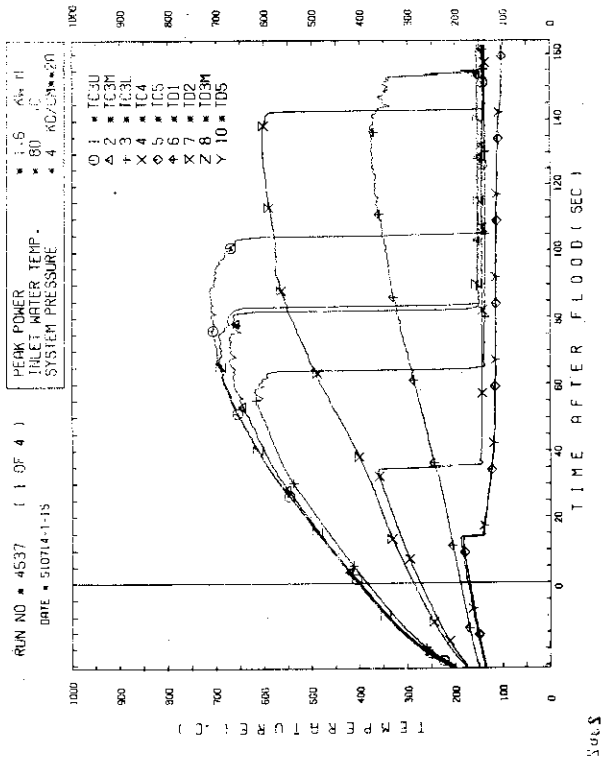
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
1	TC3U	399.	88.25	713.	103.75	652.
2	TC3M	402.	73.75	672.	81.25	660.
3	TC3L	384.	57.75	619.	63.25	594.
4	TC4	272.	33.75	360.	34.00	360.
6	TD1	189.	137.25	578.	152.50	343.
7	TD2	288.	133.00	604.	141.75	592.
8	TD3M	404.	75.00	694.	82.50	6[illegible].

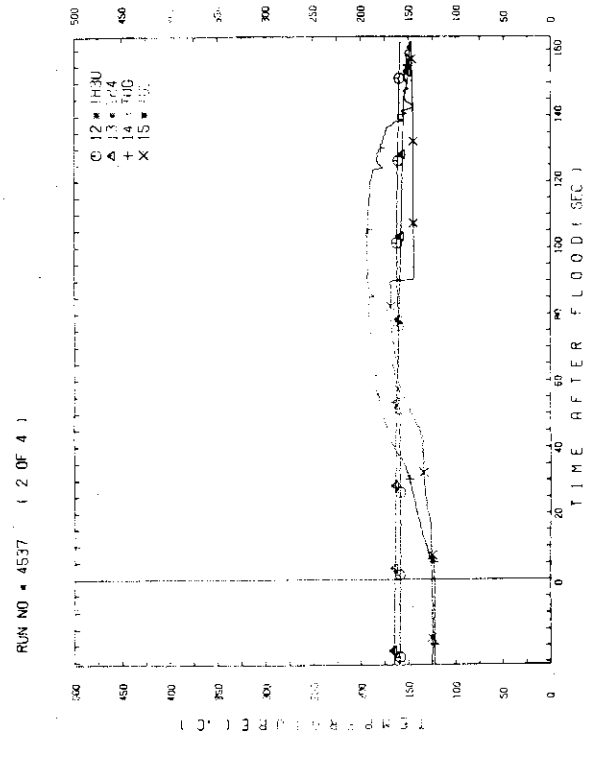
RUN NO. 4537 DATE = 810714-1-15

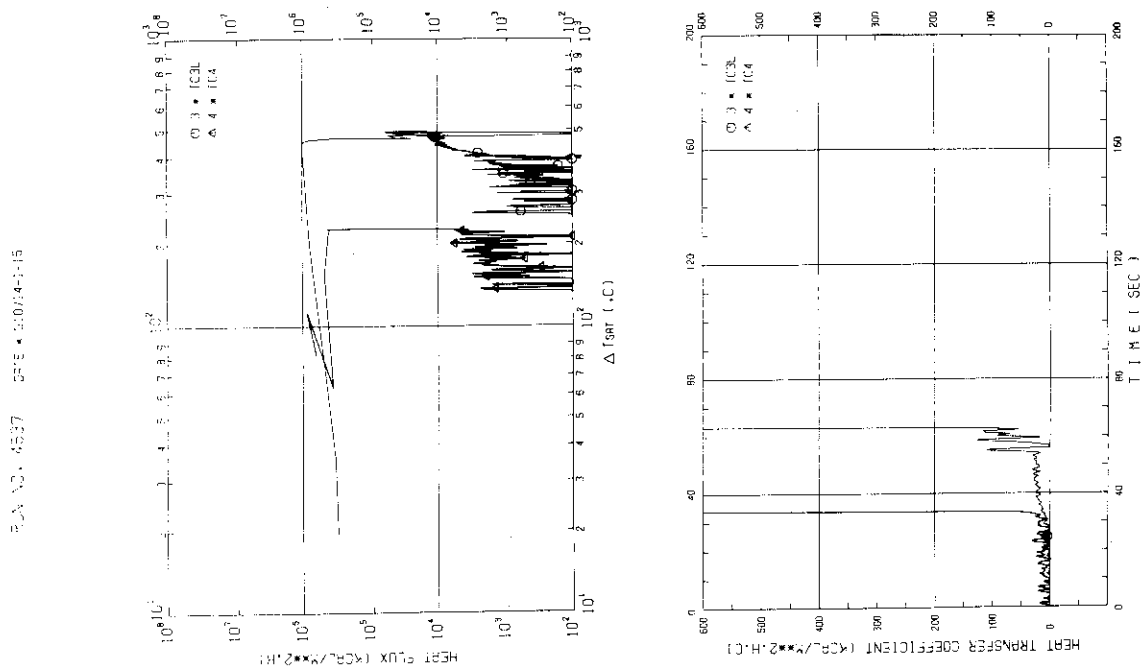


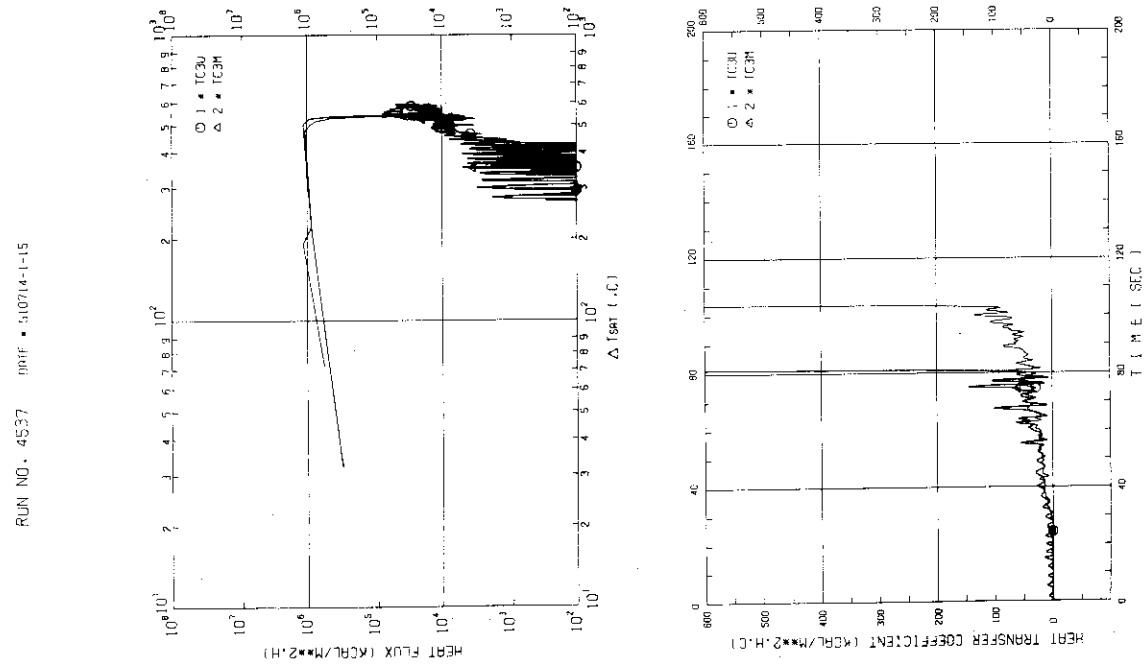

RUN NO = 4537 (3 OF 4)
TIME AFTER FLOOD(SEC)
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
16 = TDWN
20 = PLP
21 = PUP
22 = DPL
23 = DPDN

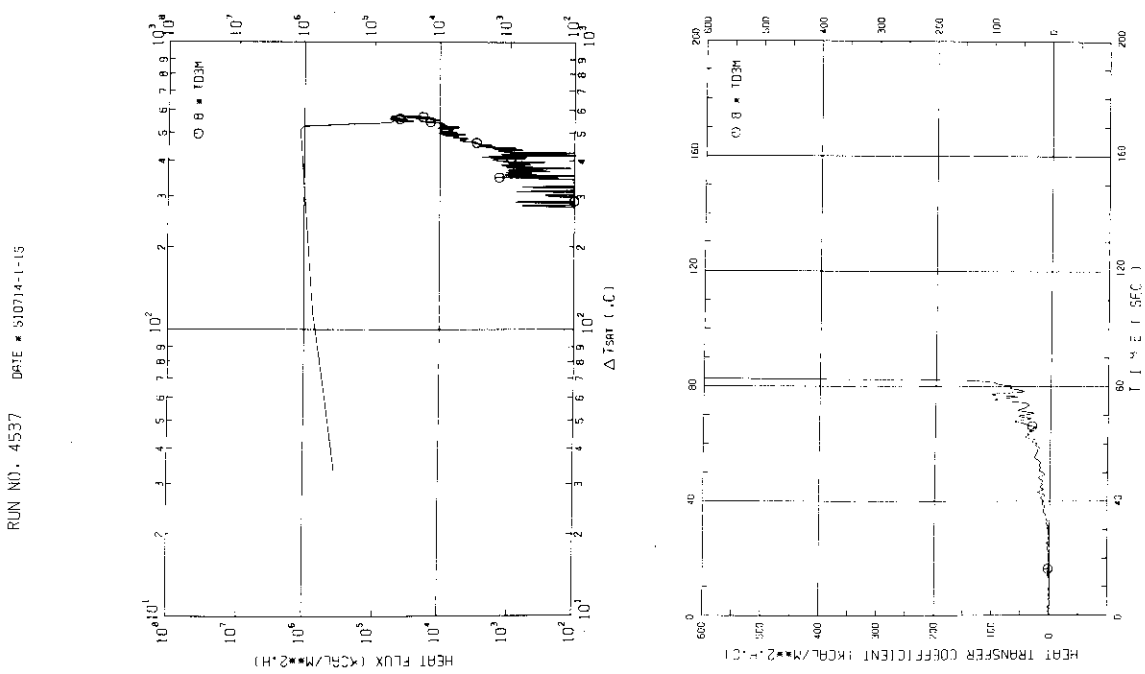

RUN NO = 4537 (4 OF 4)
TIME AFTER FLOOD(SEC)
DIFF. PRESSURE (CM.AQ.)
FLOW RATE (CM/SEC)
24 = DPTL
25 = DPTS
26 = DPHT
27 = DPPM
28 = FM
30 = I

