# PETROFINA EXPLORATION AUSTRALIA S. A.



ANEMONE - 1/1A

**FINAL WELL REPORT** 

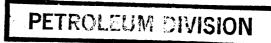
( VOLUME 2 : TESTING )





# Petrofina Exploration Australia S.A. Incorporated in Belgium with Limited Liability Registered in New South Wales

Level 2 476 St Kilda Road Melbourne Vic. 3004 Telephone: (03) 267 7999 Telex: 154767 PEXAUS Telefax: (03) 267 7776



ANEMONE - 1/1A

27 NOV 1989

FINAL WELL REPORT

(VOLUME II)

Prepared by: Bruno de Vinck

November 1989

# T A B L E O F C O N T E N T S V O L U M E II

### TESTING REPORTS

- DST #1
- DST #2
- Flopetrol
- Exal (DST #1)
- Exal (DST #2)

#### TABLE OF CONTENTS

#### VOLUME I

#### 1. GENERAL DATA

- Well Summary
- Stratigraphy
- Discussion and Recommendation

#### **PROGRAMMES** 2.

- Geological Well Prognosis
- Drilling Programme
- Sidetrack Drilling Programme
- 7" Liner Programme 5" Liner Programme
- Testing Programmes
- Abandonment Programme

#### 3. DESCRIPTION OF DRILLING UNIT

#### WELL LOCATION SURVEY 4.

- Site Survey
- Rig Positioning

#### **OPERATIONS** 5.

- Summary of Activities
- Depth vs Days Curve
- Time Breakdown
- Estimated Cost vs Depth Curve
- Contractor Summary

#### 6. DRILLING DATA

- Bit Record
- BHA Record

#### 7. DIRECTIONAL DATA

#### 8. MUD DATA

- Mud Properties
- Material Recap

#### 9. CASING AND CEMENTING DATA

- 30"
- 20**''**
- 13-3/8"
- 9-5/8"
- 7" Liner
- 7" Tie-Back
- 5" Liner

## VOLUME I (Continued)

### 10. FORMATION DATA

- Formation Fracture Data
- RFT Data
- RFT Fluid Report
- DST Fluid Report

### 11. ABANDONMENT REPORT

- Diagram
- Certificate of Seabed Clearance

### 12. ESTIMATED WELL COST

# **DST #1**

#### ANEMONE-1A

## DST 1 TRANSIENT PRESSURE TESTING

The perforated intervals 4599-4629 mkb and 4618 - 4652 mkb were tested as indicated in Figure 1.

The main results are summarised in Table 1 but some comments should be added.

#### 1. Initial Pressure:

The initial reservoir pressure at 4600m is estimated between 9600 and 9900 psi. Because the static gradient below the pressure gauges at the time of the first shut-in is unknown it is not possible to estimate the initial pressure with more precision.

The equivalent mud density required to balance this pressure would be 1.47 to 1.52 gr/cc. Therefore the reservoir was, at least partially, drilled underbalanced if all the sands had the same equivalent pressure. This could explain the high gas content in the mud and to a certain extent could be the reason for the largely washed out hole.

#### 2. Formation Permeability and Skin

All the interpretations were carried out assuming gas condensate bearing sands and consequently the gas pseudo-pressure function, m(p) was used.

A test was done with the main build-up, by assuming a volatile oil reservoir, and a permeability of 0.08 md was obtained from the Horner type plot.

It must be emphasized that the permeabilities and skin factors listed in Table 1 should be read as order of magnitude. Due to the very low permeability the time required to reach the infinite acting region was very long. However, the derivative analysis seems to confirm that the permeability is around 0.2 md.

Any turbulence effect was neglected. That effect is significant in low permeability formations but in this case the rate is small.

The calculated skins vary from slightly negative (-0.3 and -2.6; in semi-log and Horner plots of last build-up) to around 8 to 9 in the derivative plots. We think that the last figures are more reliable as the permeability reduction close to the wellbore due to the liquid drop out and any eventual partial penetration effect (if only part of shots reached the formation) will justify a positive skin.

#### 3. Radius of Investigation:

The radius of investigation is small, maybe around 60 ft. This is due to the low permeability and high total compressibility.

No boundary effects were observed. The calculated lower extrapolated pressure in the last build-up, which could indicate reservoir depletion, should be interpreted with caution due to the insufficient build-up time.

#### 4. Conclusions:

We suggest that the pressure history between 27 September and the end of the main build-up on 1 October be interpreted using a generalised superposition function. This work will be done by Petrofina Brussels with the INTERPRET Software (SCI-Intercomp). However, we feel confident to say that the tested interval in DST 1 has a very low permeability (approx. 0.2 md) and low to nil damage due to drilling fluids.

A complete set of the quick analysis plots (carried out on the rig) and results of gauge 73033 pressure data are attached to this note.

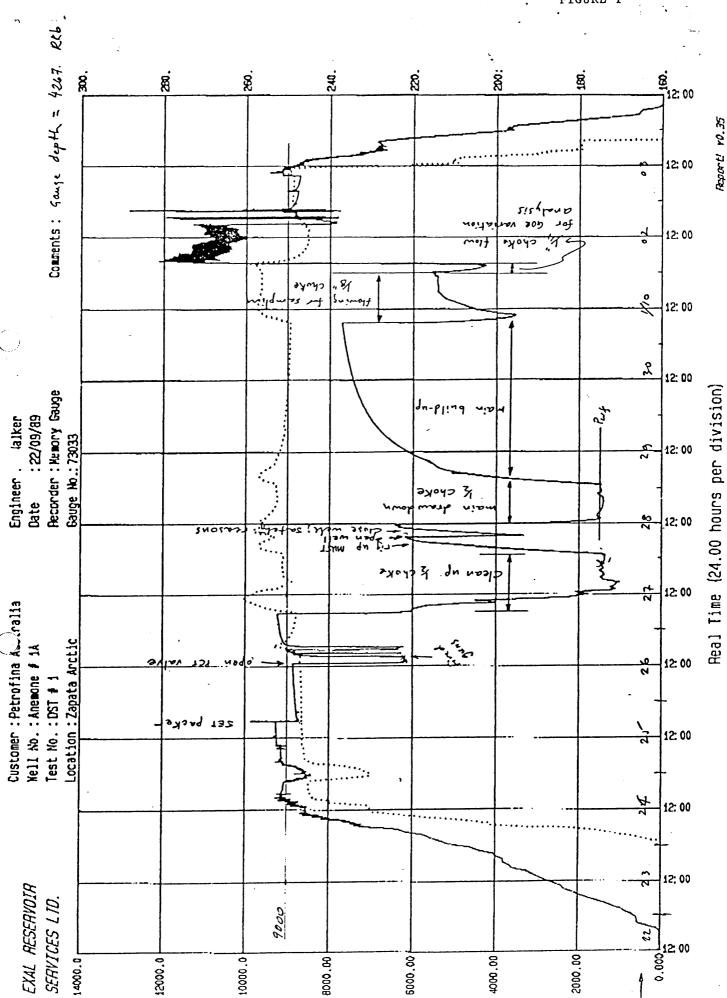
David Sousa 5 October 1989

# ANEMONE - 1A; DST 1 . SUMMARY OF TRANSIENT PRESSURE ANALYSIS .

GAUGE DEPTH (m)	75188 4267.8	73033 4267.8	71532 4299.3	74907 4299.3
1st SHUT IN				
P* (psia)	9115	9224	9164	9164
MAIN DRAWDOWN				
Semilog analysis  KH (mdft)  K (md)  Skin  Idius invest. (ft)	4.63 0.06 0.1 59	9.73 0.13 5.2 85		
Derivative analysis KH (mdft) K (md) Skin	13 0.18 9.4	13.8 0.18 9.6		×
' IN BUILD-UP				
Semilog analysis  KH (mdft)  K (md)  Skin  Radius invest. (ft)	3.9 0.05 -0.3 54	3.9 0.05 -0.3 54	÷.	
Horner analysis  KH (mdft)  K (md)  Skin  dius invest. (ft)  P* (psia)	0.99 0.01 -2.6 27 8341	0.97 0.01 -2.7 27 8369		
Derivative analysis KH (mdft) K (md) Skin	10.1 0.14 8.7	10.1 0.14 8.7		

10:50 AM

FIGURE 1



E.P.D.S. Ltd.

### PANSYSTEM ANALYSIS PROGRAM

File: 73033A.GAS

Test type: CRB

Data: 04/10/89 Time: 15:15

Analyst name...... J. Walker

Company..... Petrofina Exploration Australia SA

Wall..... Anamona # 1A

Field....: Wildcat Data....: 04/10/89

Rig Name/Number..... Zapata Arctic

Test..... DST # 1 Gauge Type..... EMS 700 Gauge Number..... 73033

Gauge Depth - Measured..: 4267.15m RKB

Vertical..:

Producing Formation.. Top:

Bottom:

Perforated Interval..Top: 4599m 4629m RKB 4652m RKB

Bottom: 4518m

Depth Reference - MSL...:

Remarks....:

### TEST PARAMETERS

## Test type - Constant rate buildup

1.045 MMscf/day Gas flow rate at surface (0)....: Pressure prior to shut-in (p(dt=0))....: 6205.501 psia/ 0.1670 hr / Equivalent production time (Tp)....: 97.222 hr Time when dt=0....:

E.P.D.S. Ltd.

## PANSYSTEM ANALYSIS PROGRAM

File: 73033A.GAS

Test type: CRB

Date: 04/10/89 Time: 15:15

#### RESERVOIR CONSTANTS

Formation thickness (h)	74.000	1 t
Average formation porosity (0):	0.1600	
Well radius (rw):	0.4000	ft.
Gauge depth:	4267.000	ft
Datum depth:	0.0000	ft

## GAS COMPOSITION Mol percent (Optional)

Mathane:	.000	Ethane:	.000	Propane:	.000	Iso-Butanc:	.000
n-Butane:	.000	IsoPentane:	.000	n-Pentans.:	.000	Hexanes:	.000
C 7 +1	.000	Nitrogen:	.000	CO2:	.000	H2S	.000
						C7+ mol ut:	000

#### RESERVOIR VARIABLES

Reservoir pressure:	8500.000	psia
Temperature (T)	260.000	deg F
Water saturation (Sw):	0.4000	_
Water compressibility (Cw):	3.500E-06	psi-1.
Formation compressibility (Cf):	3.500E-06	psi-1
Gas gravity:	1.260	sp grav
Initial gas viscosity (ui):	0.0542	cb
Initial z-factor (zi):	1.439	
Gas compressibility (Cg)	2.526E-05	ps1-1
Initial system compressibility (Ct):	2.006E-05	osi-1

-113.197 65.084 0.0136 -1.380	1.340 1.272 1.211		a a	. 0	0.05 0.05 0.06
Slope113 Intercept & Peresbility.: 0 Skin:	1.414				0.05 0.05
ldcat /10/89 pota Arctic T # 1	start of tes 1.590	a a a a a a a a a a a a a a a a a a a			0.04 1t) /dt] (tp =
Field.: Nilocat Date.: 04/10/89 Rig Hame/Number:: Zapata Arctic Test.: DST # 1	1.818				0.0
Fi J.Yalker Daration Australia SA Ri Mosone # 1A	1				0.03 0.04
File. : 7303A.GAS kralyst name. : J.Yalker Company. : Petrofina Em	2.283	74.747	67.883 (67.883	47.293	0.03

HORN 3 PLOT

PANSTISTEN (C) EPDS . . . 87, 88.

E.P.D.S. Ltd.

### PANSYSTEM ANALYSIS PROGRAM

Fila: 73033A.GAS

Test type: CRB

Date: 04/10/89 Time: 15:15

RESULTS FROM HORNER ANALYSIS using Pressure-squared and Real time

Line :

Intercept....: 85.084 / Slope....: -113.197 / Start of line....: ( 0.0369 , 80.865)
End of line....: ( 0.0307 , 81.610)
Coefficient of determination...: 0.9916

Number of points..... 21

Extrapolated p\*+2..... 85.084 psia2 (\*1E-06)

Permeability-thickness (kh)..... 1.005 md.ft

Permeability (k)..... 0.0136 md

dP skin (constant rate)..... -6205.501 psi

Extrapolated pressure..... 9224.117 page /

Pressure at dt = 1 hour..... 8803.040 psia

initial pressure @ Perfs => 9602 to 9943 psi

04. 10. 89 05:21 PM \*PETROFINA-Z. ARCTIC P01

E.P.D.S. Ltd.

### PANSYSTEM ANALYSIS PROGRAM

File: 73033B.GAS

Test type: CRD

Date: 04/10/89 Time: 16:40

#### RESERVOIR CONSTANTS

Formation thickness (h):	74,000	ft
Average formation porosity (0):	0.1500	
Woll radius (rw)	0.4000	ft
Gauge depth:	4257.000	ft
Datum depth:	0.0000	ft

## GAS COMPOSITION Mol percent (Optional)

Mcthano:	.000 Ethana:	.000 Propane:	.000 Iso-Butane:	.000
n-Butana:	.000 IsoPentane:	.000 n~Pentane.:	.000 Hexanes:	.000
C 7 +:	.000 Nitrogen:	.000 CO2:	.000 H2S:	.000
	·	·	C7+ mol wt:	.000

#### RESERVOIR VARIABLES

Reservoir pressure:	9224.000 psia
Temperature (T)	260.000 deg F
Water saturation (Sw)	0.4000
Water compressibility (Cw)	3.500E-06 psi-1
Formation compressibility (Cf)	3.500E-06 psi-1
Gas gravity:	1,260 sp grav
Initial gas viscosity (ui):	0.0669 cp
Initial z-factor (zi)	1.535
Gas compressibility (Cg):	2.258E-05 psi-1
Initial system compressibility (Ct):	1,845E-05 psi-1

## N.B. GAUGE 73033 START TIME 13:58 22/09/29. DATA SENT MY MODEM

FILE 73033, TDA

DIR C: \ TRANS.

#### 04. 10. 89 \*PETROFINA-Z. ARCTIC 05:21 PM

E.P.D.S. Ltd.

## PANSYSTEM ANALYSIS PROGRAM

2045.743 psia

File: 730338.GAS

Test type: CRD

Data: 04/10/89 Time: 16:40

## RESULTS FROM SEMILOG ANALYSIS using Pseudo-pressure and Real time

l	_	1	r	1	C			
---	---	---	---	---	---	--	--	--

Intercept:	340.094	
Slope:	-126.586	
Start of line(	1.087 ,	202.173)
End of line	1.120 ,	198.359)
Coefficient of determination:	0.9615	
Number of points	7	

m(p) at dt = 1 hr..... 340.094 psia2/cp (\*1E-06) Permeability-thickness (kh)....: 9.725 md.ft Permeability (k)..... 0.1314 md Total skin factor (s)....: 5.159 dP skin (constant rate)....: 2255.771 psi Radius of investigation....: 85.294 ft Pressure at dt = 1 hour....:

PANSYSTEK (C) EPOS 1985, 87, 88.

CARTESIAN PLOT

Company ...... Petrofina Exploration Australia SA Rig Name/Nia

Well......hromone # 1A

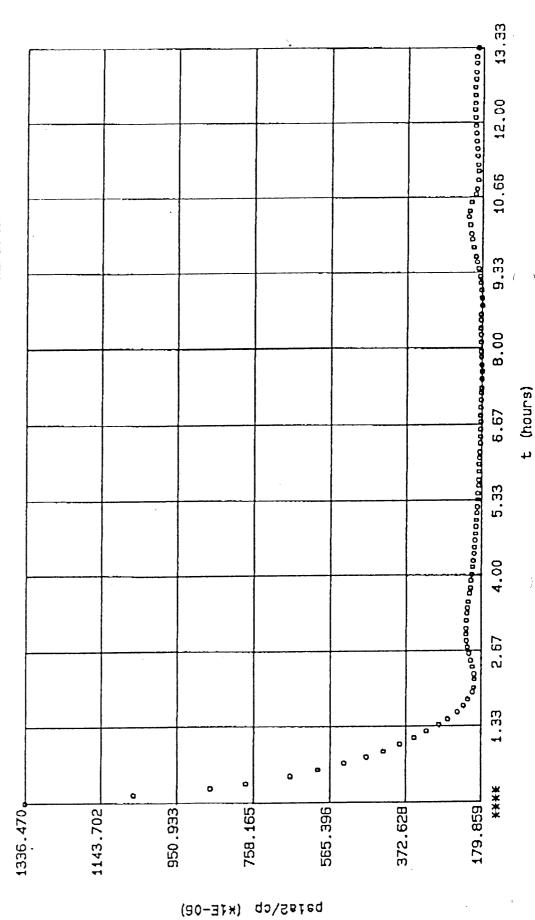
Date...... 04/10/89

Field...... Kildcat

ia St. Rig Kame/Marker...... Zupata Arctic

Test...... 1851 # 1

KLTH DRUMONN



Pseudo-pressure

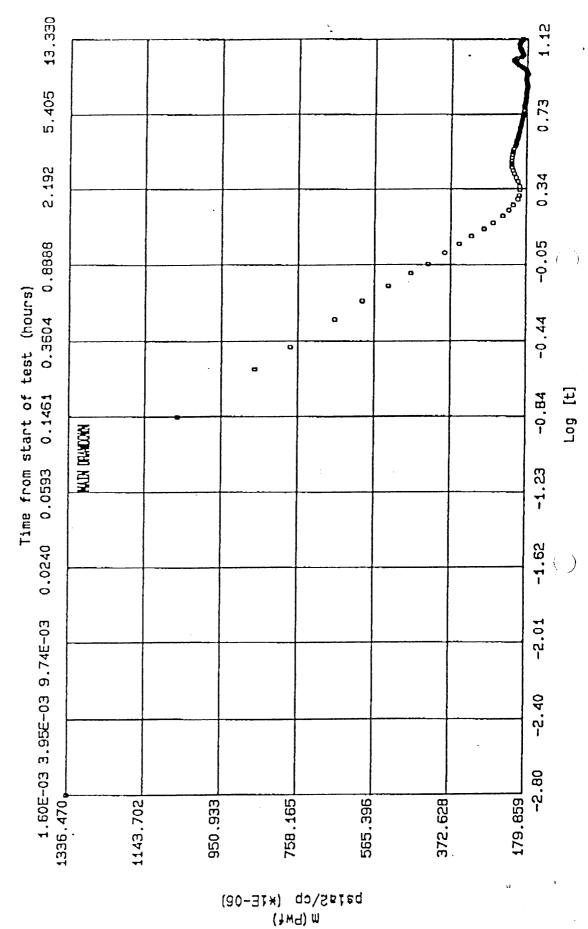
PAKSYSTEM (C) EPOS 1988, 87, 88.

SEMILOG DRAWDOWN PLOT

Company....... Petrofina Exploration Australia SA

Rig Heme/Alactor..... Zapata Arctic

[ext..... DGT # 1

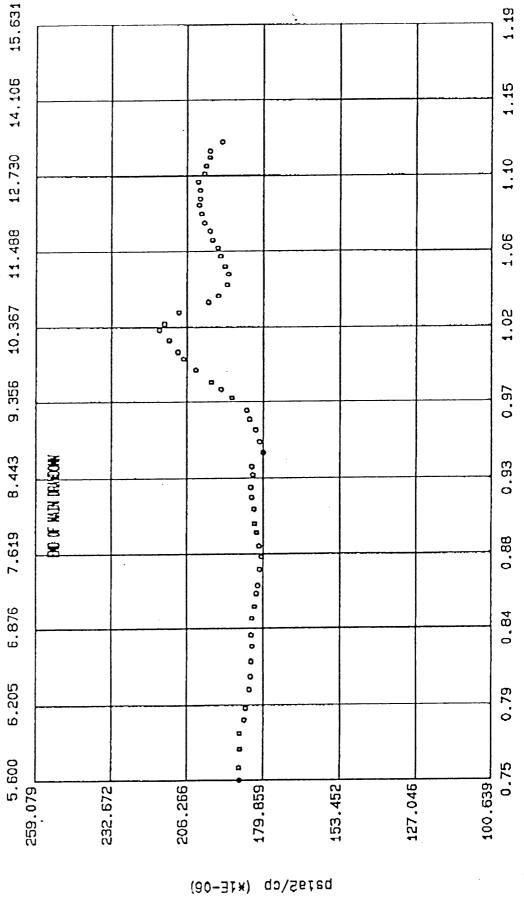


PLUSYSTEM (C) EPOS 1996, 87, 88.

SEMILOG DRAWDOWN PLOT

Hig Name/Number..... Zapata Arctic Field....: Wildcat Company....... Petrofina Explanation Australia SA Analyst name...... J. Halker

Time from start of test (hours)



(1세대) 때

Log [t]

č	3	
5	×	
20 60 044.5	5	
٤	1	
٤	=	
2	1	

SEMILOG DHAWDOWN PLOT

	14.056				`.			1.15
	13.688 1		,					1.14
-126.586 340.094 0.1314 5.159	13.330							1.12
Slope	12.980							11.1
	Time from start of test (hours) 3 11.987 12.309 12.640 1							1.10
3 Actic	12.309	BO OF HUDI ONLINO						1.09 Log [t]
Wildcat	11.987	908		0				1.08
80	Tir 11.673			0				1.07
	11.367							1.06
oleration Austr	11.069				0			1.04
. 70038.645 . J. Halker . Petrofina Epploration Australia SA Increone # 1A	10.779	212.427	202.745	193.062		183.380	173.697	164.015
File Analyst name. Ompany Well					q)m qa\Seteo	ſ	·	u .

		100.000		2.000
	Slope: 1.000 Intercept: 3.230 Hellbore Vol.: 143.566 Storage cref.: 3.242E-63	10.000		1.000
PLOT	S 1 34 S	(hours) 1.000		0.0000 [t]
LOG~LOG PLOT	Field	Real Time (hours) 0.1000	HOOM BOAKOOH	-1.000 Log [t]
		0.0100		-2.000
PANSTYTEN (C) EPOS 1985, 87, 88.	File : 730338.GAS Analyst name : J.Malker Company : Retrofina Exploration Australia SA Melli : Anemone # 1A	1.00E-03	(P) m- (P) m) BoJ	-3.000

E.P.D.S. Ltd. PANSYSTEM ANALYSIS PROGRAM

File: 73033B.GAS

Test type: CRD

Data: 04/10/89 Tima: 16:02

RESULTS FROM LOG-LOG ANALYSIS

Line :

Intercept...... 3.250

Slope....: 1.000

Apparent wellbore volume..... 143.566 bbl

Dim. wellbore storage constant (Cd)....: 67.721

Storage coefficient (initial)..... 3.242E-03 bbl/psi

# E.P.D.S. Ltd. PANSYSTEM ANALYSIS PROGRAM

File: 730338.GAS

Test type: CRD

Date: 04/10/89 Time: 16:59

RESULTS FROM A HOMOGENEOUS RESERVOIR TYPE-CURVE MATCH (WELLBORE STORAGE ANALYSIS)

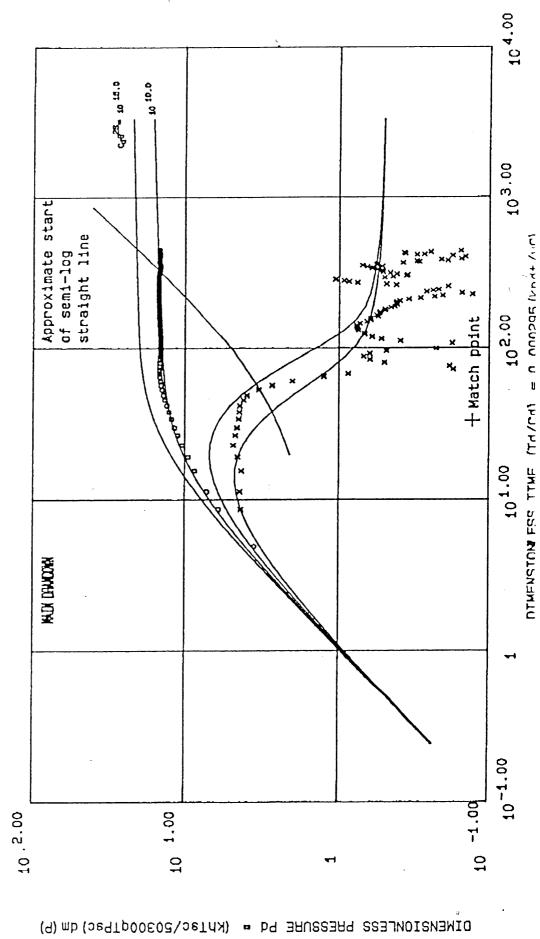
Data plotted using Real Elapsed Time and m(p)

Dim. pressure match point Pd(match):	0.1289	
Dim. time match point Td/Cd(match):	33.672	
Matched curve Cde2S(match):	1.000E+10	
Pressure match point dP(match):	10.000	
Time match point dt(match):	1.000	
Permeability-thickness (kh)	13.778	md.ft
Permeability (k):	0.1862	md
Apparent wellbore volume:	97.797	bb1
Dim. wellbore storage constant (Cd):	46.132	
Storage coefficient (initial):	2.208E-03	bbl/psi
Radius of investigation:	101.527	ft
dP akin (constant rate)	3043.964	psi
Skin factor (S)	9.597	

88
87
1986 1986
PDS SZ
豆
PLASYSTEM

HOMOGENEOUS RESERVOIR	Pu (match): 0.1289 dp (match) 10.000	Id (match): 33.672 dt (match) 1.000	ic Permeability.: · 0.1862	Skin 9.597 C (Storage) .: 97.797
HOMOGENEO	Field Hildcat	Date	Rig Hame/Number Zayata Arctic	Text 157 # 1
PAKSITEN (C) EPOS 1986, 87, 88.	File 7303B.GUS	, lajker	Company Petrofisa Emparation Australia SA	Hell

Data plotted using Real Elapsed Time and m(p)



## MAIN BUILD-UP.

E.P.D.S. Ltd.

#### PANSYSTEM ANALYSIS PROGRAM

File: 73033C.GAS

Test type: CRB

Date: 04/10/89 Time: 17:47

RESULTS FROM LOG-LOG ANALYSIS

Line :

Intercept..... 2.514

Slope....: 1.000

Apparent wellbore volume..... 783.109 bbl

Dim. wellbore storage constant (Cd)....: 369.397

Storage coefficient (initial)...... 0.0177 bbl/psi

		100.000		<u>`</u>	2.000
	Slepe: 1.00 Intercept: 2.514 Ibilbore Vol.: 783.109 Storage coef.: 0.0177	10.000	**************************************		1.000
LOG-LOG PLOT	Field	Heal Time (hours)	AP-CILLIA BULLY		-2.000 0.0000 Lag [dt]
PARSISTEN (1) ETICS 1996, 87, 88.	eks r na Exploration Australia SA : # 1A	1.00E-03 0.0100	4:000	Log (m (P) - m (PO)]  1.333	0.0000

PANSYSTEM (CL EPDS 12868, 87, 88.

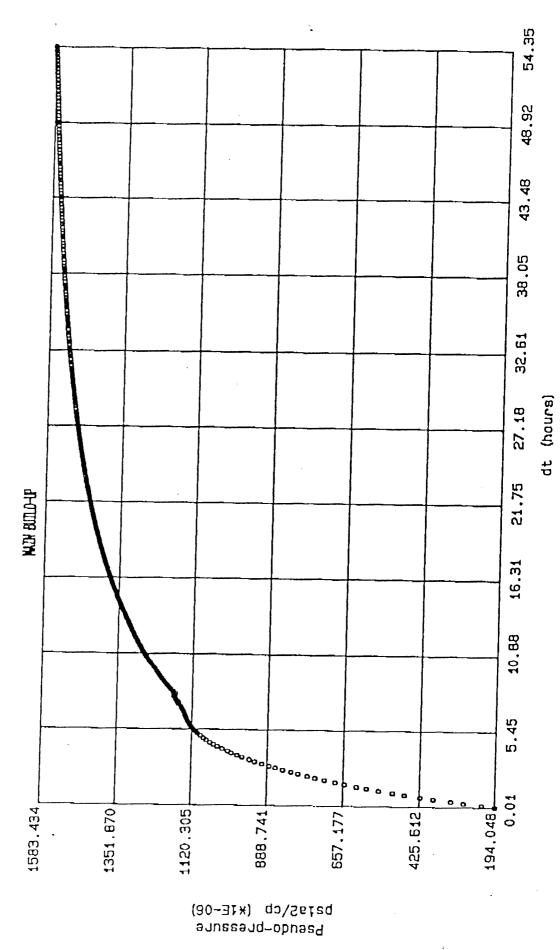
File......73030.845

Campany....... Petrofina Exploration Australia SA

Field..... Wildrat

CARTESIAN PLOT

Text...... 051 # 1



. 67, 68.	ord warrage.
PAKEYSTEK (C) EPOS	9

MDH BUI JUP PLOT

	23.647 54.349	•				1.37 1.74
1318.28t 1035.612 10.023 10.023	10.289					1.01
Slape. Intercept Permeability Skin	3 4.477	No.	, o o o o o o o o o o o o o o o o o o o			0.65
	of test (hou			9 9		07 0.29 dt]
: Vildcat : Ou/19/189 : Zapata Arctic : IST # 1	Time from start of test (hours) 4 0.3687 0.8475 1.948 MIN WILD-UP			0	,	-0.43 -0.07 Log [dt]
Field : Mildcat Date : 04/xv/BB Ang Name/Kumber : Zapata Arctic Test : 157 # 1	Time f					7 62.0-
	0.0598 0					-1.16
7303C.GUS J.Nalker Petrofina Exploration Australia SA Amemone # 1A	0.0304					-1.52
72032.64S J.Walker Petrofina Ex	0.0132	1120.305	888.741	425.612	194.048	1 88
File Asalyst næe Company Well	£ £		m (Pws) psia2\cp (x1E-	•		·

## E.P.D.S. Ltd. PANSYSTEM ANALYSIS PROGRAM

File: 73033C.GAS

Test type: CRB

Data: 04/10/89 Tima: 18:34

RESULTS FROM SEMILOG ANALYSIS using Pseudo-pressure and Real time

Line :

Intercept:	1036.612	
Slope:	318.281	
Start of line	1.383 ,	1468.645)
End of line(	1.735 .	1583.434)
Coefficient of determination:	0.9905	
Number of points:	133	

m(p) at dt = 1 hr:	1036.612 pai	a2/cp (*1E-06)
Computed initial pressure:	6770.298 psi	. a
Permeability-thickness (kh):	3.868 md.	ft
Permeability (k)	0.0523 md	
Total skin factor (s):	-0.3004	
dP skin (constant rate):	-372.255 pas	L
Radius of investigation:	53.791 ft	

Pressure at dt = 1 hour..... 4969.215 psia

		0.0132	Tint	æ:		<u>.</u>			2,99	
ට මූ	268.075 724.487 0.0131 -2.685	0.0258							2.70	
Line 1 Line 2	1400.4671 -12388.0175 1400.4677 1704.4877 0.0308 0.0131 -2.883 -2.685	0.0504			-				2.41	
لہ	Slape	.0986							2.12	(00)
	Sign Interpretation	test (hours) 0.1937 0						•	1.83	13.000)
HORNLA PLOT	4		<u>-</u>					0	1.54	it] (tp =
HORN	Wildcat  Out/10/88  Zapata Arcti	Time from start of 38 0.7685 0.3831	ALIN BILLO-LE						1.25	Log [(tp+dt)/dt] (tp =
	ta q	Time 1.588 0.7							0.96	Log [
		3.502 1.			1 /	0000			0.67	
	n Australia SA				and the second s				0.38 0	
_:	J.Kalker J.Kalker Petrofina Exploration Australia SA Anceone # 1A	49 9.179							60	
NS 1996, 87, 86		54.349		м С	1150.300	0000	657.177	425.612	194.048	
PLUSYSTEM (C) EPUS 1965, 87, 88.	File. Analyst name. Campany	4	·		(*1E-09)	ო9) m qo∖Sbiec	j	<del></del>	3	23

21:61 6861,40,01

## E.P.D.S. Ltd. PANSYSTEM ANALYSIS PROGRAM

File: 730330.GAS

Test type: CRB

Data: 04/10/89 Time: 18:06

RESULTS FROM HORNER ANALYSIS using Pseudo-pressure and Real time

### First Line :

Intercept:	1400.467
Slope:	-539.911
Start of line(	0.4907 . 1137.067)
End of line(	0.4396 . 1166.350)
Coefficient of determination:	0.9677
Number of points:	9
m(p) at dt = 1 hr	781.771 ps(a2/cp (*1E-06)
Extrapolated m(p):	1400.467 psis2/cp (*1E-06)
Permeability-thickness (kh):	2.280 md.ft
Permeability (k)	0.0308 md
Total skin factor (s)	-1.893
dP skin (constant rate)	-1479.609 psi
Radius of investigation	41.300 ft
Extrapolated pressure:	6765.826 psia
Pressure at dt = 1 hour	3816.859 paia

₹1:61 6861.40.01

E.P.D.S. Ltd.

### PANSYSTEM ANALYSIS PROGRAM

File: 73033C.GAS

Test type: CRB

Date: 04/10/89 Time: 18:06

RESULTS FROM HORNER ANALYSIS using Pseudo-pressure and Real time

#### Second Line :

4 **~** 

, , , , ,

000000			
Intercept		1704.487	
\$lope		-1268.075	
Start of	line:(	Ø.2872 ,	1337.545}
End of li	na:(	0.0978 ,	1577.815)
Coefficie	nt of determination:	0.9995	
Number of	points	178	
	4		
m(p) at dt = 1	hr	251.373	psia2/cp (*1E-06)
	p)		psia2/cp (*1E-06)
Permeability-th	nickness (kh)	0.9708	md.ft
	(),		md
Total skin fact	or (s)	-2.665	
dP skin (consta	ant rate)	-1479.609	psi
Radius of inves	stigation	26.949	ft
Extrapolated pr	^655UF6	8368.884	psia
Pressure at dt	= 1 hour	1703.569	psia

	0.0346	3.88	4.1365	8.674
SERVOIR	Pd (natus) 0.0946	Td (match):	Permeability.: 0.1365	
HOMOGENEOUS RESERVOIR	Field	Date W10/88	Rig Wate/Number Zapata Arctic	
PAKSYSTEX K) EPOS 1985, 87, 88.	File	Unlyst name J. Palker	Company Petrofina Exploration Australia SA Rig Mame/Mumber Zapata Arctic	It is a firmed to the first terms of the first term

Field	Yildcat	Pd (patch) 0.0	0.0
Date	W/10/88	Td (match)	mi
Rig Kame/Number Zapata Arctic	Japata Arctic	Permeability.: 0.1	2
Test IST # 1	IST # 1	Skin	ထ
Data plotted u	Data plotted using Real Elapsed Time and m (p)	Time and m (p)	

# (match) ... 19.000 off [match] ... 1.000 op (stin) ... 3855.824

C(Sturagel .: 619.437

104.00 C. et at 30.0 103.00 Approximate start of semi-log straight line DIME\_IDNLESS TIME (Td/Cd) = 0.000295(k 7:/uc) 105.00 101.00 WALL BUTLO-UF 10-1.00 10 -1.0d 10 1.00 10 2.00

DIWENZIONCESS by = (Kptsc/20300d1bsc) qm (P)

P.10

E.P.D.S. Ltd.

PANSYSTEM ANALYSIS PROGRAM

File: 73033C.GAS

Test type: CRB

Date: 04/10/89 Time: 18:50

RESULTS FROM A HOMOGENEOUS RESERVOIR TYPE-CURVE MATCH (WELLBORE STORAGE ANALYSIS)

Data plotted using Real Elapsed Time and m(p)

Dim. pressure match point Pd(match):	0.0945	
Dim. time match point Td/Cd(match):	3.899	
Matched curve Cde2S(match):	1.000E+10	
Pressure match point dP(match)	10.000	
Time match point dt(match):	1.000	
Permeability-thickness (kh)	10.104	md.ft
Permeability (k):	0.1365	md
Apparent wellbore volume:	619.437	bb1
Dim. wellhore storage constant. (Cd):	/ 292.192	
Stocana coefficient (initial)		bbl/psi
Radius of investigation	86.943	ft
dP skin (constant rate):	3856.024	psi
Skin factor (S)	8.674	

# DST #2

#### ANEMONE 1A - DST 2

The sandstone interval 4535-4545m was perforated with Schlumberger tubing conveyed guns (6 shots/ft -  $60^{\circ}$  phasing) on 8 October 1989 at 1500 hrs. The wellhead shut-in pressure at 1605 hrs, just before opening the well, was 2230 psi (BHSIP = 8870 psi). After a 10 minute flow the well was closed (at PCT and choke manifold) for the night for safety reasons.

On 9 October at 0548 hrs the well was opened at the PCT and choke manifold for unloading and clean up. The static wellhead pressure before opening at choke manifold was 1500 psi and was still increasing. After opening the well the WHFP dropped quickly to zero psi.

After 27 hours clean up the well was producing at an average rate of 60 bbl/day water-cushion water. The wellhead pressure was around 10 psi and the cumulative water recovery was 73.4 bbl or approximately 66% of total wellbore and tubing volume. The unloading rate was practically constant and no increasing gas rate was observed (only some gas bubbling was observed in the bubble hose).

In view of the performance of the well during the clean up Schlumberger was rigged up to take bottom samples and record the pressure gradient in order to determine the nature of formation fluids being produced.

#### Pressure Gradient Recorded with Well Flowing:

Depth (mkb)	Gradient (gr/cc)	Depth (mkb)	Gradient (gr/cc)	Depth (mkb)	Gradient (gr/cc)
100	1.0	4020	0.95/0.99	4450-4500	1.04
500	1.33	4060-4070	1.0	4420-4500	1.04
1000	1.23	4070-4080	0.81		
2000	1.19	4080-4090	1.0	:	
3000	1.08	4090-4100	0.83		
4010	1.07	4130-4150	0.93		

Two samples were taken at 3904mkb and 4428mkb and were analysed on the rig giving the following results:

	Sample 1 @ 3904mkb	Sample 2 @ 4428mkb	Mud Filtrate
Pressure	5788 psi	6536 psi	-
Temperature	111.1°C	130.7°C	-
Resistivity at 55°F	0.697 m	0.694 m	-
рН	7.17	7.47	10.7
pf/mf	0/5.4	0/5.5	0.25/0.50
нсо <sub>3</sub>	108 meg/l	110 meg/l	-
cl	4000 mg/l	4000 mg/l	15,500 mg/l
Ca <sup>2+</sup>	60 ppm	100 ppm	400 ppm
Mg <sup>2+</sup>	61 ppm	24.4 ppm	0

# FLOPETROL REPORT

WELL TEST REPORT
PETROFINA ANEMONE - 1A
FIELD: VIC/P20
DST 1+2
DATE: 22 SEP TO 11 OCT 1989.

.\_\_

DIVISION : ANZ

BASE : BEF

REPORT N°: 01/89

# Well Testing Report

Client: PETROFINA

Field: VIC/PZO Well: ANEMONE - 1A

Zone: DST #1 Date: 22 SEP - 04 OCT 89

Client = PETROFINA

Section

: INDEX

Base :\_

Field = VIC/PZO

Well = ANEMONE 1A

Page Report N°: 01/89

#### INDEX

- ☐ 1\_ TEST PROCEDURE \_
- □ 2\_ MAIN RESULTS \_
- □ 3\_OPERATING AND MEASURING CONDITIONS \_
- □ 4\_SURFACE EQUIPMENT DATA \_
- □ 5-WELL COMPLETION DATA \_
- □ 6\_SEQUENCE OF EVENTS \_
- □ 7\_ WELL TESTING DATA \_

#### TESTING CREW

- O. HOBBS
- A. GILLIES
- C. MORRELL
- E. GOH
- T. CHIN
- S. BROWN
- J. BRUCE S. MILNE
- P. NARDONE

Flopetrol chief operator Name : E GOH

Client representative Name: D Soussa

101 ٩

Client : PETROFINA

Section

Base:

BEF

Field Well

VIC/PZO ANEMONE 1A Page

3 Report N°: 01/89

#### TEST PROCEDURE

- 1. Make up EZ Tree and lubricator valve assembly.
- 2. Make up Schlumberger TCP gun assembly.
- 3. Run in hole with Schlumberger test tools.
- 4. After pressure test bottom hole assembly, run in hole with 2.5" VAM tubing.
- 5. Make up fluted hanger to test string and run in hole.
- 6. With fluted hanger sitting on wear bushing, run in hole with correlation log to check space out.
- 7. Pull out of hole with fluted hanger and run in hole with EZ Tree and lubricator valve assembly.
- 8. Pressure test lower and upper test string.
- 9. Rig up long bails and pick up flowhead.
- 10. Set packer and sit fluted hanger down in wear bushing.
- 11. After pressure test surface test equipment, run in hole with correlation log to confirm space out.
- 12. Reverse out tubing to test cushion.
- Rig up drop bar assembly on slickline and run in hole. 13.
- 14. Fire the perforation gun and open up well to gauge tank.
- 15. Shut in well for initial pressure build-up.
- Open up to gauge tank on 16/64" choke for 57 minutes. 16.
- 17. Shut in well for 680 minutes.
- 18. Open up well for clean up on: 16/64" choke - 13 minutes 32/64" choke -- 115 minutes 48/64" choke - 410 minutes
- Divert flow through separator on 32/64" choke 568 minutes.
- Shut in well for 174 minutes. 20.
- Run in hole with TPT gauge and latch onto MUST valve.

Client :\_ **PETROFINA** 

Section

Base:

BEF

Field : Well

ANEMONE 1A

VIC/PZO

Page Report N: 01/89

4

#### \_ TEST PROCEDURE \_

- Open up well and divert flow through separator on 32/64" choke -22. 792 minutes.
- 23. Shut in well for 3806 minutes.
- 24. While the well was closed, pull out of hole with TPT gauge.
- Open up well on 8/64" choke 717 minutes 25. Two PVT condensate and four PVT gas samples are taken. Increase choke size to 16/64" - 153 minutes.
- 26. Shut in well for 12 minutes.
- 27. Commence to kill well.

Base:\_\_\_\_\_BEF

Client : PETROFINA

Field : VIC/PZO
Well : ANEMONE 1A

Section

Page : 5 Report N: 01/89 Page

\_ MAIN RESULTS \_

Tested interval: DST #1 Perforations: 4599 - 4652 m

OPERATION	DURATION	BOTTOM HOLE PRESSURE	WELL HEAD PRESSURE	OIL PROD. RATE	GAS PROD.RATE	G.O.R
Units	MINS		PSIG	BBLS/DAY	MSCF/DAY	SCF/BBL
CHOKE CLOSED	57		36			
INITIAL SHUT IN	674		1510		,	
CLEAN UP 16/64" FIXED 32/64" ADJ 48/64" ADJ 48/64" FIXED 32/64" FIXED	18 115 205 205 568		175 90 440 175 250	114	992	8700
SHUT IN	174		2715			
MAIN FLOW 32/64" FIXED MAIN SHUT IN	792 3806		290 3735	116	803	6900
SECOND FLOW 8/64" FIXED 16/64" FIXED SECOND SHUT	717 153 12	·	794 350 435	51 25	109 186	2100 7300
<u>IN</u>						

				·		
Depth of bo	ttom hole	measuremer	nts: 4300 m	Refere	nce: <u>RKB</u>	
Temperature	260 F	at:430	00 m depth			
Separator ga	as gravity	(air:1)	at choke size	:_0.940 @	32/64" FIXED	<u> </u>
STO gravit	y at ch	oke size		. 0.782 @	32/64" FIXED	l
B S W :	50%		Water	cut :50	%	

#### **SCHLUMBERGER** Client : PETROFINA Section **TESTING** Page Field : VIC/PZO Report N\*: \_01/89 Well : ANEMONE 1A Base :\_\_\_\_ \_ OPERATING AND MEASURING CONDITIONS \_ A \_ TYPE OF GAUGE \_ BOTTOM HOLE: Pressure :\_ Temperature :\_\_\_\_\_ WELL HEAD : DWT : Temperature : HG THERMOMETER SEPARATOR : Pressure : BARTON Temperature : HG THERMOMETER B \_ PRODUCTION RATE CONDITIONS AND SOURCES \_ OIL PRODUCTION RATE ☐ Tank Floco Reference conditions. Shrinkage measurement. ☐ Meter ☐ Separator ☐ With tank ☐ Separator☒ Atmospheric ☐ With shrinkage ☐ Dump ☐ Rotron pressure 60°F tester GAS PRODUCTION RATE Standard conditions. ☑ Orifice meter 14.75 PSIA @ 60°F WATER PRODUCTION RATE ☐ Tank ☐ Meter C \_ WELL DATA \_ WELL STATE DURING SURVEY: Well producing through: 3.5" tubing / skillskilskikskils Main casing size 7" set at 4492.5 m Total well depth 4775 m Tubing size 3.5" set at Packer POSITRIEVE at 4330 m Perforations: Zone DST 1 From 4599 m to 4652 m From to \_\_\_\_\_\_\_to \_\_\_\_\_\_\_ \_ Zone \_\_\_\_\_ from \_\_\_\_\_ to \_\_\_\_ from \_\_\_\_\_ to \_\_\_\_

0 P 104

WELL STATE BEFORE TEST :

Well closed since NEWLY DRILLED

Well flowing since \_\_\_\_\_\_ Producing zone \_\_\_\_\_

Choke size

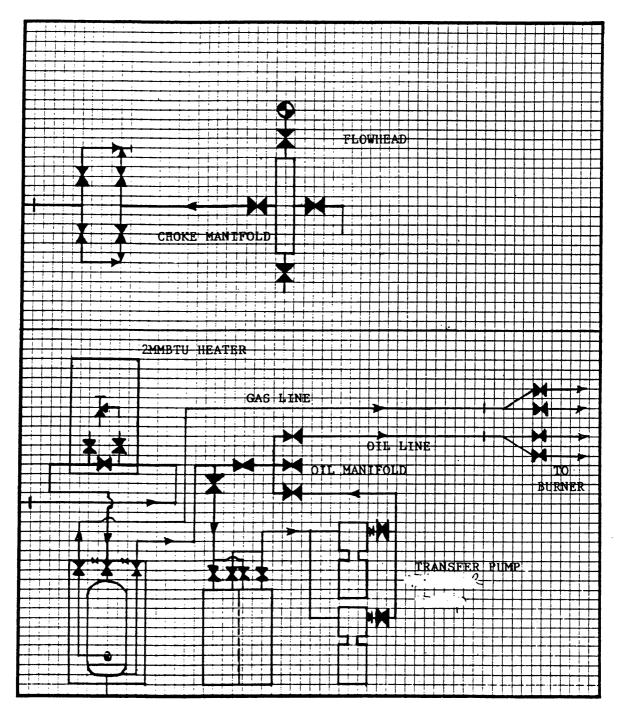
# FLOPETROL | Client : PETROFINA

Section: 4

Base : BEF

Field : VIC/PZO Well : ANEMONE 1A Page Report N: 01/89

#### \_ SURFACE EQUIPMENT LAYOUT \_



REMARKS :

DRAWING NOT TO SCALE

Base :\_\_\_\_BEF

Client : \_\_PETROFINA

Field: VIC/PZO
Well: ANEMONE 1A

Section :

. . .

Page : 8 Report N: 01/89

### \_ WELL COMPLETION DATA \_

ITEM	LENGTH (M)	DEPTH (M)	
Test String Tubing 12.7 # L80 VAM	3747.17	4002.550	
Cross Over Sub	0.309	4002.859	
MUST	3.119	4005.978	
Slip Joint Open	8.894	4014.872	
Slip Joint - 1/2 Open Slip Joint - Closed	8.132 7.070	4023.004 4030.074	
Cross Over TS 3052	0.523	4030.597	
Drill Collars (6 Stands)	166.100	4196.697	
Cross Over TS 1433	0.434	4197.131	
SHORT Reversing Valve	0.864	4197.995	
Drill Collars (1 stand)	27.250	4225.245	
MIDRV	2.907	4228.152	
R.A. Sub	0.628 0.270	4228.780 4229.050	
Drill Collars (1 stand)	27.180	4256.230	
PCT	6.995	4263.225	
HRT (Closed)	1.618	4264.843	
Exal Gauge Carrier Drill Collars (1 stand) Exal Gauge Carrier Drill Collars (1 stand)	2.970 28.510 2.970 27.710	4267.813 4296.323 4299.293 4327.003	
Jar (Closed)	1.987	4328.990	
Safety Joint	0.517	4329.507	
Cross Over	0.250	4329.757	
Positrieve Packer (7")	1.035 0.628	4330.792 4331.420	

Base :\_\_\_ BEF Client : PETROFINA

Field : VIC/PZO
Well : ANEMONE 1A

Section

Page : 9 Report N: 01/89

#### \_ WELL COMPLETION DATA \_

ITEM	LENGTH (M)	DEPTH (M)		
Cross Over	0.310	4331.730		
Tubing (25 joints)	239.82	4571.550		
Gun Drop Sub	0.460	4972.010		
Tubing (1 joint) # 48	9.590	4581.600		
Vent Sub	0.920	4582.520		
Tubing (1 joint) # 49	9.580	4592.100		
Mechanical Firing Head	2.050	4594.150		
Safety Spacer	4.850	4599.000		
3 3/8" TCP Guns	53.000	4652.000		
Bottom Nose	0.200	4652.200		

Client : PETROFINA

Section

6

Base : BEF

Field : VIC/PZO
Well : ANEMONE 1A

#### SEQUENCE OF EVENTS \_

DATE	TIME	OPERATION
		Production Testing Anemone 1A
		Perforation: 4599 - 4652 m
		Gun Type: 3 3/8" TCP 22g HMX 6 SPF 60°
		PACKER: 7" Positrieve set at 4330 m
		Cushion: 1.52 SG mud to MIDRV (4225 m)
		Drillwater to surface
22.09.89	10:30	Make up EZ Tree assembly on derrick.
	11:30	Make up lubricator valve assembly on derrick.
	12:30	Make up Flowhead assembly.
	13:45	Start pick up bottom hole assembly.
	16:50	Run in hole with 7" Positrieve Packer
	21:00	Run in hole with MUST valve
	22:30	Pressure test against PCT.
23.09.89	00:00	Continue to run in hole with test string.
24.09.89	00:00	Continue to run in hole with test string.
	12:00	Make up fluted hanger to test string for space out.
	13:00	Run in hole with fluted hanger.
	16:30	Rig up Schlumberger to run correlation log.
	20:00	Start pull out of hole to fluted hanger.
	22:30	Space out below fluted hanger.
25.09.89	00:15	Rig up EZ Tree control unit.
	00:30	Make up EZ tree assembly to test string.
	01:00	Function test EZ tree and run in hole.

Section

6

\_ SEQUENCE OF EVENTS \_(Continuation)

Page : 11
Report N: 01/89

DATE	TIME	OPERATION
25.09.89	04:00	Run in hole with lubricator valve.
	05:00	Pressure test full string against PCT to 9000 psi
	05:15	Close lubricator valve and bleed off pressure above -
		watch for leaks.
	05:25	Pressure up above lubricator valve.
	05:30	Open lubricator valve and bleed off test pressure.
	05:40	Start change out to long bails.
	07:00	Start rig up flow head.
	09:39	Packer set at 4330 m.
	09:42	Sit fluted hanger down in wear bushing.
	09:47	Hook-up kill line to flowhead.
	10:18	Commence pressure test flowhead to 9000 psi.
	12:05	Open master valve pressure test against PCT to 9000 psi.
	12:25	Close 5" pipe RAM and pressure test to 500 psi.
	12:50	Rig up Schlumberger to run correlation log.
	13:20	Run in hole with Schlumberger.
	13:25	Start rig up surface choke manifold and hook-up flow line.
	15:00	Start pull out of hole with Schlumberger.
	16:20	Schlumberger on surface. Close swab valve.
	16:55	Commence to open MIDRV.
	17:10	Start reverse out tubing with 1.52 SG mud.
	19:24	Stop reverse circulating.
	19:31	Close flow valve. Circulating through tubing to clear
		restriction at MIDRV.
	20:20	Open flow valve. Commenced reverse circulating.
	21:00	Close flow valve. Commenced circulating, attempting to clear
		restriction.
26.09.89	04:07	Still circulating attempt to flush out sediments in mud.
		Close #3 RAMS, pump 54 barrels of mud up kill line.

Section:

6

\_ SEQUENCE OF EVENTS \_(Continuation)

Page :  $\frac{12}{01/89}$ 

_ 3L	GOLINGE	Of EVENTS _(Continuation) Report N:01789
DATE	TIME	OPERATION
26.09.89	04:43	Open #3 RAMS pump 28 bbls of mud up riser - close killline.
	05:30	Close RAMS open rig choke line flush out riser via flowhead
		flowline. Divert flow to shale shakers.
	05:50	Shut flowhead wing valve. Reverse circulate to check if
		MIDRV is clear of restriction.
	05:58	Test good.
	06:00	Spot viscous pill and circulate contents of tubing to water.
	07:55	Close MIDRV pressure test tubing to 7000 psi to test valve
		functioned correctly: - test good.
	08:12	Rig up slickline lubricator pipe.
	08:15	Close lubricator valve open flowhead swab valve. Commence
		pressure test of lubricator pipe and flowlines/choke manifold.
	09:55	Lubricator pipe seal leaks, break off to repair.
	10:54	Re-stab lubricator, attempt second pressure test.
	11:30	Test fails isolate slickline equipment and pressure test all
		flowlines down to heater and choke manifold to 5000 psi.
	12:05	Test good. Pressure test up to choke manifold.
		Front 15 K valves and 10 flex hose to 9000 psi against
		down hole lubricator valve - test good.
	12:30	Start rig up drop bar assembly in lubricator.
	12:40	Open swab valve. Close kill valve and open lubricator valve.
	12:50	Pressure up annulus to open PCT.
	12:55	PCT open surface pressure 400 psi.
	12:57	Run in hole with drop bar assembly.
	13:00	Bleed off surface pressure.
	13:30	Commence attempting to pass through restriction just above
		PCT.
	15:15	Fire Tubing Conveyed Perforating guns.
	15:25	Start pull out of hole with drop bar.
	15:49	Close lubricator valve. Bleed down surface pressure and rig

Section:

6

\_ SEQUENCE OF EVENTS \_(Continuation)

Page : 13 Report N: 01/89

_ SE(	TOFINCE	OF EVENTS _(Continuation) Report N:01/89_
DATE	TIME	OPERATION
26.09.89	15:49	down wireline lubricator.
	16:02	Close swab valve and open kill valve.
	16:08	Pressure up to 2500 psi surface pressure and open up
		lubricator valve.
	16:10	Close kill valve.
	16:13	Open up well to burner flare on 2" choke.
	16:14	Vacuum at surface.
	16:16	Water cushion at bubble hose. Divert flow to gauge tank
		Initial dip = 50.5 cm
	16:17	Reduce choke to 16/64" adjustable.
	16:24	Shut inwell at PCT and close choke manifold. Cushion reco-
		vered 1.45 bbl.
	17:27	Open PCT. Well shut in at choke manifold.
	17:30	Open up well to gauge tank on 16/64" adjustable.
	18:27	Shut in well at PCT and close choke manifold.
		Cushion recovered of the second flow = 12.1 bbls
27.09.89	05:41	Open PCT. Well shut-in at choke manifold, commence clean-up.
	05:47	Open well at choke manifold on 16/64" fixed choke flow to
		gauge tank.
	06:00	Divert flow to burner.
·		Total fluid (water cushion) recovered = 8 bbls.
	06:05	Change choke to 20/64" adjustable.
	06:06	Increase choke to 24/64"
	06:10	Increase choke to 32/64"
	07:05	PCT closed due to washed out manifold valve.
	07:10	PCT opened.
	08:05	Increase choke to 48/64" adjustable.
	10:27	Rock adjustable choke.
	10:45	Pump diesel to oil burners to attempt to ignite gas flare
<del></del>		

6

\_ SEQUENCE OF EVENTS \_(Continuation)

Page : 14 Report N: 01/89

Section

DATE	TIME	OPERATION
27.09.89	10:45	(high CO2 content - 20% prevented flare from igniting).
	11:00	Flare ignites.
	11:45	Flare extinguishes itself due to CO2 content.
·	12:50	Change to 48/64" fixed choke.
	14:10	Divert flow to burner.
	16:00	Divert flow through heater.
	16:15	Decrease choke to 32/64" fixed choke.
	16:30	Divert flow through separator.
	17:30	Start separator readings.
	18:00	Bypass separator.
	18:15	Divert flow through separator.
28.09.89	01:15	Commence rig up of Schlumberger surface control equipment
		and MUST.
	01:58	Shut in well at choke manifold, pump out gauge tank.
	02:37	Close lubricator valve bleed off pressure above to flare -
		close choke manifold to monitor pressure build-up above
		valve build-up = zero.
	02:40	Pick up Schlumberger lubricator and BOPs.
	04:25	Schlumberger equipment rigged up - MUST and TPT gauge in
		lubricator.
·	04:56	Open kill valve pressure test Schlumberger equipment to
		5000 psi.
	05:01	Test good - bleed off pressure to 600 psi above lubricator
		valve - close kill line.
	05:15	Open lubricator valve.
	05:25	RIH with MUST and TPT gauge.
	07:35	Open well flow on bypass to flare, slowly increase adjustable
		choke to 1/2".

Section:

6

Page : 15 Report N: 01/89

# \_ SEQUENCE OF EVENTS \_(Continuation)

DATE	TIME	OPERATION
28.09.89	07:40	Commence EZ tree and surface glycol injection to prevent
		hydrating
	07:45	Change choke to 1/2" fixed beam.
	07:50	Divert flow to heater.
	08:00	Small fire detected at heater. Close choke manifold and
	· · · · · · · · · · · · · · · · · · ·	hydraulic actuating wing valve at flowhead.
	08:02	Fire extinguished.
	10:00	Bleed off pressure between flowhead and choke manifold.
	10:30	Commence EZ tree glycol injection.
	10:55	Open flowhead valve monitor build-up at choke.
	11:25	Commence glycol injection at surface.
	11:32	Open well at choke manifold 3/16" adjustable flow to flare
		on bypass.
	11:38	Increase choke to 1/4" fixed beam.
	11:41	Change choke to 1/2" fixed beam.
	13:30	Divert flow through separator.
	13:45	Start taking separator readings.
	14:00	Switch condensate flow to gauge tank for flow rate readings.
	16:00	Pump some condensate to light the gas flare.
	19:15	Stop glycol injection.
	20:31	Start to empty condensate tank to burner.
	20:43	Start to empty water tank to burner.
·	21:15	Finish emptying gauge tank.
29.09.89	00:53	Shut in well at choke manifold for build-up.
	01:00	Take one L.P. water sample from separator.
	01:15	Start flare - pump out gauge tank.
	01:45	Finish pumping.
	03:45	TPT gauge fails - start to unlatch MUST.
1		

Section:

\_ SEQUENCE OF EVENTS \_(Continuation)

Page : 16 Report N: 01/89

_ SE	GOENCE	OF EVENTS _(Continuation) Report N:01/89
DATE	TIME	OPERATION
29.09.89	04:47	POOH with MUST and TPT gauge.
	07:35	Schlumberger electric line out of hole, no TPT gauge or
		MUST - tools are still latched - weak point of cable head
·		had been pulled.
	07:37	Shut lubricator valve.
	07:39	Shut swab valve.
	07:44	Bleed down Schlumberger lubricator through stuffing box
		Schlumberger gauge = zero psi.
	07:49	Open lubricator valve.
	08:00	Unable to release lubricator nut suspect trapped pressure -
		open needle valve on lubricator unable to bleed off pressure -
		swab valve passing.
	08:07	Shut master valve.
	08:09	Bleed off pressure above master valve through choke manifold.
	08:15	Rig down Schlumberger lubricator.
	08:41	Rectify problem with swab valve, close swab valve open
		master valve well shut in at choke manifold.
	08:55	Rig down Schlumberger BOPs and surface control equipment.
30.09.89	00:00	Continue shut in well at surface.
1.10.89	00:00	Continue shut in well at surface.
	06:55	Start glycol injection at EZ tree.
	07:10	Start heater.
	07:19	Open well on 1/4" fixed bear bypass to flare - start glycol
		injection at surface.
	07:45	Shut down heater.
	08:30	Pressure up separator - divert flow back to bypass - commence
		dumping condensate in separator to gauge tank.
I		· ·

Section

<u>6</u>

\_ SEQUENCE OF EVENTS \_(Continuation)

Page : 17 Report N: 01/89

DATE	TIME	OPERATION
1.10.89	09:55	Shut in well at choke manifold.
	11:00	Take one L.P. condensate sample from separator.
	11:48	Open well on 1/8" fixed choke flow to bypass.
	12:00	Take one H.P. PVT oil sample from separator, bottle # 8288
		N476.
	13:22	Divert flow through separator.
	13:30	Change differential pressure range to 100" WC.
	14:15	Insert orifice plate size = 0.750"
	21:00	Start taking PVT sample #1
		Oil bottle: 12689/92
		Gas bottle: A12134
	22:00	Start taking PVT sample #2
		Oil bottle: 80-291/53
		Gas bottle: A13762
	22:30	Start taking two gas samples
·		Gas bottle: A11924
	23:00	Gas bottle: A13752
	23:45	Increase choke to 1/4" fixed beam.
2.10.89	01:30	Change orifice platesto.00750"
	02:18	Bypass separator, flow to flare, shut in well at choke manifold
	02:30	Open kill valve on flowhead.
	02:33	Halliburton commences pumping kill fluid down tubing into
		formation.
	16:30	Stop bullhead, observe well.
	18:06	Close PCT.
	18:14	Attempt to open MIDRV.
	20:56	MIDRV fail to open.
	21:72	OPen SHORT.

Section

6

\_ SEQUENCE OF EVENTS \_(Continuation)

Page :  $\frac{18}{01/89}$ 

DATE	TIME	OPERATION
2.10.89	21:22	Open SHORT.
	21:32	Start to reverse out.
	22:00	Stop reverse circulating (trip tank overflow).
	23:19	Continued reversing to trip tank.
3.10.89	03:00	Stop reversing monitor well at rig choke line.
	03:15	Close flowhead wing valve (actuator) bleed off ann. pressure
		in flowline to flare break off coflex hose.
	03:30	Open RAMS unseat packer.
	03:40	Packer unseated sit back down on hanger re-connect coflex hose
		commence circulating.
	07:19	Stop circulating, observe wells behaviour at rig choke line.
	08:00	Close master valve - hook-up Halliburton to the kill line -
		flush through Schlumberger equipment and lines with fresh wate
	08:20	Open master valve - no pressure, close actuator valve
		rig down coflex hose and flowhead.
	09:56	Rig down long bails - pick up rig bails and elevators.
	10:15	Rig down choke manifold.
	10:50	Commence POOH.
	11:04	Lubricator valve at surface - rig down and rack back.
	12:30	EZ tree on surface, unlatch and wash down mud on hydraulic
		and valve assembly.
	13:30	Latch back EZ tree and rack back on deck.
	13:45	Start pull out of hole with 3.5" VAM tubing.
4.10.89	05:30	MUST out of hole.
		END OF TEST
		•

No.: DOP 109

1	/89			Units																
 c																			4652 meters	:
Section	Page Report																		1	Ì
	ET -	GOR																	4599 RKB	
	TA SHEET	LIES	S	Air = 1				oly									bar			
	TESTING DATA	) PROPERTIES	GAS	שופט				bar assembly	ure								with drop		INTERVAL REFERENCE OF B.H.MEASUREMENTS	
	TESTI	AND FLUID	ATE Penn	AA C G				drop	ce pressure	sung g							of hole		INTERVAL REFERENCE OF B.H.MEAS	
	- WELL	RATES A	CONDENSATE	GIGVILY				well wit	fsurfa	perforating							11 out		TESTED DEPTH R DEPTH O	
	71	PROD. R	OIL OR C	aleu			PCT open	Run in w	Bleed off	Fire per							Start pul			
		STN	SEPARATOR																	
INA	20 IE 1A	SUREM		_		PCT														
PETROFINA	VIC/PZO ANEMONE	IRE MEA	AD			to open										·			SNS :	
Client:_	Field: VIC/PZO Well: ANEMONE	TEMPERATURE MEASUREMENTS	WELL HEAD	Ig. terrip ig. press.	N TEST	annulus t	400	400	-		1750	1795	1850	1900	2000	2040	2065	2100	combinions	
		AND TEN	<b>V</b>	O. Co.	PRODUCTION	dn					13	13	13	13	13	13	13	13	1 1	
FLOPETROL		PRESSURE A	BOTTOM HOLE	rressure	PR	Pressure													15:27QUIB2 FLOW RATE MEASURING 14.73 PSIA @ 60 F	
7=1	[±,	PRE		iei D	1989														62 FLOW RATE MI 14.73 PSIA @ 60	
	BEF	TIME		MINS	SEPTEMBER					0	2	5	9	7	∞	6	10	11	UIB2 FL 14.7	
	Base	DATE - TIME	F	HR MINS	26 SEP	12:50	12:55	12:57	13:00	15:15	15:17	15:20	15:21	15:22	15:23	15:24	15:25	15:26	15:270	

SCHLUMB\_AG

SCH	SCHLUMB_AGER TESTING	3_8	Ë		VELL T	ESTIN	G DA	TA SH	WELL TESTING DATA SHEET — (Continuation)	ontin	ration)	Page: 2 Report No.:	$\simeq$ 1 1 1	01/89	Section	-	7
DATE — TIME	- TIME		PRESSURI	E AND TEN	PRESSURE AND TEMPERATURE MEASUREMENTS	MEASUREM	ENTS		PROD.	RATES AN	PROD. RATES AND FLUID PROPERTIES	PERTIES		GOR			
		ВОТТ	ВОТТОМ НОLE		WELL HEAD		SEPARATOR	4TOR	OIL OR CONDENSATE	VDENSATE		GAS					
Time	Cumul	Тетр.	Pressure	Tg. Temp.	$\vdash$	Cg. press.	Temp.	Press.	Rate	Gravity	BSW	Rate	Gravity				
HR	MINS			၁									Air = 1				Units
15:27	12			13	2130												
15:28	13			13	2180												
15:29	14			13	2200												
15:30	15			13	2230												
15:31	16			13	2260												
15:32	17			13	2280												
15:33	18			13	2295												
15:34	19			13	2320												
15:35	20			13	2330												
15:40	25			13	2390												
15:45	30			13	2435												
15:49	34			13	2485				Close lubr	lubricator	valve, b	bleed do	down sur	surface press	sure		
16:08	53			13	2587				Open lubricator		valve						
16:10	55			13	2587										·		
16:13	58/0			13	2589				Open up well	t	burner						
16:14	-			13					Vacuum at	surface							
16:16	3			13					Water cushion	a	bubble h	hose div	ert	flow to tark			
16:17	4			13					Reduce choke	to	16/64" ad	adjustab1	e				

Page: WELL TESTING DATA SHEET — (Continuation) **SCHLUMB\_RGER** 

Units Section, Shut in well at PCT, tecovered 1.45 buls cushidn GOR Report No.: \_\_01/89 Open up well to tank on 16/64" adjustable 21 Open PCT, well shut in at choke manifold Air = 1 Gravity PROD. RATES AND FLUID PROPERTIES Rate Flowing water cushion only 291 | bb1s/day = 278|bb1s/dayFlow rate = 266 bbls/day BSW OIL OR CONDENSATE Gravity Flow rate = Flow rate Rate Press. SEPARATOR Temp. PRESSURE AND TEMPERATURE MEASUREMENTS Tg. press Cg. press. WELL HEAD 1390 1520 9 1049 1090 400 75 32 24 24 30 34 36 37 39 42 43 Tg. Temp. 12 12 13 13 13 13 13 13 13 13 13 12 12 ပ 12 12 12 Pressure BOTTOM HOLE Temp. **TESTING** Cumul 11/063/0 3/0 DATE -- TIME 7 4 40 50 7 2 25 16:24 17:27 17:30 18:10 18:15 18:20 17:28 17:35 17:50 18:00 16:17 17:29 17:31 17:52 17:33 17:40 17:55 17:45 17:34 Time HRS

Units total cushion recovered = 13.6 bbls Section fixed choke flow to gauge tank GOR 01/89 22 Air = 1 Gravity shut-in at choke manifold Report No.: Gas migrated to surface above P¢T Page: PROD. RATES AND FLUID PROPERTIES Rate WELL TESTING DATA SHEE f — (Continuation) BSW = 100% H20 trace 0.1 PCT, BSW OIL OR CONDENSATE Open well 16/64 surface Shut in well at Gravity Gas to surface Open PCT, Water to Rate SEPARATOR Temp. PRESSURE AND TEMPERATURE MEASUREMENTS Tg. Temp. Tg. press | Cg. press. PSIG | PSIG 1500 1500 1500 1500 1500 1500 1500 1500 1500 1500 1500 260 1200 1510 210 150 2360 900 1045 1330 1500 230 36 350 13 11 11 11 11 11 11 11 11 11 Pressure BOTTOM HOLE SCHLUML FRGER Temp. 27 SEPTEMBER 1989 674/0 **FSTING** 57/0 Cumul MINS 653 663 DATE -- TIME က Ŋ 2 2 18:27 18:20 05:20 05:30 05:41 05:43 05:50 18:25 05:47 05:52 05:42 05:44 05:45 05:46 05:48 05:49 05:51 Time

Units Section burner due to exdessive gas production opened 07:10 PCT (water cushion) 0 GOR н - well slygging Report No.: \_\_01/89 H2S 23 - sediment Air = 1 Gravity II adjustable choke C02 Page: PCT closed due to leaking valve PROD. RATES AND FLUID PROPERTIES 8 bbls Rate BSW = 100% water, gas = 20%, trate oil trake oil Well slugging H2O and gas WELL TESTING DATA SHEET — (Continuation) to 24/64" Increase thoke to 32/64" u Total fluid recovered BSW OIL OR CONDENSATE Change to 20/64 = 100% water BSW = 100% water Gravity Increase choke Divert flow to Rate BSW 07:05 Press. SEPARATOR Temp. PRESSURE AND TEMPERATURE MEASUREMENTS Tg. Temp. Tg. press | Cg. press. 1500 1500 1500 1500 1500 1500 1500 1500 1500 1500 1500 1500 1500 1500 1500 1500 1500 PSIG WELL HEAD PSIG 9 175 19 25 36 70 75 195 188 198 158 70 19 20 36 58 9 12 12 12 12 12 12 12 13 13 13 13 12 12 12 12 13 Pressure BOTTOM HOLE SCHLUMBL, {GER Temp. **FESTING** 13/0 1/0 Cumul MINS DATE - TIME  $\infty$ S 10 15 30 40 50 65 89 20 80 20 02:20 06:10 06:20 06:30 06:25 00:20 07:20 90:90 06:15 06:40 06:50 07:15 07:18 6:05 05:52 05:53 05:54 00:90 Time

lo. : DOP 110

Units Section water weight = .99 ppg to attempt to ignite gas flare 20% C02 GOR dontent 01/89Air = 1 Gravity light due to high CO2 20% Report No.: Increase choke to 48/64" adjustable trace sediment C02 wel slugging Page: PROD. RATES AND FLUID PROPERTIES C02 C02 Rate 20% gas| = 20%20% 0 liquids WELL TESTING DATA SHEET — (Continuation) Rock adjustable choke Pump diesel to flare BSW OIL OR CONDENSATE Gas flare ignites BSW = 100% water ppg BSW = 100% water not Gravity рnш pnm pnm to surface BSW 0 Flare does = 100%= 100%BSW = 100%H20 wt =Gas only Rate BSW Mud BSW SEPARATOR Temp. PRESSURE AND TEMPERATURE MEASUREMENTS Tg. Temp. Tg. press | Cg. press. PSIG 1500 1500 1500 1500 1500 1500 1500 1500 1500 1500 1500 1500 1500 1500 1500 1500 1500 1500 WELL HEAD PSIG 20 90 230 82 90 18 9 140 150 170 383 695 500 385 395 385 13 13 16 16 16 16 16 13 13 13 13 15 16 15 15 17 17 17 Pressure **BOTTOM HOLE** SCHLUML FRGER Temp. **FESTING** 115/0 Cumul 90 100 10 DATE -- TIME 25 40 145 175 85 130 142 16082 100 08:00 10:30 HRS 07:30 07:40 06:60 10:00 07:50 08:05 00:60 09:15 10:45 11:00 08:30 09:27 09:45 10:15 08:15 10:27 08:45 Time

lo.: DOP 110

lo.: DOP 110

לט		נו												7.5		-	1
5 1		フロリン	ב ע	<i>-</i>	WELL	TESTIN	WELL TESTING DATA		SHEET — (Continuation)	Contir	<b>nation</b>			67	Section	••,	
TES	TESTING												Report No.:	01/89			
DATE	DATE - TIME		PRESSUR	E AND TEN	APERATURE	PRESSURE AND TEMPERATURE MEASUREMENTS	IENTS		PRO[	). RATES A	ND FLUID F	PROD. RATES AND FLUID PROPERTIES		GOR			
		ВОТТС	BOTTOM HOLE		WELL HEAD	0	SEPARATOR	OB	OIL OR CO	OIL OR CONDENSATE	щ	GAS					
Time	Cumul	Temp.	Pressure	Tg. Temp.	Tg. press	Cg. press.	Temp. Pr	Press.	Rate	Gravity	BSW	Rate	Gravity		C02	H2S	
HRS 11:00	MINS			Ö	PSIG	PSIG							Air = 1		%	maa	Units
11:15	190			15	345	1500											
11:30	205			15	395	1500		2	Mud and g	gas at s	surface				21	0	
11:45	220			15	390	1500			Gas flare		extinguishes	itself c	due to 1	high CO2	content		
12:00	235			16	387	2100		9	Gas at su	surface					20	0	
12:15	250			16	390	2050											
12:30	265			15	405	2100		EL)	BSW = 70%	water,	15%	emulsion,	15% coi	condensate			
12:45	280			15	567	2100											
12:50	285/0			14	044	2100		J	Change to	179/87	fixed	choke			2	0	
13:00	10			17	380	2100	·								1.5	0	
13:15	25			17	280	2100		ш	BSW = 60%	water					3.5		
13:30	040			16	170	2100		田	BSW = 50%	water							
13:45	55			14	158	2100									3.5		
14:00	70			14	110	1950		щ	BSW = 40%	water							
14:10	80			14	150	1950		ם	Divert flow to	OW to b	oil burner	er					
14:15	85			14	155	1950		В	BSW = 60%	; 40%	emulsion	ů					
14:30	100			15	155	2000		П	Divert fl	flow to g	gas flare	e.					
14:45	115			15	175	2000		EI	BSW = 15%	water					22	0	
15:00	130			15	200	2000		Д .	BSW = 50%	water,	2%	emulsion					

SCH	SCHI LIME, 'RGFR	', 'BG	ř.							:		Dage.		26	Section		7
TES	TESTING	i			WELL IESTING DATA		20.5		SMEET — (Continuation)		nuatio		Report No.: 01/89	68/1			
DATE -	- TIME		PRESSURI	E AND TEI	PRESSURE AND TEMPERATURE MEASUREMENTS	MEASURE	MENTS		PRO	). RATES	4ND FLUID	PROD. RATES AND FLUID PROPERTIES		GOR			
		ВОТТС	BOTTOM HOLE		WELL HEAD		SEPAF	SEPARATOR	OILORC	OIL OR CONDENSATE	TE	GAS					
Time	Cumul	Temp.	Pressure	Тд. Тетр.	Tg. press	Cg. press.	Temp.	Press.	Rate	Gravity	BSW	Rate	Gravity	SCF	C02	H2S	
HRS	MINS			С	PSIG	PSIG	ပ	PSIG	BBLS/D	SG	%	MMSCF/D	Air = 1	bb1	%	maa	Units
15:00													·	-			
15:15	145			15	165	2000											
15:30	160			15	160	2000			BSW = 40%	water	, 8%	emulsion, 5	52% cond	condensate			
15:45	175			15	165	2000			BSW = 65%	water							
16:00	190			14	175				Divert fl	flow thr	through he	heater			16	0	
16:15	205/0			14	227				Switch to	32/64"	" fixed	l choke					
16:30	15			14	205	1950			Divert fl	flow through	as ygnc	separator					
16:45	30			14	230	1900			BSW = 30%	water	15% e	emulsion	55% cor	condensate			
17:00	45			14	323	1900			Start sep	separator	readings	8			1	nil	
17:15	09			14	301	2000											
17:30	75			14	262	2000	89	100				0,844	0.955				
17:45	06			14	345	2000	95	100	292	0.78	10	0.678	0.955	2322			
18;00	105			14	350	2000	95	105	194	0.78	45	0.631	0.955	3253	By-pass	s separator	or
18:15	120			14	345	1980			Divert	flow t	flow through	separator					
18:30	135			14	340	1980						0.780	0.955		Water	salinity	d 0009 =
18:45	150			14	327	1990	95	90									
19:00	165			14	334	1980	96	165	202	0.780	3	1.07	0.942		1	nil	
19:15	180			14	274	1995	97	165				1.02					
19:30	195			14	320	1990	97	165				1.02					

BBLS/D Units 139 126 203 50 152 152 101 PPM H2S nil ni1 Section 1.5 C02 7 GOR SCF Report No.: 01/89 BBL 27 Air = 1 0.940 0.940 Gravity MMSCF/D Page: PROD. RATES AND FLUID PROPERTIES Rate 0.988 0.877 0.942 0.971 0.991 0.971 1.15 1.15 1.15 1.091.15 1.15 1.15 1.02 1.02 1.02 1.09 1.11 WELL TESTING DATA SHEET — (Continuation) BSW % OIL OR CONDENSATE 0 0 0 0 0 0.782 0.782 0.782 0.783 Gravity SG BBLS/D Rate 126 113 113 162 153 113 63 PSIG Press. 165 165 165 165 165 165 165 165 165 165 165 165 165 165 165 165 165 SEPARATOR Temp. 100 100 100 100 100 100 100 100 100 100 100 100 98 PRESSURE AND TEMPERATURE MEASUREMENTS 98 98 86 98 ပ Tg. press | Cg. press. 2050 1950 PSIG 1990 1990 1990 2000 2000 2005 2050 1950 1950 1990 1990 1990 1990 2005 1980 2000 WELL HEAD PSIG 315 315 293 295 335 315 320 280 345 340 295 315 332 320 320 334 292 302 Tg. Temp. 14 14 14 14 14 14 14 14 14 14 14 14 14 14 14 14 14 ပ Pressure BOTTOM HOLE SCHLUME\_RGER Temp. **FESTING** Cumul MINS 210 465 225 240 255 270 285 300 315 330 345 360 375 390 405 420 435 DATE - TIME 00:00 19:30 19:45 20:00 21:00 21:45 22:00 23:45 23:30 23:45 20:15 20:45 21:15 22:15 22:30 23:00 23:15 20:30 21:30 Time HRS

lo.: DOP 110

BBLS/D 126 139 126 976 H2S Commence rig up of MVST and surface dontrol equipment 202 GOR SCF BBL Report No.: 01/89 Air = 1 Gravity 076. .940 .940 Page: choke manifold MMSCF/D PROD. RATES AND FLUID PROPERTIES Rate 0.991 0.991 0.991 0.991 WELL TESTING DATA SHEE T — (Continuation) Pump out gauge tank BSW OIL OR CONDENSATE 0 0 Shut in well at 0.782 0.782 0.782 0.782 Gravity SGBBLS/D 126.24 126.24 113.8 113.8 Rate PSIG Press. 165 165 165 165 165 165 SEPARATOR Temp. 100 100 100 100 100 100 PRESSURE AND TEMPERATURE MEASUREMENTS ပ Tg. Temp. Tg. press Cg. press. PSIG 1950 1900 1900 1900 1900 1915 1850 1950 1850 1950 1900 1890 1890 1890 1890 1850 WELL HEAD PSIG 280 299 313 285 260 250 250 295 338 343 355 360 374 379 327 367 14 14 14 14 14 14 14 14 14 14 14 14 ပ Pressure **BOTTOM HOLE** ERGER Temp. 28 SEPTEMBER 1989 568/0SCHLUM Cumul MINS 555 480 495 510 525 540 DATE -- TIME 4 S 9 ∞ 6 7 đ 01:59 01:45 01:15 01:58 02:02 02:05 24:00 00:30 00:15 01:00 01:30 02:00 02:01 02:03 02:04 02:06 02:07 Time HRS

lo.: DOP 110

Units Schlumberger equipment rigged up. MyST and THT gauge in lubricator. Close choke manifold to monitor lubricator Section Close lubricator valve - open choke manifold bleed off Pressure test DK, bleed off pressure to 600 pai above Pressure test Schlumberger equipment to 5000 psi. GOR 01/89 any presbure increase above the lub valve. Pick up Schlumberger lubricator and HOPs Air = 1 Gravity pressure above lub valve to flare. Report No.: Page: PROD. RATES AND FLUID PROPERTIES valve close kill line valve. Rate WELL TESTING DATA SHEE f — (Continuation) Open lubricator valve BSW OIL OR CONDENSATE Gravity Rate Press. SEPARATOR Temp. PRESSURE AND TEMPERATURE MEASUREMENTS Tg. Temp. Tg. press Cg. press. PSIG 1850 1850 1850 1850 1850 1850 1850 1850 1850 PSIG 1870 1850 1500 405 445 495 575 387 400 623 543 14 14 14 14 13 13 12 13 Pressure BOTTOM HOLE SCHLUML FRGER Temp. **ESTING** Cumul MINS 05:15 197/0 DATE - TIME 183 22 32 04:56 178 05:16 198 05:17 | 199 1 27 04:25 | 147 02:10 02:08 05:09 02:30 05:40 05:01 02:25 02:15 02:20 02:37 02:07 Time HRS

lo. : DOP 110

					Units																			
••																								
Section																								
30	01/89	GOR																						
				Gravity	Air = 1				:															
-	Report No.:	ROPERTIES	GAS	Rate										gauge										
nuation		PROD. RATES AND FLUID PROPERTIES	TE	BSW		-								and TPT										
(Conti		OD. RATES	OIL OR CONDENSATE	Gravity										MUST										
SHEET — (Continuation)		PR	OILOR	Rate										RIH with		-								
	. !		SEPARATOR	Press.																				
NG DA		EMENTS	SEPAI	Тетр.																				
TEST		E MEASURE	Q	Cg. press.	PSIG		1820	1820	1820	1820	1820	1820	1820	1820	1820	1820	1820	1820	1800	1800	1800	1800	1800	1800
WELL TESTING DATA		PRESSURE AND TEMPERATURE MEASUREMENTS	WELL HEAD	Tg. press	PSIG		1920	1936	1960	1988	2015	2030	2043	2051	2082	2100	2150	2210	2280	2370	2450	2520	2560	2627
		E AND TEN		Tg. Temp.	С		12	12	12	12	121	12	12	12	12	12	12	12	12	12	12	12	12	12
XER.		PRESSUR	ВОТТОМ НОСЕ	Pressure																				
SCHLUM_ERGER			BOTT(	Temp.																				
#COM	TESTING	DATE — TIME		Cumul	MINS		200	201	202	203	204	205	206	207	212	217	222	227	232	242	252	262	272	287
SCF	TES	DATE		Time	HRS	05:17	05:18	05:19	05:20	05:21	05:22	05:23	05:24	05:25	05:30	05:35	05:40	05:45	05:50	00:90	06:10	06:20	06:30	06:45

lo.: DOP 110

The color of the	J		ğ	250														7
Decimination   Preside No.	S	LING		- i 5		WELL	TESTIN	70 DN		EET — (:	Contii	Juatio		H No.:	01/89	296CII/2	=	
Description	TE-	- TIME		PRESSUF	R AND TE	MPERATURI	= MEASUREI	MENTS		PROC	). RATES A	ND FLUID	PROPERTIES		GOR			
NINS   Temp.   Persistro   Sg Temp   Tg, Press   Gp, Press   Temp.   Press   Rate   Granty   BSW   Rate   Granty   Gra			ВОТ	TOM HOLE		WELL HEA	۵	SEPA	RATOR	OIL OR CC	ONDENSA	ш	GAS					
12   2570   1800	<u>o</u>	Cumul	Тетр.	Pressure	Tg. Temp		Cg. press.	Temp.	Press.	Rate	Gravity	BSW	Rate	Gravity				
12   2710   1800   1800   19	45	CNIL			ر د	PSIG	PSIG							Air = 1				Units
12 2710 1800 Open well flow on by-pass to flare - slowly increase variable 2 2350 Open well flow on by-pass to flare - slowly increase variable 2 2350 Open well flow on by-pass to flare - slowly increase variable 3 2350 Open well flow on by-pass to flare - slowly increase variable 4 4 12 2350 Open well flow on by-pass to flare - slowly increase variable 5 12 1350 1850 Open well flow on by-pass to flare - slowly increase variable 6 5 0pen well flow on by-pass to flare - slowly increase variable 7 0pen well flow on by-pass to flare - slowly increase variable 8 0pen well flow on by-pass to flare - slowly increase variable 9 0pen well	00					2670	1800											
12 2715 1800 Open well flow on by-pass to flare - slowly increase variable 2 2 250 Commence glycol injection at syrface and subsequence glycol injection at characteristic and subsequence glycol injection at characteristic and syrface and subsequence glycol injection at characteristic and syrface and subsequence glycol injection at characteristic and syrface and syrfac	15					2710	1800											
12 2715 1800 Open well flow on by-pass to flare - slowly increase variable 2 2500	30				12	2710	1800											
1 2500	35				12	2715	1800			Open well		on by+1	to	1	slowly in	crease 1	ariable	to 32/64"
2       2350       1850       8         3       12       1910       1850       8         4       12       1750       1850       Commence glycol in         6       12       1700       1850       Safety valve         7       12       1600       1850       Safety valve         9       12       1570       1850       Change choke to 32/4         10       12       1420       1850       Change choke to 32/4         20       12       1210       1850       Divert flow to heat         20       12       1070       1850       Small fire detect         25/0       12       980       1850       Small fire detect	36	1	-			2500												
3       12       1910       1850       Commence glycol in         4       12       1750       1850       Commence glycol in         6       12       1700       1850       Safety valve         7       12       1600       1850       Safety valve         8       12       1570       1850       Change choke to 32/         10       12       1420       1850       Change choke to 32/         15       12       1210       1850       Change choke to 32/         20       12       1210       1850       Small fire detect         25/0       12       1980       1850       Small fire detect	37	2				2350												
4       12       1750       1850       Commence glycol in         5       12       1700       1850       Safety valve         6       12       1670       1850       Safety valve         8       12       1600       1850       Change choke to 32         9       12       1570       1850       Change choke to 32         10       12       1420       1850       Change choke to 32         20       12       1070       1850       Small fire defect         25/0·       12       980       1850       Small fire defect	38	3			12	1910	1850											
5       12       1700       1850       Commence glycol in         6       12       1670       1850       Safety valve         7       12       1600       1850       Asfety valve         8       12       150       Associate to the commence of the comm	39	4			12	1750	1850											
6       12       1670       1850       Safety valve         7       12       1600       1850       8         8       12       . 15       1850       Change choke to 32/         9       12       1570       1850       Change choke to 32/         10       12       1420       1850       Change choke to 32/         20       12       1210       1850       Divert flow to heat         25/0       12       980       1850       Small fire detect         25/0       12       980       1850       Small fire detect	07	5			12	1 700	1850			Commence	glycol		tion at s	urface	and subse	១		
7       12       1600       1850       8         9       12       . 15       1850       Change choke to 32/         10       12       1420       1850       Change choke to 32/         15       12       1210       1850       Divert flow to heat         20       12       1070       1850       Divert flow to heat         25/0       12       1070       1850       Small fire detect         25/0       12       980       1850       Small fire detect	41	9		B144.	12	1670	1850			Safety va	lve							
8       12       15       1850       18	42	7			12	1600	1850											
9       12       1570       1850       Change choke to 32/         10       12       1420       1850       Change choke to 32/         15       12       1210       1850       Divert flow to heat         20       12       1070       1850       Small fire detect         25/0       12       980       1850       Small fire detect	43	8			12	. 15	1850											
10       12       1420       1850       Change choke to 32/         15       12       1210       1850       Divert flow to heat         20       12       1070       1850       Small fire detect         25/0       12       980       1850       Small fire detect	777	6			12	1570	1850											
15       12       1210       1850       Divert flow to heat         20       12       1070       1850       Small fire detect         25/0 ·       12       980       1850       Small fire detect         35/0 ·       at choke manifold	45	10			12	1420	1850			Change ch	oke to	32/64	'fixed b	ean				
20       12       1070       1850       Small fire detect         25/0.       12       980       1850       small fire detect	50	15			12	1210	1850			Divert f	ow to	heater						
25/0.       12       980       1850       Small fire detect         at choke manifold	55	20			12	1070	1850											
choke manifold	00	25/0			12	086	1850			£i	re	1 1						
	$\neg \uparrow$									at choke			l flowhea	dautom	atic actua	ıting va	lve	

