

N O T A T

Denne rapport
tilhører

 STATOIL

L&U DOK.SENTER

L.NR. 30284090029

KODE WELL 31/2-12 iR-21

Returneres etter bruk

TIL: LR


FRA: KKv *Frank Kvalø*

SAK: FLOPETROL TESTANALYSE 31/2-12 GASSTEST

På grunn av mekaniske problemer eksisterer det kun bunnhulls-trykkmålinger fra en av testene i denne brønnen. Da trykkmålerene fungerte som restriksjoner i produksjonsrøret under denne testen, er evalueringen av produksjonsperiodene uten interesse. Dette illustreres kanskje best av "absolute open flow potential" (AOF) som er beregnet til $3.3 \cdot 10^6 \text{ Sm}^3/\text{d}$ (117 MMSCFD), en verdi som faktisk er lavere enn de maksimale rater som ble oppnådd under de to testene. Også "skin"-beregningene er av liten verdi da det ikke er mulig å estimere trykktapet forårsaket av trykkmålerene.

Trykkoppbygningsperioden er ikke mulig å tolke kvantitativt på grunn av "humping"-effekt, og skin er dermed beregnet med en antatt permeabilitet på $4.9 \mu\text{m}^2$ (5 D).

**Retur RES-arkiv
etter bruk.**

LNR: 302 8409-0029	STATOIL	
MOTT: 29.02.84	GR:	
AVD: RES	S.BH: K. Kvalø	ARKIV: RES
KODE: 054-PS.15 DST		
O.PR:		
MED.ID:		
E.ORD:		

N O T A T

RES
KKv/beg
17.02.84

TIL: LR

FRA: KKv *Andr. Høje*

SAK: FLOPETROL TESTANALYSE 31/2-12 GASSTEST

På grunn av mekaniske problemer eksisterer det kun bunnhulls-trykkmålinger fra en av testene i denne brønnen. Da trykkmålerene fungerte som restriksjoner i produksjonsrøret under denne testen, er evalueringen av produksjonsperiodene uten interesse. Dette illustreres kanskje best av "absolute open flow potential" (AOF) som er beregnet til $3.3 \cdot 10^6 \text{ Sm}^3/\text{d}$ (117 MMSCFD), en verdi som faktisk er lavere enn de maksimale rater som ble oppnådd under de to testene. Også "skin"-beregningene er av liten verdi da det ikke er mulig å estimere trykktapet forårsaket av trykkmålerene.

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**Retur RES-arkiv
etter bruk.**

WELL TEST INTERPRETATION REPORT #: 280883280883

FLOPETROL Engineer: Barry PRAD

Page: 1

12/08/84

REGION : RME

DISTRICT : NCD

BASE : NBR

Location: NORWAY

Field : TPOLL

Zone : GAS TEST

Well : 31/2/12

Client: STATOIL

WELL TEST INTERPRETATION REPORT

Field : TPOLL Client: STATOIL
Zone : GAS TEST DATE:
Well : 31/2/12 From : 28/08/83
To : 28/08/83

REPORT #: 280883280883

WELL LOG INTERPRETATION REPORT 1.200002000000		Page: 2 of 3
DATE: 10/09/97		10/09/97
WELL NO:	WELL NAME:	DATE: 10/09/97
WELL NO:	WELL NAME:	DATE: 10/09/97
WELL NO:	WELL NAME:	DATE: 10/09/97
WELL NO:	WELL NAME:	DATE: 10/09/97

Nature of fluid: GAS

PARAMETER	NUMERICAL VALUE	UNIT
A		
B		
CB	.000442	psi-l
D	22.5	ft
E	.600	ft
GA	.0165	cm
GLT	.3	
G	.376	
H	614	
I		

Depth of bottom hole measurements: 1357- Reference: 1
 Perforation: 1385-1405
 Tubing Diameter: 7"
 Case :
 Casing Diameter: 7 5/8"
 Pipe :