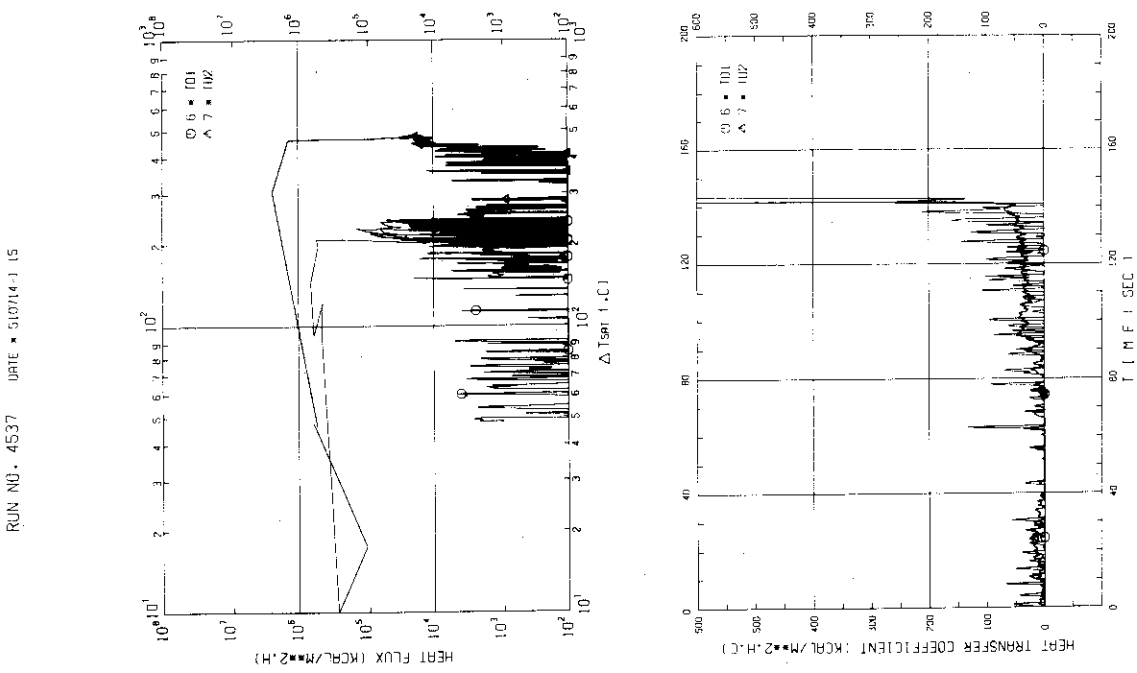

RUN NO = 4537 (1 OF 4)
DATE = 910714-1-1S
PEAK POWER
INLET WATER TEMP.
SYSTEM PRESSURE
TIME AFTER FLOOD(SEC)
TEMPERATURE(C)
1 = TE3U
2 = TE3M
3 = TE3L
4 = TC4
5 = TC5
6 = TD1
7 = TD2
8 = TD3M
10 = TD5


RUN NO = 4537 (2 OF 4)
TIME AFTER FLOOD(SEC)
12 = TH3U


RUN NO. 4537
Δ 4 * TC4
HEAT FLUX (KCAL/M**2.H)
Δ TSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4537
Δ 2 * TC3M
HEAT FLUX (KCAL/M**2.H)
Δ TSAT (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4537 DATE = 810714-1-15
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4537 DATE = 810714-1-15
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

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* *
* RUN NO. 4538 *
* *
****

(DATE * 510714 - 1 -23)

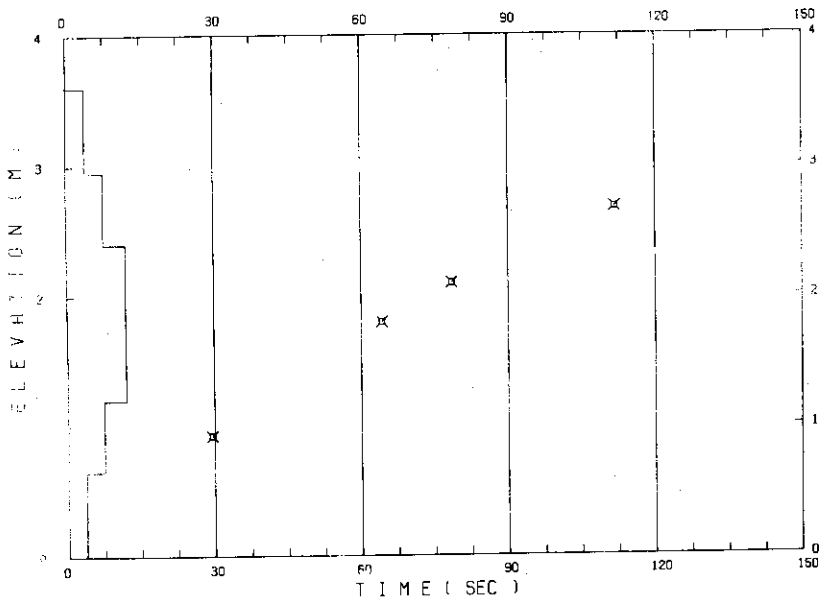
RUN CONDITIONS

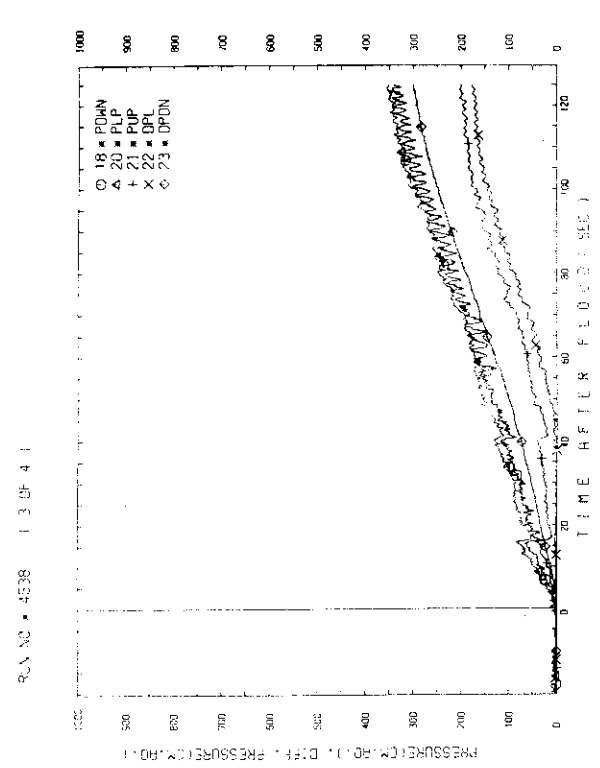
PEAK POWER	1.7	KW/M
SYSTEM PRESSURE	4	KG/CM**2A
INLET WATER TEMPERATURE	120	.C
INLET WATER VELOCITY	5	CM/SEC

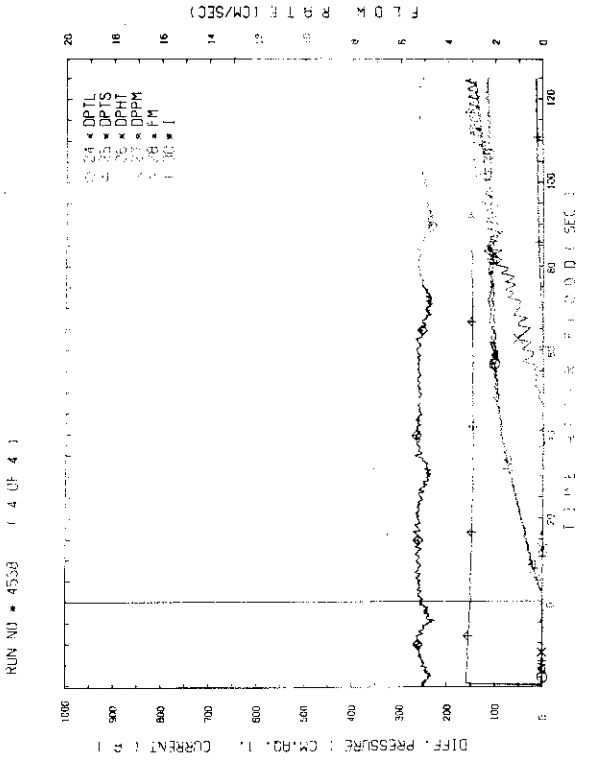
TEMPERATUR PROFILE

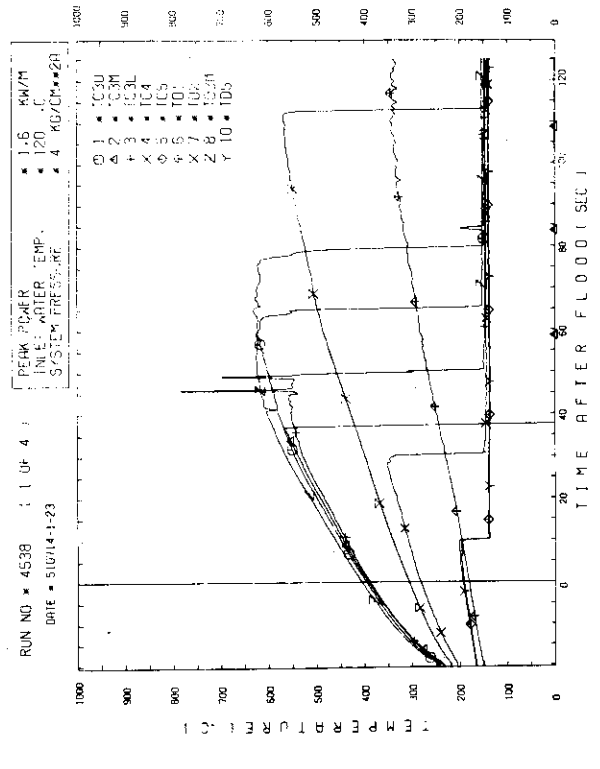
CH.NO.	SYMBOL	INITIAL TEMP, (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP, (.C)	QUENCH TIME (SEC)	QUENCH TEMP, (.C)
1	TC3J	396.	64.75	631.	78.50	545.
4	TC4	283.	27.50	351.	29.50	347.
6	TD1	181.	110.00	345.	0.0	0.
7	TD2	307.	111.00	569.	111.75	567.
8	TD3M	406.	53.75	626.	64.25	551.