Units Bleed off pressure between flowhead valve and choke manifold Sect at choke manifold 12/64" variable cloke monitor build up at choke GOR 01/89 \$urface Gravity Air = 1Report No.: Increase choke to 16/64" variable Commence subsea glycol injection Page: PROD. RATES AND FLUID PROPERTIES Commenced glychl injection at Rate WELL TESTING DATA SHEL. '— (Continuation) flow to flare on bypass Open flowhead valve BSW OIL OR CONDENSATE Gravity Open wel Fire out Rate Press. SEPARATOR Temp. PRESSURE AND TEMPERATURE MEASUREMENTS Tg. Temp. Tg. press Cg. press. PSIG 1800 1800 1800 1850 1850 1850 1800 1800 1800 1850 1850 1850 1850 WELL HEAD PSIG 2150 2750 2780 2310 2793 2805 2820 2820 2600 2550 2520 2280 2695 20 19 19 19 18 18 16 12 17 15 15 15 13 ပ Pressure **BOTTOM HOLE** RGER Temp. SCHLUME **TESTING** Cumul MINS 213/0 DATE - TIME 120 150 180 210 185 195 8 335 4 7 2  $\epsilon$ 11:15 11:33 08:00 08:02 10:00 10:30 11:00 11:05 11:25 11:34 11:38 11:20 11:30 11:37 11:35 11:36 11:39 11:40 Time

SCHLUME PRO

70		וֹם מ	ונים						_								
TES	TESTING				WELL TESTING DATA	TESTIN	G DA		SHEE f — (Continuation)	Conti	nuatio		Page: Report No.:	33 01/89		 -	
DATE -	DATE — TIME		PRESSUR	E AND TE	PRESSURE AND TEMPERATURE MEASUREMENTS	: MEASUREN	1ENTS		PRO	D. RATES,	AND FLUID	PROD. RATES AND FLUID PROPERTIES		GOR			
		ВОТТС	BOTTOM HOLE		WELL HEAD	O	SEPAR	SEPARATOR	OIL OR C	OIL OR CONDENSATE	TE	GAS					
Time	Cumul	Temp.	Pressure	Tg. Temp.	Tg. press	Cg. press.	Temp.	Press.	Rate	Gravity	BSW	Rate	Gravity				
HRS	MINS			C	PSIG	PSIG							Air = 1				Units
11:40	3/0			12	1910	1850			Change c	choke to	0 32/64"	" fixed bean	ean				
11:42	1			11	1650	1850											
11:43	2			6	1425	1850											
11:44	3			6	1375	1850											
11:45	7			6	1275	1850			BSW = gas	and	condensate	ate CO2	= 1%				
11:46	5			6	1190	1850											
11:47	9			6	1150	1950											
11:48	7			10	1090	1850											
11:49	8			10	980	1850											
11:50	6			11	970	1850			BSW = gas	and	condensate	ate					
11:51	10			12	965	1850											
11:52	11			13	006	1850											
11:53	12			13	850	1850											
11:55	14			14	816	1850			BSW = 60%	water	د 25%	emulsion	15% сс	condensate	1% C02		
12:00	19			16	795	1850											
12:15	34			17	680	2000											
12:30	64			17	539	2050											
12:45	64			17	. 565	2050											

lo. : DOP 110

SCHLUMI	SCHLUME RGER	SER	>	VELL T	ESTIN	IG DA	TA SH	WELL TESTING DATA SHEE I' — (Continuation)	Conti	nuatic		Page:	34 01/89	Section	 - <u>-</u>	7
DATE — TIME		PRESSUR	E AND TEN	I PRESSURE AND TEMPERATURE MEASUREMENTS	MEASUREN	MENTS		PRO	D. RATES	AND FLUID	PROD. RATES AND FLUID PROPERTIES		GOR			
	ВОТ	ВОТТОМ НОСЕ		WELL HEAD		SEPARATOR	(ATOR	OILORC	OIL OR CONDENSATE	TE	GAS					
Cumul	Тетр.	Pressure	Tg. Temp.	Tg. press	Cg. press.	Temp.	Press.	Rate	Gravity	BSW	Rate	Gravity	SCF	, co2	H2.S	-
CHI			>	5161	STCI	<b>.</b>	FOLA	ррг/ Л	56	9/	MSCF/D	Alf == 1	ВВГ	%	PPM	Onits
62			17	510	2050											
94			17	423	1980											
109			17	342	1980			Divert f	flow th	through	separator					
124			16	566	2000	63	165				0.982	0.925				
139			16	282	2000	61	165				0.880			1	ni1	
154			15	292	2040	61	165				0.880					
169			15	305	2040	59	165	114	0.726	0	936	0.935	8210			126
184			14	315	2040	<b>39</b> 5	165				006					
199			14	332	2020	57	165	139	0.776	0	920		6618	1.0	ni1	126
214			14	332	2000	57	165				903					
229			15	315	2000	57	165	202	0.776	0	903		4470			152
244			15	315	1990	55	165				992	1				
259			15	319	1990	55	165	190	0.776	0	905		4763	1.0	ni1	126
274			15	307	1980	55	165				923	0.935				
289			15	319	1950	55	165	139	0.775	0	923		9999			126
304			15	312	1950	55	165				076					
319			15	319	1910	55	165	140		0	905		7979	1.0	ni1	139
334			15	287	1950	54	165				906					

SCH	SCHI IME AGER	DA C	FR	-						:	:	Dage.		25	Coortion		7
TES	TESTING	?	į		WELL IESTING DATAS	ES I	<u>5</u> 0	IASH	HEET —	ı — (Continuation)	nuatic		Report No.:	01/89			•
DATE — TIME	- TIME		PRESSUR	E AND TEI	PRESSURE AND TEMPERATURE MEASUREMENTS	MEASURE	MENTS		PRC	D. RATES	NND FLUIC	PROD. RATES AND FLUID PROPERTIES		GOR			
		ВОТТС	BOTTOM HOLE		WELL HEAD	2	SEPAF	SEPARATOR	OIL OR C	OIL OR CONDENSATE	TE	GAS					Н20
Time	Cumul	Temp.	Pressure	Tg. Temp.	Tg. press	Cg. press.	Тетр.	Press.	Rate	Gravity	BSW	Rate	Gravity	SCF	C02	H2S	BBLS/D
HRS	MINS			S	PSIG	PISG	[H	PSIA	BBLS/D	SG	%	MSCF/D	Air = 1	BBL	%	PPM	Units
17:15																7	
17:30	349			15	312	1950	54	165	140		0	906		6471			101
17:45	364			15	297	1990	54	165				871	0.928				
18:00	379			15	305	1990	54	165	152		0	812		5342	1.0	nil	126
18:15	394			15	292	1990	54	165				852					
18:30	604			15	282	1990	54	165	152		0	812		5342			152
18:45	424			15	286	1990	54	165				832					
19:00	439			15	286	1990	54	165	152	0.775	0	606	0.928	5980	0.5	ni1	101
19:15	454			15	277	1990	54	165				606	0.928				
19:30	697			15	282	1990	54	165	127	0.785	0	606	0.928	7157			139
19:45	787	The second secon		15	291	1990	54	165				812	0.928				Table (All de
20:00	667			15	292	1990	54	165	178	0.775	0	812	0.928	4561	1.0	nil	76
20:15	514			15	274	1990	54	165				606	0.928				
20:30	529			15	255	1995	54	165	102	0.775	0	812	0.928	0962			88
20:45	544			15	252	2000	54	165				812	0.928				
21:00	559			15	252	2000	54	165				770	0.928		1.0	ni1	
21:15	574		,	15	257	2000	54	165				770	0.928				
21:30	589			15	225	2000	54	165	102	0.775	0	749	0.928	7343			101
21:45	909			15	302	1900	54	165				707	0.915				

BBLS/D 132.96 123.96 / 139.4 Units 114 126 9/ 88 H2S PPM nil nil nil ni1 nil Sect 0.5 0.5 0.5 C02 % 1.0 0.5 manifold for build-up period 5462.6 6985.0 6895.7 GOR BBLS 8402 6322 4951 4381 Report No.: 01/89 SCF 0.915 0.915 0.915 0.915 0.915 0.915 0.915 0.915 Air = 1 0.915 Gravity 0.915 0.915 Page: GAS PROD. RATES AND FLUID PROPERTIES MSCF/D Rate 1000 817 803 837 837 857 817 803 803 803 803 WELL TESTING DATA SHEL. ! — (Continuation) choke BSW 0 0 0 0 0 0 0 OIL OR CONDENSATE % in at 0.767 0.767 Gravity 0.767 0.767 0.767 0.767 0.767 SG Shut wel BBLS/D 116.45 114,96 Rate 165 102 147 127 191 PSIA Press. 165 165 165 165 165 165 165 165 165 165 165 165 165 SEPARATOR Temp. PRESSURE AND TEMPERATURE MEASUREMENTS 54 54 54 54 54 54 54 54 54 54 54 54 54 Ŀ Tg. press Cg. press. PSIG | PSIG 1990 1950 1950 1950 1950 1950 1950 1950 1960 1960 1990 1950 1900 1980 1990 WELL HEAD 268 300 310 270 265 265 230 290 332 270 264 280 286 292 259 Tg. Temp. 14 15 15 15 15 15 15 15 15 15 15 14 14 14 14 ပ Pressure **BOTTOM HOLE** RGER Temp. 29 SEPTEMBER 1989 SCHLUMB **FESTING** Cumul MIN DATE - TIME 634 649 919 709 724 739 754 691 999 769 784 792 7 22:00 23:30 00:45 22:30 00:54 00:55 22:15 22:45 23:45 00:00 00:53 00:53 23:15 00:15 21:45 23:00 00:30 Time HRS

SCHLUME\_RGER

Units Section GOR 01/89 Air = 1 Gravity Report No.: Page: PROD. RATES AND FLUID PROPERTIES Rate Take one L.P. H20 sample WELL TESTING DATA SHEE I' — (Continuation) OIL OR CONDENSATE Gravity Rate SEPARATOR Temp. PRESSURE AND TEMPERATURE MEASUREMENTS Tg. Temp. Tg. press Cg. press. PSIG 1950 1950 1950 1950 1910 1950 1950 1910 1910 1910 1910 1910 1910 1950 1950 1950 1950 1950 WELL HEAD PSIG 320 330 340 348 355 440 360 368 530 515 940 790 398 493 563 597 769 14 14 14 14 14 14 14 14 14 14 14 14 14 14 14 Pressure BOTTOM HOLE Temp. **TESTING** Cumul MINS DATE - TIME 4 9  $\infty$ 6 42 22 27 32 37 47 52 19 00:55 00:56 01:30 00:00 00:57 01:35 01:00 01:01 01:13 01:15 01:02 01:03 01:08 01:20 01:25 01:40 01:45 HRS

SCHLUME.

38

SCHLUME_RGER TESTING	E.E	XER T		WELL TESTING DATA	ESTIN	G DA	TA SH	SHEE f — (Continuation)	Conti	nuation)	Page:		38	Section	••	/
DATE — TIME		PRESSUR	E AND TEN	PRESSURE AND TEMPERATURE MEASUREMENTS	MEASUREN	MENTS		PROI	D. RATES	PROD. RATES AND FLUID PROPERTIES	OPERTIES		GOR			
	ВОТТ	BOTTOM HOLE		WELL HEAD		SEPARATOR	ATOR	OIL OR C	OIL OR CONDENSATE	<u> </u>	GAS					
Cumul	Temp.	Pressure	Tg. Temp.	Tg. press	Cg. press.	Temp.	Press.	Rate	Gravity	BSW	Rate	Gravity				
MINS			C	PSIG	PSIG							Air = 1				Units
82			14	887	1950											
97			14	983	1950											
112			14	1065	1950											
127			14	1138	1950											
142			14	1217	1950											
157			14	1385	1950											
172			14	1425	1950			TPT gauge	e failure,	ire, start	t to un	atch M	MUST actuator	or		
187			14	1538	2000											
202			14	1635	2000											
217			14	1638	2000(1											
219		Andrea de Calendar (any constitue de Calendar (a						MUST unlatched	atched	РООН						
232			14	1750	2000											
247			14	1800	2000											
262			14	1860	2000						-					
277			14	1913	2000											
292			14	1955	2000											
307			14	1997	1900											
322			14	2027	1900											

SCH	LUME	3 2	JER.		L 1 12/4	ATAC CIVITODY 1 19/W					doi:0	Page:		39	Sectio		7
TES	TESTING				~ CFF		במ		onee I — (colluinaalioli)		allOll)	Report	Report No.: 01/89	/89			
DATE - TIME	- TIME		PRESSUR	E AND TEI	WPERATURE	PRESSURE AND TEMPERATURE MEASUREMENTS	1ENTS		PROD. R	ATES AND	PROD. RATES AND FLUID PROPERTIES	PERTIES		GOR			
		ВОТТ	BOTTOM HOLE		WELL HEAD	0	SEPARATOR	ATOR	OIL OR CONDENSATE	DENSATE		GAS					
Time	Cumul	Temp.	Pressure	Тд. Тетр.	Tg. press	Cg. press.	Temp.	Press.	Rate Gr	Gravity B	BSW F	Rate	Gravity				
HRS 06:30	MINS			S	PSIG	PSIG							Air = 1				Units
06:45	337			13	2058	1850											
00:00	352			13	2080	1850											
07:15	367			13	2102	1850											
07:35	387			13	2127	1850			Schlumberger	er cable		out of hole .	- no MUST	. 1	actuator or T	TPT gauge	1
									tools are	still 1	latched i	into MWST	ST valve	re assembly	ı	cable weakpoint	oint
									had been broken	roken							
07:37	389			13	2130	1850			Shut lubricator		valve						
07:39	391								Shut swap	valve							
07:49	401			13	2153	1800			Open lubricator valve	cator	ı	swab va	lve pas	swab valve passes unable to undo SLB lubricator	e to un	do SLB 1	ıbricator
08:07	419			13	2150	1800			Close master	er valve	e						
08:09	421								Bleed off p	pressure		above master	valve	through c	choke manifold	nifold	
08:15	427								Rig down 10	lubricator	or						
08:41	453								Rectify swa	swab valve	e problem	- c1	ose swab	ub valve			
									Open master	r valve	- well	shut	in at ch	choke manifold	old		
08:45	457			17	2183	1910											
08:55	467								Rig down So	Schlumberger	rger BOPs	and	surface	control	equipment	nt	
00:60	472			17	2220	1910											
09:15	487			17	2250	1910											

I IIIIE | CUIIUI | IEIIID. | FIESSAIE | I.Q. IEIIID. | LA DIESS | C.G. DIESS. | LEIIID. | FIESS |

lo. : DOP 110

1

- marco - minerica

Units Section GOR Page: 40 Report No.: 01/89 40 Air = 1Gravity PROD. RATES AND FLUID PROPERTIES Rate WELL TESTING DATA SHEET — (Continuation) BSW OIL OR CONDENSATE Gravity Rate Press. SEPARATOR Temp. PRESSURE AND TEMPERATURE MEASUREMENTS Tg. Temp. Tg. press Cg. press. 2000 2000 1995 2000 PSIG 1810 1800 1800 1800 1800 1850 1910 1950 1950 1910 1820 1900 1880 1820 WELL HEAD 2635 2615 20 | 2660 2595 2510 2555 2580 2445 2500 2532 PSIG 2275 2375 2405 2424 2469 2332 2349 ) 2300 20 15 17 16 18 18 19 15 16 16 15 15 15 16 15 15 15 ပ Pressure **BOTTOM HOLE** SCHLUMBERGER Temp. **TESTING** Cumul MINS 742 12.15 757 712 727 652 682 697 532 562 592 607 622 637 **667** 502 517 547 577 DATE — TIME 13:30 12:45 13:15 12:15 12:30 13:00 11:45 12:00 10:00 10:30 11:30 06:30 09:45 10:15 09:15 10:45 11:00 11:15 Time

SCH	II UME	BFR(	FR								Marketine	-			i	_
TES	TESTING		-		WELL	WELL 1 ESTING DATA SHEE	G DA	IA SE	<b>.</b>	- (Continuation)	nuatio		t No.:	01/89	Solono 	
DATE-	DATE TIME		PRESSUR	E AND TE	MPERATUR	PRESSURE AND TEMPERATURE MEASUREMENTS	ENTS		PRC	D. RATES	AND FLUID	PROD. RATES AND FLUID PROPERTIES		GOR		
		ВОТ	BOTTOM HOLE		WELL HEAD	٥	SEPARATOR	ATOR	OIL ORC	OIL OR CONDENSATE	\TE	GAS				
Time	Currui	Тетр.	Pressure	Tg. Temp.	Tg. press	Cg. press.	Тетр.	Press.	Rate	Gravity	BSW	Rate	Gravity			
HRS	MINS			ບ	PSIG	PSIG							Air = 1			Units
13:45																
14:00	772			20	2675	2000										
14:15	787			20	2690	2000										
14:30	802			18	2708	2000										
14:45	817			18	2719	2000										
15:00	832			17	2750	2000										
15:15	847			17	.2768	1980										
15:30	862			17	2785	1940										
15:45	877			15	2806	1950										
16:00	892			15	2820	1920										
16:15	206			15	2836	1920										
16:30	922			15	2853	1920				,						
16:45	937			15	2875	1950					·					
17:00	952			15	2887	1930				,						
17:15	296			15	2900	1930										
17:30	982			15	2915	1920										
17:45	766			15	2930	1910							•			
18:00	1012			15	2944	1910										
18:15	1027		·	15	2963	1910						-				

Units Section GOR 01/89 Air = 1 Gravity Report No.: Page: PROD. RATES AND FLUID PROPERTIES Rate WELL TESTING DATA SHEET — (Continuation) BSW OIL OR CONDENSATE Gravity Rate Press. SEPARATOR Temp. PRESSURE AND TEMPERATURE MEASUREMENTS Tg. Temp. Tg. press | Cg. press. 1900 1900 1900 1900 1900 1900 1900 1900 000 PSIG 1910 1900 1900 1900 1900 1900 1900 1900 WELL HEAD 3160 3075 3085 3100 3105 3115 3145 3150 3050 3065 3127 PSIG 2970 3005 3022 3036 2988 3013 14 14 14 14 14 14 15 15 14 14 14 15 15 15 15 Pressure **BOTTOM HOLE** SCHLUMBEHGER Temp. **FESTING** 1282 1252 1222 1237 22:15 | 1267 1132 1162 1192 1207 ( Cumul MINS 1042 1072 1102 1117 1147 1057 1087 DATE - TIME 20:15 21:30 21:45 20:30 21:15 22:00 22:30 20:00 20:45 21:00 18:45 19:15 19:30 18:15 19:45 18:30 19:00 Time HRS

Units Section GOR 01/89 Air = 1 Gravity Report No.: Page: GAS PROD. RATES AND FLUID PROPERTIES Rate WELL TESTING DATA SHEET — (Continuation) BSW OIL OR CONDENSATE Gravity Rate Temp. | Press. SEPARATOR PRESSURE AND TEMPERATURE MEASUREMENTS Pressure Tg. Temp. Tg. press Cg. press. 1890 1870 1890 1890 1890 1890 1890 1890 1890 1890 1890 1890 1900 1880 1870 PSIG 1900 WELL HEAD 3300 3310 3333 3230 3240 3255 3260 3274 3285 PSIG 3192 3198 3210 3220 3235 3271 3185 14 14 14 14 14 14 14 14 14 14 14 14 14 **BOTTOM HOLE** SCHLUMBEAGER TESTING Temp. 30 SEPTEMBER 1989 1522 Cumul 1477 02:00 1492 03;00 1552 MINS 1312 1327 1342 1357 1387 03:30 1582 00:00 1372 1447 1417 01:30 1462 1402 1432 DATE - TIME 02:30 00:15 00:30 00:45 01:15 23:30 01:45 23:45 01:00 22:45 23:00 23:15 Time HRS

Units Section GOR Report No.: 01/89 77 Air = 1Gravity Page: PROD. RATES AND FLUID PROPERTIES Rate WELL TESTING DATA SHEET — (Continuation) BSW OIL OR CONDENSATE Gravity Rate Press. SEPARATOR Temp. PRESSURE AND TEMPERATURE MEASUREMENTS Tg. Temp. Tg. press | Cg. press. PSIG 2010 1820 1820 1890 1890 1890 1890 1890 2000 2000 2000 1980 2000 2000 2050 2100 2000 2050 WELL HEAD 3535 PSIG 3440 3420 3430 3345 3362 3375 3380 3390 3410 3445 3065 3475 3485 3495 3506 3519 3523 16 14 15 14 14 14 14 14 14 14 14 14 14 14 14 14 14 14 ပ Pressure **BOTTOM HOLE** SCHLUMBEAGER Temp. **TESTING** 2092 12:30 2122 Cumul MINS 1612 1792 1822 1852 1882 1912 1942 1972 2002 2032 2062 1642 1672 1702 1732 1762 DATE — TIME 04:30 08:30 11:30 12:00 04:00 00:90 06:30 00:80 00:60 06:30 10:30 00:70 10:00 11:00 05:00 05:30 07:30 03:30 Time

Units Section GOR 01/89 45 Gravity Air = 1 Report No.: Page: PROD. RATES AND FLUID PROPERTIES Rate WELL TESTING DATA SHEET — (Continuation) BSW OIL OR CONDENSATE Gravity Rate SEPARATOR Temp. PRESSURE AND TEMPERATURE MEASUREMENTS Tg. Temp. Tg. press | Cg. press. 1900PSIG 2050 1910 1950 1900 1890 1890 1890 1890 1850 1900 2080 2080 2000 2000 1950 1900 WELL HEAD PSIG 3654 3650 3590 3600 3540 3550 3558 3570 3577 3605 3612 3617 3624 3633 3633 3642 3563 3581 14 15 15 15 14 17 16 16 16 15 15 15 15 14 14 17 17 Pressure BOTTOM HOLE SCHLUMBEAGER Temp. **TESTING** Cumul 2512 2572 2602 2632 MINS 2152 2182 2212 2242 2272 2332 2362 2392 2422 2452 2482 2542 21:30 2662 2302 DATE -- TIME 20:30 21:00 18:30 19:00 13:00 14:30 17:30 19:30 20:00 16:00 18:00 12:30 17:00 13:30 14:00 15:00 15:30 16:30 Time HRS

Units Section GOR Page: 46 Report No.: 01/89 Gravity Air = 1 PROD. RATES AND FLUID PROPERTIES Rate WELL TESTING DATA SHEET — (Continuation) BSW OIL OR CONDENSATE Gravity Rate Press. SEPARATOR Tg. Temp. Tg. press | Cg. press. | Temp. PRESSURE AND TEMPERATURE MEASUREMENTS 1900 1900 1890 1900 1900 1900 1950 1960 1900 1900 PSIG 1940 1900 1900 1900 1960 1920 WELL HEAD 12 | 3728 PSIG 3715 3720 3723 3700 3710 3715 3660 3676 3685 3690 3695 3705 3657 3665 3672 12 13 12 12 13 12 13 13 13 14 13 13 13 13 13 Pressure BOTTOM HOLE SCHLUMBEAGER TESTING Temp. 01 OCTOBER 1989 05:30 3697 3547 3607 3637 05:00 3667 3517 3577 Cumul MINS 2752 3367 3397 3427 3457 3487 2722 2782 DATE -- TIME 04:30 00:50 03:00 22:00 23:30 00:00 01:30 02:30 03:30 22:30 23:00 00:30 01:00 05:00 21:30 Time

on 16/64" fixed bean by-pass to flare inject surface glycol Units Section GOR 01/89 47 Gravity Air = 1Report No.: Page: GAS PROD. RATES AND FLUID PROPERTIES Start glycol injection at EZ Rate WELL TESTING DATA SHEET — (Continuation) BSW OIL OR CONDENSATE Heater shut down Gas at surface Gas at surface Gravity Start heater Open wel 22% CO2 Rate Press. SEPARATOR Temp. PRESSURE AND TEMPERATURE MEASUREMENTS 1900 Tg. Temp. Tg. press Cg. press. 1900 1990 1990 1990 1990 1900 1900 PSIG 1990 1990 1990 1990 1990 1900 2000 88 2000 2000 WELL HEAD 1230 PSIG 2060 1700 1620 1535 1340 3745 1440 1262 3735 3742 2750 2550 2350 1395 1300 3732 3738 10 10 10 10 10 10 11 10 10 10 10 10 11 12 11 11 11  $\square$ ပ Pressure **BOTTOM HOLE** SCHLUMBEAGER Temp. 3806/ TESTING Cumul MINS 3797 3727 3757 3782 DATE - TIME 41 36 26 9  $\sim$ 4 5 21 31 00:80 07:55 07:45 07:25 06:55 07:50 00:90 06:30 07:10 07:19 07:22 07:24 07:30 07:35 07:40 07:30 05:30 07:21 Time HRS

Units - divert flow back to by-pass dump condensate Section GOR 01/89 Gravity Air = 1 Report No.: Page: Shut in well at choke manifold PROD. RATES AND FLUID PROPERTIES Rate gaug¢ tank WELL TESTING DATA SHEET — (Continuation) Pressure up separator Gas only to surface BSW OIL OR CONDENSATE in separator to Gravity Rate SEPARATOR Temp. PRESSURE AND TEMPERATURE MEASUREMENTS Pressure Tg. Temp. Tg. press Cg. press. 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2010 2000 PSIG 2000 2000 2000 WELL HEAD 245 240 610 385 330 205 215 225 225 230 233 1100 830 735 237 PSIG 1160 975 11 11 11 11 11 11 11 11 11 **BOTTOM HOLE** SCHLUMBEHGER Temp. 156/0 **TESTING** Cumul MINS 146 116 131 101 DATE - TIME 7  $\sim$ 4 9 51 61 71 91 81 06:30 09:55 09:59 10:02 08:10 08:30 09:56 08:20 09:45 10:00 09:15 10:01 08:00 08:40 08:50 00:60 09:57 09:58 Time HRS

Units Section Take one low pressure condensate sample from separator GOR 01/89 Start rigging up slickline equipment Gravity Air = 1Report No .: \_\_ Page: GAS PROD. RATES AND FLUID PROPERTIES Rate WELL TESTING DATA SHEET — (Continuation) BSW OIL OR CONDENSATE Gravity Rate SEPARATOR Temp. PRESSURE AND TEMPERATURE MEASUREMENTS Tg. press Cg. press. 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 PSIG WELL HEAD PSIG250 255 260 295 303 313 319 325 330 345 349 252 273 287 Tg. Temp. 11 11 11 11 11 11 11 11 11 Ţ 11 Pressure **BOTTOM HOLE** SCHLUMBEAGER Temp. **TESTING** Cumul MINS DATE - TIME 9 10 15 45 55 65 20 25  $\infty$ 6 10:55 10:30 10:45 10:35 11:00 10:25 10:50 10:03 10:04 10:05 10:10 10:20 10:40 10:15 10:02 Time HRS

2000

359

70

11:05

2000

368

2000

373

383

12 12

85

11:20

11:15

11:10

SE SE	SCHLUMBEHGER TESTING	3EHC	Ä		WELL TESTING DATA SHI	<b>TESTIN</b>	G DA	TASF	H	- (Continuation)	inuati		No:	50 01/89	Section	••	7
DATE - TIME	- TIME		PRESSUR	E AND TEN	PRESSURE AND TEMPERATURE MEASUREMENTS	MEASUREN	1ENTS		PRO	D. RATES	AND FLUI	PROD. RATES AND FLUID PROPERTIES		GOR			
		BOTT	BOTTOM HOLE		WELL HEAD		SEPARATOR	ATOR	OIL OR C	OIL OR CONDENSATE	\TE	GAS					
Time	Cumul	Temp.	Pressure	Tg. Temp.	Tg. press	Cg. press.	Тетр.	Press.	Rate	Gravity	BSW	Rate	Gravity				
HRS	MINS			С	PSIG	PSIG							Air = 1				Units
11:20																	
11:25	06			12	398	2000											
11:30	56			12	422	2000											
11:35	100			12	422	2000											
11:40	105			12	427	2000	•										
11:45	110			12	439	2000											
11:48	113/0			12	077	2000			Open wel	l on	8/64" f	ixed bean,	flow	to flare			
11:49	1			13	437	2000											
11:50	2			13	430	2000											
11:51	3			13	428	2000											
11:52	7			14	427	2000											
11:53	5			14	426	2000											
11:54	9			14	426	2000											
11:55	7			14	425	2000											
11:56	8			14	425	2000											
11:57	6			14	454	2000											
11:58	10			15	454	2000		-									-
11:59	11			15	423	2000											
12:00	12			15	423	2000			   Take one	one PVT c	condensate		samolelfrom	genarator			

Units Section GOR 01/89 51 1.010 1.010 1.010 1.010 1.010 1.010 Air = 1Gravity Report No.: Page: PROD. RATES AND FLUID PROPERTIES Divert flow through separator MSCF/D Rate 75 85 82 82 82 WELL TESTING DATA SHEET — (Continuation) ni BSW В OIL OR CONDENSATE Gravity 0.3% н Rate C02 PSIA Temp. Press. SEPARATOR 75 75 75 75 75 PRESSURE AND TEMPERATURE MEASUREMENTS 57 57 57 H 57 57 57 Tg. Temp. Tg. press Cg. press. 2000 PSIG 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 WELL HEAD 542 456 697 515 415 428 417 450 492 PSIG 418 415 413 410 409 422 403 427 421 ان 13 14 15 14 14 14 14 13 13 14 14 14 14 13 13 13 Pressure BOTTOM HOLE SCHLUMBEAGER Temp. **TESTING** Cumul MINS 237 192 102 117 132 147 162 177 207 DATE -- TIME 94 22 27 42 57 87 15:45 14:45 15:15 15:30 12:30 14:00 14:15 14:30 12:05 12:45 13:30 13:45 15:00 12:15 13:00 13:15 13:22 12:00 Time HRS

BBL/D Units H20 Section GOR BBLS 01/89 SCF/ 0.965 0.965 0.965 0.965 0.965 0.965 1.010 0.965 0.965 0.965 0.965 0.965 1.010 0.965 0.965 0.965 0.965 Gravity Air = 10.965 Report No.: Page: PROD. RATES AND FLUID PROPERTIES MSCF/D Rate WELL TESTING DATA SHEET — (Continuation) BSW % OIL OR CONDENSATE Gravity .762 .762 .762  $s_{G}$ BBLS?D Rate PSIA Press. SEPARATOR Temp. PRESSURE AND TEMPERATURE MEASUREMENTS ഥ Tg. Temp. Tg. press | Cg. press. PSIG WELL HEAD PSIG Pressure **BOTTOM HOLE** SCHLUMBEAGER Temp. **FESTING** MINS Cumul 20:15 507 DATE - TIME 17:30 18:30 19:30 16:00 16:15 18:15 20:00 17:45 18:00 19:45 18:45 19:00 19:15 15:45 16:30 16:45 17:00 17:15 Time HRS

SCH	SCHLUMBEAGER	3EAC	Ж		WEI I TECTING DATA CHEET		<u>י</u>			itac	(Continuation)	Page:		53	Section		7
TES	TESTING					3	ב ב	5				Report No.:		01/89		:	
DATE — TIME	- TIME		PRESSUR	E AND TEN	PRESSURE AND TEMPERATURE MEASUREMENTS	MEASURE	MENTS		PRO[	). RATES	AND FLUID	PROD. RATES AND FLUID PROPERTIES		GOR			
		ВОТТ	BOTTOM HOLE		WELL HEAD	2	SEPARATOR	ATOR	OIL OR CONDENSATE	ONDENSA	TE	GAS					Н20
Time	Cumul	Temp.	Pressure	Tg. Temp.	Tg. press	Cg. press.	Temp.	Press.	Rate	Gravity	BSW	Rate	Gravity	SCF/			RRI.S/D
HRS	MINS			С	PSIG	PSIG	Ŧ	PSIA	RBLS/D	SG	%	MSCF/D	Air = 1	BBLS			Units
20;15											٠.						
20:30	522			12	712	2010	50	100	63	.762	0	100	0.965	1587			50
21:00	552			12	717	2000	50	100	76	.762	0	93		1223			88
21:30	582			12	733	2010	48	105	38			109		2868			38
22:00	612			12	742	2010	94	105	38			113		2973			25
22:30	642			12	750	2100	97	105	51			109		2137			38
23:00	672			12	794	2020	94	105	51			109	0.965	2137			38
23:30	702			12	805	2020	9†	105				117			* · · · · · ·		
23:45	717/0			12	82.5				Increase	choke	to 16	'64" fixed	bean	,			
02 OCT	OCTOBER 1	1989															-
00:00	15			12	790	1900											
00:15	30			12	678	1900	87	105		.762		302.5	0.975				
00:45	09			13	760	1900	87	105	31.97	.765	0	269.5	0.975	8429.8			101.38
01:15	06			12	450	1800	84	105	31.92	.765	0	219.9	0.975	6889.1			164.64
01:30	105			12	405	1890			Change o	rifice	plate	to .750"					
01:45	120			12	385	1890	48	105	25.54	.765	0	186.5	0.975	7302.3			228.10
02:15	150			12	350	1900	48	105	12.77	.765	0	164.6	0.975	12889.6			190.08
02:18	153			12	340	1850			By-pass	separator	tor for	fow to flare,	shut	in at choke	e manifold	þ	

Units Halliburton commences pumping and down tubing and formation in order Section GOR 01/89 Top up ahnulus - continue to bullhead Air = 1Gravity Report No.: Page: PROD. RATES AND FLUID PROPERTIES Rate WELL TESTING DATA SHEET — (Continuation) BSW OIL OR CONDENSATE valve Gravity to kill well Open kil| Rate END OF TEST Press. SEPARATOR Temp. PRESSURE AND TEMPERATURE MEASUREMENTS Tg. Temp. Tg. press Cg. press. 1850 1820 1820 1820 1820 1820 1820 1820 PSIG **WELLHEAD** 388 435 PSIG 345 375 385 392 382 397 12 12 ပ Pressure BOTTOM HOLE SCHLUMBEAGER Temp. *TESTING* Cumul MINS DATE — TIME 4 9 3 02:30 02:19 02:22 02:23 02:24 02:25 02:33 02:21 02:18 02:20 Time HRS

# **FLOPETROL**

DIVISION : ANZ

BASE = BEF

REPORT N°: 01/89

# Well Testing Report Annexes —

Client = PETROFINA

Field = VIC/PZO Well = ANEMONE 1A

**Zone =** DST #1 **Date =** 22 SEP - 04 OCT 1989

N: DOP 111

FLOPETROL
Client: \_PETROFINA Section: ANNEX
Field: \_VIC/PZO Page : \_56
Well: \_ANEMONE 1A Peport N: \_01/89

# INDEX of ANNEXES

	1 _ BOTTOM HOLE PRESSURE AND TEMPERATURE
	MEASUREMENT _
	1.1 - B.H. gauge calibration -
	☐ 1.2 B.H. pressure calculation -
	1.3 B.H. temperature calculation -
X	2_LIQUID PRODUCTION RATE MEASUREMENT _  3 2.1 Measurements with tank _
	2.2 Measurements with meter _
x	3. GAS PRODUCTION RATE MEASUREMENT _
x	4_ SAMPLING SHEETS _
	4.1 Bottom hole sampling _
	¥ 4.2. Surface sampling .
х	5_CHARTS AND MISCELLANEOUS_

# **FLOPETROL**

Client : PETROFINA

Section: ANNEX

Base: BEF

Field : VIC/PZO
Well : ANEMONE 1A

Page : 57
Report N: 01/89

## LIQUID PRODUCTION RATE MEASUREMENT \_

### 2.1\_ MEASUREMENT WITH TANK -

 $V_0 = V \times K \times (1 - BSW)$ 

Vo: Net oil volume at 60°F and atmospheric pressure.

V: Gross oil volume measured by tank gauging.

K: Volume correction factor to be applied between the tank temperature during gauging and 60°F.

BSW: Basic sediments and water.

### 2.2 \_ MEASUREMENT WITH METER \_

a) Shrinkage factor is measured by shrinkage tester.

$$V_0 = V_S \times f \times (1 - Shr) \times K \times (1 - BSW)$$

Vo: Net oil volume at 60°F and atmospheric pressure.

VS: Gross oil volume measured by meter under separator conditions.

f : Meter correction factor = Volume measured in tank
Volume measured by meter

**Shr**:Percentage of oil volume reduction between separator and tank conditions, reported to oil volume at separator conditions.

K: Volume correction factor to be applied between the final temperature during shrinkage measurement and 60°F. BSW: Basic sediments and water.

b) Shrinkage factor is measured with tank.

$$V_0 = V_S \times (1 - Shr') \times K \times (1 - BSW)$$

 $V_0$ ,  $V_S$ , K and BSW = Same meaning as in a). (1 – Shr') = Shrinkage factor including meter correction factor .

0
7
٩
0
0
_

S S S S	58 01/89			Units																
Section: ANNEX	Page :_ Report N:_	Cumulative																		
_ =_	-)	Net STO	product. rate	BBLS /day								292	194				202			4652 meters
- OIL PRODUCTION RATE	WITH TANK -	Net volume	of STO Vo	BBLS	-							3.045	2.023				8.4			6654
RODUC		77.0	R S W	%						4 bbl/cm		10	45				3		0	INTERVAL:
- 01L P	- MEASUREMENT	۷				to flare		through heater		ation 0.264		0.995					0.995		766.0	TESTED INTER
	- M	ITY	Grav. 60°F	SG		le choke		low thro		k, calibr		0.78						eparator	0.783	
		O GRAVITY	Temp.	F		adjustab	choke	choke, f	separator	gauge tan		57			rator			el in s	54	
PETROFINA	VIC/PZO ANEMONE 1A	ST	Gravity	SG		32/64" a	fixed c	fixed c	ì	to		0.782		u	ıgh sepa			water lev	0.785	
	ANE	VOLUME	Temp.	F		well on	48/64"	32/64"	flow through	ow meter		89	89	eparator	flow through			drain w		
Client:	Field Well	TANK VO	Volume V	BBLS		Open up w	Change to	Change to	Divert fl	By-pass f		3.4	3.7	By-pass s	Divert fl		8.700	Start to		
FLOPETRO		Gauge	graduation	CM					·		36	67	63			99	66		103	
D	BEF	TIME	Interval	MIN	MBER 198					15	15	15	15			10	09	15	15	
FIG	Base:	DATE -	Time	HRS MINS	27 SEPTEMBER	07:10	12:50	16:15	16:30	17:15	17:30	17:45	18:00		18:20	18;30	19:30	19:45	20:30	

PERFORATIONS

	FLOPETROL	MEASUREMENT	JREME	1	WITH TA		NK _ ( Continuation )		Page Report N:	59	Section : ANNEX <b>2.</b>	× 0 7.
Gauge		TANK VOLUME	UME	STO	GRAVITY	ΤΥ	7	) N O O	Net volume	Net STO	Cumulative	
graduation		Volume V	Temp.	Gravity	mp.	Grav. 60°F	۷	0 3 4 4	of STO Vo		production	
CM	_¥	BBL	F	SG	F	SG		%	BBL	BBL /day		Units
	udilli											
108	<del></del>	1.320	70	0.785	54	0.783	0.994	0	1,312	63		
117		2.370	72				0.993	0	2,353	113		
130		3.400	72				0.993	0	3.376	162		
142		3.200	70	0.784	55	0.782	0.994	0	3,181	153		
151		2.376	72				0.993	0	2.359	113		
161		2.640	72				0.993	0	2.122	126		
170		2.38	72				0.993	0	2.360	113		
179		2.38	63	0.784	55	0.782	0.998	0	2.37	113.8		
189		2.640	63	0.784	55	0.782	0.998	0	2.63	126.24		
199		2.640	63	0.784	55	0.782	0.998	0	2.63	126.24		
208		2.38	63	0.784	55	0.782	0.998	0	2.37	113.8		
						Shut w	well in - pu	pump out g	gauge tank			
						Open up	well on	12/64" ad	adjustable cho	chøke		
						Change	to 16/64"	adjustable	le choke			
						Change	to 32/64"	fixed ch	choke			
						Divert	flow through	ugh separator	ator			

Section: ANNEX 2.1 Units Pump condensate to burner Cumulative production oil outlet to gauge tank product. rate BBL / day Net STO N: 01/89 139 102 114 190 140 140 152 178 139 202 152 152 127 102 9 of STO Vo Net volume Page Report 2.910 2.366 3.964 3.187 2.656 3.718 2.124 2.124 2.898 4.219 2.915 3.187 3.187 2.921 BBL Switch BSW 0 0 0 0 0 WITH TANK \_ (Continuation 1.006 1.006 1.006 1.006 0.996 0.998 0.999 1.002 1.006 1.006 1.004 1.006 1.006 1.001  $\checkmark$ Temp. Grav. 60°F 0.775 0.775 0.776 STO GRAVITY tank 57 57 63 the gauge 0.776 0.775 0.776 Gravity SG**MEASUREMENT** Temp. empty 50 50 50 TANK VOLUME 50 50 50 50 9 59 99 54 99 61 51 to Volume V 2.112 3.168 3.696 2.112 Start 2.376 4.224 3.168 2.904 3.168 2.64 3.96 2.90 2.90 2.90 FLOPETROL graduation Gauge 74/70 115 47 59 92 103 127 139 149 163 39 CM 32 43 171 23 81 Interval 30 30 29 30 30 <del>--</del>1 30 30 30 30 30 30 30 30 30 30 30 DATE - TIME HRS MINS 21:30 13:30 16:30 17:30 18:00 18:30 19:00 19:30 20:00 20:30 21:00 14:00 14:30 15:00 15:30 16:00 17:00 20:31 Time

FLOPETRO	PE		MEASUREMENT	JREME		тн т/	ANK _ ( C	WITH TANK _ (Continuation )		Page Report N:	61	Section: ANNEX 22	<b>6</b> .7
DATE -	TIME	Gauge	TANK VOL	VOLUME	STO	GRAV	ΙΤΥ	7	) N O a	Net volume	Net STO	Cumulative	
Time	Interval	graduation	Volume V	Temp.	Gravity	Temp.	Grav. 60°F	۷	A) C a	of STO Vo	product. rate	production	
HRS MINS		CM	BBL	F	SG	দ	SG		%	BBL	BBL /day		Units
21:30													
22:00	30	09	3.432	50	0.775	07	0.767	1.006	0	3.452	165		
22:30	30	75	3.960	50	0.775	0†	0.767	1.006	0	3.983	191		
23:00	30	83	2.112	50	0.775	07	0.767	1.006	0	2.124	102	-	
23:30	30	93	2.64	48	0.775	07	0.767	1.008	0	2.661	127		
24:00	30	105	3.036	87	0.775	07	0.767	1.008	0	3.06	147.0		
29 SEPTEMBER	IBER 1989	·											
00:30	30	114	2.376	87	0.775	40	0.767	1.008	0	2.395	114.96		
00:53	23	121	1.85	87	0.775	40	0.767	1.008	0	1.86	116.45		
00:53								Shut in	well at c	choke manifo	d, drain	tank	
O1 OCTOBER	ER 1989												
11:48								Open up	vell on 8	8/64" fixed	choke to flare	r.e	
13:22	76							Divert f	flow through	gh separato			
16:00	278	.37			0.768	97	0.762						
16:30	30	42	1.32	55	1.768	95	0.762	1.003	0	1.323	63		
17:00	30	97	1.056	55	1.768	97	0.762	1.003	0	1.059	51		
17:30	30	51	1.32	55	0.768	97	0.762	1.003	0	1.323	63		
18:00	30	55	1.056	54				1.004	0	1.060	51		

	₩ ₩ 7.		Units																		
	Section : ANNEX <b>2.1</b>	Cumulative	production																		
	62 01/89	Net STO	product. rate		51	0	15	25	38	. 63	92	38	38	51	51					31.97	31.92
	Page :- Report N:-	Net volume	of STO Vo		1.060	0	0.265	0.530	0.796	1.327	1.593	0.798	0.799	1.065	1.065					999.0	0.665
		BSW	8		0														0	0	0
CONDENSATE	WITH TANK _ (Continuation )	¥			1.004		1.005	1.005	1.006	1.006	1.006	1.008	1.009	1.009	1.009					1.009	1.008
	JNK - (0	<b>T</b>	Grav. 60°F													or				0.762	0.765
	/ITH T/	GRAVI	Temp.													separat	fixed			9†	48
	. 1	STO	Gravity	00												evel in	.0 1/4"			0.768	0.77
	JREME	LUME	Temp.	1	54		52	52	50	50	50	87	97	97	97	nsate	choke			9†	97
	■ MEASUREMENT	TANK VOLUME	Volume V	DDD	1.056	0	0.264	0.528	0.792	1.32	1.58	0.792	0.792	1.056	1.056	Low condensate	Increase			0.667	99.0
	וסמו		nation		55	55	56		61	99	72	7.5	78	82	98				85	87.5	90.0
	PEI	TIME	Interval		30	30	30	30	30	30	30	30	30	30	30	30	15	1989	30	30	30
No.: DOP 121	FLOPETRO	DATE - T		18:00	18;30	18:30	19:00	19:30	20:00	20:30	21:00	21:30	22:00	22:30	23:00	23:30	23:45	2 OCTOBER	00:15	00:45	01:15

Section: ANNEX 2.1 Units Cumulative production product. rate BBL /day Net STO . 63 N: 01/89 25.54 12.77 Net volume of STO  $V_{o}$ Page Report 0.532 0.266 B SW WITH TANK \_ (Continuation ) 0 0 1.008 1.008  $\mathbf{Y}$ By-pass separator Temp. Grav. 60°F 0.765 0.765 Shut in well STO GRAVITY 48 48 Gravity 0.77 0.77 MEASUREMENT Temp. TANK VOLUME 48 48 graduation Volume V 0.528 0.264 BBI FLOPETROL Gauge Z 92 93 Interval DATE - TIME 30 30  $\sim$ HRS MINS Time 01:45 02:15 02:18 01:15

WATER

	1	<b> </b>		l				Рэдо	79	Section . ANNEX D 1	7 <b>()</b> × 1
FLOPEIRO		MEASUREMENT	JREME		WITH TANK _ (Continuation )	_ ( Continu	nation )	Report N:	01/89		
DATE - TIME	Gauge	TANK VOL	VOLUME	STO	GRAVITY	2	) V ( ) G	Net volume	Net STO	Cumulative	
Time Interval	graduation	Volume V	Temp.	Gravity	Temp Grav 60°F		200	of STO Vo	product. rate	production	
HRS MINS	CM	BBL					%	BBL	BBL /day		Units
18:20		Divert f1	flow through		separator, flow on	32/64"	fixed choke				
19:45		Start to	drain water	ater level	el in separator	tor					
20:30 15	87	out	let op	1 _	ره ا	tark, calibration:	0.264 bb1/cm	m			
21:00 30	79	4.224	1 0		i			4.224	203		
21:30 30	89	1.056	72	1.0				1.056	50		
22:00 30	80	3.200	72					3.200	152		
22:30 30	92	3.168	70					3.168	152		
23:00 30	100	2.112	72	1.0				2.112	101		
23:30 30	111	2.904	72					2.904	139		
24:00 30	121	2.640	72	1.0				2.640	126		
SEPTEMBER 1989	5.										·
00;30;	131	2.64	63	1.0				2.64	126		
01:00 30	142	2.90	63	1.0				2.90	139		
01:30 30	152	2.64	63	1.0				2.64	126		
01:58	160	2.112	63	1.0			0	2.112	9.46		
		Shut in w	well, p	pump out g	gauge tank	,					
11:33		n dn uodo	ell on	well on 12/64" adjustab	djustable to	le to flare					

No.: DOP 121								WATER					
0	רשם	FLOPETROL	■ MEASUREMENT	IREME		ITH TA	NK _ ( C	WITH TANK _ (Continuation )	:	Page :- Report N':-	65 01/89	Section: ANNEX 0.1	EX OX
DATE - 1	TIME	Gauge	TANK VOL	VOLUME	STO	GRAVI	ا	X	BSW	Net volume	Net STO	Cumulative	····
Time	Interval	graduation	Volume V BBL	Temp.	Gravity	Temp. Gr	Grav. 60°F		%	of STO Vo	product. rate BBL / day	production	Units
11:33													
11:38	5		Change to	16/64"	adjustable	ole cheke							
11:41	3		Change to	32/64"	fixed	choke							
13:30	109		Divert flo	flow through	1	separator							
14:00	30	30											
14:30	30	07	2.64	99						2.64		126	
15:00	30	. 50	2.64	99						2.64		126	
15:30	30	62	3.17	61						3.17		152	
16:00	30	72	2.64	59						2.64		126	
16:30	30	82	2.64	99						2.64		126	
17:00	30	93	2.90	54						2.90		139	
17:30	30	101	2.112	51						2.112		101	
18:00	30	111	2.64	50						2.64		126	
18:30	30	123	3.168	95						3.17		152	
19:00	30	131	2.112	50						2.112		101	
19:30	30	142	2.904	50				-		2.904		139	
20:00	30	148	1.584	50						1.584		76	
20:30	30	155	1.848				·			1.848		88	
									_			_	_

										Dozo	77	Coction ANNEX D 4	70.
FLOPETRO			MEASUREMENT	IREME		ITH T/	1 - NK	WITH TANK _ (Continuation )		Report N:	01/89		
DATE - T	TIME	Gauge	TANK VOLUME	UME	STO	GRAV	ΤΥ	7	/V/ 0 d	Net volume	Net STO	Cumulative	
Г	Interval	graduation	Volume V	Temp.	Gravity	Temp. (	Grav. 60°F	<u> </u>	0 3 VV	of STO Vo	product. rate	production	
INS		CM							%	BBL	BBL, / day		Units
20:30													
20:31	1		Start to	empty	the gauge	tank							
21:15	77	47											
21:30	15	51	1.056	50						1.056	101		
22:00	30	09	2.376	50						2.376	114		
22:30	30	67	1.848	50						1.848	88		
23:00	30	77	2.64	50						2.64	126		
23:30	30	83	1.584	87						1.584	76		
24:00	30	76	2.90	87						2.90	139.4		
29 SEPTEN	SEPTEMBER 1989												
00:30	30	104.5	2.77	87						2.77	132.96		
00:53	23	112	1.98	87					0	1.98	123.96		·
00:53			Shut in w	well at	choke manifold	nifold	drain të	tank					
01 OCTOBE	OCTOBER 1989												
11:48			Open up w	well on	8/64"	fixed chol	ke to fl	are					
13:22	94		Divert fl	flow thr	through sepa	separator							
17:30	242	67											
18:00	30	54	1.32							1.32	63		

WATER

													7
		FLOPETRO	MEASUREMENT	JREME		TH 17	ANK - (	WITH TANK _ (Continuation )		Page :_ Report N:_	67 01/89	Section : ANNEX C.	ـ× <b>د. ا</b>
DATE -	TIME	Gauge	TANK VOLUME	UME	STO	GRAVI	ΙΤΥ	7	B C M	Net volume	Net STO	Cumulative	
	Interval	graduation	\$	Temp.	Gravity	Temp.	Grav. 60°F	2	A C a	°	product. rate	production	
HRS MINS		CM	BLLS						%	BBLS	BBL / day		Units
18:00													
18:30	30	57	0.79							0.79	38		
19:00	30	09	0.79							0.79	38		
19:30	30	65	1.32							1.32	63		
20:00	30	99	0.264							0.264	12		
20:30	30	72	1.056							1.056	50		
21:00	30	62	1.848							1.848	88	,	
21:20	30	82	0.792							0.792	38		
22:00	30	84	0.528							0.528	25		
22:30	30	87	0.792							0.792	38		
23:00	30	06	0.792							0.792	38		
23:30	30	Low water	level in	separator	ŗ								-
23:45	15	Increase	choke to	1/4" fixed	þ								
02 OCTOBE	OCTOBER 1989												
00:15	30	90											
00:45	30	86	2.112							2.112	101.38		
01:15	30	111	3.43							3.43	164.64		

WATER

	ק מ א		Units												
	Section: ANNEX D.1		production												
	68 01/89	Net STO	product. rate BBLS/ day		228.1	190.08			·						_
	Page :- Report N':_	ne .	of STO Vo BBLS		4.752	3.96									
		BSW													
WATER	WITH TANK _ (Continuation )	¥					ATOR								
M	ANK - (	ТҮ	Grav. 60°F				SS SEPARATOR	IN WELL							
	/ITH T		Temp.				BY-PA	SHUT							
	MEASUREMENT V	STO	Gravity												
		-UME	Temp												_
		TANK VOLUME	Volume V BBLS		4.752	3.96									
	FLOPETROL	Gauge	graduation		129	144									
	Ш	TIME	Interval		30	30									
No.: DOP 121	FLO	DATE- T	Time HRS MINS	01:15	01:45	02:15									

# FLOPETROL

Client : PETROFINA

Section:ANNEX

Page Report N°: 01/89

Base :\_ BEF Field : VIC/PZO Well : ANEMONE 1A

# \_ GAS PRODUCTION RATE MEASUREMENT by orifice meter \_

Reference is made to the rules and coefficients given in AGA gas measurement Comittee Report No.3 for orifice metering.

### a) EQUATIONS \_

$$Q = C \sqrt{hw \times Pf'}$$

Q : Production rate at reference conditions.

C: Orifice flow coefficient.

hw: Differential pressure in inches of water.

Pf: Flowing pressure in psia.

 $C = F_{u} \times F_{b} \times F_{g} \times Y \times F_{tf} \times F_{pv}$ 

Fu: Unit conversion factor in desired reference conditions.

Fb: Basic orifice factor (Q in Cu.ft / hour).

Fg: Specific gravity factor.  $\underline{Y}:$  Expension factor

Ftf: Flowing temperature factor.

Fpv: Supercompressibility factor (estimated).

### Remarks

Em: Manometer factor is equal one since only bellows type meters are used . Fr: Reynolds factor is considered to be one.

	TABLE O	F Fu FACTO	OR	
		REFERENCE	CONDITIONS	
UNITS	60°F	0°C	15°C	15°C
	14.73 psia	760mmHg*	760mmHg *	750mmHg <b>*</b>
Cu.ft / hour	1	0.9483	1.0004	1.0137
Cu.ft / day	24	22.760	24.009	24.329
m <sup>3</sup> / hour	0.02832	0.02685	0.02833	0.02870
m <sup>3</sup> / day	0.6796	0.6445	0.6799	0.6889

\* Mercury at 32°F

h١	MFT	FR	DATA -

: DANIEL SENIOR Flange taps - Pf taken down/ & stream Meter type Flow recorder type: BARTON \_\_\_\_\_ ID of meter tube : \_\_\_\_5.761

#### c) SPECIFIC GRAVITY SOURCE \_

Sampling point : SEPARATOR GAS OUTLET Gravitometer type : \_\_\_\_

### d) SUPFRCOMPRESSIBILITY FACTOR Fpv -

All coefficients are taken from AGA NX 19 manual for natural gas free of air, CO2 and H2S. More accurate values could only be determined by laboratory measurement.

Cumulative Production Page : 70 Report N: 01/89 SCF/D Section: ANNEX Gas production rate : O MSCF/D 9.671 6.779 843.9 630.7 1070.0 - GAS PRODUCT. RATE MEASUREMENT 4599 - 4652 m 15276.6 15026.1 7649.3 7644.5 7714.1 = 1.75S 1.0143 1.0263 orifice plate 0.9680 | 1.0168 1.0166 **\_**6 TESTED INTERVAL :\_\_ 0.9680 0.9732 1.0303 1.0012 0.9671 adjustable to flare щ<sup>±</sup> Inser 1.0233 1.0084 Gas produce 1.0233 1.0022 Decrease choke to 32/64" fixed choke 1.0233 1.0081 to 48/64" adjustable 1,0041 > Start taking separator readings Divert flow through separator flow through separator to 48/64" fixed choke flow through heater щ on 32/64" 314.95 314.95 621.79 621.79 314.95 ď 3000 separator 0 - 1500 psig Increase chok up well 0.955 1.750 0.942 0.955 0.955 gravity Gas (air=1 Change Client: PETROFINA diameter Diver By-pas Diver 1.250 0pen 1.250 1.250 1.750 : ANEMONE VIC/PZO Orifice Inches 70.30 Recorder ranges: Pf = Vhw × Pf 51.88 109.40 82.51 88.63 Field Well ج م "of wat 30 30 120 14 65 FLOPETROL absolute 165 psia 90 100 105 105 ሷ Flowing Temp. 96 95 89 95 95 27 SEPTEMBER 1989 BEF DATE - TIME Interval 24 30 15 20 10 15 Base :\_ 17:45 18:20 19:00 16:30 17:30 17:30 18:00 18:30 12:50 16:00 16:15 07:10 08:05 <u>ار</u> ص Time

Section: ANNEX 3 Cumulative Production Gas production E rate : Q 0.8770 0.9425 MSCF/D 0.971 0.988 0.971 1.15 1.15 1.09 1.15 1.15 1.15 1.02 1.11 1.02 1.02 1.02 Page : 71 Report N: 01/89 7738.4 7729.0 7735.5 7738.4 7729.0 7738.4 7729.0 7738.4 7733.7 7738.4 7726.1 7726.1 7753.3 7736.7 7740.4 7743.3 ပ 1.0255 0.9636 1.0255 1.0260 0.9653 1.0258 1.0255 1.0255 1.0255 **L**à 0.9653 0.9662 0.9636 0.9636 0.9636 0.9653 GAS PRODUC. RATE MEASUREMENT - (Continuation)  $\mathbf{F}_{t}$ 1,0055 1.0042 1.0030 1,0055 1.0055 1.0042 1,0039 1,0055 1,0055 1,0048 1,0042 1,0036 1,0040 1.0039 1,0042 1,0051 > 314.95 1.0314 1.0314 314.95 1.0303 314.95 1.0303 1.0303 314.95 1.0303 T<sub>0</sub> 314.95 314.95 314.95 314.95 314.95 314.95 314.95 314.95 L<sup>o</sup> gravity 0.940 0.942 0.942 (air = 1 Gas diameter Inches Orifice 1.25 1.25  $Vh_w \times P_f$ 140.60 131.52 125.10 149.13 121.76 127.70 149.13 149.13 131.52 125.75 144.07 149.13 149.13 131.52 131.52 131.52 113.35 "of wat 120 135 × ح 105 126 135 135 96 105 105 105 78 90 66 135 135 105 96 SCHLUMBERGER absolute psia 165 165 165 165 165 165 165 165 165 165 165 165 165 165 165 165 165 ď - TIME Flowing Temp 100 100 100 100 100 100 100 100 100 100 100 100 97 16 98 98 98 TESTING Interval 15 15 15 15 15 15 15 15 15 15 15 15 15 15 30 15 15 23:15 19:15 21:30 22:15 22:30 23:00 19:00 19:45 21:15 21:45 22:00 22:45 20:45 21:00 19:30 20:15 20:30 Time HRS

SC	E	SCHLUMBERGER	RGEF	~	OBQ SAB	JI IC	TE ME	ASHREN	AFNT-(	PBODI IC RATE MEASI IBEMENT-(Continuation)		Page :	:	Section: ANNEX	ANNEX 🛈
Щ	TESTING	<u> </u>										report	N:_01/89	-	
DATE -	- TIME	Flowing	P,	ت ک	Vhw × Pr		Gas	F <sub>B</sub>	π <sub>o</sub>	<b>&gt;</b>	F <sub>1</sub>	r o	၁	Gas production	Cumulative
	Interval	۲	absolute			_	gravity	•	,					27 1007	
HRS		F	psia	of wat.		Inches	(alf = 1 )							MSCr/U	
23:30															
23:45	15	100	165	100	128.35	1.25	0.940	314.95	1.0314	1.0040	0.9636	1.0255	7727.4	0.991	
24:00	15	200	165	120	140.60	1.25	0,940	314.95	1.0314	1.0048	0.9636	1.0255	7733.7	1.09	
28 SEPT	FEMBER	1989												•	
00:30	30	100	165	100	128.35	1.25	0.940	314.95	1.0314	1.0040	0.9636	1.0255	7727.4	0.991	
01:00	30	100	165	100	128.35	1.25	0,940	314.95	1.0314	1.0040	0.9636	1.0255	7727.4	0.991	
01:30	30	100	165	100	128.35	1.25	0.940	314.95	1.0314	1.0040	0.9636	1.0255	7727.4	0.991	
01:58	28	100	165	100	128.35	1.25	0,940	314.95	1.0314	1.0040	0.9636	1.0255	7727.4	0.991	
					Shut in v	ell at	choke man	nifold							
11:33	0				Open up v	vell on	12/64" ad	adjustab	le to fl	are					
11:38	5				Change to	16/64"	adjustable	ble choke	e e						
11:41	3				Change to	32/64"	fixed c	choke							
13:30	109				Divert fl	flow through		separator							
13:45	15	63	165	06	121.8	1.25	0.935	314.95	1.0342	1.0036	0.9971	1.0317	8070.9	0.982	
14:00	15	61	165	72	108.91					1.0029	0.9990	1.0321	8083.8	0.880	
14:15	15	61	165	72	108.91								8083.8	0.880	
14:30	15	59	165	81	115.51					1.0033	1.0010	1.0325	8105.7	0.936	
14:45	15	59	165	75	111.15					1.0030			8103.7	0.900	
									_		-				

	071												7.3	; <u>~</u>	
S T	SCHLUM	M G G	SCHLUMBEKGER TESTING		GAS PRODUC. RATE MEA	DUC. R.	ate Me,	ASUREA	SUREMENT - (Continuation)	Continua		age Report I	Report N: 01/89		Section: Aivine A
DATE -	- TIME	Flowing	P,	7		Orifice	Gas	L L	L <sub>u</sub>	>	1,1	ů.	S	ъ	Cumulative
Time	Interval	Temp.	absolute	3	\ \ \ \ \ \	_	gravity	۹ -	6 -	-	1	3	)	rate : U	Production
П		F	psia	"of wat.		Inches	(air=1)							MSCF/D	
14:45															
15:00	15	57	165	18	113.35	1.25	0.935			1.0032	1.0029	1.0330	8123.8	920	
15:15	15	57	165	7.5	111.15					1.0030			8122.8	903	
15:30	15	57	165	7.5	111.15								8122.8	903	
15:45	15	55	165	06	121.76			314.95	1.0342	1.0036	1.0048	1.0334	8147.0	992	
16:00	15	55	165	7.5	111.15					1.0030	1.0048		8142.0	905	
16:15	15	55	165	78	113.35					1.0032	1.0048	1.0334	8143.0	923	
16:30	15	55	165	78	113.35								8143.0	923	
16.45	7.	5.5	165	81	115.51					1.0032			8144.0	076	
17:00	15	55	165	7.5	111.15					1.0030			8142.0	905	
17:15	15	54	165	7.5	111.15						1.0058	1.0336	8151.7	906	
17:30	15	54	165	75	111.15						1.0058		8151.7	906	
17:45	15	54	165	69	106.61	1.25	0.928	314.95	1.0381	1.0028	1.0058	1.0331	8176.0	871	
18:00	15	54	165	09	99.42				·	1.0024			8173.0	812	
18:15	15	54	165	99	104.27					1.0027			8175.0	852	
18:30	15	54	165	09	99.42					1.0024			8173.0	812	
18:45	15	54	165	63	101.87					1.0025			8174.0	832	
19:00	15	54	165	75	111.15					1,0030			8177.9	606	

I	OPETROL		III.	7	GAS PRODUC. RATE MEASU	DDUC. R	ATE ME	ASURE	REMENT-(Continuation)	Continu		Page : Report N:	N: 74	Section:	Section: ANNEX 3
DATE - Time	- TIME Interval	Flowing Temp.	P <sub>f</sub> absolute	hw	$\sqrt{h_w \times P_f}$	Orifice diameter	Gas gravity	r <sub>d</sub>	F <sub>9</sub>	>	F <sub>tf</sub>	F <sub>p</sub> v	ပ	Gas production rate : O	Cumulative Production
10.00			psia	"of wat.		Inches	(air = 1)							MSCF/D	
13:00															
19:15	15	54	165	75	111.15	1.250	0.928	314.95	1.0381	1.0030	1.0058	1,0331	8177.9	606	
19:30	15	54	165	75	111.15									606	
19:45	15	54	165	Q9	99.42				1.0024				8173.0	812	
20:00	15	54	165	09	25.66									812	
20:15	15	54	165	75	111.15					1.0030			8177.9	606	
20:30	15	54	165	09	99.42					1.0024			8173.0	812	
20:45	15	54	165	09	24.66									812	
21:00	15	54	165	54	94.32					1.0022			8171.0	770	
21:15	15	54	165	54	94.32					·				770	
21:30	15	54	165	51	91.66				1.0381	1.0021			8170.0	67/	-
21:45	15	54	165	45	86.10				1.0454	1,0018		1.0321	8217.6	707	
22:00	15	54	165	09	66.42					1.0024			8222.6	817	
22:15	15	54	165	90	121.76					1,0036			8232.6	1000	
22:30	15	54	165	63	101.87					1.0025			8223.6	837	
22:45	15	54	165	63	101.87		0.915	<u> </u>		1.0025				837	
23:00	15	54	165	99	104.27					1.0027			8224.6	957	
23:15	15	54	165	09	99.42					1.0024			8222.6	817	
						5									

	ם	ET	FLOPETRO	7	GAS PRODUC. RATE MEASU	JDUC. R	ATE ME		REMENT-(Continuation)	Continu		Page Report N:	N: 75		Section: ANNEX 3
DATE - Time	- TIME Interval	Flowing Temp.	P <sub>f</sub> absolute	hw	$\sqrt{h_w \times P_f}$	Orifice diameter	Gas gravity	F <sub>b</sub>	F <sub>g</sub>	<b>&gt;</b>	F <sub>11</sub>	F <sub>pv</sub>	ပ	Gas production rate : Q	Cumulative Production
			psia	"of wat.		Inches	(air = 1 )								
23:15															
						-	28-SE	28-SEPTEMBER-	89						
23:30	15	54	165	58	97.75	1.250	0.915	314.95	1.0454	1,0023	1.0058	1.0321	8222.0	803	
23:45	15	54	165	58	97.75									803	
							29-SE	29-SEPTEMBER-	68						
00:00	15	54	165	58	97.75									803	
00:30	30	54	165	58	97.75									803	
00:53	23	54	165	58	97.75									803	
						SHUT	IN WELI	, AT	CHOKE MANIFOLD	OLD					
			-				01-00	01-0CTOBER-8	-0	·	-				
11:48	0					OPE	OPEN WELL (	on 8/64"	FIXED CHOKE	TO	FLARE				
13:22	94					VIC	DIVERT FLOW	T0	SEPARATOR						
13:30	8					ADV	ADJUSTING. RANGE	ANGE ON		DIFFERENTIAL METER	TO	100" HZ0	(		
14:15	45					0.750								·	
14:30	15	57	75	10	27.34	0.750	1.010	112.75	0.9950	1,0009	1.0029	1.0169	2748.3	75	
14:45	15	57	75	12	29.95					1,0011			2748.8	82	
15:00	15	57	75	12	29.95									82	
15:15	15	57	75	12	29.95						_			82	
15.15	15	57	75	13	31.17					1,0012	depart w			ጸኝ	

	FLOPETROL		שׁב	7	GAS PRODUC. RATE MEASU	DDUC. R	ATE ME		REMENT – (Continuation)	Continu		Page Report N:_	N: 76	Section:	Section: ANNEX 3
DATE - Time	- TIME Flowing Interval Temp.	Flowing Temp.	P <sub>f</sub> absolute	hw	$\sqrt{h_w \times P_f}$	Orifice diameter	Gas gravity	F <sub>b</sub>	Fg	٨	$F_{tf}$	F <sub>pv</sub>	၁	Gas production rate : Q	Cumulative Production
			psia	"of wat.		S	(air = 1)								
15:30															
						01-00	01-0drober-89								
15:45	15	57	75	14	32.35	0.750	1.010	112.75	0.995	1.0012	1,0029	1.0169	2749.3	89	
16:00				16	34.58					1.0014			2749.8	95	
16:15				16	34.58					1.0014			2749.8	95	
16:30		55	80	14	33.41		0.965		1.0180	1.0012	1.0048	1.0166	2817.0	76	
16:45				16	35.71					1.0013			2817.5	100	
17:00			85	18	39.10					1,0014		1.0176	2820.7	110	
17:15				11	30.53					1.0009			2819.2	98	
17:30				13	33.19					1,0010	1.0058	1.0178	2822.7	76	
17:45				11	30.53					1.0009			2822.2	98	
18:00			96	11	31.42					1,0008		1.0189	2831.8	89	
18:15				11	31.42					1.0008			2825.2	68	
18:30				13	34.15					1,0010	1.0078	1,0191	2831.8	6	·
18:45				14	35.44					1.0010			2832.0	100	
19:00				14	35 . 44					1.0010			2832.0	100	
19:15				14	35 .44					1.0010			2832.0	100	
19:30				15	36.69					1 0011			2832.2	104	
	_														

	OPETRO		III.	٦٢	GAS PRODUC. RATE MEASU	DDUC. R	ATE ME		REMENT – (Continuation)	Continu		Page :- Report N:_	N: 77 01/89		Section: ANNEX 3
DATE . Time	- TIME	Flowing Temp.	P <sub>f</sub> absolute	ج ∛	Vhw x Pf	Orifice diameter	Gas gravity	r <sub>a</sub>	Fg	>	F <sub>11</sub>	T Vd	ပ	Gas production rate : Q	Cumulative Production
			psia	"of wat.		Inches	(air=1)	-						MSCF/D	
19:30															
19:45	15	52	06	13	34.15	0.750	0.965	112.75	1.0180	1.0010	1.0078 1.0191	1.0191	2831.8	96	
20:00	15	50	100	12	32.81					1,0009	1.0098 1.0193	1.0193	2837.8	93	<b>i</b>
20:15	15	50	100	13	34.15					1.0010		:	2838.0	26	,
20:30	15	50	100	14	35.44					1,0010			2838.2	100	
21:00	30	20	100	12	32.81					1,0009			2837.8	93	
21:30	30	87	105	14	38,30					1.0009	1.0117 1.0231	1.0231	2853.8	601	The state of the s
22:00	30	97	105	15	39.64					1,0010	1.0157	1.0234	2860.5	113	
22:30	30	94	105	14	38.29		,			1.0009			2860.3	109	
23:00	30	9†	105	14	40°07					1.0009			2860.3	109	
23:30	30	46	105	16						1,0010			2860.6	117	
23:45	15					CHANGE	E TO 1/4	' FIXED	CHOKE						
00:15	30	48	105	34	59.67	1.000	0.975	200.96	1.0127	1.0022	1.0117	1.0236	5069.4	302.5	
00:45	30	48	105	27	53.18					1.0017			5067.1	269.5	·
01:15	30	48	105	18	43.42	-				1,0011			5064.2	219.9	
01:45	30	87	105	41	65.53					1.0026			2845.5	186.5	
02:15	30	48	105	32	57.89			1		1.0020			2843.9	164.6	
02:18					į.	BYP	RYPASS SEPARATOR		SHUT IN WELL	E	:-				

CONTINUEDCED TESTING	Client : PE	TROFINA		Section:ANNEX	
SCHLUMBERGER TESTING	Field : VI				8
Base : BEF	Well : A	EMONE 1A		Report N*: 01/8	39
_ \$U	IRFACE SA	MPLING _			
28-9-89	Service orde	r:	Sa	mpling No :	
Do. of sampling: $28-9-89$ Sample nature: $L_1P$ $H^2O$ $A = RESERVOIR$	AND MELL C	HARACTERISTI	CS _	•	
	Perforations:		Sampi	ing interval:7"	
Producing zone: 4333 -4002  RkB  Depth origin :  Surface elevation:	_ Tubing Dia : . _ Shoe : .	J.0	Casin Shoe	g Dia :4492.5M	
Bottomhole Initial pressure	:	at depth:		date :	
conditions Temperature	•	at deptiti		date : date :	
B _ MEASUREN Time at which sample was taken:	MENT AND SA	MPLING COND Time elapsed	SITIONS since stat	oilisation: 7 HRS	
Bottomhole Choke size: 32/64 s					
conditions   Bottom hole temp. :		_ acuepin			
Flow measurement of sampled gas = (	Gravity(air:1):_	.782	Factor Fp	$V = \frac{1}{\sqrt{Z}}: \frac{-1.0255}{\sqrt{Z}}$	
Separator Pressure: 150 PSIG Temp : 100 *F	Rates - Gas Oil (separator o	: 991 ond.): 12	6B(	c (septiment	1.)
tank Tank temperature: 15	°C	*F	at 60 °F	:BOPD [A]B]	Cab
BSW: Nil % WLR:	0/c	_ L			
Transfering fluid:		_ Transfer dura	tion :	·	
Final conditions of the shipping bottle Pressure: Nil Temp:	:				
C_IDENTIFIC Shipping bottle No.: # 2 so Addressee:	ent on:	by:		_ Shipping order No:	
Coupled with	LIQUID			GAS	
Bottom hole samples No.					
Surface samples No.					
Measurement conditions.  A. Tank .  a. Corrected v	B_ Meter	tester. <b>b</b> . C	orrected		
D _ REMARK	<u>S -</u>			Visa Chief Op	perator
DOP 127					
No					

SCHLUMBERGER TESTING	Client :	PETROFINA	Section	ANNEX 42
Base : BEF	Field : Well :	VIC/P20 ANEMONE 1A	Page Report	N : <u>01/89</u>
SU  _ate of sampling:!-10-89  Sample nature :LP H20	RFACE SA  Service orde		Sampling No. int: H20 LINE SE	:CPARATOR
Producing zone: A_RESERVOIR  4599-4652M  Depth origin : RKB  Surface elevation:	AND WELL C	HARACTERIS - 3.5"	TICS _ Sampling interva Casing Dia :	nt :
Bottomhole Initial pressure static Latest pressure measure conditions Temperature	:d:	at depth at depth at depth	: date : date : date	e:
B _ MEASUREM Time at which sample was taken:	20:30 Hrs	MPLING CON Time elapsed	NDITIONS _ d since stabilisation:	
Bottomhole dynamic conditions Choke size: 8/64" si Bottom hole pressure: Bottom hole temp. :		at depth:	date:_	
Flow measurement of sampled gas - G Values used for calculations:	ravity(air:1):	0.965	Factor Fpv = $\frac{1}{\sqrt{Z}}$ :	1.0234
Separator Pressure: 85 PSIG Temp: 57 F	Rates - Gas Oil (separator co	:1( ond.):6		R: <u>SCF/BBL</u> eparator cond.)
Stock Atmosphere : 76	0mmHg	*F Oil	at 60 °F: 63	BBOPD A[B]C[a]b
BSW:00/o WLR:				
Transfering fluid:		Transfer dura	tion:	
Final conditions of the shipping bottle:  Pressure: Temp:				
CIDENTIFICATE Shipping bottle No.: W1ser Addressee:	nt on:		Shipping (	order No:
Coupled with  Bottom hole samples No.	LIQUID		GAS	
Surface samples No.				
Measurement conditions.  A. Tank.  a. Corrected with	B_ Meter . h shrinkage te	ster. b. C	C_ Dump orrected with tank.	•
D - REMARKS	=		Vis	sa Chief Operator
		·		

SCHLUMBERGER TESTING	Client :F	PETROF INA	Section:ANNEX 4.2
	Field :	WEMONE 1A	Page : 80 Report N:
Base :VEA	vveii ·/	TUME IN	
SU  Date of sampling:1-10-89  Sample nature :L.P H <sup>2</sup> O	RFACE SA		Sampling No.: H <sup>2</sup> O LINE SEPARATOR
Producing zone: 4599 - 4652	_ Perforations:_		Sampling interval:
Depth origin : RKB Surface elevation:			
conditions Temperature	d :	at depth: at depth:	date :
Time at which sample was taken:	2130		e stabilisation:
conditions Bottom hole temp. :		at depth:	date :
Flow measurement of sampled gas _ G Values used for calculations:			_
Separator Pressure: 90 PSIG Temp. : 54 F	Rates _ Gas Oil (separator co	: 109 M and ): 38	SCFD GOR: 38 BOPD B (separator cond.)
Atmosphere : 760	)mmHg •	*F Oil at 6	O 'F :BOPD ABCate
BSW:O/o WLR:			15 MIN :
Final conditions of the shipping bottle:  Pressure: NIL Temp:			
C_IDENTIFICAT Shipping bottle No.: W2 ser Addressee:	nt on :	by:	Shipping order No:
Coupled with	LIQUID		GAS
Bottom hole samples No			
	589/82 1 2		A12134
Measurement conditions.  Tank .  a Corrected with	B_ Meter . th shrinkage te	ster. 😡 _ Correc	C - Dump . ted with tank .
D = REMARKS	=		Visa Chief Operator

SCHLUMBERGER TESTING	Client : P	ETROFINA	Section: ANNEX 42			
Base :BEF	Field : <u>V</u> Well : A	IC/P2O NEMONE 1A	Page : 31 Report N*: 01/89			
CII	DEACE CA	MADLINIC				
	RFACE SA					
Date of sampling : 1-10-89  Sample nature : LP OTL	Service orde	r:Sa _ Sampling point:_ <u>H20</u>	Impling No.: LINE: SEPARATOR			
A _ RESERVOIR Producing zone: 4599-4652	AND WELL C Perforations:	HARACTERISTICS _ Sample	ing interval:			
Depth origin : <u>RKB</u> Surface elevation:	Tubing Dia : . Shoe : .	3,5" Casin	g Dia: :4492.5			
static Latest pressure measured		at depth:	date : date : date :			
$\frac{B - MEASUREMS}{Time at which sample was taken: } 2$	NT AND SAL	MPLING CONDITIONS  Time elapsed since stab	 ulisation:110mins			
Bottomhole Choke size: 8/64" sindynamic Bottom hole pressure: Bottom hole temp.		at depth:	iWellhead temp : <u>12 C</u> date :date :			
Flow measurement of sampled gas - Gr Values used for calculations :	avity(air:1):	0.965 Factor Fpv	$V = \frac{1}{VZ}$ : 1.0234			
Separator Pressure: 90 PSIG F	ates - Gas iil (separator co	: <u>109 M</u> SC and.): <u>51</u> BC	FD GOR: 2137 SCF/BBL (separator cond.)			
Stock Atmosphere : 76 tank Tank temperature : 1	0_mmHg 0 C	*F Oil at 60 *F :	51 BOPD ABCab			
BSW:O/o WLR:						
Transfering fluid :		Transfer duration:	· · · · · · · · · · · · · · · · · · ·			
Final conditions of the shipping bottle: Pressure: Temp:						
C_IDENTIFICAT Shipping bottle No.: W3 sent Addressee:	on :	by:	Shipping order No:			
Coupled with LIQUID GAS						
Bottom hole samples No.						
	A.1A.2		924			
Measurement conditions.  [A] Tank .  [a] Corrected with	B_ Meter . shrinkage te	ster. b_ Corrected w	Dump. of the tank.			
D _ REMARKS	=		Visa Chief Operator			
22						
2						