REGION : EMD
 DISTRICT : NSD
 BASE : NWR
 Location : NORWAY

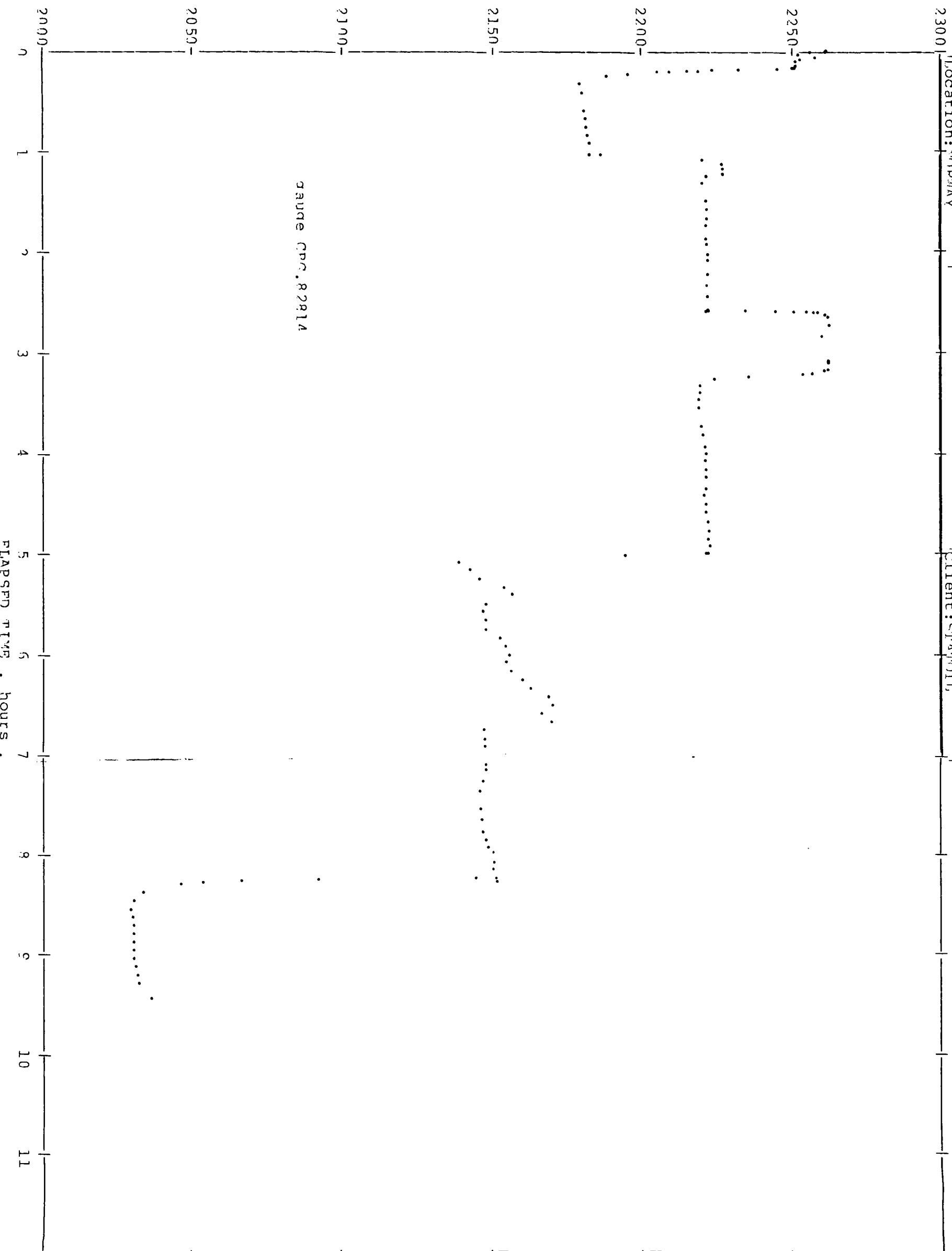
SEQUENCE OF EVENTS

Field : TROLL
 Zone : GAS TEST
 Well : 31/2/12
 Client : STATOIL

FLOW PER. #	TIME OF START	TIME OF END	DURATION hours	CUMULATIVE PRODUCTION Bbls	AVERAGE PRODUCTION RATE BOPD	COMMENTS
1 Dd	28/08/83 04:15:20	28/08/83 04:25:50	.175		6000	Open well on 32/64" adj. choke
2 Dd	28/08/83 04:25:50	28/08/83 05:16:40	.8472		27880	flow on 48/64" fixed choke
3 Dd	28/08/83 05:16:40	28/08/83 05:28:30	.1972		16000	flow on 48/64" adj. choke
4 Dd	28/08/83 05:28:30	28/08/83 06:50:30	1.3667		19600	flow on 40/64" fixed choke
5 Bu	28/08/83 06:50:30	28/08/83 07:26:10	.5944		0	Shut-in due to leak at surface
6 Bu	28/08/83 07:26:10	28/08/83 09:14:50	1.8111		19500	Open well on 40/64" fixed choke
7 Dd	28/08/83 09:14:50	28/08/83 12:30:50	3.2267		33390	flow on 56/64" fixed choke
8 Dd	28/08/83 12:30:50	28/08/83 13:44:00			48110	flow on 96/64" fixed choke. (gauge stopped recording)

WELL TEST DATA ARE FROM FLOPETROL WELL TESTING REPORT#: 82/2301/34

WFL TRST INFERRATION RPDPT #: 2808R3280883 Page: 4
 FLOPFPOL Engineer: Barry Brad 12/08/84
 REGION: EMP RPFCEJRP HISTORY Field: TPOLL
 DISTRICT: NSD Zone: Gas TRST
 BASE: MWB Mail: 31/2/12
 Location: NOPWAY Client: STAFFOIT



FLOPETROL Engineering: Barry BEAD REGION: FND DISTRICT: FND PAGE: FND Location: NORWAY		Date: 12/22/77 Field: FNDL Zone: GAS TEST Well: 31/2/12 Client: SPANGIL
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At no time during the flow test on well 31/2-12 was the well completely "blown up". The downhole pressure data available was limited due to practical difficulties. The downhole pressure data is of limited value due to the following reasons.

- 1: The "build-up" was affected by "humping", caused by liquid accumulation or temperature effect.
- 2: The well was still cleaning-up.
- 3: Pressure losses were occurring across the screen (approx. 200 psi difference between the two downhole gauges)
- 4: Gauge stopped working at high flow rates due to vibration.

Due to the nature of the reservoir pressure response, limited information could be determined regarding reservoir properties. From the "flowdown" pressure and flow rates a relationship was determined using the "FIT" analysis; there

$$p_w(r) = 21.7 + 0.0121q^2$$

It should be noted that the van der Waals pressure function was used in place of pressure due to the pressure range. The relationship was found to be