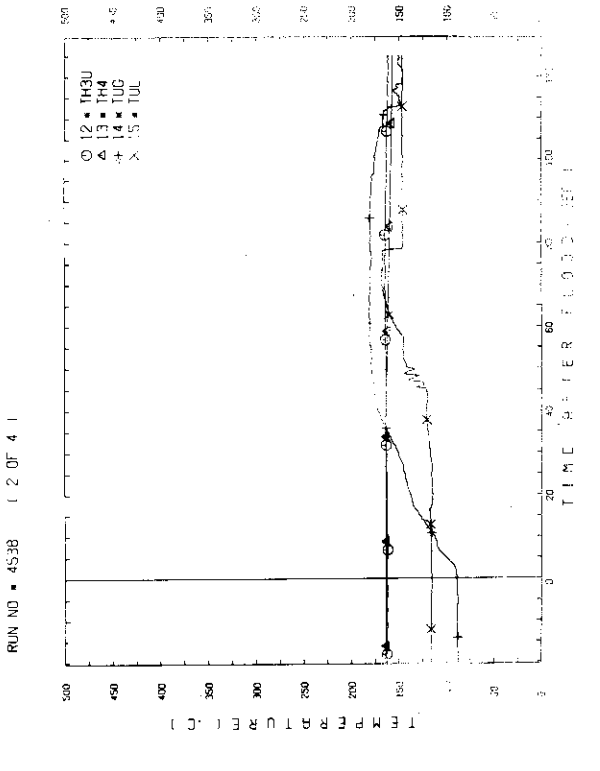
RUN NO. 4538 DATE * 510714-1-23

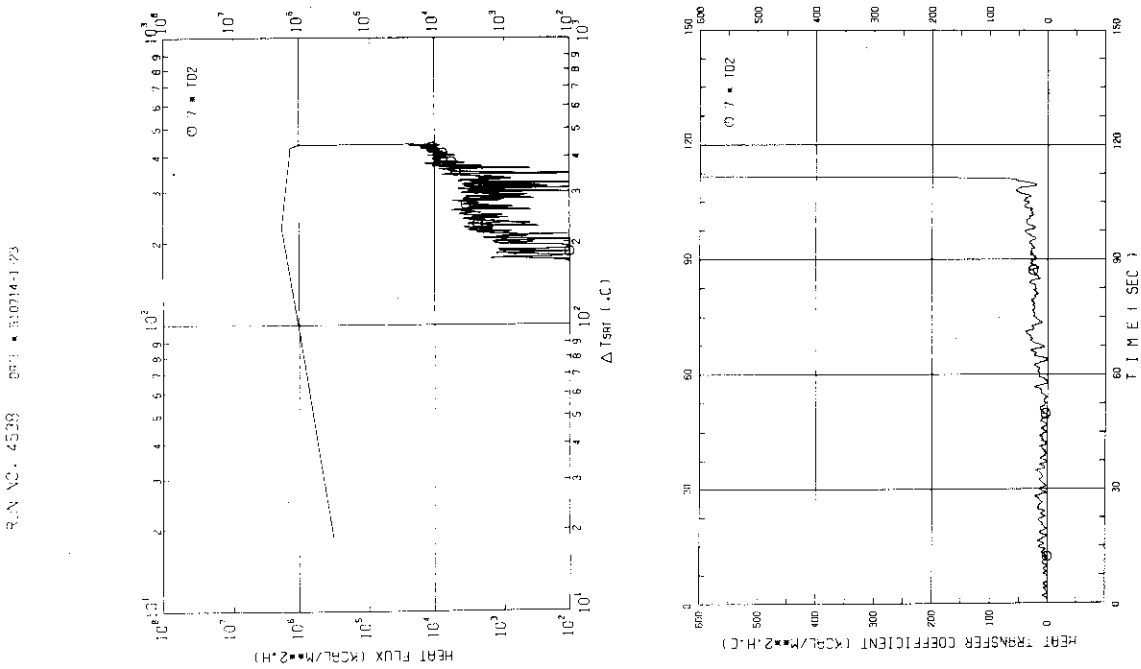


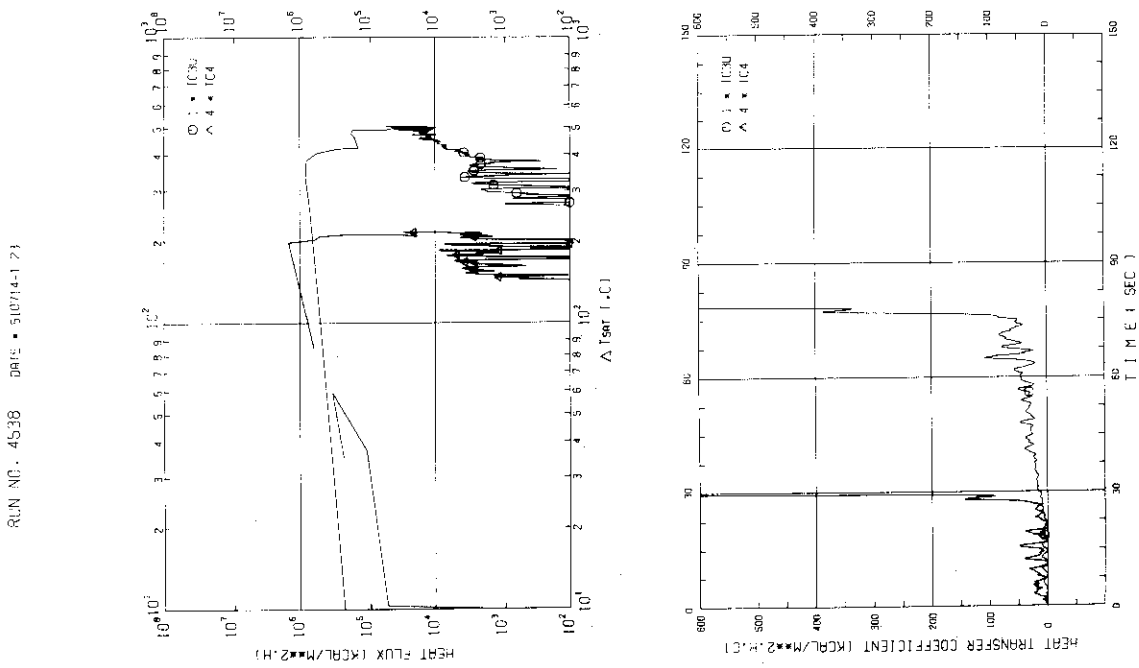

RUN NO = 4538 (3 OF 4)
18 = PDWN
20 = PLP
21 = PUP
22 = DPL
23 = DPDN
TIME AFTER FLOOD(SEC)

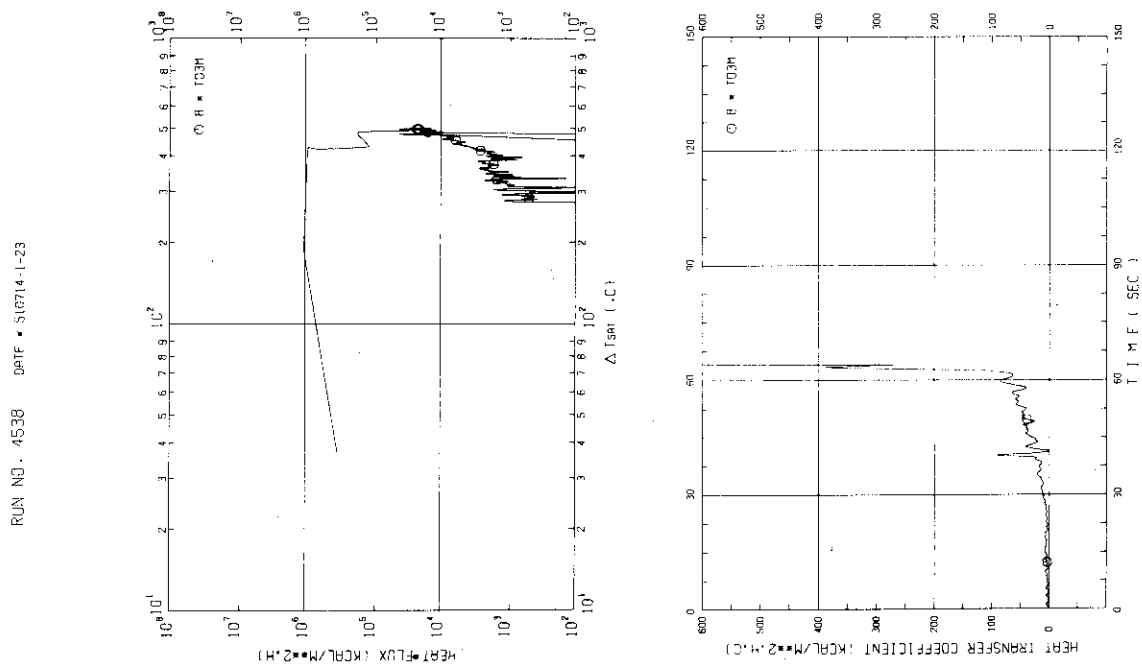

RUN NO = 4538 (4 OF 4)
24 = DPTL
25 = DPTS
26 = DPHT
27 = DPPM
28 = FM
30 = I
FLOW RATE (CM/SEC)
TIME AFTER FLOOD(SEC)


RUN NO = 4538 (1 OF 4)
DATE = 81/11-1-23
PEAK POWER = 1.6 KW/M
INLET WATER TEMP. = 120 C
SYSTEM PRESS. = 4 KG/CM**2A
1 = TC3U
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TC6
7 = TC7
8 = TC8
10 = TD5
TEMPERATURE (C)
TIME AFTER FLOOD(SEC)


RUN NO = 4538 (2 OF 4)
12 = TH3U
13 = TH4
14 = TUC
15 = TUL
TEMPERATURE (C)
TIME AFTER FLOOD(SEC)


RUN NO. 4538
HEAT FLUX (KCAL/M**2.H)
ΔTsat (°C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.°C)
TIME (SEC)


RUN NO. 4538
HEAT FLUX (KCAL/M**2.H)
ΔTsat (°C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.°C)
TIME (SEC)


RUN NO. 4538 DATE = 810714-1-23
HEAT FLUX (KCAL/M**2.H)
ΔTsat (°C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

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* *
* RUN NO. 4539 *
* *
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(DATE * 510714 - 1 -11)

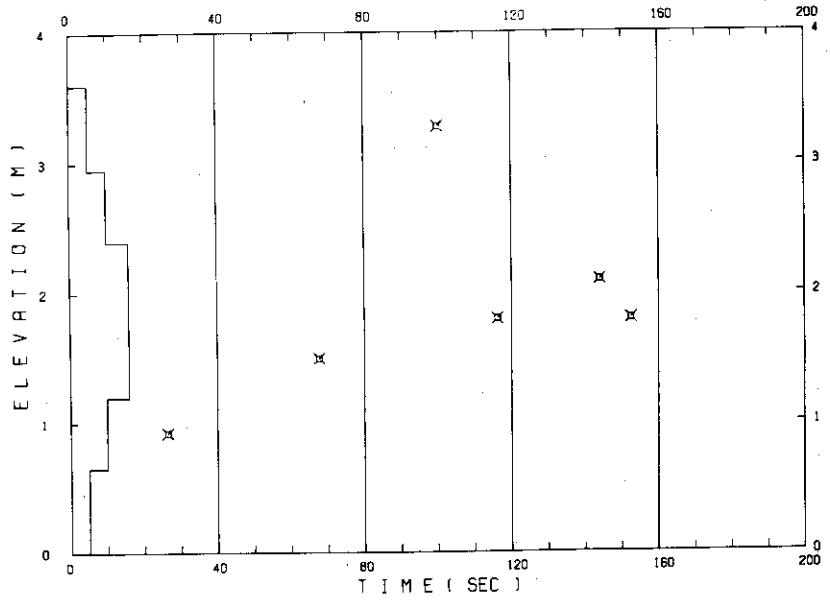
RUN CONDITIONS

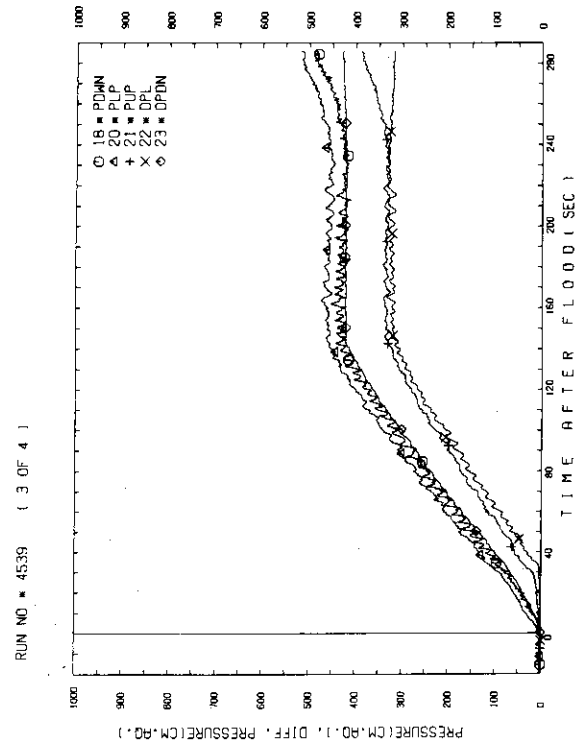
PEAK POWER	2.2	KW/M
SYSTEM PRESSURE	2	KG/CM**2A
INLET WATER TEMPERATURE	80	.C
INLET WATER VELOCITY	5	CM/SEC

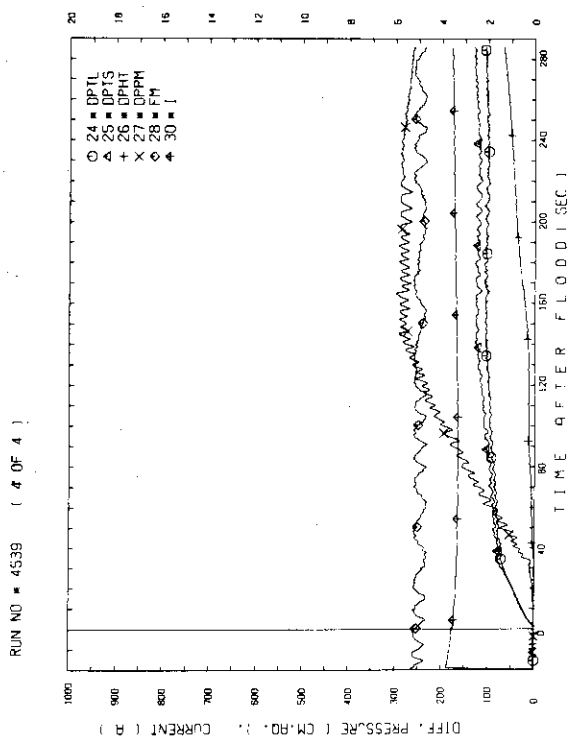
TEMPERATUR PROFILE

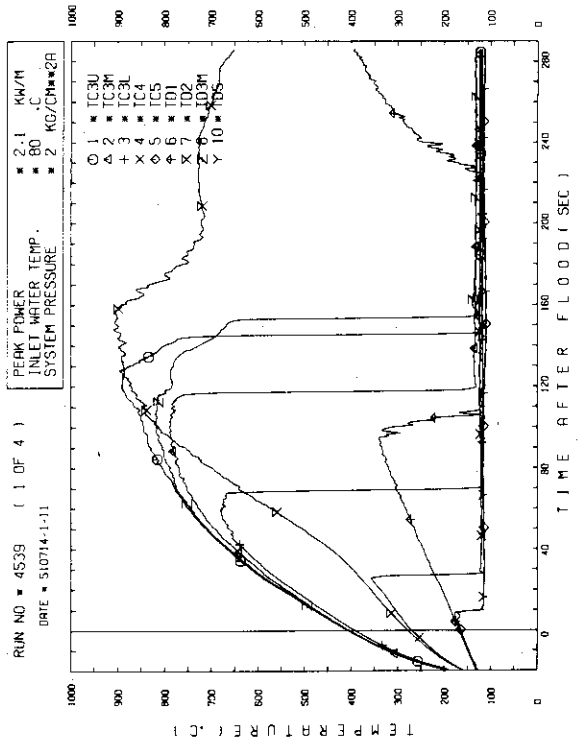
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
1	TC3U	404.	119.50	892.	144.00	759.
2	TC3M	401.	100.50	790.	116.25	757.
3	TC3L	390.	59.50	682.	67.75	670.
4	TC4	268.	25.75	356.	26.50	347.
6	TD1	167.	94.75	341.	100.00	316.
8	TD3M	405.	106.50	820.	152.50	652.