SCHLUMBERGER TESTIN	G Client :_	PETROF INA		1	on:ANNEX42
Base : <u>VEA</u>	Field : Well :_	ANEMONE IA		Page Rep	e : <u>82 -                                    </u>
•	SURFACE SA		Sa	maliaa	No.:
Date of sampling: 1-10-89 Sample nature : L.P CONDEN	SATE Service ordi	Sampling po	oint : Oll	LINE	SEPARATOR
Producing zone: $\frac{A - RESERV0}{4599 - 4652}$	OIR AND WELL Perforations:	CHARACTERIS	TICS <u> </u>	ling inte	erval :
Depth origin : RKB Surface elevation:					
Bottomhole static Latest pressure measure conditions	ured :	at depth	:		date:
Time at which sample was taken:		_ Time elapsed	d since stab	olisation	1:
Bottom hole dynamic conditions Choke size: Bottom hole pressure Bottom hole temp.		_ at depth:		da1	le:
Flow measurement of sampled gas Values used for calculations:				12	
Separator Pressure:PS Temp. :*I	IG <u>Rates</u> _ Gas Oil (separator o	ond.):	SC	FD PD B C	GOR: (separator cond.)
' <u>Stock</u> Atmosphere : tank Tank temperature :	760mmHg 11°C	*F Oi	l at 60 °F :		BOPD ABCab
BSW:O/O WLR:_					
Transfering fluid:		_ Transfer dura	stion:		
Final conditions of the shipping bot Pressure:Temp:					
C_ IDENTIF Shipping bottle No.: # 3 Addressee:	CATION OF THE sent on :	SAMPLE _ by:		_ Shipp	ing order No:
Coupled with	LIQUID			G.	AS
Bottom hole samples No					
Surface samples No.					
Measurement conditions.  [/ Tank , a _ Corrected	B_ Meter . with shrinkage t	ester. b_ C	Corrected v	C _ Du	mp . nk .
D _ REMAR	KS -			-	Visa Chief Operator
			-		

SCHLUMBERGER TESTI	G Client :_	PETROF INA	Section: ANNEX 4.2
Base :VEA	Field:	ANEMONE IA	Page : 33 Report N°:
	SURFACE SA		
Date of sampling: 1-10-89 Sample nature : PVT OIL	Service ord	er:Sampling point:SEF	ARATOR OIL SIGHT GLASS
Producing zone : 4599 - 465	Perforations:		
Depth origin : RKB Surface elevation:	Tubing Dia : Shoe :	3.5" Casir Shoe	ng Dia:
conditions Temperature	sured :	at depth: at depth: at depth:	date :
Time at which sample was taken	1200	AMPLING CONDITIONS  _ Time elapsed since state	Dilisation: WELL 1401 317 IDEL
dynamic Bottom hole pressur Bottom hole temp.	:	_ at depth:	
Flow measurement of sampled ga Values used for calculations:	s _ Gravity(air: 1):_	Factor Fp	
Temp. : 46	F Oil (separator o		OPD B (separator cond.)
Atmosphere :  tank  Tank temperature :			:BOPD ABCab
BSW:O/O WLR	o,	į	
Transfering fluid : MFRCLRY		Transfer duration:	60 MINS
Final conditions of the shipping beautiful Pressure: 5 PSI Temp	ottle:	-	
C_IDENTI Shipping bottle No.: 8288 N4 Addressee:	FICATION OF THE 76sent on :	SAMPLE _ by:	_ Shipping order No:
Coupled with	LIQUID		GAS
Bottom hole samples No. —			
Surface samples No			
Measurement conditions.  Tank .  [a] _ Correcte	B_ Meter d with shrinkage	lester. 数_ Corrected v	C_ Dump _ with tank .
D _ REMA	ARKS -		Visa Chief Operator
WELL ON BY-PASS - SA AT REQUEST OF RESERVOI	MPLE TAKEN FROM R ENGINEER	SEPARATOR	

SCHLUMBERGER TESTING	Client :	PETROF INA	Sec	tion:ANNEX42
Base : SALE VEA	Field : Well :	ANEMONE IA	Pag Rej	oort N*:
SU  Date of sampling:1-10-89  Sample nature :PUT_OIL	RFACE SA  Service orde		Samplin : Separator	g No.: oil sight glass
A_RESERVOIR  Producing zone: 4599 - 4652  Depth origin : RKB  Surface elevation:	AND WELL C	HARACTERISTIC	S <u> </u>	iterval: 30 mins
Bottomhole static Latest pressure measured conditions Temperature	d .	at deoth:		_ date : i
B - MEASUREM Time at which sample was taken: 2	ENT AND SA	MPLING CONDI . Time elapsed sii	nce stabilisati	on: 60 Mins
Bottom hole dynamic conditions  Choke size: 8/64" size conditions  Choke size: 8/64" size:	<del></del>	_ 0.00 >		
Flow measurement of sampled gas _ G Values used for calculations :				
Separator Pressure: 85 PSIG Temp. : 54 °F	Oil (separator co	ond.): <u>38</u>	BOPD L	(separator cond.)
Stock Atmosphere : 760 tank Tank temperature : 10	)	*F	60 T:	ABCab
BSW: Nil % WLR:		Transfer duration	n:	· · · · · · · · · · · · · · · · · · ·
Final conditions of the shipping bottle:  Pressure: 50 psig Temp:	12°C			
Shipping bottle No.: 12689/92 ser	nt on:	by:	Ship	ping order No:
Coupled with  Bottom hole samples No	LIQUID			GAS
			A-12134	
Measurement conditions.  Tank  Tank  Tank	B_ Meter . th shrinkage te	ester. 🔯 _ Corr	C_D	ank .
Sample volume 550 cc oil 50 cc gas 20 cc Mer	sample cap			Visa Chief Operator

ſ	SCHLUME	BERGER TESTING	Client :F	PETROFINA	Sect	ion:ANNEX 4.2
		VEA	Field : Well :	NEMONE 1A	Pag	e : <u>85 </u> ort N:
		A _ RESERVOIR one : 4599 - 4652	_ Perforations : _	3 5"	Sampling in	. 7"
	Bottom hole static conditions	Initial pressure Latest pressure measure Temperature	d :	at depth: at depth:		. 0318 :
	Time at which	h sample was taken:	2100	MPLING CONDIT Time elapsed sind	ce stabilisatio	on: 60 MINS
	Bottom hole dynamic conditions	Choke size: 8/64 si Bottom hole pressure: Bottom hole temp. :		at depth:	da	ite :
	Flow measurement of sampled gas = Gravity (air:1): 0.965 Factor Fpv = $\frac{1}{\sqrt{2}}$ : 1.0234 Values used for calculations:					
İ	Separator	Pressure :85PSIG Temp. :54*F	Rates - Gas Oil (separator co	: 109 M and.): 38	SCFD BOPD B	GOR: 2868 SCF/BBL (separator cond.)
	Stock tank	Atmosphere : 760 Tank temperature : 10	) mmHa	*F I Oil at	60 °F :38	BOPD ABCab
	BSW:Nil					
	Transfering fluid: Vacuum Transfer duration: 30 MIN  Final conditions of the shipping bottle: Pressure: 90 PSI Temp: 12°C					
		C_IDENTIFICA	nt on :	SAMPLE _ by:	Ship	oing order No:
	Coupled wit		LIQUID		O	AS
		ole samples No	689/92			
	Measurement conditions.  B_ Meter.  C_ Dump.  a_ Corrected with shrinkage tester. b_ Corrected with tank.					
		D _ REMARKS	_=			Visa Chief Operator
: DOP 127	SAMPLE	VOLUME - 20 LT				

SCHLUMBER	RGER TESTING	Client : _ F	PETROF INA	Se	ection:ANNEX42	
Base :		Field : Well :	NEMONE IA	P	age : <u>36 -</u> leport N*:	
_	<u>_</u> SU	RFACE SAI		Samp · SFPARAT	oling No.: OR OIL SIGHT GLASS	
Producing zone	A _ RESERVOIR 4599 - 4652	AND WELL C Perforations:_	HARACTERISTIC	S <u>-</u> _ Sampling	ınterval:	
					Dia:	
	test pressure measure mperature	d:	at depth: _ at depth: _		date : date : date :	
Time at which s	B_MEASUREM ample was taken:	ENT AND SAL	MPLING CONDI Time elapsed si	nce stabilis	ation: 90 MINS	
dynamic Bo conditions Bo	ttom hole pressure: ttom hole temp. :		at depth:		_Well head temp.: <u>12°C</u> _date : _date :	
Values used for c	Flow measurement of sampled gas = Gravity(air:1): $0.965$ Factor Fpv = $\frac{1}{\sqrt{Z}}$ : $\frac{1.0234}{\sqrt{Z}}$					
Ter	np. :54*F	Oil (separator co	ond. ):	BUPL	GOR: 2973 SCF  (Separator cond.)	
' <u>Stock</u> Ato tank Tan	mosphere : 760 nk temperature : 10	mmHg •	*F   Oil at	60 F: <u>5</u>	1 BOPD ABCab	
BSW: Nil			Transfer duratio	n: 30 MIN	S :	
Transfering fluid: Mercury Transfer duration: 30 MINS  Final conditions of the shipping bottle: Pressure: 30 PSIG Temp: 12 C						
Shipping bottle Addressee:		TION OF THE	SAMPLE _ by:	S	hipping order No:	
Coupled with		LIQUID			GAS	
Bottom hole	samples No					
Surface samp	oles No.			A13762		
Measurement conditions.  B _ Meter .  Tank .  B _ Meter .  C _ Dump .  C _ Dump .  C _ Dump .						
	D = REMARKS				Visa Chief Operator	
SAMPLE VO	50cc (	Oil Sample Gas Cap Mercury				
5						

SCHLUMBERGER TESTIN	Client : PETROFINA	Section: ANNEX 42			
Base:VEA	Field: Well:_ANEMONE IA	Page : <u>\$7</u> Report N:			
	SURFACE SAMPLING _				
Date of sampling: $\frac{1-10-89}{GAS}$	Service order: Sampling point: U	_ Sampling No : PSTREAM METER RUN ON EPARATOR			
Producing zone: $\frac{A - RESERVC}{4599 - 4652}$	IR AND WELL CHARACTERISTICS Sa	: Impling interval :			
Depth origin : RKB Surface elevation:	Tubing Dia : 3.5" Ca Shoe : Si	asing Dia: 7" hoe: 4492.5M			
static Latest pressure meas	:at depth: ured :at depth: :at depth:	date :			
Time at which sample was taken:_	MENT AND SAMPLING CONDITION 2200 Time elapsed since	stabilisation: 90 MINS			
dynamic Bottom hole pressure:  conditions Bottom hole temp. :	_since: Well head pressure: at depth: at depth:	date :			
Flow measurement of sampled gas _ Gravity(air:1): $0.965$ Factor Fpv = $\frac{1}{VZ}$ : $\frac{1.0234}{VZ}$					
Temp. :54 *F	G Rates - Gas : 113 M Oil (separator cond.): 38	BOPD B (separator cond.)			
' Stock Atmosphere : tank Tank temperature :	760 mmHg. F Oil at 60	F: 51 BOPD ABCab			
BSW:Nil% WLR:_	o/o				
Transfering fluid : VACUM	Transfer duration:				
Final conditions of the shipping bott Pressure: 90 PSIG Temp:	<u>e :</u> 12 <sup>0</sup> C				
C_IDENTIFI Shipping bottle No.: A137 <b>5</b> 2 Addressee:	Sent on :by:	Shipping order No:			
Coupled with	LIQUID	GAS			
Bottom hole samples No					
Surface samples No.	30 291/53				
Measurement conditions.  B. Meter.  Tank.  a. Corrected with shrinkage tester.  b. Corrected with tank.					
D _ REMAR	S _	Visa Chief Operator			
VOLLME - 20 LT		•			

SCHLUMBERGER TESTING	Client :	PETROF INA	Section:ANNEX 4.5
Base :VEA	Field : Well :	ANEMONE IA	Page : 38
Date of sampling: 1-10-89 Sample nature: GAS	RFACE SA Service orde	r:	Sampling No.: PSTREAM METER RUN OF EPARATOR
Producing zone: A_RESERVOIR 4599 - 4652	*	CHARACTERISTICS .	= ampling interval:
Depth origin : RKB Surface elevation:	_ Tubing Dia : . _ Shoe : .	S	hoe : 4492.5M
Bottomhole static Latest pressure measured conditions Temperature	4 •	at death:	date :
B _ MEASUREM Time at which sample was taken: 22	ENT AND SA	MPLING CONDITIO	NS _
dynamic I Bottom hole pressure:		_ at deptn:	750Well head temp :12°Cdate :date :
Flow measurement of sampled gas _ G Values used for calculations :	ravity(air:1):	0.965 Factor	Fpv = $\frac{1}{VZ}$ : 1.0234
	Oil (separator co	ond.): <u>51</u>	_BOPD (separator cond.)
Stock Atmosphere : 760 tank Tank temperature : 10	) C C	*F Oil at 60	·F:51BOPD [A]B]C]a
BSW:		l	20 MIN
Transfering fluid: VACUM  Final conditions of the shipping bottle:		Iransfer duration:_	30 Will
Final conditions of the shipping bottle:  Pressure:90Temp:			
Shipping bottle No.: All 1924 sen Addressee:	t on :	by:	
Coupled with	LIQUID		GAS
Bottom hole samples No.			
L.P		W3	
Measurement conditions.  [7 Tank .  [a] Corrected with	B_ Meter . h shrinkage te	ster. <b>b</b> _ Correcto	C_Dump.  ed with tank.
D = REMARKS	=		Visa Chief Operato
TAKEN IN CONJUNCTION WITH TO OF L.P CONDENSATE & 1 L.P H	WO 20C JERAY <sup>2</sup> O	/ CANS	

SCHLUMI	BERGER TESTING	Client :	PETROF IN	<u> </u>	Section	ANNEX 42
Base :	VEA	Field : Well :	ANEMONE 1	Α	Page Report	: N*:
Date of samp Sample natu	SU oling :1-10-89 ore :GAS	RFACE SA Service orde		Sa point:_ <u>UPST</u>	mpling No. <u>REAM METE</u> RATOR	R RUN OF
_	A _ RESERVOIR zone : 4599 - 4652	_Perforations:.		Sampl		
Depth origin Surface ele	n : <u>RKB</u> vation:	Tubing Dia : . Shoe : .	3.5"	Casin Shoe	g Dıa : :	7" 4492.5M
Bottom hole static conditions	Initial pressure Latest pressure measured Temperature	d :	at de	pth:	date	:
Time at whice	B = MEASUREM th sample was taken: $23$		. Time elap	sed since stab	ilisation:	
Bottom hole dynamic conditions	Bottom hole pressure: Bottom hole temp. :		at depth: _		date : _	
Flow measurement of sampled gas = Gravity(air:1): .965 Factor Fpv = $\frac{1}{VZ}$ : .1.0234 Values used for calculations:						
Separator	Pressure :90PSIG   Temp. :57*F	Oil (separator co	ond.):3	ВС	PD B (se	1
<u>Stock</u> tank	Atmosphere : 760 Tank temperature : 10	mmHg	*F *F	Oil at 60 °F:	51	BOPD ABCab
BSW:	º/o WLR:	o <sub>/o</sub>				
	luid: VACUM	·	Transfer	duration:#	#) MIN	
Final conditi Pressure:	ons of the shipping bottle: 90 PSI Temp:	12°C				
C_IDENTIFICATION OF THE SAMPLE _  Shipping bottle No.: A13752 sent on :by: Shipping order No:  Addressee :						
Coupled wit	h	LIQUID			GAS	
Bottom hole samples No						
Surface s	amples No. L.I					
Measurement conditions.  B _ Meter .  Tank .  C _ Dump .  a _ Corrected with shrinkage tester.  b _ Corrected with tank .						
	D _ REMARKS	=			Vis	a Chief Operator
TAKEN A.3 &	IN CONJUNCTION WITH 1 A.4	L.P 20 LT SA	MPLES			

U.: UUP 127

SCHLUMBERGER TEST	ING Client :_	PETROFINA	Section: ANNEX 4.2		
Base :VEA	Field : Well :	ANEMONE 1A	Page : <u>9</u> 0 Report N:		
Date of sampling: 1-10-89 Sample nature : L.P CON	SURFACE SAMPLING _  Date of sampling:1-10-89				
A_RESE Producing zone: 4599 - 46  Depth origin : RKB Surface elevation:	Perforations:	3.5" Cas	ing Dia:		
Bottomhole static Latest pressure monditions Temperature	neasured:	at depth:	date : date : date :		
B = MEAS Time at which sample was take	SUREMENT AND SA n:2230	MPLING CONDITIONS Time elapsed since sta	S _ abilisation:110 MINS		
dynamic Bottom hole pressi	ure:	_ at depth:	) Well head temp: 12°C date: date:		
Flow measurement of sampled Values used for calculations:	gas _ Gravity(air: 1):_	.965 Factor F	$pv = \frac{1}{\sqrt{Z}}$ : 1.0234		
Separator Pressure: 90 Temp: 57	_PSIG Rates _ Gas _ *F Oil (separator c	$\frac{109  M}{51}$ sond ):	GCFD GOR: 2137 SCF/BBL BOPD B (separator cond.)		
' <u>Stock</u> Atmosphere : tank Tank temperature :		*F Oil at 60 *F	: 51 BOPD ABCab		
BSW:					
Final conditions of the shipping Pressure: Nil Tem	bottle :				
Shipping bottle No: All		by:	Shipping order No:		
Coupled with	LIQUID		GAS		
Bottom hole samples No.					
Surface samples No.	W3		1924		
Measurement conditions.  Tank .  a _ Correct					
D _ REM	IARKS -		Visa Chief Operator		
20					

SCHLUMBERGER TESTING		PETROFINA			
Base :VEA	Field : Well :	WEMONE 1A	Page : 91 _ Report N:		
_SURFACE SAMPLING _					
Date of sampling: 1-10-89  Sample nature: L.P CONDENSAT					
Producing zone: 4599 - 4652	_Perforations:_		ampling interval:		
Depth origin : RKB Surface elevation:		<u> </u>			
Bottomhole Initial pressure  static Latest pressure measured conditions Temperature	d:	at depth:	date :		
Time at which sample was taken: $224$	15		stabilisation: 125 MINS		
conditions Bottom hole temp. :		at depth:	date:		
Flow measurement of sampled gas _ G Values used for calculations :					
Senarator Pressure: 90 PSIG Temp.: 57 °F	Rates - Gas Oil (separator co	: <u>109 M</u> ond.): <u>51</u>	SCFD GOR: 2137 SCF/BE BOPD B (separator cond.)		
Atmosphere : 760 tank Tank temperature : 100	)mmHg C	*F Oil at 60	F: 51 BOPD ABCab		
BSW:O/o WLR:			15 MIN :		
Final conditions of the shipping bottle:  Pressure:NIL Temp:					
C_ IDENTIFICATE Shipping bottle No.: A2 sen Addressee:	TION OF THE	SAMPLE _ by:	Shipping order No:		
Coupled with	LIQUID		GAS		
Bottom hole samples No.					
Surface samples No.			A 11924		
Measurement conditions.  B_ Meter.  Tank.  a_Corrected with shrinkage tester. b_ Corrected with tank.					
D _ REMARKS	=		Visa Chief Operator		

SCHLUMB	ERGER TESTING	Client :I	PETROFINA	_ Section:ANNEX 4.2		
	VEA		WEMONE 1A	Page : 92 Report N:		
Base .						
Data of compl		Savusa orda		Sampling No :		
Sample nature	Date of sampling: 1-10-89 Service order: Sampling No.: Sampling no.: Sampling no.: OIL LINE SEPARATOR					
_	ne : <u>4599 - 4652</u>	_ Perforations:_		mpling interval:		
1				asing Dia: noe :4492.5M		
cratic 1	Latest pressure measure	:d:	at depth:	date : date : date :		
CONGRETA	•	<del>,</del>	MPLING CONDITION			
1	sample was taken:	2300	Time elapsed since s	stabilisation: 140 MINS		
Bottom hole	Choke size: 8/64 s	ince: 1148 \	Well head pressure: 794	Well head temp : 12°Cdate :		
<u>dynamic</u> conditions	Bottom hole temp. :		at depth:	date:		
Values used fo	r calculations:			Fpv = $\frac{1}{\sqrt{Z}}$ : 1.0234		
Separator F	Pressure : <u>90</u> PSIG Temp. : <u>57</u> • F	Rates - Gas Oil (separator co	: 109 M ond.): 51	SCFD GOR:2137 SCF/BBL BOPD B (separator cond.)		
' <u>Stock</u> tank	Atmosphere : $\frac{760}{1}$	mmHg 0°C	*F Oil at 60 *	F: 51 BOPD ABCab		
Į.	º/o WLR:					
Transfering flu	nd:		Transfer duration:			
Final condition Pressure:	ns of the shipping bottle: NIL Temp:					
	C_ IDENTIFICA	TION OF THE	SAMPLE _	Shipping order No:		
	le No.:se			Shipping Gloer No :		
Coupled with		LIQUID		GAS		
Bottom hol	e samples No					
			AI	13752		
Surface sar	nples No					
Measurement Tank .	Measurement conditions.  B _ Meter _ C _ Dump _  a _ Corrected with shrinkage tester.					
	D _ REMARKS			Visa Chief Operator		
127						
9						
 0						

SCHLUME	BERGER TESTING	Client :	PETROF INA		Section:	ANNEX 42
Base :	VEA	Field : Well :	ANEMONE 1	A	Page Report	N*:
Date of samp Sample natu	SURFACE SAMPLING _  Date of sampling:1-10-89					
_	A_RESERVOIR 20 ne : 4599 - 4652 n : RKB	_ Perforations:.		Sampl		<b>B</b>
Bottom hole static conditions	Latest pressure measure	d :	at de	pth:	date	:
Time at whic	B _ MEASUREM th sample was taken:	2315	. Time elap	sed since stab	ilisation:	
Bottomhole dynamic conditions	Bottom hole pressure : Bottom hole temp. :		_ at depth: _ _ at depth: _		date : _ date : _	
Flow measurement of sampled gas _ Gravity(air:1):965 Factor Fpv = 1 : 1.0234  Values used for calculations :						
Separator	Pressure :90	Oil (separator c	ond. ):3	1 BC	PDI (Se	parator cond.)
' <u>Stock</u> tank	Atmosphere : 760 Tank temperature : 10	emmHg	•F •F	Oil at 60 °F:	51	BOPD ABCab
BSW:	º/o WLR:	o <sub>/o</sub>	t			
Transfering f	luid :		Transfer	duration:	15 MIN	<u> </u>
Final condition	ons of the shipping bottle :  NILTemp:	-	-			
Shipping bo Addressee :	C_IDENTIFICA ttle No.: A4 ser	TION OF THE	SAMPLE _ by:		_ Shipping o	order No :
Coupled wit	h	LIQUID			GAS	
<u>Bottom h</u> a	ole samples No			A137	52	
Surface s	amples No.					
Measurement conditions.  B - Meter - C - Dump -  Tank .  a - Corrected with shrinkage tester. 2 - Corrected with tank .						
	D _ REMARKS	=			Vis	a Chief Operator

DIVISION : ANT

BASE : BE7

REPORT N°: 01/89

## Well Testing Report

Client: PETROFINA

Field: VIC/P20

Well: ANEMONE 1A

Zone: DST# 2

Date: 7/10/89 - 11/10/89

Base : BEF

Client = PETROFINA

Field = VIC/P20 Well = ANEMONE-A Section : INDEX

Page : 2 Report N°: 01/89

### INDEX

- ☑ 2\_ MAIN RESULTS \_
- ☑ 3\_OPERATING AND MEASURING CONDITIONS -
- □ 4\_SURFACE EQUIPMENT DATA \_
- 5\_WELL COMPLETION DATA \_
- S 6\_SEQUENCE OF EVENTS \_
- ∇ 7 WELL TESTING DATA -

#### TESTING CREW

- A. Munro
- O. Hobbs
- A. Gillies
- C. Morrell
- E. Goh
- T. Chin
- S. Brown
- J. Bruce
- S. Milne
- P. Nardone

Flopetrol chief operator

Name: A. Munro

Client r

representative

Name: D. Soussa

Base :\_BEF

**PETROFINA** Client:

VIC/P20 Field : ANEMONE-A Well

Section

Page Report N: 01/89

#### \_ TEST PROCEDURE \_

MAKE UP SCHLUMBERGER TOP GUN ASSEMBLY. 1.

- RUN IN HOLE WITH SCHLUMBERGER TEST TOOLS. 2.
- AFTER RUNNING THE BOTTOM HOLE ASSEMBLY RIG UP TO RUN 3-1/2 VHM TUBING. 3. WHILST RUNNING IN HOLE, FILL THE TEST STRING WITH WATER.
- RIG UP AND RUN IN HOLE WITH E-1 TREE ASSEMBLY. 4.
- RIG UP AND RUN IN HOLE WITH LUBRICATOR VALVE. 5.
- CHANGE OUT TO LONG BAILS. 6.
- RIG UP FLOW HEAD AND COFLEX HOSE. 7.
- PRESSURE TEST THE WHOLE TEST STRING TO 9,000 PSI. 8.
- AFTER THE PACKER SET, RUN IN HOLE WITH SCHLUMBERGER CORRELOTION LOG 9. TO CHECK SPACE OUT.
- RIGGING UP SURFACE TEST EQUIPMENT AND PRESSURE TEST. 10.
- RUN IN HOLE WITH DROP BAR ASSEMBLY. 11.
- PERFORATE AND FLOW 10 MINUTE TO CAUGE TANK. 12.
- SHUT IN WELL AT PCT AND CHOKE MANIFOLD FOR INITIAL PRESSURE BUILD UP. 13.
- OPEN UP WELL FOR CLEAN-UP. 14.
- RUN IN HOLE WITH TWO BOTTOM HOLE SAMPLERS AND DO CRADIENT SURVEY. 15.
- SHUT IN WELL AT CHOKE MANIFOLD TO PULL OUT OF HOLE WITH BOTTOM HOLE 16. SAMPLES.
- OPEN UP WELL TO CONTINUE CLEAN-UP PERIOD.
- SHUT IN WELL AT PCT AND COMMENCE BULL HEADING. 18.
- 19. UNSET PACKER AND COMMENCE CIRCULATING.
- PULL OUT OF HOLE WITH TEST STRING. 20.

Base :\_

Client : PETROFINA

Field : VIC/P20 Well : ANEMONE-1A Section

4

Page 01/89 Report N°:\_

RESULTS \_ MAIN

interval: \_\_DST#2 \_\_\_\_\_ Perforations : \_\_\_\_4535-4545 Tested

OPERATION	DURATION	BOTTOM HOLE PRESSURE	WELL HEAD PRESSURE	OIL PROD. RATE	GAS PROD.RATE	G.O.R
Units	MINS		PSIG	BBL/DAY		
Initial Flow choke closed	76		2300			
Initial Flow choke open full	11		0	Ni l		
Initial Buildup	806		1570			
Clean up choke open full	1827		2080	57		
2nd Shut in surface	72		2100			
Clean up. Choke open full	178		2100	67		
3rd Shut in Surface	170		1645			
Clean up. Choke open full	896		2050	76		

Depth of bottom hole measurements: 4297m	Reference :RKB
Temperature: 260°F at:depth	4297m
Separator gas gravity (air:1) at choke size	:
STO gravity at choke size	:
BSW: 95% H <sub>2</sub> O, 3% Mud, 2% emulsion Water	cut :

#### REMARKS AND OTHER OPERATIONS

Wellhead pressures given are the final for each flow period. Production rates varied considerably throughout flow periods, the rate for the end of the cleanup is the last available rate, since the well was flowing mud the gauge tank was by-passed.

SCHLUMBERGER	Client : PETROFINA	Section : 3			
TESTING	Field : VIC/P20	Page : 5			
Base:BEF	Well : ANEMONE 1A	Report N°: 01/89			
_ OPERATING AND MEASURING CONDITIONS _					
A _ TYPE OF C	AUGE				
BOTTOM HOLE:  Pressure:					
Temperature:					
<u>WELL HEAD</u> : Pressure : <u>DWT</u> Temperature : <u>HG THER</u>	MOMETER				
SEPARATOR: BARTON  Pressure: HG THER	MOMETER				
B _ PRODUCTION	RATE CONDITIONS AND SOURCES	<u>-</u>			
OIL PRODUCTION RATE  Tank Floco  Meter Rotron	Reference conditions. Separator  Atmospheric pressure 60°F	Shrinkage measurement - 区 With tank U With shrinkage tester			
GAS PRODUCTION RATE  ☑ Orifice meter  ☐	Standard conditions 14.75 PSIA @ 60 <sup>0</sup> F	<u>-</u>			
WATER PRODUCTION RATE  Tank Meter					
C <u>- WELL DA</u>	<u> </u>				
WELL STATE DURING SURV	<u>EY</u> :				
Main casing size 7" Tubing size 35"  Perforations: Zone DST2 Fro	:3.5" tubing Administrative / ARRANS set at 4492.5m	depth 4775m TRIEVE set at 4329m toto			
WELL STATE BEFORE TEST :					
☐ Well closed since <u>N</u> ☐ Well flowing since	Producing zone				

UUF 104

# FLOPETROL Client : PETROFINA

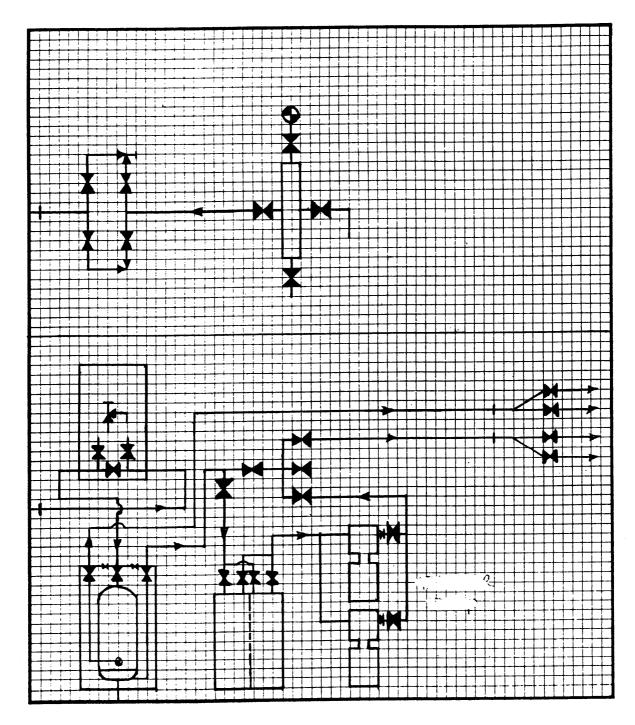
Base =\_

BEF

VIC/P20 Field : Well : ANEMONE 1A Section

Page : 6 Report N: 01/89

### \_ SURFACE EQUIPMENT LAYOUT \_



#### **REMARKS**:

Drawing not to scale.

Base :\_\_\_BEF

Client : PETROFINA

Field : VIC/P20

Well : ANEMONE 1A

Section

Page :  $\frac{7}{01/89}$ 

\_ WELL COMPLETION DATA \_

LOWER TEST STRING

LOWER 1EST STRING		
ITEM	LENGTH (M)	DEPTH (M)
BOTTOM OF FLUTED HANGER		255.070
CROSSOVER	0.310	255.280
3-½" VAM TUBING	3748.739	4004.119
CROSSOVER	0.309	4004.428
SLIP JT (OPEN) (7.066-OPEN)	8.590	4013.018
SLIP JT ( $\frac{1}{2}$ OPEN) (7.067-OPEN)	7.829	4020.847
SLIP JT (CLOSED) (7.065-OPEN)	7.065	4027.912
CROSSOVER	0.523	4028.435
6 STDS DC'S	166.100	4194.535
CROSSOVER	0.434	4194.969
SHORT	1.069	4196.038
1 SID DC'S	27.250	4223.288
MIDRV	2.910	4226.198
R.A. SUB 0.898	0.628 0.270	4226.826 4227.096
1 STD DC'S	27.180	4254.276
PCT	6.995	4261.271
HRT (CLOSED) (1.720 OPEN)	1.618	4262.889
EXAL GALGE CARRIER	2.970	4265.859
1 SIF DC's	28.510	4294.369
EXAL GALGE CARRIER	2.970	4297.339
1 SID DC'S	27.710	4325.049
JAR (CLOSED) (2.240 OPEN)	1.986	4327.035
SAFETY JOINT	0.517	4327.552
CROSSOVER	0.245	4327.797
PACKER (1.967 UNSET)	1.035	4328.832
	0.628	4329.460
CROSSOVER	0.310	4329.770
TUBING 20 JTS#42-23	191.880	4521.650
GUN DROP SUB	0.460	4522.110
TUBING 1 JT #43	9.590	4531.700
VENTED FIRING HEAD	0.550	4532.250
SAFETY SPACER	2.750	4535.000
GUNS	10.000	4545.000
BOITIOM NOSE	0.200	4545.200

Client : PETROFINA

Section

6

Base :\_

BEF

Field : VIC/P20
Well : ANEMONE 1A

Page :\_ Report N°:\_

8 01/89

### \_ SEQUENCE OF EVENTS \_

DATE	TIME	OPERATION
7-10-89		DST 2
	0530	RIG UP E-2 TREE REEL AND CONSOLE
		AND CHOKE MANIFOLD
	0805	STAB IN E-2 TREE ASSEMBLY
	0815	R. I.H. WITH E-2 TREE
	1010	STAB IN LUBRICATOR VALVE ASSEMBLY
	1018	R.I.H. WITH LUBRICATOR VALVE
	1050	PICK UP LONG BAILS
	1112	RIG UP FLOWHEAD AND CO-FLEX HOSE
	1300	RIG UP KILL LINE
	1335	TIGHTEN THE 4-1/2 PH6 JOINT BELOW FLOWHEAD
	1410	CLOSE KILL VALVE. PRESSURE TEST TO 9000 psi.
	1425	CLOSE SWAB VALVE, OPEN KILL VALVE, PRESSURE.
		TEST ACAINST PCT AND FLOW VALVE TO 9000 psi.
	1445	COMMENCE TO SET PACKER
	1450	4-1/2 PH6 JOINT BELOW FLOW HEAD START TO BACK OUT
		AFTER 2 TURNS
	1500	RIG DOWN FLOW LINE AND KILL LINE
	1515	TIGHTEN THE 4-1/2 PH6 JOINT
	1600	COMMENCE TO SET PACKER
	1615	PACKER SET AT 4330M
	1620	RIG UP SCHLUMBERGER TO RUN CORRELATION LOG
_	1650	RUN IN HOLE WITH CORRELATION LOG
	1850	SCHLUMBERGER LOGGING TOOL ON SURFACE
	1900	COMMENCE RICGING UP FLOW LINE AND KILL LINE
	1940	HOOK-UP FLOW LINE TO CHOKE MANIFOLD
	2000	CLOSE KILL VALVE, PRESSURE TEST TO 9000 psi

Section

6

\_ SEQUENCE OF EVENTS \_(Continuation)

Page : 9 Report N: 01/89

_ SE	JUENCE	OF EVENTS _(Continuation) Report N:_01/89	
DATE	TIME	OPERATION	
7-10-89	2005	CLOSE LUBRICATOR VALVE	
	2021	OPEN KILL VALVE, PRESSURE TEST CHOKE MANIFOLD	
		FRONT VALVES AND LUBRICATOR VALVE TO 9000 psi	
	2042	OPEN CHOKE MANIFOLD, PRESSURE TEST 5000 psi	
		TO HEATER INLET VALVE	
	2110	CLOSE CHOKE MANIFOLD BACK VALVE, PRESSURE	
		TEST TO 5000 psi	
	2145	START RIGGING UP SLICK LINE LUBRICATOR	
	2240	COMMENCE PRESSURE TEST LUBRICATOR TO 9000 psi	
8-10-89			
	0041	LUBRICATOR WILL NOT HOLD PRESSURE PAST	
		6500 psi, RIG DOWN SLICKLINE EQUIPMENT	
	0539	OPEN KILL VALVE HALIBURTON PRESSURE UP ON	
	· · · · · · · · · · · · · · · · · · ·	TUBING TO 1000 psi	
	0547	OPEN PCT OBSERVE PRESSURE INCREASE AT	
		WELL HEAD (DUE TO RAT HOLE PRESSURE)	
	0549	CLOSE KILL VALVE OPEN SWAB VALVE	
	0550	DROP MECHANICAL FIRED GUN DROP BAR	
		DOWN HOLE CLOSE SWAB VALVE OBSERVE WHP	
	0640	NO INDICATION OF GUNS HAVING FIRED	
	0645	RIG UP SCHLUMBERGER SURFACE CONTROL	
		EQUIPMENT AND LUBRICATOR FOR FISHING JOB	
	0855	RIG UP COMPLETE, CLOSE LUBRICATOR VALVE	
		OPEN KILL VALVE OPEN SWAB VALVE HALIBURTON	
		FLUSH AIR OUT OF LINES AND LUBRICATOR	
	0900	COMMENCE PRESSURE TEST OF SCHLUMBERGER	
	· · · · · · · · · · · · · · · · · · ·	LUBRICATOR AND COPS TO 9000 psi	
	1015	TEST GOOD CLOSE KILL VALVE OPEN LUBRICATOR	
		VALVE	
	1016	SCHLUMBERGER R.I.H. WITH CCL, WEIGHT BARS	

0P 108

Section

SEQUENCE OF EVENTS (Continuation)

Page : 10 Report N: 01/89

_ S	EQUENCE	OF EVENTS _(Continuation) Report N: 01/89
DATE	TIME	OPERATION
8-10-89		
	1016	SPANG JARS AND JAR UP FISHING TOOL
	1118	BLED OFF INCREASE IN WHP CAUSED BY
		DISPLACEMENT AS TOOLS ARE RUNNING IN
	1121	STOP RUNNING IN MONITOR WHP
		TO ENSURE INCREASING PRESSURE IS ONLY
		DUE TO DISPLACEMENT
	1123	CONTINUE TO R. I.H.
	1135	MAINTAIN WHP AT ZERO BY BLEEDING
		OFF THROUGH BUBBIE HOSE
	1218	WIRELINE AT DEPTH ATTEMPTING TO FIRE GUN
	1242	PULL OUT OF HOLE WITH WIRELINE
	1346	WIRELINE ON SURFACE, CLOSE LUBRICATOR VALVE
I		RETAIN DROP BAR
	1438	OPEN LUBRICATOR VALVE AND KILL VALVE TO
		FILL TUBING WITH WATER FOR PRESSURE TEST
	1440	WIRELINE RIG UP WITH NEW DROP BAR
		ASSEMBLY
	1456	CLOSE LUBRICATOR VALVE, PRESSURE TEST
		WIRELINE LUBRICATOR TO 3000 psi
	1518	OPEN LUBRICATOR VALVE, PRESSURE ON
		SURFACE AND INCREASING
	1530	CLOSE LUBRICATOR VALVE, BLEED OFF PRESSURE
	1535	RIG DOWN WIRELINE, DROP BAR HAS
		BACK OUT FROM THE WIRELINE ASSEMBLY AND
L		DROP INTO THE HOLE DURING THE RIGGING UP
	1554	EQUALISED PRESSURE ACROSS LUBRICATOR VALVE
	1555	OPEN LUBRICATOR VALVE
	1606	OPEN UP WELL ON FULL ADJUSTABLE TO TANK
	1617	CLOSE PCT AND CHOKE MANIFOLD
L .		

Section

Page :\_ Report N:\_

11 01/89

_ SEC	QUENCE	OF EVENTS _(Continuation)	Page : 11 Report N: 01/89
DATE	DATE TIME OPERATION		
9-10-89	0529	OPEN KILL LINE	
	0530	START TO PRESSURE UP TUBING TO 1000 PSI	- Address
	0538	CLOSE KILL LINE	
	0542	START TO PRESSURE UP ANNULUS	
	0543	OPEN PCT. WELL OPEN TO CHOKE MANIFOLD	
	0547	OPEN UP WELL ONFULL ADJUSTABLE CHOKE TO	
		CALCE TANK	
10-10-89	1134	SET UP FIRST BOTTOM HOLE SAMPLER ON 4 H	DURS DELAY
	1204	SET UP SECOND (TOP) BOTTOM HOLE SAMPLER	ON 4 HOURS DELAY
	1205	COMMENCE RIGGING UP CALCE AND BOTTOM HOL	E
		SAMPLERS	
	1210	CLOSE LUBRICATOR VALVE AND BLEED OFF ABO	)VE
	1215	CLOSE CHOKE MANIFOLD AND OPEN SWAB VALVE	Ξ
	1243	OPEN KILL VALVE, PRESSURE TEST LUBRICAT	TOR TO
		3500 psi	
	1255	BLEED DOWN PRESSURE TO 1250 psi	
	1259	OPEN LUBRICATOR VALVE, PRESSURE REMAIN	1250 psi
		NO CLEAR INDICATION OF VALVE OPENING	
	1300	CLOSE LUBRICATOR VALVE, BLEED DOWN TO	1000 psi
	1306	OPEN LUBRICATOR VALVE, PRESSURE INCREAS	SE TO 1250 psi
	1308	START RUN IN HOLE WITH SAMPLERS AND TPT	
	1322	GALGE AT 100M, OPEN WELL TO GALGE TANK	
	1534	FIRST BOTTOM HOLE SAMPLE TAKEN AT 4428M	
	1604	SECOND BOTTOM HOLE SAPLE TAKEN AT 3904M	
	1620	SHUT IN WELL AT THE CHOKE MANIFOLD	
	1622	PULL OUT OF HOLE WHILE GRADIENT SURVEY	
	1840	TOT GALGE AND BOTTOM HOLE SAMPLERS ON SU	RFACE
		CLOSE LUBRICATOR VALVE, BLFED OFF WELL	HEAD
		PRESSURE.	
	1900	CLOSE SWAB VALVE, AND CHOKE MANIFOLD OPE	N

\_ SEQUENCE OF EVENTS \_(Continuation)

Section : 6

Page : 12 Report N: 01/89

I	DATE	TIME	OPERATION
_[	10-10-89	1900	KILL VALVE
		1907	PRESSURE UP TO 1500 psi ABOVE LUBRICATOR VALVE
		1908	OPEN LUBRICATOR VALVE, WELL OPEN TO
			CHOKE MANIFOLD
		1910	OPEN UP WELL TO CAUCE TANK
		1915	OBTAIN THE FIRST BOTTOM HOLE SAMPLE (3904M)
			AT ATMOSPHERIC CONDITION
l		2000	100% MLD FLOWING TO THE SURFACE
		2006	DIVERT FLOW TO FLARE
		2045	OBTAIN THE SECOND BOTTOM HOLE SAMPLE (4428M)
			AT ATMOSPHERIC CONDITION, BOTH SAMPLES APPEAR
			TO BE FORMATION WATER
		2050	RIG DOWN WIRELINE EQUIPMENT
-1 1			
	11-10-89		
		1006	CLOSE PCT BLEED OFF PRESSURE
		1011	CLOSE CHOKE MANIFOLD
		1014	OPEN KILL VALVE
		1026	OPEN MIDRV - 2800 psi CLOSE KILL VALVE
		1030	OPEN CHOKE MANIFOLD HOLD PRESSURE ON
			VARIABLE CHOKE - COMMENCE REVERSE CIRCULATION
			ADJUST VARIABLE CHOKE AS REQUIRED TO
			MAINTAIN APPROPRIATE TUBING PRESSURE
		1158	OPEN KILL VALVE
		1204	CLOSE MIDRV
-		1210	OPEN PCT
		1212	COMMENCE BULLHEADING
		1255	CLOSE MASTER VALVE, FLUSH THROUGH SURFACE LINES
		1306	CLOSE FLOW VALVE, OPEN MASTER VALVE
		1315	PRESSURE UP ANNULUS TO OPEN SHORT

DOP 108

Section

6

SEQUENCE OF EVENTS \_(Continuation)

Page : 13 Report N: 01/89

_ SE	GUENCE	OF EVENTS (Continuation) Report N: 01/89
DATE	TIME	OPERATION
11-10-89	1335	UNSET PACKER
	1341	START CIRCULATING
	1751	STOP CIRCULATING, TOTAL 8390 STROKES
	1830	RIG DOWN FLOW HEAD
	1900	LUBRICATOR VALVE ON SURFACE
	2300	E-7 TREE ON SURFACE
		END OF TEST
··		
;		

DOP 108

Units Page :- Report N:\_ Section 4535 - 4545M RKB GOR - WELL TESTING DATA SHEET Gravity DEPTH REFERENCE
DEPTH OF B.H. MEASUREMENTS : PROD. RATES AND FLUID PROPERTIES GAS Rate TESTED INTERVAL Gravity BSW OIL OR CONDENSATE 89 RIG UP E-Z TREE REEL UNIT AND CONSOLE AND CHOKE MANIFOLD RIG UP SLICK LINE LURICATOR AND TAOP BAT ASSEMBLY Rate RIG UP SURFACE ROUTHAINT AND PRESSURE TEST Tg temp Tg press. Cg press. Temp. Press. SEPARATOR PRESSURE AND TEMPERATURE MEASUREMENTS ANEMONE 1A RUN IN FOLE WITH CORRELATION LOG ~ RIG UP FLOWLEND AND CO-FLEX HOSE PETROF INA STAB IN LURICATOR ASSEMBLY DST PRESSURE TEST ACAINST PCT LIQUID FLOW RATE MEASURING CONDITIONS: STAB IN E-2 TREE ASSIMBLY PRESSURE TEST KILL VALVE Client : RIH WITH LUBRICATOR PICK UP LONG BAILS Field Well RIH WITH E-2 IREE SET PACER FLOPETROL Pressure BOT TOM HOLE Temp. Cumul DATE - TIME Base: 2145 1615 0805 0815 1410 Time 0530 1010 1018 1050 1425 1650 1900

No.: DOP 109

Units Section GOR OPEN KILL VALVE - HALIBURION PRESSURES UP ON TUBING ABOVE PCT TO 1000 psi 15 Gravity LURRICATOR WILL NOT HOLD PRESSURE PAST 6500 psi - RIG DOWN SLICKLINE Report No.: DROP MECHANICALLY FIRED GIN DROP BAR DOWN HOLE | CLOSE SWAB VALVE Page: PROD. RATES AND FLUID PROPERTIES OPEN PCT - OBSERVE PRESSURE INCREASE AT WILL HEAD (DUT TO RAT Rate WELL TESTING DATA SHEET — (Continuation) BSW 8-10-89 7-10-89 OIL OR CONDENSATE COMPLUE PRESSURE TEST OF LUPRICATOR TO 9000 ps Gravity Rate CLOSÉ KILL VALVE OPEN SWAB VALVE 123 SEPARATOR HOLE RESSURE) - POT OPENED Temp. PRESSURE AND TEMPERATURE MEASUREMENTS EQUIPERNT AND TOOLS Tg. Temp. Tg. press | Cg. press. WELL HEAD OBSERVE WHP PSIG 28 27 27 30 8 28 30 10 2 10 10 10 10 10 8 Pressure **BOTTOM HOLE** SCHLUMBEAGER Temp. **FESTING** Cumul DATE — TIME 0619 0618 0620 0550 0616 0621 Time 0549 0547 2240 0041

Units Section GOR OPEN KILL VALVE 16 COMMENCE PRESSURE TEST OF LUBRICATOR AND BOPS TO 9000 ps Gravity Air = 1HALIBURITON FLUSH AIRE OUT OF LINES OPEN LURICATOR VALVE Report No.: NO INDICATION OF GINS HAVING FIRED - SMALL WHP DUE Page: RIG UP SCHLUMBERCHE SURFACE CONTROL EQUIPMENT AND PROD. RATES AND FLUID PROPERTIES Rate WELL TESTING DATA SHEET — (Continuation) CLOSE LUBRICATOR VALVE BSW OIL OR CONDENSATE Gravity LUBRICATOR FOR FISHING OPERATION TO HATROSTATIC AND DISPLACEMENT + CLOSE KILL VALVE 8-10-89 AND LUBRICATOR WITH WATER Rate RIG UP COMPLETE, OPEN SWAB VALVE Press. SEPARATOR TEST (DOD) Temp. PRESSURE AND TEMPERATURE MEASUREMENTS Tg. Temp. Tg. press | Cg. press. WELL HEAD PSIG 23 20 20 20 25 21 21 26 21  $\infty$ 10 10 9 10 10 2 10 10 10 Pressure **BOTTOM HOLE** SCHLUMBERGER Temp. **ESTING** Cumul DATE - TIME 1015 0855 0060 0730 0800 0830 0630 0645 0020 0625 0640 Time

Units Section GOR 17 Gravity - INCREASE IN WHP ATTRIBUTED TO DISPLACEMENT OF TUBING Report No.: DROP BAR FALL INTO THE HOLE DURING THE RIGGING UP BLEND OFF (PRESSURE THROUGH) HOSE |- MAINITAIN WHP AT Page: GAS PROD. RATES AND FLUID PROPERTIES CONTENTS CAUSED BY TOOL STRING RUNNING IN HOLE STOP TOOL STRING - CHECK FOR AIM WIP INCREASE SPANG JARS RESSURE ON SURFACE WELL TESTING DATA SHEET — (Continuation) WIRELINE AT DEPTH ATTEMPTING TO FIRE CLIN BLEED OFF PRESSURE THROUGH BUBBIE HOSE - NO INCREAGE WHP CLASED BY DISPLACEMENT WIRELINE RIG UP NEW DROP BAR ASSENBLY BSW OIL OR CONDENSATE SCALLAMBERGER WIRELINE RIH MITH CCL, WEIGHT BARS, Gravity 8-10-89 OPEN LUBRICATOR VALVE, Rate CLOSE LUBRICATOR VALVE WHILE TOOKS ARE STATIC PULL OUT OFHOLE SEPARATOR Temp. AND A JAR UP FISHING TOOL PRESSURE AND TEMPERATURE MEASUREMENTS AHO HO Tg. Temp. Tg. press | Cg. press. WELL HEAD 800 500 PSIG 145 0 230 150 150 450 0 8 12 12 12 12 12 12 12 12 12 Pressure BOTTOM HOLE SCHLUMBEAGER Temp. **FESTING** Cumul 28 0 9 DATE -- TIME 1518 1440 1456 1135 1218 1242 1450 1123 1130 1137 1120 Time 1016 1122 1121

Units Section GOR BLEED OFF PRESSURE ABOVE Air = 1Gravity Report No.: Page: PROD. RATES AND FLUID PROPERTIES Rate WELL TESTING DATA SHEET — (Continuation) BSW OIL OR CONDENSATE Gravity CLOSE LUPRICATOR VALVE, OPEN LURICATOR VALVE Rate 8-110-89 Pressure Tg. Temp. Tg. press Cg. press. Temp. Press. SEPARATOR PRESSURE AND TEMPERATURE MEASUREMENTS WELL HEAD PSIG **BOTTOM HOLE** SCHLUMBERGER Temp. **ESTING** MINS Cumul 4 DATE -- TIME Time

Units **CALLATION** WATER CUSHION BBI Section BBL/DAY 100.8 GOR 19 OPEN UP WELL ON FULL ADJUSTABLE CHOKE TO CAUCH TANK Air = 1Gravity Report No. OPEN UP WELL ON FULL ADJUSTABLE CHOKE TO TANK Page: PROD. RATES AND FLUID PROPERTIES CLOSE IN WEIL PCT AND CLOSE CHOKE MANIFOLD Rate WELL OPEN TO CHOKE MANIFOLD WELL TESTING DATA SHEET — (Continuation) BSW PRESSURE UP TUBING TO 1000 PSI OIL OR CONDENSATE Gravity VERY WEAK BUBBLE ON SURFACE Rate 9 - 10 - 898-110-89 SLIGHT VACUM SEPARATOR OPEN PCT. Temp. PRESSURE AND TEMPERATURE MEASUREMENTS 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 Tg. Temp. Tg. press Cg. press. PSIG WELL HEAD PSIG 1570 1665 1730 1895 2295 2300 2 4 က 4 4 8 6: တ တ 6 တ 6 6 6 6 6 6 12 12 Pressure **BOTTOM HOLE** SCHLUMBEAGER Temp. 806/0 MINS **ESTING** 0/9/ 11/0 Cumul 32 22 793 2 က \_ 12 17 27 75 DATE -- TIME 0615 0543 0605 0610 0545 0546 0555 0530 0544 0550 0090 0547 Time 1604 1605 1606 1607 1613 1617

Units 23.85 25.17 22.93 22.14 15.46 17.12 20.69 12,38 13.69 15.00 BBLS 8.16 10.93 18,31 19.67 3.94 6.05 1.97 9.61 CUM. WATER CUSHION 50.88 Section 63.66 63.66 BBL/DAY 63.36 12.72 50.68 101.76 50.88 88,32 100.80 126.72 126.72 38.40 66.36 66.36 75.84 75.84 75.84 GOR Report No.: 01/89 20 Air = 1 Gravity Page: GAS PROD. RATES AND FLUID PROPERTIES Rate WELL TESTING DATA SHEET — (Continuation) WEAK BLOW ON BUBBLE HOSE BSW OIL OR CONDENSATE Gravity 9-10-89 Rate Press. SEPARATOR Temp. PRESSURE AND TEMPERATURE MEASUREMENTS 2100 2100 2100 2100 Tg. press | Cg. press. 2100 2100 2100 2000 2000 2100 1800 2000 2000 1800 2000 2000 2000 2000 PSIG WELL HEAD PSIG C 3 2 2 S 5 S 4 4 S 4 3 S 5 \_  $\vdash$ Tg. Temp. 7 13 13 13 12 13 13 13 13 ပ 10 12 12 6 6 6 6 10 Pressure BOTTOM HOLE SCHLUMBERGER Temp. **ESTING** Cumul MINS 15.00 557 DATE -- TIME 47 77 11:30 347 13:30 467 14:00 497 14:30 527 11:00|317 12:00|377 12:30 407 10:00 257 10:30 287 13:00 437 07:30 107 08:30 167 09:00 197 09:30 227 08:00|13706:30 00:20 06:15 Time

Units COMMITTIVE 35.79 39.49 45.29 46.48 47.80 30.19 32.70 37.77 27.2931.25 32.89 26.10 40.94 43.71 34.34 28.61 WATER CLISHION Section BBI/D 57.1275.84 75.84 95.04 82.37 69.67 57.02 73.84 63.36 38.40 63.36 73.84 63.66 50.88 50.88 63.66 38.4 GOR 21 Air = 1Gravity Report No.: Page: GAS PROD. RATES AND FLUID PROPERTIES Rate WELL TESTING DATA SHEET — (Continuation) BSW OIL OR CONDENSATE Gravity BSW : 0.5% BSW : 1% BSW: 2% BSW: 1% 9 - 10 - 89Rate Press. SEPARATOR Temp. PRESSURE AND TEMPERATURE MEASUREMENTS Tg. Temp. Tg. press | Cg. press. 2150 2010 2150 2120 PSIG 2075 2150 2150 2100 2150 2150 2100 2180 2150 2150 2150 2100 WELL HEAD PSIG 10.5 8.5 9.5 6.5 7.0 7.0 7.0 5.5 5.5 7.0 S 4.5 4.5  $\infty$ œ တ 10 4 12.5 12.5 12.5 2 12 12 13 3 13 2 13 13 13 13 13 13 Pressure BOTTOM HOLE SCHLUMBEAGER Temp. **ESTING** Cumul MINS 1067 1007 1037 917 947 977 707 767 797 827 857 887 617 647 737 DATE — TIME 587 677 2300 2330 2230 1830 1900 1930 2000 2030 2100 2130 2200 Time 1730 1800 1530 1630 1700 1500 1600

Units **CAMLATIVE** 68.93 63.38 64.70 66.0262.06 58.89 61.27 67.21 53.48 55.99 54.67 57.31 60.21 52.16 49.12 49.91 50.97 WATER CUSHION BBL Section 82.56 63.36 63.36 57.12 63.3663.36 37.92 63.36 75.84 50.88 57.12 57.1263.36 63.36 37.92 50.88 63.36 BBI/D GOR 22 Air = 1 Gravity Report No. Page: PROD. RATES AND FLUID PROPERTIES 49cm Rate WELL TESTING DATA SHEET — (Continuation) 1% EMLSION DIP 1% HMLSION 1% BALLSION  $BSW = 9\% H^2O \mid 2\% \text{ EMULSION}$ BSW WEAK BLOW AT BUBBLE HOSE TAKE OIL OR CONDENSATE Gravity 10 - 10 - 89 $BSW = 99\% H^2O$  $BSW = 99\% H^2O$ ≥ 99% H<sup>2</sup>O CHANGE TANKS Rate BSW SEPARATOR Tg. Temp. Tg. press | Cg. press. | Temp. PRESSURE AND TEMPERATURE MEASUREMENTS 2080 2080 2080 2080 2080 2080 2080 2120 2150 2150 2150 2080 2100 2120 2050 2050 2120 PSIG WELL HEAD 11.0 11.0 11.0 10.0 11.0 PSIG 10 9 9 Ξ 12 Ξ 12 12 Π 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 Pressure BOTTOM HOLE SCHLUMBENGER Temp. 1577 1547 1517 1487 1337 1367 1397 1427 1457 1277 1307 1217 1247 1097 1157 1187 1127 **ESTING** Cumul MINS DATE - TIME 0800 0730 0630 0020 0200 0530 0330 0400 0430 0090 0090 0300 0000 0130 0200 0230 0030 0100 2330 Time

Units 77.90 79.09 75.26 76.58 CUM. BBLS 73.02 70.25 71.57 73.94 WATER CUSHION Section, BBL/DAY 63.36 63.36 63.36 63.36 57.12 09.69 44.16 63.36 SURVEY GOR 01/89 WITH BOTTOM HOLE SAMPLERS AND GRADIENT OPEN LUBR‡CATOR VALVE AND RUN IN HOLE Air = 1 Gravity Report No.: Page: PROD. RATES AND FLUID PROPERTIES Rate WELL TESTING DATA SHEE1 — (Continuation) CLOSE LUBRICATOR VALVE CLOSE CHOKE MANIFOLD BSW OIL OR CONDENSATE Gravity 10-10-89 Rate Press SEPARATOR Temp. PRESSURE AND TEMPERATURE MEASUREMENTS Tg. Temp. Tg. press Cg. press. 201C 2010 2010 PSIG 2010 2010 2080 2010 2080 2080 2080 2080 2080 2080 2080 2080 WELL HEAD PSIG 1420 1440 1405 1375 1350 1395 10 10 11 11 11 11 11 11 11 ပ 12 12 12 12 12 12 12 12 15 12 12 13 11 11 11 Pressure BOTTOM HOLE SCHLUMBL. IGER Temp. **ESTING** 12:10 |1827/0 Cumul MINS 1667 1757 1787 1817 1607 1637 1697 1727 70 Ŋ 68 69 56 65 99 **6**7 DATE -- TIME 12:00 10:00 11:00 13:18 13:20 06:30 13:19 08:30 00:60 10:30 11:30 12:15 13:15 13:16 13:06 Time 1317

Units **CAMLATIVE** 81.23 86.23 87.68 88.60 84.52 83.07 BBL Section BBL/DAY WATER 66.52 80.03 69.69 82.36 88.70 69.69 GOR Air = 1Gravity Report No. FIRST BOTTOM HOLE SAMPLE TAKEN @ 4428M SECOND BOTTOM HOLE SAPLE TAKEN @ 3904M Page: PULL OUT OF HOLE FOR GRADITANT SURVEY PROD. RATES AND FLUID PROPERTIES Rate OPEN GROVE MAN FOLD TO CALCHE TANK SHUT IN WELL AT CHOKE MANIFOLD WELL TESTING DATA SHEET — (Continuation) BSW OIL OR CONDENSATE Gravity 10 - 10 - 892% M.D 2% M.D Rate BSW BSW Press. SEPARATOR Temp. PRESSURE AND TEMPERATURE MEASUREMENTS 2050 2100 2100 2100 2100 2100 2100 2050 Tg. Temp. Tg. press | Cg. press. PSIG 2100 2100 2100 2100 2100 2100 2100 2100 2100 WELL HEAD 10.5 12.5 PSIG 110 15 17 30 35 49 59 9 വ 9 6 14 20 24 41 ပ 13 13 13 13 33 13 14 13 12 3 13 13 13 13 12 4 13 Pressure BOTTOM HOLE SCHLUMBE, (GER Temp. **ESTING** MINS 178/0 Cumul 72/0 DATE - TIME 15 128 158 2 က 4 വ 9  $\infty$ 10 38 89 98 1635 1530 1600 1620 1629 1630 1625 1628 1322 1400 1430 1623 1624 1626 1320 1500 1622 1627 Time

National Secritor   Court   Court   National Secritor   National					-													7
Phessure And Pienerrature Measurements   Photo Properties	SCH TES1		# *	Ä Ž		WELL	TESTIN	IG DAI		EET	Continu	ation)	Page: Report	Zo.:	67	Section —		•
DOTTOMHOLE   MELLHEAD   SEPARATOR   OLLOR CONDENSATE   GAS   OLLOR CONDENSATE   CAS   OLLOR CONDENSATE   OLLOR CONDE	DATE —	TIME		PRESSUF	R AND TE	MPERATURE	E MEASUREM	ENTS		PRO	D. RATES AND	FLUID PRC	PERTIES		GOR	M	WATER	
Cumul Tomp         Tomp Pressure To_Tomes         Operation Top Pressure Top Top Top Pressure Top Pressure Top Pressure Top			ВОТТ	OM HOLE		WELL HEAI	0	SEPAR	4TOR	OIL OR C	ONDENSATE		GAS			RATE	CUM.	
MINS         ©         BSIG         PSIG         10-10-89         AK-81           20         13         255         2050         10-10-89         AK-81           40         13         695         2050         AK-81         AK-81           40         13         695         2050         AK-81         AK-81           9         70         13         1047         2050         AK-81         AK-81           10         10         13         1290         2050         AK-81         AK-81           115         10         13         130         2050         AK-81         AK-81           116         13         140         2050         AK-81         AK-81         AK-81           116         13         140         2050         AK-81         AK-81         AK-81           116         13         1445         AK-81         AK-8	Time	Cumul	Temp.	Pressure	Tg. Temp		$\vdash$		Press.	Rate		SW	Rate	Gravity		BBL/day	BBL	
2         2         2         5         2         5         5         6         6         6         6         6         6         7         6         7         7         7         7         8         9         8         9         8         9         9         9         9         9         9         9         9         9         9		MINS			ပ	BSIG								Air = 1				Units
26         13         255         2050         10-10-89           25         13         372         2050         10-10-89           40         13         695         2050         10-10-89           55         13         695         2050         10-10-89           70         13         1047         2050         10-10-89           85         13         1047         2050         10-10-89           100         13         1047         2050         10-10-80           115         13         1047         2050         10-10-80           1100         13         1040         2050         10-10-80           1100         13         1450         2050         10-10-80           140         13         1450         2050         10-10-80           167         150         10-10-80         10-10-80           168         13         1645         10-10-80         10-10-80           1100         13         1645         10-10-80         10-10-80         10-10-80           11         13         24         10-10-80         10-10-80         10-10-80         10-10-80           11	1635																	
25         13         372         2050         8         6         7         6         6         7<	1640	20				Ŋ	2050			10-10-	89							
40         13         695         2050         8           55         13         858         2050         8           70         13         1047         2050         8           85         13         1296         2050         8           1100         13         1290         2050         8           115         13         1450         2050         8         8           140         13         1450         2050         8         8         8           140         13         1450         2050         8         8         8         8         8           140         13         1450         2050         8         8         10         8         10         8           162         163         1 </td <td>1645</td> <td>25</td> <td></td> <td></td> <td></td> <td></td> <td>2050</td> <td></td>	1645	25					2050											
55         13         858         2050         9<	1700	40				695	2050											
70         13         1047         2050         6           85         13         1196         2050         6         6         7           100         13         1230         2050         7         8         7         8           115         13         1450         2050         8	1715					858	2050	·										-
85       13       1196       2050       6       7       8       7       8	1730	70				1047	2050											
100       13       1230       2050       80	1745	85				1196	2050											-
5 115         13 1290         2050         R         AND         AND         BOTTOM         HOLE         AMDLER ON SURFACE,           0 140         13 1450         2050         BOTTOM         HOLE         AMDLER ON SURFACE,           1 167         1 500         AND         PRESSURE         PRESSURE         PRESSURE           1 168         1 1 645         OPEN LUBRICATOR VALVE.         PRESSURE         PRESSURE           1 1 1         1 1 1645         OPEN WELL TO GAUGE TANK.         PRESSURE         PRESSURE           1 1 1         1 1 2         4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1800			·		1230	2050											
130       13       2050       BOTTOM HOLE SAMPLER ON SURFACE,         140       13       1450       2050       BOTTOM HOLE SAMPLER ON SURFACE,         167       1500       N       AND BLEED OFF PRE\$SURE.       CQUA         168       13       1645       N       OPEN LUBRICATOR VALVE.       CQUA         169       13       1645       N       OPEN WELL TO GAUGE TANK.       N         170/0       13       1645       N       OPEN WELL TO GAUGE TANK.       N         2       13       4       N       N       N       N         3       13       4       N       N       N       N       N         3       13       4       N       N       N       N       N       N       N       N	1815	11				1290	2050											
140       13       1450       2050       BOTTOM HOLE SAMPLER ON SURFACE,         167       AND BLEED OFF PRESSURE.       PRESSURE.       COPEN LUBRICATION VALVE.         168       13       1645       OPEN LUBRICATION VALVE.         170/0       13       1645       OPEN WELL TO GAUGE TANK.         2       13       4       OPEN WELL TO GAUGE TANK.         3       13       4       OPEN WELL TO GAUGE TANK.	1830	İ				1330	2050											
167       AND BLEED OFF PRESSURE.         168       1500       PRESSURE UP EO 1500 psi TO         169       0PEN LUBRICATOR VALVE.         170/0       13 1645       OPEN WELL TO GAUGE TANK.         1       13 2       OPEN WELL TO GAUGE TANK.         2       13 4       4         3       13 4       4	1840					1450	2050				HOLE	i	ł	FACE,	CLOSE L	LUBRICATOR	R VALVE	
167       1500       PRESSURE UP EO 1500 psi TO         168       13 1645       OPEN LUBRICATOR VALVE.         169       13 1645       OPEN WELL TO GAUGE TANK.         170/0       13 1645       OPEN WELL TO GAUGE TANK.         2       13 4       4         3       13 4       4											OFF	PRESSU	RE.					
168       13       1645       OPEN LUBRICATOR VAL         169       13       1645       COPEN LUBRICATOR VAL         170/0       13       1645       OPEN WELL TO GAUGE         2       13       4       CAUGE         3       13       4       CAUGE         3       13       4       CAUGE	1907					1500				PRESSUR	UP	1500	- 1			LUBRICATOR	A VALVE	
169       13       1645       OPEN WELL TO GAUGE         170/0       13       1645       OPEN WELL TO GAUGE         2       13       4       CAUGE         3       13       4       CAUGE         3       13       4       CAUGE         3       13       4       CAUGE	1908					1645				1	BRICATO	1	<b>ы</b>					
170/0       13       1645       OPEN WELL TO GAUGE         1       13       2       August         2       13       4       August         3       13       4       August	1909					1645												
2 13 3 13	1910	170/0				9					TO		ANK.					
3 13	1911					2												
3 13	1912			·		7												
	[ 1913 					4												

Units **CIMULATI** 92.82 93.08 90.45 BB WATER Section BBL/DAY 76.03 133.05 114.05 GOR 26 Gravity Report No.: Page: PROD. RATES AND FLUID PROPERTIES Rate BSW: 10p% MLD AT SURFACE WELL TESTING DATA SHEET — (Continuation) DIVERT FLOW TO FLAR BSW OIL OR CONDENSATE BSW: 100% MLD BSW: 100% MLDBSW: 100% MLD BSW: 100% MLDBSW: 100% MLD BSW: 100% MLD BSW: 100% MLDBSW: 100% MLDGravity Rate 11 - 10 - 89Press. SEPARATOR Temp. PRESSURE AND TEMPERATURE MEASUREMENTS 
 Tg. Temp.
 Tg. press
 Cg. press

 OC
 PSIG
 PSIG
 2020 2020 2020 2020 2020 2020 2020 2020 2020 2050 2050 2050 2050 2020 WELL HEAD 11.5 11.5 15 15 16 18 17 12 17 17 S 4 12 2 12 13 2 2 12 12 12 2 Pressure **BOTTOM HOLE** SCHLUMBENGER Temp. **FESTING** Cumul MINS 200 230 140 170 260 290 56 80 DATE - TIME വ 35 50 20 2130 0000 2330 2100 22001945 2000 2006 2030 2300 1913 1914 1915 1930 Time

Units GAS @ SURFACE STRONG BLOW GAS @ SURFACT AS @ SURFAC STRONG BLOW STRONG BLOW Section %80, WEAK BLOW (SAMPLE TAKEN 30% MLD EMLLSION GOR  $17\% \, \odot$ 17% Ω<sub>2</sub>, 24% Ω<sub>2</sub> 32% CO,  $27\% \, \odot_2$ 35% CO<sub>2</sub> 8 35% CO, 35% Ω<sub>2</sub> 35% 27 Air = 11<del>3%</del> CO, Gravity Report No. 10% EMLSION 10% EMLSION 10% EMLSION 10% EMLSION 10% EMLSION 5% EMLSION 5% EMISION 5% EMLSION 5% EMLSION 5% EMLSION Page: GAS 5% EMLSION 5% EMLSION PROD. RATES AND FLUID PROPERTIES Rate 70% MLD WATER 5% EMISION WEAK BLOW WELL TESTING DATA SHEET — (Continuation) BSW (SANPLE TAKEN)  $BSW = 90\% |MD/H|^2O$ 90% MLD/HTO 90% MLD/HTO 95% MLD/HTO 95% MLD/HTO 90% MLD/HFO 90% MLD/HFO 95% MD/HO 95% MLD/HTO OIL OR CONDENSATE 95% MD/H<sup>2</sup>0 95% MD/H<sup>2</sup>o 95% MLD/H<sup>2</sup>0 Gravity GAS TO SURFACE MLD @ SURFACE BSW = 85% MLD MLD @ SURFACE Rate SEPARATOR Temp. PRESSURE AND TEMPERATURE MEASUREMENTS Cg. press. 2080 2080 2080 2080 2080 2080 2080 2080 2080 2080 2080 2080 2080 2080 2080 2080 WELL HEAD Tg. press 10 12 2 12 12 2 12 2 2 12 12  $\overline{\mathbf{c}}$ 14 14 12 12 11 Tg. Temp. 12 13 12 12 2 12 12 12 12 12 12 13 12 12 12 12 2 Pressure BOTTOM HOLE SCHLUMBEHGER Temp. **FESTING** Cumul 770 710 740 650 680 530 560 590 099 MINS 500 620 320 350 380 440 470 DATE - TIME Time 3730 0800 9610 00/ 009 9630 0330 0430 )500 0530 0030 0100 0130 0200 0230 0300 0400

Units Section GAS 43% CO, GAS 45% (CO.) GAS 54%  $\Omega_2$ GAS 45% (CD), GOR OPEN CHOKE MANIFOLD HOLD PRESSURE ON VARIABLE CHOKE COMPINE REVERSE CIRCULATING ADJUST VARIABLE CHOKE 28 Air = 15% EMULSION Gravity 2% EMJESION 2% EMULSION 2% EMJESION Report No.: - CLOSE KILL VALVE AS REQUIRED TO MAINTAIN PRESSURE ON TUBING Page: PROD. RATES AND FLUID PROPERTIES Rate WELL TESTING DATA SHEET — (Continuation) 3% MD 3% MLD 3% M.D 3% MD BLEED OFF PRESSURE BSW OIL OR CONDENSATE Gravity BSW =  $90\% \text{ H}^2\text{O}$  $BSW = 95\% H^2O$  $BSW = 95\% H^2O$  $BSW = 95\% H^2O$ - 2800 P\$1 COMPINE BULLHEADING 11-10-89 CLOSE CHOKE MANIFOLD Rate VALVE OPEN KILL WALVE CLOSE MIDRE OPEN MIDRU OPEN KILL CLOSE PCT OPEN PCT SEPARATOR Temp. PRESSURE AND TEMPERATURE MEASUREMENTS Tg. Temp. Tg. press | Cg. press. PSIG 2050 2050 2050 2050 2050 WELL HEAD C PSIG 13 13 12 12 12 13 13 13 13 13 Pressure BOTTOM HOLE SCHLUMBEAGER Temp. **FESTING** Cumul 800 830 860 890 896 DATE — TIME 1210 1212 9001 1158 1204 Time 1014 1026 1030 0830 0060 0930 1000 1011

## **EXAL REPORT (DST #1)**

#### EXAL

#### RESERVOIR SERVICES



# PRECISION PRESSURE/TEMPERATURE MEASUREMENT

#### WELL SITE TEST REPORT

Client : Petrofina Exploration Australia A.S.

Well : Anemone # 1A

Dates : 22nd September to 4th October, 1989

Country : Australia

Rig/Platform : Zapata Arctic

Field : Wildcat

Test : DST # 1

Exal Job Number : AB 256

Perforation Interval : 4599-4618m mdrkb

4629~4652m mdrkb

Client Engineer : D. Sousa

Exal Engineer : J. Walker

## EXAL

## RESERVOIR SERVICES



## TECHNICAL INDEX

1	Introduction.
2	Sequence of events.
3	Gauge information.
4	Diagrams : Test String.  Gauge carrier.
5	Real time pressure/temperature plots - EMS 73033.
6	Real time pressure/temperature data - EMS 73033.
7	Panoil analysis - EMS 73033.
8	Real time pressure/temperature plots - EMS 75188.
9	Real time pressure/temperature plots - EMS 71532.
10	Real time pressure/temperature plots - EMS 74907.
11	Gauge comparison.

# EXAL RESERVOIR SERVICES



#### INTRODUCTION

Exal Reservoir Services ran four EMS 700 electronic pressure and temperature gauges into well Anemone # 1A on the Zapata Arctic as part of DST # 1. The four gauges S/N's 71532, 75188, 73033 and 74907 were run on two Exal gauge carriers APS-029 and APS-030.

The test objectives were fourfold, one to determine the type and mobility of any reservoir fluid, two to determine basic productivity characteristics, three to measure pressure/temperature effects over time, and four to obtain PVT samples.

As far as Exal Reservoir Services were concerned the test was a complete success as all gauges worked well and recorded data as per their respective control programmes.

Gauge no. 73033 was chosen as the primary gauge for analysis and for the final report.

Client : Petrofina Australia Location: Zapata Arctic

Test No.: DST # 1

Engineer: J.Walker
Well No.: Anemone # 1A

Time	Description of Event.
13:57:00 13:58:00 14:00:00 14:01:00 17:35:00 24/09/89	Started gauge No. 75188. Sample rate 0.008 hours Started gauge No. 73033. Sample rate 0.016 hours Started gauge No. 71532. Sample rate 0.008 hours Started gauge No. 74907. Sample rate 0.016 hours Gauges installed in 2 gauge carriers and run in hole
17:00:00 22:30:00 <b>25/09/</b> 89	Schlumberger run correlation log Space out below fluted hanger
05:00:00 07:00:00 09:39:00 13:00:00 16:55:00 17:10:00 19:24:00 19:31:00	Pressure tested full string against PCT to 9000 psi Commenced Flowhead rig up Packer set at 4330 m RKB Schlumberger run correlation log Commenced opening MIDRV Commenced reversing out tubing contents to 1.52 SG mud Stopped reverse circulating Closed flow valve circulating through tubing to clear restriction at MIDRV Continued circulating and reverse circulating to clear restriction in MIDRV
26/09/89	
05:58:00 06:00:00	MIDRV restriction clear Spotted viscous pill and circulated contents of tubing to water
07:55:00 08:12:00 08:30:00 12:05:00 12:55:00 13:30:00 15:11:00 15:25:00 15:49:00 16:15:00 16:16:00 16:17:00 16:24:00 17:29:00	Closed MIDRV, functioned tested good Rigged up Schlumberger slickline Pressure tested lubricator Pressure tested between choke manifold and PCT Pressured up annulus to open PCT Commenced run in hole with slickline drop bar assembly Commenced attempts to pass through restriction above PCT Perforating guns detonated Commenced pull out of hole with drop bar assembly Rigged down slickline Opened Well at choke manifold to burner flare on 2" adjustable choke Vacuum at surface Water cushion at bubble hose, diverted flow to gauge tank Decreased choke to 16/64" adjustable choke Shut-in Well at PCT and closed choke manifold Opened PCT
17:32:00 17:30:00 18:27:00 27/09/89	Opened Well at choke manifold to gauge tank on 16/64" adjustable choke Shut-in Well at PCT and closed choke manifold Opened PCT

Location: Zapata Arctic

Test No.: OST # 1

Engineer: J.Walker

Well No.: Anemone # 1A

Time	Description of Event.
05:48:00	Opened Well at choke manifold to gauge tank on 16/64" fixed choke
06:00:00	Flow diverted to burner
06:05:00	Changed choke to 20/64" adjustable choke
06:06:00	Increased choke to 24/64" adjustable choke
06:10:00	Increased choke to 32/64" adjustable choke
07:05:00	PCT closed due to washed out manifold valve
07:10:00	PCT opened
08:05:00	Increased choke to 48/64" adjustable choke
12:50:00	Changed choke to 48/64" fixed choke
14:10:00	Flow diverted to burner
16:00:00	Flow diverted through heater
16:15:00	Decreased choke to 32/64" fixed choke
16:30:00	Flow diverted through separator
18:00:00	By-passed separator
18:15:00	Flow diverted through separator
28/09/89	
01:59:30	Shut-in well at choke manifold
02:40:00	Rigged up Schlumberger wireline
05:25:00	Commenced run in hole with Schlumberger MUST and
	TPT gauge
07:38:00	Opened Well at choke manifold slowly increased to
	1/2" adjustable choke, flow on by-pass to burner
07:45:00	Changed choke to 1/2" fixed choke
07:50:00	Flow diverted to heater
08:03:00	Shut-in Well at choke manifold, small fire at heater
08:05:00	Fire extinguished
11:35:30	Opened Well at choke manifold on 3/16" adjustable choke Flow on by-pass to flare
11:38:00	Increased choke to 1/4" adjustable choke
11:41:00	Changed choke to 1/2" fixed choke
13:30:00	Flow diverted through separator
29/09/89	ı
00:55:00	Shut-in Well at choke manifold
03:45:00	Schlumberger TPT gauge fails
04:47:00	Commenced pull out of hole with wireline, MUST
•	and TPT gauge remain latched downhole
07:35:00	Schlumberger at surface
07:37:00	Closed lubricator valve
07:39:00	Closed swab valve
08:00:00	Unable to open lubricator valve
08:07:00	Closed master valve
08:09:00	Bled off pressure above master valve
	through choke manifold
08:15:00	Rigged down Schlumberger lubricator
08:41:00	Rectified problem with swab valve
	Closed swab and opened master valve

Location: Zapata Arctic

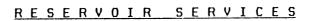
Test No.: DST # 1

Engineer: J.Walker
Well No.: Anemone # 1A

Date : 01/10/89

Time	Description of Event.
07:20:00	Opened Well at choke manifold on 1/4" fixed choke Flow by-passed to burner
09:54:00	Shut-in Well at choke manifold
11:48:00	Opened Well at choke manifold on 1/8" fixed choke Flow by-passed to burner
13:22:00	Flow diverted through separator
21:00:00	Commenced taking PVT samples at separator
23:45:00	Increased choke to 1/4" fixed choke
02/10/89	
02:20:00	Shut-in Well at choke manifold
02:33:00	Commenced bullheading formtion
16:30:00	Stopped bullheading formation, observed well
18:10:00	Closed PCT
18:14:00	Attempted to open MIDRV
20:56:00	MIDRV failed to open
21:22:00	Opened SHORT
21:32:00	Commenced reverse circulation
22:00:00	Stopped reverse circulation (trip tank overflow)
23:19:00	Continued reverse ciculation
03/10/89	
03:32:00	Unseated packer
	End of DST # 1

#### EXAL





#### GAUGE INFORMATION

Client: Petrofina Exploration Australia S.A. Client Engineer: D. Sousa

Field: Wildcat Well: Anemone # 1A Test : DST # 1

Date : Z2nd September, 1989 Job No. : AB Z56

Perforations: 4599-4618m mdrkb

4629-4652m mdrkb

Gauge No	75188	73033	71532	74907
Gauge type	EMS 700	EMS 700	EMS 700	EMS 700
Transducer range (psia)	10000	10000	15000	15000
Start time	13:57	13:58	14:00	14:01
Start date	22/09/89	22/09/89	22/09/89	22/09/89
Delay	40hrs	40hrs	40hrs	40hrs
Sample rate	0.008hrs	0.016hrs	<b>0.0</b> 08hrs	0.016hrs
Recording duration	207hrs	374hrs	207hrs	374hrs
Recording start time	05:58 24/09/89	05:59 24/09/89	06:01 24/09/89	06:02 24/09/89
Memory capacity full	05:15 01/10/89	03:58 08/10/89	05:18 01/10/89	04:01 08/10/89
Position of carrier	Upper Carrier	Upper Carrier	Lower Carrier	Lower Carrier
Sensing depth (m mdrkb)	4267.15	4267.15	4298.63	4298.63

#### EXAL RESERVOIR SERVICES LIMITED

WELL : Anemone # 1A FIELD : Wildcat LOCATION : Zapata Arctic TEST : DST # 1

CUSTOMER : Petrofina Australia ENGINEER : J.Walker DATE : 22/09/89 PERFORATIONS : 4599-4618m 4629-4652m

		Depth m RKB	Length Meters	O.D. Inches	I.D. Inches
	TUBING 3 1/2"VAM 12.7 # L80 2	255.38	3747.17	3.500	2.625
		02.55	.31	4.750	2.688
o	M.U.S.T	02.86	3.12	5.250	2.250
	SLIP JOINT [OPEN]	05.98	8.89	5.000	2.250
	SLIP JOINT [1/2 OPEN]	14.87	8.13	5.000	2.250
l hdl	SLIP JOINT [CLOSED]	23.00	7.07	5.000	2.250
	CROSS OVER 3 1/2"IF X 3 1/2"XH	30.07	.52	4.750	2.438
	DRILL COLLARS [6 STANDS]	30.60	166.10	4.750	2.313
	CROSS OVER 3 1/2"XH X 3 1/2"IF	96.70	.43	4.813	2.313
	S.H.O.R.T. REVERSING VALVE	97.13	.86	5.000	2.400
	DRILL COLLARS [1 STAND]	98.00	27.25	4.750	2.250
	M.I.D.R.V	25.25	2.91	5.000	2.250
$\blacksquare$	R.A. MARKER SUB (PIP TAG 8 4228.78 m RKB) 42	28.15	.80	4.760	2.625
	DRILL COLLARS [1 STAND]	29.05	27.18	4.750	2.250
ı	P.C.T	56.23	7.00	5.000	2.250
0	H.R.T. [CLOSED]	63.23	1.62	5.000	2.250
	GAUGE CARRIER EMS # 75188 & EMS # 73033 42	64.84	2.97	5.375	2.300
	DRILL COLLARS [1 STAND]	.67.81	28.51	4.750	2.250
	GAUGE CARRIER EMS # 71532 & EMS # 74907 42	98.32	2.97	5.375	2.300
	DRILL COLLARS [1 STAND]	99.29	27.71	4.750	2.250
	JARS [CLOSED]	27.00	1.99	5.000	2.250
	ONTO COLOCULA, I I I I I I I I I I I I I I I I I I I	28.99	.52	5.000	2.250
		29.51	.25	4.750	2.438
	POSITRIEVE PACKER [MID RUBBERS AT 4330.79 m RKB] . 43	29.76	1.66	5.500	2.400
	CROSS OVER 2 7/8"EUE X 2 3/8"EUE	31.42	.31	3.625	2.000
	TUBING 2 3/8"EUE [25 JOINTS]	31.73	239.82	2.875	1.901
	GUN DROP SUB	71.55	. 46	3.000	2.000
	TUBING 2 3/8 EUE [1 JOINT]	72.01	9.59	2.875	1.901
	VENT SUB	81.60	.92	3.000	1.875
	TUBING 2 3/8"EUE [1 JOINT]	82.52	9.58	2.875	1.901
	MECHANICAL FIRING HEAD 45	92.10	2.05	3.375	
. 🏻	SAFETY SPACER		4.85	3.375	
	T.C.P. GUNS [22g HMX 6 SPF 60 DEGREE PHASING] 45	99.00	53.00	3.375	
	BULLNOSE		.20	3.375	
_					

## EXAL RESERVOIR SERVICES LIMITED

#### GAUGE CARRIER DETAILS

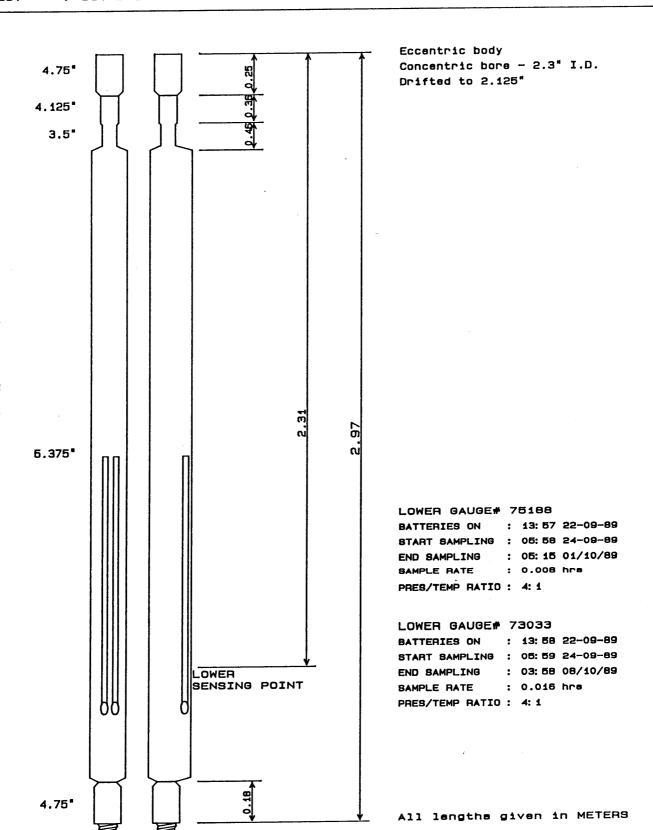
Anemone # 1A WELL FIELD

CUSTOMER: Petrofina Australia ENGINEER: J.Walker

Wildcat LOCATION : Zapata Arctic : J.Walker : 22/09/89

: DST # 1 TEST

DATE CARRIER : APS 029



## EXAL RESERVOIR SERVICES LIMITED

#### GAUGE CARRIER DETAILS

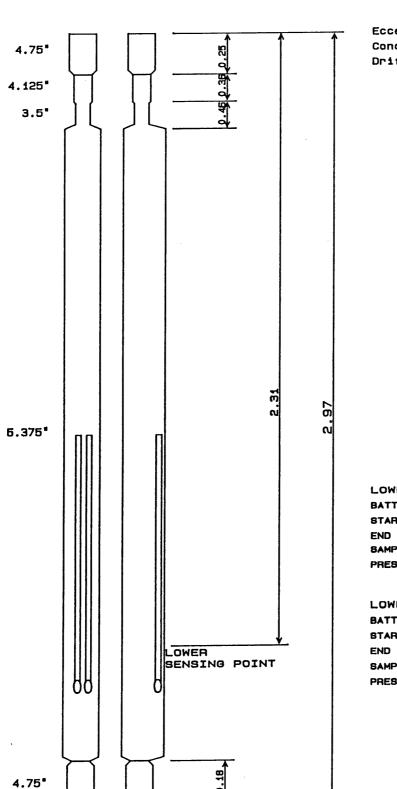
WELL Anemone # 1A

FIELD Wildcat LOCATION : Zapata Arctic

TEST : DST # 1 CUSTOMER: Petrofina Australia ENGINEER: J.Walker

J.Walker 22/09/89 DATE

CARRIER : APS 030



Eccentric body

Concentric bore - 2.3" I.D.