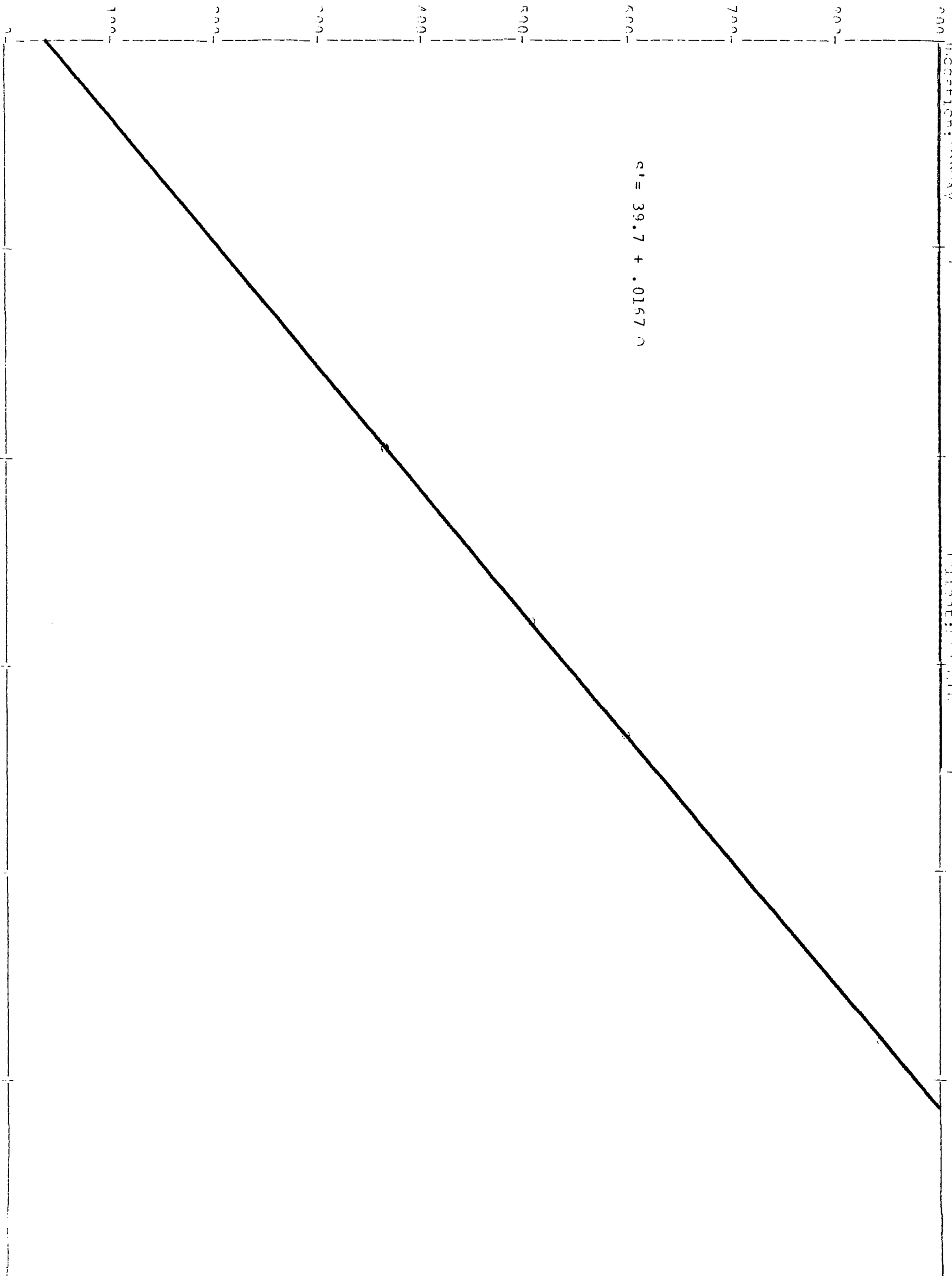
$p_w(r) = 21.413 + 0.0216q^2$ with an absolute open flow potential of 117 "DINBAR". These figures are in error due to the effect of pressure losses caused by the screens/downhole gauge. If assuming a permeability of 5 Darcy's an activation of the correct skin may be made. The relationship between skin (S) and flow rate (Q) was evaluated at

$$S = 21.7 + 0.01671q^2$$

Again it should be remembered that these values are subjected to error due to pressure losses. A superposition plot of the build-up is shown to indicate the "humping" effect.

APPL. MESS. TEMPERATURE PROOF 4:280083220883
FIELD: 5
12/02/04
PROJECT: EMP
DISPOSITION: NCR
LOCATION: NCR
DATE: 01/27/12

$$e^i = 39.7 + .0167 \pi$$



	GAS FLOW RATE . MMSCFD .	DEPTH	APPARENT VELOCITY . FT/D
1	1.25000E 04		2.66000E 02
2	1.25000E 04		3.54000E 02
3	2.70000E 04		5.00000E 02
4	3.33000E 04		5.00000E 02
5	4.21000E 04		9.42000E 02

	FLOW RATE . MSCFD .	DEL	GAS PSEUDO PRESSURE CHANGE .Dmp.
1	2.78800E 04		2.55100E 07
2	1.96000E 04		1.29100E 07
3	1.95000E 04		1.29100E 07
4	3.33900E 04		3.59100E 07
5	4.81100E 04		7.24100E 07

REGION : EMR	RELATIONSHIP BETWEEN	Field : TROLL
DISTRICT: NSD	FLOW RATE AND DRAWDOWN	Zone : GAS TEST
BASE : NWB		Well : 31/2/12
Location: NORWAY		Client: STATOIL