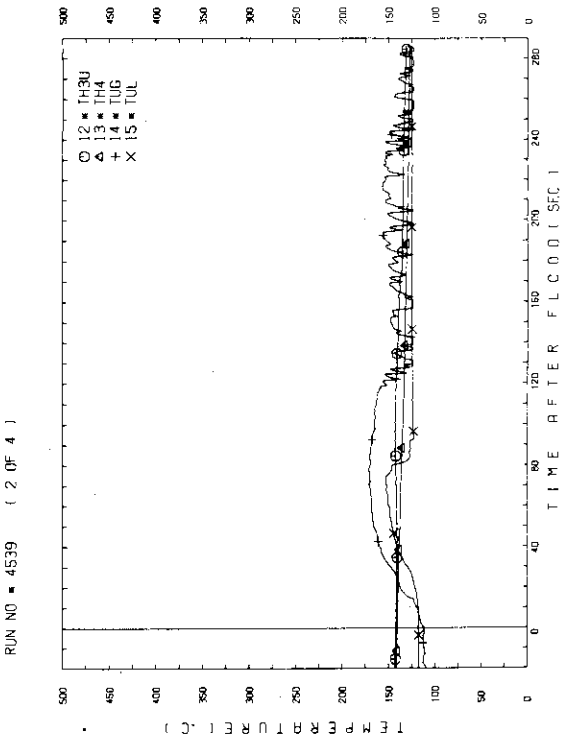
RUN NO. 4539 DATE * 510714-1-11

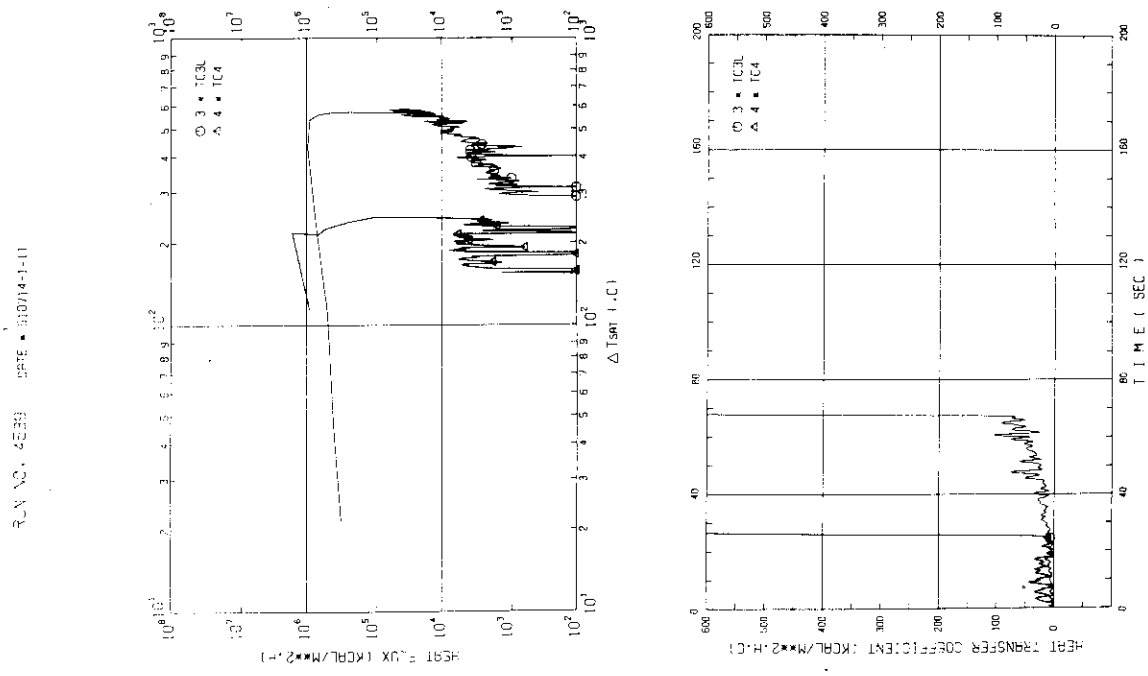


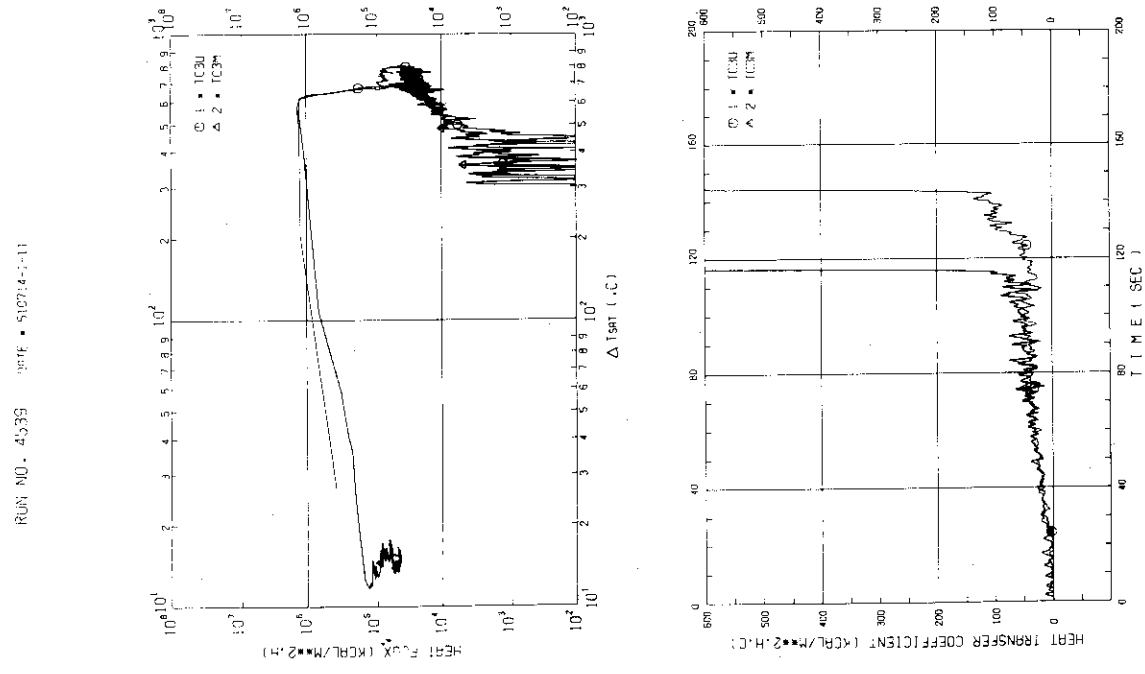

RUN NO = 4539 (3 OF 4)
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD(SEC)
18 = PDWN
20 = PUP
21 = PUP
22 = DPL
23 = DPDN

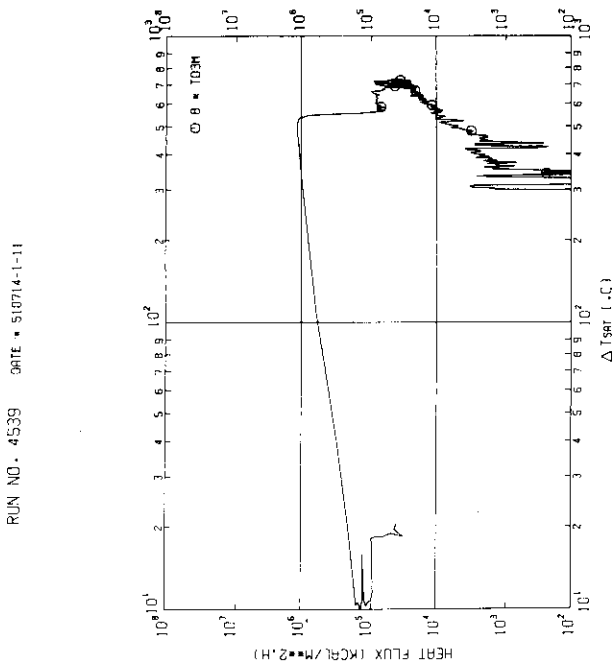

RUN NO = 4539 (4 OF 4)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
FLOW RATE (CM/SEC)
TIME AFTER FLOOD(SEC)
24 = DPTL
25 = DPTS
26 = DPHT
27 = DPPM
28 = FM
30 = I

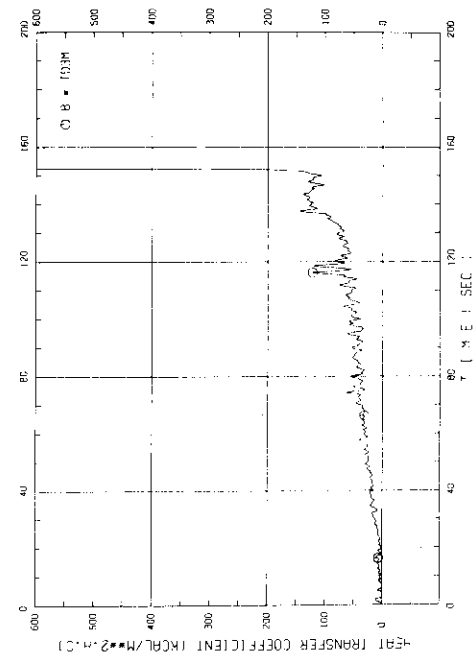

RUN NO = 4539 (1 OF 4)
DATE = 810714-1-11
PEAK POWER = 2.1 KW/M
INLET WATER TEMP. = 80 .C
SYSTEM PRESSURE = 2 KG/CM**2A
1 = TC3U
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
7 = TD2
8 = TD3M
10 = TDS
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)

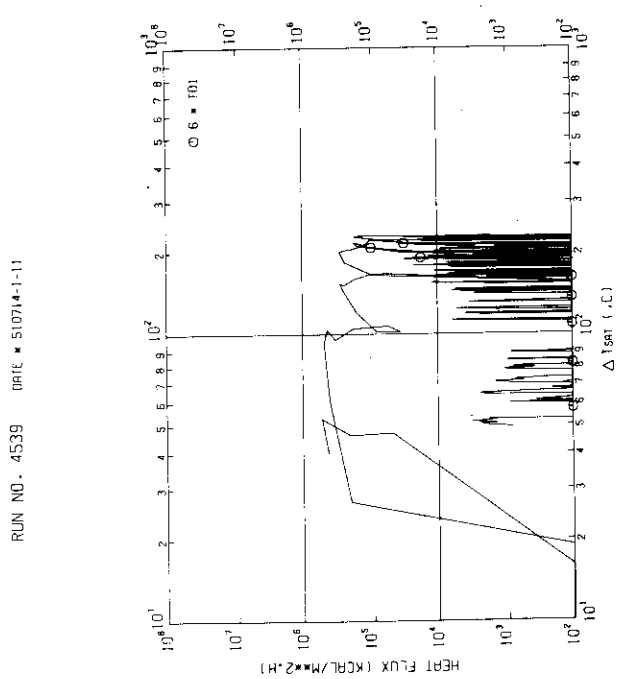

RUN NO = 4539 (2 OF 4)
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)
12 = TH3U
13 = TH4
14 = TUC
15 = TUL

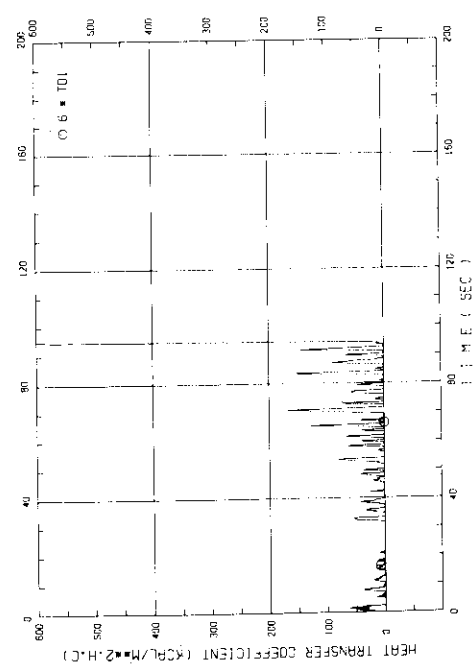

RUN NO. 4539
DATE = 810714-1-11
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4539
DATE = 810714-1-11
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4539 DATE = 510714-1-11
Θ 8 = T03M
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)