Drifted to 2.125"

LOWER GAUGE# 71532

BATTERIES ON : 14:00 22-09-89 START SAMPLING : 06:01 24-09-89 : 05: 18 01-10-89 END SAMPLING SAMPLE RATE ; 0.008 hrs

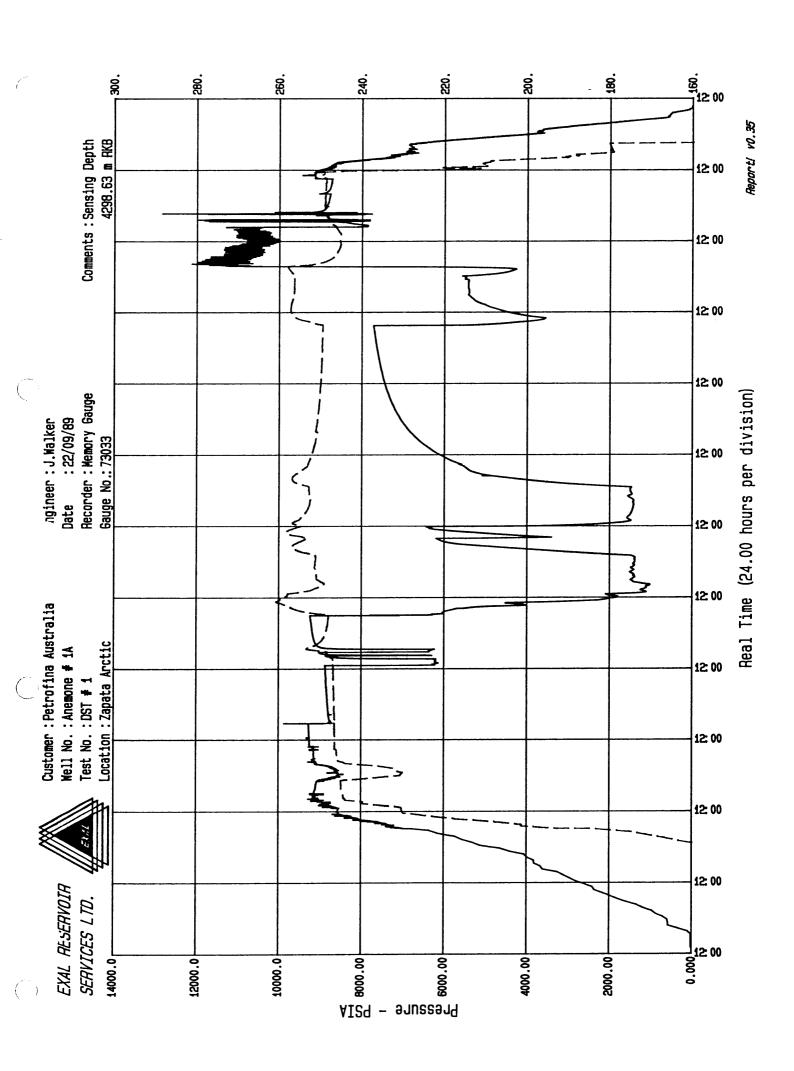
PRES/TEMP RATIO : 4:1

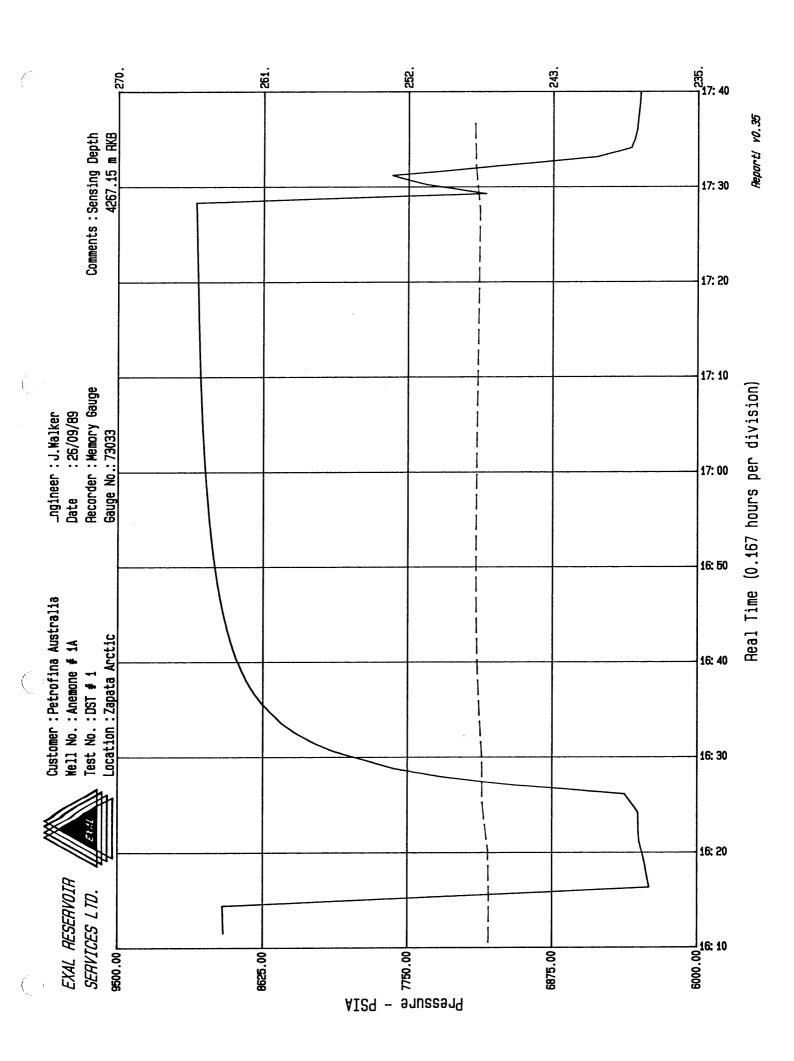
LOWER GAUGE# 74907

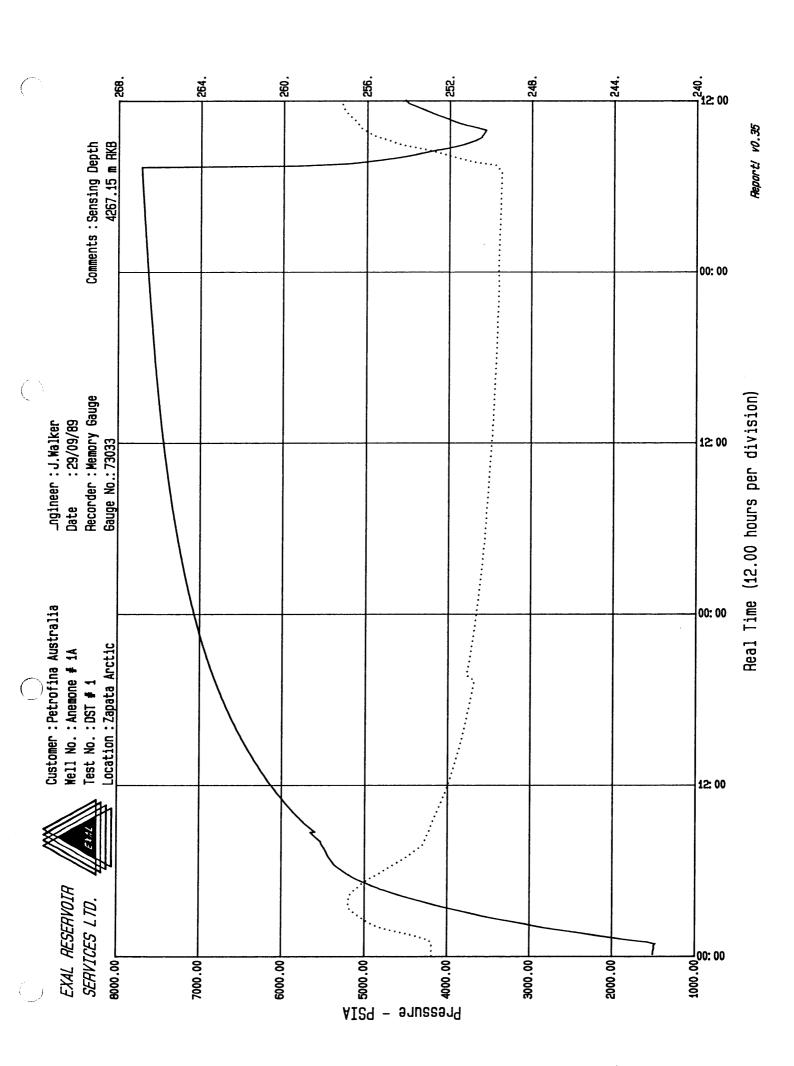
BATTERIES ON : 14:01 22-09-89 START SAMPLING : 08: 02 24-09-89 END BAMPLING : 04: 01 08-10-89 SAMPLE RATE : 0.016 hrs

PRES/TEMP RATIO : 4: 1

All lengths given in METERS











#### Memory Gauge Data.

Customer . . . : Petrofina Australia

Location . . . : Zapata Arctic

Well No. . . . : Anemone # 1A

Test No. . . . : DST # 1

Gauge No . . . : 73033

Engineer . . . : J.Walker

Comments . . . : Sensing Depth 4267.15m RKB

Printout of REDUCED DATA

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033 Well No.: Anemone # 1A

Real Time	Delta Time	Pressure	Темр	Pn-P( n-1)
HH:MM:SS.	Hours	PSIA	Deg F	ΡŞΊΑ
13:57:00	Started naune	No. 75188	Sample rate 0.0	008 hours
13:58:00	Started name	No. 73033.	Sample rate 0.0	016 hours
14:00:00	Started pauge	No. 71532.	Sample rate 0.0	008 hours
14:01:00	Started name	No. 74907.	Sample rate 0.0	016 hours
17:35:00	Gauges install	ed in 2 gau	ge carriers and	d run in hole
17:00:00	Schlumberger r	un correlat	ion log	•
22:30:00	Space out belo	w fluted ha	nger	
05:00:00	Pressure teste	ed full stri	ng against PCT	to 9000 psi
07:00:00	Commenced Flow			
09:30:13	67.537	9026.83		9026.83
09:36:56	67.649		246.45	-
<b>09:39:00</b>	Packer set at			
09:42:42	67.745	9240.86		214.03 1.89
09:45:35	67.793	9242.75	240 42	1.03
09:51:20	67.889	0047 70	246.42	4.95
09:54:13	67.937	9247.70		2.82
09:59:59	68.033	9250.52 9251.88		1.37
10:02:52	68.081	9251.88		2.24
10:08:37	68.177 68.225	9254.88		0.75
10:11:30	68.321	9255.56		0.68
10:17:16	68.369	3233,30	246.39	• • • • • • • • • • • • • • • • • • • •
10:20:08 10:25:54	68.465	9255.96	2.0.00	0.40
10:23:34	68.561	9246.60		-9.37
10:31:40	68.609	32 13 13 2	246.39	
10:40:18	68.705	9253.13		6.53
10:43:11	68.753	9253.82		. <b>0.68</b>
10:48:56	68.849		246.38	
10:51:49	68.897	9253.21	•	-0.60
10:57:35	68.993	9253.95		0.74
11:00:28	69.041	9253.47		-0.48
11:06:13	69.137	9253.19		-0.28
11:09:06	69.185	9253.51		0.32
11:14:52	69.281	9254.07		0.56
11:17:44	69.329		246.39	0.40
11:23:30	69.425	9254.56		0.48
11:29:16	69.521	9255.41	n.c. 70	0.86
11:32:08	69.569	2055 22	246.39	0.55
11:37:54	69.665	9255.96		0.40
11:40:47	69.713	9256.37	240 70	0.40
11:46:32	69.809	2255 25	246.39	0.48
11:49:25	69.857	9256.85	246.40	<b>0.40</b>
11:56:08	69.969	0257 47	440.4W	0.62
11:59:01	70.017	9257.47 9258.31		Ø.85
12:04:47	70.113	9258.31		0.35
12:07:40	70.161	9260.34		1.68
12:13:25	70.257 70.305	9261.49		1.15
12:16:18	70.401	9255.94	•	-5.56
12:22:04 12:27:49	70.497	9257.17		1.23
12.27.43	(49,49)	0201+11		

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033.

Well No.: Anemone # 1A

	D 14 T:	0	T	Pn-P( n-1 )
Real Time	Delta Time	Pressure PSIA	Temp Deg F	PSIV PN-F(N-T)
HH:MM:SS	Hours	Laru	neñ i	1 3411
12:30:42	70.545	9321.51		64.34
12:36:28	70.641	9317.36		-4.16
12:39:20	70.689		246.48	
12:45:06	70.785	9254.00		-63.35
12:47:59	70.833	9255.66		1.65
12:53:44	70.929		246.40	
12:56:37	70.977	9258.03		2.38
13:00:00	Schlumberger re	un correlation	n log	
13:02:23	71.073	9258.80		0.76
13:05:16	71.121	9259.00		0.20
13:11:01	71.217	9259.86		0.86
13:16:47	71.313	9261.14		1.29
13:19:40	71.361	9261.22		0.08
13:25:25	71.457	9261.71		0.48
13:28:18	71.505	9261.48		-0.23
13:34:04	71.601	9261.84		0.36
13:36:56	71.649		246.42	
13:42:42	71.745	9262.92		1.07
13:45:35	71.793	9263.40		0.48
13:51:20	71.889		246.43	
13:54:13	71.937	9263.77		0.38
13:59:59	72.033	9264.10		0.32
14:02:52	72.081	9263.98		-0.12
14:08:37	72.177	9263.88	5.4545	-0.09
14:15:20	72.289		246.42	1.00
14:18:13	72.337	9264.97		1.09
14:23:59	72.433	9264.74		-0.23
14:26:52	72.481	9265.21		0.47
14:32:37	72.577	9266.07		0.86 0.00
14:35:30	72.625	9266.07		-0.04
14:41:16	72.721	9266.03	245 47	-0.04
14:44:08	72.769	0255 00	246.43	0.87
14:49:54	72.865	9266.90		0.04
14:52:47	72.913	9266.94	246.43	0.04
14:58:32	73.009	9268.89	240.43	1.95
15:01:25	73.057 73.153	9269.45		0.56
15:07:11	73.193	3203.43	246.44	0.00
15:12:56		9269.02	270.77	-0.43
15:15:49	73.297	9268.85		-0.17
15:21:35	73.393	9268.42		-0.43
15:24:28	73.441	9268.85		0.43
15:30:13	73.537	9269.18		0.34
15:33:06	73.585	9269.33		0.15
15:38:52	73.681	3203.33	246.48	
15:41:44	73.729	9270.35	270.40	1.02
15:47:30	73.825 73.873	9270.19		-0.16
15:50:23	73.969	J210.1J	246.48	
15:56:08	73.363 74.017	9271.40	<u> </u>	1.21
15:59:01 16:04:47	74.017	9271.40		0.00
10.04.47	(4.113	3211.70		0.40

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033 Well No.: Anemone # 1A

		_	<b>T</b>	Pn-P(n-1)
Real Time	Delta Tim		Temp	PSIA
HH:MM:SS	Hours	PSIA	Deg F	. a fu
16:10:32	74.209		246.48	
16:13:25	74.257	9271.24		-0.16
16:19:11	74.353	9271.88		0.64
16:22:04	74.333	9272.00		0.12
16:27:49	74.497	9272.32		0.32
16:30:42	74.437	9272.32		0.00
16:37:25	74.657	9272.49		0.16
16:40:18	74.705	9272.69		0.20
16:46:04	74.703	9273.51		0.82
16:48:56	74.849	3213.31	246.48	
16:54:42	74.945	9273.95		0.44
16:55:00	Commenced op		-	
17:00:28	75.041	9274.38		0.43
17:00:20	75.089	3214.30	246.48	
17:03:20	75.185	9274.84		0.46
17:10:00			uhion conten	ts to 1.52 SG mud
17:11:59	75.233	9275.80	dorng domes.	0.97
17:17:44	75.329	3213.00	246.48	- · · · · · · · · · · · · · · · · · · ·
	75.377	9270.03	210110	-5.77
17:20:37 17:26:23	75.473	9802.31		532.29
	75.521	8720.57		-1081.75
17:29:16	75.617	8763.96		43.39
17:35:01	75.665	8766.22		2.26
17:37:54		8784.23		18.01
17:43:40	75.761	0704.23	246.46	10.01
17:46:32	75.809	8737.39	240.40	-46.84
17:52:18	75.905 76.001	8743.42		6.03
17:58:04	76.049	0143.42	246.46	
18:00:56	76.145	8754.47	, 240.40	11.06
18:06:42	76.193	8756.38		1.90
18:09:35	76.289	0130.50	246.52	
18:15:20	76.337	8756.44	240.32	0.07
18:18:13	76.433	8758.77		2.33
18:23:59		8755.95		-2.82
18:26:52	76.481 76.577	8761.79		5.83
18:32:37	76.625	8763.48		1.69
18:35:30 18:41:16	76.721	8766.75		3.27
18:44:08	76.769	0,001.0	246.40	v
	76.865	8770.39		3.64
18:49:54		8775.77		5.39
18:56:37	76.977	8776.42		0.65
18:59:30	77.025			1.77
19:05:16	77.121	8778.20	246.52	1.11
19:08:08	77.169	0700 01	40.34	1.81
19:13:54	77.265	8780.01		- <b>0.</b> 36
19:16:47	77.313	8779.65	מאני במ	םכ.ש-
19:22:32	77.409		246.52	
19:24:00	• •	rse circulati	uō	3.35
19:25:25	77.457	8783.00		
19:31:00			rıng turouğh	tubino to clear
	restriction	at MIURV		

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

	Real Time	Delta Time	Pressure	Темр	Pn-P( n-1)
•	HH:MM:SS	Hours	PSIA	Deg F	PSIA
	10.71.11	99 CC7	0701 77		-1.28
	19:31:11	77.553	8781.72 8783. <b>0</b> 8		1.36
	19:34:04	77.601			2.83
	19:39:49	77.697	8785.91		-1.84
	19:42:42	77.745	8784.07		
	19:48:28	77.841	8782.56		-1.51 2.85
	19:54:13	77.937	8785.41		2.26
	19:57:06	77.985	8787.67		3.34
	20:02:52	78.081	8791.01	245 40	3.34
	20:05:44	78.129	0777 07	246.48	2.82
	20:11:30	78.225	8793.83		-6.36
	20:14:23	78.273	8787.48		
	20:20:00	Continued circu		reverse circu.	rattiin to creai
	20.20.00	restriction in	LITOKA	246.49	
	20:20:08	78.369 78.417	8727.96	240.43	-59.51
	20:23:01 20:28:47	78.513	8722.72		-5.25
		78.561	8796.06		73.34
	20:31:40 20:37:25	78.657	8797.62		1.56
	20:37:23	78.753	8797.95		0.33
	20:45:11	78.801	8784.71		-13.24
	20:51:49	78.897	8790.97		6.26
	20:51:43	78.945	8791.04		0.07
	21:00:28	79.041	8791.28		0.24
	21:00:20	79.089	0731.20	246.48	<b>U42</b> T
	21:03:20	79.185	8791.50	240.40	0.23
	21:11:59	79.233	8796.98		5.48
	21:18:42	79.345	8797.88		0.90
	21:21:35	79.393	8798.44	,	0.56
	21:27:20	79.489	0130.44	246.53	47.00
	21:30:13	79.537	8799.90	240.33	1.46
	21:35:59	79.633	8800.53		0.64
	21:41:44	79.729	0000.33	246.56	
	21:44:37	79.777	8803.34	210.00	2.81
	21:50:23	79.873	8804.93		1.59
	21:53:16	79.921	8805.31		0.38
	21:59:01	80.017	8805.08		-0.24
	22:01:54	80.065	8805.55		0.48
	22:07:40	80.161	8807.18		1.63
	22:10:32	80.209		246.59	•
	22:16:18	80.305	8806.43		-0.76
	22:19:11	80.353	8806.82		0.40
	22:24:56	80.449		246.56	
	22:27:49	80.497	8806.84		0.01
	22:33:35	80.593	8807.50		0.66
	22:39:20	80.689		246.53	
	22:42:13	80.737	8805.70		-1.80
	22:47:59	80.833	8806.72		1.02
	22:50:52	80.881	8807.43		0.72
	22:56:37	80.977	8808.41		0.98
	22:59:30	81.025	8809.13		0.72
	00-00	3			

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

Real Time	Delta Time	Pressure	Temp	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSĮA
07.05.10	01 131	8811.00		1.87
23:05:16	81.121 81.169	טש.וופפ	246.52	1.01
23:08:08	81.169	8811.65	240.32	0.65
23:13:54	81.313	8812.16		0.52
23:16:47 23:22:32	81.409	0012.10	246.53	0,11
23:25:25	81.457	8812.37	240.00	0.21
23:23:23	81.553	8812.98		0.61
23:36:56	81.649	0012.00	246.55	
23:40:47	81.713	8814.61		1.63
23:46:32	81.809		246.56	
23:49:25	81.857	8815.34	•	0.73
23:55:11	81.953	8815.42		0.08
23:58:04	82.001	8815.69		0.26
00:03:49	82.097	8816.97		1.29
00:06:42	82.145	8817.01		0.04
00:12:28	82.241	8816.88	-	-0.13
00:15:20	82.289		246.56	
00:21:06	82.385	8817.44		0.56
00:26:52	82.481	8819.03		1.59
00:29:44	82.529		246.56	
00:35:30	82.625	8820.83		1.80
00:38:23	82.673	8821.62	<b>-</b> -	0.80
00:44:08	82.769		246.57	0.07
00:47:01	82.817	8822.55		0.93
00:52:47	82.913	8822.84		0.29
00:55:40	82.961	8823.24		0.40
01:01:25	83.057	8824.08		0.83 -0.72
01:04:18	83.105	8823.36	•	0.87
01:10:04	83.201	8824.23	246.59	<b>0.</b> 01
01:12:56	83.249	0025 35	240.33	1.11
01:18:42	83.345	8825.35 8825.64		0.29
01:24:28	83.441	0023.04	246.59	0.25
01:27:20	83.489 83.585	8825.94	240.33	0.30
01:33:06 01:35:59	83.633	8825.63		-0.32
01:41:44	83.729	0023.00	246.59	
01:44:37	83.777	8826.55		0.93
01:50:23	83.873	8827.19		0.64
01:53:16	83.921	8826.36		-0.84
01:59:01	84.017	8828.00		1.64
02:02:52	84.081	8828.60		0.60
02:08:37	84.177	8828.83		0.24
02:11:30	84.225	8828.87		0.04
02:17:16	84.321	8829.36		0.49
02:23:01	84.417	8829.60		0.24
02:25:54	84.465	8829.72		0.12
02:31:40	84.561	8829.28		-0.44
02:34:32	84.609		246.62	
02:40:18	84.705	8831.03		1.75
02:43:11	84.753	8831.35		0.32

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

Real Time	Delta Time	Pressure		Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIĄ
02.40.55	84.849		. 246.62	
02:48:56	84.897	8832.70		1.35
02:51:49	84.897	8833.62		0.91
02:57:35		8834.06		0.44
03:00:28	85.041 85.137	8834.00		0.01
03:06:13	85.185	8834.43		0.36
03:09:06	85.281	8834.19		-0.24
03:14:52	85.377	8835.58		1.39
03:20:37	85.425	8836.03		0.45
03:23:30	85.521	8836.12		0.09
03:29:16	85.569	0030.12	246.64	0.00
03:32:08	85.665	8837.56	240.04	1.43
03:37:54	85.713	8836.84		-0.72
03:40:47	85.8 <b>0</b> 9	6070.04	246.64	0.12
03:46:32	85.857	8837.58	240.04	0.74
03:49:25	85.953	8838.58		0.99
03:55:11	86.001	8838.75		0.17
03:58:04	86.097	8839.23		0.48
04:03:49	86.193	8840.04		0.81
04:09:35	86.241	8840.63		0.60
04:12:28	86.337	8841.48		0.85
04:18:13		8842.50		1.02
04:22:04	86.401	8842.91		0.41
04:27:49	86.497	8843.30		0.38
04:30:42	86.545	8843.34		0.04
04:36:28	86.641	0043.34	246.66	0,04
04:39:20	86.689 86.785	8842.42	240.00	-0.91
04:45:06	86.833	8843.86		1.43
04:47:59	86.929	0045.00	246.68	,,,,
04:53:44 04:56:37	86.977	8843.79	210.00	-0.07
05:02:23	87.073	8844.89	•	1.10
05:02:23 05:08:08	87.169	0044.03	246.69	
05:11:01	87.103	8845.55	240.00	0.66
Ø5:16:47	87.313	8845.45		-0.11
05:10:47	87.361	8840.51		-4.93
05:25:25	87.457	8845.14		4.63
<b>05:23:23 05:28:18</b>	87.505	8845.70		0.56
05:26:18 05:34:04	87.601	8846.22		0.52
05:36:56	87.649	. 0040122	246.68	
05:42:42	87.745	8848.32		2.11
05:45:35	87.793	8848.84		0.52
05:45:35 05:51:20	87.733	8040.04	246.70	3102
	87.937	8849.78	240.10	0.94
05:54:13	87.937 MIDRV restricti			0.01
05:58:00	88.033	8851.35		1.57
05:59:59	Conttod vices:		circulated cont	
<b>06:00:00</b>		hirr and	CAI CULUICU COITE	
00.05.44	to water 88.129		246.71	, ,
06:05:44	88.177	8851.95	LTU-11	0.60
06:08:37 06:14:23	88.273	8852.53		<b>0.58</b>
VD:14:23	00.213	0002.00		

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

Real Time	Delta Time	Pressure	Темр	Pn-P( n-1 )
HH:MM:SS		PSIA	Deg F	PSĮA
				•
06:17:16	88.321	8853.22		0.69
06:23:01	88.417	8853.64		0.42
06:25:54	88.465	8852.50		-1.14
06:31:40	88.561	8853.58		1.07
06:34:32	88.609		246.71	
06:40:18	88.705	8854.51		0.93
06:44:08	88.769		246.71	0.40
06:49:54	88.865	8854.98		0.48
06:52:47	88.913	8855.58	0.45 70	0.60
06:58:32	89.009	0.050 40	246.72	0.92
07:04:18	89.105	8856.49		Ø.52 Ø.12
07:07:11	89.153	8856.61	240 72	V.12
07:12:56	89.249	0057.01	246.72	1.19
07:15:49	89.297	8857.81		0.08
07:21:35	89.393	8857.89	•	<b>0.2</b> 8
07:24:28	89.441	8858.17		0.69
07:30:13	89.537	8858.86 8859.32		0.46
07:33:06	89.585	8859.57		0.25
07:38:52	89.681 89.729	8855.57	246.75	0.25
07:41:44		8859.86	240.73	0.29
07:47:30	89.825 89.921	8860.70		0.84
07:53:16	Closed MIDRY,		tested good	
<b>07:55:00</b> <b>07:56:0</b> 8	89.969	Tunctioned	246.75	
08:01:54	90.065	8862.76	2.0	2.06
08:01:54	90.113	8863.19		0.44
08:10:32	90.209	0005.10	246.76	τ,
08:12:00	Rigged up Schl	umberoer sl		
08:13:25	90.257	8850.88	•	-12.31
08:19:11	90.353	8848.71		-2.18
08:22:04	90.401	8849.92		1.21
08:27:49	90.497	8851.97		2.06
08:30:00	Pressure teste	ed lubricate	r	
08:30:42	90.545	8853.28		1.31
08:36:28	90.641	8855.95		2.67
08:39:20	90.689		246.76	
08:45:06	90.785	8858.18		2.23
08:50:52	90.881	8857.90		<b>-0.28</b> .
08:53:44	90.929		246.77	
08:59:30	91.025	8859.41		1.51
09:02:23	91.073	8859.77		0.36
09:09:06	91.185	8860.46		0.69
09:11:59	91.233	8861.18		0.72
09:17:44	91.329		246.77	
09:20:37	91.377	8862.48		1.30
09:26:23	91.473	8862.88		0.40
09:29:16	91.521	8862.68		-0.20
09:35:01	91.617	8863.31		0.64
09:37:54	91.665	8863.37		0.05
09:43:40	91.761	8863.59		0.23

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

Date : 26/09/89

			~	Pn-P(n-1)
Real Time		Pressure	Temp	PSIA
HH:MM:SS	Hours	PSIA	Deg F	Larin
09:49:25	91.857	8863.47		-0.12
	91.905	8863.83		0.36
09:52:18	92.001	8863.91		0.08
09:58:04	92.049	0003.31	246.78	0.00
10:00:56	92.145	8865.04	240.70	1.13
10:06:42				0.48
10:09:35	92.193	8865.52	246.78	<b>v.</b> 40
10:15:20	92.289	8865.68	240.70	0.16
10:18:13	92.337			-0.44
10:23:59	92.433	8865.24		0.65
10:26:52	92.481	8865.89		Ø.90
10:32:37	92.577	8866.79		Ø.29
10:35:30	92.625	8867.08		1.10
10:41:16	92.721	8868.18		
10:47:01	92.817	8868.32		0.13
10:49:54	92.865	8868.67		0.36
10:55:40	92.961	<sub>-</sub> 8869.59		0.92
10:58:32	93.009		246.80	
11:04:18	93.105	8869.59		0.00
11:07:11	93.153	8870.39		0.80
11:12:56	93.249		246.81	
11:15:49	93.297	8870.52		0.13
11:21:35	93.393	8870.63		0,11
11:24:28	93.441	8870.67		0.04
11:31:11	93.553	8870.32		-0.35
11:36:56	93.649		246.81	
11:39:49	93.697	8870.16		-0.16
11:45:35	93.793	8870.32		0.16
11:48:28	93.841	8871.00		0.68
11:54:13	93.937	8872.18		1.18
11:57:06	93.985	8872.15		-0.03
12:02:52	94.081	8872.35		0.20
12:05:00	Pressure tested	between c	hoke manifold a	ind PCT
12:05:44	94.129		246.81	
12:11:30	94.225	8872.19		-0.16
12:14:23	94.273	8872.43		0.24
12:20:08	94.369		246.81	
12:23:01	94.417	8873.35		0.92
12:28:47	94.513	8873.47	•	0.12
12:34:32	94.609		246.82	
12:37:25	94.657	8875.23		1.77
12:43:11	94.753	8874.34		-0.89
12:46:04	94.801	8875.07		0.73
12:51:49	94.897	8876.57		1.50
12:54:42	94.945	8879.25		2.68
12:54:42	Pressured up an		nen PCT	= - <b></b>
12:57:00	Commenced run in	n hole with	a slickline don	n bar assembly
	95.041	6577.10	, uzzunzziio di U	-2302.16
13:00:28		0011110	247.09	
13:03:20	95.089	C230 30	741.A7	-337.80
13:09:06	95.185	6239.30		10.46
13:11:59	95.233	6249.76		10.40

Client : Petrofina Australia Location: Zapata Arctic Test No.: DST # 1

Gauge No: 73033 Well No.: Anemone # 1A

		_	_	D D( 1)
Real Time		Pressure	Темр	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	bzív
			848.88	
13:17:44	95.329		246.97	16.88
13:20:37	95.377	6266.64		-47.14
13:26:23	95.473	6219.51		
13:30:00		mpts to pass	through rest	riction above PCT
13:32:08	95.569		246.94	97, 99
13:35:01	95.617	6195.81		-23.69
13:40:47	95.713	6164.64		-31.18
13:43:40	95.761	6154.20		-10.43
13:50:23	95.873	6139.78		-14.42
13:53:16	95.921	6143.19		3.40
13:59:01	96.017	6211.91	•	68.72
14:01:54	96.065	6201.97		-9.94
14:07:40	96.161	6210.31		8.35
14:10:32	96.209		246.90	7.04
14:16:18	96.305	6207.30		-3.01
14:19:11	96.353	6202.46		-4.84
14:24:56	96.449		246.89	0.40
14:30:42	96.545	6202.94		0.48
14:33:35	96.593	6201.51		-1.43
14:39:20	96.689		246.89	
14:42:13	96.737	6200.26		-1.25
14:47:59	96.833	6202.51		2.25
14:50:52	96.881	6197.60		-4.91
14:56:37	96.977	6198.96		1.36
14:59:30	97.025	6199.14		0.18
15:05:16	97.121	6219.34		20.21
15:08:08	97.169		246.90	•
15:11:00	Perforating gur	ns detonated	•	
15:13:54	97.265	6883.00		663.66
15:19:40	97.361	7856.52		973.51
15:22:32	97.409		247.22	
15:25:00	Commenced pull		with drop ba	r assembly
15:28:18	97.505	8378.48		521.96
15:31:11	97.553	8472.94		94.46
15:36:56	97.649		247.54	
15:39:49	97.697	8628.20		155.26
15:45:35	97.793	8688.09		59.89
15:48:28	97.841	8729.93		41.84
15:49:00	Rigged down sli	ickline		
15:54:13	97.937	8786.12		56.19
15:57:06	97.985	8805.88		19.76
16:02:52	98.081	8834.97		29.10
16:05:44	98.129		247.60	
16:12:28	98.241	8864.11		29.14
16:15:00	Opened Well at		old to burner	flare on
	2" adjustable o			
	Vacuum at surfa			
16:16:00	Water cushion a	at bubble hos	se diverted	flow to gauge tank
16:17:00	Decreased choke	to 16/64" a	adjustable ch	ok e
16:18:13	98.337	6311.69	=	-2552.42
.550	<del></del> .	_		

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

				•
Real Time	Delta Tim	e Pressure	Темр	Pn-P(n-1)
HH:MM:SS		PSIA	Deg F	PSIA
				•
16:21:06	98.385	6350.62		38.93
16:24:00		at PCT and cl	osed choke	manifold
16:26:52	98.481	7101.20		750.58
16:29:44	98.529		247.99	
16:35:30	98.625	8630.97		1529.76
16:38:23	98.673	8739.77		108.80
16:44:08	98.769		248.35	
16:47:01	98.817	8891.72		151.95
16:52:47	98.913	8940.06		48.34
16:55:40	98.961	8957.05		17.00
17:01:25	99.057	8982.74	-	25.68
17:04:18	99.105	8992.54		9.80
17:10:04	99.201	9006.71		14.17
17:15:49	99.297			10.09
17:18:42	99.345	9020.60		3.80
17:24:28	99.441	9028.01		7.41
17:27:20	99.489		248.16	
17:29:00	Opened PCT			
17:32:00	Opened Well	at choke manif	old to gauge	e tank on
17:30:00	16/64" adius			
17:33:06	99.585	6611.07		-2416.93
17:35:59	99.633	6369.08		-241.99
17:41:44	99.729		248.75	
17:44:37	99.777	6359.34		-9.74
17:50:23	99.873	6370.27		10.93
17:53:16	99.921	6369.95		-1.33
17:59:01	100.017	6347.21		-21.74
18:01:54	100.065	6341.58		-5.62
18:07:40	100.161	6321.55		-20.03
18:13:25	100.257	6306.21		-15.34
18:16:18	100.305	6297.55		-8.66
18:22:04	100.401	6280.24		-17.31
18:24:56	100.449		253.04	
18:27:00		at PCT and cl	osed choke r	manifold
18:31:40	100.561	7472.48		1192.24
18:34:32	100.609		253.26	
18:40:18	100.705	8559 <b>.75</b>		1087.28
18:43:11	100.753	8670.38		110.63
18:48:56	100.849		252.95	•
18:51:49	100.897	8855.41		185.03
18:57:35	100.993	8922.61		67.20
19:03:20	101.089		252.36	
19:06:13	101.137	8984.79		62.18
19:11:59	101.233	9012.20		27.42
19:14:52	10i.281	9022.31		10.11
19:20:37	101.377	9038.16		15.85
19:23:30	101.425	9045.19		7.03
19:29:16	101.521	9056.55		11.36
19:32:08	101.569		251.37	
19:37:54	101.665	9070.94		14.38
	- · · <del>-</del>			

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033 Well No.: Anemone # 1A

Date : 26/09/89

	5 1. T.	0	Tarra	Pn-P(n-1)
Real Time	Delta Time	Pressure PSIA	Temp Deg F	PSIA
HH:MM:SS	Hours	Latu	Deg (	, 52,
19:40:47	101.713	9075.10		4.16
19:46:32	101.809		251.01	
19:49:25	101.857	9085.73		10.63
19:55:11	101.953	9091.78		6.05
20:00:56	102.049		250.70	
20:03:49	102.097	9099.32		7.55
20:09:35	102.193	9104.12		4.80
20:12:28	102.241	9106.38		2.26
20:18:13	102.337	9110.61		4.24
20:21:06	102.385	9112.50		1.88
20:26:52	102.481	9116.37		3.88
20:29:44	102.529		250.21	- 47
20:35:30	102.625	9121.51		5.13
20:38:23	102.673	9123.11		1.60
20:44:08	102.769		250.00	4 01
20:47:01	102.817	9127.93	2.42.05	4.81
20:53:44	102.929		249.89	
20:59:30	103.025	9134.06		6.14
21:02:23	103.073	9135.51	248 27	1.44
21:08:08	103.169		249.73	4 15
21:11:01	103.217	9139.66		4,15 2,47
21:16:47	103.313	9142.13		1.06
21:19:40	103.361	9143.19		2.39
21:25:25	103.457	9145.58		1.12
21:28:18	103.505	9146.71		2.34
21:34:04	103.601	9149.05	249.44	2.04
21:36:56	103.649	01E3 EA	243.44	3.45
21:42:42	103.745	9152.50 9153.70	•	1.20
21:45:35	103.793	3133.10	249.32	1.20
21:51:20	103.889	9156.89	243.32	3.19
21:57:06 21:59:59	103.985 104.033	9158.05		1.16
21:59:59	104.129	3130.03	249.20	,,,,
22:03:44	104.177	9161.11	2,0120	3.05
22:14:23	104.273	9162.86		1.75
22:17:16	104.321	9163.88		1.02
22:23:01	104.417	9165.60		1.73
22:25:54	104.465	9166.37		0.76
22:31:40	104.561	9168.14		1.77
22:34:32	104.609		249.01	•
22:40:18	104.705	9170.60		2.46
22:46:04	104.801	9172.10		1.50
22:48:56	104.849		248.93	
22:54:42	104.945	9174.13	•	2.04
22:57:35	104.993	9174.94		0.80
23:03:20	105.089		248.85	•
23:06:13	105.137	9177.25		2.32
23:12:56	105.249		248.79	,
23:15:49	105.297	9179.60		2.34
23:21:35	105.393	9180.84		1.25
				•

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

Real Time	Delta Time	Pressure	Temp	Pn-P( n-1 )
HH:MM:SS	Hours	PSTA	Deg F	PS1A
				A 15
23:24:28	105.441	9180.99		0.15
23:30:13	105.537	9182.37		1.38
23:33:06	105.585	9183.07		0.70
23:38:52	105.681	9184.37		1.30
23:44:37	105.777	9185.55		1.18
23:47:30	105.825	9186.05		0.51
23:53:16	105.921	9187.27		1.22
23:56:08	105.969		248.59	1 67
00:01:54	106.065	9188.91		1.63
00:04:47	106.113	9189.51	0.40 57	0.60
00:10:32	106.209		248.53	1 41
00:13:25	106.257	9190.92		1.41
00:19:11	106.353	9192.10		1.18
00:22:04	106.401	9192.65		0.55 0.87
00:27:49	106.497	9193.52		
00:30:42	106.545	9194.07		0.55
00:36:28	106.641	9195.01		0.94
00:42:13	106.737	9195.90		0.90
00:45:06	106.785	9196.29		0.39
00:50:52	106.881	9197.20	240.70	0.91
00:53:44	106.929		248.38	
00:59:30	107.025	9198.41		1.21
01:02:23	107.073	9198.85	240.74	0.44
01:08:08	107.169	0000 44	248.34	1.26
01:11:01	107.217	9200.11	•	0.83
01:16:47	107.313	9200.94		0.35
01:19:40	107.361	9201.29		0.91
01:25:25	107.457	9202.20	•	0.30
01:28:18	107.505	9202.50 9203.37		0.87
01:35:01	107.617	9204.33		0.96
01:40:47	107.713 107.761	9204.55		0.21
01:43:40	107.857	9205.38		0.83
01:49:25		9205.93		<b>0.</b> 55
01:52:18 01:58:04	107.905 108.001	9206.77		0.84
		3200.77	248.20	
02:00:56 02:06:42	108.049 108.145	9208.58	240.20	1.81
02:06:42 02:09:35	108.145	9208.94		0.36
02:03:35	108.289	3200.34	248.17	0.00
02:18:13	108.337	9210.66	240	1.72
02:13:13	108.433	9211.45		0.79
02:29:44	108.529	521111	248.14	
02:32:37	108.577	9212.59	240.14	1.14
02:32:37	108.673	9213.31		0.72
02:38:23	108.721	9213.90		0.59
02:47:01	108.721	9214.72		0.82
02:47:01	108.865	9215.28		0.56
02:55:40	108.961	9216.44		1.15
02:58:32	109.009	3610.77	248.09	• •
03:04:18	109.105	9218.02		1.58
0J.07.10	100.100			

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033 Well No.: Anemone # 1A

Real Time	Delta Time	Pressure	. Temp	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
03:07:11	109.153	9218.42		0.40
03:12:56	109.249	3213172	248.05	
03:15:49	109.297	9220.06		1.64
03:13:43	109.393	9221.14		1:09
03:27:20	109.489	322111	248.03	
03:27:20	109.537	9222.65	2,2,5	1.50
03:35:59	109.633	9223.57		0.92
03:33:53	109.681	9224.15		0.58
03:44:37	109.777	9225.11		0.97
03:44:37	109.825	9225.74		0.63
03:53:16	109.921	9226.71		0.97
03:57:06	109.985	9227.30		0.59
04:02:52	110.081	9228.61		1.31
04:02:32	110.129	3220.01	247.97	
04:03:44	110.225	9230.65	211101	2.04
04:11:30	110.273	9231.21		0.56
04:14:23	110.369	3231121	247.96	_
04:25:54	110.465	9233.94		2.72
04:28:47	110.513	9234.34		0.40
04:34:32	110.609	020.10.	247.92	
04:37:25	110.657	9236.00		1.66
04:37:23	110.753	9236.77		0.76
04:45:11	110.801	9237.21		0.44
04:40:04	110.897	9238.20		0.99
04:51:45	110.945	9238.40		0.20
05:00:28	111.041	9239.28		0.87
05:00:28 05:03:20	111.089	3233.20	247.90	
05:03:20	111.185	9240.76	241.00	1.49
05:03:00 05:11:59	111.233	9241.09	,	0.32
05:17:44	111.329	3241.03	247.89	
05:23:30	111.425	9242.75	2,,,,,	1.66
05:25:30	111.473	9243.07		0.32
05:26:23	111.569	3243.01	247.87	0.00
05:35:01	111.617	9244.20	217101	1.13
05:40:47	111.713	9245.11		0.91
05:41:00	Opened PCT	0240111		
05:43:40	111.761	7232.24		-2012.88
05:43:40	Opened Well at		old to pauge	
03.40.00	16/64" fixed cl			
05:49:25	111.857	6769.84		-462.40
05:52:18	111.905	6372.49		-397.34
.05:58:04	112.001	6271.95		-100.54
06:00:00	Flow diverted			
	112.049	ev builter	248.76	
06:00:56	Changed choke	to 20/64" =d		•
06:05:00	Increased choke	a to 74/64"	adiustable ch	- ok <i>e</i>
06:06:00	112.145	6292.76	adjectació cin	20.82
06:06:42	Increased choke		adjustable ch	
06:10:00		6150.35	delinatore cu	-142.42
06:12:28	112.241 112.305	6038.91		-111.43
06:16:18	112.303	16.0690		111170

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

Date : 27/09/89

Real Time	Delta Time	Pressure	Temp	Pn-P(n-1)
HH:MM:SS	. Hours	PSIA	Deg F	PSIĄ
06:22:04	112.401	6022.57		-16.35
06:24:56	112.449		251.64	
06:30:42	112.545	6036.99		14.42
06:33:35	112.593	6035.60	555 55	-1.38
06:39:20	112.689		252.99	7 70
06:42:13	112.737	6031.82		-3.78
06:47:59	112.833	6015.91		-15.92 -9.95
06:50:52	112.881	6005.96		-9.27
06:56:37	112.977	5996.69		-3.44
06:59:30	113.025	5993.25		
07:05:00	PCT closed due		out manifold v	-15.34
07:05:16	113.121	5977.91		-13.54
07:10:00	PCT opened	E0E4 77		-23.18
07:11:01	113.217	5954.72		-13.74
07:13:54	113.265	5940.98		-20.58
07:19:40	113.361	5920.40	255.28	-20.30
07:22:32	113.409	5882.57	233.20	-37.83
07:28:18	113.505	5864.96		-17.61
07:31:11	113.553	5004.50	255.78	17.01
07:36:56	113.649 113.697	5822.64	233.70	-42.31
07:39:49	113.793	5793.45		-29.19
07:45:35		5777.41		-16.04
07:48:28	113.841	5749.54		-27.87
07:54:13	113.937	5734.78		-14.76
07:57:06	113.985 114.081	5698.90		-35.88
08:02:52 08:05:00	Increased choke		' adjustable cho	
08:08:37	114.177	5548.08	,	-150.81
08:11:30	114.225	5501.54		-46.55
08:17:16	114.321	5448.95		-52.58
08:20:08	114.369	3440.33	257.07	
08:25:54	114.465	5360.62		-88.33
08:28:47	114.513	5319.88		-40.74
08:34:32	114.609	00.000	257.55	
08:38:23	114.673	5152.39	-	-167.49
08:44:08	114.769		257.84	
08:47:01	114.817	4923.66		-228.73
08:52:47	114.913	4681.56	•	-242.10
08:55:40	114.961	4516.34		-165.22
09:01:25	115.057	4164.15		-352.20
09:07:11	115.153	4058.13		-106.01
09:10:04	115.201	4034.34		-23.80
09:15:49	115.297	4046.66		12.32
09:18:42	115.345	4062.13		15.47
09:24:28	115.441	4080.69		18.56
09:27:20	115.489		259.04	
09:33:06	115.585	4154.66		73.97
09:35:59	115.633	4203.83	,	49.17
09:41:44	115.729		259.59	
09:44:37	115.777	4367.09		163.27
55-11-61		-		

Location: Zapata Arctic
Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A Date : 27/09/89

			_	
Real Time	Delta Time	Pressure	Темр	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	<b>b</b> efv
00.50.27	115.873	4483.20		116.10
09:50:23	115.969	4403.20	260.17	,,,,,,
09:56:08	116.017	4495.70	200.11	12.50
09:59:01 10:04:47	116.113	4217.52		-278.17
10:04:47	116.113	4024.51		-193.01
10:07:40	116.257	3667.88		-356.64
10:15:25	116.305	3500.88		-166.99
10:18:18	116.401	3258.45		-242.43
10:24:56	116.449	3230.13	260.49	
10:30:42	116.545	2962.62		-295.83
10:33:35	116.593	2822.32		-140.30
10:39:20	116.689		260.00	
10:42:13	116.737	2590.94		-231.38
10:47:59	116.833	2421.69		-169.25
10:53:44	116.929		259.79	
10:56:37	116.977	2238.21	•	-183.48
11:03:20	117.089		259.66	
11:06:13	117.137	2160.17		-78.04
11:11:59	117.233	2100.03		-60.14
11:14:52	117.281	2079.71		-20.32
11:20:37	117.377	2051.88		-27.84
11:23:30	117.425	2041.39		-10.49
11:29:16	117.521	2017.25		-24.14
11:32:08	117.569		259.37	•
11:37:54	117.665	1935.30		-81.95
11:40:47	117.713	1888.37		-46.93
11:46:32	117.809		258.88	
11:52:18	117.905	1823.83		-64.54
11:55:11	117.953	1813.64		-10.18
12:00:56	118.049		258.35	
12:03:49	118.097	1792.29		-21.35
12:09:35	118.193	1801.89		9.60
12:12:28	118.241	1826.84		24.96
12:18:13	118.337	1888.23		61.38
12:21:06	118.385	1922.90		34.68
12:26:52	118.481	1980.13		57:22
12:29:44	118.529		257.89	55 OS
12:35:30	118.625	2041.09		60.96
12:38:23	118.673	2048.00		6.92
12:44:08	118.769		257.83	
12:49:54	118.865	2086.51		38.51
12:50:00	Changed choke		xed choke	
12:52:47	118.913	2067.12		-19.39
12:58:32	119.009		257.57	=== 0.4
13:01:25	119.057	1716.50		-350.61
13:07:11	119.153	1518.63		-197.87
13:10:04	119.201	1434.49		-84.14
13:15:49	119.297	1307.93		-126.55
13:18:42	119.345	1259.85		-48.08
13:25:25	119.457	1172.38		-87.47

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

Real Time	Delta Time	Pressure	Temp	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Den F	PSIĄ
17.20.10	110 505	1144 74		-28.14
13:28:18	119.505	1144.24 1117.41		-26.84
13:34:04	119.601	1109.12		-8.28
13:39:49	119.697			4.28
13:42:42	119.745	1113.40		12.83
13:48:28	119.841	1126.23	253.07	12.00
13:51:20	119.889	1140 70	253.07	23.48
13:57:06	119.985	1149.70		11.51
13:59:59	120.033	1161.22	252.29	11.51
14:05:44	120.129	1215 12	252.25	53.96
14:08:37	120.177	1215.17		33.30
14:10:00	Flow diverted			28.41
14:14:23	120.273	1243.58		9.55
14:17:16	120.321	1253.13		-2.44
14:23:01	120.417	1250.69		-8.38
14:25:54	120.465	1242.31	•	-23.61
14:31:40	120.561	1218.70		-13.71
14:37:25	120.657	1204.99		-13.71 -8.59
14:40:18	120.705	1196.40		-36.55
14:46:04	120.801	1159.85	251.15	-30.33
14:48:56	120.849	1175 50	251.15	-24.25
14:54:42	120.945	1135.59		-24.25 -3.03
14:57:35	120.993	1132.56	350 50	-3.03
15:03:20	121.089	1115 15	250.69	17 40
15:06:13	121.137	1115.16		-17.40
15:11:59	121.233	1106.96		-8.20
15:14:52	121.281	1111.15		4.19 7.24
15:20:37	121.377	1118.39		2.38
15:23:30	121.425	1120.77	•	
15:29:16	121.521	1126.29		5.52
15:35:01	121.617	1120.22		-6.07
15:37:54	121.665	1114.02		-6.20
15:44:37	121.777	1077.94		-36.08
15:47:30	121.825	1065.65		-12.29
15:53:16	121.921	1042.42	240 45	-23.23
15:56:08	121.969		249.46	
	Flow diverted		ter	17 10
16:01:54	122.065	1025.24		-17.19
16:04:47	122.113	1024.42	240 05	-0.81
16:10:32	122.209	ימרר חד	249.05	32.53
16:13:25		1056.95	Carrad abates	32.33
	Decreased chok		TIXED CHOKE	CC 40
16:19:11	122.353	1123.04		66.08
16:22:04	122.401_	1150.35		27.31
16:27:49	122.497	1201.92		51.57
16:30:00			arator	45 00
16:33:35	122.593	1247.01		45.09
16:36:28	122.641	1263.99		16.98
16:42:13	122.737	1306.16		42.17
16:45:06	122.785	1331.06		24.90
16:50:52	122.881	1383.70		52.64

Location: Zapata Arctic Test No.: OST # 1

Gauge No: 73033
Well No.: Anemone # 1A
Date : 27/09/89

				n n/ 1)
Real Time	Delta Time	Pressure	Temp	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSÍA
16:53:44	122.929		249.63	
16:59:30	123.025	1428.27	2,0,0	44.57
17:02:23	123.023	1443.70		15.43
17:02:23	123.169	1110110	250.01	
17:11:01	123.217	1441.48		-2.22
17:16:47	123.313	1451.78		10.30
17:22:32	123.409	,,,,,,,,	250.28	
17:25:25	123.457	1456.21		4.44
17:31:11	123.553	1462.09		5.88
17:34:04	123.601	1470.43		8.34
17:39:49	123.697	1495.26		24.83
17:42:42	123.745	1494.63		-0.63
17:48:28	123.841	1488.08		-6.55
17:51:20	123.889		250.77	
17:57:06	123.985	1476.16		-11.92
17:59:59	124.033	1466.11		-10.05
18:00:00	By-passed sepa			
18:06:42	124.145	1454.98		-11.13
18:09:35	124.193	1450.50		-4.48
18:15:00	Flow diverted		rator	
18:15:20	124.289	<del>-</del> -	250.92	
18:21:06	124.385	1428.71		-21.79
18:23:59	124.433	1422.21		-6.50
18:29:44	124.529		250.92	
18:32:37	124.577	1409.40		-12.81
18:38:23	124.673	1391.39		-18.01
18:41:16	124.721	1390.93		-0.46
18:47:01	124.817	1407.02	•	16.09
18:49:54	124.865	1404.97		-2.05
18:55:40	124.961	1401.68		-3.29
18:58:32	125.009		250.92	
19:04:18	125.105	1415.50		13.82
19:07:11	125.153	1424.51		9.01
19:12:56	125.249		250.95	
19:18:42	125.345	1408.44		-16.07
19:21:35	125.393	1418.40		9.96
19:27:20	125.489		250.96	
19:30:13	125.537	1426.92		8.52
19:35:59	125.633	1420.22		-6.70
19:38:52	125.681	1423.78	•	3.56
19:44:37	125.777	1436.10		12.31
19:47:30	125.825	1443.51		7.41
19:53:16	125.921	1466.28		22.77
19:56:08	125.969		251.10	
20:01:54	126.065	1487.17		20.89
20:04:47	126.113	1498.05		10.88
20:10:32	126.209		251.23	
20:16:18	126.305	1506.14		8.08
20:19:11	126.353	1502.66		-3.48
20:25:54	126.465	1484.01		-18.66

Location: Zapata Arctic

Test No.: DST # 1

į

Gauge No: 73033

Well No.: Anemone # 1A

Real Time	Delta Time		Ţemp_	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSĮA
20:28:47	126.513	1489.42		5.41
20:34:32	126.609		251.33	•
20:37:25	126.657	1467.54		-21.88
20:43:11	126.753	1455.33		-12.21
20:46:04	126.801	1446.57		-8.76
20:51:49	126.897	1438.17		-8.39
20:54:42	126.945	1435.10		-3.07
21:00:28	127.041	1425.64		-9.46
21:06:13	127.137	1419.12		-6.52
21:09:06	127.185	1421.94		2.82
21:14:52	127.281	1424.67		2.73
21:17:44	127.329		251.21	44 67
21:23:30	127.425	1436.60		11.93
21:26:23	127.473	1447.86	25. 22	11.26
21:32:08	127.569	1.470.70	251.27	22 42
21:35:01	127.617	1470.28		22.42 0.85
21:40:47	127.713	1471.13		11.64
21:43:40	127.761	1482.76		8.49
21:49:25	127.857	1491.25 1488.03		-3.22
21:52:18	127.905 128.001	1471.33		-16.70
21:58:04 22:03:49	128.097	1471.33		-17.31
22:05:45	128.145	1444.31		-9.72
22:12:28	128.241	1431.95		-12.35
22:12:28	128.289	1451.55	251.32	.2.00
22:21:06	128.385	1419.19	201102	-12.76
22:23:59	128.433	1412.66		-6.53
22:29:44	128.529		251.26	
22:32:37	128.577	1400.67		-12.00
22:38:23	128.673	1403.66		3.00
22:41:16	128.721	1395.74		-7.92
22:47:59	128.833	1403.99		14.24
22:50:52	128.881	1416.54		6.56
22:56:37	128.977	1421.94		5.39
23:02:23	129.073	1429.84		7.90
23:05:16	129.121	1430.39		0.56
23:11:01	129.217	1423.25		-7.14
23:13:54	129.265	1421.90		-1.35
23:19:40	129.361	1418.82	254 25	-3.08
23:22:32	129.409		251.26	40.40
23:28:18	129.505	1406.36		-12.46
23:31:11	129.553	1402.96		-3.40
23:36:56	129.649		251.20	0.00
23:39:49	129.697	1394.88		-8.08 -E 90
23:45:35	129.793	1388.99		-5.90 7.52
23:48:28	129.841	1385.46		-3.52 7.24
23:54:13	129.937	1392.70		-4.50
23:59:59	130.033	1388.20		0.77
00:02:52	130.081	1388.97 1392.93		3.96
00:08:37	130.177	1004.00		J. Ju

Exal Reservoir Services Ltd.

Location: Zapata Arctic Well No

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

Date : 28/09/89

Real Time	Delta Time Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
00:11:30	130.225	1395.96		3.03
00:17:16	130.321	1387.70		-8.27
00:20:08	130.369		251.08	
00:25:54	130.465	1392.32		4.62
00:28:47	130.513	1392.60		0.28
00:34:32	130.609		251.08	
00:37:25	130.657	1404.94		12.34
00:43:11	130.753	1399.03		-5.91
00:48:56	130.849		251.07	
00:51:49	130.897	1388.72		-10.30
00:57:35	130.993	1392.62		3.90
01:00:28	131.041	1394.26		1.64
01:07:11	131.153	1392.40		-1.85
01:10:04	131.201	1387.31		-5.09
01:15:49	131.297	1379.52		-7.79
01:18:42	131.345	1384.23		_ 4.71
01:24:28	131.441	1392.89		8.66
01:27:20	131.489		251.01	
01:33:06	131.585	1411.91		19.02
01:35:59	131.633	1420.28		8.37
01:41:44	131.729		251.07	75 75
01:47:30	131.825	1455.66		35.39
01:50:23	131.873	1466.19		10.53
01:56:08	131.969		251.20	77 60
01:59:01	132.017	1499.71		33.52
01:59:30	Shut-in well a		fold	170 00
02:04:47	132.113	1638.31		3138.60 76.58
02:07:40	132.161	1714.89	•	149.13
02:13:25	132.257	1864.02		73.36
02:16:18	132.305	1937.37		140.76
02:22:04	132.401	2078.14	252.29	140.70
02:24:56	132.449	2222 05	252.25	199.71
02:30:42	132.545	2277.85 2341.42		63.57
02:33:35	132.593	2341.42	253.23	00.01
02:39:20 <b>02:40:00</b>	132.689 Rigged up Schl	umbaccar uic		
02:40:00	132.785	2590.63	GIIIIG	249.21
02:45:00	132.833	2651.10		60.47
02:47:33	132.929	2031110	254.04	
02:56:37	132.977	2829.31		178.22
03:02:23	133.073	2943.68		114.36
03:02:25	133.121	3000.02		56.34
03:11:01	133.217	3109.97		109.95
03:17:01	133.265	3164.94		54.98
03:13:54	133.361	3271.46		106.52
03:19:40	133.409	3211.70	255.35	,
03:22:32	133.521	3444.68		173.22
03:23:16	133.569	J	255.65	
03:37:54	133.665	3596.33		151.65
03:37:54	133.761	3694.54		98.21
99.47.40	100.101	230,707	•	

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

		-		5 54 41
Real Time	Delta Time	Pressure	Temp	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	baiv
07.40.77	133.809		256.06	
03:46:32 03:52:18	133.905	3840.24	230.00	145.70
03:52:18 03:55:11	133.953	3888.25		48.01
04:00:56	134.049	2000.23	256.38	43.0.
04:00:56	134.043	4029.42	230.50	141.18
04:03:45	134.193	4121.72		92.30
04:03:33	134.241	4167.44		45.72
04:12:28	134.337	4257.95		90.51
04:78:75	134.385	4302.76		44.81
04:26:52	134.481	4392.37		89.61
04:20:32	134.577	4482.15		89.78
04:35:30	134.625	4526.62		44.47
04:41:16	134.721	4615.75		89.12
04:44:08	134.769	,0.0	256.82	
04:49:54	134.865	4751.12		135.37
04:52:47	134.913	4796.16		45.04
04:58:32	135.009	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	256.79	
05:01:25	135.057	4930.14	<b></b>	133.98
05:07:11	135.153	5021.94		91.80
05:10:04	135.201	5067.00		45.06
05:15:49	135.297	5154.46		87.46
05:18:42	135.345	5199.37		44.91
05:24:28	135.441	5289.77		90.40
05:25:00	Commenced run		Schlumberger	MUST and
03.23.00	TPT gauge	2	_	
05:30:13	135.537	5378.61		88.84
05:33:06	135.585	5421.47		42.86
05:38:52	135.681	5506.40		84.93
05:41:44	135.729		256.20	
05:47:30	135.825	5628.91		122.51
05:51:20	135.889		255.97	
05:57:06	135.985	5741.34		112.44
05:59:59	136.033	5770.40		29.06
06:05:44	136.129		255.58	
06:08:37	136.177	5842.69		72.29
06:14:23	136.273	5889.59		46.90
06:17:16	136.321	5910.79		21.20
06:23:01	136.417	5946.66	•	35.87
06:28:47	136.513	5978.18		31.52
06:31:40	136.561	5993.11		14.93
06:37:25	136.657	6017.85		24.74
06:40:18	136.705	6030.20		12.35
06:46:04	136.801	6053.14		22.94
06:48:56	136.849		254.31	
06:54:42	136.945	6081.51		28.37
06:57:35	136.993	6092.02		10.51
07:03:20	137.089		253.91	
07:06:13	137.137	6113.94		21.91
07:11:59	137.233	6130.52		16.59
07:14:52	137.281	6139.20		8.68
_,				

Exal Reservoir Services Ltd.

Location: Zapata Arctic Test No.: DST # 1

Gauge No: 73033
Well No.: Anemone # 1A
Date : 28/09/89

Real Time	Delta Time	Pressure	Temp	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSĮA
				*
07:20:37	137.377	6153.26		14.06
07:26:23	137.473	6167.69		14.43
07:29:16	137.521	6174.68		6.99
07:35:01	137.617	6187.71		13.03
07:37:54	137.665	6194.72		7.01
Ø7:38:00	Opened Well a		old slowly	increased to
V1.30.00	1/2" adjustab	le choke, flow	on by-pass	to burner
07:43:40	137.761	4975.34		-1219.39
07:45:00	Changed choke		l choke	
07:45:32	137.809		253.05	
07:50:00	Flow diverted	to beater		
07:52:18	137.905	4196.28		-779.06
07:55:11	137.953	3919.05		-277.23
08:00:56	138.049	5313.03	254.20	
	Chut-in Hall	at choke manif		fire at heater
08:03:00	138.Ø97	3422.65	Old: Glidzi	-496.40
08:03:49	•			
08:05:00	Fire extingui: 138.193	3553.45		130.80
08:09:35		3707.18		153.73
08:16:18	138.305	3769.72		62.55
08:19:11	138.353	3/63.72	255.36	02.33
08:24:56	138.449	7057 20	255.50	183.57
08:27:49	138.497	3953.29		118.00
08:33:35	138.593	4071.29		58.63
08:36:28	138.641	4129.92		115.90
08:42:13	138.737	4245.82		
08:45:06	138.785	4302.36		56.54
08:50:52	138.881	4413.81	055 70	5111.44
08:53:44	138.929		257.39	107 51
08:59:30	139.025	4577.34		163.54
09:02:23	139.073	4630.68		53.33
09:08:08	139.169		257.91	200 70
09:13:54	139.265	4840.04		209.36
09:16:47	139.313	4891.42		51.38
09:22:32	139.409		258.19	454 55
09:25:25	139.457	5043.14		151.72
09:31:11	139.553	5143.79		100.66
09:34:04	139.601	5193.77		49.97
09:39:49	139.697	5294.69		100.92
09:42:42	139.745	5345.33		50.63
09:48:28	139.841	5446.13		100.80
09:51:20	139.889		258.15	
09:57:06	139.985	5601.00		154.87
09:59:59	140.033	5653.28		52.28
10:05:44	140.129		257.91	
10:11:30	140.225	5853.16		199.89
10:14:23	140.273	5898.67		45.51
10:20:08	140.369		257.52	
10:23:01	140.417	6019.46		120.79
10:28:47	140.513	6087.52		68.05
10:32:37	140.577	6140.24		52.73
10.75.71	170.511			

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

				n n/ 1)
Real Time	Delta Time	Pressure	Temp	Pn-P(n-1) PSIA
HH:MM:SS	Hours	PSIA	Deg F	Laíu
	140.673	6211.91		71.67
10:38:23	140.721	6242.04		30.13
10:41:16	140.817	6293.58		51.54
10:47:01	140.865	6314.77		21.19
10:49:54	140.961	6350.26		35.49
10:55:40	141.009	0330.20	256.16	
10:58:32	141.105	6333.14		-17.12
11:04:18	141.703	6355.20		22.06
11:10:04	141.249	0555.20	255.63	
11:12:56	141.345	6382.89	202111	27.69
11:18:42	141.393	6391.48		8.59
11:21:35 11:27:20	141.489	0001110	255.16	
11:30:13	141.537	6422.28		30.80
	Opened Hell at	choke manife	old on 3/16" a	adjustable choke
11:35:30	Flow on by-pas	s to flare		-
11:35:59	141.633	6390.33		-31:94
11:38:00	Increased chok		ustable chok	
11:38:52	141.681	6126.96		-263.38
11:41:00	Changed choke		d choke	
11:44:37	141.777	4903.62		-1223.33
11:47:30	141.825	4513.18		-390.45
11:53:16	141.921	3950.15		-563.02
11:59:01	142.017	3520.41		-429.74
12:01:54	142.065	3374.59		-145.81
12:07:40	142.161	3134.96		-239.64
12:10:32	142.209		255.63	
12:16:18	142.305	2777.66		-357.30
12:19:11	142.353	2680.64		-97.02
12:24:56	142.449		256.20	
12:27:49	142.497	2409.81		-270.83
12:33:35	142.593	2290.97		-118.85
12:36:28	142.641	2230.12		-60.85
12:42:13	142.737	2101.85		-128.26
12:45:06	142.785	2063.23		-38.62
12:50:52	142.881	1952.23		-111.00
12:57:35	142.993	1834.34		-117.89
13:00:28	143.041	1785.31		-49.03
13:06:15	143.137	1709.45		-75.86
13:09:06	143.185	1673.36		-36.10
13:14:52	143.281	1616.48		-56:88
13:17:44	143.329		256.12	
13:23:30	143.425	1555.62		-60.85
13:26:23	143.473	1541.17		-14.45
13:30:00	Flow diverted	through separ	rator	
13:32:08	143.569		255.68	
13:35:01	143.617	1497.64		-43.54
13:40:47	143.713	1486.62		-11.01
13:43:40	143.761	1497.28		0.65
13:49:25	143.857	1489.24		1.96
13:55:11	143.953	1500.08		10.85
,				

Exal Peservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

				•
Real Time	Delta Time	Pressure	Temp	Pn-P( n-1 )
HH:MM:SS	Hours	PSIA	Deg F	PSIA
				0.50
13:58:04	144.001	1508.68		8.59
14:03:49	144.097	1524.27		15.60
14:06:42	144.145	1530.84		6.56
14:12:28	144.241	1546.87	554 50	16.03
14:15:20	144.289		254.79	40.44
14:21:06	144.385	1565.98		19.11
14:23:59	144.433	1570.05	254 55	4.07
14:29:44	144.529	4500 GA	254.66	ר דר
14:32:37	144.577	1576.60		6.55
14:38:23	144.673	1575.24		-1.36
14:41:16	144.721	1576.99		1.75
14:47:01	144.817	1571.95		-5.03
14:52:47	144.913	1569.14		-2.81
14:55:40	144.961	1565.75		-3.39
15:01:25	145.057	1560.21		-5.54
15:04:18	145.105	1556.30		-3.91
15:10:04	145.201	1550.56		-5.74
15:12:56	145.249		254.19	
15:19:40	145.361	1532.79	254 20	-17.77
15:22:32	145.409		254.08	7 74
15:28:18	145.505	1525.55		-7.24
15:31:11	145.553	1520.99	057.01	-4.55
15:36:56	145.649	4500 ĖD	253.91	12 47
15:42:42	145.745	1508.57		-12.43
15:45:35	145.793	1506.48	057 70	-2.09
15:51:20	145.889		253.76	: 0.07
15:54:13	145.937	1496.85		-9.63
15:59:59	146.033	1492.97	•	-3.88 -0.79
16:02:52	146.081	1492.18		-0.79 -6.62
16:08:37	146.177	1485.56		1.12
16:11:30	146.225	1486.68		-5.68
16:17:16	146.321	1481.00	257 51	-3.00
16:20:08	146.369	4.475 00	253.51	-5.12
16:25:54	146.465	1475.89		-3.26
16:28:47	146.513	1472.63	253.38	3.20
16:34:32	146.609	1405 47	233.30	-7.21
16:40:18	146.705	1465.43	•	-2.27
16:43:11	146.753	1463.15	253.27	2.21
16:48:56	146.849 146.897	1460.65	255.27	-2.50
16:51:49		1457.18		-3.48
16:57:35	146.993	1457.76		0.18
17:00:28	147.041			-7.16
17:06:13	147.137	1450.20		0.46
17:09:06	147.185	1450.66		-3.34
17:14:52	147.281	1447.32	252 VC	-5.54
17:17:44	147.329	1440 04	253.06	-0.38
17:23:30	147.425	1446.94		-0.38 -1.14
17:26:23	147.473	1445.80	252 00	-1.14
17:32:08	147.569	1.470.00	252.98	-5.98
17:38:52	147.681	1439.82		-5.30

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

6 - 4 4 - 4 4				
Real Time	Delta Time	Pressure	Temp	Pn-P( n-1 )
HH:MM:SS	Hours	PSIA	Deo F	PȘIA
		•		• .
17:41:44	147.729		252.92	
17:47:30	147.825	1435.34		-4.49
17:50:23	147.873	1433.10		-2.24
17:56:08	147.969		252.83	
17:59:01	148.017	1430.07		-3.03
18:04:47	148.113	1431.20		1.13
18:07:40	148.161	1428.86		-2.33
18:13:25	148.257	1430.28		1.42
18:16:18	148.305	1429.49		-0.80
18:22:04	148.401	1427.92		-1.57
18:24:56	148.449		252.70	
18:30:42	148.545	1431.09		3.17
18:36:28	148.641	1428.17		-2.92
18:39:20	148.689		252.66	
18:45:06	148.785	1423,80		-4.37
18:47:59	148.833	1421.74		-2.05
18:53:44	148.929		252.60	
18:56:37	148.977	1419.97	**	-1.77
19:02:23	149.073	1417.46		-2.52
19:05:16	149.121	1418.33		0.87
19:11:01	149.217	1415.00		-3.33
19:13:54	149.265	1413.76		-1.24
19:19:40	149.361	1419.65		5.89
19:25:25	149.457	1421.73		2.08
19:28:18	149.505	1423.56		1.82
19:34:04	149.601	1422.85		-0.70
19:36:56	149.649		252.48	¥,
19:42:42	149.745	1427.35	•	4.50
19:45:35	149.793	1424.90		-2.45
19:51:20	149.889		252.45	
19:54:13	149.937	1433.38		8.48
20:00:56	150.049	•	252.44	
20:03:49	150.097	1427.16		-6.21
20:09:35	150.193	1428.59		1.42
20:12:28	150.241	1427.19		-1.40
20:18:13	150.337	1413.11		-14.08
20:23:59	150.433	1413.08		-0.03
20:26:52	150.481	1417.56		4.49
20:32:37	150.577	1422.23		4.67
20:35:30	150.625	1423.26		1.02
20:41:16	150.721	1429.05		5.79
20:44:08	150.769		252.37	
20:49:54	150.865	1436.26		7.21
20:52:47	150.913	1442.52		6.26
20:58:32	151.009		252.41	
21:01:25	151.057	1461.26		18.74
21:07:11	151.153	1476.16		14.90
21:10:04	151.201	1483.29		7.13
21:15:49	151.297	1496.59		13.30
21:21:35	151.393	1510.22		13.63

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033 Well No.: Anemone # 1A Date : 28/09/89

				4
Real Time			Temp	Pn-P(n-1) PSIA
HH:MM:SS	. Hours	PSIA	Deg F	kaíu .
21:24:28	151.441	1515.10		4.88
21:30:13	151.537	1527.46		12.36
	151.585	1530.73		3.27
21:33:06	151.681	1539.35		8.61
21:38:52	151.729	1000.00	252.68	
21:41:44		1546.96	232.00	7.62
21:47:30	151.825	1553.71		6.75
21:50:23	151.873 151.969	1333.71	252.75	0.10
21:56:08	152.017	1556.67	232.13	2.95
21:59:01	152.017	1550.80		-5.87
22:04:47		1541.17		-9.63
22:07:40	152.161 152.257	1517.02		-24.15
22:13:25	152.257	1317.02	252.75	21113
22:20:08		1479.18	232.13	-37.84
22:23:01	152.417	1470.40		-8.78
22:28:47	152.513	1467.71		-2.69
22:31:40	152.561	1467.70		-4.84
22:37:25	152.657 152.705	1461.80		-1.06
22:40:18		1463.98		2.18
22:46:04	152.801	1463.30	252.63	2.10
22:48:56	152.849	1471.21	232.03	7.23
22:54:42	152.945	1471.21		1.47
22:57:35	152.993	1472.03	252.64	1.71
23:03:20	153.089	1401 07	252.04	8.35
23:09:06	153.185	1481.03		4.36
23:11:59	153.233	1485.40	252.68	4.50
23:17:44	153.329	4400 01	232.00	2.62
23:20:37	153.377	1488.01		5.59
23:26:23	153.473	1493.61	•	3.71
23:29:16	153.521	1497.32		2.91
23:35:01	153.617	1500.22		1.32
23:37:54	153.665	1501.55 1502.38		<b>0.83</b>
23:43:40	153.761	1502.38	252.73	<b>0.</b> 03
23:46:32	153.809	150C 01	252.73	4.43
23:52:18	153.905	1506.81 1504.19		-2.61
23:55:11	153.953	1504.15	252.75	2.01
00:00:56	154.049 154.145	1504.54	202.10	0.34
00:06:42	154.145	1502.48		-2.06
00:09:35	154.193	1302.40	252.75	
00:15:20		1501.80	202110	-0.68
00:18:13	154.337			-3.21
00:23:59	154.433	1498.59		-1.91
00:26:52	154.481	1496.68		-6.15
00:32:37	154.577	1490.53		3.97
00:35:30	154.625	1494.50		-2.23
00:42:13	154.737	1492.27		-2.31
00:45:06	154.785	1489.96		-2.51 -13.71
00:50:52	154.881	1476.26	מבט מב	13.11
00:53:44	154.929		252.75	
00:55:00	Shut-in Well		11010	90.40
00:59:30	155.025	1566.65		JW . 40

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

Real Time		Pressure	Temp	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSĮA
01.00.10	155.121	1705.56		139.91
01:05:16 01:08:08	155.169	1703.50	252.88	100.01
01:08:08	155.265	1904.56	232.00	199.00
01:15:54	155.313	1967.63		63.07
01:22:32	155.409	1301.03	253.44	
01:25:25	155.457	2152.86	2001	185.23
01:31:11	155.553	2271.08		118.22
01:34:04	155.601	2328.94	•	57.86
01:39:49	155.697	2441.46		112.52
01:42:42	155.745	2496.61		55.15
01:48:28	155.841	2602.98		106.37
01:51:20	155.889	•	254.89	
01:57:06	155.985	2757.34		154.36
02:02:52	156.081	2855.93		98.59
02:05:44	156.129		255.41	
02:11:30	156.225	2999.20		143.27
02:14:23	156.273	3045.77		46.57
02:20:08	156.369		255.82	
02:23:01	156.417	3182.77		137.00
02:28:47	156.513	3271.06		88.28
02:31:40	156.561	3314.51		43.45
02:37:25	156.657	3400.07		85.56
02:40:18	156.705	3442.08		42.02
02:46:04	156.801	3524.20		82.12
02:51:49	156.897	3603.99		79.79
02:54:42	156.945	3643.50		39.51
03:01:25	157.057	3733.15		89.65
03:04:18	157.105	3770.68	•	37.53
03:10:04	157.201	3844.32	255 50	73:64
03:12:56	157.249	7054 50	256.69	107 70
03:18:42	157.345	3951.52		107.20 34.77
03:21:35	157.393	3986.29	256.81	34.77
03:27:20	157.489	4007 77	250.01	101.04
03:30:13	157.537	4087.33 4152.91		65.58
03:35:59	157.633	4185.53		32.62
03:38:52	157.681	4249.55		64.02
03:44:37	157.777 Schlumberger Tf		e ·	04.02
<b>03:45:00</b>	157.873	4310.40	3	60.84
03:53:16	157.921	4341.01		30.61
03:59:01	158.017	4401.04		60.03
04:01:54	158.065	4429.85		28.82
04:07:40	158.161	4488.25		58.39
04:07:40	158.209	4400.23	256.76	33,00
04:10:32	158.305	4573.76	200110	85.51
04:19:11	158.353	4601.52		27,76
04:13:11	158.449	,001102	256.66	= - 7 - =
04:27:49	158.497	4683.40	<del></del>	81.88
04:27:43	158.593	4734.40		51.00
04:36:28	158.641	4760.03		25.63
3 <b></b>	. =			

Location: Zapata Arctic Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

	B 11 T.	D	Temp	Pn-P(n-1)
Real Time	Delta Time	Pressure PSIA	Deg F	PSIA
HH:MM:SS	Hours	F21W	กะกิ เ	1 3111
04:42:13	158.737	4811.19		51.16
04:47:00	Commenced pull		with wireline,	MUST
04.41.00	and TPT gauge	remain latch	ed downhole	
04:47:59	158.833	4841.60		30.40
04:50:52	158.881	4866.24		24.65
04:56:37	158.977	4911.33		45.08
04:59:30	159.025	4933.77		22.44
05:05:16	159.121	4976.83		43.06
05:08:08	159.169		256.07	
05:13:54	159.265	5037.68		60.85
05:16:47	159.313	5056.46		18.78
05:23:30	159.425	5098.26		41.80
<b>05:26:</b> 23	159.473	5114.53		16.27
05:32:08	159.569		255.63	
05:35:01	159.617	5157.77		43.24
05:40:47	159.713	5185.80		28.03
05:46:32	159.809		255.30	17 75
05:49:25	159.857	5229.15		43.35
05:55:11	159.953	5254.69		25.54
05:58:04	160.001	5266.94		12.24
06:03:49	160.097	5289.34		22:41
06:06:42	160.145	5300.59		11.25
06:12:28	160.241	5321.71	754 70	21.12
06:15:20	160.289		254.78	70.00
06:21:06	160.385	5352.39		30.68 9.29
06:23:59	160.433	5361.69	254 51	9.29
06:29:44	160.529	5704 00	254.51	29.53
06:35:30	160.625	5391.22		6.45
06:38:23	160.673	5397.68	254 21	.0.43
06:44:08	160.769	E41E 00	254.21	17.38
06:47:01	160.817	5415.06		10.85
06:52:47	160.913	5425.91		5.27
06:55:40	160.961	5431.18		9.69
07:01:25	161.057	5440.87		4.56
07:04:18	161.105	5445.43 5454.59		9.16
07:10:04	161.201	5454.55	253.72	3.10
07:12:56	161.249	5467.58	233.72	12.99
07:18:42	161.345 161.393	5473.12		5.54
07:21:35	161.489	3473.12	253.49	0.0.
07:27:20	161.585	5489.97	233.43	16.85
07:33:06	Schlumberger a			
07:35:00	161.633	5494.48		4.51
07:35:59				4.01
07:37:00	Closed Jubrica			
07:39:00	Closed swab va	1 AG	253.29	
07:41:44	161.729	5512.10	£33.£3	17.62
07:45:35	161.793	3312.10	253.15	
07:51:20	161.889 161.937	5526.40	200110	14.30
07:54:13	162.033	5531.17		4.76
07:59:59	104.000	1101111		

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: **73033** 

Well No.: Anemone # 1A

		_		E
Real Time		Pressure	Temp Dea F	<b>Pn-P(n-1)</b> PSIA
HH:MM:SS	Hours	PSIA	neā L	L21U
08:00:00	Unable to open	lubricator	valve	
08:02:52	162.081	5535.78	VG1 VG	4.61
08:07:00	Closed master			
08:08:37	162.177	5555.79		20.01
Ø8:Ø9:ØØ	Bled off press		aster valve	
00.00.00	through choke			
08:11:30	162.225	5565.22		9.44
08:15:00	Rigged down Sc	:hlumberger	lubricator	
08:17:16	162.321	5584.87		19.64
08:20:08	162.369		253.04	
08:25:54	162.465	5610.44		25.57
08:31:40	162.561	5627.01		16.57
08:34:32	162.609		252.95	
08:40:18	162.705	5650.17		23,16
08:41:00	Rectified prob			
	Closed swab an	-	ster valve	F4 71
08:43:11	162.753	5595.86	252 02	-54.31
08:48:56	162.849	-074 70	252.87	70:07
08:51:49	162.897	5634.39		38.53 22.03
08:57:35	162.993	5656.43		10.44
09:00:28	163.041	5666.86		20.11
09:06:13	163.137	5686.97		8.90
09:09:06	163.185	5695.88		17.77
09:14:52	163.281	5713.65	252.76	17.77
09:17:44	163.329 163.425	5740.20	232.70	26.54
09:23:30 09:29:16	163.521	5757.53		17.33
09:32:08	163.569	5/5/.55	252.69	11.00
09:37:54	163.665	5782.95	232.03	25.43
09:40:47	163.713	5791.16		8.20
09:46:32	163.809	3.3	252.62	
09:49:25	163.857	5815.96		24.80
09:55:11	163.953	5831.92		15.96
09:58:04	164.001	5839.77		7.85
10:03:49	164.097	5855.82	•	16.05
10:07:40	164.161	5866.84		11.02
10:13:25	164.257	5881.89		15.05
10:19:11	164.353	5896.69		14.80
10:22:04	164.401	5903.92		7.23
10:27:49	164.497	5918.37		14.45
10:30:42	164.545	5925.49		7.12
10:36:28	164.641	5939.86		14.37
10:39:20	164.689		252.35	
10:45:06	164.785	5960.97		21.11
10:47:59	164.833	5967.99	050 00	7.02
10:53:44	164.929		252.28	00.00
10:56:37	164.977	5988.88		20.89
11:02:23	165.073	6002.61		13.73
11:05:16	165.121	6009.46		6.85
11:11:01	165.217	6022.98		13.52

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033 Well No.: Anemone # 1A

Real Time HH:MM:SS	<b>Delta Time</b> Hours	Pressure PSIA	Temp Deg F	<b>Pn-P(n-1)</b> PSIA
11:16:47	165.313	6036.44		13.47
11:19:40	165.361	6043.14		6.70
11:25:25	165.457	6056.62		13.48
11:28:18	165.505	6063.21		6.59
11:34:04	165.601	6076.02		12.81
11:36:56	165.649		252.07	
11:42:42	165.745	6096.31		20.29
11:45:35	165.793	6102.89		6.57
11:51:20	165.889		252.02	
11:54:13	165.937	6121.59		18.70
11:59:59	166.033	6134.91		13.33
12:02:52	166.081	6140.47		5.56
12:08:37	166.177	6152.55		12.08
12:14:23	166.273	6164.87		12.32
12:17:16	166.321	6171.74		6.87
12:23:01	166.417	6183.48		11.74
12:26:52	166.481	6190.96		7.48
12:32:37	166.577	6202.07		11.11
12:35:30	166.625	6207.68		5.61
12:41:16	166.721	6218.81		11.13
12:44:08	166.769		251.81	40.75
12:49:54	166.865	6235.16		16.35
12:52:47	166.913	6241.29	251 72	6.13
12:58:32	167.009	8850 00	251.78	10 71
13:01:25	167.057	6258.00		16.71 10.77
13:07:11	167.153	6268.76	251 71	10.77
13:12:56	167.249	6304 60	251.71	16.14
13:15:49	167.297	6284.90		10.72
13:21:35	167.393	6295.62		5.30
13:24:28	167.441	6300.92 6311.57		10.65
13:30:13	167.537	6316.89		5.32
13:33:06	167.585	6327.35		10.46
13:38:52	167.681	6327.33	251.62	10.40
13:41:44	167.729 167.825	6342.80	231.02	15.45
13:47:30	167.873	6347.99		5.19
13:50:23	167.969	0547.55	251.56	2
13:56:08 14:01:54	168.065	6368.09	231.30	20.10
14:01:54	168.113	6373.21		5.12
14:10:32	168.209	0515.21	251.52	_,,_
14:13:25	168.257	6388.43	232	15.22
14:19:11	168.353	6398.54		10.11
14:22:04	168.401	6403.51		4.96
14:27:49	168.497	6413.27		9.76
14:27:45	168.545	6418.19		4.92
14:36:28	168.641	6427.88		9.69
14:38:28	168.689	5,21100	251.42	
14:45:06	168.785	6442.29		14.41
14:48:56	168.849	2.,2.20	251.39	
14:54:42	168.945	6458.06		15.77
17.07.74	100.040			

Exal Reservoir Services Ltd.