4.50e 08

4.00e 08

3.50e 08

3.00e 08

2.50e 08

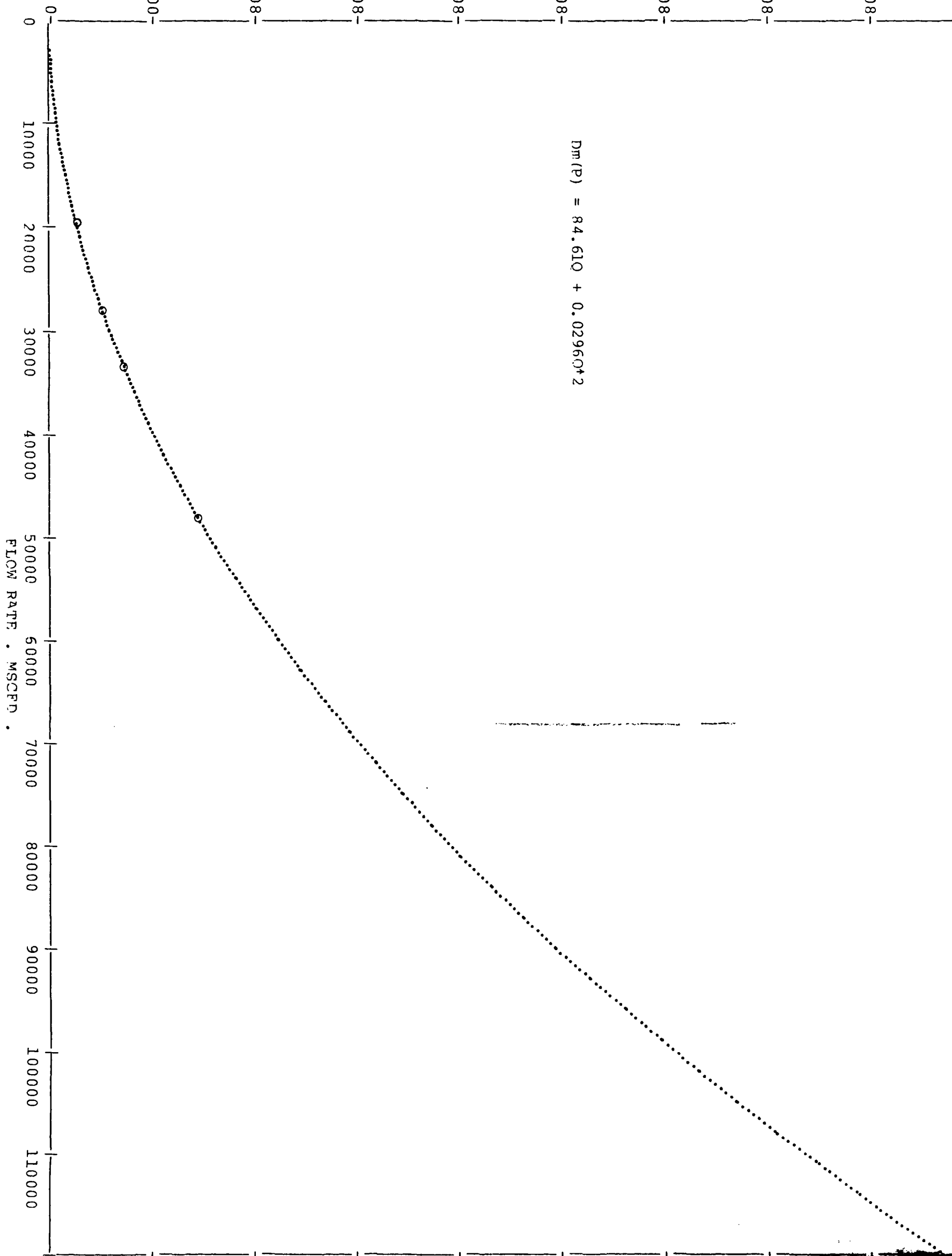
2.00e 08

1.50e 08

1.00e 08

50000000

$$Dm(P) = 84.61Q + 0.0296Q^2$$



REGION : FWP
 DISTRICT: NSN
 RASG : MWR
 Location: MOPNAV
 SUPERPOSITION REPORT #5 (BUILD-UP)
 Field : TPOLL
 Zone : GAS TEST
 Well : 31/2/12
 Client: SPATROL