Θ 8 = T03M
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4539 DATE = 510714-1-11
Θ 6 = TD1
HEAT FLUX (KCAL/M**2.H)
ΔTSAT (.C)


Θ 6 = TD1
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)

RUN NO. 4540

(DATE * 510714 - 1 -14)

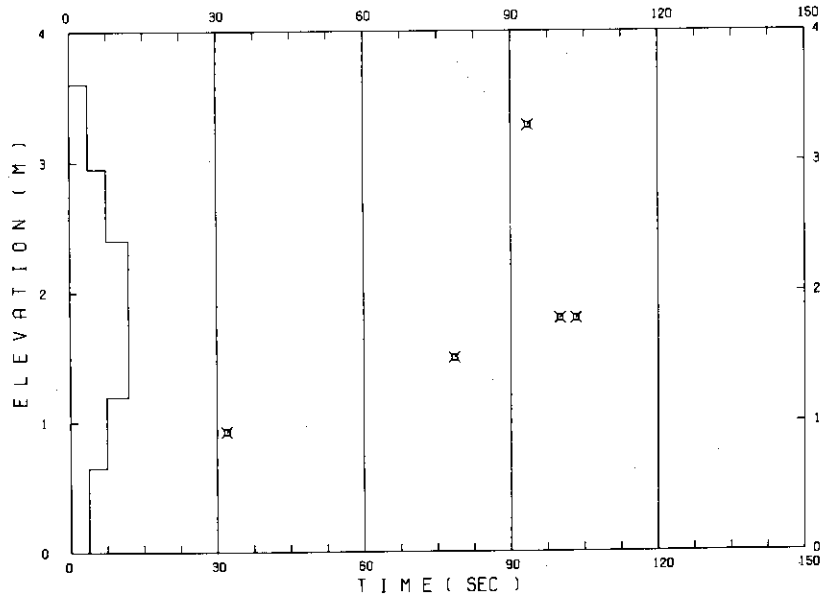
RUN CONDITIONS

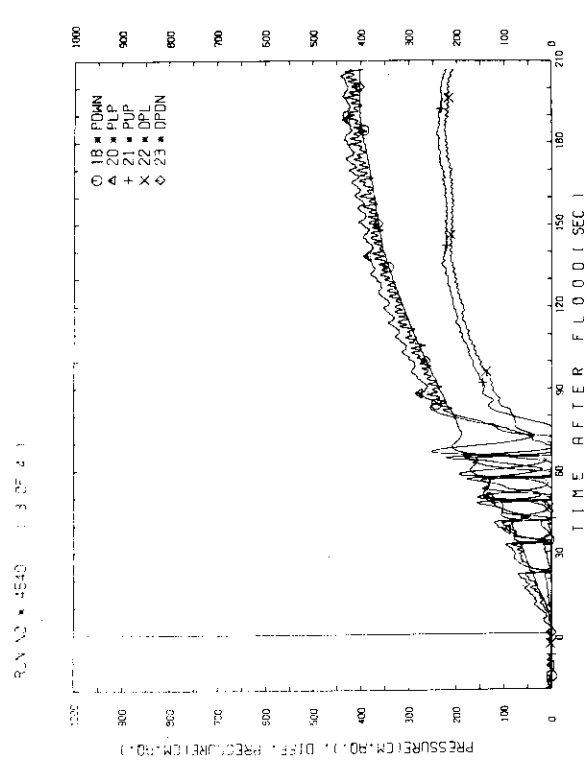
PEAK POWER	2.2	KW/M
SYSTEM PRESSURE	4	KG/CM**2A
INLET WATER TEMPERATURE	80	.C
INLET WATER VELOCITY	5	CM/SEC

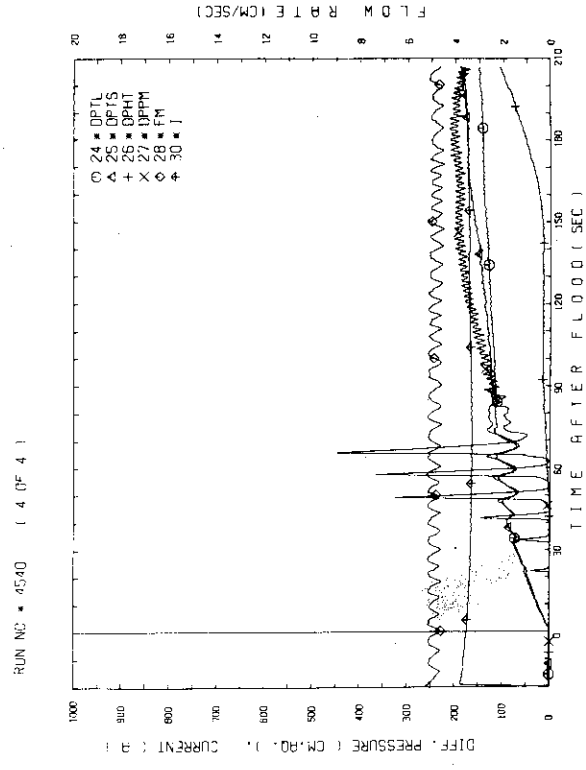
TEMPERATUR PROFILE

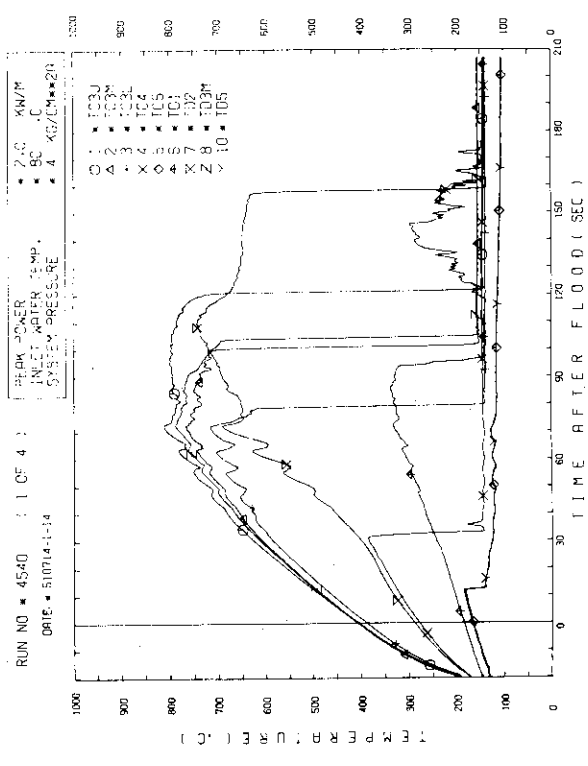
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
1	TC3U	405.	72.00	811.	0.0	0.
2	TC3M	406.	72.50	768.	100.00	709.
3	TC3L	388.	72.00	715.	78.50	615.
4	TC4	277.	31.50	385.	32.00	368.
6	TD1	185.	85.75	338.	93.50	319.
8	TD3M	405.	72.75	788.	103.25	693.