Location: Zapata Arctic Test No.: DST # 1

Gauge No: **73033** 

Well No.: Anemone # 1A

Real Time HH:MM:SS	Delta Time Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
15:00:28	169.041	6467.43		9.37
15:03:20	169.089		251.35	
15:09:06	169.185	6481.33		13.90
15:11:59	169.233	6485.95		4.62
15:17:44	169.329		251.30	
15:20:37	169.377	6499.35		13.40
15:26:23	169.473	6508.26		8.90
15:29:16	169.521	6512.65		4.39
15:35:01	169.617	6521.44		8.80
15:37:54	169.665	6525.90		4.45
15:43:40	169.761	6534.64		8.74
15:46:32	169.809		251.23	
15:52:18	169.905	6548.02		13,38
15:58:04	170.001	6556.53		8.51
16:00:56	170.049		251.18	
16:06:42	170.145	6569.28		12.75
16:09:35	170.193	6573.40		4.12
16:15:20	170.289		251.15	
16:18:13	170.337	6585.95		12.55
16:23:59	170.433	6594.21		8.26
16:26:52	170.481	6598.34		4.13
16:32:37	170.577	6606.53		8.19
16:35:30	170.625	6610.53		4.00
16:41:16	170.721	6618.65		8.12
16:44:08	170.769		251.08	
16:49:54	170.865	6631.35		12.71
16:55:40	170.961	6639.15	0=4 0=	7.79
16:58:32	171.009		251.05	11.56
17:04:18	171.105	6650.70		3.94
17:07:11	171.153	6654.64		8.82
17:13:54	171.265	6663.47		3.79
17:16:47	171.313	6667.26	מרמ חס	3.13
17:22:32	171.409	17	250.98	11.17
17:25:25	171.457	6678.43		7.47
17:31:11	171.553	6685.90		3.75
17:34:04	171.601	6689.65		7.25
17:39:49	171.697	6696.90		7.23
17:45:35	171.793	6704.20		3.61
17:48:28	171.841	6707.82		7.27
17:54:13	171.937	6715.08		3.60
17:57:06	171.985	6718.68 6725. <b>70</b>		7.02
18:02:52	172.081	6/23.70	250.88	
18:05:44	172.129	C77C 54	230.00	10.54
18:11:30	172.225	6736.24		3.54
18:14:23	172.273	6739.78	250.84	J. G.
18:20:08	172.369	6750.10	776.04	10.33
18:23:01	172.417			6.89
18:28:47	172.513	6756.99 6760.39		3.40
18:31:40	172.561	6767.12		6.73
18:37:25	172.657	0/0/.12		

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: **73033** 

Well No.: Anemone # 1A

Date : 29/09/89

Real Time HH:MM:SS	<b>Delta Time</b> Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
18:43:11	172.753	6773.97		6.85
18:46:04	172.801	6777.32		3.35
18:51:49	172.897	6783.93		6.61
18:54:42	172.945	6787.23		3.31
19:00:28	173.041	6793.87		6.63
19:03:20	173.089		250.75	
19:09:06	173.185	6803.71		9.84
19:11:59	173.233	6806.99		3.29
19:17:44	173.329		250.71	
19:20:37	173.377	6816.68		9.69
19:26:23	173.473	6823.14		6.45
19:29:16	173.521	6826.94		3.80
19:35:59	173.633	6834.26		7.32
19:41:44	173.729		251.09	
19:44:37	173.777	6843.77		9.52
19:50:23	173.873	6849.90		6.12
19:53:16	173.921	6852.97		3.07
19:59:01	174.017	6859.01		6.05
20:01:54	174.065	6862.00		2.98
20:07:40	174.161	6867.97	254 22	5.98
20:10:32	174.209	5555 55	251.02	0.00
20:16:18	174.305	6876.77		8.80
20:19:11	174.353	6879.61	252 00	2.85
20:24:56	174.449	5555	250.99	0.70
20:27:49	174.497	6888.40		8.79
20:33:35	174.593	6894.20	250 86	5.79
20:39:20	174.689	5507 55	250.96	8.48
20:42:13	174.737	6902.68		5.59
20:47:59	174.833	6908.26		2.91
20:50:52	174.881	6911.18		5.46
20:56:37	174.977	6916.64		2.80
20:59:30	175.025	6919.43 6924.76		5.33
21:05:16	175.121 175.169	6924.76	250.90	3.33
21:08:08 21:13:54	175.265	6932.91	250.50	8.15
21:15:54	175.313	6935.58		2.66
21:78:47	175.409	0333.30	250.88	2.00
21:28:18	175.505	6946.42	200.00	10.84
21:31:11	175.553	6949.05		2.63
21:36:56	175.649	0040.00	250.85	
21:39:49	175.697	6956.92	200.00	7.87
21:45:35	175.793	6962.12		5.21
21:48:28	175.841	6964.79		2.67
21:55:11	175.953	6970.60		5.81
21:58:04	176.001	6973.19		2.59
22:03:49	176.097	6978.27		5.08
22:05:43	176.145	6980.86		2.59
22:12:28	176.241	6985.89		5.02
22:15:20	176.289		250.78	
22:21:06	176.385	6993.30		7.41

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: **73033** 

Well No.: Anemone # 1A

Date : 29/09/89

Real Time HH:MM:SS	Delta Time Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
77.70.57	176.481	6998.19		4.89
22:26:52	176.529	0,550.15	250.76	
22:29:44	176.625	7005.61	230.13	7.42
22:35:30	176.623	7007.83		2.22
22:38:23	176.769	1001.03	250.73	
22:44:08		7015.07	250.15	7.25
22:47:01	176.817	7019.84		4.76
22:52:47	176.913	7013.84		2.39
22:55:40	176.961	7026.82		4.59
23:01:25	177.057	7029.27		2.45
23:04:18	177.105	7023.27		4.73
23:10:04	177.201	7034.00	250.69	, , , ,
23:12:56	177.249	7040.90	230.03	6.90
23:18:42	177.345	7045.50		4.63
23:24:28	177.441	7045.53	250.66	,
23:27:20	177.489	7052 77	250.00	6.79
23:33:06	177.585	7052.32		2.37
23:35:59	177.633	7054.69	250.65	2.01
23:41:44	177.729	7051 47	250.05	6.74
23:44:37	177.777	7061.43		4.24
23:50:23	177.873	7065.68		2.25
23:53:16	177.921	7067.92		4.18
23:59:01	178.017	7072.11		2.32
00:01:54	178.065	7074.43		4.21
00:07:40	178.161	7078.64	שרט כט	4.21
00:10:32	178.209	5005 55	250.60	7.11
00:17:16	178.321	7085.75		4.45
00:23:01	178.417	7090.20		2.02
00:25:54	178.465	7092.22		4.15
00:31:40	178.561	7096.37	250 52	4.13
00:34:32	178.609	5486 FE	250.57	6.20
00:40:18	178.705	7102.57		2.04
00:43:11	178.753	7104.60	250.54	2.04
00:48:56	178.849	5445 00	250.54	6.29
00:51:49	178.897	7110.89		4.11
00:57:35	178.993	7115.00		1.95
01:00:28	179.041	7116.95		4.04
01:06:13	179.137	7120.99		4.04
01:11:59	179.233	7125.05		1.95
01:14:52	179.281	7127.00		4.00
01:20:37	179.377	7131.01		
01:23:30	179.425	7132.93		1.93
01:29:16	179.521	7136.81		3.88
01:32:08	179.569		250.50	F 75
01:37:54	179.665	7142.57		5.76
01:40:47	179.713	7144.69		2.12
01:46:32	179.809		250.47	E 03
01:49:25	179.857	7150.30		5.62
01:55:11	179.953	7154.16		3.85
01:58:04	180.001	7156.18		2.03
02:03:49	180.097	7159.80		3.61

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033
Well No.: Anemone # 1A
Date : 30/09/89

Real Time HH:MM:SS	<b>Delta Time</b> Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
02:09:35	180.193	7163.69		3.89
02:12:28	180.241	7165.49		1.80
02:18:13	180.337	7169.23		3.74
02:21:06	180.385	7170.96		1.72
02:26:52	180.481	7174.69		3.73
02:29:44	180.529		250.41	
02:36:28	180.641	7180.89		6.20
02:39:20	180.689		250.40	
02:45:06	180.785	7186.28		5.39
02:47:59	180.833	7188.14		1.85
02:53:44	180.929		250.39	
02:56:37	180.977	7193.53		5.40
03:02:23	181.073	7197.08		3.54
03:08:08	181.169		250.37	E 2E
03:11:01	181.217	7202.32		5.25 3.44
03:16:47	181.313	7205.77		PM.
03:19:40	181.361	7207.45		1.69 3.41
03:25:25	181.457	7210.86		1.84
03:28:18	181.505	7212.70		3.47
03:34:04	181.601	7216.17	250.33	3.47
03:36:56	181.649	7771 71	250.33	5.04
03:42:42	181.745	7221.21 7222.80		1.59
03:45:35	181.793 181.889	1222.00	250.32	1.35
03:51:20	181.937	7227.82	230.32	5.02
03:54:13 03:59:59	182.033	7231.14		3.32
04:05:44	182.129	1251.14	250.31	
04:08:37	182.177	7236.07	250107	4.92
04:14:23	182.273	7239.42		3.36
04:17:16	182.321	7240.98		1.55
04:23:01	182.417	7244.16		3.18
04:25:54	182.465	7245.96		1.80
04:31:40	182.561	7249.11		3.15
04:34:32	182.609		250.27	
04:40:18	182.705	7253.83		4.72
04:43:11	182.753	7255.35		1.52
04:48:56	182,849		250.26	
04:55:40	182.961	7262.22		6.87
04:58:32	183.009		250.24	
05:04:18	183.105	7266.83		4.61
05:07:11	183.153	7268.47		1.63
05:12:56	183.249		250.22	
05:15:49	183.297	7272.96		4.50
05:21:35	183.393	7276.08		3.11
05:24:28	183.441	7277.67		1.59
05:30:13	183.537	7280.69		3.02
<b>05:33:0</b> 6	183.585	7282.23		1.54
<b>05:</b> 38:52	183.681	7285.24	050 01	3.01
05:41:44	183.729		250.21	4 71
05:47:30	183.825	7289.55		4.31

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: **73033** 

Well No.: Anemone # 1A

Date : 30/09/89

Real Time HH:MM:SS	Delta Time Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
05:53:16	183.921	7292.51		2.96
05:56:08	183.969		250.20	
06:01:54	184.065	7296.85		4.34
06:04:47	184.113	7298.41		1.56
06:10:32	184.209		250.18	
06:13:25	184.257	7302.74		4.33
06:19:11	184.353	7305.58		2.85
06:22:04	184.401	7306.90		1.31
06:27:49	184.497	7309.82		2.92
06:30:42	184.545	7311.15		1.33
<b>06:36:</b> 28	184.641	7314.06		2.91
06:39:20	184.689		250.15	
06:45:06	184.785	7318.07		4.01
06:50:52	184.881	7320.81		2.73
06:53:44	184.929		250.13	
06:59:30	185.025	7325.05		4.24
07:02:23	185.073	7327.75		2.70
07:08:08	185.169		250.15	7 75
07:11:01	185.217	7331.50	050 44	3.75
07:17:44	185.329	7775 00	250.14	4.70
07:20:37	185.377	7335.89		4.39
07:26:23	185.473	7338.39		2.49
07:29:16	185.521	7339.59		1.20 2.58
07:35:01	185.617	7342.17		1.25
07:37:54	185.665	7343.43		2.61
07:43:40	185.761	7346.04		2.66
07:49:25	185.857	7348.70		1.29
07:52:18	185.905	7349.99 7352.60		2.61
07:58:04	186.001 186.049	7332.00	250.09	2.01
08:00:56	186.145	7356.37	230.03	3.76
08:06:42 08:09:35	186.193	7357.66		1.29
08:15:20	186.289	7557.00	250.08	1.25
08:18:13	186.337	7361.37	200.00	3.71
Ø8:23:59	186.433	7363.92		2.55
08:26:52	186.481	7365.14		1.22
08:32:37	186.577	7367.60		2.46
08:38:23	186.673	7370.15		2.55
08:41:16	186.721	7371.31		1.17
08:47:01	186.817	7373.90		2.59
08:49:54	186.865	7375.14		1.24
08:55:40	186.961	7377.46		2.32
08:58:32	187.009		250.05	
09:04:18	187.105	7381.25		3.79
09:07:11	187.153	7382.39		1.14
09:12:56	187.249		250.03	
09:15:49	187.297	7386.01		3.62
09:21:35	187.393	7388.52		2.51
09:24:28	187.441	7389.66		1.14
09:30:13	187.537	7392.01		2.35

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

Date : 30/09/89

Real Time HH:MM:SS	Delta Time Hours	<b>Pressure</b> PSIA	T <b>emp</b> Deg F	Pn-P(n-1) PSIA
<b>09:35:</b> 59	187.633	7394.45		2.44
09:39:49	187.697	7396.20		1.75
09:45:35	187.793	7398.58		2.38
09:48:28	187.841	7399.73		1.14
09:54:13	187.937	7402.07		2.35
09:57:06	187.985	7403.29		1.22
10:02:52	188.081	7405.62		2.32
10:05:44	188.129		250.00	
10:11:30	188.225	7409.07		3.45
10:14:23	188.273	7410.29		1.22
10:20:08	188.369		249.99	
10:23:01	188.417	7413.64	·	3.35
10:28:47	188.513	7415.72		2.08
10:34:32	188.609		249.97	
10:37:25	188.657	7419.30		3.58
10:43:11	188.753	7421.50		2.20
10:46:04	188.801	7422.68		1.18
10:51:49	188.897	7424.85		2.17
10:54:42	188.945	7426.02		1.17
11:00:28	189.041	7428.23		2.21
11:03:20	189.089		249.95	
11:09:06	189.185	7431.46		3.23
11:11:59	189.233	7432.56		1.11
11:17:44	189.329		249.94	7.04
11:20:37	189.377	7435.80		3.24
11:26:23	189.473	7437.94		2.14
11:32:08	189.569		249.93	7 77
11:35:01	189.617	7441.16		3.23
11:40:47	189.713	7443.26		2.10
11:43:40	189.761	7444.21		0.95
11:49:25	189.857	7446.43		2.21 0.90
11:52:18	189.905	7447.33		v.90 2.06
11:58:04	190.001	7449.39		
12:01:54	190.065	7450.67		1.28 2.16
12:07:40	190.161	7452.83	249.90	2.10
12:10:32	190.209	2455 02	249.90	2.99
12:16:18	190.305	7455.82		1.93
12:22:04	190.401	7457.75	249.88	1.33
12:24:56	190.449	7450 70	243.00	3.04
12:30:42	190.545	7460.79 7461.86		1.07
12:33:35	190.593	7461.86	249.87	1.401
12:39:20	190.689	7464.90	243.07	3.04
12:42:13	190.737			1.96
12:47:59	190.833	7466.86 7467.83		Ø.98
12:50:52	190.881	7467.83		1.91
12:56:37	190.977	7469.74		0.94
12:59:30	191.025	7470.68		1.92
13:05:16	191.121 191.169	1412.00	249.86	
13:08:08	191.165	7475.45	2-3100	2.85
13:13:54	131.203	1713.73		

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

Date : 30/09/89

Real Time HH:MM:SS	Delta Time Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
13:19:40	191.361	7477.31		1.86
13:22:32	191.409		249.84	
13:28:18	191.505	7480.17		2.86
13:31:11	191.553	7481.09		<b>0.</b> 92
13:36:56	191.649		249.83	
13:39:49	191.697	7483.86		2.77
13:45:35	191.793	7485.73		1.87
13:48:28	191.841	7486.61		0.88
13:54:13	191.937	7488.39		1.78
13:57:06	191.985	7489.38		0.99
14:02:52	192.081	7491.06		1.68
14:05:44	192.129		249.82	
14:11:30	192.225	7493.76		2.70
14:17:16	192.321	7495.60		1.83
14:21:06	192.385	7496.74		1.15
14:26:52	192.481	7498.46		1.72
14:29:44	192.529		249.80	
14:35:30	192.625	7500.97		2.51
14:38:23	192.673	7501.92		0.96
14:44:08	192.769		249.80	
14:47:01	192.817	7504.48		2.56
14:52:47	192.913	7506.19		1.71
14:55:40	192.961	7507.03		0.84
15:01:25	193.057	7508.70		1.67
15:04:18	193.105	7509.59		0.89
15:10:04	193.201	7511.23		1.64
15:15:49	193.297	7512.94		1.71
15:18:42	193.345	7513.70		0.76
15:24:28	193.441	7515.42		1.72
15:27:20	193.489		249.77	
15:33:06	193.585	7517.85		2.43
15:35:59	193.633	7518.73		0.88
15:41:44	193.729		249.76	
15:44:37	193.777	7521.29		2.56
15:50:23	193.873	7523.01		1.72
15:53:16	193.921	7523.84		0.83
15:59:01	194.017	7525.58		1.73
16:04:47	194.113	7527.21		1.63
16:07:40	194.161	7528.01		0.80
16:13:25	194.257	7529.65		1.64
16:16:18	194.305	7530.49		0.84
16:22:04	194.401	7532.10		1.61
16:24:56	194.449		249.75	
16:30:42	194.545	7534.56		2.46
16:33:35	194.593	7535.36		0.80
16:39:20	194.689		249.73	
16:43:11	194.753	7538.19		2.83
16:48:56	194.849		249.73	5 44
16:51:49	194.897	7540.60		2.41
16:57:35	194.993	7542.12		1.52

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

Date : 30/09/89

Real Time HH:MM:SS	Delta Time Hours	Pressure PSIA	<b>Temp</b> Deg F	<b>Pn-P(n-1)</b> PSIA
17:03:20	195.089		249.73	•
17:06:13	195.137	7544.42		2.31
17:11:59	195.233	7545.98		1.55
17:14:52	195.281	7546.67		0.69
17:20:37	195.377	7548.31		1.65
17:23:30	195.425	7549.08		0.77
17:29:16	195.521	7550.59		1.52
17:32:08	195.569		249.70	
17:37:54	195.665	7552.85		2.26
17:40:47	195.713	7553.66		0.80
17:46:32	195.809		249.70	
17:49:25	195.857	7555.91		2.26
17:55:11	195.953	7557.20		1.29
18:00:56	196.049		249.69	
18:03:49	196.097	7559.34		2.14
18:09:35	196.193	7560.76		1.42
18:12:28	196.241	7561.37		0.61
18:18:13	196.337	7562.83		1.45
18:21:06	196.385	7563.46		0.64
18:26:52	196.481	7565.03		1.57
18:29:44	196.529		249.68	
18:35:30	196.625	7567.14		2.11
18:38:23	196.673	7567.86		0.73
18:44:08	196.769		249.67	
18:47:01	196.817	7569.99		2.13
18:52:47	196.913	7571.45		1.45
18:58:32	197.009		249.67	
19:01:25	197.057	7573.56		2.11
19:08:08	197.169		249.67	
19:11:01	197.217	7575.81		2.26
19:16:47	197.313	7577.22		1.40
19:19:40	197.361	7577.87		0.65
19:25:25	197.457	7579.28		1.42
19:28:18	197.505	7579.92		0.64
19:34:04	197.601	7581.39	540.54	1.47
19:36:56	197.649		249.64	+ 00
19:42:42	197.745	7583.37		1.98 1.34
19:48:28	197.841	7584.71	249.64	1.34
19:51:20	197.889	7505 7 <b>0</b>	243.04	1.99
19:57:06	197.985	7586.70		0.77
19:59:59	198.033	7587.47	0.40 5.4	W.77
20:05:44	198.129	meno 70	249.64	1 02
20:08:37	198.177	7589.38		1.92
20:14:23	198.273	7590.75		1.37
20:17:16	198.321	7591.51		0.77
20:23:01	198.417	7592.92		1.40 0.67
20:25:54	198.465	7593.58		v.67 1.99
20:31:40	198.561	7595.57	240 64	1.33
20:34:32	198.609	neon er	249.64	1.95
20:40:18	198.705	7597.53		1.55

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A
Date : 30/09/89

Real Time HH:MM:SS	Delta Time Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
20:46:04	198.801	7598.78		1.25
20:48:56	198.849	, 5551.5	249.63	
20:54:42	198.945	7600.75		1.97
20:57:35	198.993	7601.44		0.69
21:03:20	199.089		249.62	
21:06:13	199.137	7603.34		1.90
21:11:59	199.233	7604.68		1.34
21:14:52	199.281	7605.33		0.65
21:20:37	199.377	7606.70		1.37
21:23:30	199.425	7607.36		0.67
21:30:13	199.537	7608.90		1.53
21:33:06	199.585	7609.53		0.64
21:38:52	199.681	7610.84		1.30
21:44:37	199.777	7612.16		1.33
21:47:30	199.825	7612.79		0.63
21:53:16	199.921	7614.13	240 50	1.34
21:56:08	199.969	77.45.00	249.59	1 00
22:01:54	200.065	7616.00		1.86 Ø.50
22:04:47	200.113	7616.50	249.59	0.50
22:10:32	200.209	7010 40	243.33	1.96
22:13:25	200.257 200.353	7618.45 7619.82		1.37
22:19:11 22:22:04	200.333	7620.39		0.58
22:27:49	200.497	7621.60		1.20
22:30:42	200.545	7622.23		0.64
22:36:28	200.641	7623.46		1.23
22:42:13	200.737	7624.67		1.21
22:45:06	200.785	7625.26		0.59
22:50:52	200.881	7626.45		1.19
22:53:44	200.929		249.58	
22:59:30	201.025	7628.32		1.87
23:02:23	201.073	7628.93		0.61
23:08:08	201.169		249.57	
23:11:01	201.217	7630.73		1.80
23:16:47	201.313	7631.96		1.23
23:19:40	201.361	7632.64		0.68
23:25:25	201.457	7633.81		1.17
23:31:11	201.553	7635.03		1.23
23:34:04	201.601	7635.61		0.58 1.23
23:39:49	201.697	7636.84		
23:42:42	201.745	7637.41		0.58
23:49:25	201.857	7638.72		1.30 0.68
23:52:18	201.905	7639.39		1.04
23:58:04	202.001	7640.43	249.59	1.04
00:00:56	202.049 202.145	7642.12	49.33	1.69
00:06:42 00:09:35	202.145	7642.73		0.61
00:09:35	202.193	1042110	249.59	0.101
00:13:20	202.203	7644.46	2.0.22	1.73
00:23:59	202.433	7645.61		1.15

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

Date : 01/10/89

Real Time HH:MM:SS	<b>Delta Time</b> Hours	<b>Pressure</b> PSIA	Temp Deg F	Pn-P(n-1) PSIA
00:29:44	202.529		249.58	
00:32:37	202.577	7647.17		1.56
00:38:23	202.673	7648.24		1.07
00:41:16	202.721	7648.83		0.59
00:47:01	202.817	7649.93		1.10
00:49:54	202.865	7650.47		0.54
00:55:40	202.961	7651.58		1.11
00:58:32	203.009		249.58	
01:04:18	203.105	7653.18		1.60
01:07:11	203.153	7653.72		0.54
01:12:56	203.249		249.57	
01:15:49	203.297	7655.33		1.61
01:21:35	203.393	7656.38		1.05
01:27:20	203.489		249.57	
01:30:13	203.537	7657.98		1.60
01:35:59	203.633	7659.13		1.15
01:38:52	203.681	7659.71		0.58
01:44:37	203.777	7660.73		1.02
01:47:30	203.825	7661.34		0.61 1.11
01:53:16	203.921	7662.46	249.56	1.11
01:56:08	203.969	7007 00	249.56	1.54
02:01:54	204.065	7663.99		0.58
02:04:47	204.113	7664.57 7665.87		1.31
02:11:30	204.225	7666.41		0.54
02:14:23	204.273 204.369	7000.41	249.55	W.J4
02:20:08 02:25:54	204.465	7668.70	240.00	2.29
02:28:47	204.513	7669.28		0.58
02:34:32	204.609	1003.20	249.55	2.2.
02:34:32	204.657	7670.97	2.3702	1.69
02:43:11	204.753	7672.08		1.11
02:46:04	204.801	7672.64		0.56
02:51:49	204.897	7673.81		1.17
02:54:42	204.945	7674.33		0.52
03:00:28	205.041	7675.46		1.13
03:03:20	205.089		249.54	
03:09:06	205.185	7677.06		1.60
03:14:52	205.281	7678.08		1.02
03:17:44	205.329		249.52	
03:23:30	205.425	7679.81		1.73
03:26:23	205.473	7680.31		0.50
03:32:08	205.569		249.52	
03:35:01	205.617	7682.08		1.77
03:40:47	205.713	7683.15		1.08
03:43:40	205.761	7683.69		0.54
03:49:25	205.857	7684.77		1.08
03:52:18	205.905	7685.27		0.50
03:58:04	206.001	7686.33	<b>5.</b>	1.06
04:00:56	206.049		249.51	1 . 45
04:06:42	206.145	7687.79		1.46

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

Date : 01/10/89

Real Time HH:MM:SS	Delta Time Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
04:12:28	206.241	7688.90		1.11
04:15:20	206.289		249.50	
04:21:06	206.385	7690.54		1.64
04:23:59	206.433	7691.08		0.54
04:30:42	206.545	7692.19		1.11
04:33:35	206.593	7692.81		0.61
04:39:20	206.689		249.50	
04:42:13	206.737	7694.31		1.50
04:47:59	206.833	7695.42		1.11
04:50:52	206.881	7695.87		0.45
04:56:37	206.977	7696.92		1.05
04:59:30	207.025	7697.41		0.49
05:05:16	207.121	7698.48		1.08
05:11:01	207.217	7699.52		1.04
05:13:54	207.265	7700.02		0.50
05:19:40	207.361	7701.06		1.04
<b>05:22:3</b> 2	207.409		249.49	
05:28:18	207.505	7702.54		1.49
05:31:11	207.553	7703.12		0.58
<b>05:36:5</b> 6	207.649		249.48	4 50
<b>05:</b> 39:49	207.697	7704.69		1.58
05:45:35	207.793	7705.69		1.00
<b>05:48:</b> 28	207.841	7706.23		0.54
05:54:13	207.937	7707.16		0.92
05:57:06	207.985	7707.62		0.46
06:02:52	208.081	7708.68		1.06
06:08:37	208.177	7709.64		0.96
06:11:30	208.225	7710.06		0.42 0.99
06:17:16	208.321	7711.05	240 40	<b>v.</b> 55
06:20:08	208.369	mm.10 F3	249.46	1.48
06:25:54	208.465	7712.52		0.54
<b>06:28:47</b>	208.513	7713.06	240 45	W.54
06:34:32	208.609	7714 45	249.46	1.38
06:37:25	208.657	7714.45		1.12
06:43:11	208.753	7715.56 7716.01		0.45
06:46:04	208.801	7717.05		1.04
06:52:47	208.913 209.009 >	1/11/103	249.45	1.07
06:58:32	203.000	7718.47	243.43	1.42
07:01:25	209.057	7719.43		0.96
07:07:11	209.153 209.201	7719.84		0.41
07:10:04 07:15:49	209.297	7720.82		0.98
	209.345	7721.23		0.41
07:18:42	Opened Well at		fold on 1/4"	
07:20:00	Flow by-passed	to bucher	1010 011 174	. and allone
07.74.70	209.441	5820.48		-1900.75
07:24:28	209.441	3020.70	249.73	
07:27:20	209.585	5252.28		-568.20
07:33:06 07:35:59	209.633	5165.33		-86.95
	209.729	3,03.03	250.89	
07:41:44	703.173			

Location: Zapata Arctic Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

Date : 01/10/89

Real Time	Delta Time	Pressure	Temp	Pn-P(n-1)
HH:MM:SS	Hours	PSTA	Deg F	PSIA
·				
07:44:37	209.777	4938.58		-226.75
07:50:23	209.873	4802.16		-136.42
07:56:08	209.969		251.54	
07:59:01	210.017	4630.49		-171.66
08:04:47	210.113	4531.37		-99.12
08:07:40	210.161	4488.02		-43.35
08:13:25	210.257	4404.15		-83.86
08:16:18	210.305	4364.30		-39.85
08:22:04	210.401	4278.69		-85.61
08:24:56	210.449		252.76	
08:30:42	210.545	4157.10		-121.60
08:33:35	210.593	409G.47		-60.63
08:39:20	210.689		253.52	
08:42:13	210.737	3977.59		-118.88
08:47:59	210.833	3910.20		-67.39
08:53:44	210.929		254.34	
08:56:37	210.977	3817.85		-92.34
09:02:23	211.073	3761.60		-56.25
09:05:16	211.121	3734.91		-26.69
09:11:59	211.233	3682.15		-52.77
09:14:52	211.281	3663.50		-18.65
09:20:37	211.377	3630.95		-32.54
09:23:30	211.425	3613.85		-17.11
09:29:16	211.521	3605.78		-8.07
09:32:08	211.569		255.68	
09:37:54	211.665	3587.64		-18.14
09:40:47	211.713	3581.96		-5.68
09:46:32	211.809		255.97	
09:52:18	211.905	3557.57		-24.39
09:54:00	Shut-in Well a	t choke mani	fold	
09:55:11	211.953	3561.54		3.97
10:00:56	212.049		256.26	
10:03:49	212.097	3652.15		90.61
10:09:35	212.193	3719.93		67.78
10:12:28	212.241	3753.93		34.00
10:18:13	212.337	3817.74		63.81
10:21:06	212.385	3846.83		29:10
10:26:52	212.481	3902.47		55.64
10:29:44	212.529		256.51	
10:35:30	212.625	3973.76		71.29
10:41:16	212.721	4018.81		45.05
10:44:08	212.769		256.70	
10:49:54	212.865	4084.92		66.11
10:52:47	212.913	4106.57		21.65
10:58:32	213.009		256.88	
11:01:25	213.057	4170.36		63.79
11:07:11	213.153	4212.02		41.66
11:10:04	213.201	4232.75		20.72
11:15:49	213.297	4273.95		41.21
11:18:42	· · · · · · · · · · · · · · · · · · ·	4294.57		20.62
	<del>-</del> . <del>-</del>			

Gauge No: 73033 Client : Petrofina Australia

Well No.: Anemone # 1A Location: Zapata Arctic : 01/10/89 Date

Test No.: DST # 1

Temp Pn-P(n-1) Pressure Delta Time Real Time Deg F PSIA **PSIA** Hours HH:MM:SS 41.04 4335.61 213.441 11:24:28 257.14 213.489 11:27:20 68.08 4403.69 213.601 11:34:04 40.40 4444.09 213.697 11:39:49 20.14 4464.23 213.745 11:42:42 Opened Well at choke manifold on 1/8" fixed choke 11:48:00 Flow by-passed to burner 40.19 11:48:28 213.841 4504.43 257.23 213.889 11:51:20 25.61 4530.04 213,985 11:57:06 10.83 4540.87 214.033 11:59:59 257.26 214.129 12:05:44 35.28 -4576.14 214.177 12:08:37 23.08 4599.23 12:14:23 214.273 11.22 4610.44 214.321 12:17:16 24.27 4634.71 12:23:01 214.417 12.81 214.465 4647.53 12:25:54 24.03 4671.55 214.561 12:31:40 22.59 4694.14 12:37:25 214.657 11.52 4705.66 214.705 12:40:18 23.92 214.801 4729.58 12:46:04 257.28 214.849 12:48:56 26.44 4756.01 12:54:42 214.945 11.26 214.993 4767.28 12:57:35 257.27 215.089 13:03:20 31.79 4799.07 215.137 13:06:13 20.85 215.233 4819.92 13:11:59 10.17 4830.10 13:14:52 215.281 20.25 13:20:37 215.377 4850.35 Flow diverted through separator 13:22:00 12.53 4862.88 215.425 13:23:30 20.39 4883:27 13:29:16 215.521 21.59 4904.85 215.617 13:35:01 9.78 215.665 4914.64 13:37:54 19.27 4933.91 215.761 13:43:40 257.17 215.809 13:46:32 19.80 4953.71 215.905 13:52:18 257.14 215.969 13:56:08 22.24 4975.95 216.065 14:01:54 7.49 4983.43 216.113 14:04:47 257.11 216.209 14:10:32 17.86 5001.30 216.257 14:13:25 12.58 5013.88 216.353 14:19:11 257.08 216.449 14:24:56 34.31 5048.18 216.497 14:27:49 22.10 5070.28 216.593 14:33:35 10.56 5080.85 216.641 14:36:28 20.08 5100.92 216.737 14:42:13 9.30 5110.23 216.785 14:45:06 18.98 5129.21 216.881 14:50:52

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

Date : 01/10/89

Real Time HH:MM:SS	Delta Time Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1). PSIA
14:53:44	216.929		256.99	
14:59:30	217.025	5160.37		31.16
15:02:23	217.073	5170.56		10.19
15:08:08	217.169		256.92	
15:11:01	217.217	5199.10		28.54
15:16:47	217.313	5212.54		13.44
15:22:32	217.409		256.86	
15:25:25	217.457	5232.72		20.18
15:31:11	217.553	5246.67		13.96
15:34:04	217.601	5253.33		6.65
15:39:49	217.697	5264.97		11.64
15:42:42	217.745	5270.85		5.88
15:48:28	217.841	5279.94		9.09
15:51:20	217.889		256.76	
15:57:06	217.985	5291.21		11.26
15:59:59	218.033	5294.47		3.27
16:05:44	218.129		256.72	
16:08:37	218.177	5304.20		9.73
16:15:20	218.289		256.70	
16:21:06	218.385	5325.02		20.82
16:23:59	218.433	5330.25	•	5.23
16:29:44	218.529		256.67	
16:32:37	218.577	5343.22		12.97
16:38:23	218.673	5351.54		8.31
16:41:16	218.721	5355.37		3.83
16:47:01	218.817	5361.92		6.56
16:49:54	218.865	5365.04		3.12
16:55:40	218.961	5371.03		5.99
16:58:32	219.009		256.57	-
17:04:18	219.105	5378.38		7.34
17:07:11	219.153	5381.87		3.49
17:12:56	219.249		256.55	
17:18:42	219.345	5400.29		18.42
17:21:35	219.393	5401.46		4.17
17:27:20	219.489		256.50	
17:30:13	219.537	5418.13		13.67
17:35:59	219.633	5424.31		6.18
17:38:52	219.681	5426.61		2.30
17:44:37	219.777	5427.49		0.88
17:47:30	219.825	5426.97		-0.51
17:53:16	219.921	5422.48		-4.49
17:56:08	219.969		256.43	
18:01:54	220.065	5415.12		<del>-</del> 7.37
18:07:40	220.161	5412.01		-3.10
18:10:32	220.209		256.41	
18:16:18	220.305	5409.18		-2.83
18:19:11	220.353	5408.15		-1.03
18:24:56	220.449		256.39	
18:27:49	220.497	5411.07		2.92
18:33:35		5413.80		2.73
. 5 - 55 - 65				

Exal Reservoir Services Ltd.

CITCHE . I CONTRIBUTION HOLE

Location: Zapata Arctic

Test No.: DST # 1

המתחב ווחי וחמחח

Well No.: Anemone # 1A

Date : 01/10/89

Real Time	Delta Time	Pressure	Темр	Pn=P(n=1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
	556 553	5444 00		
18:37:25	220.657	5414.96		1.16
18:43:11	220.753	5414.91		-0.05
18:46:04	220.801	5414.28		-0.63
18:51:49	220.897	5411.75		-2.53
18:54:42	220.945	5412.37		0.63
19:00:28	221.041	5412.39		0,02
19:06:13	221.137	5411.05		-1.34
19:09:06	221.185	5411.84		0.78
19:14:52	221.281	5412.52	250 75	0.68
19:17:44	221.329		256.37	. 70
19:23:30	221.425	5414.91		2.39
19:26:23	221.473	5415.87		0.96
19:32:08	221.569	= = = =	256.37	5 45
19:35:01	221.617	5418.32		2.45
19:40:47	221.713	5420.74		2.43
19:43:40	221.761	5424.60		3.85
19:49:25	221.857	5427.63		3.03
19:52:18	221.905	-5428.77		1.14
19:58:04	222.001	5430.40		1.63
20:03:49	222.097	5431.22		0.82
20:06:42	222.145	5431.26		0.04
20:12:28	222.241	5431.86	, acc 2c	0.61
20:15:20	222.289 222.385	5434.01	256.36	2.14
20:21:06 20:23:59	222.385 222.433	5433.93		-0.07
20:23:33	222.433	5433.33	256.36	0.07
20:23:44	222.577	5432.76	230.30	-1.18
20:32:37	222.673	5431.90		-0.86
20:41:16	222.721	5431.83		-0.07
20:47:01	222.817	5432.28		0.45
20:49:54	222.865	5432.76		0.48
20:55:40	222.961	5433.86		1.11
21:00:00	Commenced taking		les at separator	
21:02:23	223.073	5434.01	·	0.14
21:05:16	223.121	5434.22		0.21
21:11:01	223.217	5432.26		-1.96
21:13:54	223.265	5432.76		0.50
21:19:40	223.361	5430.03		-2.73
21:22:32	223.409		256.35	
21:28:18	223.505	5429.72		-0.31
21:31:11	223.553	5429.12		-0.61
21:36:56	223.649		256.36	
21:39:49	223.697	5433.47		4.35
21:45:35	223.793	5428.97		-4.50
21:51:20	223.889		256.36	
21:54:13	223.937	5430.61		1.64
21:59:59	224.033	5427.12		-3.50
22:02:52	224.081	5424.87		-2.25
22:08:37	224.177	5421.51		-3.35
22:11:30	224.225	5419.25		-2.27

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

Date : 01/10/89

Real Time	Delta Time Hours	<b>Pressure</b> PSIA	Temp Deg F	Pn-P(n-1) PSIA
пп•тит•55	riodi 5	, 52		
22:17:16	224.321	5416.64		-2.60
22:20:08	224.369		256.37	
22:25:54	224.465	5415.51		-1.13
22:28:47	224.513	5419.76		4.25
22:34:32	224.609		256.38	
22:37:25	224.657	5423.44		3.68
22:43:11	224.753	5428.95		5.52
22:48:56	224.849		256.37	
22:51:49	224.897	5500.64	e	71.69
22:57:35	224.993	5502.34		1.70
23:00:28	225.041	5494.62		-7.72
23:06:13	225.137	5488.90	-	-5.72
23:09:06	225.185	5490.15		1.25
23:14:52	225.281	5485.88		-4.27
23:17:44	225.329		256.32	
23:24:28	225.441	5500.46	_	14.58
23:27:20	225.489		256.31	
23:33:06	225.585	5491.55		-8.91
23:35:59	225.633	5489.15		-2.40
23:41:44	225.729		256.30	
23:45:00	Increased choke	to 1/4" fi	xed. choke	
23:47:30	225.825	5504.75		15.60
23:50:23	225.873	5528.45		23.70
23:56:08	225.969		256.29	
23:59:01	226.017	5506.23		-22.23
00:04:47	226.113	5339.04		-167.18
00:07:40	226.161	5279.30		-59.75
00:13:25	226.257	5178.56		-100.74
00:16:18	226.305	5127.65		-50.91
00:22:04	226.401	5036.63		-91.02
00:24:56	226.449		256.54	
00:30:42	226.545	4917.30		-119.33
00:33:35	,226.593	4881.76		-35.54
00:39:20	226.689		256.77	
00:45:06	226.785	4750.57		-131.19
00:47:59	226.833	4720.61		-29.96
00:53:44	226.929		256.96	
00:56:37	226.977	4644.81		75.80
01:02:23	227.073	4602.81		-42.00
01:05:16	227.121	4582.11		-20.70
01:11:01	227.217	4543.86		-38.25
01:13:54	227.265	4526.26		-17.60
01:19:40	227.361	4494.38		-31.89
01:22:32	227.409		257.25	
01:28:18	227.505	4449.61		-44.76
01:34:04	227.601	4421.88		-27.74
01:36:56	227.649		257.39	
01:43:40	227.761	4382.93		-38.95
01:46:32	227.809		257.47	
01:52:18	227.905	4351.56		-31.37

Exal Reservoir Services Ltd.

official - Len offine impliente

Location: Zapata Arctic

Test No.: DST # 1

กลิตก็ต เกละ เวิกวิว

Well No.: Anemone # 1A

Date : 02/10/89

Real Time HH:MM:SS	Delta Time Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
01:55:11	227.953	4340.22		-11.34
02:00:56	228.049		257.62	
02:03:49	228.097	4313.05		-27.17
02:09:35	228.193	4293.29		-19.76
02:12:28	228.241	4285.05		-8.23
02:18:13	228.337	4270.72		-14.33
02:20:00	Shut-in Well at	•	fold	
02:21:06	228.385	4278.91		8.18
02:26:52	228.481	4351.35		72.44
02:32:37	228.577	4420.17		68.82
02:33:00	Commenced bullh	-	tion	
02:35:30	228.625	4458.64		38.47
02:41:16	228.721	4689.94	255 04	231.30
02:44:08	228.769	5554 35	257.91	5D4 41
02:49:54	228.865	5274.35		584.41
02:52:47	228.913	5529.43	252 55	255.08
02:58:32	229.009	במחם בם	257.66	1463.09
03:01:25	229.057	6992.52		2739.82
03:07:11	229.153	9732.34 10861.86		1129.52
03:10:04	229.201	10825.06		-36.79
03:15:49	229.297 229.345	11004.21		179.15
03:18:42 03:24:28	229.441	10770.90		-233.31
03:24:28	229.537	11261.02		490.12
03:30:13	229.585	11481.34		220.31
<b>03:38:5</b> 2	229.681	11506.03		24.69
03:41:44	229.729	11300.05	252.15	2.025
03:47:30	229.825	11470.63		-35.40
03:50:23	229.873	11651.77		181.14
03:56:08	229.969		250.96	
03:59:01	230.017	12081.83		430.06
04:05:44	230.129		250.20	
04:08:37	230.177	11105.82		-976.01
04:14:23	230.273	10727.37		-378.45
04:17:16	230.321	11420.23		692.86
04:23:01	230.417	11595.36		175.13
04:28:47	230.513	10964.10		-631.27
04:31:40	230.561	10849.89		-114.21
04:37:25	230.657	11878.47		1028.58
04:40:18	230.705	11664.36		-214.11
04:46:04	230.801	11038.25	·	-626.11
04:48:56	230.849		248.63	771 77
04:54:42	230.945	11369.97		331.72
04:57:35	230.993	11697.27	246.22	327.30
05:03:20	231.089		248.28	E24 44
05:06:13	231.137	11175.86		-521.41
05:11:59	231.233	10868.22	247 07	-307.64
05:17:44	231.329	11570 57	247.93	670.31
05:20:37	231.377	11538.53		-549.67
05:26:23	231.473	10988.87		J-1.01

Exal Reservoir Services Ltd.

Location: Zapata Arctic Test No.: DST # 1

Gauge No: 73033 Well No.: Anemone # 1A

Date : 02/10/89

•				
Real Time	Delta Time	Pressure	Temp	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
05:29:16	231.521	10776.31		-212.55
05:35:01	231.617	11707.37		931.06
05:37:54	231.665	11501.37		-206.00
05:43:40	231.761	10962.44		-538.93
05:46:32	231.809		247.23	
05:52:18	231.905	11527.68		565.24
05:55:11	231.953	11429.63		-98.06
06:00:56	232.049	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	247.02	
06:03:49	232.097	10709.67		-719.96
06:09:35	232.193	11534.80	•	825.13
06:15:20	232.133	11357.50	246.85	
06:18:13	232.2337	10824.99		-709.81
	232.449	10024.55	246.76	
06:24:56	232.443	11460.71	2.00.0	635.72
06:27:49 06:33:35	232.593	11137.03		-323.69
	_	10906.75		-230.28
06:36:28	232.641 232.737	10537.66		-369.09
06:42:13		10588.03		50.37
06:45:06	232.785	11240.47		652.44
06:50:52	232.881	11240.47	246.39	ODE : TT
06:53:44	232.929	10505 00	240.33	-653.57
06:59:30	233.025	10586.90	,	-158.34
07:02:23	233.073	10428.56	246.33	150.54
07:08:08	233.169	10000 70	240.33	461.76
07:13:54	233.265	10890.32		-200.10
07:16:47	233.313	10690.22	246.14	-200.10
07:22:32	233.409	44044 35	240.14	354.12
07:25:25	233.457	11044.35		4.24
07:31:11	233.553	11048.59		-222.96
07:34:04	233.601	10825.63		-222.36 -347.35
07:39:49	233.697	10478.27		-347.33 17.32
07:42:42	233.745	10495.59		
07:48:28	233.841	11116.75	245 22	621.15
07:51:20	233.889		245.98	COO 21
07:57:06	233.985	10508.54		-608.21
07:59:59	234.033	10363.82	0.45 0.4	-144.72
08:05:44	234.129		245.91	. 517 52
08:11:30	234.225	10877.74		513.92
08:14:23	234.273	10684.12		-193.62
08:20:08	234.369		245.76	700 05
08:23:01	234.417	11057.07		372.95
08:28:47	234.513	10960.91		-96.16
08:31:40	234.561	10754.19		-206.72
08:37:25	234.657	10430.13		-324.05
08:40:18	234.705	10780.70		350.57
08:47:01	234.817	10970.85		190.15
08:49:54	234.865	10764.14		-206.71
08:55:40	234.961	10440.40		-323.74
09:01:25	235.057	11342.64		902,24
09:04:18	235.105	11066.95		-275.69
09:10:04		10658.06		-408.89
,				

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

Date : 02/10/89

Real Time	Delta Time	Pressure	Темр	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
			n.= 47	
09:12:56	235.249		245.43	CC7 00
09:18:42	235.345	11321.15		663.08
09:21:35	235.393	11029.54	0.45 70	-291.61
09:27:20	235.489		245.32	E 4 E 70
09:30:13	235.537	10483.84		-545.70
09:35:59	235.633	11109.84		626.00
09:38:52	235.681	11210.14		100.30
09:44:37	235.777	10756.75		-453.39
09:47:30	235.825	10586.14		-170.60 478.37
09:53:16	235.921	11064.51		-274.32
09:59:01	236.017	10790.20		-177.42
10:01:54	236.065	10612.77		-284.82
10:07:40	236.161	10327.95	245.22	204.02
10:10:32	236.209	10057 04	243.22	525.99
10:16:18	236.305	10853.94 10657.97		-195.98
10:19:11	236.353	10657.57	245.18	133.30
10:24:56	236.449	10205 75	243.10	-361.21
10:27:49	236.497	10296.75		497.72
10:33:35	236.593	10794.47 10603.71		-190.76
10:36:28	236.641	10312.76		-290.96
10:42:13	236.737	10312.76		-116.89
10:45:06	236.785	10913.06	•	717.20
10:50:52	236.881	10503.66		-409.40
10:56:37	236.977	10359.87		-143.79
10:59:30	237.025	10103.99		-255.88
11:06:13	237.137	10722.10		618.11
11:09:06	237.185	10456.54		-265.56
11:14:52	237.281 237.329	10430.34	245.24	200.00
11:17:44	237.425	10090.06	2,0.2,	-366.47
11:23:30	237.473	9995.79		-94.27
11:26:23 11:32:08	237.569	5555.15	245.35	• • • • • • • • • • • • • • • • • • • •
11:35:01	237.617	10548.21	2.0.00	552.42
	237.713	10256.67		-291.54
11:40:47 11:43:40	237.761	10142.28		-114.39
	237.767	10025.68		-116.60
11:49:25 11:55:11	237.953	10522.73		497.05
11:58:04	238.001	10364.41		-158.32
12:03:49	238.097	10122.66		-241.75
12:05:45	238.145	10023.33		-99.33
12:12:28	238.241	10710.92		687.59
12:12:28	238.289	10110.32	245.35	
12:21:06	238.385	10248.30		-462.62
12:23:59	238.433	10137.19		-111.11
12:23:33	238.529	10101110	245.36	
12:29:44	238.577	10834.15		696.97
12:38:23	238.673	10453.64		-380.51
12:44:08	238.769	,0,00,0	245.29	
12:47:01	238.817	10410.25		-43.39
12:52:47	238.913	10752.38		342.13
14.34.41	200.010	,		

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

Date : 02/10/89

Real Time	Delta Timo	e Pressure	Temp	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	P510
				120 24
12:55:40	238.961	10572.65		-179.74
13:01:25	239.057	10298.14		-274.50
13:04:18	239.105	10619.28		321.14
13:10:04	239.201	10709.98		90.71
13:12:56	239.249		245.18	405.64
13:18:42	239.345	10284.35		-425.64
13:21:35	239.393	10179.74		-104.61
13:28:18	239.505	10838.13		658.39
13:31:11	239.553	10646.04	5.4F .5	-192.09
13:36:56	239.649		245.16	707 05
13:42:42	239.745	11043.89		397.85
13:45:35	239.793	10780.45		-263.44
13:51:20	239.889	40744 77	245.12	470 71
13:54:13	239.937	10341.73		-438.71
13:59:59	240.033	10906.54		564.80 -46.55
14:02:52	240.081	10859.99		-46.55 -350.22
14:08:37	240.177	10509.77		-131.26
14:11:30	240.225	10378.51 10807.82		429.31
14:17:16	240.321 240.369	10007.02	245.34	423.51
14:20:08 14:25:54	240.365	10509.77	243.54	-298.05
14:23:34	240.463	10383.19	•	-126.58
14:20:47	240.513	10000.13	245.47	120.00
14:34:32	240.705	10858.49	243.41	475.30
14:43:11	240.753	10668.31		-190.18
14:48:56	240.849	10000.51	245.63	, , , , ,
14:51:49	240.897	10291.80		-376.51
14:57:35	240.993	10909.91		618.11
15:00:28	241.041	10723.56		-186.35
15:06:13	241.137	10482.03		-241.54
15:09:06	241.185	10392.59		-89.44
15:14:52	241.281	11036.93		644.34
15:17:44	241.329		245.87	
15:23:30	241.425	10686.04	-	-350.89
15:26:23	241.473	10619.65		-66.38
15:32:08	241.569		245.98	
15:37:54	241.665	10999.30		379.65
15:40:47	241.713	10910.22	-	-89.08
15:46:32	241.809		246.13	
15:50:23	241.873	10721.10		-189.12
15:56:08	241.969		246.21	
15:59:01	242.017	10597.74		-123.37
16:04:47	242.113	10531.51		-66.23
16:07:40	242.161	10502.08		-29.43
16:13:25	242.257	10447.48		-54.60
16:16:18	242.305	11031.65		584.17
16:22:04	242.401	11151.57		119.92
16:27:49	242.497	8082.46		-3069.11
16:30:00		eading format	ion, observed	
16:30:42	242.545	7998.56		-83.90

Location: Zapata Arctic

Test No.: DST # 1

ьаиде мо: тэмээ

Well No.: Anemone # 1A

Date : 02/10/89

Real Time HH:MM:SS	Delta Time Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
16:36:28	242.641	7871.54	246.50	-127.02
16:39:20	242.689	2001 22	240.50	-10.32
16:45:06	242.785	7861.22 7855.93		-5.29
16:47:59	242.833	7855.33	246.75	. 5123
16:53:44	242.929	2055 00	240.75	-0.93
16:56:37	242.977	7855.00 7879.08		24.08
17:02:23	243.073	7875.00		15.15
17:05:16	243.121	7950.43		56.20
17:11:01	243.217	7985.56		35.13
17:13:54	243.265	8054.15		68.59
17:19:40	243.361 243.457	8119.52		65.37
17:25:25	243.457	8149.66	-	30.14
17:28:18	243.503	8206.71		57.05
17:34:04	243.649	OL CO.TT	247.42	
17:36:56 17:42:42	243.745	8280.08		73.37
17:42:42	243.793	8302.47	,	22.39
17:51:20	243.889		247.57	
17:54:13	243.937	8362.33		59.87
17:59:59	244.033	8398.56		36.22
18:02:52	244.081	8484.36		85.81
18:08:37	244.177	8503.48		19,.12
18:10:00	Closed PCT		•	
18:12:28	244.241	10517.77		2014.29
18:14:00	Attempted to	open MIDRV		
18:18:13	244.337	11502.67		984.90
18:23:59	244.433	11333.77		-168.90
18:26:52	244.481	11099.88		-233.89
18:32:37	244.577	11804.62		704.74
18:35:30	244.625	7809.62		-3995.00
18:41:16	244.721	10084.55		2274.92
18:44:08	244.769		247.55	1055 07
18:49:54	244.865	9028.72		-1055.83
18:52:47	244.913	9944.47	0.47 05	915.76
18:58:32	245.009	0.400.07	247.85	-1445.84
19:01:25	245.057	8498.63		176.21
19:07:11	245.153	8674.85		47.53
19:10:04	245.201	8722.38		61.39
19:15:49	245.297	8783.77 8811.48		27.72
19:21:35	245.393	8819.43		7.95
19:24:28	245.441	8832.22		12.79
19:30:13	245.537 245.585	8840.82		8.60
19:33:06		8853.01		12.19
19:38:52	245.681	0033.01	248.15	
19:41:44	245.729 245.825	8853.78	240113	0.77
19:47:30	245.825	8851.87		-1.91
19:50:23	245.873	0031.01	248.20	
19:56:08 19:59:01	245.963	8851.46		-0.41
20:04:47	246.113	8855.29		3.83
20.04.41	LTU.110			

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033 Well No.: Anemone # 1A

Date : 02/10/89

		_	_	n n/- 1\
Real Time	Delta Time	Pressure	Temp	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
20:10:32	246.209		248.22	
20:10:32	246.257	8858.81		3.52
20:13:23	246.353	9121.11		262.30
20:13:11	246.401	9062.79		-58.32
20:27:49	246.497	8966.41		-96.38
20:27:43	246.561	8980.50		14.09
	246.657	8777.50		-203.00
20:37:25	246.705	8120.65		-656.85
20:40:18	246.705	9750.16		1629.51
20:46:04	246.849	3730.10	248.90	
20:48:56	246.945	11756.97	240.30	2006.81
20:54:42	MIDRV failed t		-	
20:56:00	246.993	7867.11		-3889.86
20:57:35	247.089	7007.11	249.27	0000111
21:03:20		8367.66	243.21	500.55
21:09:06	247.185	8429.09	•	61.44
21:11:59	247.233	8423.03	249.32	01.77
21:17:44	247.329	0120 77	243.32	-300.36
21:20:37	247.377	8128.73		500.50
21:22:00	Opened SHORT	9867.29		1738.56
21:26:23	247.473			-686.36
21:29:16	247.521	9180.93		00.00
21:32:00	Commenced reve		100	-40.11
21:35:01	247.617	9140.82		-49.62
21:37:54	247.665	9091.21		-47.28
21:43:40	247.761	9043.93	240 75	-47.20
21:46:32	247.809	0000 50	249.35	-54.24
21:52:18	247.905	8989.68		-11.46
21:55:11	247.953	8978.22		
22:00:00	Stopped revers	e circulation	249.16	OVERTION/
22:00:56	248.049	0042 54	243.10	-35.68
22:06:42	248.145	8942.54		-7.18
22:09:35	248.193	8935.36	249.11	7.10
22:15:20	248.289	5545 55	243.11	-18.49
22:18:13	248.337	8916.88		-10.30
22:23:59	248.433	8906.58		-4.60
22:26:52	248.481	8901.98		-8.58
22:32:37	248.577	8893.41		-3.84
22:35:30	248.625	8889.57		-7.06
22:41:16	248.721	8882.51	240 05	-7.00
22:44:08	248.769		249.05	-9.42
22:49:54	248.865	8873.08	740.00	-5.42
22:53:44	248.929		249.08	-9.14
22:59:30	249.025	8863.94		
23:05:16	249.121	8859.11		-4.83
23:08:08	249.169		249.05	
23:13:54	249.265	8852.32		-6.79
23:16:47	249.313	8850.06		-2:27
23:19:00	Continued reve	rse ciculati		
23:22:32	249.409		249.10	70.00
23:25:25	249.457	8888.93		38.88

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 1

Gauge NO: 10000

Well No.: Anemone # 1A

Date : 02/10/89

Real Time	Delta Time	Pressure	Temp	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
07.71.11	240 557	8871.65		-17.28
23:31:11	249.553 249.601	8867.01		-4.64
23:34:04	249.697	8858.69		-8.32
23:39:49		8855.24		-3.45
23:42:42	249.745	8850.15		-5.09
23:48:28	249.841	8845.67		-4.48
23:54:13	249.937	8841.80		-3.87
23:57:06	249.985 250.081	8837.42		-4.37
00:02:52	250.001	0057.42	249.12	
00:05:44	250.725	8831.96	2.002	-5.46
00:11:30	250.273	8829.85	at .	-2.11
00:14:23	250.369	0023.03	249.10	
00:20:08	250.417	8825.66	2.12.7.2	-4.19
00:23:01	250.417	8822.94		-2.73
00:28:47	250.561	8818.83		-4.11
00:31:40	250.657	8815.38		-3.44
00:37:25	250.705	8810.61		-4.77
00:40:18	250.801	8810.40		-0.21
00:46:04	250.897	8810.44		0.04
00:51:49	250.945	8810.65		0.21
00:54:42	251.041	8810.76		0.11
01:00:28 01:03:20	251.089	0010.70	249.00	
	251.185	8807.12	,	-3.64
01:09:06	251.733	·		-0.72
01:11:59	251.345	8804.75		-1.66
01:18:42 01:21:35	251.393	8803.71		-1.03
01:21:35	251.489	0000	249.04	
01:30:13	251.537	8801.20		-2.52
01:35:59	251.633	8799.45		-1.75
01:38:52	251.681	8798.55		-0.90
01:44:37	251.777	8796.79		-1.76
01:50:23	251.873	8795.00		-1.79
01:53:16	251.921	8794.09		-0.91
01:59:01	252.017	8792.70		-1.39
02:01:54	252.065	8791.85		-0.85
02:07:40	252.161	8790.31		-1.54
02:10:32	252.209		249.03	
02:16:18	252.305	8788.32		-2.00
02:19:11	252.353	8787.68		-0.64
02:24:56	252.449	•	249.03	
02:27:49	252.497	8785.34		-2.34
02:33:35	252.593	8784.45		-0.89
02:36:28	252.641	8783.97		-0.48
02:42:13	252.737	8782.82		-1.15
02:47:59	252.833	8777.74		-5.08
02:50:52	252.881	8777.78		0.04
02:56:37	252.977	8778.67		0.89
02:59:30	253.025	8778.52		-0.15
03:05:16	253.121	8777.89		-0.64
03:08:08	253.169		248.97	4

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 1

Gauge No: 73033

Well No.: Anemone # 1A

Date : 03/10/89

Real Time HH:MM:SS	<b>Delta Time</b> Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
03:13:54 03:16:47 03:22:32 03:25:25	253.265 253.313 253.409 253.457	8777.22 8776.83 8775. <b>0</b> 4	248.98	-0.66 -0.40 -1.79
03:23:25	253.553	8773.29		-1.75

File: 73033A.GAS

Test type: CRB

Date: 09/10/89 Time: 11:19

Analyst name...... J.Walker

Company..... Petrofina Exploration Australia SA

Well..... Anemone # 1A

Field....: Wildcat Date....: 04/10/89

Rig Name/Number..... Zapata Arctic

Test....: DST # 1
Gauge Type....: EMS 700
Gauge Number...: 73033

Gauge Depth - Measured..: 4267.15m RKB

Vertical..:

Producing Formation.. Top:

Bottom:

Perforated interval..Top: 4599m 4629m RKB

Bottom: 4618m 4652m RKB

Depth Reference - MSL...:

Remarks....:

:

: :

: : :

: :

### TEST PARAMETERS

Test type - Constant rate buildup

Gas flow rate at surface (0).....: 1.045 MMscf/day Pressure prior to shut-in (p(dt=0))....: 6205.501 psia Equivalent production time (Tp)....: 0.1670 hr 11me when dt=0................... 98.460 hr

File: 73033A.GAS

Test type: CRB

Date: 09/10/89 Time: 11:19

### RESERVOIR CONSTANTS

Formation thickness (h):	74.000	ft
Average formation porosity (0):	0.1600	
Well radius (rw):	0.4000	ft
Gauge depth:	4267.000	ft
Natum denth	0.0000	ft

# GAS COMPOSITION Mol percent (Optional)

Methane:	.000 Ethane:	.000 Propane:	.000 Iso-Butane:	.000
n-Butane:	.000 IsoPentane:	.000 n-Pentane.:	.000 Hexanes:	.000
	.000 Nitrogen:	.000 CO2:	.000 H25:	.000
υ / T	. We will ogen	.000 001111111	C7+ mol wt:	.000

## RESERVOIR VARIABLES

Reservoir pressure	9150.000	psia
Temperature (T):	260.000	deg F
Water saturation (Sw)	0.4000	
Water compressibility (Cw)	3.500E-06	•
Formation compressibility (Cf):	3.500E-06	psi-1
Gas pravity:	1.260	sp <u>o</u> rav
Initial gas viscosity (ui)	0.0667	cp
Initial z-factor (zi)	1.526	
Gas compressibility (Cg):	2.283E-05	
Initial system compressibility (Ct):	1.860E-05	psi-1

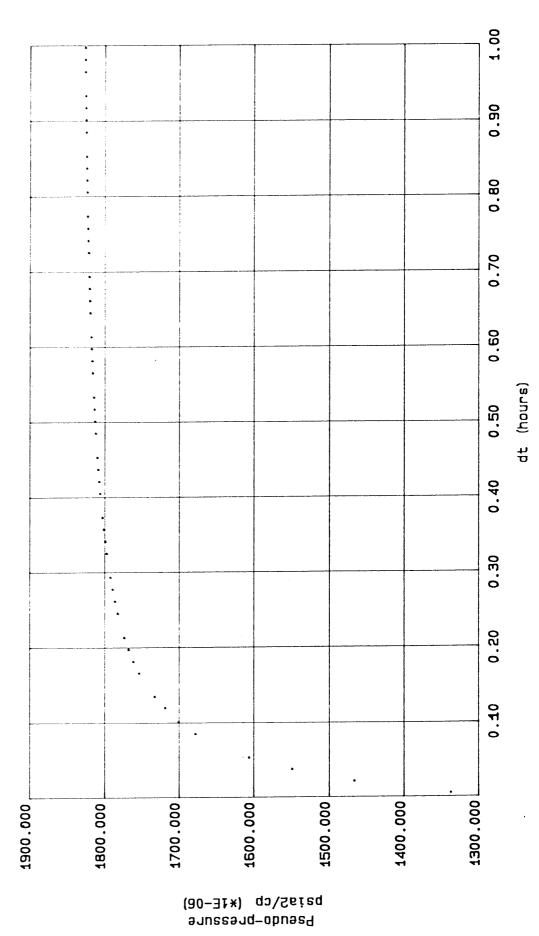
PANSYSTEM (C) EPDS 1986, 87, 88.

CARTESIAN PLOT

Company...... Petrofina Exploration Australia SA | Well | Aremone # 1A

Hig Name/Number..... Zapata Arctic

Test...... 1651 # 1



File: 73033A.GAS

Test type: CRB

Date: 09/10/89 Time: 09:26

Data	Time	Pressure
Data Point	Hours	psia
FOIII	1.04. 0	·
1.	98.4330	6358.400
2.	98.4650	6438.880
3.	98.4810	7101.200
4.	98.4970	7533.370
5.	98.5130	7835.720
6.	98.5450	8219.430
7.	98.5610	8344.080
8.	98.5770	8441.040
9.	98.5930	8517.900
10.	98.6250	8630.970
11.	98.6410	8673.490
12.	98.6570	8709.450
13.	98,6730	8739.770
14.	98.7050	8789.120
15.	98.7210	8809.020
16.	98.7370	8826.270
17.	98.7530	8842.216
18.	98.7850	8869.381
19.	98.8010	8880.966
20.	98.8170	8891.719
21.	98.8330	8901.400
22.	98.8650	8918.524
23.	98.8810	8926.139
24.	98.8970	8933.357
25.	98.9130	8940.057
26.	98.9450	8951.866
27.	98.9610	8957.054
28.	98.9770	8961.764
29.	98.9930	8966.514
30.	99.0250	8975.390
31.	99.0410	8979.064
32.	99.0570	8982.738
33.	99.0730	8986.133
34.	99.1050	8992.538
35.	99.1210	8995.135
36.	99.1370	8997.692
37.	99.1530	8999.770
38.	99.1850	9004.472
39.	99.2010	9006.710
40.	99.2170	9008.469
41.	99.2330	9010.267
42.	99.2650	9013.678
43.	99.2810	9015.317
44.	99.2970	9016.797
45.	99.3130	9018.156
46.	99.3450	9020.595
47.	99.3610	9021.715
48.	99.3770	9022.914
49.	99.3930	9024.314
50.	99.4250	9026.766

E.P.D.S. Ltd.

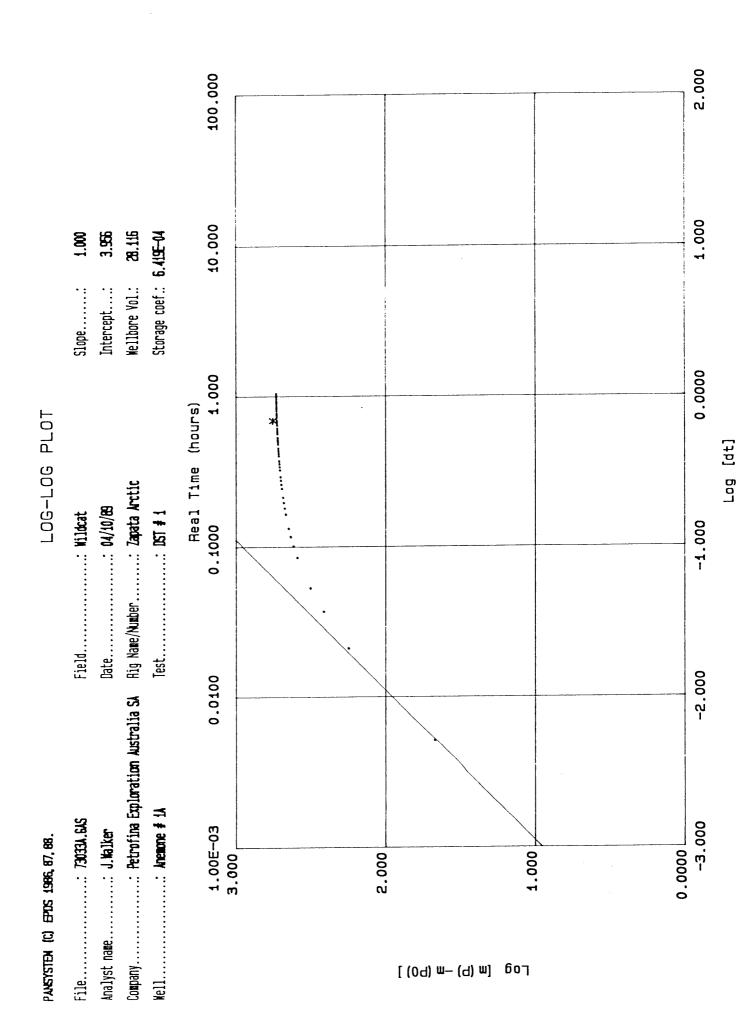
# PANSYSIEM ANALYSIS PROGRAM

File: 73033A.GAS

Test type: CRB

Date: 09/10/89 Time: 09:26

Data Point	Time Hours	Pressure psia
		0020 000
51.	99.4410	9028.006
<del>-</del> · · ·	99.4570	9028.846
52.		9029.766
53.	99.4730	
	00 5050	9033.846
<b>5</b> /1	99.5050	300010

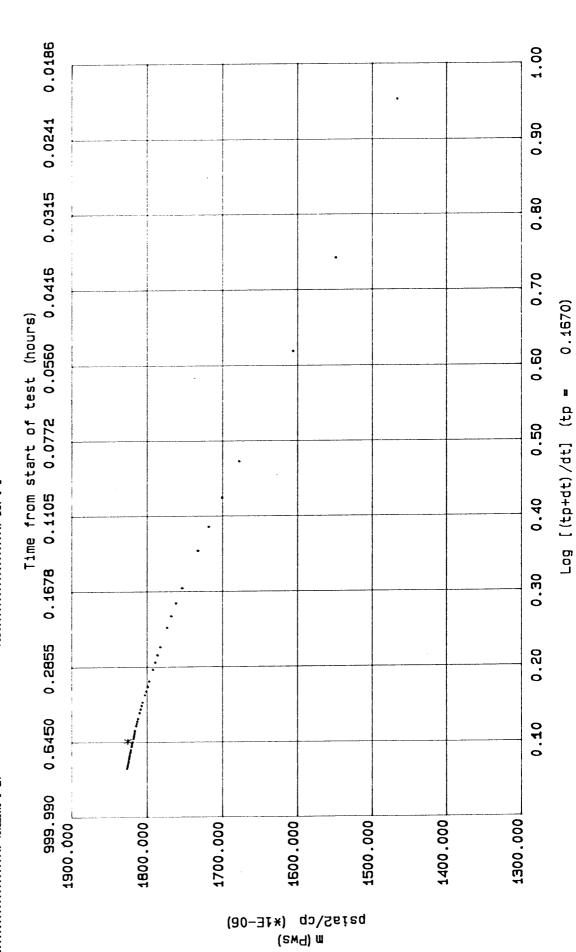


PANSYSTEN (C) EPDS 1986, 87, 88.

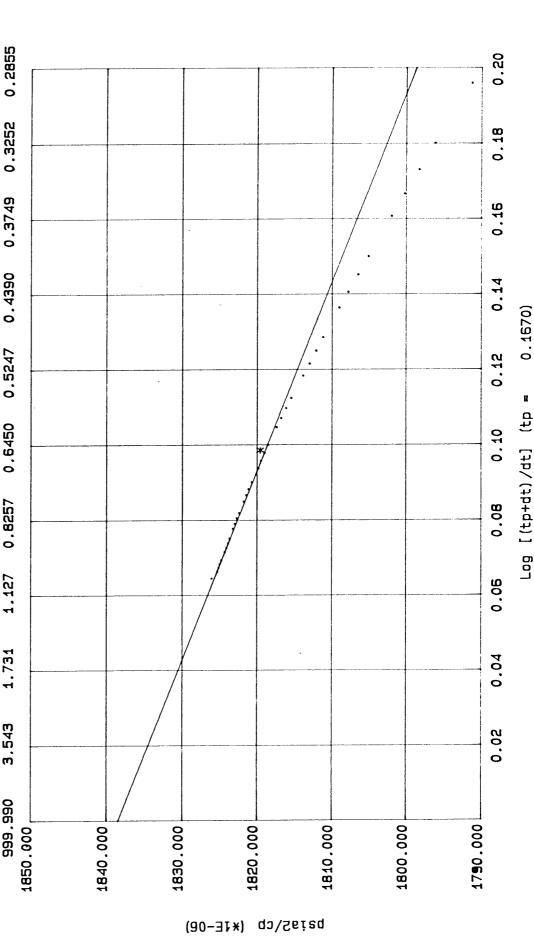
HORNER PLOT

File	atell and the second se
File	Ansluct name

Rig Name/Number..... Zapata Arctic Date..... 04/10/69 : Wildcat Test...... 1557 # 1 Company...... Petrofina Exploration Australia SA 



0.3749 1838.493 0.0836 0.3914 -198.897 Slope..... Intercept...: Permeability∴ 0.4390 Time from start of test (hours) 7 0.8257 0.6450 0.5247 0 0.5247 HORNER PLOT Aig Name/Number..... Zapata Arctic Date..... 04/10/89 Test..... 157 # 1 1.127 1.731 Company...... Petrofina Exploration Australia SA 3.543 File..... 730334.6AS 999.990 Analyst name...... J.Walker PANSYSTEM (C) EPDS 1986, 87, 88. 1850.000 1840.000



(SWG) W

### E.P.D.S. Ltd.

# PANSYSTEM ANALYSIS PROGRAM

File: 73033A.GAS

Test type: CRB

Date: 09/10/89 Time: 11:23

RESULTS FROM HORNER ANALYSIS using Pseudo-pressure and Real time

#### Line :

Line	•		
-	Intercept:	1838.493	
	Slope:	-198.897	
	Start of line	0.0790 ,	1822.867)
	End of line	0.0644 .	1825.945)
	Coefficient of determination:	0.9882	
	Number of points:	11	
m(p)	at dt = 1 hr:	1825.156	psia2/cp (*1E-06)
Extra	polated m(p):	1838.493	psia2/cp (*1E-06)
Perme	ability-thickness (kh):	6.189	mơ.ft
Perme	ability (k):	0.0836	mď
Total	skin factor (s)	0.3914	
dP sk	in (constant rate)	343.344	p5 i
Radiu	s of investigation	7.693	ft
Extra	polated pressure	9103.359	psia
Press	ure at dt = 1 hour:	9029.470	psia

### PANSYSTEM ANALYSIS PROGRAM

E.P.D.S. Ltd.

File: 73033B.GAS

Date: 09/10/89 Time: 16:31

Test type: CRD

Analyst name..... J.Walker

Company..... Petrofina Exploration Australia SA

Well..... Anemone # 1A

Field..... Wildcat
Date..... 04/10/89

Rig Name/Number..... Zapata Arctic

Test....: DST # 1
Gauge Type....: EMS 700
Gauge Number...: 73033

Gauge Depth - Measured..: 4267.15m RKB

Vertical..:

Producing Formation.. Top:

Bottom:

Perforated interval..Top: 4599m 4629m RKB

Bottom: 4618m 4652m RKB

Depth Reference - MSL...: Remarks....:

:

:

:

: :

:

### TEST PARAMETERS

### Test type - Constant rate drawdown

Gas flow rate at surface (Q):	1.045	MMscf/day
Reservoir initial pressure (Pi):	6438.403	psia
Total flowing time:	13.000	hr
Time when t=0	141.615	hr

## PANSYSTEM ANALYSIS PROGRAM

E.P.D.S. Ltd.

File: 73033B.GAS

Test type: CRD

Date: 09/10/89 Time: 16:31

### RESERVUIR CONSTANTS

Formation thickness (h):	74.000 ft
Average formation porosity (0):	0.1600
Well radius (rw):	0.4000 ft
Gauge depth:	4267.000 ft
Datum depth:	0.0000 ft

# GAS COMPOSITION Mol percent (Optional)

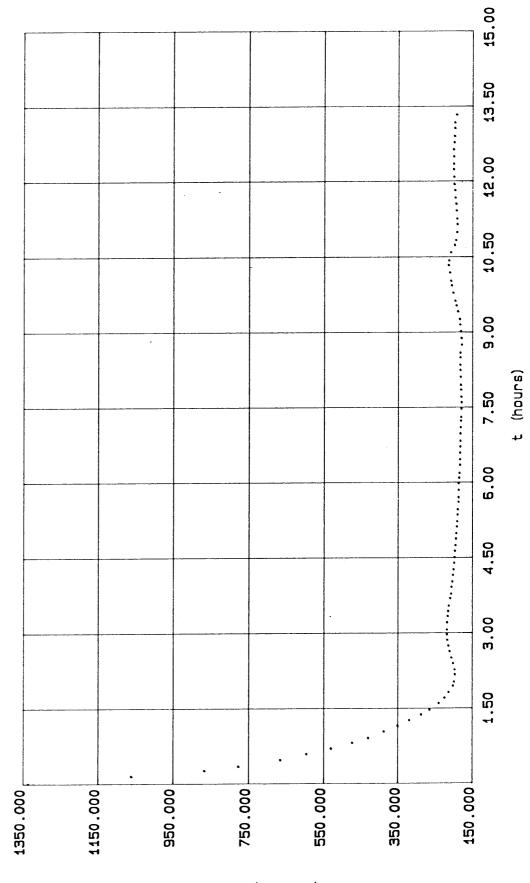
Methane:	.000 Ethane:	.000 Propane:	.000 Iso-Butane:	.000
n-Butane:	.000 IsoPentane: .000 Nitrogen:	.000 n-Pentane.: .000 CO2:	.000 Hexanes:	.000 .000
C 7 +:	. Wow With Ogen	.000 002	C7+ mol wt:	.000

### RESERVOIR VARIABLES

Reservoir pressure	9150.000	psia
Temperature (T)	260.000	deg F
Water saturation (Sw)	0.4000	
Water compressibility (Cw)	3.500E-06	psi-1
Formation compressibility (Cf):	3.500E-06	psi-1
Gas gravity:	1.260	sp grav
Initial gas viscosity (ui):	0.0667	ср
Initial z-factor (zi)	1.526	
Gas compressibility (Cg):	2.283E-05	psi-1
Initial system compressibility (Ct):	1.860E-05	psi-1

CARTESIAN PLOT Company...... Petrofina Exploration Australia SA File..... 730338.64S PANSYSTEM (C) EPDS 1986, 87, 88.

Rig Name/Number..... Zapata Arctic



psia2/cp (\*1E-06) Pseudo-pressure

File: 73033B.GAS

Test type: CRD

Date: 09/10/89 Time: 18:26

Data	Time	Pressure
Point	Hours	psia
1.	141.6170	6438.403
2.	141.7610	5082.898
3.	141.8730	4191.192
4.	141.9530	3796.333
5.	142.0810	3324.059
6.	142.1930	3041.451
7.	142.3050	2777.657
8.	142.4170	2557.698
9.	142.5130	2390.415
10.	142.6410	2230.118
11.	142.7530	2089.942
12.	142.8650	1971.284
13.	142.9770	1849.371
14.	143.0730	1759.725
15.	143.2010	1662.986
16.	143.3130	1600.634
17.	143.4250	1555.621
18.	143.5530	1507.191
19.	143.6330	1494.133
20.	143.7770	1487.153
21.	143.8730	1490.003
22.	144.0010	1508.676
23.	144.1130	1526.675
24.	144.2410	1546.868
25.	144.3530	1560.696
26.	144.4650	1572.074
27.	144.5770	1576.600
28.	144.6730	1575.236
29.	144.8170	1571.951
30.	144.9450	1566.152
31.	145.0410	1561.318
32.	145.1530	1554.420
33.	145.2970	1538.860
34.	145.3930	1528.815
35.	145.5210	1524.749
36.	145.6330	1515.708
37.	145.7610	1508.507
38.	145.8730	1501.579
39.	146.0010	1494.294
40.	146.1130	1491.686
41.	146.2410	1485.818 1479.190
42.	146.3530	1475.130
43.	146.4810	1471.641
44.	146.5930	1465.088
45.	146.7210	1461.474
46.	146.8330	1456.503
47.	146.9610	1456.192
48.	147.0730	1446.421
49.	147.2170 147.3130	1447.105
50.	147.3130	

File: 73033B.GAS

Test type: CRD

Date: 09/10/89 Time: 18:26

Data	Time	Pressure
Point	Hours	psia
51.	147.4570	1445.835
52.	147.5850	1446.348
53.	147.6970	1439.486
54.	147.7930	1437.335
55.	147.9530	1431.991
56.	148.0650	1430.249
57.	148.1930	1429.478
58.	148.3210	1427.954
59.	148.4330	1429.299
60.	148.5770	1428.204
61.	148.7050	1424.535
62.	148.8330	1421.742
63.	148.9130	1419.793
64.	149.0730	1417.456
65.	149.2010	1414.878
66.	149.3130	1418.017
67.	149.4570	1421.734
68.	149.5530	1424.628
69.	149.7130	1425.285
70.	149.8410	1428.684
71.	149.9530	1430.156
72.	150.0970	1427.164
73.	150.1930	1428.588
74.	150.3530	1412.310
75.	150.4810	1417.563
76.	150.6250	1423.259 1432.180
77.	150.7530	1432.160
78.	150.8650	1457.820
79.	151.0250	1473.454
80.	151.1370	1487.899
81.	151.2330	1510.218
82.	151.3930	1527.465
83.	151.5370	1535.475
84.	151.6330 151.7930	1547.839
85.	151.9370	1561.686
86.	152.0330	1554.600
87.	152.1930	1534.085
88.	152.3370	1491.964
89.	152.4330	1477.425
90.	152.5930	1464.697
91.	152.7530	1462.847
92.	152.8650	1467.913
93. 94.	153.0250	1474.333
	153.1530	1478.313
95. ac	153.2810	1486.306
96. 97.	153.4250	1490.104
98.	153.5530	1498.207
99.	153.6970	1502.222
100.	153.8410	1505.794
100.	·	

# E.P.D.S. Ltd. PANSYSTEM ANALYSIS PROGRAM

File: 73033B.GAS

Test type: CRD

Date: 09/10/89 Time: 18:26

Data	Time	Pressure
Point	Hours	psia
101.	153.9530	1504.194
107.	154,0970	1504.260
103.	154.2410	1506.949
104.	154.3850	1498.127
105.	154.5130	1495.575
106.	154.6730	1490.256
107.	154.7850	1489.962
108.	154.9450	1471.865

		100.000			2.000
	1.000 3.260 139.647 3.188E-03	10.000			۵00 ـ 4
	Slope 1.000 Intercept 3.260 Wellbore Vol.: 139.647 Storage coef.: 3.188E-03	C			0
LOG-LOG PLOT		ie (hours) 1.000		· ·	0.0000 g [t]
L0G-L0	: Wildcat: 04/10/89: Zapata Arctic: DST # 1	Real Time 0.1000			-1.000 Leg
	Field. Date. Rig Name/Number Test.				
		0.0100			-2.000
S 1986, 87, 88.	: 73033B.GAS: J.Walker: Petrofina Exploration Australia SA: Anemone # 1A	1.00E-03 4.000	3.000	o o	-3.000
Pansysten (C) epds 1986, 87, 88.	File. Analyst name. Company			[(d)m-(iq)m] 6oJ	

E.P.D.S. Ltd.