4.08e 08

4.06e 09

4.04e 08

C
A
S

P4.02e 08

4.00e 08

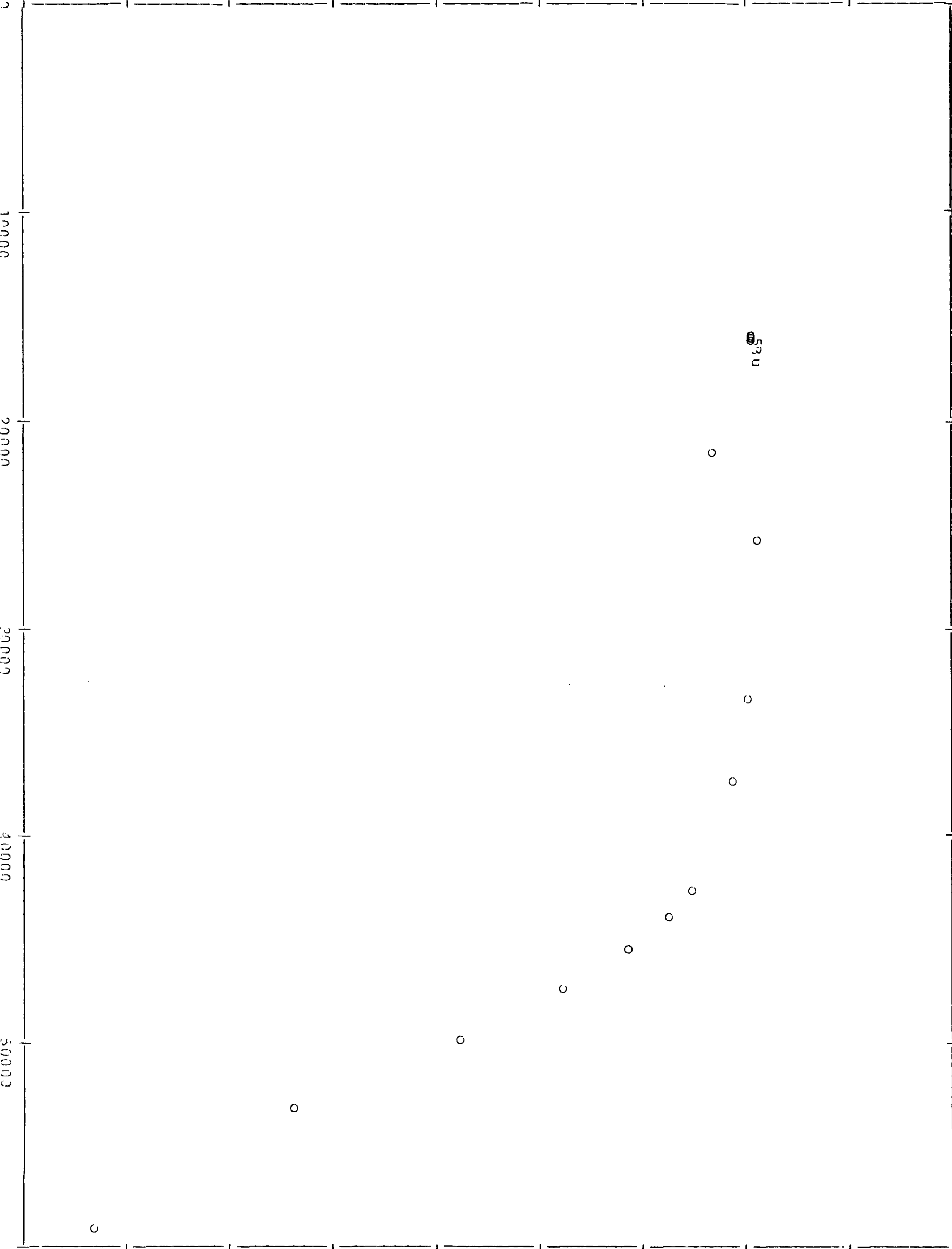
13.98e 08

13.96e 08

3.94e 08

3.92e 08

3.90e 08



14:LOAD DATA

File# 1
10d

72:CRS PSEUDO-F

* Pressures must

* be given in

* psi

TEM FHH(T)

148

GAS GRAVITY(G)

.61

MOL% N2(N)

8

M% CO2(C)

.3

M% H2S(H)

8

P= 2262

U= 0.01638

Z= 0.85565

U*Z= 0.01395

MIP1= 4.0391e 08

P= 2262

U= 0.01638

Z= 0.85566

U*Z= 0.01395

MIP1= 4.0387e 08

P= 2261

U= 0.01638

Z= 0.85566

U*Z= 0.01395

MIP1= 4.0368e 08

P= 2256

U= 0.01628

Z= 0.85569

U*Z= 0.01393

MIP1= 4.0192e 08

P= 2252

U= 0.01627

Z= 0.85571

U*Z= 0.01392

MIP1= 4.0848e 08

P= 2258

U= 0.01629

Z= 0.85568

U*Z= 0.01394

MIP1= 4.0242e 08

P= 2252

U= 0.01627

Z= 0.85571

U*Z= 0.01393

MIP1= 4.0876e 08

P= 2251

U= 0.01627

Z= 0.85572

U*Z= 0.01392

MIP1= 4.0828e 08

P= 2251

U= 0.01627

Z= 0.85572

U*Z= 0.01392

MIP1= 4.0827e 08

P= 2251

U= 0.01627

Z= 0.85572

U*Z= 0.01392

MIP1= 4.0817e 08

File# 2
200
72:GAS PSEUDO-F

* Pressures must

* be given in
** psia

TEMPERATURE (T)
140
GAS GRAVITY (G)
.61

MOL% N2 (N)
0
M% CO2 (C)
.3
M% H2S (H)
0

P= 2251
U= 0.01627
Z= 0.85572
U*Z= 0.01392
MIP1= 4.0017e 08

P= 2245
U= 0.01625
Z= 0.85575
U*Z= 0.01391
MIP1= 3.9846e 08

P= 2232
U= 0.01621
Z= 0.85583
U*Z= 0.01387
MIP1= 3.9429e 08

P= 2220
U= 0.01618
Z= 0.85590
U*Z= 0.01385
MIP1= 3.9140e 08

P= 2219
U= 0.01617
Z= 0.85593
U*Z= 0.01384
MIP1= 3.8994e 08

P= 2215
U= 0.01616
Z= 0.85596
U*Z= 0.01383
MIP1= 3.8873e 08

P= 2209
U= 0.01614
Z= 0.85601
U*Z= 0.01382
MIP1= 3.8687e 08

P= 2205
U= 0.01613
Z= 0.85604
U*Z= 0.01381
MIP1= 3.8557e 08

P= 2195
U= 0.01610
Z= 0.85613
U*Z= 0.01378
MIP1= 3.8247e 08

P= 2188
U= 0.01608
Z= 0.85620
U*Z= 0.01376
MIP1= 3.8018e 08

P= 2179
U= 0.01605
Z= 0.85629
U*Z= 0.01374
MIP1= 3.7722e 08

P= 2180
U= 0.01605
Z= 0.85627
U*Z= 0.01374
MIP1= 3.7764e 08

P= 2181
U= 0.01605
Z= 0.85627
U*Z= 0.01375
MIP1= 3.7778e 08

P= 2181
U= 0.01605
Z= 0.85627
U*Z= 0.01375
MIP1= 3.7788e 08

P= 2182
U= 0.01606
Z= 0.85626
U*Z= 0.01375
MIP1= 3.7809e 08

P= 2182
U= 0.01606
Z= 0.85626
U*Z= 0.01375
MIP1= 3.7816e 08

P= 2183
U= 0.01606
Z= 0.85625
U*Z= 0.01375
MIP1= 3.7842e 08

P= 2183
U= 0.01606
Z= 0.85625
U*Z= 0.01375
MIP1= 3.7842e 08

File# 3

306

72:GAS PSEUDO-F

? Pressures must

* be given in

* * asia

TEM FRAH(T)