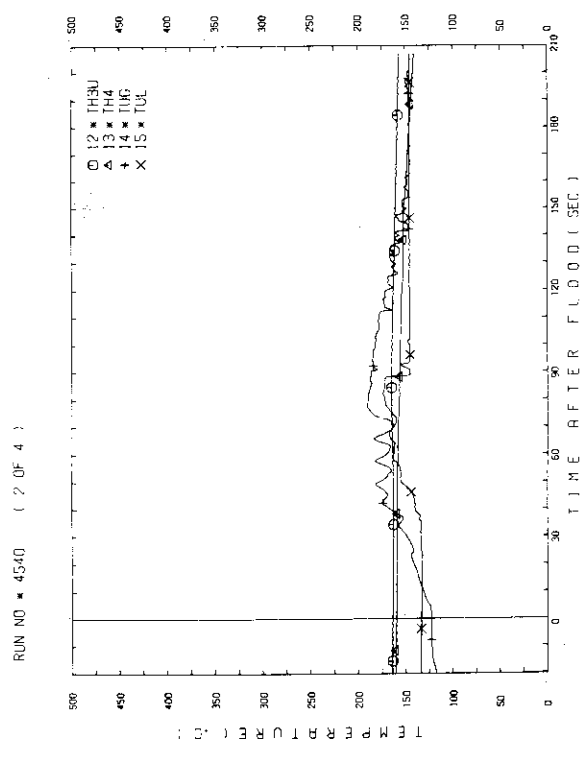
RUN NO. 4540 DATE * 510714-1-14

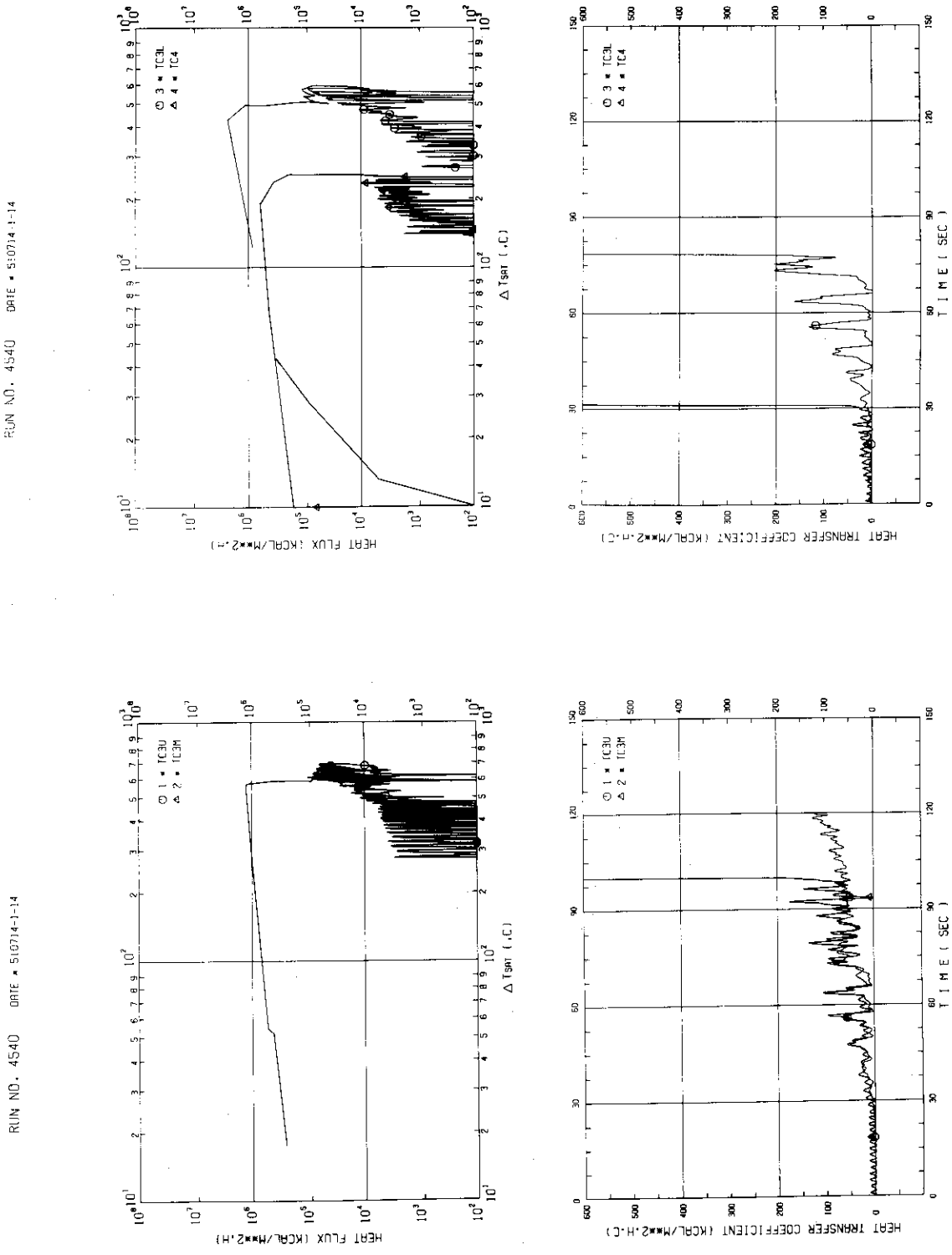


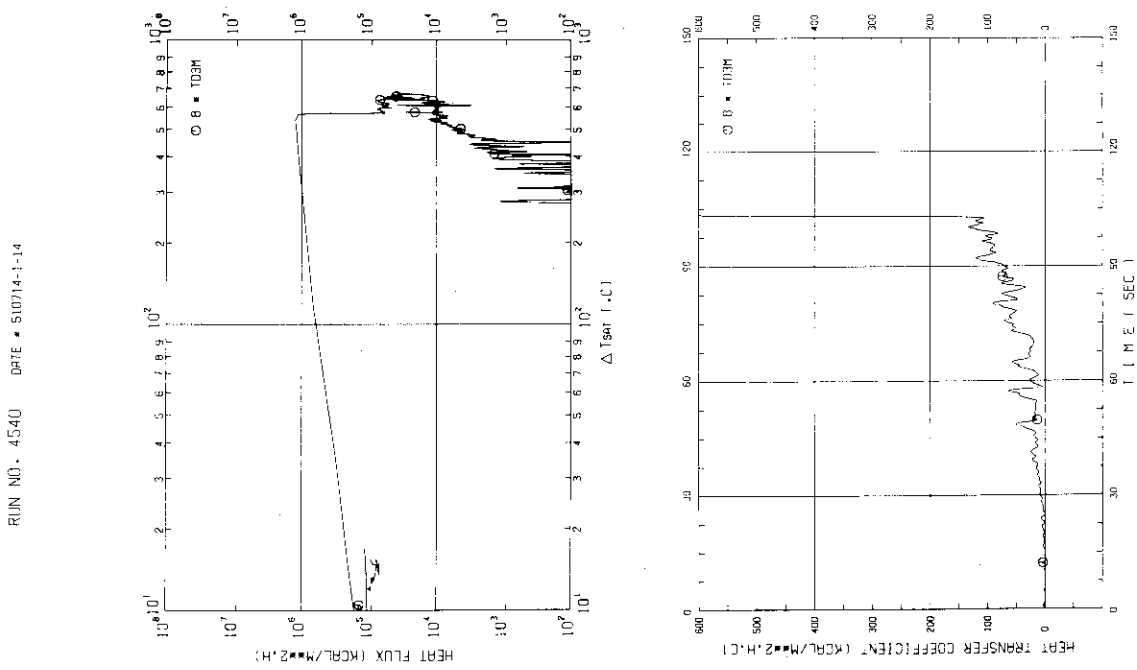

RUN NO = 4540 (3 OF 4)
18 = PDWN
20 = PLP
21 = PUP
22 = DPL
23 = DPDN
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD(SEC)


RUN NO = 4540 (4 OF 4)
24 = DPTL
25 = DPTS
26 = DPHT
27 = DPPM
28 = FM
30 = I
FLOW RATE (CM/SEC)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
TIME AFTER FLOOD(SEC)


RUN NO = 4540 (1 OF 4)
DATE = 810714-1-14
REAM POWER = 2.0 KW/M
INLET WATER TEMP. = 80 .C
SYSTEM PRESSURE = 4 KG/CM**2G
1 = TC3U
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TC1
7 = TC2
8 = TC3M
10 = TC5
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO = 4540 (2 OF 4)
12 = TH3U
13 = TH4
14 = TUG
15 = TUL
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO. 4540 DATE = 910714-1-14
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 3 = TC3L
△ 4 = TC4
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)
RUN NO. 4540 DATE = 910714-1-14
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
○ 1 = TC3U
△ 2 = TC3M
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4540 DATE = 510714-1-14
HEAT FLUX (KCAL/M**2.H)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)
ΔTsat (.C)

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*        *
*  RUN NO. 4541  *
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(DATE * 510714 - 1 -21)

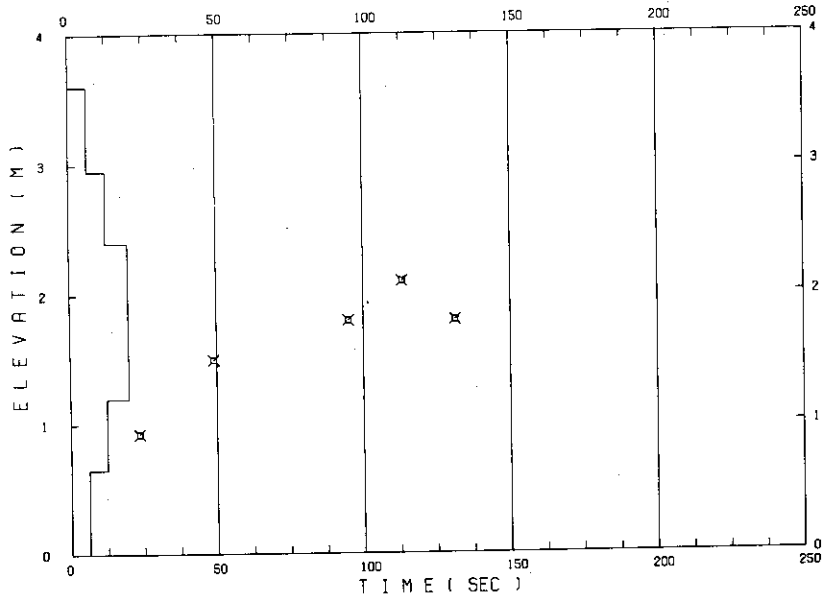
RUN CONDITIONS

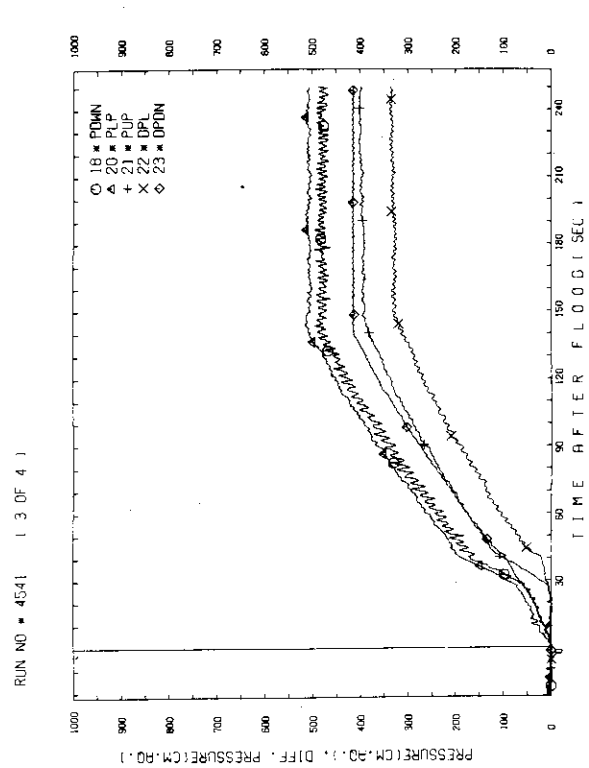
PEAK POWER	2.2	KW/M
SYSTEM PRESSURE	2	KG/CM**2A
INLET WATER TEMPERATURE	105	.C
INLET WATER VELOCITY	5	CM/SEC

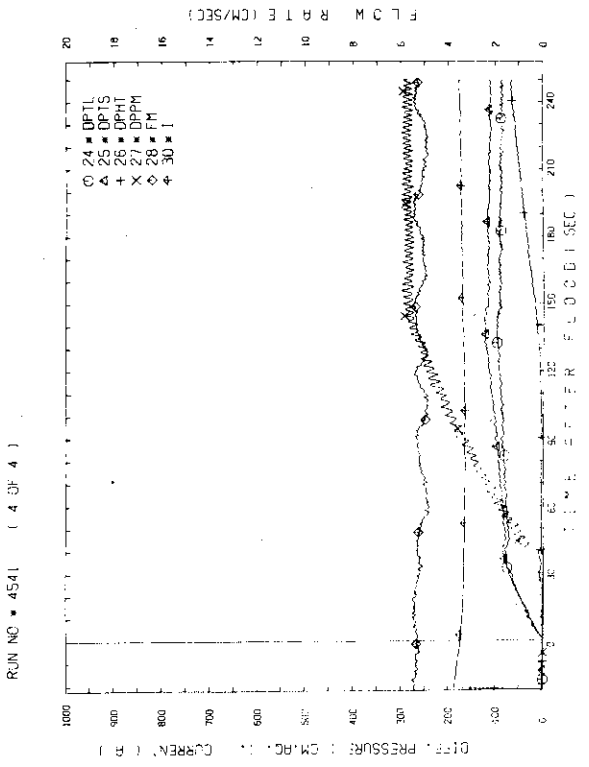
TEMPERATUR PROFILE

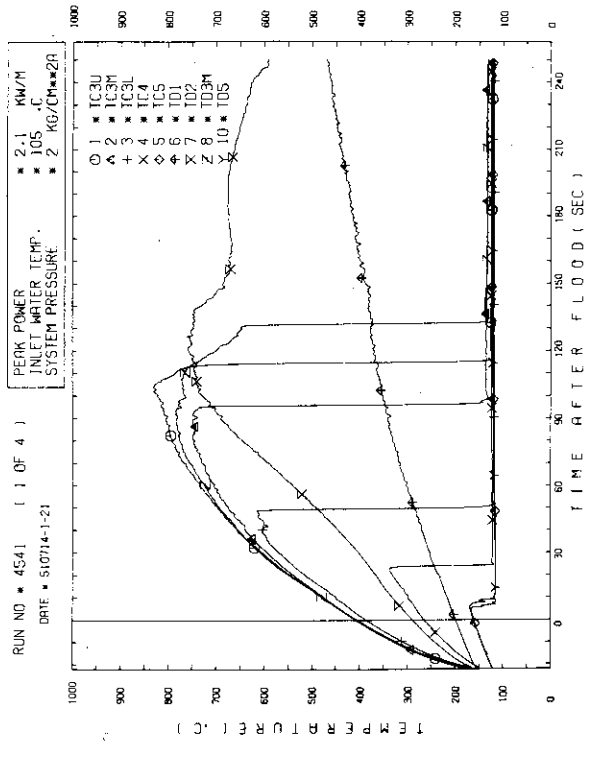
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
1	TC3U	404.	102.25	831.	113.25	756.
2	TC3M	406.	68.50	750.	95.00	737.
3	TC3L	385.	49.25	614.	49.00	614.
4	TC4	264.	23.50	337.	23.50	337.
6	TD1	199.	0.0	0.	0.0	0.
8	TD3M	406.	93.75	784.	131.25	644.