### PANSYSTEM ANALYSIS PROGRAM

File: 73033B.GAS

Test type: CRD

Date: 09/10/89 Time: 16:37

RESULTS FROM LOG-LOG ANALYSIS

Line :

Intercept....: 3.260

Slope....: 1.000

Apparent wellbore volume...... 139.647 bbl

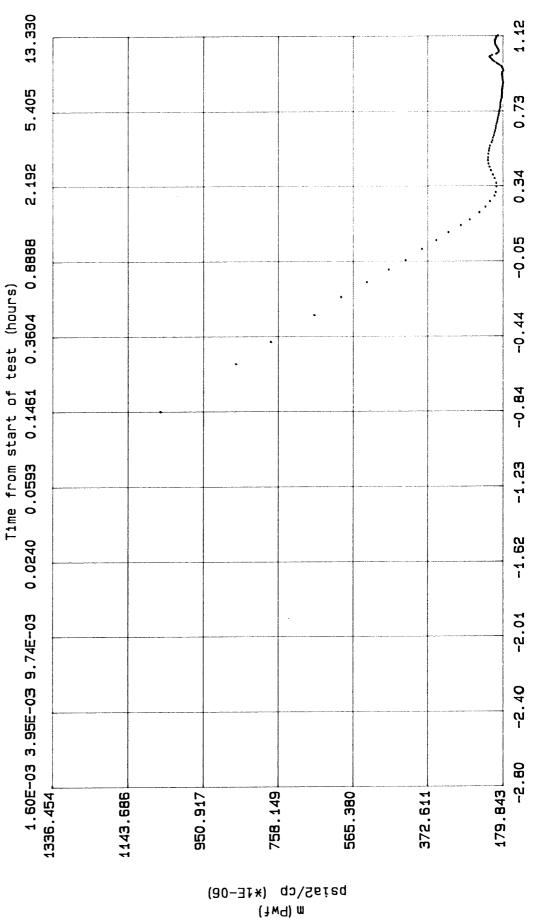
Dim. wellbore storage constant (Cd)....: 65.872

Storage coefficient (initial)...... 3.188E-03 bbl/psi

, 92
6
EPDS 1986, 87, 88,
S
<u> </u>
ANSYSTEM
•

SEMILOG DRAWDOWN PLOT

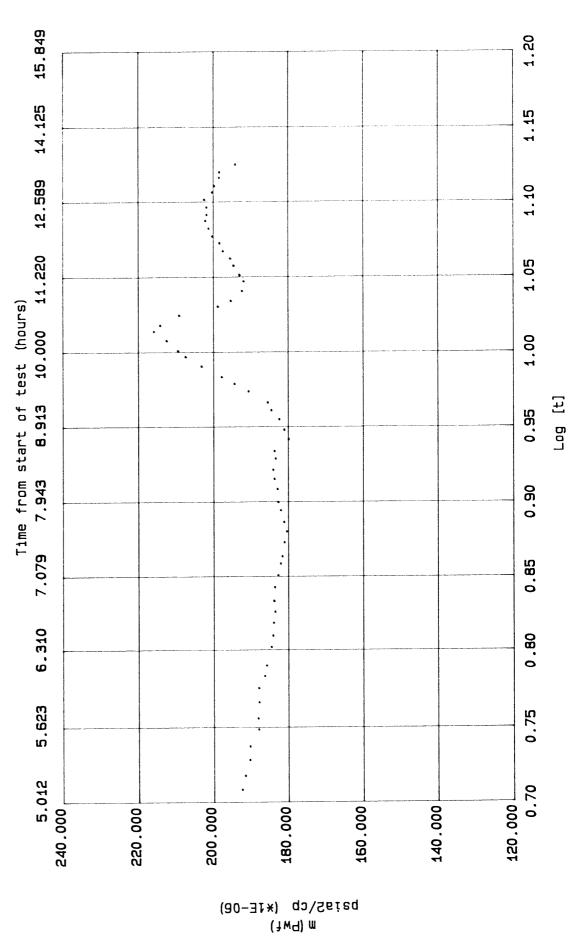
File	: 73033B.6AS	Field	Wildcat
Analyst name	J.Malker	Date	: 04/10/89
Company	Petrofina Exploration Australia SA Rig Name/Number Zapata Arctic	Rig Name/Number	Zapata Arctic
Well	Anemone # 1A	Test	: DST # 1



Log [t]

PANSYSTEM (C) EPDS 1986. 87. 88.

PANSYSTEN (C) EPDS 1986, 87, 88.	<b>88</b> .	SEMILOG DR/	SEMILOG DRAWDOWN PLOT
File	.: 73033B.64S	Field	
Analyst name J.Malker	alker	Date04/10/89	
Company Pet	rofina Exploration Australia SA	Petrofina Exploration Australia SA Rig Name/Number Zapata Arctic	
HellAremone # 1A	mone # 1A	Test 1657 # 1	



DRAWDOWN PLOT
SEMILOG
EPDS 1986, 87, 88.
() EPDS 49
PANSYSTEM (C

	849						1.20
	15.849						+
	36						80
	15.136						1.18
m m n (	4						(0
-107.193 318.863 0.1552 6.946	14.454				e e para appara e a mata a al-		1.16
	an and an an an an an an an an an an an an an						
Slope Intercept Permeability.:	13.804						1.14
Slop Inte Perm	(hours) 183 13						
							1.12
	test 13.			<b>\ </b>			4
	į.						1.10
retic	tart of 12.589			1			4
Wildcat 04/10/89 Zapata Arctic DST # 1	Time from start of 12.589						89
<b>9</b> 0 7 0	e from 12.023						1.08
: : : :	Tim R2						10
Field	11.482						1.06
Field Date Rig Nam Test							
	10.965						1.04
stralia	7(						
tion Au	10.474						1.02
Sploral LA	10						4
.: 730338.64S .: J.Kalker .: Petrofina Exploration Australia SA .:: Anemone # 1A	10.000		•				1.00
:: 73033B.6 :: J.Kalker :: Petrofin	10. 260.000	240.000	220.000	200.000	180.000	160.000	140.000
	260	240	220	200	180	160	140
			lan-	-3/cb (*1E-	ersd		
File. Analyst name. Company			(90-	(1WG) m	-,		
File. Analy Compa							

Log [t]

### PANSYSTEM ANALYSIS PROGRAM

5

File: 73033B.GAS

Test type: CRD

Date: 09/10/89 Time: 16:31

RESULTS FROM SEMILOG ANALYSIS using Pseudo-pressure and Real time

Line :

Intercept:	318.863	
Slope:	-107.193	
Start of line(	1.087 ,	202.157)
End of line:(	1.111 ,	199.680)
Coefficient of determination:	0.9474	

m(n)	at c	11: ==	1	hr:	318.863	psia2/cp	(*1E-0G)
171 1 1 1 /	a	J L				•	

Permeability-thickness (kh)..... 11.484 md.ft

Total skin factor (s)..... 6.946

Number of points....

dP skin (constant rate)..... 2603.799 psi

Radius of investigation..... 92.453 ft

Pressure at dt = 1 hour..... 1964.732 psia

0.1808 dp (match) 10.000 44.203 dt (match) 1.000 0.2512 dp (skin) 3823.994 16.474 C (Storage) 103.960	start e e e e e e e e e e e e e e e e e e e	
Pd(match)  Id(match)  Permeability.:  Skin:  Elapsed Time and m(p)	Approximate s'of semi-log straight line	+ Match poxint x x x x x x x x x x x x x x x x x x x
Fieldwildcat Date		
J.Malker Petrofina Exploration Australia SA Anemone # 1A	10 1.00	1 -1.00

File: 73033B.GAS

Test type: CRD

Date: 09/10/89 Time: 18:26

### RESULTS FROM A HOMOGENEOUS RESERVOIR TYPE-CURVE MATCH (WELLBORE STORAGE ANALYSIS)

Data plotted using Real Elapsed Time and m(p)

Dim. pressure match point Pd(match):	0.1808	
Dim. time match point Td/Cd(match):	44.203	
Matched curve Cde2S(match):	1.000E+16	
Pressure match point dP(match):	10.000	
Time match point dt(match):	1.000	
Permeability-thickness (kh):	19.326	md.ft
Permeability (k):	0.2612	md
Apparent wellbore volume:	103.960	bb l
Dim. wellbore storage constant (Cd):	49.039	
Storage coefficient (initial):	2.373E-03	bbl/psi
Radius of investigation:	119.935	ft
dP skin (constant rate):	3823.994	psi
Skin factor (S):	16.474	

### PANSYSTEM ANALYSIS PROGRAM

E.P.D.S. Ltd.

File: 73033C.GAS

Test type: CRB

Date: 10/10/89 Time: 06:21

Analyst name...... J. Walker

Company..... Petrofina Exploration Australia SA

Well..... Anemone # 1A

Field....: Wildcat Date..... 04/10/89

Rig Name/Number..... Zapata Arctic

Test....: DST # 1
Gauge Type....: EMS 700
Gauge Number...: 73033

Gauge Depth - Measured..: 4267.15m RKB

Vertical..:

Producing Formation..Top:

Bottom:

Perforated interval..Top: 4599m 4629m RKB

Bottom: 4618m 4652m RKB

Depth Reference - MSL...:

Remarks....:

TEST PARAMETERS

Test type - Constant rate buildup

Gas flow rate at surface (Q).....: 1.045 MMscf/day Pressure prior to shut-in (p(dt=0))....: 1479.609 psia Equivalent production time (Tp).....: 13.000 hr Time when dt=0.....: 154.94 hr

### E.P.D.S. Ltd. PANSYSTEM ANALYSIS PROGRAM

File: 730330.6AS

Test type: CRB

Date: 10/10/89 Time: 06:21

### RESERVOIR CONSTANTS

Formation thickness (h):	74.000	ft
Average formation porosity (0)	0.1600	
Well radius (rw):	0.4000	ft
Gauge depth:	4267.000	ft
Datum depth:	0.0000	ft

### GAS COMPOSITION Mol percent (Optional)

Methane:	.000 Ethane:	.000 Propane:	.000	Iso-Butane:	.000
n-Butane:	.000 IsoPentane:	.000 n-Pentane.:	.000	Hexanes:	.000
C 7 +:	.000 Nitrogen:	.000 CO2:	.000	H2S:	.000
	-			C7+ mol wit:	ดดด

### RESERVOIR VARIABLES

Reservoir pressure:	9150.000	psia
Temperature (T):	260.000	deg F
Water saturation (Sw):	0.4000	
Water compressibility (Cw):	3.500E-06	psi-1
Formation compressibility (Cf):	3.500E-06	psi-1
Gas gravity:	1.260	sp grav
Initial gas viscosity (ui):	0.0667	cp
Initial z-factor (zi):	1.526	
Gas compressibility (Cg):	2.283E-05	psi-1
Initial system compressibility (Ct):	1.860E-05	psi-1

PANSYSTEM (C) EPDS 1986, 87, 88.

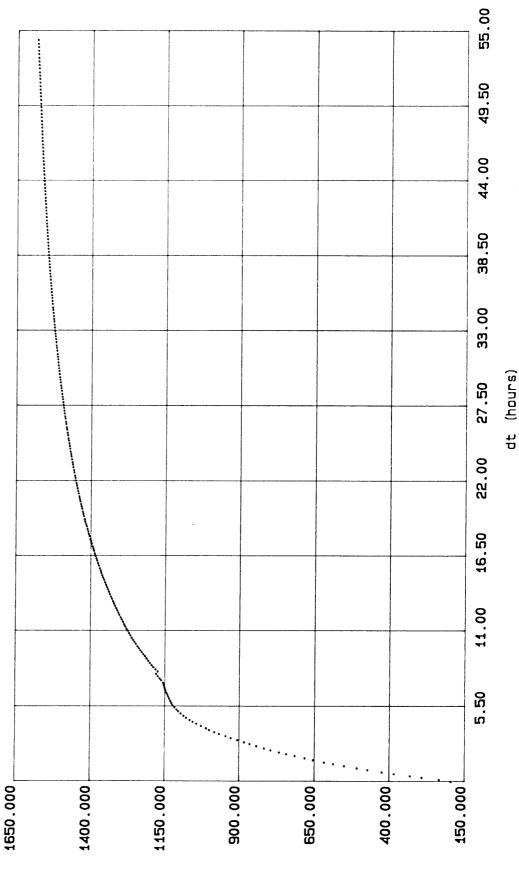
CARTESIAN PLOT

Company...... Petrofina Exploration Australia SA

Field....: Wildcat

Hig Name/Number..... Zapata Arctic

Test...... 1551 # 1



bajgs\cb (\*1E-00) 97u2297q-obu929

Test type: CRB

Data	Time	Pressure
Point	Hours	psia
Corne		
1.	154.9450	1471.865
Ζ.	155.0730	1636.729
3.	155.2330	1861.498
4.	155.3450	2009.854
5.	155.5050	2212.735
6.	155.6330	2366.706
7.	155.7930	2550.395
8.	155.9210	2689.649
9.	156.0810	2855.933
10.	156.2250	2999.204
11.	156.3530	3122.446
12.	156.5130	3271.056
13.	156.6410	3385.802
14.	156.8010	3524.205
15.	156.9450	3643.501
16.	157.0730	3745.818
17.	157.2330	3868.658
18.	157.3610	3963.241
19.	157.5210	4076.437
20.	157.6650	4174.704
21.	157.7930	4260.067 4360.939
22.	157.9530	4459.024
23.	158.1130	4535.950
24.	158.2410	4638.080
25.	158.4170	4709.608
26.	158.5450 158.7050	4791.810
27.	158.8330	4841.596
28.	158.9930	4918.832
29.	159.1530	4990.961
30.	159.2970	5050.045
31.	159.4250	5098.259
32. 33.	159.6010	5153.423
34.	159.7450	5195.898
35.	159.9050	5242.203
36.	160.0650	5281.742
37.	160.1930	5311.649
38.	160.3530	5345.858
39.	160.5130	5374.301
40.	160.6570	5395.608
41.	160.8010	5413.237
42.	160.9610	5431.177
43.	161.1370	5448.572
44.	161.2810	5461.934
45.	161.4250	5476.395
46.	161.6010	5491.401
47.	161.7450	5506.588
48.	161.9050	5520.816
49.	162.0330	5531.165
50.	162.2250	5565.225

Test type: CRB

Section   Sect	Data	Time	Pressure
\$1.			psia
52.         162.5130         5618.526           53.         162.6730         5646.149           54.         162.8330         5618.534           55.         167.9930         5656.425           56.         163.1530         5689.929           57.         163.3130         5719.638           59.         163.6330         5777.393           60.         163.7930         5804.867           61.         163.9530         5831.921           62.         164.1130         5858.571           63.         164.2730         5884.390           64.         164.4330         5908.743           65.         164.5930         5932.769           66.         164.7530         5956.310           67.         164.9450         5984.185           68.         165.1050         6007.236           69.         165.2650         6027.738           70.         165.4250         6052.022           71.         165.6010         6076.024           72.         165.7560         60752.022           73.         165.9370         6121.585           76.         166.2570         6162.890 <t< td=""><td>OTHE</td><td>riour b</td><td>•</td></t<>	OTHE	riour b	•
52.         162.5130         S618.526           53.         162.6730         S646.149           54.         162.8330         S618.534           55.         167.9930         5656.425           56.         163.1530         5689.929           57.         163.3130         5719.638           59.         163.6330         5777.399           60.         163.7930         5804.867           61.         163.9530         5831.921           62.         164.1130         5858.571           63.         164.2730         5884.390           64.         164.4330         5908.743           65.         164.5930         5932.789           66.         164.7530         5956.310           67.         164.9450         5984.185           68.         165.1050         6007.236           69.         165.2650         6029.738           70.         165.4250         6052.022           71.         165.6010         6076.024           72.         165.7510         6098.613           73.         165.9370         612.589           76.         166.930         6242.068           7	51.	162.3530	5590.611
53.         162.6730         5646.149           54.         162.8330         5618.534           55.         162.9930         5656.425           56.         163.1530         5689.929           57.         163.3130         5719.638           58.         163.4730         5748.858           59.         163.6330         5777.399           60.         163.7930         5804.867           61.         163.9530         5831.921           62.         164.1130         5858.571           63.         164.2730         5884.390           64.         164.4330         5908.743           65.         164.5930         5932.789           66.         164.7530         5956.310           67.         164.9450         5984.185           68.         165.1050         6007.236           69.         165.2650         6029.738           70.         165.4250         6052.022           71.         165.5601         6076.024           72.         165.7510         6098.613           73.         165.2570         6162.890           76.         166.2570         6162.890 <td< td=""><td></td><td></td><td>5618.526</td></td<>			5618.526
54.         162.8330         \$618.534           55.         162.9930         \$656.425           56.         163.1530         \$689.929           57.         163.3130         \$719.638           58.         163.4730         \$748.858           59.         163.6330         \$7777.399           60.         163.7930         \$804.867           61.         163.9530         \$831.921           62.         164.1130         \$858.571           63.         164.2730         \$884.390           64.         164.4330         \$908.743           65.         164.5930         \$932.769           66.         164.7530         \$9956.310           67.         164.9450         \$994.185           68.         165.1050         \$6007.236           69.         165.2650         \$6022.738           70.         165.4250         \$6052.022           71.         165.56010         \$6075.024           72.         165.7610         \$6098.613           73.         165.9370         \$6121.585           74.         166.9370         \$6121.890           75.         166.5770         \$6202.068			5646.149
55.         162.9930         5656.425           56.         163.1530         5689.922           57.         163.3130         5719.638           58.         163.4730         5748.858           59.         163.6330         5777.399           60.         163.7930         5804.867           61.         163.9530         5831.921           62.         164.1130         5858.571           63.         164.2730         5884.390           64.         164.4330         5908.743           65.         164.5930         5932.789           66.         164.7530         5956.310           67.         164.9450         5984.185           68.         165.1050         6007.236           69.         165.2650         6023.738           70.         165.4250         6052.022           71.         165.6010         6076.024           72.         165.7610         6098.613           73.         165.9370         6121.585           74.         166.0810         6140.472           75.         166.2570         6162.890           76.         166.7530         6222.068 <td< td=""><td></td><td></td><td>5618.534</td></td<>			5618.534
56.         163.1530         5689.929           57.         163.3130         5719.638           58.         163.4730         5748.858           59.         163.6330         5777.399           60.         163.7930         5804.867           61.         163.9530         5831.921           62.         164.1130         5858.571           63.         164.2730         5884.390           64.         164.4330         5908.743           65.         164.5930         5932.789           66.         164.7530         5956.310           67.         164.9450         5984.185           68.         165.1050         6007.236           69.         165.2650         6029.738           70.         165.4250         6052.022           71.         165.5610         60776.024           72.         165.7610         6098.613           73.         165.9370         6121.585           74.         166.0810         6140.472           75.         166.2570         6162.890           76.         166.7530         6222.515           79.         166.1750         6263.364 <t< td=""><td></td><td></td><td>5656.425</td></t<>			5656.425
57.       163.3130       5719.638         58.       163.4730       5748.858         59.       163.6330       5777.399         60.       163.7930       5804.867         61.       163.9530       5831.921         62.       164.1130       5858.571         63.       164.2730       5884.390         64.       164.4330       5908.743         65.       164.5930       5932.789         66.       164.7530       5956.310         67.       164.9450       5984.185         68.       165.1050       6007.236         69.       165.2650       6023.738         70.       165.4250       6052.022         71.       165.5010       6076.024         72.       165.7510       6098.613         73.       166.29370       6121.585         74.       166.0010       6140.472         75.       166.2570       6162.890         76.       166.4910       6181.612         77.       166.5750       6202.08         80.       167.1050       6263.364         81.       167.7650       6281.340         82.       167.6010			5689.929
58.       163.4730       5748.858         59.       163.6330       5777.399         60.       163.7930       5804.867         61.       163.9530       5831.921         62.       164.1130       5858.571         63.       164.2730       5884.390         64.       164.4330       5932.789         65.       164.5930       5932.789         66.       164.7530       5956.310         67.       164.9450       5984.185         68.       165.1050       6007.236         69.       165.2650       6029.738         70.       165.4250       6029.738         70.       165.7610       6076.024         72.       165.7610       6076.024         72.       165.7510       6098.613         73.       165.9370       6121.585         74.       166.2010       6140.472         75.       166.5750       6162.890         76.       166.5750       6202.068         81.       167.72650       6223.364         82.       167.4410       6300.922         83.       167.6010       6318.655         84.       167.7770			5719.638
59.       163.6330       5777.399         60.       163.7930       5804.867         61.       163.9530       5831.921         62.       164.1130       5858.571         63.       164.2730       5984.390         64.       164.4330       5908.743         65.       164.5930       5932.789         66.       164.7530       5956.310         67.       164.9450       5984.185         68.       165.1050       6007.236         69.       165.2650       6029.738         70.       165.4250       6052.022         71.       165.6010       6076.024         72.       165.7610       6098.613         73.       165.9370       6121.585         74.       166.0810       6140.472         75.       166.2570       6162.890         76.       166.5750       6202.068         78.       166.7530       6222.515         79.       166.510       6281.340         80.       167.1050       6263.364         81.       167.2650       6281.340         82.       167.4410       6300.922         83.       167.6010			5748.858
60. 163.7930 5804.867 61. 163.9530 5831.921 62. 164.1130 5858.571 63. 164.2730 5884.390 64. 164.4330 5908.743 65. 164.5930 5932.789 66. 164.7530 5956.310 67. 164.9450 5984.185 68. 165.1050 6007.236 69. 165.2650 6029.738 70. 165.4250 6052.022 71. 165.6010 6076.024 72. 165.7610 6098.613 73. 165.9370 6121.585 74. 166.0810 6140.472 75. 166.2570 6162.890 76. 166.4010 6181.612 77. 166.5770 6202.068 81. 167.2650 6221.310 80. 167.1050 6221.389 80. 167.1050 6233.364 81. 167.2650 6281.340 82. 167.4410 6300.922 83. 167.6010 6318.655 84. 167.7770 6337.687 85. 167.9370 6354.860 86. 168.0810 6369.751 87. 168.2730 6354.860 88. 168.4330 6406.755 89. 168.2730 6390.054 89. 169.2970 6491.907 91. 168.9770 6476.697 92. 169.1370 6573.401 99. 170.3370 6585.998 99. 170.1930 6573.401			5777.399
61. 163.9530 5831.921 62. 164.1130 5858.571 63. 164.2730 5984.390 64. 164.4330 5908.743 65. 164.5930 5932.789 66. 164.7530 5956.310 67. 164.9450 5984.185 68. 165.1050 6007.236 69. 165.2650 6029.738 70. 165.4250 6022.022 71. 165.5010 6076.024 72. 165.7610 6098.613 73. 165.9370 6121.585 74. 166.0810 6140.472 75. 166.2570 6162.890 76. 166.4010 6181.612 77. 166.5750 6222.068 80. 167.1050 6222.515 79. 166.9130 6222.515 79. 166.9130 6221.388 80. 167.1050 6283.364 81. 167.2650 6283.364 82. 167.4410 6300.922 83. 167.7770 6318.655 84. 167.7770 6337.687 85. 168.2730 6354.860 86. 168.0810 6348.575 88. 169.4330 6406.755 89. 168.2730 6354.860 86. 168.0810 6348.878 91. 168.2730 6354.860 92. 169.1370 6443.878 93. 169.2970 6441.200 92. 169.1370 6476.697 93. 169.2970 6441.200 94. 169.4730 6558.297 95. 169.6650 6525.897 96. 169.8410 6542.331 97. 170.0170 6557.906 98. 170.1930 6573.401 99. 170.3370 6585.948			5804.867
62.         164.1130         5858.571           63.         164.2730         5884.390           64.         164.4330         5908.743           65.         164.5930         5932.789           66.         164.7530         5956.310           67.         164.9450         5984.185           68.         165.1050         6007.236           69.         165.2650         6029.738           70.         165.4250         6052.022           71.         165.6010         6076.024           72.         165.7610         6098.613           73.         165.9370         6121.585           74.         166.0810         6140.472           75.         166.2570         6162.830           76.         166.2570         6162.830           77.         166.5750         6202.068           80.         167.1050         6263.364           81.         167.2650         6281.340           82.         167.4410         6300.922           83.         167.6010         6318.655           84.         167.7770         6337.687           85.         167.9370         6354.860 <td< td=""><td></td><td></td><td>5831.921</td></td<>			5831.921
63. 164.2730 5884.390 64. 164.4330 5908.743 65. 164.5930 5932.788 66. 164.7530 5956.310 67. 164.9450 5984.185 68. 165.1050 6007.236 69. 165.2650 6029.738 70. 165.4250 6052.022 71. 165.6010 6076.024 72. 165.7610 6098.613 73. 165.9370 6121.585 74. 166.0810 6140.472 75. 166.2570 6162.830 76. 166.4010 6181.612 77. 166.5770 6202.068 80. 167.1050 6241.289 80. 167.1050 6241.340 82. 167.4410 6300.922 83. 167.2650 6281.340 82. 167.4410 6300.922 83. 167.5010 6318.655 84. 167.7770 6337.687 85. 168.2730 6354.860 86. 168.0810 6369.751 87. 168.2730 6354.860 88. 169.2730 6354.860 89. 168.8010 6443.878 91. 168.9770 6461.200 92. 169.1370 6476.697 93. 169.2730 6491.907 94. 169.9770 6491.907 95. 169.6550 6525.897 96. 169.8650 6525.897 98. 170.1930 6573.401 99. 170.3370 6585.949			
64. 164. 4330 5908.743 65. 164. 5930 5932.789 66. 164. 7530 5956.310 67. 164. 9450 5984.185 68. 165. 1050 6007.236 69. 165. 22650 6029.738 70. 165. 4250 6052.022 71. 165. 6010 6076.024 72. 165. 7610 6098.613 73. 165. 9370 6121.585 74. 166. 0810 6140.472 75. 166. 2570 6162.890 76. 166. 4010 6181.612 77. 166. 5770 6202.068 78. 166. 5770 6202.068 80. 167. 1050 6241.289 80. 167. 1050 6263.364 81. 167. 2650 6281.340 82. 167. 4410 6300.922 83. 167. 6010 6318.655 84. 167. 7770 6337.687 85. 167. 9370 6354.860 86. 168. 8810 6369.751 87. 168. 2730 6354.860 86. 168. 8810 6369.751 87. 168. 2730 6354.860 88. 169. 4330 6443.878 91. 169. 9770 6461. 200 92. 169. 1370 6476. 697 93. 169. 2970 6491. 907 94. 169. 9770 6491. 907 95. 169. 6550 6525. 897 96. 169. 6650 6525. 897 98. 170. 1930 6573. 401 99. 170. 3370 6585. 948			
65. 164.5930 5932.789 66. 164.7530 5956.310 67. 164.9450 5984.185 68. 165.1050 6007.236 69. 165.2650 6029.738 70. 165.4250 6052.022 71. 165.6010 6076.024 72. 165.7610 6098.613 73. 165.9370 6121.585 74. 166.0810 6140.472 75. 166.2570 6162.830 76. 166.4010 6181.612 77. 166.5750 6202.068 8. 166.7530 6222.515 79. 166.9130 6241.289 80. 167.1050 6263.364 81. 167.2650 6281.340 82. 167.4410 6300.922 83. 167.6010 6318.655 84. 167.7770 6337.687 85. 167.9370 6354.860 86. 168.0810 6369.751 87. 168.2730 6390.054 88. 169.4330 6406.755 89. 169.4330 6406.755 90. 168.8010 6443.878 91. 168.9770 6461.200 92. 169.1370 6476.697 93. 169.2970 6491.907 94. 169.4730 6585.949 95. 169.4730 6585.949 97. 170.0170 6557.906 98. 170.1930 6573.401 99. 170.3370 6585.949			
66. 164.7530 5956.310 67. 164.9450 5984.185 68. 165.1050 6007.236 69. 165.2650 6029.738 70. 165.4250 6052.022 71. 165.6010 6076.024 72. 165.7610 6098.613 73. 165.9370 6121.585 74. 166.0810 6140.477 75. 166.2570 6162.890 76. 166.4010 6181.612 77. 166.5770 6202.068 78. 166.7530 6222.058 79. 166.9130 6241.289 80. 167.1050 6263.364 81. 167.2650 6281.340 82. 167.4010 6300.922 83. 167.6010 6318.655 84. 167.7770 6337.687 85. 167.9370 6354.860 86. 168.0810 6369.751 87. 168.2730 6390.054 88. 168.4330 6406.755 90. 168.8010 6443.878 91. 168.9770 6476.597 93. 169.2770 6491.307 94. 169.9770 6491.209 97. 169.9770 6491.307 98. 169.2970 6491.307 99. 169.9770 6557.906 99. 169.8410 6542.331 97. 170.0170 6557.906 98. 170.1930 6573.401 99. 170.3370 6585.949			
67. 164.9450 5984.185 68. 165.1050 6007.236 69. 165.2650 6029.738 70. 165.4250 6052.022 71. 165.6010 6076.024 72. 165.7610 6098.613 73. 165.9370 6121.585 74. 166.0810 6140.477 75. 166.2570 6162.890 76. 166.4010 6181.612 77. 166.5770 6202.068 78. 166.7530 6222.515 79. 166.9130 6241.289 80. 167.1050 6263.364 81. 167.2650 6281.340 82. 167.4410 6300.922 83. 167.6010 6318.655 84. 167.7770 6337.687 85. 167.9370 6354.860 86. 168.0810 6369.751 87. 168.2730 6390.054 88. 168.4330 6406.755 89. 168.6250 6426.256 90. 168.8010 6443.878 91. 169.9770 6461.200 92. 169.1370 6476.697 93. 169.2970 6491.907 94. 169.4730 6508.256 95. 169.4730 6508.256 96. 169.8410 6542.331 97. 170.0170 6557.906 98. 170.1930 6573.401 99. 170.3370 6585.949			
68. 165.1050 6007.236 69. 165.2650 6029.738 70. 165.4250 6052.022 71. 165.6010 6076.024 72. 165.7610 6098.613 73. 165.9370 6121.585 74. 166.0810 6140.472 75. 166.2570 6162.890 76. 166.5770 6202.068 78. 166.7530 6227.515 79. 166.9130 6241.289 80. 167.1050 6263.364 81. 167.2650 6281.340 82. 167.4410 6300.922 83. 167.6010 6318.655 84. 167.7770 6337.687 85. 167.9370 6354.860 86. 168.0810 6369.751 87. 168.2730 6354.860 88. 168.4330 6406.755 89. 168.2730 6364.878 99. 168.970 6461.200 92. 169.1370 6476.697 93. 169.2970 6491.907 94. 169.4730 6508.256 95. 169.6650 6525.897 96. 169.8410 6542.331 97. 170.0170 6557.906 98. 170.1930 6573.401 99. 170.3370 6585.949			
69. 165.2650 6029.738 70. 165.4250 6052.022 71. 165.6010 6076.024 72. 165.7610 6098.613 73. 165.9370 6121.585 74. 166.0810 6140.472 75. 166.2570 6162.890 76. 166.4010 6181.612 77. 166.5770 6202.051 78. 166.7530 6222.515 79. 166.9130 6224.1289 80. 167.1050 6263.364 81. 167.2650 6281.340 82. 167.4410 6300.922 83. 167.6010 6318.655 84. 167.7770 6337.687 85. 167.9370 6354.860 86. 168.0810 6369.751 87. 168.2730 6390.054 88. 168.4330 6406.755 89. 168.6250 6426.256 90. 168.8010 6443.878 91. 169.9770 6461.200 92. 169.1370 6476.697 93. 169.2970 6491.907 94. 169.4730 6508.256 95. 169.6650 6525.897 96. 169.8410 6542.331 97. 170.0170 6557.906			
70.         165.4250         6052.022           71.         165.6010         6076.024           72.         165.7610         6098.613           73.         165.9370         6121.585           74.         166.0810         6140.472           75.         166.2570         6162.890           76.         166.4010         6181.612           77.         166.5770         6207.068           78.         166.7530         6222.515           79.         166.9130         6241.289           80.         167.1050         6263.364           81.         167.2650         6281.340           82.         167.4410         6300.922           83.         167.6010         6318.655           84.         167.7770         6337.687           85.         167.9370         6354.860           86.         168.0810         6369.751           87.         168.2730         6390.054           88.         168.4330         6406.755           89.         168.6250         6426.256           90.         168.8010         6443.878           91.         168.970         6491.200			
71.       165.6010       6076.024         72.       165.7610       6098.613         73.       165.9370       6121.585         74.       166.0810       6140.472         75.       166.2570       6162.890         76.       166.4010       6181.612         77.       166.5770       6202.068         78.       166.7530       6222.515         79.       166.9130       6241.289         80.       167.1050       6263.364         81.       167.2650       6281.340         82.       167.4410       6309.922         83.       167.6010       6318.655         84.       167.7770       6337.687         85.       167.9370       6354.860         86.       168.0810       6369.751         87.       168.2730       6390.054         88.       168.2730       6390.054         89.       168.6250       6426.256         90.       168.8010       6443.878         91.       168.970       6461.200         92.       169.1370       6476.697         93.       169.2970       6491.907         94.       169.4730			
72.         165.7610         6098.613           73.         165.9370         6121.585           74.         166.0810         6140.472           75.         166.2570         6162.890           76.         166.4010         6181.612           77.         166.5770         6202.068           78.         166.7530         6222.515           79.         166.9130         6241.289           80.         167.1050         6263.364           81.         167.2650         6281.340           82.         167.4410         6300.922           83.         167.6010         6318.655           84.         167.7770         6337.687           85.         167.9370         6354.860           86.         168.0810         6369.751           87.         168.2730         6390.054           88.         168.4330         6406.755           89.         168.6250         6426.256           90.         168.8010         6443.878           91.         168.970         6461.200           92.         169.1370         6476.697           93.         169.2970         6491.907			
73.       165.9370       6121.585         74.       166.0810       6140.472         75.       166.2570       6162.890         76.       166.4010       6181.612         77.       166.5770       6202.068         78.       166.7530       6222.515         79.       166.9130       6241.289         80.       167.1050       6263.364         81.       167.2650       6281.340         82.       167.4410       6300.922         83.       167.6010       6318.655         84.       167.7770       6337.687         85.       167.9370       6354.860         86.       168.0810       6369.751         87.       168.2730       6390.054         88.       168.4330       6406.755         89.       168.6250       6426.256         90.       168.8010       6443.878         91.       168.9770       6461.200         92.       169.1370       6476.697         93.       169.2970       6491.907         94.       169.4730       6508.256         95.       169.6650       6525.897         96.       169.8410			
74.       166.0810       6140.472         75.       166.2570       6162.890         76.       166.4010       6181.612         77.       166.5770       6202.068         78.       166.7530       6227.515         79.       166.9130       6241.289         80.       167.1050       6263.364         81.       167.2650       6281.340         82.       167.4410       6300.922         83.       167.6010       6318.655         84.       167.7770       6337.687         85.       167.9370       6354.860         86.       168.0810       6369.751         87.       168.2730       6390.054         88.       168.4330       6406.755         89.       168.6250       6426.256         90.       168.8010       6443.878         91.       168.9770       6461.200         92.       169.1370       6476.697         93.       169.2970       6491.907         94.       169.4730       6508.256         95.       169.6650       6525.897         96.       169.8410       6542.331         97.       170.0170			
75.			
76.       166.4010       6181.612         77.       166.5770       6202.068         78.       166.7530       6222.515         79.       166.9130       6241.289         80.       167.1050       6263.364         81.       167.2650       6281.340         82.       167.4410       6300.922         83.       167.6010       6318.655         84.       167.7770       6337.687         85.       167.9370       6354.860         86.       168.0810       6369.751         87.       168.2730       6390.054         88.       168.4330       6406.755         89.       168.6250       6426.256         90.       168.8010       6443.878         91.       168.9770       6461.200         92.       169.1370       6476.697         93.       169.2970       6491.907         94.       169.4730       6508.256         95.       169.6650       6525.897         96.       169.8410       6542.331         97.       170.0170       6557.906         98.       170.1930       6573.401         99.       170.3370		•	
77.       166.5770       6202.068         78.       166.7530       6222.515         79.       166.9130       6241.289         80.       167.1050       6263.364         81.       167.2650       6281.340         82.       167.4410       6300.922         83.       167.6010       6318.655         84.       167.7770       6337.687         85.       167.9370       6354.860         86.       168.0810       6369.751         87.       168.2730       6390.054         88.       168.4330       6406.755         89.       168.6250       6426.256         90.       168.8010       6443.878         91.       168.9770       6461.200         92.       169.1370       6476.697         93.       169.2970       6491.907         94.       169.4730       6508.256         95.       169.6650       6525.897         96.       169.8410       6542.331         97.       170.0170       6557.906         98.       170.1930       6573.401         99.       170.3370       6585.949			
78.       166.7530       6222.515         79.       166.9130       6241.289         80.       167.1050       6263.364         81.       167.2650       6281.340         82.       167.4410       6300.922         83.       167.6010       6318.655         84.       167.7770       6337.687         85.       167.9370       6354.860         86.       168.0810       6369.751         87.       168.2730       6390.054         88.       168.4330       6406.755         89.       168.6250       6426.256         90.       168.8010       6443.878         91.       168.9770       6461.200         92.       169.1370       6476.697         93.       169.2970       6491.907         94.       169.4730       6508.256         95.       169.6650       6525.897         96.       169.8410       6542.331         97.       170.0170       6557.401         98.       170.1930       6585.949         99.       170.3370       6585.985.949			
79.       166.9130       6241.289         80.       167.1050       6263.364         81.       167.2650       6281.340         82.       167.4410       6300.922         83.       167.6010       6318.655         84.       167.7770       6337.687         85.       167.9370       6354.860         86.       168.0810       6369.751         87.       168.2730       6390.054         88.       168.4330       6406.755         89.       168.6250       6426.256         90.       168.8010       6443.878         91.       168.9770       6461.200         92.       169.1370       6476.697         93.       169.2970       6491.907         94.       169.4730       6508.256         95.       169.6650       6525.897         96.       169.8410       6542.331         97.       170.0170       6557.906         98.       170.1930       6585.949			
80.       167.1050       6263.364         81.       167.2650       6281.340         82.       167.4410       6300.922         83.       167.6010       6318.655         84.       167.7770       6337.687         85.       167.9370       6354.860         86.       168.0810       6369.751         87.       168.2730       6390.054         88.       168.4330       6406.755         89.       168.6250       6426.256         90.       168.8010       6443.878         91.       168.9770       6461.200         92.       169.1370       6476.697         93.       169.2970       6491.907         94.       169.4730       6508.256         95.       169.6650       6525.897         96.       169.8410       6542.331         97.       170.0170       6557.906         98.       170.1930       6573.401         99.       170.3370       6585.949			
81.       167.2650       6281.340         82.       167.4410       6300.922         83.       167.6010       6318.655         84.       167.7770       6337.687         85.       167.9370       6354.860         86.       168.0810       6369.751         87.       168.2730       6390.054         88.       168.4330       6406.755         89.       168.6250       6426.256         90.       168.8010       6443.878         91.       168.9770       6461.200         92.       169.1370       6476.697         93.       169.2970       6491.907         94.       169.4730       6508.256         95.       169.6650       6525.897         96.       169.8410       6542.331         97.       170.0170       6557.906         98.       170.1930       6573.401         99.       170.3370       6585.949			
87.       167.4410       6300.922         83.       167.6010       6318.655         84.       167.7770       6337.687         85.       167.9370       6354.860         86.       168.0810       6369.751         87.       168.2730       6390.054         88.       168.4330       6406.755         89.       168.6250       6426.256         90.       168.8010       6443.878         91.       168.9770       6461.200         92.       169.1370       6476.697         93.       169.2970       6491.907         94.       169.4730       6508.256         95.       169.6650       6525.897         96.       169.8410       6542.331         97.       170.0170       6557.906         98.       170.1930       6573.401         99.       170.3370       6585.949		: = :	
83.       167.6010       6318.655         84.       167.7770       6337.687         85.       167.9370       6354.860         86.       168.0810       6369.751         87.       168.2730       6390.054         88.       168.4330       6406.755         89.       168.6250       6426.256         90.       168.8010       6443.878         91.       168.9770       6461.200         92.       169.1370       6476.697         93.       169.2970       6491.907         94.       169.4730       6508.256         95.       169.6650       6525.897         96.       169.8410       6542.331         97.       170.0170       6557.906         98.       170.1930       6585.949         99.       170.3370       6585.949			
84.       167.7770       6337.687         85.       167.9370       6354.860         86.       168.0810       6369.751         87.       168.2730       6390.054         88.       168.4330       6406.755         89.       168.6250       6426.256         90.       168.8010       6443.878         91.       168.9770       6461.200         92.       169.1370       6476.697         93.       169.2970       6491.907         94.       169.4730       6508.256         95.       169.6650       6525.897         96.       169.8410       6542.331         97.       170.0170       6557.906         98.       170.1930       6573.401         99.       170.3370       6585.949			
85.       167.9370       6354.860         86.       168.0810       6369.751         87.       168.2730       6390.054         88.       168.4330       6406.755         89.       168.6250       6426.256         90.       168.8010       6443.878         91.       168.9770       6461.200         92.       169.1370       6476.697         93.       169.2970       6491.907         94.       169.4730       6508.256         95.       169.6650       6525.897         96.       169.8410       6542.331         97.       170.0170       6557.906         98.       170.1930       6573.401         99.       170.3370       6585.949			
86. 168.0810 6369.751 87. 168.2730 6390.054 88. 168.4330 6406.755 89. 168.6250 6426.256 90. 168.8010 6443.878 91. 168.9770 6461.200 92. 169.1370 6476.697 93. 169.2970 6491.907 94. 169.4730 6508.256 95. 169.6650 6525.897 96. 169.8410 6542.331 97. 170.0170 6557.906 98. 170.1930 6573.401 99. 170.3370 6585.949			
87. 168.2730 6390.054 88. 168.4330 6406.755 89. 168.6250 6426.256 90. 168.8010 6443.878 91. 168.9770 6461.200 92. 169.1370 6476.697 93. 169.2970 6491.907 94. 169.4730 6508.256 95. 169.6650 6525.897 96. 169.8410 6542.331 97. 170.0170 6557.906 98. 170.1930 6573.401 99. 170.3370 6585.949			
88. 168.4330 G406.755 89. 168.6250 G426.256 90. 168.8010 G443.878 91. 168.9770 G461.200 92. 169.1370 G476.697 93. 169.2970 G491.907 94. 169.4730 G508.256 95. 169.6650 G525.897 96. 169.8410 G542.331 97. 170.0170 G557.906 98. 170.1930 G585.949			
89.       168.6250       6426.256         90.       168.8010       6443.878         91.       168.9770       6461.200         92.       169.1370       6476.697         93.       169.2970       6491.907         94.       169.4730       6508.256         95.       169.6650       6525.897         96.       169.8410       6542.331         97.       170.0170       6557.906         98.       170.1930       6573.401         99.       170.3370       6585.949			
90. 168.8010 6443.878 91. 168.9770 6461.200 92. 169.1370 6476.697 93. 169.2970 6491.907 94. 169.4730 6508.256 95. 169.6650 6525.897 96. 169.8410 6542.331 97. 170.0170 6557.906 98. 170.1930 6573.401 99. 170.3370 6585.949			
91.       168.9770       6461.200         92.       169.1370       6476.697         93.       169.2970       6491.907         94.       169.4730       6508.256         95.       169.6650       6525.897         96.       169.8410       6542.331         97.       170.0170       6557.906         98.       170.1930       6573.401         99.       170.3370       6585.949			
92. 169.1370 6476.697 93. 169.2970 6491.907 94. 169.4730 6508.256 95. 169.6650 6525.897 96. 169.8410 6542.331 97. 170.0170 6557.906 98. 170.1930 6573.401 99. 170.3370 6585.949			
93.       169.2970       6491.907         94.       169.4730       6508.256         95.       169.6650       6525.897         96.       169.8410       6542.331         97.       170.0170       6557.906         98.       170.1930       6573.401         99.       170.3370       6585.949			
94. 169.4730 6508.256 95. 169.6650 6525.897 96. 169.8410 6542.331 97. 170.0170 6557.906 98. 170.1930 6573.401 99. 170.3370 6585.949	92.		
95. 169.6650 6525.897 96. 169.8410 6542.331 97. 170.0170 6557.906 98. 170.1930 6573.401 99. 170.3370 6585.949	93.		
96. 169.8410 6542.331 97. 170.0170 6557.906 98. 170.1930 6573.401 99. 170.3370 6585.949	94.		
97. 170.0170 6557.906 98. 170.1930 6573.401 99. 170.3370 6585.949	95.		
98. 170.1930 6573.401 99. 170.3370 6585.949	96.	169.8410	
99. 170.3370 6585.949	97.		
55. CCA1 174	98.	170.1930	· · · · · · · · · · · · · · · · · · ·
100. 170.5130 6601.124	99.	170.3370	
	100.	170.5130	6601.124

Test type: CRB

Point Hours   6617.272   101.   170.7050   6617.272   102.   170.8810   6632.618   103.   171.0730   6648.128   104.   171.2330   6660.915   105.   171.4250   6675.941   106.   171.6910   6699.648   107.   171.7930   6704.204   108.   171.130   6728.048   110.   172.3210   6743.181   111.   172.4970   6755.799   112.   172.5570   6767.115   113.   172.8650   6781.685   114.   173.0410   6793.870   115.   173.2170   6895.873   116.   173.3930   6817.880   117.   173.6010   6832.087   118.   173.7770   6843.774   119.   173.9530   6854.912   120.   174.1130   6864.991   121.   174.3370   6879.790   122.   174.5130   6889.942   124.   174.8810   6911.175   125.   175.0570   6921.235   126.   175.2330   6931.111   127.   175.4410   6942.866   128.   175.6170   6952.538   130.   176.0010   6973.190   131.   176.1930   6995.253   132.   176.570   6952.123   133.   176.5770   7003.064   134.   176.7530   7011.81   135.   176.9610   6973.390   136.   177.1530   7033.420   137.   177.3130   7033.231   138.   177.5370   7003.064   139.   177.7130   7059.456   140.   177.9210   7067.923   141.   178.1130   7075.465   142.   178.2730   7093.578   144.   178.810   7012.565   145.   178.810   7112.255   146.   177.9210   7067.923   144.   178.810   7075.465   145.   178.8730   7110.288   146.   179.4730   7115.208   147.   179.2810   7112.208   148.   179.4730   7115.208   149.   179.6650   7142.577   150.   179.8810   7112.284   149.   179.6650   7142.577   150.   179.8810   7112.284   149.   179.6650   7142.577   150.   179.8810   7112.084   149.   179.2810   712.093   140.   179.2810   712.093   141.   179.2810   712.093   144.   179.2810   712.093   145.   179.2810   712.093   146.   179.2810   712.093   147.   179.2810   712.093   148.   179.6650   7142.577   150.   179.8810   7115.0944	Data	Time	Pressure
101. 170.7050 6617.272 102. 170.8810 6632.618 103. 171.0730 6648.128 104. 171.2330 6660.915 105. 171.4250 6675.941 106. 171.7930 6704.204 108. 171.7930 6704.204 108. 171.3730 6704.204 108. 171.3730 6715.083 110. 172.3210 6743.181 111. 172.4970 6755.799 112. 172.6570 6767.115 113. 172.8850 6781.685 114. 173.0410 6793.870 115. 173.2170 6805.873 116. 173.3930 6817.880 117. 173.6010 6832.007 118. 173.7770 6843.774 119. 173.9530 6854.912 120. 174.1130 6864.991 121. 174.3370 6878.790 122. 174.5130 6864.991 123. 174.6730 6898.341 124. 174.8810 6911.175 125. 175.0570 6921.235 126. 175.2330 6931.111 127. 175.4410 6942.866 128. 175.6170 6952.538 129. 175.7930 6962.123 120. 174.1810 6942.866 121.29. 175.7930 6962.123 123. 176.6730 6933.420 124. 174.8810 6911.175 125. 175.0570 6921.235 126. 175.7930 6962.123 127. 175.4410 6942.866 128. 175.6170 6952.538 129. 175.7930 6962.123 130. 176.0010 6973.190 131. 176.1930 6983.420 132. 176.3850 6933.302 133. 176.5770 7003.064 134. 176.7530 7011.813 135. 176.9610 7022.230 136. 177.1530 7031.677 137. 177.3130 7038.291 138. 177.7130 7058.456 149. 179.2810 7076.923 144. 178.2730 7083.840 145. 179.2810 7102.281			psia
107. 170.8810 6632.618 108. 171.0730 6648.178 104. 171.2330 6660.915 105. 171.4250 6675.941 106. 171.6010 6689.648 107. 171.7930 6704.204 108. 171.9370 6715.083 109. 172.1130 6728.048 110. 172.3210 6743.181 111. 172.4970 6755.793 112. 172.6570 6767.115 113. 172.8650 6781.685 114. 173.0410 6793.870 115. 173.2170 6805.873 116. 173.3930 6817.880 117. 173.6010 6832.087 118. 173.7770 6843.774 119. 173.9530 6854.912 120. 174.1130 6864.991 121. 174.3370 6898.341 122. 174.6730 6898.341 123. 174.6730 6898.982 124. 174.8810 6911.175 125. 175.0570 6921.235 126. 175.2330 6931.111 127. 175.4410 6942.866 128. 175.6170 6952.538 129. 175.7930 6952.123 130. 176.6010 6973.190 131. 176.9010 6973.190 132. 176.5930 6962.123 133. 176.5770 7003.064 134. 176.5930 7031.677 137. 177.3130 7033.291 138. 177.7530 7050.146 139. 177.1530 7033.291 131. 176.9570 7003.064 134. 176.9570 7003.064 135. 176.9570 7003.064 136. 177.1530 7033.291 137. 177.3130 7033.291 138. 177.773130 7033.291 139. 177.773130 7033.291 130. 177.9210 7067.923 134. 178.130 7076.465 144. 178.130 7076.465 145. 178.8810 7110.248 146. 179.0730 7115.208	. 02.110		
102.         170.8810         6632.618           103.         171.0730         6648.128           104.         171.2330         6660.915           105.         171.4250         6675.941           106.         171.6010         6689.648           107.         171.7930         6704.204           108.         171.9370         6715.083           109.         172.1130         6728.048           110.         172.3210         6743.181           111.         172.4970         6755.799           112.         172.6570         6767.115           113.         172.8650         6781.685           114.         173.0410         6793.870           115.         173.2170         6605.873           116.         173.3930         6817.880           117.         173.6010         6832.087           118.         173.7770         6843.774           119.         173.9530         6854.912           120.         174.1130         6864.991           121.         174.3730         6898.982           122.         174.5130         6884.991           123.         174.6730         6898.982 <td>101.</td> <td>170.7050</td> <td></td>	101.	170.7050	
103. 171.0730		170.8810	6632.618
104. 171.2330		171.0730	
105. 171.4250 6675.941 106. 171.6010 6689.648 107. 171.7930 6704.204 108. 171.9370 6715.083 109. 172.1130 6728.048 110. 172.3210 6743.181 111. 172.4970 6755.799 112. 172.6570 6767.115 113. 172.8650 6781.685 114. 173.0410 6793.870 115. 173.2170 6605.873 116. 173.3930 6817.880 117. 173.6010 6832.087 118. 173.7770 6843.7774 119. 173.9530 6654.912 120. 174.1130 6864.991 121. 174.3370 6878.790 122. 174.5130 6898.341 123. 174.6730 6988.982 124. 174.8810 6911.175 125. 175.0570 6921.235 126. 175.2330 6911.175 126. 175.6170 6925.538 129. 175.6170 6922.538 129. 175.6170 6932.538 130. 176.0010 6933.40 131. 176.7930 6962.123 130. 176.0010 6973.190 131. 176.7930 6982.343 133. 176.5770 7003.064 134. 176.7930 6983.440 137. 176.3850 6993.302 133. 176.5770 7003.064 134. 176.7930 7031.677 137. 177.3130 7039.291 138. 177.5370 7003.064 139. 177.7130 7059.465 140. 177.9210 7067.923 141. 178.1130 7076.465 142. 178.2730 7093.578 144. 178.8810 7110.248 145. 179.0730 7118.23		171.2330	6660.915
106.         171.6010         6689.648           107.         171.7930         6704.204           108.         171.9370         6715.083           109.         172.1130         6728.048           110.         172.3210         6743.181           111.         172.4970         6755.799           112.         172.6570         6767.115           113.         172.8650         6781.685           114.         173.0410         6793.870           115.         173.2170         6805.873           116.         173.3930         6817.880           117.         173.6010         6832.087           118.         173.7770         6843.774           119.         173.9530         6854.912           120.         174.1130         6864.991           121.         174.3370         6878.780           122.         174.5130         6884.991           123.         174.6730         6898.982           124.         174.8810         6911.175           125.         175.0570         6921.235           126.         175.2330         6931.111           127.         175.4410         6942.866 <td></td> <td></td> <td>6675.941</td>			6675.941
107.       171.7930       6704.204         108.       171.9370       6715.083         109.       172.1130       6728.048         110.       172.3210       6743.181         111.       172.4970       6755.799         112.       172.6570       6767.115         113.       172.8650       6781.685         114.       173.0410       6793.870         115.       173.2170       6805.873         116.       173.3930       6817.880         117.       173.6010       6832.087         118.       173.7770       6843.774         119.       173.9530       6854.912         120.       174.1130       6864.991         121.       174.3370       6878.790         122.       174.5130       6889.341         123.       174.6730       6898.982         124.       174.8810       6911.175         125.       175.0570       6921.235         126.       175.7330       6931.111         127.       175.74410       6942.866         129.       175.7930       6962.123         130.       176.0910       6973.190         131.			6689.648
108.       171.9370       6715.083         109.       172.1130       6728.048         110.       172.3210       6743.181         111.       172.4970       6755.799         112.       172.6570       6767.115         113.       172.8650       6781.685         114.       173.0410       6793.870         115.       173.2170       6805.873         116.       173.3930       6817.880         117.       173.6010       6832.087         118.       173.7770       6843.774         119.       173.9530       6854.912         120.       174.1130       6864.991         121.       174.3370       6878.790         122.       174.5130       6889.341         123.       174.6730       6898.982         124.       174.8810       6911.175         125.       175.0570       6921.235         126.       175.2330       6931.111         127.       175.4410       6942.866         128.       175.7930       6962.123         130.       176.0010       6973.190         131.       176.7930       6983.420         132.			6704.204
109.       172.1130       6728.048         110.       172.3210       6743.181         111.       172.4970       6755.799         112.       172.6570       6767.115         113.       172.8650       6781.685         114.       173.0410       6793.870         115.       173.2170       6805.873         116.       173.3930       6817.880         117.       173.6010       6832.087         118.       173.7770       6843.774         119.       173.9530       6854.912         120.       174.1130       6864.991         121.       174.5130       6878.790         122.       174.5130       6889.341         123.       174.6730       6898.982         124.       174.8810       6911.175         125.       175.0570       6921.235         126.       175.2330       6931.111         127.       175.4410       6942.866         128.       175.6170       6952.538         129.       175.7930       6962.123         130.       176.3650       6993.302         131.       176.3650       6993.302         132.			6715.083
110.       172.3210       6743.181         111.       172.4970       6755.793         112.       172.6570       6767.115         113.       172.8650       6781.685         114.       173.0410       6793.870         115.       173.2170       6805.873         116.       173.3930       6817.880         117.       173.6010       6823.087         118.       173.7770       6843.774         119.       173.9530       6854.912         120.       174.1130       6864.991         121.       174.3370       6878.790         122.       174.5130       6889.341         123.       174.6730       6898.982         124.       174.8810       6911.175         125.       175.0570       6921.235         126.       175.2330       6931.111         127.       175.4410       6942.866         128.       175.6170       6952.538         129.       175.7930       6962.123         130.       176.0010       6973.190         131.       176.910       693.302         133.       176.5770       7003.064         134.			6728.048
111.       172.4970       6755.799         112.       172.6570       6767.115         113.       172.8650       6781.685         114.       173.0410       6793.870         115.       173.2170       6805.873         116.       173.3930       6817.880         117.       173.6010       6832.087         118.       173.7770       6843.774         119.       173.9530       6854.912         120.       174.1130       6864.91         121.       174.3370       6878.790         122.       174.5130       6889.341         123.       174.6730       6898.982         124.       174.8810       6911.175         125.       175.0570       6921.235         126.       175.2330       6931.111         127.       175.4410       6942.866         128.       175.6170       6952.538         129.       175.7930       6962.123         130.       176.0010       6973.190         131.       176.9510       703.064         134.       176.7530       7011.813         135.       176.9610       7022.230         136.			6743.181
112.       172.6570       6767.115         113.       172.8650       6781.685         114.       173.0410       6793.870         115.       173.2170       6805.873         116.       173.3930       6817.880         117.       173.6010       6832.087         118.       173.7770       6843.774         119.       173.9530       6854.912         120.       174.1130       6864.91         120.       174.1130       6864.91         121.       174.3370       6878.790         122.       174.5130       6889.341         123.       174.6730       6898.982         124.       174.8810       6911.175         125.       175.0570       6921.235         126.       175.2330       6931.111         127.       175.4410       6942.866         128.       175.7930       6962.123         130.       176.0010       6973.190         131.       176.3850       6993.302         133.       176.5770       7003.064         134.       176.7530       7011.813         135.       176.9610       7022.230         136.			6755.799
113.       172.8650       6781.685         114.       173.0410       6793.870         115.       173.2170       6805.873         116.       173.3930       6817.880         117.       173.6010       6832.087         118.       173.7770       6843.774         119.       173.9530       6854.912         120.       174.1130       6864.991         121.       174.3370       6878.790         122.       174.5130       6889.982         124.       174.6730       6898.982         124.       174.6810       6911.175         125.       175.0570       6921.235         126.       175.2330       6931.111         127.       175.4410       6942.866         128.       175.5170       6952.538         129.       175.7930       6962.123         130.       176.0010       6973.190         131.       176.3850       6993.302         132.       176.3850       6993.302         133.       176.57530       7011.813         135.       176.9610       7022.230         136.       177.1530       7031.677         137.			6767.115
114.       173.0410       6793.870         115.       173.2170       6805.873         116.       173.3930       6817.880         117.       173.6010       6832.087         118.       173.7770       6843.774         119.       173.9530       6854.912         120.       174.1130       6864.991         121.       174.3370       6878.790         122.       174.5130       6889.341         123.       174.6730       6898.982         124.       174.8810       6911.175         125.       175.0570       6921.235         126.       175.2330       6931.111         127.       175.4410       6942.866         128.       175.6170       6952.538         129.       175.7930       6961.123         130.       176.0010       6973.190         131.       176.3850       6993.302         132.       176.3850       6993.302         133.       176.5770       7003.064         134.       176.7530       7011.813         135.       176.9610       7022.230         136.       177.1530       7050.146         139.			6781.685
115.       173.2170       6805.873         116.       173.3930       6817.880         117.       173.6010       6832.087         118.       173.7770       6843.774         119.       173.9530       6854.912         120.       174.1130       6864.991         121.       174.3370       6878.790         122.       174.5130       6889.341         123.       174.6730       6898.982         124.       174.8810       6911.175         125.       175.0570       6921.235         126.       175.2330       6931.111         127.       175.4410       6942.866         128.       175.6170       6952.538         129.       175.7930       6962.123         130.       176.0010       6973.190         131.       176.1930       6983.420         132.       176.3850       6993.302         133.       176.5770       7003.064         134.       176.7530       7011.813         135.       176.9610       7022.230         136.       177.1530       7031.677         137.       177.3130       7039.291         140.			6793.870
116.       173.3930       6817.880         117.       173.6010       6832.087         118.       173.7770       6843.774         119.       173.9530       6854.912         120.       174.1130       6864.991         121.       174.3370       6878.790         122.       174.5130       6889.341         123.       174.6730       6898.982         124.       174.8810       6911.175         125.       175.0570       6921.235         126.       175.2330       6931.111         127.       175.4410       6942.866         128.       175.6170       6952.538         129.       175.7930       6962.123         130.       176.0010       6973.190         131.       176.0010       6973.190         132.       176.3850       6993.302         133.       176.5770       7003.064         134.       176.7530       7011.813         135.       176.9610       7022.230         136.       177.1530       7031.677         137.       177.3130       7058.456         140.       177.9210       7067.923         140.			6805.873
117.       173.6010       6832.087         118.       173.7770       6843.774         119.       173.9530       6854.912         120.       174.1130       6864.991         121.       174.3370       6878.790         122.       174.5130       6889.341         123.       174.6730       6898.982         124.       174.8810       6911.175         125.       175.0570       6921.235         126.       175.2330       6931.111         127.       175.4410       6942.866         128.       175.6170       6952.538         129.       175.7930       6962.123         130.       176.0010       6973.190         131.       176.3850       6993.302         132.       176.3850       6993.302         133.       176.5770       7003.064         134.       176.7530       7011.813         135.       176.9610       7022.230         136.       177.1530       7031.677         137.       177.3130       7059.146         139.       177.7130       7058.456         140.       177.9210       7067.923         141.			6817.880
118.       173.7770       6843.774         119.       173.9530       6854.912         120.       174.1130       6864.991         121.       174.3370       6878.790         122.       174.5130       6889.341         123.       174.6730       6898.982         124.       174.8810       6911.175         125.       175.0570       6921.235         126.       175.2330       6931.111         127.       175.4410       6942.866         128.       175.6170       6952.538         129.       175.7930       6962.123         130.       176.0010       6973.190         131.       176.1930       6983.420         132.       176.3850       6993.302         133.       176.5770       7003.064         134.       176.7530       7011.813         135.       176.9610       7022.230         136.       177.1530       7031.677         137.       177.3130       7039.291         138.       177.730       7058.456         140.       177.9210       7067.923         141.       178.1130       7076.465         142.			6832.087
119.       173.9530       6854.912         120.       174.1130       6864.991         121.       174.3370       6878.790         122.       174.5130       6889.341         123.       174.6730       6898.982         124.       174.8810       6911.175         125.       175.0570       6921.235         126.       175.2330       6931.111         127.       175.4410       6942.866         128.       175.6170       6952.538         129.       175.7930       6962.123         130.       176.0010       6973.190         131.       176.1930       6983.420         132.       176.3850       6993.302         133.       176.5770       7003.064         134.       176.7530       7011.813         135.       176.9610       7022.230         136.       177.1530       7031.677         137.       177.3130       7039.291         138.       177.730       7050.146         139.       177.7130       7058.456         140.       177.9210       7067.923         141.       178.2730       7083.840         142.			6843.774
120.       174.1130       6864.991         121.       174.3370       6878.790         122.       174.5130       6889.341         123.       174.6730       6898.982         124.       174.8810       6911.175         125.       175.0570       6921.235         126.       175.2330       6931.111         127.       175.4410       6942.866         128.       175.6170       6952.538         129.       175.7930       6962.123         130.       176.0010       6973.190         131.       176.1930       6983.420         132.       176.3850       6993.302         133.       176.5770       7003.064         134.       176.7530       7011.813         135.       176.9610       7022.230         136.       177.1530       7031.677         137.       177.3130       7039.291         138.       177.5370       7050.146         139.       177.7130       7054.465         140.       177.9210       7067.923         141.       178.1130       7076.465         142.       178.2730       7083.840         143.			6854.912
121.       174.3370       6878.790         122.       174.5130       6889.341         123.       174.6730       6898.982         124.       174.8810       6911.175         125.       175.0570       6921.235         126.       175.2330       6931.111         127.       175.4410       6942.866         128.       175.6170       6952.538         129.       175.7930       6962.123         130.       176.9010       6973.190         131.       176.1930       6983.420         132.       176.3850       6993.306         133.       176.5770       7003.064         134.       176.7530       7011.813         135.       176.9610       7022.230         136.       177.1530       7031.677         137.       177.3130       7039.291         138.       177.5370       7050.146         139.       177.7130       7050.146         140.       177.9210       7067.923         141.       178.130       7076.465         142.       178.2730       7083.840         143.       178.4970       7093.578         144.			6864.991
122.       174.5130       6889.341         123.       174.6730       6898.982         124.       174.8810       6911.175         125.       175.0570       6921.235         126.       175.2330       6931.111         127.       175.4410       6942.866         128.       175.6170       6952.538         129.       175.7930       6962.123         130.       176.9010       6973.190         131.       176.1930       6983.420         132.       176.3850       6993.302         133.       176.5770       7003.064         134.       176.7530       7011.813         135.       176.9610       7022.230         136.       177.1530       7031.677         137.       177.3130       7039.291         138.       177.5370       7050.146         139.       177.7130       7059.465         140.       177.9210       7067.923         141.       178.130       7076.465         142.       178.2730       7083.840         143.       178.4970       7093.578         144.       178.7050       7102.565         145.			6878.790
123.       174.6730       6898.982         124.       174.8810       6911.175         125.       175.0570       6921.235         126.       175.2330       6931.111         127.       175.4410       6942.866         128.       175.6170       6952.538         129.       175.7930       6962.123         130.       176.0010       6973.190         131.       176.1930       6983.420         132.       176.3850       6993.302         133.       176.5770       7003.064         134.       176.7530       7011.813         135.       176.9610       7022.230         136.       177.1530       7031.677         137.       177.3130       7039.291         138.       177.5370       7050.146         139.       177.7130       7058.456         140.       177.9210       7067.923         141.       178.1130       7076.465         142.       178.2730       7083.840         143.       178.4970       7093.578         144.       178.7050       7102.565         145.       178.8810       7110.248         146.			6889.341
124.       174.8810       6911.175         125.       175.0570       6921.235         126.       175.2330       6931.111         127.       175.4410       6942.866         128.       175.6170       6952.538         129.       175.7930       6962.123         130.       176.0010       6973.190         131.       176.1930       6983.420         132.       176.3850       6993.302         133.       176.5770       7003.064         134.       176.7530       7011.813         135.       176.9610       7022.230         136.       177.1530       7031.677         137.       177.3130       7039.291         138.       177.5370       7050.146         139.       177.7130       7058.456         140.       177.9210       7067.923         141.       178.1130       7076.465         142.       178.2730       7083.840         143.       178.4970       7093.578         144.       178.7050       7102.565         145.       178.8810       7110.248         146.       179.0730       7118.235         147.			6898.982
125.       175.0570       6921.235         126.       175.2330       6931.111         127.       175.4410       6942.866         128.       175.6170       6952.538         129.       175.7930       6962.123         130.       176.0010       6973.190         131.       176.1930       6983.420         132.       176.3850       6993.302         133.       176.5770       7003.064         134.       176.7530       7011.813         135.       176.9610       7022.230         136.       177.1530       7031.677         137.       177.3130       7039.291         138.       177.5370       7050.146         139.       177.7130       7058.456         140.       177.9210       7067.923         141.       178.1130       7076.465         142.       178.2730       7083.840         143.       178.4970       7093.578         144.       178.7050       7102.565         145.       178.8810       7110.248         146.       179.0730       7118.235         147.       179.2810       7127.003         148.			6911.175
126.       175.2330       6931.111         127.       175.4410       6942.866         128.       175.6170       6952.538         129.       175.7930       6962.123         130.       176.0010       6973.190         131.       176.1930       6983.420         132.       176.3850       6993.302         133.       176.5770       7003.064         134.       176.7530       7011.813         135.       176.9610       7022.230         136.       177.1530       7031.677         137.       177.3130       7039.291         138.       177.5370       7050.146         139.       177.7130       7058.456         140.       177.9210       7067.923         141.       178.1130       7076.465         142.       178.2730       7083.840         143.       178.4970       7093.578         144.       178.7050       7102.565         145.       178.8810       7110.248         146.       179.0730       7118.235         147.       179.2810       7127.003         148.       179.4730       7135.008         149.			6921.235
127.       175.4410       6942.866         128.       175.6170       6952.538         129.       175.7930       6962.123         130.       176.0010       6973.190         131.       176.1930       6983.420         132.       176.3850       6993.302         133.       176.5770       7003.064         134.       176.7530       7011.813         135.       176.9610       7022.230         136.       177.1530       7031.677         137.       177.3130       7039.291         138.       177.5370       7050.146         139.       177.7130       7058.456         140.       177.9210       7067.923         141.       178.1130       7076.465         142.       178.2730       7083.840         143.       178.4970       7093.578         144.       178.7050       7102.565         145.       178.8810       7110.248         146.       179.0730       7118.235         147.       179.2810       7127.003         148.       179.4730       7135.008         149.       179.6650       7142.572			6931.111
128.       175.6170       6952.538         129.       175.7930       6962.123         130.       176.0010       6973.190         131.       176.0930       6983.420         132.       176.3850       6993.302         133.       176.5770       7003.064         134.       176.7530       7011.813         135.       176.9610       7022.230         136.       177.1530       7031.677         137.       177.3130       7039.291         138.       177.5370       7050.146         139.       177.7130       7058.456         140.       177.9210       7067.923         141.       178.1130       7076.465         142.       178.2730       7083.840         143.       178.4970       7093.578         144.       178.7050       7102.565         145.       178.8810       7110.248         146.       179.0730       7118.235         147.       179.2810       7127.003         148.       179.4730       7135.008         149.       179.6650       7142.572			6942.866
129.       175.7930       6962.123         130.       176.0010       6973.190         131.       176.1930       6983.420         132.       176.3850       6993.302         133.       176.5770       7003.064         134.       176.7530       7011.813         135.       176.9610       7022.230         136.       177.1530       7031.677         137.       177.3130       7039.291         138.       177.5370       7050.146         139.       177.7130       7059.456         140.       177.9210       7067.923         141.       178.1130       7076.465         142.       178.2730       7083.840         143.       178.4970       7093.578         144.       178.7050       7102.565         145.       178.8810       7110.248         146.       179.0730       7118.235         147.       179.2810       7127.003         148.       179.4730       7135.008         149.       179.6650       7142.572			6952.538
130.       176.0010       6973.190         131.       176.1930       6983.420         132.       176.3850       6993.302         133.       176.5770       7003.064         134.       176.7530       7011.813         135.       176.9610       7022.230         136.       177.1530       7031.677         137.       177.3130       7039.291         138.       177.5370       7050.146         139.       177.7130       7058.456         140.       177.9210       7067.923         141.       178.1130       7076.465         142.       178.2730       7083.840         143.       178.4970       7093.578         144.       178.7050       7102.565         145.       178.8810       7110.248         146.       179.0730       7118.235         147.       179.2810       7127.003         148.       179.4730       7135.008         149.       179.6650       7142.572          2150       7142.572		175.7930	6962.123
131.       176.1930       6983.420         132.       176.3850       6993.302         133.       176.5770       7003.064         134.       176.7530       7011.813         135.       176.9610       7022.230         136.       177.1530       7031.677         137.       177.3130       7039.291         138.       177.5370       7050.146         139.       177.7130       7058.456         140.       177.9210       7067.923         141.       178.1130       7076.465         142.       178.2730       7083.840         143.       178.4970       7093.578         144.       178.7050       7102.565         145.       178.8810       7110.248         146.       179.0730       7118.235         147.       179.2810       7127.003         148.       179.4730       7135.008         149.       179.6650       7142.572		176.0010	
132.       176.3850       6993.302         133.       176.5770       7003.064         134.       176.7530       7011.813         135.       176.9610       7022.230         136.       177.1530       7031.677         137.       177.3130       7039.291         138.       177.5370       7050.146         139.       177.7130       7058.456         140.       177.9210       7067.923         141.       178.1130       7076.465         142.       178.2730       7083.840         143.       178.4970       7093.578         144.       178.7050       7102.565         145.       178.8810       7110.248         146.       179.0730       7118.235         147.       179.2810       7127.003         148.       179.4730       7135.008         149.       179.6650       7142.572		176.1930	6983.420
133.       176.5770       7003.064         134.       176.7530       7011.813         135.       176.9610       7022.230         136.       177.1530       7031.677         137.       177.3130       7039.291         138.       177.5370       7050.146         139.       177.7130       7058.456         140.       177.9210       7067.923         141.       178.1130       7076.465         142.       178.2730       7083.840         143.       178.4970       7093.578         144.       178.7050       7102.565         145.       178.8810       7110.248         146.       179.0730       7118.235         147.       179.2810       7127.003         148.       179.4730       7135.008         149.       179.6650       7142.572		176.3850	6993.302
134.       176.7530       7011.813         135.       176.9610       7022.230         136.       177.1530       7031.677         137.       177.3130       7039.291         138.       177.5370       7050.146         139.       177.7130       7058.456         140.       177.9210       7067.923         141.       178.1130       7076.465         142.       178.2730       7083.840         143.       178.4970       7093.578         144.       178.7050       7102.565         145.       178.8810       7110.248         146.       179.0730       7118.235         147.       179.2810       7127.003         148.       179.4730       7135.008         149.       179.6650       7142.572		176.5770	7003.064
135.       176.9610       7022.230         136.       177.1530       7031.677         137.       177.3130       7050.146         138.       177.5370       7050.146         139.       177.7130       7058.456         140.       177.9210       7067.923         141.       178.1130       7076.465         142.       178.2730       7083.840         143.       178.4970       7093.578         144.       178.7050       7102.565         145.       178.8810       7110.248         146.       179.0730       7118.235         147.       179.2810       7127.003         148.       179.4730       7135.008         149.       179.6650       7142.572		176.7530	7011.813
136.       177.1530       7031.677         137.       177.3130       7039.291         138.       177.5370       7050.146         139.       177.7130       7058.456         140.       177.9210       7067.923         141.       178.1130       7076.465         142.       178.2730       7083.840         143.       178.4970       7093.578         144.       178.7050       7102.565         145.       178.8810       7110.248         146.       179.0730       7118.235         147.       179.2810       7127.003         148.       179.4730       7135.008         149.       179.6650       7142.572			
137.       177.3130       7039.291         138.       177.5370       7050.146         139.       177.7130       7058.456         140.       177.9210       7067.923         141.       178.1130       7076.465         142.       178.2730       7083.840         143.       178.4970       7093.578         144.       178.7050       7102.565         145.       178.8810       7110.248         146.       179.0730       7118.235         147.       179.2810       7127.003         148.       179.4730       7135.008         149.       179.6650       7142.572		177.1530	7031.677
138.       177.5370       7050.146         139.       177.7130       7058.456         140.       177.9210       7067.923         141.       178.1130       7076.465         142.       178.2730       7083.840         143.       178.4970       7093.578         144.       178.7050       7102.565         145.       178.8810       7110.248         146.       179.0730       7118.235         147.       179.2810       7127.003         148.       179.4730       7135.008         149.       179.6650       7142.572		177.3130	7039.291
139.       177.7130       7058.456         140.       177.9210       7067.923         141.       178.1130       7076.465         142.       178.2730       7083.840         143.       178.4970       7093.578         144.       178.7050       7102.565         145.       178.8810       7110.248         146.       179.0730       7118.235         147.       179.2810       7127.003         148.       179.4730       7135.008         149.       179.6650       7142.572		177.5370	7050.146
140.       177.9210       7067.923         141.       178.1130       7076.465         142.       178.2730       7083.840         143.       178.4970       7093.578         144.       178.7050       7102.565         145.       178.8810       7110.248         146.       179.0730       7118.235         147.       179.2810       7127.003         148.       179.4730       7135.008         149.       179.6650       7142.572          7160.844			7058.456
141.       178.1130       7076.465         142.       178.2730       7083.840         143.       178.4970       7093.578         144.       178.7050       7102.565         145.       178.8810       7110.248         146.       179.0730       7118.235         147.       179.2810       7127.003         148.       179.4730       7135.008         149.       179.6650       7142.572		177.9210	7067.923
142.       178.2730       7083.840         143.       178.4970       7093.578         144.       178.7050       7102.565         145.       178.8810       7110.248         146.       179.0730       7118.235         147.       179.2810       7127.003         148.       179.4730       7135.008         149.       179.6650       7142.572			7076.465
143.       178.4970       7093.578         144.       178.7050       7102.565         145.       178.8810       7110.248         146.       179.0730       7118.235         147.       179.2810       7127.003         148.       179.4730       7135.008         149.       179.6650       7142.572		178.2730	7083.840
144.       178.7050       7102.565         145.       178.8810       7110.248         146.       179.0730       7118.235         147.       179.2810       7127.003         148.       179.4730       7135.008         149.       179.6650       7142.572		178.4970	
145.       178.8810       7110.248         146.       179.0730       7118.235         147.       179.2810       7127.003         148.       179.4730       7135.008         149.       179.6650       7142.572		178.7050	
146.       179.0730       7118.235         147.       179.2810       7127.003         148.       179.4730       7135.008         149.       179.6650       7142.572			
147.     179.2810     7127.003       148.     179.4730     7135.008       149.     179.6650     7142.572       7150.844		179.0730	
148.     179.4730     7135.008       149.     179.6650     7142.572       7150.844		179.2810	
149. 179.6650 7142.572		179.4730	
7150 044		179.6650	
		179.8730	7150.944

Test type: CRB

Data	Time	Pressure
Point	Hours	psia
151.	180.0330	7157.430
152.	180.2570	7166.095
153.	180.4330	7172.924
154.	180.6730	7182.023
155.	180.8330	7188.137
156.	181.0730	7197.075
157.	181.2330	7202.965
158.	181.4730	7211.581
159.	181.6330	7217.194
160.	181.8570	7225.018
161.	182.0650	7232.239
162.	182.2730	7239.423
163.	182.4650	7245.965
164.	182,6730	7252.735
165.	182.8810	7259.545
166.	183.0730	7265.811
167.	183.2810	7272.434
168.	183.5050	7279.665
169.	183.7130	7286.077
170.	183.9050	7292.059
171.	184.1130	7298.408
172.	184.3210	7304.672
173.	184.5130	7310.353
174.	184.7370	7316.796
175.	184.9450	7322.845
176.	185.1530	7329.888
177.	185.3770	7335.893
178.	185.5850	7341.376
179.	185.7930	7346.912
180.	186.0010	7352.601
181.	186.1930	7357.659
182.	186.4330	7363.920
	186.6410	7369.346
183.	186.8330	7374.202
184. 185.	187.0730	7380.391
186.	187.2810	7385.667
187.	187.5050	7391.211
	187.7130	7396.580
188.	187.9210	7401.769
189.		7407.139
190.	188.1450 188.3530	7412.077
191.	188.5930	7417.702
192.	188.7850	7422.222
193.		7427.048
194.	188.9930 189.2330	7432.561
195.		7437.593
196.	189.4570	7441.430
197.	189.6330	7447.327
198.	189.9050	7451.813
199.	190.1130	7456.505
200.	190.3370	(100.000

Test type: CRB

	<u></u>	Pressure
Data	Time	psia
Point	Hours	рата
201.	190.5450	7460.788
202.	190.7850	7465.863
203.	190.9930	7470.047
204.	191.2330	7474.842
205.	191.4410	7478.913
206.	191.6810	7483.595
207.	191.9050	7487.857
Z08.	192.1130	7491.714
209.	192.3530	7496.131
210.	192.5770	7500.204
211.	192.8010	7504.177
212.	193.0410	7508.466
213.	193.2650	7512.402
214.	193.4730	7515.956
215.	193.7130	7520.199
216.	193.9530	7524.376
217.	194.1770	7528.199
218.	194.4010	7532.099
219.	194.6570	7536.521
220.	194.8810	7540.294
221.	195.1210	7544.195
222.	195.3450	7547.739
223.	195.5850	7551.589
224.	195.7930	7554.841
225.	196.0330	7558.439
226.	196.2730	7561.907 7565.415
227.	196.5130	7569.037
228.	196.7530	7572.330
229.	196.9770	7575.814
230.	197.2170	7579.285
231.	197.4570	7582.373
232.	197.6810	7585.820
233.	197.9210	7589.229
234.	198.1610 198.4010	7592.649
235.	198.6410	7596.699
236.	198.8810	7599.866
237.	199.1210	7603.186
238.	199.3770	7606.698
239.	199.6170	7609.917
240.	199.8570	7613.214
241. 242.	200.1130	7616.497
243.	200.3530	7619.819
244.	200.5930	7622.848
245.	200.8650	7626.222
246.	201.0730	7628.931
247.	201.3450	7632.370
248.	201.5850	7635.417
249.	201.8410	7638.640
250.	202.0810	7641.350

Test type: CRB

Data	Time	Pressure
Point	Hours	psia
. 02		
251.	202.3370	7644.458
252.	202.5610	7646.976
253.	202.8330	7650.123
254.	203.0730	7652.810
255.	203.3130	7655.521
256.	203.6010	7658.784
257.	203.8410	7661.457
258.	204.0970	7664.414
259.	204.3370	7667.140
260.	204.5930	767 <b>0.</b> 236
261.	204.8650	7673.347
262.	205.1210	7676.290
263.	205.3770	7679.119
264.	205.6330	7682.269
265.	205.8730	7684.920
266.	206.1450	7687.787
267.	206.4170	7690.809
268.	206.6570	7693.499
269.	206.8970	7696.098
270.	207.1850	7699.173
271.	207.4410	7701.941
272.	207.6970	7704.695
273.	207.9530	7707.309
274.	208.2410	7710.294
275.	208.4810	7712.716
276.	208.7530	7715.562
277.	208.9930	7717.779
278.	209.2810	7720.586

## PANSYSTEM ANALYSIS PROGRAM

File: 73033C.GAS

Test type: CRB

Date: 10/10/89 Time: 06:21

RESULTS FROM LOG-LOG ANALYSIS

Line :

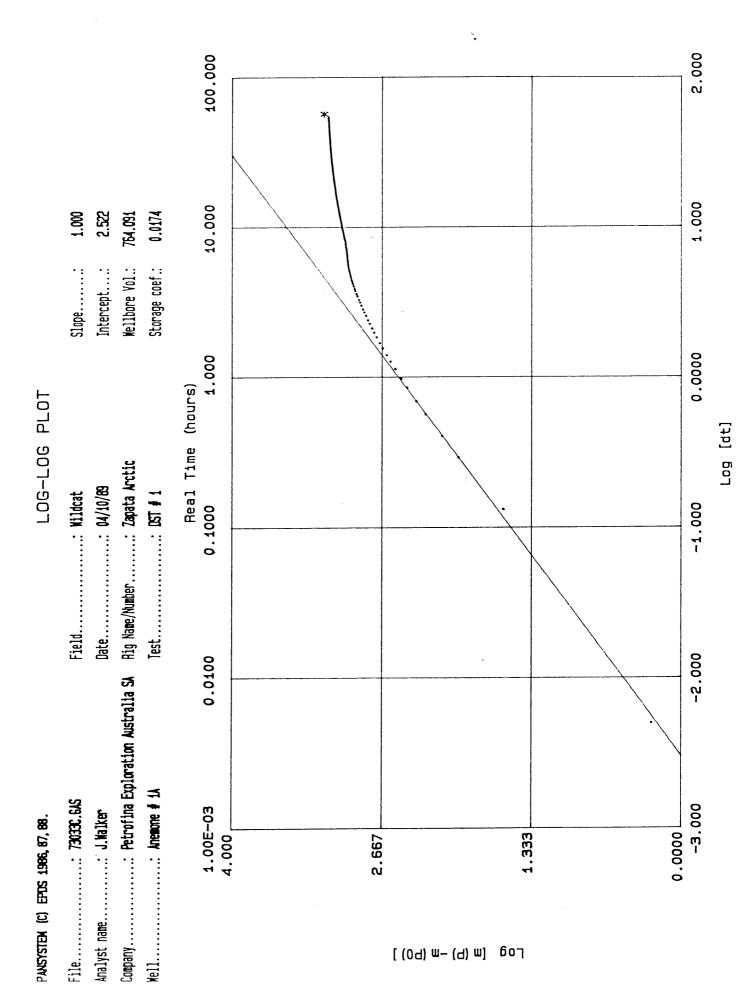
Intercept..... 2.522

Slope..... 1.000

Apparent wellbore volume...... 764.091 bb1

Dim. wellbore storage constant (Cd)....: 360.426

Storage coefficient (initial)...... 0.0174 bbl/psi



Ĺ

# E.P.D.S. Ltd.

# PANSYSTEM ANALYSIS PROGRAM

File: 73033C.GAS

Test type: CRB

Date: 10/10/89 Time: 06:26

RESULTS FROM HORNER ANALYSIS using Pseudo-pressure and Real time

#### Line :

Line	:		
	Intercept:	1704.589	
	Slope:	-1258.957	
	Start of line(	0.1766 ,	1482.065)
	End of line:(	0.1382 ,	1530.493)
•	Coefficient of determination:	1.0000	
	Number of points:	43	
			-
m(p)	at dt = 1 hr:	261.923	psia2/cp (*1E-06)
Extra	polated m(p):	1704.589	psia2/cp (*1E-06)
Perme	ability-thickness (kh):	0.9778	md.ft
Perme	ability (k):	0.0132	md
Total	skin factor (s):	-2.656	
dP sk	in (constant rate):	-1479.609	psi
Radius	s of investigation:	26.977	ft
Extra	polated pressure:	8369.525	psia
Pressi	ure at dt = 1 hour	1744.844	psia

0.1313 8.00 00.00 0.2094 1.80 0.3350 1.60 0.0132 اران (8) Slope....: -1258.957 Intercept...: 1704.589 Permeability.: Skin....: 0.5390 1.40 13.000) Time from start of test (hours) 0.8755 1.20 Log [(tp+dt)/dt] (tp =1.444 1.00 Rig Name/Number..... Zapata Arctic Date..... 04/10/69 Test..... DGT # 1 2.448 0.80 4.361 0.60 8.599 0.40 Company...... Petrofina Exploration Australia SA 22.226 0.80 939.930 Analyst name..... J. Walker 0.0000 300.000 1500.000 1200.000 900.006 600.000 1800.000 psia2/cp (\*1E-06) (EWG) M

HORNER PLOT

PANSYSTEN (C) EPDS 1986, 67, 88.