146

GAS GRAVITY(G)

.61

MOL% N2(IN)

0

M% O2(O)

.3

M% H2S(H)

0

P= 2183

U= 0.01606

Z= 0.85525

U*Z= 0.01375

MIP1= 3.7841e 08

P= 2186

U= 0.01607

Z= 0.85621

U*Z= 0.01376

MIP1= 3.7954e 08

P= 2221

U= 0.01618

Z= 0.85592

U*Z= 0.01385

MIP1= 3.9051e 08

P= 2227

U= 0.01626

Z= 0.85587

U*Z= 0.01386

MIP1= 3.9267e 08

P= 2228

U= 0.01628

Z= 0.85587

U*Z= 0.01386

MIP1= 3.9275e 08

P= 2228

U= 0.01628

Z= 0.85587

U*Z= 0.01386

MIP1= 3.9282e 08

File# 4
40d

TE: GAS PRESSURE-F

* Pressures must
* be given in
** psia

TEM FRAH(T)

140

GAS GRAVITY(G)

.61

MOL% N2(N)

8

M% CO2(C)

.3

M% H2S(H)

8

P= 2228
U= 0.01628
Z= 0.85587
U*Z= 0.01386
MIP1= 3.9282e 08

P= 2221
U= 0.01618
Z= 0.85591
U*Z= 0.01385
MIP1= 3.9876e 08

P= 2226
U= 0.01617
Z= 0.85592
U*Z= 0.01384
MIP1= 3.9835e 08

P= 2221
U= 0.01618
Z= 0.85591
U*Z= 0.01385
MIP1= 3.9878e 08

P= 2222
U= 0.01618
Z= 0.85591
U*Z= 0.01385
MIP1= 3.9891e 08

P= 2222
U= 0.01618
Z= 0.85591
U*Z= 0.01385
MIP1= 3.9890e 08

P= 2221
U= 0.01618
Z= 0.85591
U*Z= 0.01385
MIP1= 3.9888e 08

P= 2222
U= 0.01618
Z= 0.85591
U*Z= 0.01385
MIP1= 3.9882e 08

P= 2222
U= 0.01618
Z= 0.85591
U*Z= 0.01385
MIP1= 3.9889e 08

P= 2222
U= 0.01618
Z= 0.85591
U*Z= 0.01385
MIP1= 3.9898e 08

P= 2222
U= 0.01618
Z= 0.85591
U*Z= 0.01385
MIP1= 3.9896e 08

P= 2222
U= 0.01618
Z= 0.85591
U*Z= 0.01385
MIP1= 3.9898e 08

P= 2222
U= 0.01618
Z= 0.85591
U*Z= 0.01385
MIP1= 3.9885e 08

P= 2222
U= 0.01618
Z= 0.85591
U*Z= 0.01385
MIP1= 3.9899e 08

P= 2222
U= 0.01618
Z= 0.85591
U*Z= 0.01385
MIP1= 3.9899e 08

P= 2222
U= 0.01618
Z= 0.85591
U*Z= 0.01385
MIP1= 3.9101e 08

File# 5

53a

72:GAS PSEUDO-F

* Pressures must
* be given in

** psia

TEM FRAH(T)

140

GAS GRAVITY(G)

.61

MOL% N2(N)

M% CO2(C)

.3

M% H2S(H)

0

P= 2222

U= 0.01618

Z= 0.85591

U*Z= 0.01385

MIP1= 3.9101e 08

P= 2223

U= 0.01618

Z= 0.85590

U*Z= 0.01385

MIP1= 3.9136e 08

P= 2235

U= 0.01622

Z= 0.85581

U*Z= 0.01388

MIP1= 3.9522e 08

P= 2245

U= 0.01625

Z= 0.85575

U*Z= 0.01391

MIP1= 3.9846e 08

P= 2251

U= 0.01627

Z= 0.85571

U*Z= 0.01392

MIP1= 4.0044e 08

P= 2255

U= 0.01628

Z= 0.85569

U*Z= 0.01393

MIP1= 4.3172e 08

P= 2258

U= 0.01629

Z= 0.85568

U*Z= 0.01394

MIP1= 4.0252e 08

P= 2259

U= 0.01629

Z= 0.85567

U*Z= 0.01394

MIP1= 4.0298e 08

P= 2261

U= 0.01630

Z= 0.85566

U*Z= 0.01395

MIP1= 4.0339e 08

P= 2262

U= 0.01630

Z= 0.85566

U*Z= 0.01395

MIP1= 4.0378e 08

P= 2263

U= 0.01630

Z= 0.85565

U*Z= 0.01395

MIP1= 4.0407e 08

P= 2263

U= 0.01631

Z= 0.85565

U*Z= 0.01395

MIP1= 4.0427e 08

P= 2263

U= 0.01630

Z= 0.85565

U*Z= 0.01395

MIP1= 4.0409e 08

P= 2263

U= 0.01631

Z= 0.85565

U*Z= 0.01395

MIP1= 4.0409e 08

P= 2263

U= 0.01630

Z= 0.85565

U*Z= 0.01395

MIP1= 4.0409e 08

File# 6
 600
 72:GAS PSEUDO-F

 * Pressures must
 * be given in
 ** psia

 TEM FRAH(T)
 140
 GAS GRAVITY(G)
 .61
 MOL% N2(N)
 0
 M% CO2(C)
 .3
 M% H2S(H)
 0

P= 2235
 U= 0.01622
 Z= 0.85581
 U*Z= 0.01388
 MIP1= 3.9527e 08
 P= 2224
 U= 0.01619
 Z= 0.85589
 U*Z= 0.01385
 MIP1= 3.9168e 08
 P= 2219
 U= 0.01617
 Z= 0.85593
 U*Z= 0.01384
 MIP1= 3.9881e 08