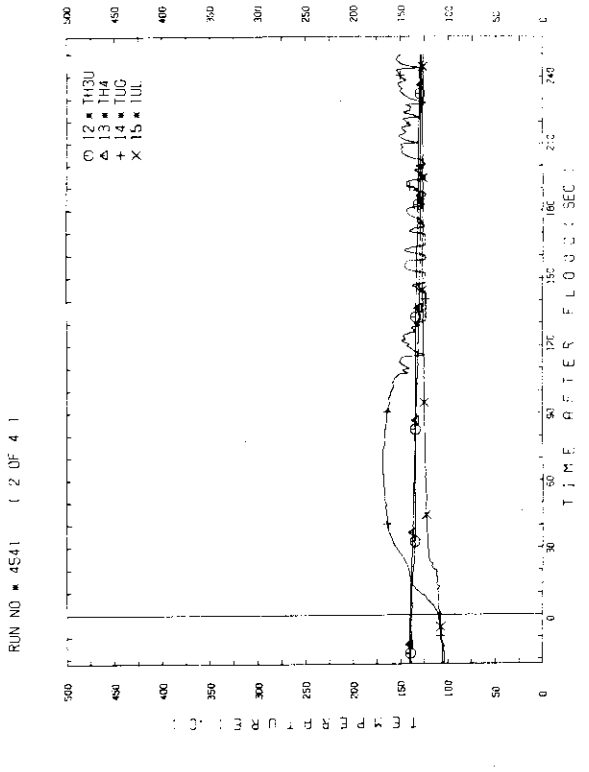
RUN NO. 4541 DATE * 510714-1-21

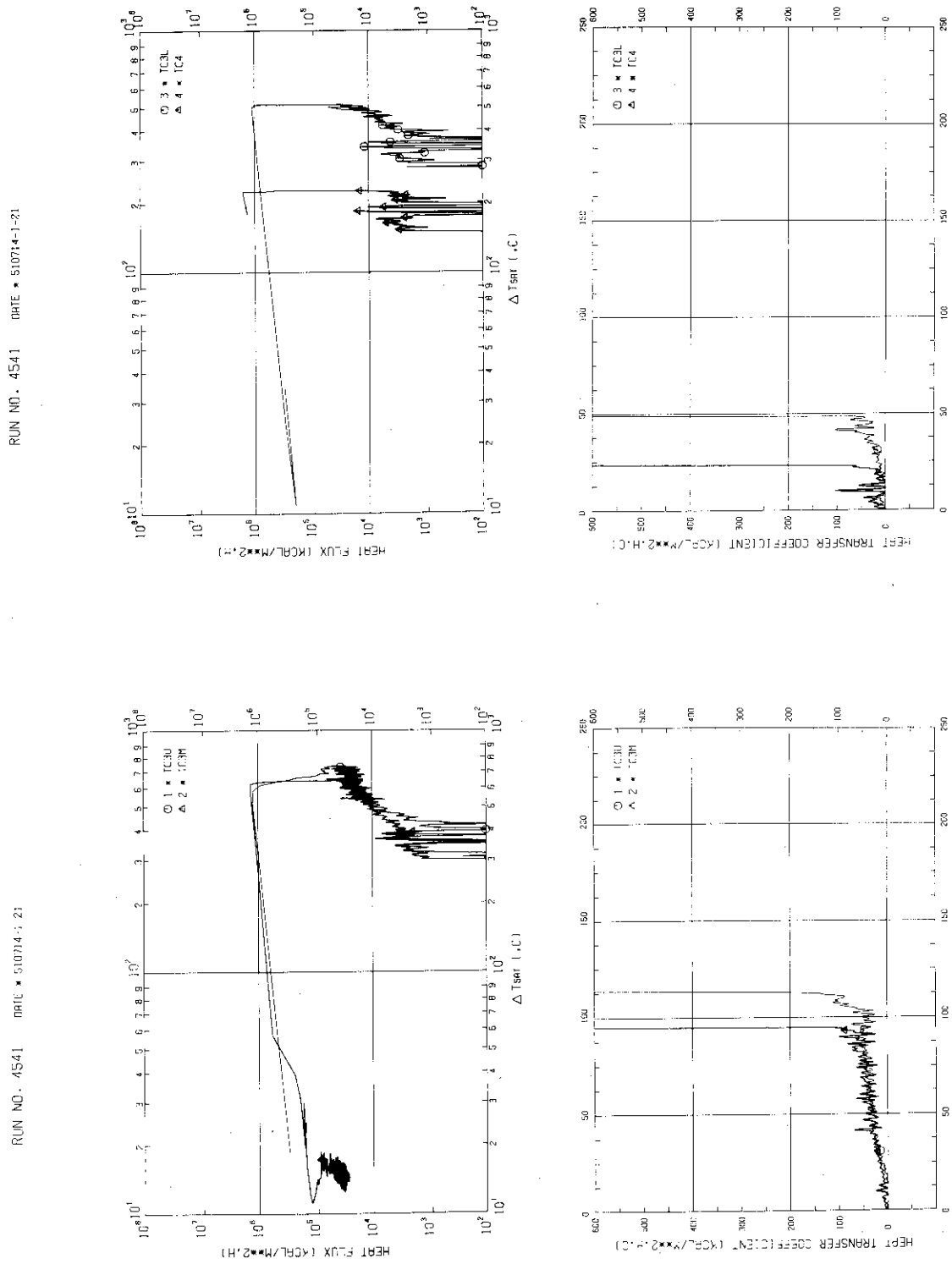


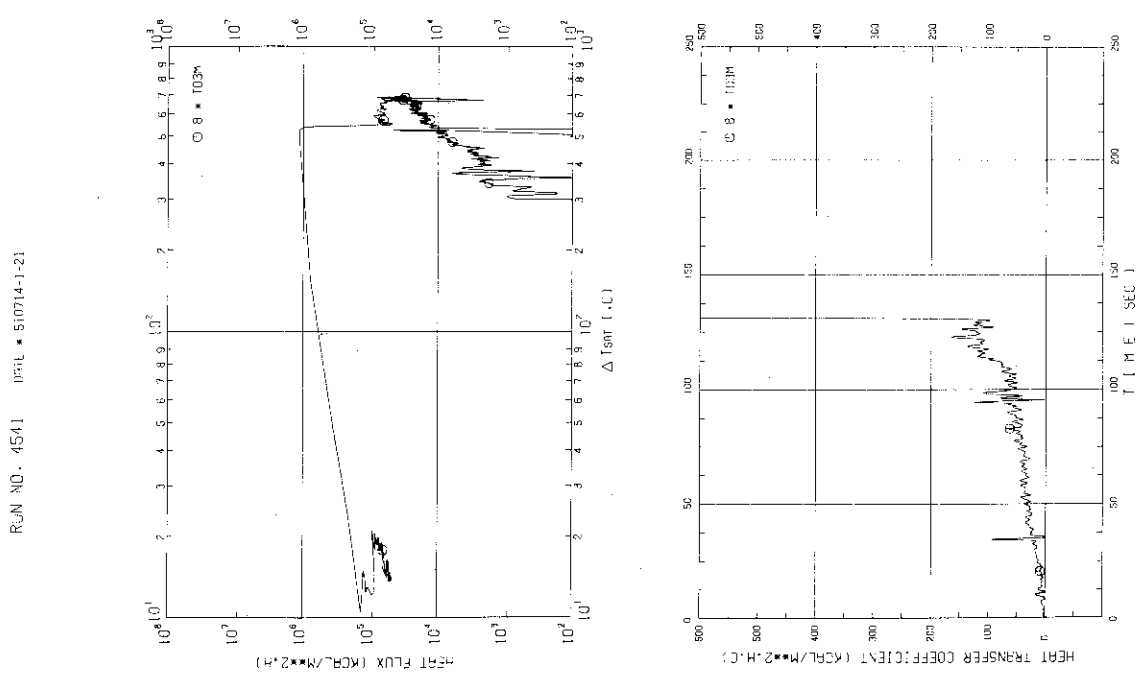

RUN NO = 4541 (3 OF 4)
18 = PDWN
20 = PLP
21 = PUP
22 = DPL
23 = DPDN
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)
TIME AFTER FLOOD(SEC)


RUN NO = 4541 (4 OF 4)
24 = DPTL
25 = DPTS
26 = DPHT
27 = DPPM
28 = FM
30 = I
FLOW RATE (CM/SEC)
TIME AFTER FLOOD(SEC)


RUN NO = 4541 (1 OF 4)
DATE = 810714-1-21
PEAK POWER * 2.1 KW/M
INLET WATER TEMP. * 105 .C
SYSTEM PRESSURE * 2 KG/CM**2A
1 = TC3U
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
7 = TD2
8 = TD3M
10 = TD5
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO = 4541 (2 OF 4)
12 = TH3U
13 = TH4
14 = TUC
15 = TUL
TEMPERATURE (.C)
TIME AFTER FLOOD(SEC)


RUN NO. 4541 DATE = 910714-1-21
HEAT FLUX (KCAL/M**2.H)
ΔTsat (°C)
○ 3 × TC3L
△ 4 × TC4
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)
RUN NO. 4541 DATE = 910714-1-21
HEAT FLUX (KCAL/M**2.H)
ΔTsat (°C)
○ 1 × TC3U
△ 2 × TC3M
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)


RUN NO. 4541
HEAT FLUX (KCAL/M**2.H)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)
ΔTsat (C)

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* *
* RUN NO. 4542 *
* *
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(DATE * 510714 - 1 -24)

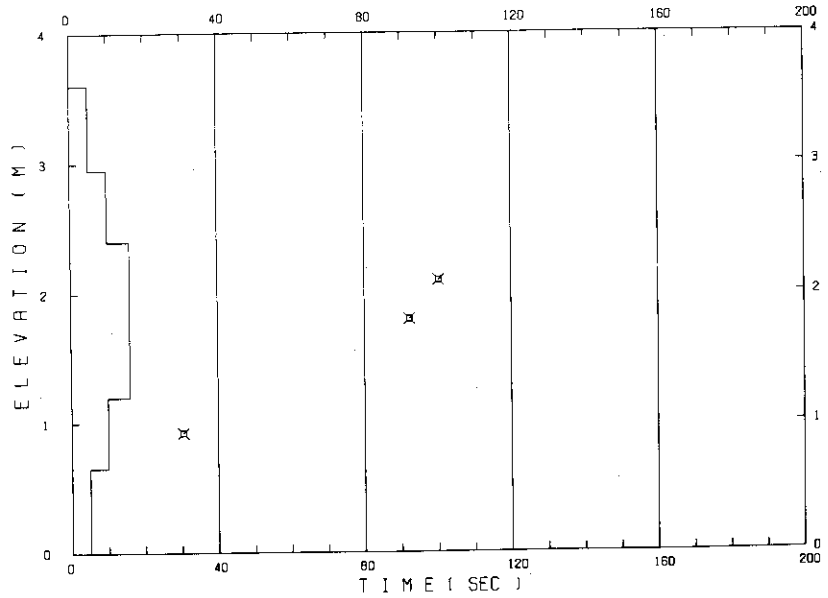
RUN CONDITIONS

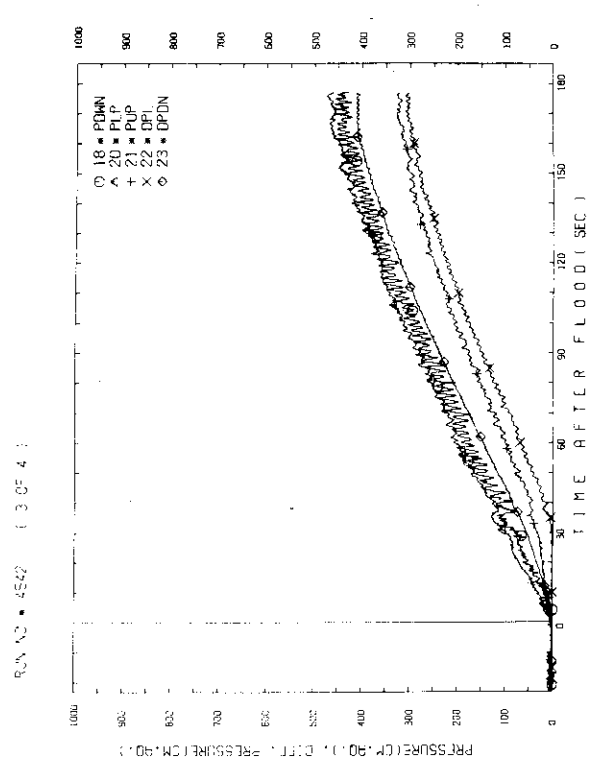
PEAK POWER	2.2	KW/M
SYSTEM PRESSURE	4	KG/CM**2A
INLET WATER TEMPERATURE	120	.C
INLET WATER VELOCITY	5	CM/SEC

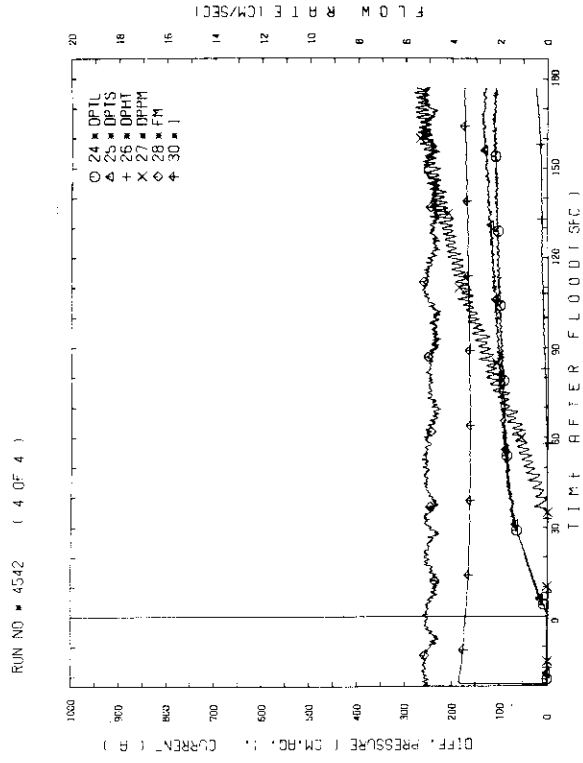
TEMPERATUR PROFILE

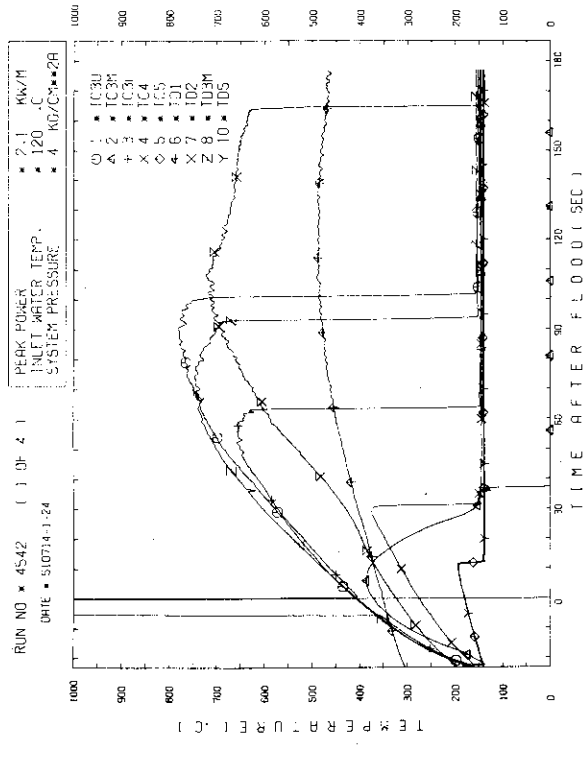
CH.NO.	SYMBOL	INITIAL TEMP. (.C)	TURNAROUND TIME (SEC)	TURNAROUND TEMP. (.C)	QUENCH TIME (SEC)	QUENCH TEMP. (.C)
1	TC3U	408.	93.50	782.	100.25	735.
4	TC4	275.	29.00	375.	30.50	371.
6	TD1	352.	108.00	491.	0.0	0.
7	TD2	324.	108.50	723.	0.0	0.
5	TD3M	405.	74.25	746.	92.25	692.