#### PANSYSTEM ANALYSIS PROGRAM

File: 73033C.GAS Test type: CRB

Date: 10/10/89 Time: 06:32

RESULTS FROM SEMILOG ANALYSIS using Pseudo-pressure and Real time

Line :

Intercept....: 1162.527

Slope....: 242.606

Start of line...:( 1.701 , 1575.052)

End of line...:( 1.735 , 1583.418)

Coefficient of determination...: 0.9998

Computed initial pressure..... 6972.559 psia

Permeability-thickness (kh)..... 5.074 md.ft

Permeability (k)...... 0.0686 md

Total skin factor (s)...... 1.113

dP skin (constant rate)...... 910.651 psi

Radius of investigation..... 61.455 ft

Pressure at dt = 1 hour..... 5572.109 psia

63.096 1.80 34.674 1.54 19.055 1.28 242.606 0.088 1112.521 Permeability.: Intercept...: 10.471 Slope..... 1.02 Time from start of test (hours) 5.754 9.76 3.162 Log [dt] 0.50 Rig Name/Number..... Zapata Arctic Test...... DGT # 1 1.738 0.24 0.9550 -0.02 0.5248 -0.28 Company...... Petrofina Exploration Australia SA -0.54 0.2884 0.1585 -0.80 File..... 73033C.GNS Analyst name...... J.Malker 0.000.0 1800.000 600.000 300.000 1500.000 1200.000 900.006 psia2\cp (\*1E-06) (EW9) m

MDH BUILDUP PLOT

PANSYSTEN (C) EPDS 1986, 87, 88.

E.P.D.S. Ltd.

File: 73033C.GAS

Test type: CRB

Date: 10/10/89 Time: 06:40

# RESULTS FROM A HOMOGENEOUS RESERVOIR TYPE-CURVE MATCH (WELLBORE STORAGE ANALYSIS)

Data plotted using Real Elapsed Time and m(p)

Dim. pressure match point Pd(match):	0.0523	
Dim. time match point Td/Cd(match):	1.760	
Matched curve Cde2S(match):	10000.000	
Pressure match point dP(match):	10.000	
Time match point dt(match):	1.000	
Permeability-thickness (kh):	5.589	md.ft
Permeability (k):	0.0755	mđ
Apparent wellbore volume:	755.253	bb I
Dim. wellbore storage constant (Cd):	356.258	
Storage coefficient (initial):	0.0172	bbl/psi
Radius of investigation:	64.500	ft
dP skin (constant rate):	1238.593	psi
Skin factor (S):	1.667	

HOMOGENEOUS RESERVOIR File.... Analyst nam Company.... Well.....

PANSYSTEM (C) EPDS 1986, 87, 88.

203E.64S	730330.645	Field Wildcat	Pd (match): 0.0523 dp (match) 10.000	0.0523	dp (match):	10.000
lame	J.Halker	Date 04/10/89	Td (match) :	1.750	1.750 dt (match) 1.000	1.000
•	Petrofina Exploration Australia SA	Rig Name/Number Zapata Arctic	Permeability.: 0.0755 dp (skin): 1238.593	0.0班	dp (skin):	[238.583
	Anemone # 1A	Test DST # 1	Sk in:	1.667	1.667 C (Storage) : 755.253	西.253

(

Data plotted using Real Elapsed Time and m (p)

104.00 Cees 10 30.0 40 20.0 40 45.0 0.00 0.00 0.00 0.00 103.00 Approximate start of semi-log straight line DIMENSIONLESS TIME (Td/Cd) = 0.000295 (khdt/uC) 10 2.00 10 1.00 10 -1.00 10 2.00 10 1.00

DIWENSIONFESS bHESSNHE bq =  $(k\mu 1 \text{sc} \ 20300 \text{d} 1 \text{bsc}) \text{ qw} (b)$ 

٠,

# EXAL

### RESERVOIR SERVICES



# RESERVOIR PARAMETERS AND GAS DATA

Client: Petrofina Exploration Australia S.A. Client Engineer: D. Sousa

Field: Wildcat Well: Anemone # 1A Test : DST # 1

Date : 22nd September, 1989 Job No. : AB 256

Perforations: 4599-4618m mdrkb

4629-4652m mdrkb

Formation thickness h: 74 ft

Average formation porosity 0: 16 %

Reservoir pressure P: 9150 psia

Reservoir temperature T: 260 degF

Well radius Rw: 0.4 ft

Average water saturation Sw: 40 %

Gas gravity: 1.26

Initial gas viscosity Ui: 0.0667 cp

Initial Z-factor Zi: 1.526

Gas compressibility Cgi: 2.283 x10 -5/psi

Water compressibility Cw: 3.500 x10 -6/psi

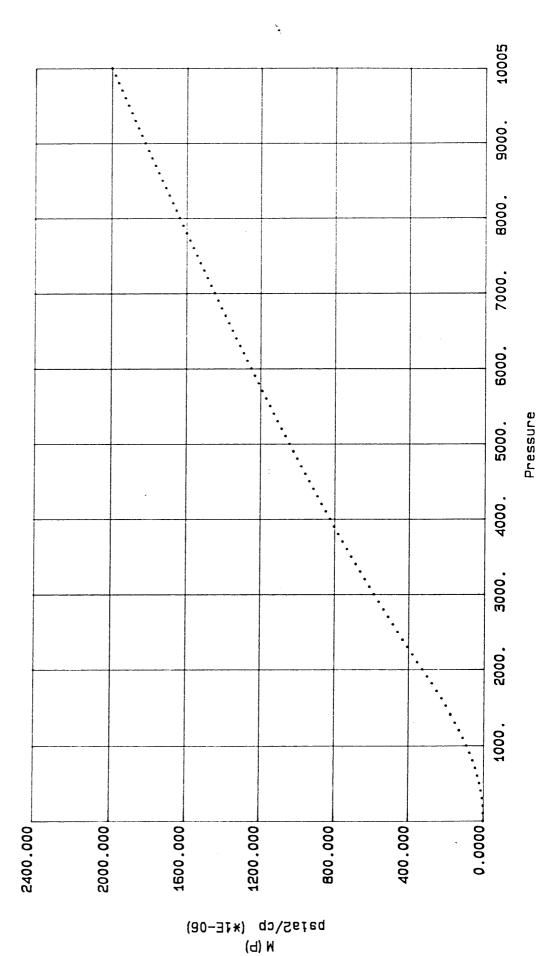
Formation compressibility Cf: 3.500 x10 -6/psi

Total system compressibility Cti: 1.860 x10 -5/psi

Note: The above data was supplied by the Onsite Reservoir Engineer on the rig.

M (P) v PRESSURE PANSYSTEM (C) EPDS 1986, 87, 88.

Field: Wildcat	Date	Petrofina Exploration Australia SA Rig Name/Number Zapata Arctic	Test: DST # 1
ZAG33A, GAS	: J. Walker	Petrofina Exploration Australia SA	: Anemone # 1A
File73033A.GAS	Analyst name	Сомралу Р	Well



Test type: CRB

Data	Pressure	m(p)
Point	psia	psia2/cp (*1E-0
		0.00
1.	.000	.000
2.	100.000	.874
3.	200.000	3.539
4.	300.000	8.031
5.	400.000	14.351
6.	500.000	22.635
7.	600.000	32.774
8.	700.000	44.838
9.	800.000	58.821
10.	900.000	74.653
11.	1000.000	92.181
12.	1100.000	111.324
13.	1200.000	132.015
14.	1300.000	153.952
15.	1400.000	176.910
16.	1500.000	200.734
17.	1600.000	225.293
18.	1700.000	250.443
19.	1800.000	276.042
20.	1900.000	301.955
21.	2000.000	328.075
22.	2100.000	354.314
23.	2200.000	380.580
24.	2300.000	406.793
25.	2400.000	432.888
26.	2500.000	458.814
27.	2600.000	484.543
28.	2700.000	510.146
29.	2800.000	535.598
30.	2900.000	560.871
31.	3000.000	585.943
32.	3100.000	61 <b>0.</b> 797
33.	3200.000	635.420
34.	3300.000	659.801
<b>35.</b>	3400.000	683.933
36.	3500.000	707.812
37.	3600.000	731.433
38.	3700.000	754.794
39.	3800.000	777.896
40.	3900.000	800.784
41.	4000.000	823.537
42.	4100.000	846.154
43.	4200.000	868.631
44.	4300.000	89 <b>0.96</b> 5
45.	4400.000	913.153
46.	4500.000	935.194
47.	4600.000	957.086
48.	4700.000	978.828
49.	4800.000	1000.420
50.	4900.000	1021.860

Test type: CRB

Data	Pressure	m(p)
Point	psia	psia2/cp (*1E-0
1 OTHE	Bula	•
51.	5000,000	1043.150
52.	5100.000	1064.289
53.	5200.000	1085.302
54.	5300.000	1106.207
55.	5400.000	1127.003
56.	5500.000	1147.690
57.	5600.000	1168.266
58.	5700.000	1188.733
59.	5800.000	1209.089
60.	5900.000	1229.334
61.	6000.000	1249.469
62.	6100.000	1269.494
63.	6200.000	1289.410
64.	6300.000	1309.215
65.	6400.000	1328.915
66.	6500.000	1348.547
67.	6600.000	1368.123
68.	6700.000	1387.641
69.	6800.000	1407.101
70.	6900.000	1426.501
71.	7000.000	1445.842
72.	7100.000	1465.124
73.	7200.000	1484.345
74.	7300.000	1503.505
75.	7400.000	1522.605
76.	7500.000	1541.644
77.	7600.000	1560.621
78.	7700.000	1579.537
79.	7800.000	1598.391
80.	7900.000	1617.184
81.	8000.000	1635.915
82.	8100.000	1654.585
83.	8200.000	1673.192
84.	8300.000	1691.738
85.	8400.000	1710.222
86.	8500.000	1728.645
87.	8600.000	1747.005
88.	8700.000	1765.305
89.	8800.000	1783.542
90.	8900.000	1801.719
91.	9000.000	1819.835
92.	9100.000	1837.889
93.	9200.000	1855.883
94.	9300.000	1873.816
95.	9400.000	1891.688
96.	9500.000	1909.500
97.	9600.000	1927.256
98.	9700.000	1944.979
99.	9800.000	1962.673
100.	9900.000	1980.337
100.		

PANSYSTEN (C) EPDS 1986, 67, 88.

File..... 73033A.GAS

Analyst name...... J.Malker

480.000

400.000

320.000

240.000

(q) I (γ) (×1Ε−0√) (γ) (±1Ε−0√)

160.000

Field....: Wildcat

I (P) v PRESSURE

Date......04/10/89

Company....... Petrofina Exploration Australia SA Rig Name/Number..... Zapata Arctic

Pressure

10005

9000.

8000.

7000.

6000.

5000.

4000.

3000.

2000.

1000.

0.000.0

80.000

Test type: CRB

Data	Pressure	I(p
Point	psia	psi.hrs/cP (*1E
1.	.000	.000
2.	100.000	.070
3.	200.000	.274
4.	300.000	.600
5.	400.000	1.034
6.	500.000	1.566
7.	600.000	Z.179
8.	700.000	2.859
9.	800.000	3.599
10.	900.000	4.382
11.	1000.000	5.195
12.	1100.000	6.036
13.	1200.000	6.905
14.	1300.000	7.800
15.	1400.000	8.728
16.	1500.000	9.701
17.	1600.000	10.731
18.	1700.000	11.833
19.	1800.000	13.018
20.	1900.000	14.297
21.	2000.000	15.679
22.	2100.000	17.175
23.	2200.000	18.791
24.	2300.000	20.532
25.	2400.000	22.402
26.	2500.000	24.405
27.	2600.000	26.543
28.	2700.000	28.826
29.	2800.000	31.256
30.	2900.000	33.830
31.	3000.000	36.548
32.	3100.000	39.408
33.	3200.000	42.406
34.	3300.000	45.540
35.	3400.000	48.806
36.	3500.000	52.200
37.	3600.000	55.719
38.	3700.000	59.358
39.	3800.000	63.114
40.	3900.000	66.990
41.	4000.000	70.997
42.	4100.000	75.131
43.	4200.000	79.389
44.	4300.000	83.768
45.	4400.000	88.264
46.	4500.000	92.873
47.	4600.000	97.593
48.	4700.000	102.419
49.	4800.000	107.348
50.	4900.000	112.377

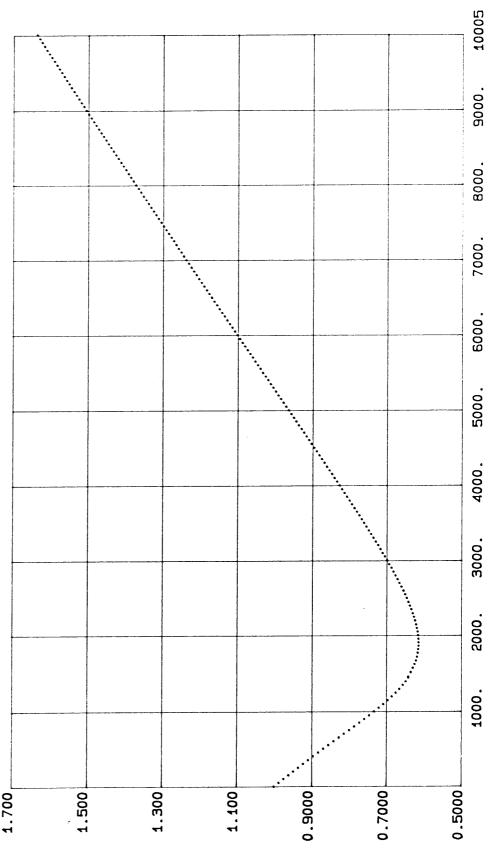
Test type: CRB

		•
Data	Pressure	I(p
Point	psia	psi.hrs/cP (*1E
51.	5000.000	117.503
52.	5100.000	122.723
53.	5200.000	128.040
54.	5300.000	133.454
55.	5400.000	138.965
56.	5500.000	144.568
57.	5600.000	150.262
58.	5700.000	156.042
59.	5800.000	161.908
60.	5900.000	167.856
61.	6000.000	173.884
62.	6100.000	179.989
63.	6200.000	186.170
64.	6300.000	192.423
65.	6400.000	198.747
66.	6500.000	205.154
67.	6600.000	211.643
68.	6700.000	218.214
69.	6800.000	224.865
70.	6900.000	231.593
71.	7000.000	238.397
72.	7100.000	245.274
73.	7200.000	252.224
74.	7300.000	259.244
75.	7400.000	266.332
76.	7500.000	273.488
77.	7600.000	280.708
78.	7700.000	287.992
79.	7800.000	295.339
80.	7900.000	302.746
81.	8000.000	310.211 317.734
82.	8100.000	317.734 325.314
83.	8200.000	332.948
84.	8300.000	340.635
85.	8 <b>400.0</b> 00 85 <b>00.0</b> 00	348.374
86. 07	8600.000	356.163
87.	8700.000	364.002
88.	8800.000	371.889
89.	8900.000	379.822
90.	9000.000	387.801
91. 92.	9100.000	395.825
	9200.000	403.891
93. 94.	9300.000	411.999
95.	9400.000	420.149
96.	9500.000	428.338
97.	9600.000	436.567
98.	9700.000	444.847
99.	9800.000	453.178
100.	9900.000	461.559

PANSYSTEN (C) EPDS 1986, 87, 88.

111
7
岀
یہ
(C)
ഗ
ш
$\sim$
ā
ш
>
-
~
ш
$\circ$
10
Ċ
$\mathcal{L}$
.~
Щ
1
7
. •

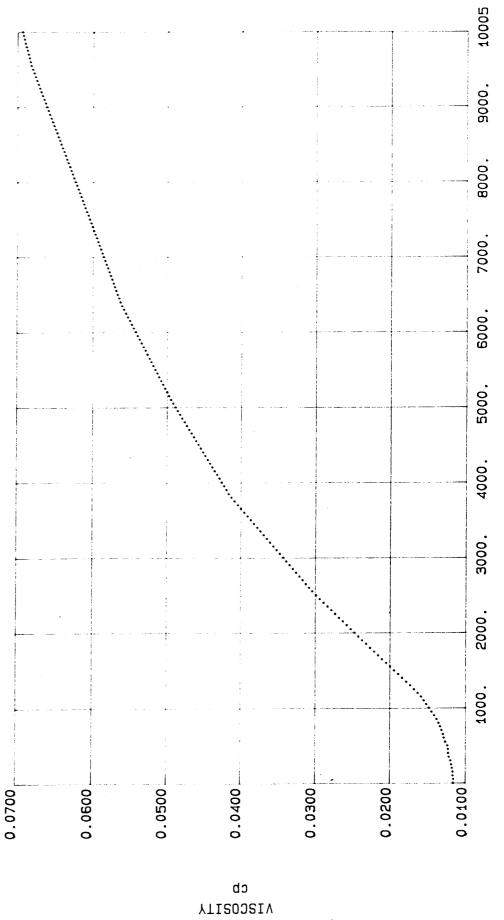
File		Field Wildcat	Wildcat
Analyst name J. Halker	J. Nalker	Date 04/10/89	04/10/89
Company:	mpany Petrofina Exploration Australia SA Rig Name/Number Zapata Arctic	Rig Name/Number	Zapata Arctic
Well	Anemone # 1A	Test DST # 1	DST # 1



AOT3A7-Z

Pressure

VISCOSITY v PRESSURE Aig Name/Number..... Zapata Arctic Date..... 04/10/89 Field......Wildcat Test..... DST # 1 Company...... Petrofina Exploration Australia SA Analyst name..... J.Walker PANSYSTEM (C) EPDS 1986, 87, 88.



Pressure

Test type: CRB

Data	Pressure	Gas viscosity	Z-Factor
Point	psia	co	
	0.00	.012	1.000
1.	.000	.012	.987
2.	50.000	.012	.975
3.	100.000	.012	.962
4.	150.000	.012	.949
5.	200.000	.012	.936
6.	250.000	.012	.923
7.	300.000	.012	.909
8.	350.000	.012	.896
9.	400.000	.012	.882
10.	450.000	.012	.869
11.	500.000	.013	.855
12.	550.000	.013	.847
13.	600.000		.828
14.	650.000	.013	.814
15.	700.000	.013	.801
16.	750.000	.013	.787
17.	800.000	-014	.773
18.	850.000	.014	.760
19.	900.000	.014	.747
20.	950.000	.015	.734
21.	1000.000	.015	.734
22.	1050.000	.015	.709
23.	1100.000	.016	. 703
24.	1150.000	.016	
25.	1200.000	.016	.686
26.	1250.000	.017	.676
27.	1300.000	.017	.666
28.	1350.000	.018	.657
29.	1400.000	.018	.650
30.	1450.000	.019	.642
31.	1500.000	.019	.636
32.	1550.000	.020	.631
33.	1600.000	. 02 1	.676
34.	1650.000	. Ø2 1	.623
35.	1700.000	.022	.670
36.	1750.000	.022	.618
37.	1800.000	.023	.616.
38.	1850.000	.023	.616
39.	1900.000	.024	.616
40.	1950.000	.024	.616
41.	2000.000	.025	.617
42.	2050.000	.025	.618
43.	2100.000	.026	.620
44.	2150.000	.026	.623
45.	2200.000	.027	.675
46.	2250.000	.027	.628
47.	2300.000	.028	.632
48.	2350.000	.028	.635
49.	2400.000	.029	.639
5Ø.	2450.000	.029	.643
JV.	_ 1000		

Test type: CRB

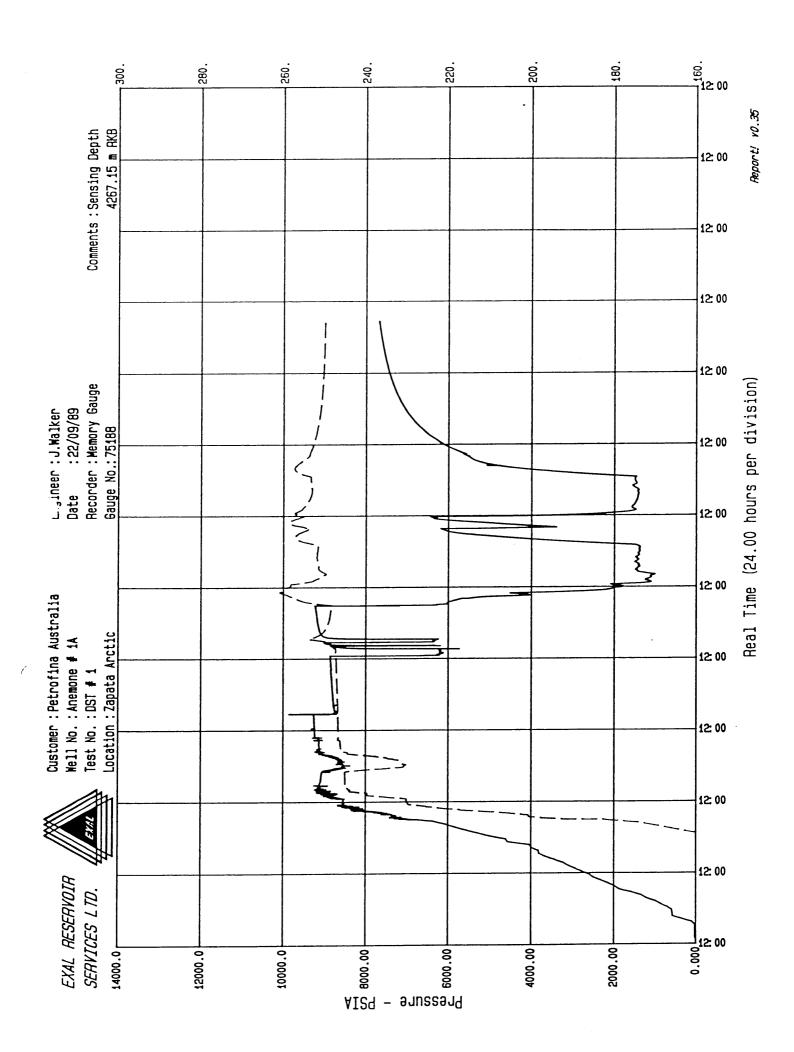
Point	Data	Pressure	Gas viscosity	Z-Factor
51.         Z500.000         .030         .648           52.         Z550.000         .030         .652           53.         Z600.000         .031         .657           54.         Z650.000         .031         .667           55.         Z700.000         .032         .667           56.         Z750.000         .033         .673           57.         Z800.000         .033         .683           59.         Z900.000         .033         .683           59.         Z900.000         .033         .689           60.         Z950.000         .034         .695           61.         3000.000         .034         .695           62.         3050.000         .034         .701           62.         3050.000         .035         .707           63.         3100.000         .035         .717           64.         3150.000         .036         .775           65.         3200.000         .036         .775           66.         3250.000         .037         .731           67.         3300.000         .037         .733           68.         3350.000				
57.	TOINT	pord	·	
52.         2550.000         .031         .657           53.         2650.000         .031         .657           54.         2650.000         .031         .667           55.         2700.000         .032         .6673           56.         2750.000         .033         .678           58.         2850.000         .033         .683           59.         2900.000         .033         .681           60.         2950.000         .034         .695           61.         3000.000         .034         .695           61.         3000.000         .034         .701           62.         3050.000         .035         .707           63.         3100.000         .035         .717           64.         3150.000         .036         .775           65.         3250.000         .036         .771           66.         3250.000         .037         .731           67.         3300.000         .037         .737           68.         3350.000         .037         .743           69.         3420.000         .038         .756           70.         3450.000	51.	2500.000	.030	.648
53.         2500,000         .031         .652           54.         2650,000         .031         .662           55.         2700,000         .032         .667           56.         2750,000         .033         .670           57.         7800,000         .033         .683           59.         2900,000         .033         .683           60.         2950,000         .034         .701           61.         3000,000         .034         .701           61.         3000,000         .034         .701           62.         3950,000         .035         .712           63.         3150,000         .035         .717           64.         3150,000         .036         .719           65.         3200,000         .036         .731           67.         3300,000         .036         .731           67.         3300,000         .037         .737           68.         3250,000         .037         .737           69.         3400,000         .038         .750           70.         3450,000         .039         .763           71.         3500,000			.030	.652
54.         2550.000         .031         .667           55.         2700.000         .032         .673           56.         2750.000         .033         .673           57.         2800.000         .033         .683           59.         2900.000         .033         .683           60.         2150.000         .034         .695           61.         3000.000         .034         .695           61.         3000.000         .034         .695           61.         3000.000         .035         .707           63.         3100.000         .035         .717           64.         3150.000         .036         .725           65.         3200.000         .036         .725           66.         3250.000         .036         .731           67.         3300.000         .037         .737           68.         3350.000         .037         .737           69.         3440.000         .038         .756           70.         3450.000         .038         .756           71.         3500.000         .039         .763           72.         3550.000			.031	.657
55.         2700,000         .037         .667           56.         2750,000         .033         .678           57.         2800,000         .033         .683           59.         2900,000         .034         .693           60.         2950,000         .034         .695           61.         3000,000         .034         .701           62.         3050,000         .035         .717           63.         3100,000         .035         .717           64.         3150,000         .036         .719           65.         3250,000         .036         .725           66.         3250,000         .037         .737           67.         3300,000         .037         .737           68.         3350,000         .037         .737           69.         3450,000         .038         .750           70.         3450,000         .038         .750           71.         3500,000         .039         .763           72.         3550,000         .039         .763           73.         3600,000         .039         .763           74.         3650,000			.031	.662
56.         2750, 000         .032         .673           57.         2800, 000         .033         .683           58.         2950, 000         .033         .689           60.         2950, 000         .034         .695           61.         3000, 000         .034         .695           61.         3000, 000         .035         .707           62.         3050, 000         .035         .712           64.         3150, 000         .036         .725           65.         3250, 000         .036         .725           66.         3250, 000         .036         .731           67.         3300, 000         .037         .737           68.         3350, 000         .037         .743           69.         3490, 000         .037         .743           69.         3490, 000         .038         .756           71.         3500, 000         .039         .763           72.         3550, 000         .039         .763           73.         3600, 000         .039         .769           74.         3150, 000         .040         .789           75.         3700			.032	.667
57.         2800,000         .0333         .678           58.         2850,000         .0333         .683           59.         2900,000         .0344         .695           61.         .3000,000         .0344         .701           62.         .3050,000         .0355         .707           63.         .3100,000         .0355         .717           64.         .3150,000         .036         .725           65.         .3200,000         .036         .725           66.         .3250,000         .036         .725           67.         .3300,000         .037         .731           68.         .3350,000         .037         .737           69.         .3400,000         .038         .756           70.         .3450,000         .038         .756           71.         .3590,000         .039         .763           72.         .3550,000         .039         .763           73.         .3550,000         .039         .763           74.         .3650,000         .039         .763           75.         .3700,000         .040         .782           76.         .			.032	.673
58.         2850.000         .0333         .683           59.         2900.000         .0333         .689           60.         2950.000         .0344         .695           61.         3000.000         .0355         .701           62.         3050.000         .0355         .717           63.         3150.000         .0356         .7219           65.         3200.000         .036         .7219           65.         3200.000         .036         .7219           66.         3750.000         .036         .731           67.         3300.000         .0377         .7437           68.         3350.000         .0377         .7437           69.         3450.000         .038         .750           70.         3450.000         .038         .750           71.         3500.000         .039         .763           72.         3550.000         .039         .769           73.         3600.000         .040         .786           74.         3650.000         .040         .787           75.         3700.000         .041         .795           77.         3800.000<			.033	.678
59.         2900.000         .033         .689           60.         2950.000         .034         .695           51.         3000.000         .034         .701           62.         3050.000         .035         .707           63.         3100.000         .035         .7112           65.         3200.000         .036         .7119           65.         3250.000         .036         .731           66.         3250.000         .036         .731           67.         3300.000         .037         .737           68.         3350.000         .037         .731           69.         3400.000         .038         .756           71.         3500.000         .038         .756           71.         3500.000         .039         .763           72.         3550.000         .039         .763           73.         3600.000         .040         .776           74.         3650.000         .040         .782           75.         3700.000         .040         .782           76.         3750.000         .041         .795           77.         3800.000			.033	.683
60.         2950.000         .034         .701           61.         3000.000         .034         .701           62.         3050.000         .035         .707           63.         3100.000         .036         .719           64.         3150.000         .036         .725           66.         3250.000         .036         .731           67.         3300.000         .037         .737           68.         3350.000         .037         .743           69.         3400.000         .038         .750           70.         3450.000         .038         .750           71.         3500.000         .038         .750           72.         3550.000         .039         .763           73.         3600.000         .040         .782           74.         3550.000         .040         .782           75.         3700.000         .040         .782           75.         3700.000         .041         .795           76.         3750.000         .041         .795           77.         3800.000         .041         .795           80.         3950.000			.033	.689
61.         3000.000         .034         .701           62.         3055.000         .035         .707           63.         3100.000         .035         .711           64.         3150.000         .036         .719           65.         3200.000         .036         .731           66.         3250.000         .037         .737           67.         3300.000         .037         .737           69.         .3460.000         .038         .750           70.         .3450.000         .038         .756           71.         .3500.000         .039         .763           72.         .3550.000         .039         .769           73.         .3600.000         .039         .769           74.         .3650.000         .040         .782           75.         .3700.000         .040         .782           75.         .3700.000         .041         .795           76.         .3750.000         .041         .795           77.         .3800.000         .041         .802           80.         .3950.000         .042         .808           81.         .4000.000 </td <td></td> <td></td> <td>.034</td> <td>.695</td>			.034	.695
62. 3050.000 .035 .707 63. 3100.000 .035 .7117 64. 3150.000 .036 .7119 65. 3200.000 .036 .725 66. 3250.000 .036 .725 66. 3250.000 .037 .737 67. 3300.000 .037 .737 68. 3350.000 .037 .737 69. 3400.000 .038 .750 70. 3450.000 .038 .750 71. 3500.000 .039 .763 72. 3550.000 .039 .763 73. 3600.000 .039 .769 73. 3600.000 .040 .776 74. 3650.000 .040 .787 75. 3700.000 .040 .787 76. 3750.000 .041 .795 77. 3800.000 .041 .795 77. 3800.000 .041 .802 78. 3950.000 .041 .802 79. 3900.000 .041 .802 80. 3950.000 .042 .805 80. 3950.000 .042 .808 81. 4000.000 .044 .802 82. 4050.000 .044 .829 82. 4050.000 .044 .829 83. 4100.000 .044 .829 84. 4150.000 .044 .849 85. 4260.000 .044 .849 85. 4260.000 .044 .869 86. 4250.000 .044 .869 87. 4300.000 .044 .869 88. 4350.000 .044 .869 98. 4400.000 .044 .869 99. 4400.000 .045 .803 90. 4450.000 .046 .945 .803 90. 4450.000 .046 .945 91. 4500.000 .047 .917 95. 4700.000 .047 .917 95. 4700.000 .047 .917 98. 4800.000 .047 .917 99. 4800.000 .047 .917 99. 4800.000 .047 .917 99. 4800.000 .047 .917 99. 4900.000 .048 .937 99. 4900.000 .048 .937 99. 4900.000 .048 .937 99. 4900.000 .048 .937 99. 4900.000 .048 .937 99. 4900.000 .048 .937 99. 4900.000 .048 .937 99. 4900.000 .048 .937				.701
63. 3100.000 .035 .719 64. 3150.000 .036 .719 65. 3200.000 .036 .725 66. 3250.000 .036 .731 67. 3300.000 .037 .737 68. 3350.000 .037 .737 68. 3350.000 .037 .737 69. 3400.000 .038 .750 70. 3450.000 .038 .750 71. 3500.000 .039 .763 72. 3550.000 .039 .763 73. 3600.000 .039 .763 74. 3650.000 .040 .776 74. 3650.000 .040 .776 75. 3700.000 .040 .780 76. 3750.000 .040 .780 77. 3800.000 .041 .795 77. 3800.000 .041 .802 78. 3650.000 .041 .802 79. 3900.000 .041 .802 80. 3950.000 .042 .808 81. 4000.000 .042 .808 82. 4050.000 .044 .829 83. 4100.000 .044 .829 84. 4150.000 .044 .849 85. 4250.000 .044 .865 86. 4250.000 .044 .865 87. 4300.000 .044 .865 88. 4350.000 .044 .865 89. 4400.000 .044 .869 99. 4400.000 .045 .803 90. 4450.000 .045 .803 90. 4450.000 .045 .803 90. 4450.000 .045 .803 90. 4450.000 .045 .803 90. 4450.000 .045 .803 91. 4500.000 .046 .809 91. 4500.000 .046 .809 92. 4550.000 .047 .917 95. 4700.000 .047 .917 95. 4700.000 .048 .944 99. 4800.000 .047 .937 98. 4800.000 .048 .937 99. 4800.000 .048 .937 99. 4800.000 .048 .937 99. 4800.000 .048 .937 99. 4800.000 .048 .937 99. 4800.000 .048 .937 99. 4800.000 .048 .937 99. 4800.000 .048 .937 99. 4800.000 .048 .937 99. 4800.000 .048 .937 99. 4800.000 .048 .937			.035	.707
64. 3150.000 036 719 65. 3200.000 036 725 66. 3250.000 036 731 67. 3300.000 037 737 68. 3350.000 037 743 69. 3400.000 038 750 70. 3450.000 038 756 71. 3500.000 039 763 72. 3550.000 039 763 73. 3550.000 039 763 74. 3550.000 039 763 75. 3700.000 040 776 75. 3750.000 040 782 75. 3750.000 041 795 77. 3800.000 041 795 77. 3800.000 041 882 80. 3950.000 041 882 81. 4000.000 042 808 80. 3950.000 042 887 81. 4000.000 044 889 82. 4050.000 044 889 84. 4150.000 044 889 85. 4200.000 044 889 86. 4250.000 044 889 90. 4450.000 044 889 91. 4500.000 045 989 91. 4500.000 045 989 91. 4500.000 047 991 91. 4500.000 044 889 91. 4500.000 044 889 91. 4500.000 044 889 91. 4500.000 044 889 91. 4500.000 044 889 91. 4500.000 044 889 91. 4500.000 044 889 91. 4500.000 044 889 91. 4500.000 044 889 91. 4500.000 044 889 91. 4500.000 044 889 91. 4500.000 044 899 91. 4500.000 044 991				.717
65.         37.00.000         .036         .725           66.         32.50.000         .037         .731           67.         33.00.000         .037         .737           68.         33550.000         .037         .743           69.         34.00.000         .038         .750           70.         34.50.000         .039         .763           71.         .35.00.000         .039         .763           72.         .35.50.000         .039         .763           73.         .36.50.000         .040         .776           74.         .36.50.000         .040         .782           75.         .3700.000         .040         .782           75.         .3750.000         .041         .795           77.         .3800.000         .041         .807           78.         .3850.000         .042         .808           79.         .3900.000         .042         .808           80.         .3950.000         .042         .807           81.         .4000.000         .043         .829           82.         .4050.000         .043         .835           83.				.719
66.         37.50.000         .036         .731           67.         3300.000         .037         .743           68.         3350.000         .037         .743           69.         3400.000         .038         .750           70.         3450.000         .039         .763           71.         3500.000         .039         .763           72.         3550.000         .040         .776           73.         3600.000         .040         .782           75.         3700.000         .040         .782           75.         3700.000         .040         .782           76.         3750.000         .041         .795           77.         3800.000         .041         .807           78.         3850.000         .042         .808           80.         3950.000         .042         .815           80.         3950.000         .042         .815           81.         .4000.000         .043         .829           82.         .4050.000         .043         .835           83.         .4100.000         .044         .855           86.         .4250.000				.725
67. 3300.000 .037 .737 68. 3350.000 .037 .743 68. 3350.000 .038 .750 68. 3400.000 .038 .750 70. 3450.000 .038 .750 71. 3500.000 .039 .763 72. 3550.000 .039 .763 73. 3600.000 .040 .776 74. 3650.000 .040 .776 75. 3700.000 .040 .782 76. 3750.000 .041 .795 77. 3800.000 .041 .795 77. 3800.000 .041 .802 78. 3850.000 .041 .802 78. 3850.000 .042 .815 80. 3950.000 .042 .815 80. 3950.000 .042 .822 81. 4000.000 .043 .829 82. 4050.000 .043 .829 83. 4100.000 .043 .829 84. 4150.000 .044 .855 85. 4200.000 .044 .855 86. 4250.000 .044 .869 87. 4300.000 .044 .869 88. 4350.000 .044 .869 88. 4350.000 .044 .869 99. 4400.000 .045 .893 90. 4450.000 .045 .893 90. 4450.000 .045 .893 90. 4450.000 .045 .893 91. 4500.000 .045 .893 91. 4500.000 .045 .893 91. 4500.000 .045 .893 91. 4500.000 .045 .893 91. 4500.000 .045 .893 91. 4500.000 .045 .893 91. 4500.000 .045 .893 91. 4500.000 .045 .893 91. 4500.000 .045 .893 91. 4500.000 .046 .993 91. 4500.000 .047 .917 95. 4700.000 .047 .917 95. 4700.000 .047 .917 95. 4700.000 .048 .937 98. 4800.000 .048 .937 98. 4800.000 .048 .937 98. 4800.000 .048 .937 98. 4800.000 .048 .937 98. 4800.000 .048 .937 98. 4800.000 .048 .937				.731
68.         3350.000         .037         .743           69.         3400.000         .038         .750           70.         3450.000         .0338         .766           71.         3550.000         .039         .763           72.         3550.000         .039         .769           73.         3600.000         .040         .776           74.         3650.000         .040         .782           75.         3700.000         .041         .795           76.         3750.000         .041         .802           78.         3850.000         .041         .802           79.         3900.000         .042         .815           80.         3950.000         .042         .815           80.         3950.000         .042         .815           80.         3950.000         .042         .815           81.         4000.000         .043         .829           82.         4050.000         .043         .835           83.         4100.000         .044         .849           85.         4200.000         .044         .862           87.         4300.000				.737
69. 3400.000 .038 .750 70. 3450.000 .038 .756 71. 3500.000 .039 .763 72. 3550.000 .039 .763 73. 3600.000 .040 .776 74. 3650.000 .040 .782 75. 3700.000 .040 .782 76. 3750.000 .040 .041 .795 77. 3800.000 .041 .802 78. 3850.000 .041 .802 78. 3850.000 .041 .802 80. 3950.000 .042 .808 80. 3950.000 .042 .872 81. 4000.000 .042 .872 81. 4050.000 .043 .829 82. 4050.000 .043 .829 83. 4100.000 .043 .829 84. 4150.000 .044 .869 88. 4350.000 .044 .869 88. 4350.000 .044 .869 99. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .896 91. 4500.000 .046 .993 93. 4600.000 .046 .903 93. 4600.000 .047 .917 95. 4700.000 .047 .917 95. 4700.000 .047 .917 95. 4700.000 .048 .937 98. 4850.000 .048 .937 98. 4850.000 .048 .937 98. 4850.000 .048 .937 98. 4850.000 .048 .937 98. 4850.000 .048 .937 98. 4850.000 .048 .951				
70. 3450.000 .038 .756 71. 3500.000 .039 .763 72. 3550.000 .039 .763 73. 3600.000 .040 .776 74. 3550.000 .040 .786 75. 3700.000 .040 .789 76. 3750.000 .041 .795 77. 3800.000 .041 .802 78. 3850.000 .041 .802 78. 3850.000 .041 .802 80. 3950.000 .042 .808 80. 3950.000 .042 .815 80. 3950.000 .042 .815 80. 3950.000 .042 .872 81. 4000.000 .043 .829 82. 40050.000 .043 .829 82. 40050.000 .043 .835 83. 4100.000 .043 .835 84. 4150.000 .044 .855 86. 4250.000 .044 .855 86. 4250.000 .044 .869 87. 4300.000 .044 .869 88. 4350.000 .045 .876 89. 4400.000 .045 .876 89. 4400.000 .045 .883 90. 4450.000 .045 .869 91. 4500.000 .045 .869 92. 4550.000 .045 .809 93. 4600.000 .045 .809 94. 4500.000 .045 .809 95. 4700.000 .046 .996 97. 4550.000 .046 .996 97. 4550.000 .046 .996 97. 4550.000 .046 .996 97. 4550.000 .046 .996 97. 4550.000 .047 .917 95. 4700.000 .047 .917 95. 4700.000 .048 .937 98. 4850.000 .048 .937 98. 4850.000 .048 .937 98. 4850.000 .048 .937 98. 4850.000 .048 .937 98. 4850.000 .048 .937 98. 4850.000 .048 .937 98. 4850.000 .048 .937 98. 4850.000 .048 .937				
71. 3500.000 .039 .763 72. 3550.000 .039 .763 73. 3600.000 .040 .776 74. 3650.000 .040 .040 .782 75. 3700.000 .040 .041 .795 76. 3750.000 .041 .802 77. 3800.000 .041 .802 78. 3850.000 .041 .802 78. 3850.000 .041 .802 80. 3950.000 .042 .808 80. 3950.000 .042 .815 80. 3950.000 .042 .815 80. 3950.000 .042 .822 81. 4000.000 .043 .829 82. 4050.000 .043 .835 83. 4100.000 .043 .835 84. 4150.000 .044 .869 85. 4200.000 .044 .869 86. 4250.000 .044 .865 87. 4300.000 .044 .869 88. 4350.000 .045 .869 99. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 91. 4500.000 .045 .883 92. 4550.000 .046 .903 93. 4600.000 .046 .903 93. 4600.000 .047 .917 95. 4700.000 .047 .917 95. 4700.000 .047 .917 95. 4700.000 .048 .944 99. 4850.000 .048				
77. 3550.000 .039 .769  73. 3600.000 .040 .776  74. 3650.000 .040 .782  75. 3700.000 .040 .789  76. 3750.000 .041 .795  77. 3800.000 .041 .807  78. 3850.000 .041 .807  78. 3850.000 .042 .808  79. 3900.000 .042 .815  80. 3950.000 .042 .815  80. 3950.000 .042 .822  81. 4000.000 .043 .829  82. 4050.000 .043 .829  83. 4100.000 .043 .835  83. 4100.000 .044 .869  84. 4150.000 .044 .869  85. 4200.000 .044 .866  87. 4300.000 .044 .866  88. 4350.000 .045 .883  90. 4450.000 .045 .883  90. 4450.000 .045 .883  90. 4450.000 .045 .883  90. 4450.000 .045 .883  90. 4450.000 .045 .883  90. 4450.000 .045 .883  90. 4450.000 .045 .883  90. 4450.000 .045 .883  90. 4450.000 .045 .883  90. 4450.000 .045 .883  90. 4450.000 .045 .883  90. 4450.000 .045 .893  91. 4500.000 .046 .993  93. 4600.000 .046 .993  93. 4600.000 .046 .993  93. 4600.000 .046 .993  94. 4650.000 .046 .993  97. 4800.000 .048 .937  98. 4850.000 .048 .937  98. 4850.000 .048 .937  98. 4850.000 .048 .937  98. 4850.000 .048 .937  98. 4850.000 .048 .937				
73. 3600.000 .040 .776 74. 3650.000 .040 .782 75. 3700.000 .040 .789 76. 3750.000 .041 .795 77. 3800.000 .041 .802 78. 3850.000 .041 .802 78. 3850.000 .042 .808 79. 3390.000 .042 .815 80. 3950.000 .042 .822 81. 4000.000 .043 .829 82. 4050.000 .043 .835 83. 4100.000 .043 .835 83. 4100.000 .044 .865 84. 4150.000 .044 .865 86. 4250.000 .044 .866 87. 4300.000 .044 .862 88. 4350.000 .044 .869 88. 4350.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .883 90. 4450.000 .045 .893 91. 4500.000 .046 .996 92. 4550.000 .046 .996 93. 4500.000 .047 .917 95. 4700.000 .047 .917 95. 4700.000 .047 .917 95. 4700.000 .048 .937 98. 4850.000 .048 .937 98. 4850.000 .048 .951				
74.         3650.000         .040         .782           75.         3700.000         .040         .789           76.         3750.000         .041         .795           77.         3800.000         .041         .802           78.         3850.000         .042         .808           89.         3950.000         .042         .815           80.         3950.000         .042         .827           81.         4000.000         .043         .829           82.         4050.000         .043         .835           83.         4100.000         .044         .842           85.         4200.000         .044         .849           86.         4250.000         .044         .855           86.         4250.000         .044         .862           87.         4300.000         .044         .863           88.         4350.000         .045         .883           90.         4450.000         .045         .883           91.         4500.000         .046         .903           93.         4600.000         .046         .903           93.         4600.000				
75. 3700.000 .040 .789 76. 3750.000 .041 .795 77. 3800.000 .041 .802 78. 3850.000 .042 .808 79. 3900.000 .042 .815 80. 3950.000 .042 .822 81. 4000.000 .043 .829 82. 4050.000 .043 .835 83. 4100.000 .043 .847 84. 4150.000 .044 .862 85. 4200.000 .044 .862 86. 4250.000 .044 .862 87. 4300.000 .044 .862 88. 4350.000 .045 .868 88. 4350.000 .045 .876 89. 4400.000 .045 .876 89. 4400.000 .045 .893 90. 4450.000 .045 .893 91. 4500.000 .046 .993 93. 4600.000 .046 .993 93. 4600.000 .047 .917 95. 4700.000 .047 .930 97. 4800.000 .048 .937 98. 4850.000 .048 .937 98. 4850.000 .048 .937 98. 4850.000 .048 .937				
76. 3750.000 .041 .795 77. 3800.000 .041 .802 78. 3850.000 .042 .808 79. 3900.000 .042 .815 80. 3950.000 .042 .822 81. 4000.000 .043 .829 82. 4050.000 .043 .835 83. 4100.000 .044 .849 84. 4150.000 .044 .849 85. 4200.000 .044 .862 87. 4300.000 .044 .862 88. 4350.000 .044 .869 88. 4350.000 .045 .869 99. 4400.000 .045 .876 89. 4400.000 .045 .883 90. 4450.000 .045 .893 91. 4500.000 .045 .893 91. 4500.000 .045 .893 92. 4550.000 .046 .993 93. 4600.000 .046 .993 93. 4600.000 .047 .917 95. 4700.000 .047 .917 95. 4750.000 .048 .937 98. 4850.000 .048 .937 98. 4850.000 .048 .937				
77.         3800.000         .041         .802           78.         3850.000         .042         .808           79.         3900.000         .042         .815           80.         3950.000         .042         .872           81.         4000.000         .043         .829           82.         4050.000         .043         .835           83.         4100.000         .044         .847           84.         4150.000         .044         .855           86.         4250.000         .044         .855           86.         4250.000         .044         .869           88.         4350.000         .044         .869           88.         4350.000         .045         .883           90.         4450.000         .045         .883           91.         4500.000         .045         .896           92.         4550.000         .046         .903           93.         4600.000         .046         .910           94.         4650.000         .047         .917           95.         4700.000         .047         .917           96.         4750.000				
78.         3850.000         .042         .808           79.         3900.000         .042         .815           80.         3950.000         .042         .827           81.         4000.000         .043         .829           82.         4050.000         .043         .835           83.         4100.000         .044         .849           84.         4150.000         .044         .855           86.         4250.000         .044         .862           87.         4300.000         .044         .869           88.         4350.000         .045         .876           89.         4400.000         .045         .883           90.         4450.000         .045         .889           91.         4500.000         .046         .903           93.         4600.000         .046         .903           93.         4600.000         .047         .917           95.         4700.000         .047         .917           95.         4700.000         .047         .930           97.         4800.000         .048         .937           98.         4850.000				
79.         3900.000         .047         .815           80.         3950.000         .042         .827           81.         4000.000         .043         .829           82.         4050.000         .043         .835           83.         4100.000         .044         .842           84.         4150.000         .044         .855           86.         4250.000         .044         .862           87.         4300.000         .044         .869           88.         4350.000         .045         .876           89.         4400.000         .045         .883           90.         4450.000         .045         .883           91.         4500.000         .046         .903           92.         4550.000         .046         .910           94.         4650.000         .047         .917           95.         4700.000         .047         .924           96.         4750.000         .047         .930           97.         4800.000         .048         .937           98.         4850.000         .048         .937           98.         4850.000				
80.       3950.000       .042       .872         81.       4000.000       .043       .829         82.       4050.000       .043       .835         83.       4100.000       .043       .847         84.       4150.000       .044       .849         85.       4200.000       .044       .855         86.       4250.000       .044       .862         87.       4300.000       .044       .869         88.       4350.000       .045       .876         89.       4400.000       .045       .883         90.       4450.000       .045       .889         91.       4500.000       .046       .903         93.       4600.000       .046       .903         93.       4600.000       .047       .917         95.       4700.000       .047       .917         96.       4750.000       .047       .930         97.       4800.000       .048       .937         98.       4850.000       .048       .937         98.       4850.000       .048       .944         99.       4900.000       .048       .949				
81.       4000.000       .043       .829         82.       4050.000       .043       .835         83.       4100.000       .043       .847         84.       4150.000       .044       .849         85.       4200.000       .044       .855         86.       4250.000       .044       .862         87.       4300.000       .044       .869         88.       4350.000       .045       .876         89.       4400.000       .045       .883         90.       4450.000       .045       .899         91.       4500.000       .046       .903         92.       4550.000       .046       .910         94.       4650.000       .047       .917         95.       4700.000       .047       .924         96.       4750.000       .047       .930         97.       4800.000       .048       .937         98.       4850.000       .048       .937         98.       4850.000       .048       .944         99.       4900.000       .048       .951				
87. 4050.000 .043 .835 83. 4100.000 .043 .847 84. 4150.000 .044 .849 85. 4200.000 .044 .855 86. 4250.000 .044 .862 87. 4300.000 .044 .869 88. 4350.000 .045 .876 89. 4400.000 .045 .883 90. 4450.000 .045 .889 91. 4500.000 .045 .899 92. 4550.000 .046 .993 93. 4600.000 .046 .910 94. 4650.000 .047 .917 95. 4700.000 .047 .917 95. 4700.000 .047 .917 96. 4750.000 .048 .937 98. 4850.000 .048 .937 98. 4850.000 .048				
83.				
84.       4150.000       .044       .849         85.       4200.000       .044       .855         86.       4250.000       .044       .862         87.       4300.000       .044       .869         88.       4350.000       .045       .876         89.       4400.000       .045       .883         90.       4450.000       .045       .896         91.       4500.000       .046       .903         92.       4550.000       .046       .903         93.       4600.000       .046       .910         94.       4650.000       .047       .917         95.       4700.000       .047       .924         96.       4750.000       .047       .930         97.       4800.000       .048       .937         98.       4850.000       .048       .944         99.       4900.000       .048       .951				
85.       4200.000       .044       .855         86.       4250.000       .044       .862         87.       4300.000       .044       .869         88.       4350.000       .045       .876         89.       4400.000       .045       .883         90.       4450.000       .045       .896         91.       4500.000       .046       .903         92.       4550.000       .046       .903         93.       4600.000       .046       .910         94.       4650.000       .047       .917         95.       4700.000       .047       .924         96.       4750.000       .047       .930         97.       4800.000       .048       .937         98.       4850.000       .048       .944         99.       4900.000       .048       .951				
86.       4250.000       .044       .862         87.       4300.000       .044       .869         88.       4350.000       .045       .876         89.       4400.000       .045       .883         90.       4450.000       .045       .899         91.       4500.000       .046       .903         92.       4550.000       .046       .903         93.       4600.000       .046       .910         94.       4650.000       .047       .917         95.       4700.000       .047       .924         96.       4750.000       .047       .930         97.       4800.000       .048       .937         98.       4850.000       .048       .944         99.       4900.000       .048       .951				
87.       4300.000       .044       .869         88.       4350.000       .045       .876         89.       4400.000       .045       .883         90.       4450.000       .045       .889         91.       4500.000       .046       .896         92.       4550.000       .046       .903         93.       4600.000       .046       .910         94.       4650.000       .047       .917         95.       4700.000       .047       .924         96.       4750.000       .047       .930         97.       4800.000       .048       .937         98.       4850.000       .048       .944         99.       4900.000       .048       .951				
88.       4350.000       .045       .883         89.       4400.000       .045       .883         90.       4450.000       .045       .889         91.       4500.000       .046       .896         92.       4550.000       .046       .903         93.       4600.000       .046       .910         94.       4650.000       .047       .917         95.       4700.000       .047       .924         96.       4750.000       .047       .930         97.       4800.000       .048       .937         98.       4850.000       .048       .944         99.       4900.000       .048       .951				
88.       4350.000       .045       .883         90.       4450.000       .045       .889         91.       4500.000       .046       .896         92.       4550.000       .046       .903         93.       4600.000       .046       .910         94.       4650.000       .047       .917         95.       4700.000       .047       .924         96.       4750.000       .047       .930         97.       4800.000       .048       .937         98.       4850.000       .048       .944         99.       4900.000       .048       .951				
90. 4450.000 .045 .889 91. 4500.000 .046 .896 92. 4550.000 .046 .903 93. 4600.000 .046 .910 94. 4650.000 .047 .917 95. 4700.000 .047 .924 96. 4750.000 .047 .930 97. 4800.000 .048 .937 98. 4850.000 .048 .944 99. 4900.000 .048				
91.       4500.000       .046       .896         92.       4550.000       .046       .903         93.       4600.000       .046       .910         94.       4650.000       .047       .917         95.       4700.000       .047       .924         96.       4750.000       .047       .930         97.       4800.000       .048       .937         98.       4850.000       .048       .944         99.       4900.000       .048       .951				
97.       4550.000       .046       .903         93.       4600.000       .046       .910         94.       4650.000       .047       .917         95.       4700.000       .047       .924         96.       4750.000       .047       .930         97.       4800.000       .048       .937         98.       4850.000       .048       .944         99.       4900.000       .048       .951				
93.       4600.000       .046       .910         94.       4650.000       .047       .917         95.       4700.000       .047       .924         96.       4750.000       .047       .930         97.       4800.000       .048       .937         98.       4850.000       .048       .944         99.       4900.000       .048       .951				
94.       4650.000       .047       .917         95.       4700.000       .047       .924         96.       4750.000       .047       .930         97.       4800.000       .048       .937         98.       4850.000       .048       .944         99.       4900.000       .048       .951				
95. 4700.000 .047 .924 96. 4750.000 .047 .930 97. 4800.000 .048 .937 98. 4850.000 .048 .944 99. 4900.000 .048 .951				
96. 4750.000 .047 .930 97. 4800.000 .048 .937 98. 4850.000 .048 .944 99. 4900.000 .048 .951				
97. 4800.000 .048 .937 98. 4850.000 .048 .944 99. 4900.000 .048 .951				
98. 4850.000 .048 .944 99. 4900.000 .048 .951				
99. 4900.000 .048 .951				
95.	98.			
100. 4950.000 .049 .958	99.			
	100.	4950.000	. 049	. 350

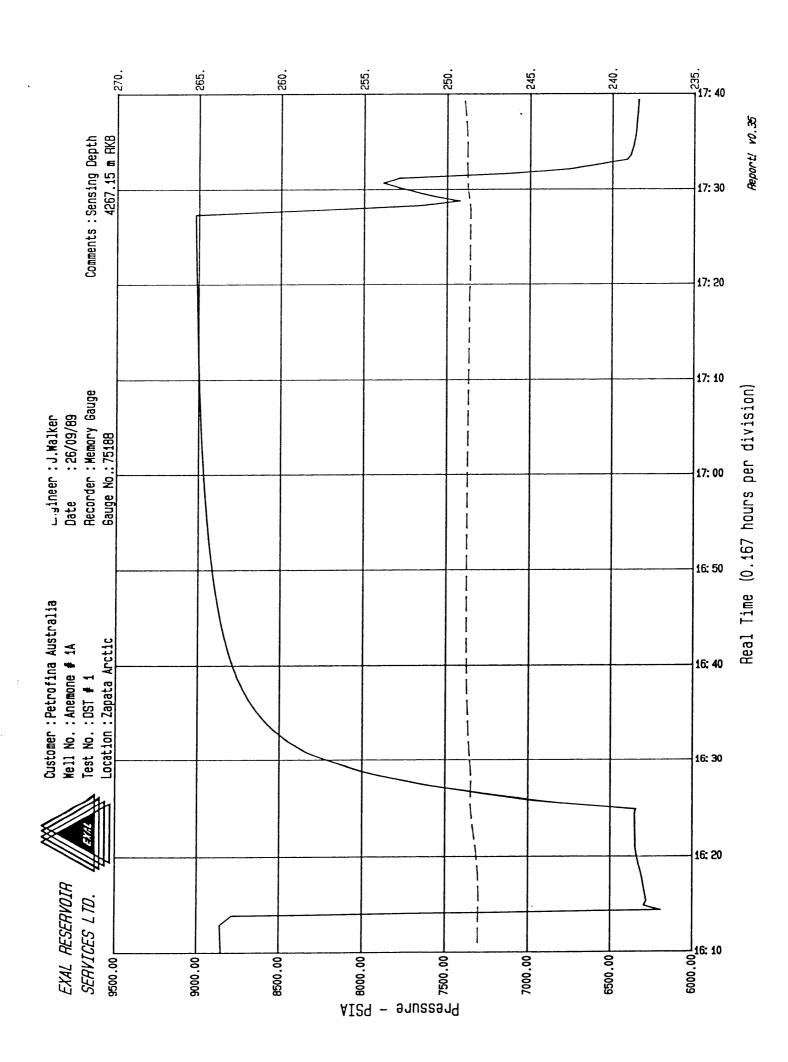
Test type: CRB

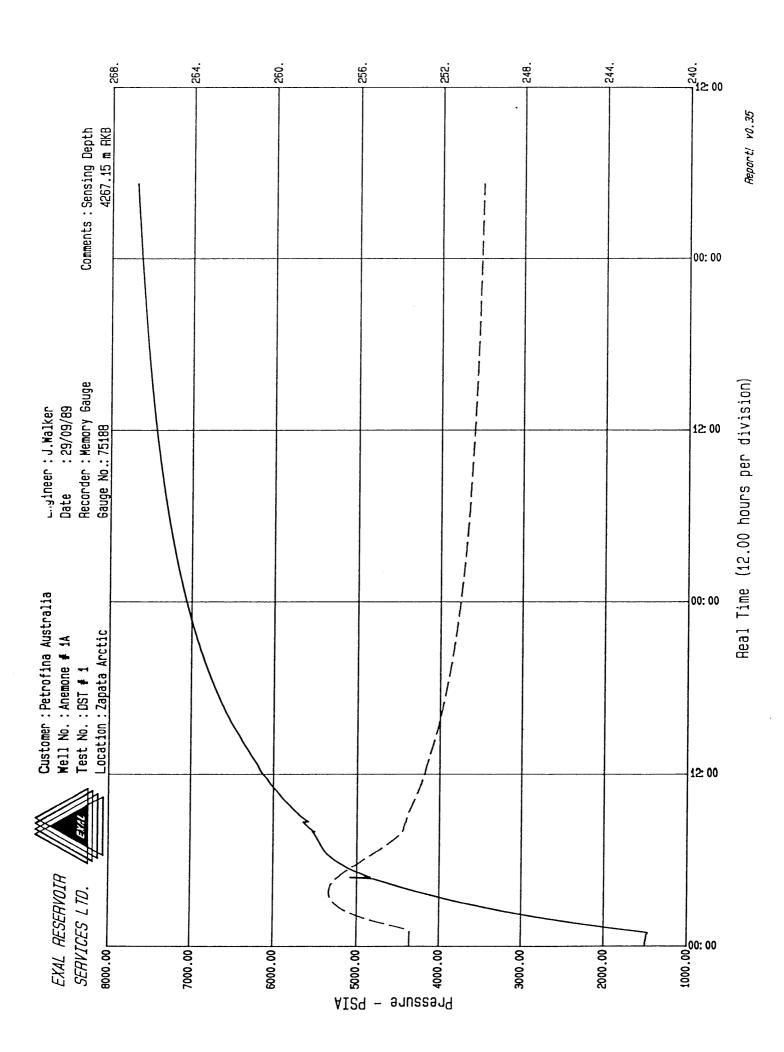
Data	Pressure	Gas viscosity	Z-Factor
Point	psia	cū	
			n cr.
101.	5000.000	.049	.965
102.	5050.000	. Ø49	.972 .978
103.	5100.000	.049	.985
104.	5150.000	.050	.992
105.	5200.000	.050	.999
106.	5250.000	. 050	1.006
107.	5300.000	.051	1.013
108.	5350.000	.051	1.020
109.	5400.000	.051	1.027
110.	5450.000	.051	1.033
111.	5500.000	.052 .052	1.040
112.	5550.000		1.047
113.	5600.000	.057	1.054
114.	5650.000	.052	1.061
115.	5700.000	.053	1.068
116.	5750.000	.053	1.075
117.	5800.000	.053	1.081
118.	5850.000	.053	1.088
119.	5900.000	.054	1.095
120.	5950.000	.054	1.102
121.	6000.000	.054	1.109
122.	6050.000	.054	1.116
123.	6100.000	.055	1.122
124.	6150.000	.055	1.129
125.	6200.000	.055	1.136
126.	6250.000	.056	1.143
127.	6300.000	.056	1.150
128.	6350.000	.056	
129.	6400.000	.056	1.157
130.	6450.000	. 056	1.163
131.	65 <b>00.</b> 000	.057	1.170 1.177
132.	6550.000	. 057	
133.	66 <b>00.0</b> 00	.057	1.184 1.191
134.	6650.000	.057	
135.	6700.000	.057	1.197 1.204
136.	6750.000	.058	
137.	6800.000	. Ø58	1.211
138.	685 <b>0.00</b> 0	.058	1.218
139.	6900.000	. Ø58	1.225
140.	695 <b>0.</b> 000	. 058	1.231
141.	7000.000	. Ø59	1.238
142.	7050.000	. 059	1.245
143.	7100.000	. Ø59	1.252
144.	7150.000	.059	1.258
145.	7200.000	. 059	1.265
146.	7250.000	. Ø59	1.272
147.	7300.000	.060	1.279
148.	7350.000	060	1.285
149.	7400.000	.060	1.292
150.	7450.000	. 060	1.299

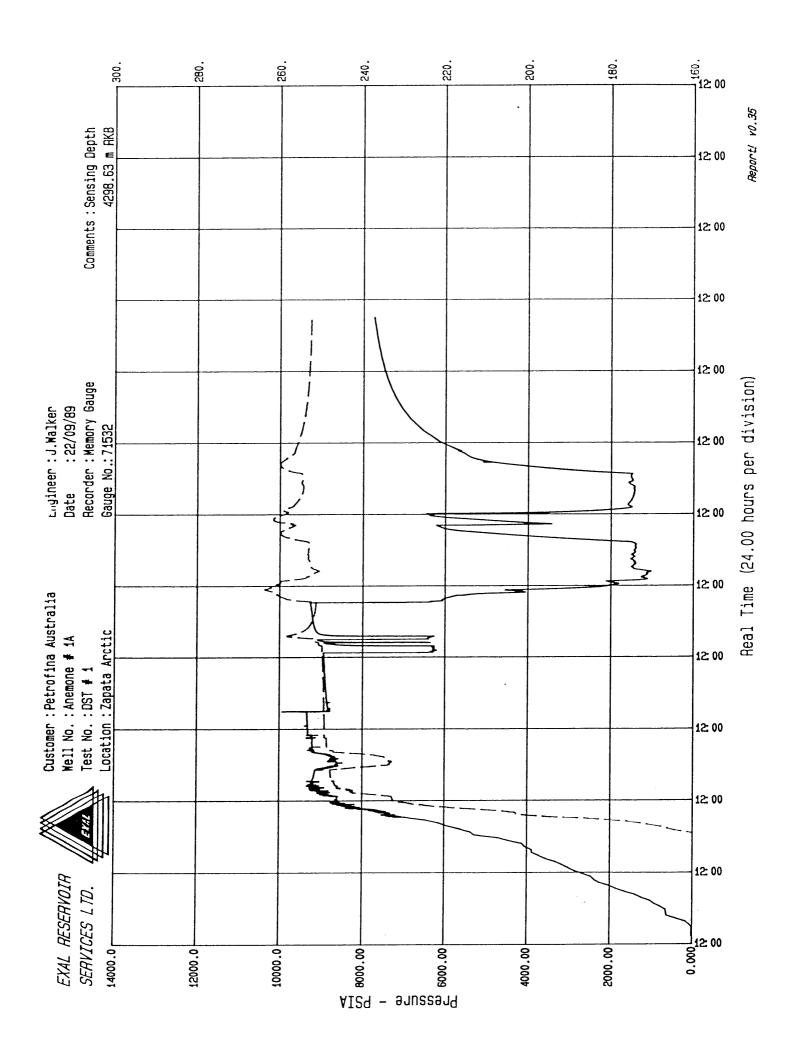
Test type: CRB

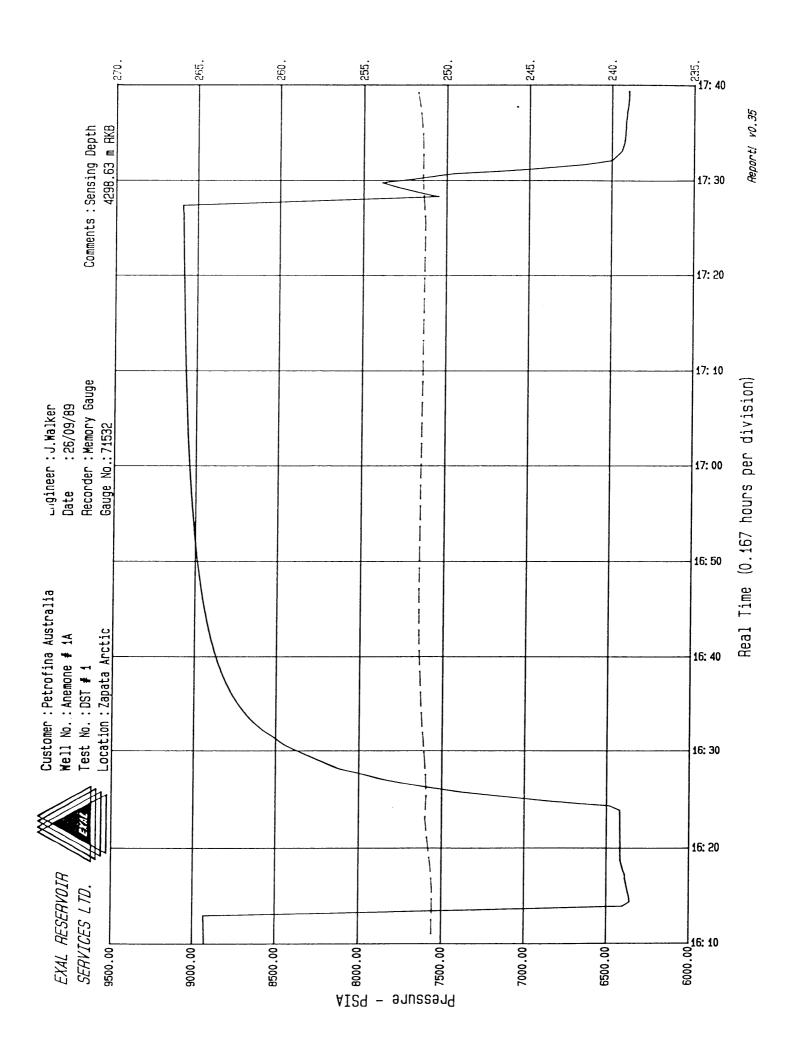
Data	Pressure	Gas viscosity	Z-Factor
Point	psia	СD	
OTHE	,,,,,,	•	
151.	7500.000	.060	1.306
152.	7550.000	.061	1.312
153.	7600.000	.061	1.319
154.	7650.000	.061	1.326
155.	7700.000	.061	1.333
	7750.000	.061	1.339
156.	7800.000	.067	1.346
157.	7850.000	.062	1.353
158.	7900.000	.ØG2	1.359
159.	7950.000	.062	1.366
160.		.Ø6Z	1.373
161.	8000.000	.063	1.379
162.	8050.000	.063	1.386
163.	8100.000	.063	1.393
164.	8150.000	.063	1.399
165.	8200.000	.063	1.406
166.	8250.000	.063	1.413
167.	8300.000	.064	1.419
168.	8350.000		1.426
169.	8400.000	. 064	1.433
170.	8450.000	. 064	1.439
171.	85ØØ.ØØØ	.064	1.446
172.	8550.000	.064	1.453
173.	8600.000	.065	1.459
174.	865 <b>0.0</b> 00	, Ø65	1.466
175.	8700.000	.065	1.473
176.	8750.000	.065	1.479
177.	8800.000	.065	
178.	8850.000	. 066	1.486
179.	8900.000	.066	1.493
180.	8950.000	.066	1.499
181.	9000.000	.066	1.506
182.	9050.000	.066	1.512
183.	9100.000	.066	1.519
184.	9150.000	.067	1.526
185.	9200.000	. 067	1.532
186.	9250.000	.067	1.539
187.	9300.000	.067	1.545
188.	9350.000	. Ø67	1.552
189.	9400.000	.068	1.558
190.	9450.000	.068	1.565
191.	9500.000	.068	1.572
192.	9550.000	.068	1.578
193.	96 <b>00.0</b> 00	.068	1.585
194.	9650.000	.068	1.591
195.	9700.000	.069	1.598
196.	9750.000	. Ø69	1.604
197.	9800.000	. Ø69	1.611
198.	9850.000	. Ø69	1.617
	9900.000	. Ø69	1.624
199.	9950.000	.069	1.631
200.	3330.000		

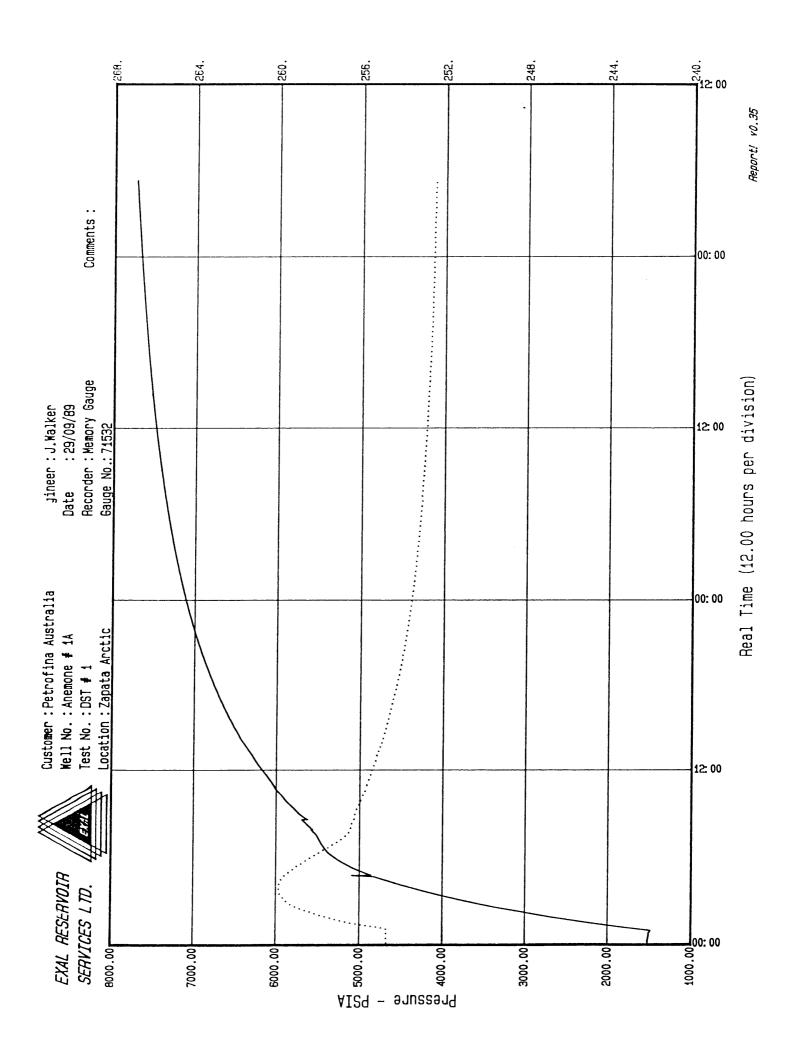


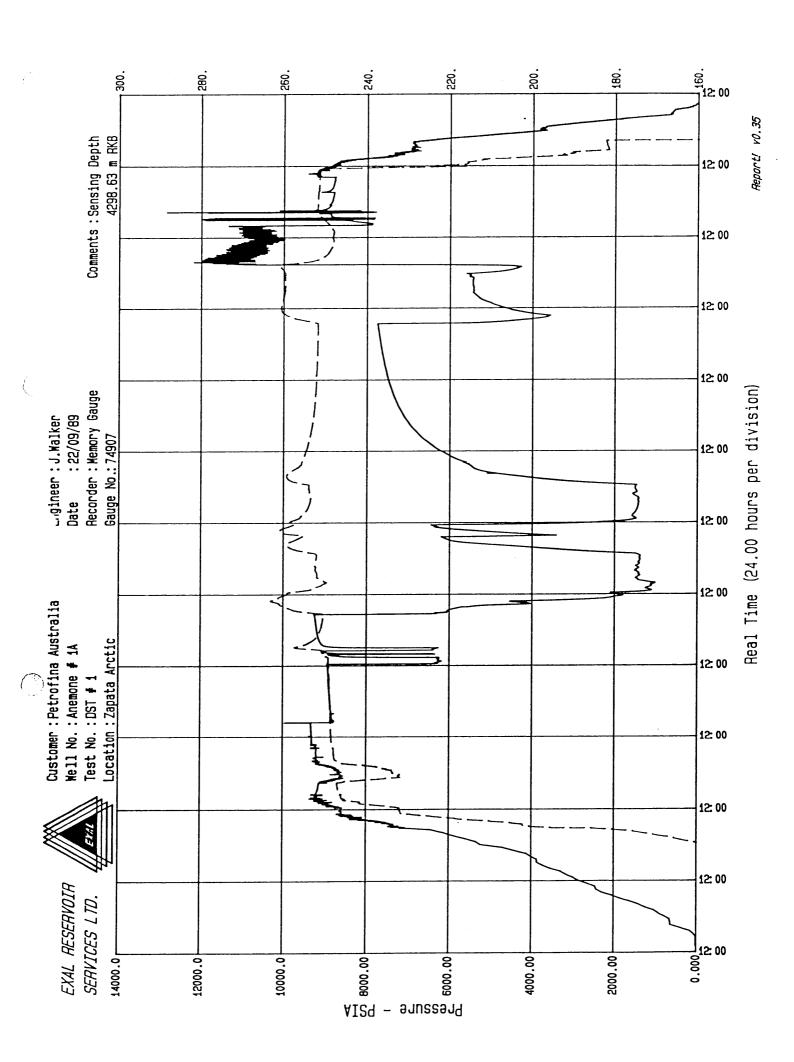


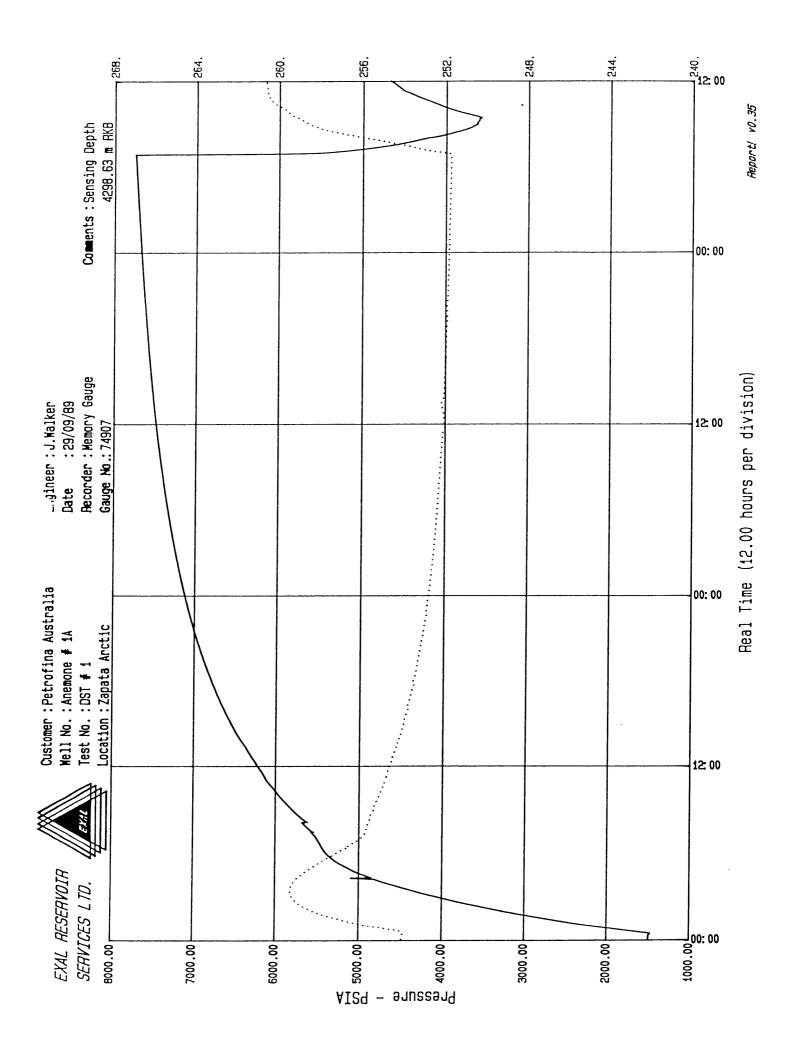


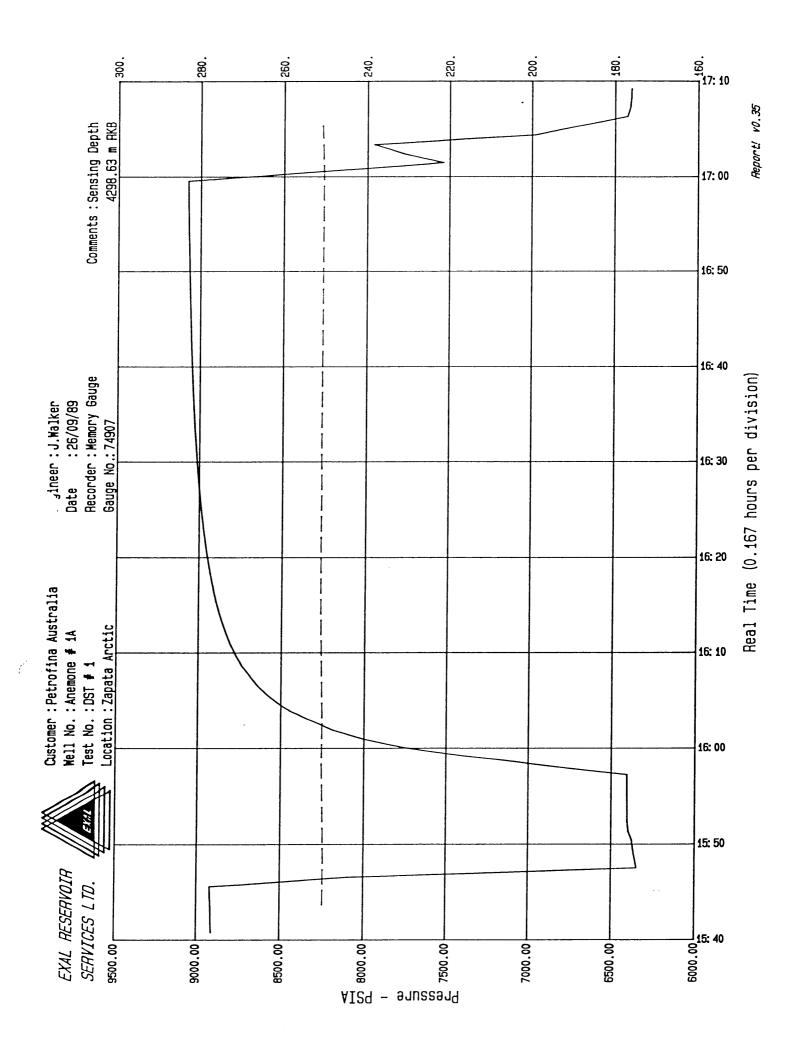












## EXAL

## RESERVOIR SERVICES



#### GAUGE COMPARISON

Client: Petrofina Exploration Australia S.A. Client Engineer: D. Sousa

Field: Wildcat Well: Anemone # 1A Test : DST # 1

Date : 22nd September, 1989 Job No. : AB 256

Perforations: 4599-4618m mdrkb 4629-4652m mdrkb

		4023	-4032M MUI	KU	**	
Gauge No			. 75188	73033	71532	74907
Sensing	point (m mdrkb)		4267.15	4267.15	4298.63	4298.63
Maximum	Temperature (degF)		. 260.9	260.7	263.7	263.0
Date	Event/End of	Time	Pre psia	ssure psia		ssure psia
25/09/89	Initial static	09:20	9146.8	9158.6	9221.4	9298.1
26/09/89	Initial flow period Initial build-up period First flow period	16:24 17:29 18:27	6353.0 9020.5 6246.6	6358.4 9033.8 6230.8	6421.1 9092.9 6266.3	6408.4 9076.6 6274.5
27/09/89	First build-up period	05:41	9244.1	9245.1	9263.4	9250.9
28/09/89	Second flow period Second build-up period Third flow period Third build-up period	01:59 07:38 08:03 11:36	1509.4 6185.4 3405.5 6430.3	1499.7 6194.7 3407.2 6438.4	1512.9 6202.7 3434.2 6454.3	1499.5 6200.8 3418.8 6445.4
29/09/89	Fourth flow period	<b>00:</b> 55	1466.8	1479.9	1484.7	1470.5
01/10/89	Fourth build-up period Fifth flow period Fifth build-up period	07:20 09:54 11:48	7692.4*	7721.4 3555.1 4497.8	7740.9**	7749.8 3575.7 4521.9
<b>02/10/8</b> 9	Sixth flow period	Ø2:2Ø		4268.3		4281.6
03/10/89	Final static	04:00		8880.6		8926.8

Comments 1. \* Gauge No.75188 memory full (21000 data points) at 05:15 01/10/89

2. \*\* Gauge No.71532 memory full (21000 data points) at 05:18 01/10/89

# EXAL REPORT (DST #2)

## EXAL

# RESERVOIR SERVICES



## PRECISION

## PRESSURE/TEMPERATURE

## <u>MEASUREMENT</u>

## WELL SITE TEST REPORT

Client

: Petrofina Exploration Australia A.S.