P= 2220
 U= 0.01617
 Z= 0.85592
 U*Z= 0.01384
 MIP1= 3.9843e 08
 P= 2221
 U= 0.01618
 Z= 0.85592
 U*Z= 0.01385
 MIP1= 3.9863e 08
 P= 2221
 U= 0.01618
 Z= 0.85591
 U*Z= 0.01385
 MIP1= 3.9874e 08

P= 2268
 U= 0.01631
 Z= 0.85565
 U*Z= 0.01395
 MIP1= 4.0415e 08

P= 2219
 U= 0.01617
 Z= 0.85593
 U*Z= 0.01384
 MIP1= 3.8999e 08

P= 2221
 U= 0.01618
 Z= 0.85592
 U*Z= 0.01385
 MIP1= 3.9878e 08

P= 2261
 U= 0.01630
 Z= 0.85566
 U*Z= 0.01395
 MIP1= 4.0353e 08

P= 2219
 U= 0.01617
 Z= 0.85593
 U*Z= 0.01384
 MIP1= 3.8995e 08

P= 2221
 U= 0.01618
 Z= 0.85591
 U*Z= 0.01385
 MIP1= 3.9875e 08

P= 2257
 U= 0.01629
 Z= 0.85568
 U*Z= 0.01394
 MIP1= 4.0218e 08

P= 2219
 U= 0.01617
 Z= 0.85593
 U*Z= 0.01384
 MIP1= 3.8993e 08

P= 2221
 U= 0.01618
 Z= 0.85591
 U*Z= 0.01385
 MIP1= 3.9876e 08

P= 2254
 U= 0.01628
 Z= 0.85570
 U*Z= 0.01393
 MIP1= 4.0112e 08

P= 2220
 U= 0.01617
 Z= 0.85593
 U*Z= 0.01384
 MIP1= 3.9823e 08

P= 2222
 U= 0.01618
 Z= 0.85591
 U*Z= 0.01385
 MIP1= 3.9883e 08

6 Id (cont)

P= 2221
U= 0.01618
Z= 0.85592
U*Z= 0.01385
MIP1= 3.9852e 08

P= 2222
U= 0.01618
Z= 0.85591
U*Z= 0.01385
MIP1= 3.9104e 08

P= 2221
U= 0.01618
Z= 0.85591
U*Z= 0.01385
MIP1= 3.9879e 08

P= 2222
U= 0.01618
Z= 0.85591
U*Z= 0.01385
MIP1= 3.9883e 08

P= 2222
U= 0.01618
Z= 0.85591
U*Z= 0.01385
MIP1= 3.9105e 08

P= 2222
U= 0.01618
Z= 0.85591
U*Z= 0.01385
MIP1= 3.9108e 08

P= 2222
U= 0.01618
Z= 0.85591
U*Z= 0.01385
MIP1= 3.9106e 08

P= 2223
U= 0.01618
Z= 0.85598
U*Z= 0.01385
MIP1= 3.9122e 08

File# 7
700

72:GAS PSEUDO-F

* Pressures must
* be given in
* psia

TEM FAH(T)

140

GAS GRAVITY(G)

.61

MOL% N2(H)

0

M% CO2(C)

.3

M% H2S(H)