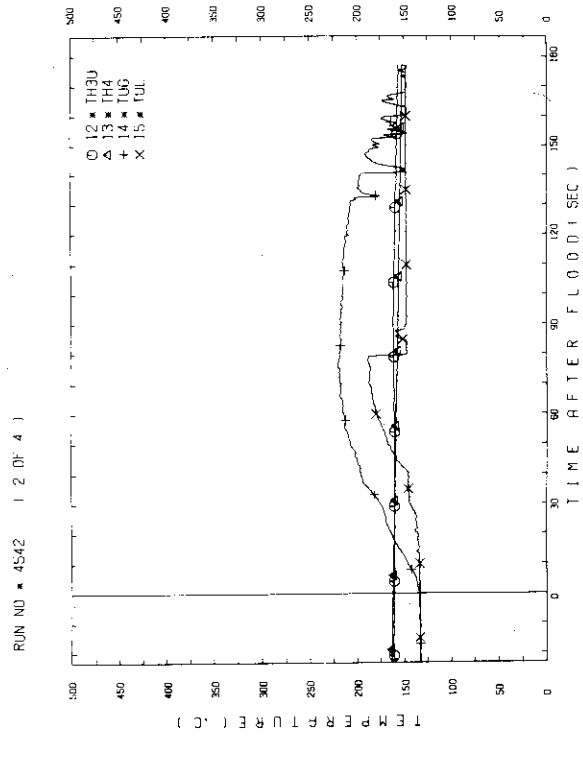
RUN NO. 4542 DATE * 510714-1-24

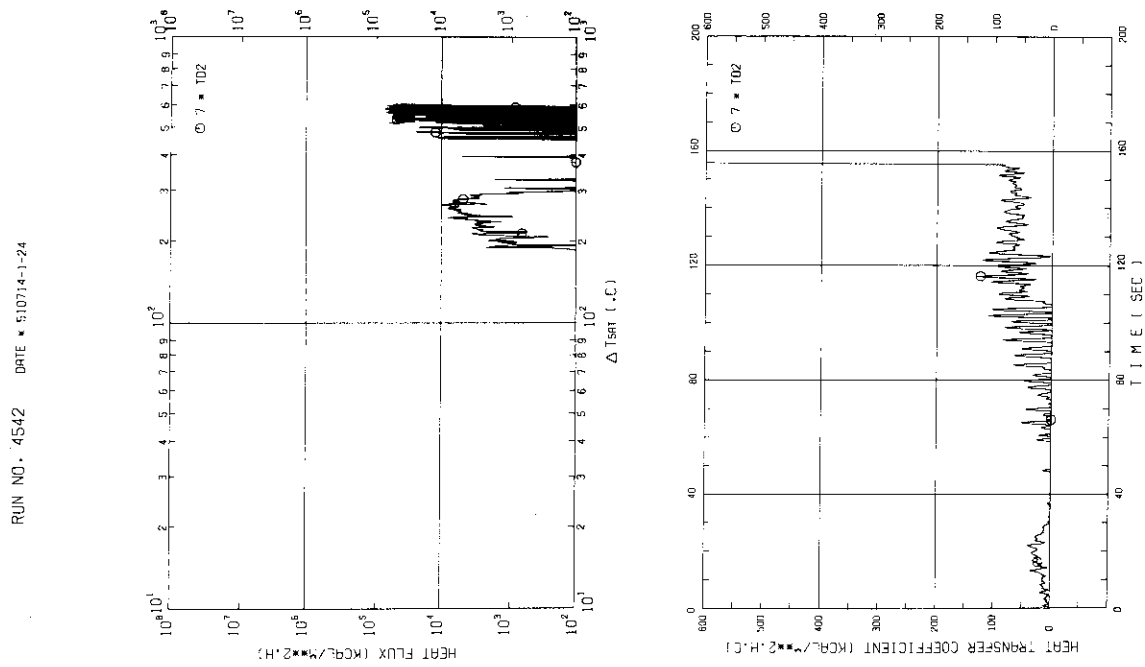


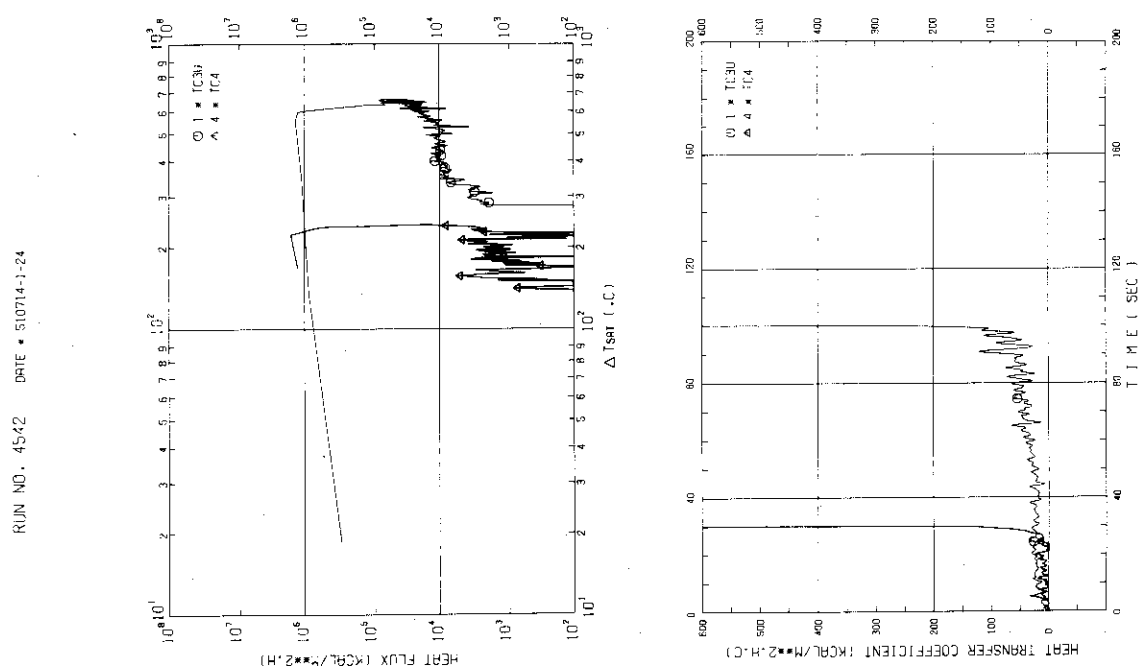

RUN NO = 4542 (3 OF 4)
18 = PDWN
20 = PLP
21 = PUP
22 = DPI
23 = DPDN
TIME AFTER FLOOD(SEC)
PRESSURE(CM.AQ.), DIFF. PRESSURE(CM.AQ.)

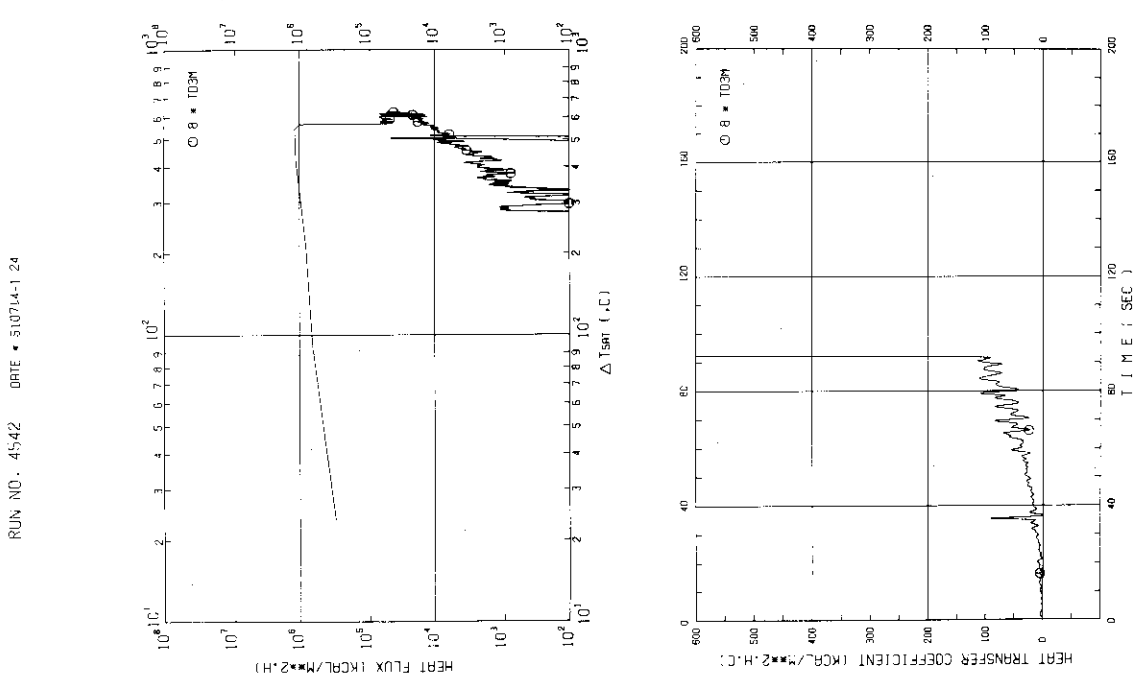

RUN NO = 4542 (4 OF 4)
24 = DPTL
25 = DPTS
26 = DPHT
27 = DPPM
28 = FM
30 = I
TIME AFTER FLOOD(SEC)
DIFF. PRESSURE (CM.AQ.), CURRENT (A)
FLOW RATE (CM/SEC)


RUN NO = 4542 (1 OF 4)
DATE = 810714-1-24
PEAK POWER = 2.1 MW/M
INLET WATER TEMP. = 120 .C
SYSTEM PRESSURE = 4 KG/CM**2A
1 = TC3U
2 = TC3M
3 = TC3L
4 = TC4
5 = TC5
6 = TD1
7 = TD2
8 = TD3M
10 = TD5
TIME AFTER FLOOD(SEC)
TEMPERATURE (.C)


RUN NO = 4542 (2 OF 4)
12 = TH3U
13 = TH4
14 = TUG
15 = TUL
TIME AFTER FLOOD(SEC)
TEMPERATURE (.C)


RUN NO. 4542 DATE = 810714-1-24
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)
○ 7 = TD2


RUN NO. 4542 DATE = 810714-1-24
HEAT FLUX (KCAL/M**2.H)
ΔTsat (.C)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
TIME (SEC)
○ 1 = TC3U
△ 4 = TC4


RUN NO. 4542 DATE = 810714-1 24
HEAT FLUX (KCAL/M**2.H)
HEAT TRANSFER COEFFICIENT (KCAL/M**2.H.C)
ΔTsat (,C)
TIME (SEC)
⊙ 8 * TD3M