0

P= 2222

U= 0.01618

Z= 0.85591

U*Z= 0.01385

MIP1= 3.9104e 08

P= 2194

U= 0.01609

Z= 0.85614

U*Z= 0.01378

MIP1= 3.8212e 08

P= 2138

U= 0.01592

Z= 0.85674

U*Z= 0.01364

MIP1= 3.6434e 08

P= 2142

U= 0.01593

Z= 0.85676

U*Z= 0.01365

MIP1= 3.6559e 08

P= 2145

U= 0.01594

Z= 0.85666

U*Z= 0.01366

MIP1= 3.6657e 08

P= 2153

U= 0.01597

Z= 0.85656

U*Z= 0.01368

MIP1= 3.6916e 08

P= 2157

U= 0.01598

Z= 0.85652

U*Z= 0.01369

MIP1= 3.7036e 08

P= 2148

U= 0.01595

Z= 0.85663

U*Z= 0.01366

MIP1= 3.6739e 08

P= 2147

U= 0.01595

Z= 0.85664

U*Z= 0.01366

MIP1= 3.6709e 08

P= 2148

U= 0.01595

Z= 0.85663

U*Z= 0.01366

MIP1= 3.6735e 08

P= 2148

U= 0.01595

Z= 0.85663

U*Z= 0.01367

MIP1= 3.6743e 08

P= 2153

U= 0.01597

Z= 0.85657

U*Z= 0.01368

MIP1= 3.6895e 08

P= 2155

U= 0.01597

Z= 0.85655

U*Z= 0.01368

MIP1= 3.6959e 08

P= 2156

U= 0.01598

Z= 0.85653

U*Z= 0.01369

MIP1= 3.7000e 08

P= 2155

U= 0.01597

Z= 0.85654

U*Z= 0.01368

MIP1= 3.6961e 08

P= 2157

U= 0.01598

Z= 0.85652

U*Z= 0.01369

MIP1= 3.7021e 08

P= 2161

U= 0.01599

Z= 0.85648

U*Z= 0.01370

MIP1= 3.7149e 08

P= 2163

U= 0.01600

Z= 0.85645

U*Z= 0.01370

MIP1= 3.7228e 08

P= 2169
U= 0.01602
Z= 0.85639
U*Z= 0.01372
MIP1= 3.7414e 08

P= 2147
U= 0.01595
Z= 0.85663
U*Z= 0.01366
MIP1= 3.6723e 08

P= 2147
U= 0.01595
Z= 0.85664
U*Z= 0.01366
MIP1= 3.6713e 08

P= 2171
U= 0.01602
Z= 0.85637
U*Z= 0.01372
MIP1= 3.7458e 08

P= 2147
U= 0.01595
Z= 0.85664
U*Z= 0.01366
MIP1= 3.6715e 08

P= 2148
U= 0.01595
Z= 0.85662
U*Z= 0.01367
MIP1= 3.6744e 08

P= 2166
U= 0.01601
Z= 0.85642
U*Z= 0.01371
MIP1= 3.7312e 08

P= 2146
U= 0.01595
Z= 0.85665
U*Z= 0.01366
MIP1= 3.6685e 08

P= 2149
U= 0.01596
Z= 0.85661
U*Z= 0.01367
MIP1= 3.6792e 08

P= 2170
U= 0.01602
Z= 0.85637
U*Z= 0.01372
MIP1= 3.7451e 08

P= 2145
U= 0.01594
Z= 0.85666
U*Z= 0.01366
MIP1= 3.6656e 08

P= 2150
U= 0.01596
Z= 0.85660
U*Z= 0.01367
MIP1= 3.6800e 08

P= 2147
U= 0.01595
Z= 0.85664
U*Z= 0.01366
MIP1= 3.6702e 08

P= 2145
U= 0.01594
Z= 0.85666
U*Z= 0.01366
MIP1= 3.6664e 08

P= 2150
U= 0.01596
Z= 0.85660
U*Z= 0.01367
MIP1= 3.6800e 08

P= 2147
U= 0.01595
Z= 0.85664
U*Z= 0.01366
MIP1= 3.6703e 08

P= 2146
U= 0.01595
Z= 0.85665
U*Z= 0.01366
MIP1= 3.6676e 08

P= 2151
U= 0.01596
Z= 0.85659
U*Z= 0.01367
MIP1= 3.6844e 08

P= 2147
U= 0.01595
Z= 0.85664
U*Z= 0.01366
MIP1= 3.6710e 08

P= 2146
U= 0.01595
Z= 0.85665
U*Z= 0.01366
MIP1= 3.6685e 08

File#	8	P=	2053	P=	2030
80d		U=	0.01566	U=	0.01559
72:GAS PSEUDO-F		Z=	0.85801	Z=	0.85843
*****		U*Z=	0.01344	U*Z=	0.01338
* Pressures must		MIP1=	3.3806e 08	MIP1=	3.3100e 08
* be given in					
** psia		P=	2046	P=	2030
*****		U=	0.01564	U=	0.01559
TEM FAH(7)		Z=	0.85814	Z=	0.85843
140		U*Z=	0.01342	U*Z=	0.01338
GAS GRAVITY(G)		MIP1=	3.3580e 08	MIP1=	3.3105e 08
.61					
MOL% N2(N)		P=	2033	P=	2030
0		U=	0.01560	U=	0.01559
M% CO2(O)		Z=	0.85837	Z=	0.85843
.3		U*Z=	0.01339	U*Z=	0.01338
M% H2S(H)		MIP1=	3.3202e 08	MIP1=	3.3108e 08
0					
P=	2151	P=	2030	P=	2030
U=	0.01596	U=	0.01559	U=	0.01559
Z=	0.85659	Z=	0.85843	Z=	0.85843
U*Z=	0.01367	U*Z=	0.01338	U*Z=	0.01338
MIP1=	3.6844e 08	MIP1=	3.3108e 08	MIP1=	3.3108e 08
P=	2144	P=	2029	P=	2031
U=	0.01594	U=	0.01559	U=	0.01559
Z=	0.85667	Z=	0.85845	Z=	0.85842
U*Z=	0.01366	U*Z=	0.01338	U*Z=	0.01338
MIP1=	3.6622e 08	MIP1=	3.3071e 08	MIP1=	3.3126e 08
P=	2092	P=	2030	P=	2031
U=	0.01578	U=	0.01559	U=	0.01559
Z=	0.85739	Z=	0.85844	Z=	0.85841
U*Z=	0.01353	U*Z=	0.01338	U*Z=	0.01339
MIP1=	3.4988e 08	MIP1=	3.3089e 08	MIP1=	3.3144e 08
P=	2066	P=	2030	P=	2032
U=	0.01570	U=	0.01559	U=	0.01559
Z=	0.85779	Z=	0.85843	Z=	0.85840
U*Z=	0.01347	U*Z=	0.01338	U*Z=	0.01339
MIP1=	3.4200e 08	MIP1=	3.3102e 08	MIP1=	3.3152e 08

EDA (cont)

P= 3032
U= 0.01875
Z= 0.86718
U*Z= 0.01626
MEP1= 6.7459e 02

P= 2936
U= 0.01561
Z= 0.85832
U*Z= 0.01340
MEP1= 3.3282e 02