Well

Anemone # 1A

Dates

6th October, 1989

Country

Australia

Rig/Platform

: Zapata Arctic

Field

Wildcat

Test

: DST # 2

Exal Job Number

AB 256

Perforation Interval : 4536-4546m mdrkb

Client Engineer : D. Sousa

Exal Engineer : R. Weir

# EXAL

# RESERVOIR SERVICES



## TECHNICAL INDEX

1	Introduction.	
2	Sequence of events.	
3	Gauge information.	
4	Diagrams : Test String.  Gauge carrier.	
5	Real time pressure/temperature plot	- EMS 75189.
6	Real time pressure/temperature data	- EMS 75189.
7	Panoil analysis	- EMS 75189.
8	Real time pressure/temperature plot	- EMS 72121.
9	Real time pressure/temperature plot	- EMS 71532.
10	Real time pressure/temperature plot	- EMS 74907.
11	Gauge comparison.	

## <u>EXAL</u> RESERVOIR SERVICES



#### INTRODUCTION

Exal Reservoir Services ran four EMS 700 electronic pressure and temperature gauges into well Anemone # 1A on the Zapata Arctic as part of DST # 2. The four gauges S/N's 71532, 75189, 72121 and 74907 were run on two Exal gauge carriers APS-029 and APS-030.

The test objectives were fourfold, one to determine the type and mobility of any reservoir fluid, two to determine basic productivity characteristics, three to measure pressure/temperature effects over time, and four to obtain PVT samples.

As far as Exal Reservoir Services were concerned the test was a complete success as all gauges worked well and recorded data as per their respective control programmes. After obtaining samples of water using bottom hole samplers during the main drawdown period, the test was ended without a corresponding buildup.

Gauge no.75189 was chosen as the primary gauge for analysis and for the final report.

Description of Event. Time Gauges installed in 2 gauge carriers and run in hole 11:03:00 07/10/89 Pressure tested full string against PCT to 9000 psi 14:25:00 Packer set @ 4330 m RKB 16:15:00 Schlumberger run correlation log 16:50:00 08/10/89 Slickline lubricator fails pressures above 6500 psi 00:41:00 Open PCT and observe well head pressure 05:44:00 Open swab valve 05:49:00 Drop mechanicaly fired gun, followed by firing bar 05:50:00 06:40:00 No indication of guns firing Rig up Schlumberger lubricator to fish bar 06:45:00 Pressure test Lubricator to 9000 psi 09:00:00 Close kill valve, open Lubricator valve, R.I.H. 10:16:00 Bleed off W.H.P increase (due to displacement) 11:08:00 Maintain W.H.P at 0 psig, by bleeding off at bubble hose 11:35:00 Wireline on depth, fish drop bar but unable to fire guns 12:18:00 Wireline on surface, redress drop bar 13:46:00 Rig up wireline with new drop bar assembly 14:40:00 Close lubricator valve for pressure test 14:56:00 Drop bar fires guns, (bar seperated during rig up) 15:02:00 Detect rise in W.H.P 15:18:00 Rig down Lubricator 15:35:00 Open well on adjustable choke for initial flow 16:06:00 Close well in at PCT and choke manifold 16:17:00 09/10/89 Pressurise annulus, open PCT 05:43:20 Open well at choke manifold, flowing to Gauge tank 05:48:30 10/10/89 Rig up Bottom hole samplers with gauge 12:05:00 Close Lubricator valve and bleed off above 12:10:00 Close choke manifold, open swab valve 12:15:00 Open kill valve, pressure test Lubricator to 3500 psi 12:43:00 Bleed down lubricator to 1250 psi, open Lubricator valve 12:55:00 Close Lubricator valve, bleed down to 1000 psi 13:00:00 Open lubricator, pressure increase to 1250, R.I.H. 13:03:30 Gauge @ 100 m, open well to Gauge tank 13:22:00 First sample taken at 4478 m 15:34:00 Second sample taken at 3904 m 16:04:00 Shut in well at choke manifold 16:22:00 Sampler string to surface, close Lubricator valve & bleed of 18:40:00 Close swab valve and choke, open kill valve 19:00:00 Pressurise above Lubricator to 1500 psi 19:07:00

Engineer: R.Weir

Date

Well No.: Anemone # 1A

: 06/10/89

Client : Petrofina Australia

Location: Zapata Arctic

Test No.: DST # 2

19:08:00

19:10:00 20:00:00

Exal Reservoir Services Ltd.

Open well at choke to Gauge tank

100% mud flowing to surface

Open Lubricator valve, well open to choke manifold

Location: Zapata Arctic

Test No.: DST # 2

Engineer: K.Weir

Well No.: Anemone # 1A

Time	Description of Event.
20:06:00	Divert flow to flare
11/10/89	
40.00.00	
10:06:00	Close PCT, bleed off pressure
10:11:00	Close choke at manifold
10:26:00	Open kill valve, open MIDRV (@ 2800 psi), close kill valve
10:30:00	Commence reverse circulating, maintaining tubing pressure
12:04:00	Open kill valve, close MIDRV
12:10:00	Pressurise annulus to open PCT (PCT remains closed)
12:12:00	. Commence Bullheading (no increase in gauge pressure)
13:37:00	Unseat packer and circulate (transient pulse seen downhole)
18:18:00	Pump slug, prior to P.O.O.H

## EXAL

## RESERVOIR SERVICES



## GAUGE INFORMATION

Client: Petrofina Exploration Australia S.A. Client Engineer: D. Sousa

Field: Wildcat Well: Anemone # 1A Test : DST # 2

Date : 6th October, 1989 Job No. : AB 256

Perforations:4536.3-4546.3m drkb

Gauge No	72121	75189	71532	74907
Gauge type	EMS 700	EMS 700	EMS 700	EMS 700
Transducer range (psia)	10000	10000	15000	15000
Start time	Ø9:55:45	09:57:00	09:53:30	09:54:30
Start date	Ø6/1 <b>0</b> /89	Ø6/1Ø/89	06/10/89	06/10/89
Delay	30hrs	30hrs	30hrs	30hrs
Sample rate	0.016hrs	0.008hrs	0.008hrs	0.016hrs
Recording duration	365hrs	197hrs	197hrs	365hrs
Recording start time	15:56 07/10/89	15:57 07/10/89	15:54 07/10/89	15:55 07/10/89
Memory capacity full	14:55 21/10/89	14:57 14/10/89	14:53 14/10/89	14:54 21/10/89
Position of carrier	Upper Carrier	Upper Carrier	Lower Carrier	Lower Carrier
Sensing depth (m mdrkb)	4266.50	4266.50	4297.97	4297.97

## EXAL RESERVOIR SERVICES LIMITED

WELL : Anemone # 1A
FIELD : Wildcat
LOCATION : Zapata Arctic
TEST : DST # 2

CUSTOMER : Petrofina Australia ENGINEER : R.Weir DATE : 06/10/89 PERFORATIONS : 4536-4546m

TEST	: DS1 # 2	PEHFUHAITUN	S . 403	0-404011		
AND THE PROPERTY OF THE PROPER			Depth m RKB	Length Hotors	O.D. Inches	I.D. Inches
			055 00	2740 74	3 500	2 525
	TUBING 3 1/2*VAM 12.7 # L80 CROSS OVER 3 1/2*VAM X 3 1/2*IF			3748.74 .31	3.500 4.750	2.625
						2.250
	SLIP JOINT [OPEN]	• • • • • • •	1004.43	8.59	5.000	
	SLIP JOINT [OPEN]		1013.02	8.59	5.000	2.250
	BLIP JOINT [1/2 OPEN]			7.60	5.000	2.250
	CROSS OVER 3 1/2"IF X 3 1/2"XH	4	1029.21	.52	4.750	2.438
	DRILL COLLARS [6 STANDS]	4	1029.74	166.10	4.750	2.313
	CROSS OVER 3 1/2"XH X 3 1/2"IF	4	195.84	.43	4.813	2.313
	8.H.O.R.T. REVERSING VALVE	4	1196.27	1.07	5.000	2.400
	DRILL COLLARS [1 STAND]	4	1197.34	27.25	4.750	2.250
	M.I.D.R.V	4	224.59	2.91	5.000	2,250
X	R.A. MARKER SUB (PIP TAG & 4228.13 m RK	(B) 4	227.50	.90	4.750	2.625
	DRILL COLLARS [1 STAND]	4	228.40	27.18	4.750	2.250
$\square$	P.C.T	4	255.58	7.00	5.000	2.250
0	H.R.T. [CLOSED]	4	262.57	1.62	5.000	2.250
	GAUGE CARRIER ENS # 75188 & EMS # 730	933 4	264.19	2.97	5.375	2.300
	DRILL COLLARS [1 STAND]	4	267.16	28.51	4.750	2.250
	8AU8E CARRIER EMS # 71532 € EMS # 7490	7 4	295.67	2.97	5.375	2.300
	DRILL COLLARS [1 STAND]	4	298.64	27.71	4.750	2.250
1411	JARS [CLOSED]	4	326.35	1.99	5.000	2.250
	BAFETY JOINT	• • • • • • •	328.34	.52	5.000	2.250
	CROSS OVER 3 1/2"IF X 2 7/8"EUE	4	328.85	.25	4.750	2.438
	POSITRIEVE PACKER [MID NUBBERS AT 4330	.10 m RKB] . 43	329.10	1.66	5.500	2.400
	CROSS OVER 2 7/8"EUE X 2 3/8"EUE	4:	330.76	.31	3.625	2.000
	TUBING 2 3/8 EUE [20 JOINTS]	4:	331.07	191.88	2.875	1.901
	BUN DROP SUB	4	522.95	. 46	3.000	2.000
	TUBING 2 3/8°EUE [1 JOINT]	48	523.41	9.59	2.875	1.901
	VENTED FIRING HEAD	45	533.00	.55	3.375	ļ
	SAFETY SPACER	4	533.55	2.75	3.875	
	T.C.P. GUNS [22g HMX 6 SPF 60 DEGREE	PHASING] 45	536.30	10.00	3.375	
	BULLNOSE			.20	8.375	
$\sim$						



#### GAUGE CARRIER DETAILS

WELL : Anemone # 1A FIELD

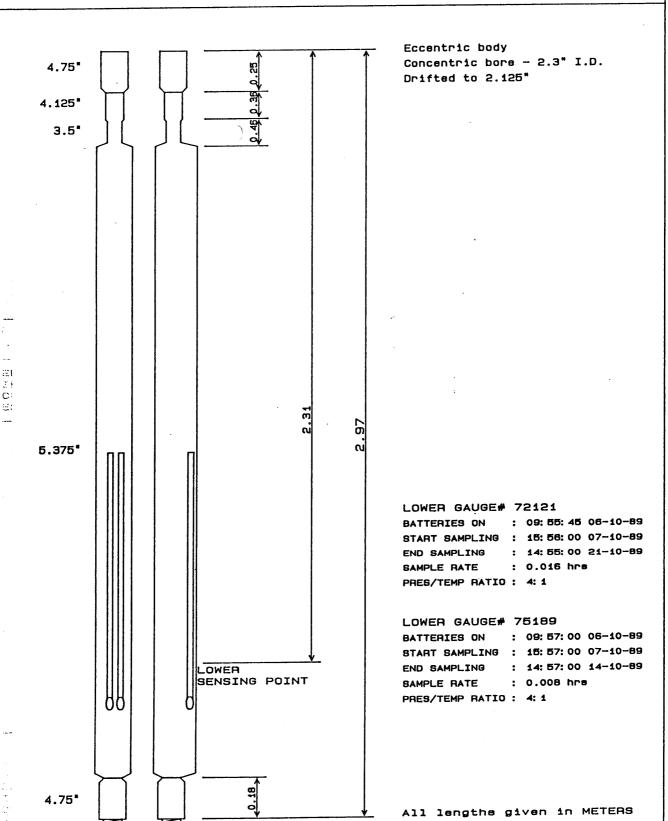
: Wildcat

LOCATION: Zapata Arctic : DST # 2 TEST

CUSTOMER: Petrofina Australia

ENGINEER : R.Weir

DATE : 06/10/89 CARRIER : APS 029 (Upper)





#### GAUGE CARRIER DETAILS

WELL Anemone # 1A

FIELD Wildcat LOCATION :

: DST # 2 TEST

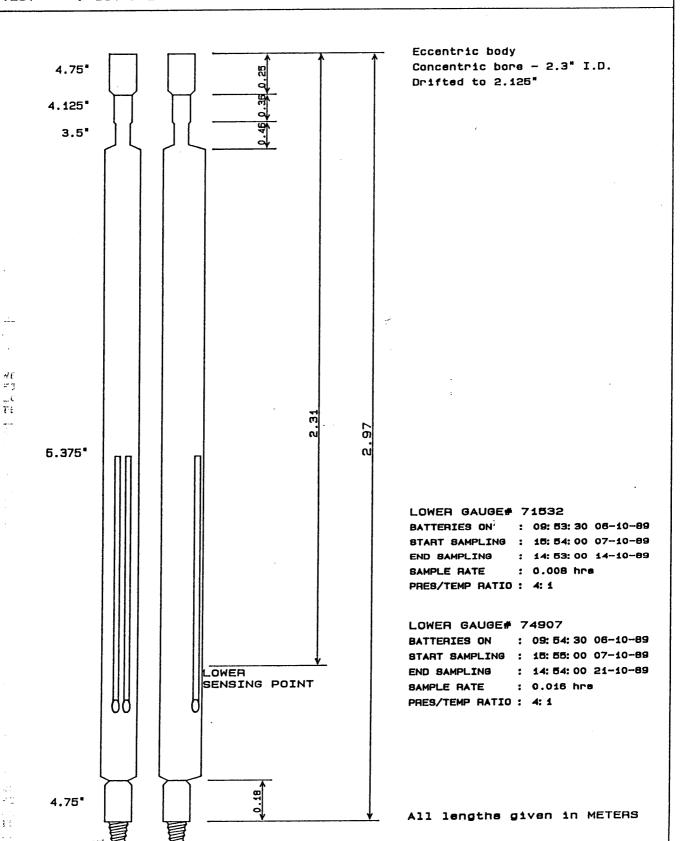
Zapata Arctic

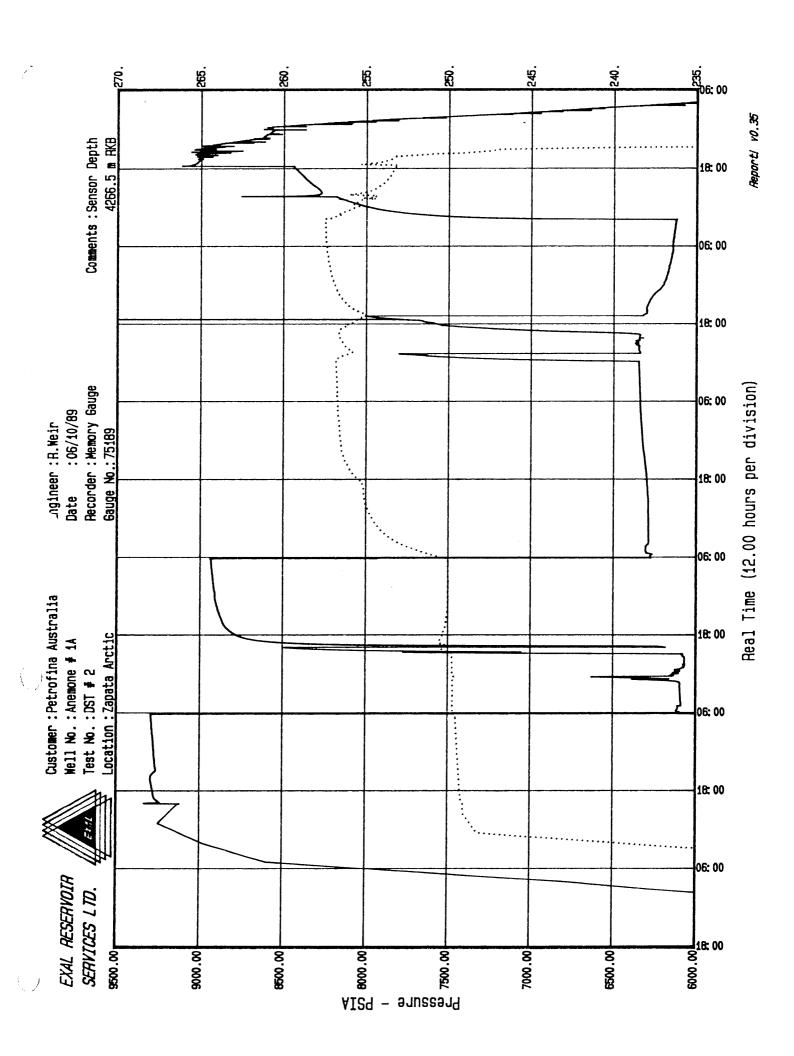
CUSTOMER: Petrofina Australia

R.Weir 06/10/89 ENGINEER:

DATE

APS 030 (Lower) CARRIER







# EXAL RESERVOIR SERVICES LTD.

## Memory Gauge Data.

Customer . . . : Petrofina Australia

Location . . . . : Zapata Arctic

Well No. . . . : Anemone # 1A

Test No. . . . : DST # 2

Gauge No . . . : 75189

Engineer . . . : R.Weir

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

	,		T	Pn-P(n-1)
Real Time	Delta Time	Pressure	Temp	PSIA
HH:MM:SS	Hours	PSIA	Deg F	£21U
09:57:58	0.016	21.14		21.14
11:03:00	Gauges installed		carriers and	
11:27:58	1.516	gg-	54.30	
14:27:58	4.516	•	60.18	
15:57:58	6.016	814.51		793.37
18:57:58	9.016	2881.15		2066.64
20:27:58	10.516		109.17	
23:27:58	13.516		153.78	
00:57:58	15.016	5403.13		2521.98
03:57:58	18.016	6807.30		1404.17
05:27:58	19.516		208.14	
08:27:58	22.516		231.68	
09:57:58	24.016	8980.81		2173.50
12:57:58	27.016	9245.98		265.18
14:25:00	Pressure tested	full string	against PCT	to 9000 psi
14:27:58	28.516		249.01	
15:59:24	30.040	9117.14		-128.85
16:00:50	30.064		249.01	
16:03:43	30.112	9330.47		213.34
16:05:10	30.136	9330.33		-0.14
16:08:02	30.184		249.08	
16:09:29	30.208	9236.78		-93.55
16:12:22	30.256	9239.45 🥖		2.67
16:13:48	30.280	9240.42		0.97
16:15:00	Packer set @ 43			
16:16:41	30.328	9242.67	;	2.26
16:18:07	30.352	9243.76	1:	1.08
16:21:00	30.400 .	9246.14		2.39
16:22:26	30.424		249.14	7 70
16:25:19	30.472	9249.93		3.79
16:26:46	30.496	9251.55	040 44	1.62
16:29:38	30.544		249.14	4.34
16:31:05	30.568	9255.89		
16:33:58	30.616	9258.38		2.48
16:35:24	30.640	9259.71		1.34 2.53
16:38:17	30.688	9262.24		1.10
16:39:43	30.712	9263.34		2.16
16:42:36	30.760	9265.51	249.15	2.10
16:44:02	30.784	9268.04	243.13	2.53
16:46:55	30.832 30.856	9268.51		0.48
16:48:22	Schlumberger rur		100	
16:50:00		, COLLECTED	249.15	-
16:51:14	30.904	9269.99	FACTO	1.48
16:52:41	30.928	9270.92		0.92
16:55:34	30.976	9271.14		0.22
16:57:00	31.000	9271.14		0.22
16:59:53	31.048	9272.46		0.40
17:01:19	31.072 31.120	9272.83		0.37
17:04:12	31.120	JE 1 E • UJ		<b></b> -

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189 Well No.: Anemone # 1A

	,			
Real Time	Delta Time	Pressure	Темр_	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
•			, 240 10	•
17:05:38	31.144	0007 50	249.16	0.67
17:08:31	31.192	9273.50		0.87 0.29
17:09:58	31.216	9273.78	249.17	W.23
17:12:50	31.264	0274 CC	249.17	0.87
17:14:17	31.288	9274.66		Ø.05
17:17:10	31.336	9274.70		0.00
17:18:36	31.360	9274.70		Ø.73
17:21:29	31.408	9275.44		0.08
17:22:55	31.432	9275.52		Ø.54
17:25:48	31.480	9276.06	249.18	0.34
17:27:14	31.504	0220 22	249.10	0.72
17:30:07	31.552	9276.77 9276.82		0.05
17:31:34	31.576	9276.82	249.18	0.03
17:34:26	31.624	0270 02	243.10	0.00
17:35:53	31.648	9276.82		-0.13
17:38:46	31.696	9276.69		-0.06
17:40:12	31.720	9276.63 9276.84		0.21
17:43:05	31.768			0.24
17:44:31	31.792	9277.08		1.15
17:47:24	31.840	9278.22	249.20	1.13
17:48:50	31.864	0220 22	243.20	1.00
17:51:43	31.912	9279.22	منين ز	0.24
17:53:10	31.936	9279.46	249.20	0.24
17:56:02	31.984	0270 61	243.20	0.14
17:57:29	32.008	9279.61 9279.70		0.10
18:00:22	32.056	9280.10		0.40
18:01:48	32.080	9280,34		0.40
18:04:41	32.128 32.152	9280.58		0.24
18:06:07 18:09:00	32.200	9280.93	•	0.35
18:10:26	32.224	3200.33	249.22	
18:13:19	32.272	9281.91	240122	0.99
18:14:46	32.296	9282.06		0.14
18:17:38	32.344	3202.00	249.21	
18:19:05	32.368	9282.63	2.000	0.57
18:21:58	32.416	9282.77		0.14
18:23:24	32.440	9282.92		0.14
18:26:17	32.488	9283.36	•	0.45
18:27:43	32.512	9283.84		0.48
18:30:36	32.560	9284.27		0.43
18:32:02	32.584	"	249.21	
18:34:55	32.632	9284.99		0.72
18:36:22	32.656	9285.32		0.33
18:39:14	32.704		249.22	
18:40:41	32.728	9285.61		0.29
18:43:34	32.776	9285.89		0.29
18:45:00	32.800	9286.10		0.21
18:47:53	32.848	9286.15		0.05
18:49:19	32.872	9286.20		0.05
18:52:12	32.920	9286.53		0.33

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

	, D. 14. T.	Pressure	Темр	Pn-P(n-1)
Real Time HH:MM:SS	Delta Time Hours	PSIA	Deg F	PSIA
HH:HH:55	noul 5	1 3111		
18:53:38	32.944	·	249.23	
18:56:31	32.992	9287.20		0.67
18:57:58	33.016	9287.25		0.05
19:00:50	33.064		249.23	
19:02:17	33.088	9288.01		0.76
19:05:10	33.136	9288.35		0.33
19:06:36	33.160	9288.82		0.48
19:09:29	33.208	9289.25		0.43
19:10:55	33.232	9289.35		0.10
19:13:48	33.280	9289.08		-0.27
19:15:14	33.304		249.24	
19:18:07	33.352	9289.75		0.67
19:19:34	33.376	9290.13		0.38
19:22:26	33.424		249.25	
19:23:53	33.448	9290.67		0.54
19:26:46	33.496	9291.20		0.53
19:28:12	33.520	9291.56	-	0.37
19:31:05	33.568	9291.85		0.29
19:32:31	33.592	9292.06		0.21
19:35:24	33.640	9291.94		-0.11
19:36:50	33.664		249.24	
19:39:43	33.712	9292.10	•	0.16
19:41:10	33.736	9292.20	AFFECT OF THE PARTY OF THE PART	0.10
19:44:02	33.784		249.25	
19:45:29	33.808	9292.53	•	0.33
19:48:22	33.856	9292.95		0.41
19:49:48	33.880	9292.80	·	-0.14
19:52:41	33.928	9292.44	•	-0.37
19:54:07	33.952	9292.44		0.00
19:57:00	34.000	9292.68		0.24
19:58:26	34.024		249.25	
20:01:19	34.072	9292.12		-0.56
20:02:46	34.096	9292.07		-0.05
20:05:38	34.144		249.25	
20:07:05	34.168	9292.34		0.27
20:09:58	34.216	9292.25		0.10
20:11:24	34.240	9292.45		0.21
20:14:17	34.288	9291.45		-1.00
20:15:43	34.312	9291,07		-0.38
20:18:36	34.360	9289.20		-1.86
20:20:02	34.384		249.27	
20:22:55	34.432	9287.48		-1.72
20:24:22	34.456	9286.96		-0.53
20:27:14	34.504		249.27	
20:28:41	34.528	9284.81		-2.15
20:31:34	34.576	9283.38		-1.43
20:33:00	34.600	9283.25		-0.13
20:35:53	34.648	9280.89		-2.36
20:37:19	34.672	9280.27		-0.62
20:40:12	34.720	9277.71		-2.56
20-10-12				

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Date : 07/10/89

Real Time HH:MM:SS	Delta Time Hours	Pressure PSIA	T <b>em</b> p Deg F	Pn-P(n-1) PSIA
20-41-70	74 744		249.28	•
20:41:38	34.744 34.792	9276.05	243.20	-1.66
20:44:31		9275.33		-0.72
20:45:58	34.816 34.854	. 5213.33	249.28	0112
20:48:50	34.864 34.888	9272.36	243.20	-2.98
20:50:17 20:53:10	34.936	9269.75		-2.61
	34.960	9268.58		-1.16
20:54:36	. 35.008	9266.96		-1.62
20:57:29 20:58:55	35.032	9266.31		-0.65
21:01:48	35.080	9263.73		-2.58
21:03:14	35.104	0200112	249.29	
21:05:14	35.152	9260.82	2.0.20	-2.91
21:07:34	35.176	9260.67	•	-0.14
21:10:26	35.224	3200.01	249.29	
21:11:53	35.248	9260.77		0.10
21:14:46	35.296	9261.01		0.24
21:14:46	35.320	9261.20	<u>.</u>	0.19
21:19:05	35.368	9261.10		-0.10
21:20:31	35.392	9261.26		0.16
21:23:24	35.440	9261.50		0.24
21:24:50	35.464	<b>020</b>	249.29	
21:27:43	35.512	9262.73		1.23
21:29:10	35.536	9263.11	. 7	0.38
21:32:02	35.584		249.30	
21:33:29	35.608	9263.46	•	0.35
21:36:22	35.656	9263.79		0.33
21:37:48	35.680	9264.08		0.29
21:40:41	35.728	9264.86		0.78
21:42:07	35.752	9265.13	•	0.27
21:45:00	35.800	9265.32		0.19
21:46:26	35.824		249.31	
21:49:19	35.872	9265.05		-0.27
21:50:46	35.896	9264.95		-0.10
21:53:38	35.944		249.31	
21:55:05	35.968	9264.86		-0.10
21:57:58	36.016	9265.00		0.14
21:59:24	36.040	9265.19		0.19
22:02:17	36.088	9265.72		0.53
22:03:43	36.112	9265.91		0.19
22:06:36	36.160	9266.29		0.38
22:08:02	36.184		249.31	
22:10:55	36.232	9266.64		0.35
22:12:22	36.256	9266.97		0.33
22:15:14	36.304		249.32	
22:16:41	36.328	9267.50		0.53
22:19:34	36.376	9268.02		0.53
22:21:00	36.400	9268.07		0.05
22:23:53	36.448	9267.93		-0.14
22:25:19	36.472	9267.93	ė.	0.00
22:28:12	36.520	9267.64		-0.29

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

				_	
	Real Time	Delta Time	Pressure	Темр	Pn-P(n-1)
	HH:MM:SS	Hours	PSIA	Deg F	PSIA
		7C E44	•	249.32	
	22:29:38	36.544	9267.69	243.32	0.05
	22:32:31	36.592 36.616	9267.36		-0.33
	22:33:58 22:36:50	36.664	3201.30	249.32	0.00
	22:38:17	36.688	9267.55	2.0.0	0.19
	22:41:10	36.736	9268.17		0.62
	22:47:10	36.760	9268.02		-0.14
	22:42:38	36.808	9268.04		0.02
	22:46:55	36.832	9268.55		0.51
	22:49:48	36.880	9268.99		0.44
	22:51:14	36.904		249.32	
	22:54:07	36.952	9269.90		0.91
	22:55:34	36.976	9269.90		0.00
	22:58:26	37.024		249.32	
	22:59:53	37.048	9269.98		0.08
	23:02:46	37.096	9270.09	•	0.11
	23:04:12	37.120	9270.05		-0.05
	23:07:05	37.168	9270.67		0.62
	23:08:31	37.192	9271.06		0.40
	23:11:24	37.240	9271.24		0.18
	23:12:50	37.264		249.34	
	23:15:43	37.312	9271.21		-0.03
	23:17:10	37.336	9271.45 🦯		0.24
	23:20:02	37.384		249.35	
	23:21:29	37.408	9271.78		0.33
	23:24:22	37.456	9271.40		-0.38
	23:25:48	37.480	9271.59	C#	0.19
	23:28:41	37.528	9272.07		0.48 0.21
	23:30:07	37.552	9272.27		0.19
	23:33:00	37.600	9272.46	240 70	0.15
	23:34:26	37.624	0272 00	249.36	0.33
	23:37:19	37.672	9272.80 9273.04		0.24
	23:38:46	37.696 37.744	3273.04	249.36	0.24
	23:41:38	37.768	9273.47	243.30	0.43
	23:43:05	37.816	9273.32		-0.14
	23:45:58 23:47:24	37.840	9273.23	`	-0.10
	23:50:17	37.888	9271.60		-1.62
	23:51:43	37.912	9270.76		-0.84
	23:54:36	37.960	9271.13		0.37
	23:56:02	37.984		249.36	
	23:58:55	38.032	9272.53		1.40
	00:00:22	38.056	9272.96		0.43
	00:00:22	38.104	32.2.00	249.37	
	00:03:14	38.128	9273.29		0.33
	00:07:34	38.176	9273.58		0.29
	00:09:00	38.200	9273.53		-0.05
	00:11:53	38.248	9273.62		0.10
-	00:13:19	38.272	9273.67		0.05
	00:16:12	38.320	9273.05		-0.62

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189 Well No.: Anemone # 1A Date : 08/10/89

	<i>;</i>			
Real Time	Delta Time	Pressure	Темр	Pn-P( n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
				•
00:17:38	38.344		249.37	•
00:20:31	38.392	9273.11		0.06
00:21:58	38.416	9273.31		0.19
00:24:50	38.464		249.37	
00:26:17	38.488	9274.53		1.23
00:29:10	38.536	9274.88		0.35
00:30:36	38.560	9275.06		0.18
00:33:29	38.608	9274.88		-0.18
00:34:55	38.632	9275.07		0.19
00:37:48	38.680	9274.59		-0.48
00:39:14	38.704		249.38	
00:41:00	Slickline lubri	cator fails	pressures ab	ove 6500 psi
00:42:07	38.752	9275.02	•	0.43
00:42:34	38.776	9275.26		0.24
00:45:34	38.824	0210120	249.38	
00:40:20	38.848	9275.60		0.33
00:47:55	38.896	9275.88		0.29
	38.920	9276.03		0.14
00:52:12	38.968	9276.12		0.10
00:55:05	38.992	9276.41		0.29
00:56:31		9275.99		-0.41
00:59:24	39.040	3213.33	249.39	7
01:00:50	39.064	0270 40	243.33	0.46
01:03:43	39.112	9276.46	• •	0.14
01:05:10	39.136	9276.60	249.39	<b>9.17</b>
01:08:02	39.184	0070 00	243.33	0.06
01:09:29	39.208	9276.66		. 0.74
01:12:22	39.256	9276.90		-0.14
01:13:48	39.280	9276.76	•	-0.14 -0.10
01:16:41	39.328	9276.66	•	0.05
01:18:07	39.352	9276.71		0.19
01:21:00	39.400	9276.90	240.70	W13
01:22:26	39.424		249.39	0.44
01:25:19	39.472	9277.35		
01:26:46	39.496	9277.59		0.24
01:29:38	39.544		249.41	0.40
01:31:05	39.568	9277.39		-0.19
01:33:58	39.616	9277.20		-0.19
01:35:24	39.640	9277.25		0.05
01:38:17	39.688	9277.30		0.05
01:39:43	39.712	9277.54		0.24
01:42:36	39.760	9277.74		0.21
01:44:02	39.784		249.41	
01:46:55	39.832	9278.17		0.43
01:48:22	39.856	9278.17		0.00
01:51:14	39.904		249.42	
01:52:41	39.928	9278.51		0.33
Ø1:55:34	39.976	9278.56		0.05
01:57:00	40.000	9278.51		-0.05
01:59:53	40.048	9278.51		0.00
02:01:19	40.072	9278.70	•	0.19
02-01-75				

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Date : 08/10/89

	,			
Real Time	Delta Time	Pressure	Temp	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
			- •	
02:04:12	40.120	9279.23	•	0.53
02:05:38	40.144		249.42	
02:08:31	40.192	9279.48		0.25
02:09:58	40.216	9279.67		0.19
02:12:50	40.264	2 22	249.42	
02:14:17	40.288	9279.94		0.27
02:17:10	40.336	9280.04		0.10
02:18:36	40.360	9279.99		-0.05
02:21:29	40.408	9279.27		-0.72
02:22:55	40.432	9279.42		0.14
02:25:48	40.480	9280.04		0.62
02:23:48	40.504	0200101	249.43	
02:27:14	40.552	9280.91	2.00.0	0.87
	40.576	9281.06		0.14
02:31:34 02:34:26	40.624	3201.00	249.43	<b></b>
	40.648	9281.53	243.40	0.48
02:35:53	40.696	9282.15		0.62
02:38:46		9282.49		0.33
02:40:12	40.720	9282.58		0.10
02:43:05	40.768			0.10
02:44:31	40.792	9282.79	•	0.61
02:47:24	40.840	9283.40	249.44	<b>v.</b> 01
02:48:50	40.864	0207 04 **		0.45
02:51:43	40.912	9283.84	•	0.05
02:53:10	40.936	9283.89	240 44	w.v5
02:56:02	40.984	2004 40	249.44	0.29
02:57:29	41.008	9284.18	•	-0.10
03:00:22	41.056	9284.08	•	
03:01:48	41.080	9284.21		0.13
03:04:41	41.128	9284.61		0.40
03:06:07	41.152	9284.56		-0.05
03:09:00	41.200	9283.60		-0.96
03:10:26	41.224		249.44	0.40
03:13:19	41.272	9283.79		0.19
03:14:46	41.296	9283.98		0.19
03:17:38	41.344		249.44	A 77
03:19:05	41.368	9284.70		0.72
03:21:58	41.416	9284.94		0.24
03:23:24	41.440	9284.80		-0.14
03:26:17	41.488	9284.94	•	0.14
03:27:43	41.512	9285.27		0.33
03:30:36	41.560	9285.77		0.49
03:32:02	41.584		249.45	
03:34:55	41.632	9285.90		0.13
03:36:22	41.656	9285.90		0.00
03:39:14	41.704		249.45	
03:40:41	41.728	9286.24	·	0.35
03:43:34	41.776	9286.24		0.00
03:45:00	41.800	9286.29		0.05
03:47:53	41.848	9286.53		0.24
03:49:19	41.872	9286.40		-0.13
		•		

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Real Time HH:MM:SS	Delta Time Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
03:52:12	41.920	9286.40	•	0.00
03:53:38	41.944		249.45	
03:56:31	41.992	9286.69		0.29
03:57:58	42.016	9286.55		-0.14
04:00:50	42.064		249.46	
04:02:17	42.088	9286.83		0.29
04:05:10	42.136	9286.63		-0.21
04:06:36	42.160	9286.98		0.35
04:09:29	42.208	9286.64		-0.33
04:10:55	42.232	9286.44		-0.21
04:13:48	42.280	9286.51		0.08
04:15:14	42.304		249.46	
04:18:07	42.352	9286.83	•	0.32
04:19:34	42.376	9287.12		0.29
04:22:26	42,424		249.48	
04:23:53	42.448	9287.52		0.40
04:26:46	42.496	9287.85		0.33
04:28:12	42.520	9287.84		-0.02
04:31:05	42.568	9288.09	•	0.25
04:32:31	42.592	9288.04		-0.05
04:35:24	42.640	9288.28		0.24
04:36:50	42.664		249.48	
04:39:43	42.712	9288.42		0.14
04:41:10	42.736	9288.71	·	0.29
04:44:02	42.784		249.48	
04:45:29	42.808	9289.67		0.96
04:48:22	42.856	9289.97		0.30
04:49:48	42.880	9290.14		0.18
04:52:41	42.928	9290.14	•	0.00
04:54:07	42.952	9290.24		0.10 0.00
04:57:00	43.000	9290.24	249.49	<b>v.v</b> v
04:58:26	43.024	9290.30	243.43	0.06
05:01:19	43.072	9290.26		-0.05
05:02:46	43.096	5250.20	249.48	0.00
05:05:38	43.144 43.168	9290.43	243.40	0.18
05:07:05	43.216	9290.57		0.14
05:09:58 05:11:24	43.240	9290.88		0.30
05:14:17	43.288	9291.40		0.53
05:14:17 05:15:43	43.312	9291.69		0.29
<del></del>	43.360	9291.78		0.10
05:18:36 05:20:02	43.384	3231.10	249.49	20.0
05:20:02 05:22:55	43.432	9291.35	2.00.10	-0.43
05:24:22	43.456	9291.26		-0.10
05:27:14	43.504	5257720	249.49	
05:28:41	43.528	9291.50		0.24
05:31:34	43.576	9291.27		-0.22
05:33:00	43.600	9291.55		0.27
05:35:53	43.648	9291.61		0.06
05:37:19	43.672	9291.59		-0.02

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189 Well No.: Anemone # 1A

		_	-	D., D/ - 13
Real Time	Delta Time	Pressure	Темр	Pn-P(n-1) PSIA
HH:MM:SS	Hours	PSIA	Deg F	Lain
05.40.13	43.720	9292.12	•	0.53
05:40:12	43.744	J2 J2 • 12	249.50	
05:41:38	Open PCT and obs	serve well		
05:44:00 05:44:31	43.792	7541.38	Treat production	-1750.74
05:44:51	43.816	5994.32		-1547.06
05:48:50	43.864	3331102	249.91	
05:49:00	Open swab valve			
05:50:00	Drop mechanicaly	, fired our	followed by	firino bar
05:50:17	43.888	6102.22	,	107.90
05:53:10	43.936	6099.11		-3.11
05:54:36	43.960	6099.91		0.80
05:57:29	44.008	6097.43		-2.48
05:58:55	44.032	6098.08		0.65
06:01:48	44.080	6097.74		-0.34
06:07:40	44.104	000	249.70	
06:06:07	44.152	6095.69		-2.06
06:07:34	44.176	6098.70		3.02
06:10:26	44.224	0000110	249.67	
06:11:53	44.248	6105.45		6.75
06:14:46	44.296	6110.86		5.41
06:16:12	44.320	6113.64		2.78
06:19:05	44.368	6114.97		1.33
06:20:31	44.392	6114.69		-0.28
06:23:24	44.440	6112.37		-2.32
06:24:50	44.464	0112101	249.64	
06:27:43	44.512	6109.60		-2.77
06:29:10	44.536	6109.08		-0.52
06:32:02	44.584	5.54.55	249.65	
06:33:29	44.608	6107.56		-1.52
06:36:22	44.656	6106.85		-0.72
06:37:48	44.680	6106.28		-0.57
06:40:00	No indication of		חח	
06:40:41	44.728	6105.93	3	-0.35
06:42:07	44.752	6105.53		-0.39
06:45:00	44.800	6105.10		-0.44
06:45:00	Rig up Schlumber		ator to fish b	
06:46:26	44.824	<b></b>	249.65	
06:49:19	44.872	6104.48	•	-0.51
06:50:46	44.896	6104.13		-0.35
06:53:38	44.944		249.64	
06:55:05	44.968	6103.43		-0.70
Ø6:57:58	45.016	6102.88		-0.55
06:59:24	45.040	6106.60		3.72
07:02:17	45.088	6084.70		-21.90
07:02:17	45.112	6084.82		0.12
07:05:45 07:06:36	45.160	6085.31	٠	0.50
07:08:02	45.184	2000.01	249.72	
07:00:02 07:10:55	45.232	6084.90	<u> </u>	-0.41
07:10:55	45.256	6084.47		-0.44
07:12:22	45.304	JUUTITI	249.71	
w(+13+14	+9.Je+		2-75-17	

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Date : 08/10/89

Real Time	. Delta Time	Pressure	Тетр	Pn-P(n-1)
HH:MM:SS		PSIA	Deg F	PSIA
07:16:41	45.328	6084.38		-0.09
	45.376	6084.20		-0.17
07:19:34	45.400	Б084.14		-0.06
07:21:00	45.448	6084.98		0.83
07:23:53	45.472	6084.57		-0.41
07:25:19	45.520	6085.44		Ø.87
07:28:12	45.544,	0003.44	249.70	0.0.
07:29:38	45.544,	6085.94	243.10	0.50
07:32:31	45.616	6086.42		0.48
07:33:58	45.664	00001.2	249.69	
07:36:50	45.688	<b>6086.97</b>	2.0.00	0.55
07:38:17	45.736	6087.29		. 0.32
07:41:10	45.760	6087.45	•	0.16
07:42:36		6087.54	•	0.09
07:45:29	45.808	6087.63		0.09
07:46:55	45.832	6087.84		0.22
07:49:48	45.880	6087.84	249.69	0.22
07:51:14	45.904	C000 77	243.03.	0.52
07:54:07	45.952	6088.37		-0.09
07:55:34	45.976	6088.28	249.67	0.03
07:58:26	46.024	C000 7F	243.07	0.07
07:59:53	46.048	6088.35		0.44
08:02:46	46.096	6088.79	,	-0.09
08:04:12	46.120	6088.70	منتهاني المستحاني	0.09
08:07:05	46.168	6088.79		0.03
08:08:31	46.192	6088.92		0.09
08:11:24	46.240	6089.01	740 67	
08:12:50	46.264	2222 22	249.67	-0.13
08:15:43	46.312	6088.88		-0.09
08:17:10	46.336	6088.79	740 07	-0.03
08:20:02	46.384	6000 33	249.67	0.48
08:21:29	46.408	6089.27		0.48 0.22
08:24:22	46.456	6089.49		-0.04
08:25:48	46.480	6089.45		-0.10
08:28:41	46.528	6089.34		0.00
08:30:07	46.552	6089.34		0.61
08:33:00	46.600	6089.96	249.66	<b>v.</b> 01
08:34:26	46.624	caoa oo	243.00	-0.07
08:37:19	46.672	6089.88		-0.09
08:38:46	46.696	6089.80	240.62	0.03
08:41:38	46.744		249.67	a 25
08:43:05	46.768	6090.06		0.26 0.22
08:45:58	46.816	6090.28		
08:47:24	46.840	6090.17	•	-0.10
08:50:17	46.888	6090.41		0.23
Ø8:51:43	46.912	6090.58		0.17
08:54:36	46.960	6090.63	040.00	0.04
08:56:02	46.984	6006 55	249.67	0.13
08:58:55	47.032	6090.76		W.13
Ø9:00:00	Pressure test		נפק שששע סז	-0.04
09:00:22	47.056	6090.71		-0.04

Exal Reservoir Services Ltd.

Location: Zapata Arctic
Test No.: DST # 2

Gauge No: 75189 Well No.: Anemone # 1A

	ř			
Real Time		Pressure	Temp	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F <sub></sub>	PSIA
00-07-14	47.104	•	249.66	
09:03:14	47.128	6091.18	240.00	0.47
09:04:41	47.176	6091.06		-0.12
09:07:34	47.200	6090.70		-0.37
09:09:00 09:11:53	47.248	6090.80		0.10
09:11:53	47.272	6091.19		0.39
09:16:12	47.320	6091.68		0.48
09:10:12	47.344	0037.00	249.66	
09:20:31	47.392	6092.24		0.57
03:20:51	47.416	6091.98		-0.26
09:24:50	47.464	202	249.67	
09:26:17	47.488	6091.68		-0.31
09:29:10	47.536	6092.77		1.09
09:30:36	47.560	6092.38		-0.39
09:33:29	47.608	6091.97		-0.41
09:34:55	47.632	6092.16		0.19
09:37:48	47.680	6091.85		-0.31
09:39:14	47.704		249.66	
09:42:07	47.752	6091.88		0.03
09:43:34	47.776	6092.10		0.22
09:46:26	47.824		249.67	
09:47:53	47.848	6092.73	•	0.63
09:50:46	47.896	6092.81		0.09
09:52:12	47.920	6092.68		-0.13
09:55:05	47.968	6093.12		0.44
09:56:31	47.992	6092.81		-0.31
09:59:24	48.040	6093.12	· ::	0.31
10:00:50	48.064		249.67	
10:03:43	48.112	6092.73		-0.39
10:05:10	48.136	6093.03		0.31
10:08:02	48.184		249.66	
10:09:29	48.208	6093.32		0.29
10:12:22	48.256	6093.56		0.23
10:13:48	48.280	6092.33		-1.22
10:16:00	Close kill valv		ricator valve	, R.I.H.
10:16:41	48.328	6092.03		-0.31
10:18:07	48.352	6092.16		0.13
10:21:00	48.400	6092.18	<b></b> '	0.03
10:22:26	48.424		249.67	0.77
10:25:19	48.472	6092.90	•	0.72
10:26:46	48.496	6092.86		-0.04
10:29:38	48.544		249.67	
10:31:05	48.568	6092.94		0.09
10:33:58	48.616	6093.69		0.74
10:35:24	48.640	6094.46		0.77
10:38:17	48.688	6096.84		2.38
10:39:43	48.712	6098.50		1.66
10:42:36	48.760	6102.87	848.88	4.37
10:44:02	48.784		249.67	n nn
10:46:55	48.832	6112.75		9.88

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

	,		,	
Real Time	Delta Time	Pressure	Тетр	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
		•		
10:48:22	48.856	6119.05		6.30
10:51:14	48.904		249.67	
10:52:41	48.928	6143.61		24.55
10:55:34	48.976	6174.27		30.66
10:57:00	49.000	6194.12		19.84
10:59:53	49.048	6241.52		47.40
11:01:19	49.072	6259.79		18.27
11:04:12	49.120	6314.63		54.84
11:05:38	49.144	•	249.67	
11:08:00	Bleed off W.H.	P increase	(due to displa	acement)
11:08:31	49.192	6269.91	•	-44.72
11:09:58	49.216	6164.47		-105.44
11:12:50	49.264		249.69	
11:14:17	49.288	6211.64		47.17
11:17:10	49.336	6255.94		44.29
	49.360	6268.05		12.11
11:18:36	49.408	6342.65		74.61
11:21:29	49.432	6386.10		43.45
11:22:55		6469.75		83.65
11:25:48	49.480	0403.73	249.58	05.00
11:27:14	49.504	6626.49	243.30	156.74
11:30:07	49.552			-68.35
11:31:34	49.576	6558.15	249.70	00.35
11:34:26	49.624			es at bubble bose
11:35:00			, by breeding c	off at bubble hose -421.60
11:35:53	49.648	6136.55		17.72
11:38:46	49.696	6154.27		•
11:40:12	49.720	6152.29		-1.97
11:43:05	49.768	6129.34		-22.96
11:44:31	49.792	6131.57	•	2.23
11:47:24	49.840	6134.42		2.85
11:48:50	49.864		249.67	
11:51:43	49.912	6136.03		1.62
11:53:10	49.936	6141.38		5.34
11:56:02	49.984		249.67	
11:57:29	50.008	6114.15		-27.22
12:00:22	50.056	6106.66		-7.50
12:01:48	50.080	6107.51		0.85
12:04:41	. 50.128	6113.79		6.29
12:06:07	50.152	6134.45		20.65
12:09:00	50.200	6125.57		-8.87
12:10:26	50.224		249.67	
12:13:19	50.272	6123.84		-1.73
12:14:46	50.296	6112.03		-11,.81
12:17:38	50.344		249.69	•
12:18:00	Wireline on de	enth. fish o		mable to fire guns
12:19:05	50.368	6093.48		-18.54
12:13:05	50.416	6120.73		27.25
	50.440	6092.28		-28.46
12:23:24	50.488	6100.09		7.81
12:26:17	50.512	6094.99		-5.10
12:27:43	30.312	Q-0-1-00		

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Real Time	Delta Tim	e Pressure	Тетр	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
-			•	
12:30:36	50.560	6097.43	•	2.45
12:32:02	50.584		249.69	
12:34:55	50.632	6094.18		-3.25
12:36:22	50.656	6121.78		27.60
12:39:14	50.704		249.69	45 40
12:40:41	50.728	6106.30		-15.49
12:43:34	50.776	6093.24		-13.06
12:45:00	50.800	6088.21		-5.03 -6.56
12:47:53	50.848	6081.65		-6.36 Ø.45
12:49:19	50.872	6082.11		-0.52
12:52:12	50.920	6081.58	040.71	-0.52
12:53:38	50.944	10	249.71	-10.09
12:56:31	50.992	6071.49		-3.19
12:57:58	51.016	6068.30	740 71	-3.13
13:00:50	51.064	5655 36	249.71	-3.10
13:02:17	51.088	6065.20		1.83
13:05:10	51.136	6067.03		-1.57
13:06:36	51.160	6065.46		-0.92
13:09:29	51.208	6064.54		1.79
13:10:55	51.232	6066.33		-2.18
13:13:48	51.280	6064.15	249.71	2.10
13:15:14	51.304	6060 17		4.02
13:18:07	51.352	6068.17	<i>i</i> •	-5.42
13:19:34	51.376	6062.75	249.71	J. 74
13:22:26	51.424	CAC7 27	243.(1	0.48
13:23:53	51.448	6063.23 6063.89	:	0.66
13:26:46	51.496	6066.30	î :	2.42
13:28:12	51.520	6062.94		-3.36
13:31:05	51.568 51.592	6064.67		1.73
13:32:31	51.532	6064.67		0.00
13:35:24	51.664	0004.07	249.71	0.00
13:36:50	51.712	6064.80	243111	0.13
13:39:43 13:41:10	51.736	6064.72		-0.09
13:41:10	51.784	0004.12	249.71	
13:44:02	51.808	6063.32		-1.40
13:46:00	Wireline on	surface, redr	ess drop bar	
13:48:22	51.856	6063.51	•	0.19
13:49:48	51.880	6063.55		0.04
13:52:41	51.928	6063.54		-0.02
13:54:07	51.952	6063.71		0.17
13:57:00	52.000	6063.84		0.13
13:58:26	52.024	303374	249.71	
14:01:19	52.072	6063.38		-0.46
14:02:46	52.096	6063.99		0.61
14:02:48	52.144		249.71	
14:07:05	52.168	6064.02		0.03
14:07:03	52.216	6064.25		0.23
14:11:24	52.240	6063.40		-0.85
14:14:17	52.288	6063.54		0.13

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A Date : 08/10/89

	,	•		
Real Time	Delta Time	Pressure	Temp	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
			•	
14:15:43	52.312	6064.03		0.50
14:18:36	52.360	6063.86		-0.17
14:20:02	52.384		249.72	
14:22:55	52.432	6063.80		-0.06
14:24:22	52.456	6063.89		0.09
14:27:14	52.504		249.72	
14:28:41	52.528	6064.56		0.67
14:31:34	52.576	6064.73		0.17
14:33:00	52.600	6065.15		0.42
14:35:53	52.648	6065.46		0.31
14:37:19	52.672	6065.39		-0.07
14:40:00	Rig up wirelin	e with new d	rop bar asseml	hly
14:40:12	52.720	6075.13	•	9.74
14:41:38	52.744		249.71	
14:44:31	52.792	6075.16		0.03
14:45:58	52.816	6075.07		-0.09
14:48:50	52.864		249.72	
14:50:17	52.888	6075.04		-0.03
14:53:10	52.936	6075.09		0.04
14:54:36	52.960	6082.03		6.95
14:56:00	Close lubricat	or valve for	pressure tes	t
14:57:29	53.008	6080.24	•	-1.79
14:58:55	53.032	6081.12		0.87
15:01:48	53.080	6077.05		-4.06
15:02:00	Drop bar fires		seperated dur	ing rig up)
15:02:00	53.104	gano, ra-	249.72	
15:06:07	53.152	6874.15		797.09
15:07:34	53.176	7069.89		195.74
15:10:26	53.224	1000100	249.85	
15:11:53	53.248	7488.30		418.41
15:14:46	53.296	7685.85		197.56
15:16:12	53.320	7768.74		82.88
15:18:00	Detect rise in			
	53.368	7053.29		-715.45
15:19:05	53.392	7200.81		147.52
15:20:31 15:23:24	53.440	7433.30		232.50
15:23:24	53.464	1400.00	250.15	
15:27:43	53.512	7699.43	•	266 <b>.</b> 12
	53.536	7770.24		70.81
15:29:10	53.584	1110.24	250.27	, , , , , ,
15:32:02	53.504	7945.81	230.21	175.57
15:33:29				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
15:35:00	Rig down Lubri	8038.99		93.18
15:36:22	53.656			40.91
15:37:48	53.680	8079.90		72.17
15:40:41	53.728	8152.07		31.95
15:42:07	53.752	8184.02		60.18
15:45:00	53.800	8244.20	7EA 70	00.10
15:46:26	53.824	0740 74	250.38	74 14
15:49:19	53.872	8318.34		74.14 22.53
15:50:46	53.896	8340.88		77.33

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

	<i>;</i>			
Real Time	Delta Time	Pressure	Temp	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
			,	
15:53:38	53.944		250.38	
15:55:05	53.968	8397.78		56.91
15:57:58	54.016	8425.62		27.84
15:59:24	54.040	8438.83		13.21
16:02:17	54.088	8463.23		24.40
16:03:43	54.112	8475.12		11.89
16:06:00	Open well on a	adjustable d	hoke for initial	flow
16:06:36	54.160	6179.26		-2295.86
16:08:02	54.184		250.35	
16:10:55	54.232	6206.31	,	27.05
16:12:22	54.256	6217.32		11.01
16:15:14	54.304		250.45	
16:16:41	54.328	6401.44		184.12
16:17:00	Close well in	at PCT and	choke manifold	
16:19:34	54.376	7433.19		1031.75
16:21:00	54.400	7659.58		226.39
16:23:53	54.448	7938.79		279.21
16:25:19	54.472	8032.24		93.45
16:28:12	54.520	8170.39		138.15
16:29:38	54.544		250.37	
16:32:31	54.592	8305.87		135.48
16:33:58	54.616	8339.66		33.79
16:36:50	54.664		250.48	
16:38:17	54.688	8420.35	•	80.68
16:41:10	54.736	8461.49	•	41.14
16:42:36	54.760	8479.82		18.33
16:45:29	54.808	8512.07		32.25
16:46:55	54.832	8526.27	. :	14.20
16:49:48	54.880	8551.94	•	25.67
16:51:14	54.904	•	250.51	
16:54:07	54.952	8584.10		32.16
16:55:34	54.976	8593.76		9.66
16:58:26	55.024		250.49	
16:59:53	55.048	8619.53		25.77
17:02:46	55.096	8634.53	•	15.00
17:04:12	55.120	8641.48		6.95
17:07:05	55.168	8654.52		13.04
17:08:31	55.192	8660.58		6.06
17:11:24	55.240	8672.01		11.43
17:12:50	55.264		250.44	
17:15:43	55.312	8687.52		15.51
17:17:10	55.336	8692.41		4.89
17:20:02	55.384		250.41	
17:21:29	55.408	8705.72		13.31
17:24:22	55.456	8713.09		7.37
17:25:48	55.480	8716.65		3.56
17:28:41	55.528	8723.93		7.28
17:20:41	55.552	8727.63		3.70
17:30:07	55.600	8734.35		6.72
17:33:00	55.624	0,01.00	250.34	
1111111	33.024			

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189 Well No.: Anemone # 1A

Real Time HH:MM:SS	Delta Time Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
Unitilii.22	11001 3	, 52		
17:37:19	55.672	8743.84		9.49
17:38:46	55.696	8746.76		2.92
17:41:38	55.744		250.33	
17:43:05	55.768	8755.03		8.27
17:45:58	55.816	8760.43		5.40
17:47:24	55.840	8762.96		2.53
17:50:17	55.888	8767.91		4.95
17:51:43	55.912	8770.28		2.37 4.29
17:54:36	55.960	8774.57	750 77	4.23
17:56:02	55.984		250.27	C 20
17:58:55	56.032	8780.85		6.28 2.03
18:00:22	56.056	8782.88	. 250 21	2.03
18:03:14	56.104	0700 57	250.21	5.64
18:04:41	56.128	8788.52		3.57
18:07:34	56.176	8792.09		1.71
18:09:00	56.200	8793.80		3.36
18:11:53	56.248	8797.16		1.68
18:13:19	56.272	8798.84		3.08
18:16:12	56.320	8801.92	250.28	3.00
18:17:38	56.344	8806.19	230.20	4.26
18:20:31	56.392			1.46
18:21:58	56.416	8807.65	250.23	1.40
18:24:50	56.464	8811.75	230723	4.10
18:26:17	56.488 EC 539	8814.49	•	2.74
18:29:10	56.536 56.560	8815.76		1.27
18:30:36	56.608	8818.25		2.49
18:33:29	56.632	8819.55		1.31
18:34:55 18:37:48	56.680	8822.15	•	2.59
18:39:14	56.704	OULLITE	250.21	
18:42:07	56.752	8825.48		3.33
18:43:34	56.776	8826.57		1.09
18:46:26	56.824		250.19	
18:47:53	56.848	8829.81		3.24
18:50:46	56.896	8831.60		1.79
18:52:12	56.920	8832.44		0.83
18:55:05	56.968	8834.18		1.75
18:56:31	56.992	8835.03		0.85
18:59:24	57.040	8837.05		2.01
19:00:50	57.064		250.16	
19:03:43	57.112	8839.67		2.63
19:05:10	57.136	8840.38		0.71
19:08:02	57.184		250.14	
19:09:29	57.208	8842.92		2.53
19:12:22	57.256	8844.54		1.62
19:13:48	57.280	8845.39		0.85
19:16:41	57.328	8846.93		1.54
19:18:07	57.352	8847.68		0.76
19:21:00	57.400	8849.13	252 43	1.45
19:22:26	57.424		250.13	

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Real Time HH:MM:SS	Delta Time Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
19:25:19	57.472	8851.29	•	2.16
19:26:46	57.496	8851.90		0.61
19:29:38	57.544	000,700	250.12	
19:31:05	57.568	8853.70		1.79
19:33:58	57.616	8854.93		1.23
19:35:24	57.640	8855.26		0.33
19:38:17	57.688	8856.30		1.04
19:39:43	57.712	8856.85		0.55
19:42:36	57.760	8857.98		1.13
19:44:02	57.784		250.11	
19:46:55	57.832	8859.48		1.50
19:48:22	57.856	8860.14		0.66
19:51:14	57.904	•	250.09	
19:52:41	57.928	8861.70		1.56
19:55:34	57.976	8862.31	· ·	0.61
19:57:00	58.000	8862.74		0.43
19:59:53	58.048	8863.59		0.85 -
20:01:19	58.072	8864.01		0.43
20:04:12	58.120	8864.42		0.41
20:05:38	58.144		250.08	
20:08:31	58.192	8865.27		0.85
20:09:58	58.216	8865.65	•	0.38
20:12:50	58.264		250.08	
20:14:17	58.288	8867.07		1.42
20:17:10	58.336	8867.66	•	0.60
20:18:36	58.360	8868.00		0.33
20:21:29	58.408	8868.93	· · · · · · · · · · · · · · · · · · ·	0.93
20:22:55	58.432	8869.30		0.38
20:25:48	58.480	8869.96		0.66
20:27:14	58.504		250.06	
20:30:07	58.552	8871.10		1.13
20:31:34	58.576	8871.48		0.38
20:34:26	58.624		250.06	
20:35:53	58.648	8872.70	•	1.23
20:38:46	58.696	8873.45		0.74
20:40:12	58.720	8873.92		0.47
20:43:05	58.768	8874.67		Ø.76
20:44:31	58.792	8875.05		0.38
20:47:24	58.840	8875.60		0.55
20:48:50	58.864		250.05	4 45
20:51:43	58.912	8877.07		1.46
20:53:10	58.936	8877.59	:	0.52
20:56:02	58.984		250.02°	
20:57:29	59.008	8878.71		1.12
21:00:22	59.056	8879.38		0.68
21:01:48	59.080	8879.62		0.24
21:04:41	59.128	8880.33		0.71
21:06:07	59.152	8880.61		0.28
21:09:00	59.200	8881.31		0.69
21:10:26	59.224		250.02	

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Date : 08/10/89

-		n	T	D=== D( === 1.1
Real Time	Delta Time	Pressure	Темр	Pri-P(ri-1) PSIA
HH:MM:SŞ	Hours	PSIA	Deg F	Lain
21:13:19	59.272	8881.97	,	. 0.66
21:14:46	59.296	8882.11		0.14
21:17:38	59.344		250.02	
21:19:05	59.368	8883.57		1.47
21:21:58	59.416	8884.24		0.66
21:23:24	59.440	8884.71		0.47
21:26:17	59.488	8885.69		<b>0.9</b> 8
21:27:43	59.512	8886.13		0.44
21:30:36	59.560	8887.07		0.95
21:32:02	59.584		250.01	
21:34:55	59.632	8888.29		1.21
21:36:22	59.656	8888.71		0.43
21:39:14	59.704		250.01	
21:40:41	59.728	8889.75		1.04
21:43:34	59.776	8890.55		0.80
21:45:00	59.800	8890.84		0,28
21:47:53	59.848	8891.30	-	0.46
21:49:19	59.872	8891.44		0.14 0.43
21:52:12	59.920	8891.86	250.01	V.45
21:53:38	59.944	8892.05	230.01	0.19
21:56:31	59.992	8892.00		-0.05
21:57:58	60.016 60.064	0032.00	250.00	0.03
22:00:50 22:02:17	60.088	8892.71	250.00	0.71
22:02:17	60.136	8893.23		0.52
22:05:10	60.160	8893.42		0.19
22:00:36	60.208	8893.74		0.32
22:10:55	60.232	8893.94		0.20
22:13:48	60.280	8894.56		0.61
22:15:14	60.304		249.99	
22:18:07	60.352	8895.36		0.80
22:19:34	60.376	8895.64		0.28
22:22:26	60.424		249.99	•
22:23:53	60.448	8896.67		1.02
22:26:46	60.496	8897.58		0.91
22:28:12	60.520	8897.90		0.32
22:31:05	60.568	8898.37		0.47
22:32:31	60.592	8898.66		0.28
22:35:24	60.640	8899.13		0.47
22:36:50	60.664	0000 00	249.99	0.07
22:39:43	60.712	8900.06		0.93
22:41:10	60.736	8900.20	0.0.00	0.14
22:44:02	60.784		249.98	0.71
22:45:29	60.808	8900.91		0.71
22:48:22	60.856	8901.33		0.43
22:49:48	60.880	8901.48		0.14 0.71
22:52:41	60.928	8902.19		0.71 0.57
22:54:07	60.952	8902.75		0.43
22:57:00	61.000	8903.18	740 00	W.43
22:58:26	61.024		249.98	

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Real Time	Delta Time	Pressure	Темр	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
·	24 022	0007 70	•	0.52
23:01:19	61.072	8903.70 8903.56		-0.14
23:02:46	61.096	8303.30	249.98	0.14
23:05:38	61.144	8904.55	243.30	0.99
23:07:05	61.168	8904.33		0.43
23:09:58	61.216 61.240	8905.01		0.03
23:11:24	61.288	8905.72		0.71
23:14:17	61.312	8906.00		0.28
23:15:43 23:18:36	61.360	8906.38		0.38
23:20:02	61.384		249.97	
23:22:55	61.432	8906.85		0.47
23:24:22	61.456	8906.95		0.09
23:27:14	61.504	•	249.95	
23:28:41	61.528	8907.83		0.88
23:31:34	61.576	8908.18		0.35
23:33:00	61.600	8908.27		0.09
23:35:53	61.648	8908.70		0.43
23:37:19	61.672	8908.85		0.16
23:40:12	61.720	8908.71		-0.14
23:41:38	61.744		249.97	· · · · · · · · · · · · · · · · · · ·
23:44:31	61.792	8908.22		-0.49
23:45:58	61.816	8908.51		0.28
23:48:50	61.864		249.97	
23:50:17	61.888	8909.26		0.76
23:53:10	61.936	8909.89	•	0.63
23:54:36	61.960	8909.99		0.09
23:57:29	62.008	8909.33	::	-0.66
23:58:55	62.032	8908.55		-0.77
00:01:48	62.080	8907.89	240 07	-0.66
00:03:14	62.104	0000 53	249.97	0.68
00:06:07	62.152	8908.57		Ø.14
00:07:34	62.176	8908.71	249.98	0.14
00:10:26	62.224	0000 00	243.30	0.38
00:11:53	62.248	8909.09		0.27
00:14:46	62.296	8909.36 8909.52		0.16
00:16:12	62.320 62.368	8909.66		0.14
00:19:05	62.392	8909.75		0.09
00:20:31	62.440	8910.05		0.30
00:23:24 00:24:50	62.464	0310.03	249.98	
00:27:43	62.512	8910.18		0.13
00:27:43	62.536	8910.23		0.05
00:32:02	62.584		249.98	
00:32:02	62.608	8910.37		0.14
00:35:23	62.656	8910.32	·	-0.05
00:38:22	62.680	8910.70		0.38
00:40:41	62.728	8911.27		0.57
00:42:07	62.752	8911.85		0.58
00:45:00	62.800	8912.79		0.95
00:46:26	62.824		249.99	
			•	

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189 Well No.: Anemone # 1A

Real Time	Delta Time	Pressure	Temp	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
00.40.10	C7 077	8913.60	•	0.80
00:49:19	62.872 <b>62.896</b>	8913.83		0.24
00:50:46 00:53:38	62.944	0313.03	249.99	0.2.4
00:55:05	62.968	8913.36	243.33	-0.47
00:57:58	63.016	8913.79		0.43
00:57:30	63.040	8914.15		0.36
01:02:17	63.088	8914.95		0.80
01:03:43	. 63.112	8915.38		0.43
01:06:36	63.160	8916.06		0.68
01:08:02	63.184		249.98	
01:10:55	63.232	8916.37		0.32
01:12:22	63.256	8915.43		-0.95
01:15:14	63.304		249.98	
01:16:41	63.328	8915.90		0.47
01:19:34	63.376	8916.12		0.22
01:21:00	63.400	8916.37		Ø.25
01:23:53	63.448	8916.71		0.33
01:25:19	63.472	8916.88		0.17
01:28:12	63.520	8916.88		0.00
01:29:38	63.544		249.98	0.05
01:32:31	63.592	8917.13		0.25
01:33:58	63.616	8917.27	240.00	0.14
01:36:50	63.664	0017.04	249.498	0.57
01:38:17	63.688	8917.84		0.36
01:41:10	63.736	8918.20 8918.41		0.20
01:42:36	63.760	8917.26		-1.15
01:45:29 01:46:55	63.808 63.832	8917.54		0.28
01:49:48	63.880	8918.35		0.80
01:51:14	63.904	0310.33	249.97	
01:54:07	63.952	8918.96	_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.61
01:55:34	63.976	8918.96		0.00
01:58:26	64.024		249.97	
01:59:53	64.048	8919.34		0.38
02:02:46	64.096	8919.76		0.43
02:04:12	64.120	8919.91		0.14
02:07:05	64.168	8920.19		0.28
02:08:31	64.192	8920.19		0.00
02:11:24	64.240	8920.38		0.19
02:12:50	64.264		249.97	
02:15:43	64.312	8920.71		0.33
02:17:10	64.336	8920.85		0.14
02:20:02	64.384		249.95	0.47
02:21:29	64.408	8921.03		0.17
02:24:22	64.456	8920.90		-0.13
02:25:48	64.480	8920.93		<b>0.0</b> 3
02:28:41	64.528	8921.45		0.52
02:30:07	64.552	8921.74		0.28 0.28
02:33:00	64.600	8922.02	740 07	v.20
02:34:26	64.624		249.97	

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Date : 09/10/89

Real Time	Delta Time	Pressure	Темр	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
	54 555	0022 41	•	0.39
02:37:19	64.672	8922.41 8922.56		0.14
02:38:46	64.696	8922.56	249.97	<b>U.14</b>
02:41:38	64.744	8922.75	243.31	0.19
02:43:05	64.768 64.816	8922.76		0.02
02:45:58	64.840	8922.89		0.13
02:47:24	64.888	8923.36		0.47
02:50:17	64.912	8923.45		0.09
02:51:43	64.960	8923.69		0.24
02:54:36		0323.03	249.97	
02:56:02	64.984	8923.79	243.31	0.09
02:58:55	65.032	8923.60		-0.19
03:00:22	65.056	0252.04	249.97	0.10
03:03:14	65.104	8923.41	243.31	-0.19
03:04:41	65.128	8923.41		0.00
03:07:34	65.176	8923.74		0.33
03:09:00	65.200	8924.02		0.28
03:11:53	65.248 65.272	8924.35		0.33
03:13:19	65.320	8924.59		0.24
03:16:12	65.344	0324.33	249.97	<b></b>
03:17:38	65.392	8925.06	243.31	0.47
03:20:31	65.416	8925.30		0.24
03:21:58	65.464	0323.30	249.97	
03:24:50	65.488	8925.63	243131	0.33
03:26:17	65.536	8925.87		0.24
03:29:10	65.560	8925.96	1.4	0.09
03:30:36	65.608	8926.15	:	0.19
03:33:29	65.632	8926.39	, <b>Ω4</b>	0.24
03:34:55	65.680	8926.53		0.14
03:37:48	65.704	0320.33	249.97	
03:39:14	65.752	8926.91	240101	0.38
03:42:07	65.776	8927.15		0.24
03:43:34 03:46:26	65.824	0321.13	249.97	
03:40:26	65.848	8927.29	2.000	0.14
03:47:53	65.896	8927.48		0.19
03:50:46	65.920	8927.52		0.05
03:52:12	65.968	8927.29		-0.24
03:56:31	65.992	8927.29		0.00
03:59:24	66.040	8927.54		0.25
04:00:50	66.064		249.97	
04:00:30	66.112	8928.19		0.65
04:05:10	66.136	8928.33		0.14
04:05:10 04:08:02	66.184	0.020.00	249.98	
04:08:02	66.208	8928.67	2.0.00	0.35
	66.256	8928.80		0.13
04:12:22	66.280	8928.90		. 0.09
04:13:48	66.328	8929.27		0.38
04:16:41	66.352	8929.37		0.09
04:18:07	66.400	8929.98		0.62
04:21:00 04:22:26	66.424	0020.00	249.97	
44.22.20	00.464		_,_,_,	

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

	,.			
Real Time	Delta Tim	e Pressure	Temp	Pn-P( n-1 )
HH:MM:SS	Hours	PSIA	Deg F	PSIA
	•		,	•
04:25:19	66.472	8930.84		0.85
04:26:46	66.496	8930.88		0.05
04:29:38	66.544		249.98	
04:31:05	66.568	8930.05		-0.84
04:33:58	66.616	8929.89		-0.16
04:35:24	66.640	8930.08		0.19
04:38:17	66.688	8930.36		0.28
04:39:43	. 66.712	8930.71		0.35
04:42:36	66.760	8931.07		0.36
04:44:02	66.784		249.97	
04:46:55	66.832	8931.40		0.33
04:48:22	66.856	8931.50		0.09
04:51:14	66.904		-249.98	
04:52:41	66.928	8931.56		0.06
04:55:34	66.976	8931.59		0.03
04:57:00	67.000	8931.55	-	-0.05
04:59:53	67.048	8931.75		0.20
05:01:19	67.072	8931.89		0.14
05:04:12	67.120	8932.18		0.28
05:05:38	67.144		249.98	
05:08:31	67.192	8932.26		0.08
05:09:58	67.216	8932.35		0.09
05:12:50	67.264		249.97	:
05:14:17	67.288	8932.63		0.28
05:17:10	67.336	8932.74	•	0.11
05:18:36	67.360	8932.60		-0.14
05:21:29	67.408	8932.55		-0.05
05:22:55	67.432	8932.59		0.03
05:25:48	67.480	8932.74	•	0.16
05:27:14	67.504		249.98	,
05:30:07	67.552	8933.17		0.43
05:31:34	67.576	8933.22		0.05
05:34:26	67.624		249.98	•
05:35:53	67.648	8933.36		0.14
05:38:46	67.696	8935.16		1.80
05:40:12	67.720	8935.03		-0.13
05:43:05	67.768	8937.16		2.13
05:43:20	Pressurise an	nnulus, open PO	T	•
05:44:31	67.792	7924.35		-1012.82
05:47:24	67.840	8109.15		184.80
05:48:30	Open well at	choke manifold		Gauge tank
05:48:50	67.864		250.50	
05:51:43	67.912	6270.75		-1838.40
05:53:10	67.936	6272.03		1.27
05:56:02	67.984		250.50	
05:57:29	68.008	6274.96		2.93
06:00:22	68.056	6275.14		0.18
06:01:48	68.080	6274.91		-0.23
06:04:41	68.128	6274.68		- <b>0.23</b>
06:06:07	68.152	6274.77		0.09

Location: Zapata Arctic
Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

	i			
Real Time	Delta Time	Pressure	Темр	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
•			,	
06:09:00	68.200	6273.97		-0.80
06:10:26	68.224		250.85	4 07
06:13:19	68.272	6272.74	•	-1.23
06:14:46	68.296	6272.56	054 04	-0.18
06:17:38	68.344		251.04	
06:19:05	68.368	6269.57		-2.99
06:21:58	68.416	6268.15		-1.42
06:23:24	68.440	6267.49		-0.67
06:26:17	68.488	6266.16		-1.33
06:27:43	68.512	6265.44		-0.71
06:30:36	68.560	6263.56		-1.89
06:32:02	68.584	-	251.34	
06:34:55	68.632	6279.28		15.72
06:36:22	68.656	6285.09		5.80
06:39:14	68.704		251.52	
06:40:41	68.728	6298.21		13.13
06:43:34	68.776	6298.70		0.49
06:45:00	68.800	6299.03		0.33
06:47:53	68.848	6298.78		-0.25
06:49:19	68.872	6298.84		0.06
06:52:12	68.920	6301.24		2.39
06:53:38	68.944		251.81	
06:56:31	68.992	6302.22		0.98
06:57:58	69.016	6301.95		-0.26
07:00:50	69.064	·	251.96	
07:02:17	69.088	6303.25		1.30
07:05:10	69.136	6303.05	::	-0.20
07:06:36	69.160	6303.33		0.28
07:09:29	69.208	6303.07		-0.26
07:10:55	69.232	6302.38		-0.69
07:13:48	69.280	6302.89		0.50
07:15:14	69.304		252.21	2.40
07:18:07	69.352	6303.07		0.18
07:19:34	69.376	6302.41		-0.66
07:22:26	69.424		252.34	0.17
07:23:53	69.448	6302.58		0.17
07:26:46	69.496	6302.49		-0.08
07:28:12	69.520	6302.78	•	0.28
07:31:05	69.568	6302.19		-0.58
07:32:31	69.592	6302.61		0.41 -0.03
07:35:24	69.640 °	6302.58		-0.03
07:36:50	69.664		252.59	
07:39:43	69.712	6301.63		-0.95
07:41:10	69.736	6300.71		-0.92
07:44:02	69.784		252.70	
07:45:29	69.808	6298.89		-1.83
07:48:22	69.856	6297.25		-1.64
07:49:48	69.880	6297.07		-0.17
07:52:41	69.928	6293.82		-3.25
07:54:07	69.952	6292.79		-1.04

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

	,			
Real Time	Delta Time	Pressure	Temp	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
•		2222	•	-2.42
07:57:00	70.000	6290.37	252.91	-2.42
07:58:26	70.024	6287.67	737.31	-2.70
08:01:19	70.072	6286.96		-0.70
08:02:46	70.096 70.144	6200.30	253.01	<b>31.</b> -
08:05:38 08:07:05	70.168	6285.84		-1.12
08:07:03 08:09:58	70.216	6284.98		-0.86
08:11:24	70.240	6285.02		0.05
08:11:24	70.288	6284.06		-0.96
08:15:43	70.312	6284.30		0.24
08:18:36	70.360	6284.15		-0.14
08:20:02	70.384		253.19	
08:22:55	70.432	6283.86	•	-0.29
08:24:22	70.456	6283.95		0.09
08:27:14	70.504		253.26	
08:28:41	70.528	6284.34	•	0.39
08:31:34	70.576	6284.17		0.17
08:33:00	70.600	6284.78		0.62
08:35:53	70.648	6284.77		-0.01
08:37:19	70.672	6284.70		-0.07
08:40:12	70.720	6284.43		-0.28
08:41:38	70.744		253.45	2 22
08:44:31	70.792	6284.44	والمقيم المعارض	0.02
08:45:58	70.816	6284.44	aca ca	0.00
08:48:50	70.864		253.52	a 20
08:50:17	70.888	6284.73		0.28 -0.32
08:53:10	70.936	6284.41		-0.32 0.15
08:54:36	70.960	6284.55		0.22
08:57:29	71.008	6284.78 6284.70		-0.07
08:58:55	71.032	6284.80		0.09
09:01:48	71.080	0204.00	253.65	0.00
09:03:14	71.104 71.152	6285.02	233.03	0.22
09:06:07	71.152	6285.02		0.00
09:07:34 09:10:26	71.176	0203.02	253.71	
09:10:26	71.248	6285.37		0.35
09:14:46	71.296	6285.01		-0.36
09:16:12	71.320	6285.24		0.24
09:19:05	71.368	6285.14		-0.10
09:20:31	71.392	6285.42	,	0.28
09:23:24	71.440	6285.63		0.21
09:24:50	71.464		253.82	
09:27:43	71.512	6285.53		-0.10
09:29:10	71.536	6285.49		-0.04
09:32:02	71.584		253.87	
09:33:29	71.608	6285.15		-0.34
09:36:22	71.656	6285.50		0.35
09:37:48	71.680	6285.56		0.06
09:40:41	71.728	6285.32		-0.24
09:42:07	71.752	6285.55		0.24

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Real Time	Delta Time	Pressure	Temp	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
		,		
09:45:00	71.800	6285.41	•	-0.14
09:46:26	71.824		253.97	
09:49:19	71.872	6285.71		0.30
09:50:46	71.896	6285.40		-0.31
09:53:38	71.944		254.03	a 70
09:55:05	71.968	6285.68		0.28 -0.03
09:57:58	72.016	6285.65		-0.03 -0.29
09:59:24	72.040	6285.36		0.06
10:02:17	72.088	6285.42		0.12
10:03:43	72.112	6285.54		0.50
10:06:36	72.160	6286.04	254.13	Ø.50
10:08:02	72.184	C20C 17	254.15	0.09
10:10:55	72.232	6286.13 6285.82	•	-0.31
10:12:22	72.256	0203.02	254.17	0.51
10:15:14	72.304	6286.31	254.17	0.49
10:16:41	72.328 72.376	6286.13		-0.18
10:19:34	72.400	6286.03		-0.10
10:21:00 10:23:53	72.448	6286.09		0.06
10:25:19	72.472	6286.27		0.18
10:28:12	72.520	6285.86		-0.41
10:29:38	72.544	020210	254.24	
10:32:31	72.592	6286.27		0.41
10:32:58	72.616	6286.23		-0.04
10:36:50	72.664	,	254.27	
10:38:17	72.688	6286.35		0.12
10:41:10	72.736	6286.33	•	-0.01
10:42:36	72.760	6286.00	ूर्यः	-0.34
10:45:29	72.808	6285.24		-0.76
10:46:55	72.832	6285.21		-0.03
10:49:48	72.880	6285.31		0.10
10:51:14	72.904		254.36	
10:54:07	72.952	6285.30		-0.01
10:55:34	72.976	6285.34		0.04
10:58:26	73.024		254.38	
10:59:53	73.048	6285.23		-0.12
11:02:46	73.096	6284.80		-0.42
11:04:12	73.120	6285.14		0.34
11:07:05	73.168	6285.09		-0.06
11:08:31	73.192	6285.31		0.22
11:11:24	73.240	6285.31		0.00
11:12:50	73.264		254.45	
11:15:43	73.312	6285.47		0.16
11:17:10	73.336	6285.43	054 15	-0.04
11:20:02	73.384		254.48	A 00
11:21:29	73.408	6285.48		0.06
11:24:22	73.456	6285.70		0.22
11:25:48	73.480	6285.76		0.06 -0.17
11:28:41	73.528	6285.59	•	
11:30:07	73.552	6285.52		-0.07

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

	Dulla Tama	0	Темр	Pn-P(n-1)
Real Time HH:MM:SS	Delta Time Hours	Pressure PSIA	Deg F	PSIA
111111111111111111111111111111111111111	11001 5	. • • • • • • • • • • • • • • • • • • •		•
11:33:00	73.600	6285.58		0.06
11:34:26	73.624		254.56	
11:37:19	73.672	6285.81		0.24
11:38:46	73.696	6285.77	254 57	-0.04
11:41:38	73.744	COOC A1	254.57	0.24
11:43:05	73.768	6286.01		-0.03
11:45:58	73.816	6285.98 6285.98		0.00
11:47:24	73.840	6285.99		0.02
11:50:17	73.888	6286.02		0.03
11:51:43	73.912 73.960	6286.08		0.06
11:54:35	73.984	0200.00	254.64	0.00
11:56:02 11:58:55	74.032	6286.04		-0.04
12:00:22	74.052	6286.04		0.00
12:03:14	74.104	0200.04	254.65	
12:04:41	74.128	6286.25	202	0.21
12:07:34	74.176	6286.22		-0.03
12:09:00	74.200	6286.19		-0.03
12:11:53	74.248	6286.28		0.09
12:13:19	74.272	6286.43		0.15
12:16:12	74.320	6286.41		-0.01
12:17:38	74.344		254.70	•
12:20:31	74.392	6286.19		-0.22
12:21:58	74.416	6286.28		0.09
12:24:50	74.464		254.73	
12:26:17	74.488	6286.14		-0.14
12:29:10	74.536	6286.37		0.24
12:30:36	74.560	6286.48		0.10
12:33:29	74.608	6286.49	•	0.02
12:34:55	74.632	6286.36		-0.13
12:37:48	74.680	6286.83		0.47
12:39:14	74.704		254.79	0.44
12:42:07	74.752	6287.27		0.44
12:43:34	74.776	6287.18	054.00	-0.09
12:46:26	74.824		254.80	Ø.19
12:47:53	74.848	6287.37		-0.01
12:50:46	74.896	6287.36		-0.01 0.13
12:52:12	74.920	6287.49		0.03
12:55:05	74.968	6287.52 6287.45		-0.07
12:56:31	74.992	6287.44		-0.01
12:59:24	75.040	0401.44	354 05	0.01
13:00:50	75.064	C007 77	254.85	-0.12
13:03:43	75.112	6287.32		-0.04
13:05:10	75.136	6287.28	254.86	<b>U.U</b> T
13:08:02	75.184	C207 A1	234.00°	-0.26
13:09:29	75.208	6287.01 6287.10		0.09
13:12:22	75.256 75.280	6287.07		-0.03
13:13:48	75.328	6287.09		0.02
13:16:41 13:18:07	75.352 75.352	6287.19		0.10
13.10.07	13.334	0201110		• *

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189 Well No.: Anemone # 1A

	<i>;</i>			0.04.11
Real Time	Delta Time	Pressure	Темр	Pn-P(n-1) PSIA
HH:MM:SS	Hours	PSIA	Deg F	F31H
13:21:00	75.400	6287.35	•	0.16
13:21:00	75.424	0201.55	254.89	
13:25:19	75.472	6287.24		-0.12
13:26:46	75.496	6287.19		-0.04
13:29:38	75.544		254.91	•
13:31:05	75.568	6287.12		-0.07
13:33:58	75.616	6287.18		0.06
13:35:24	75.640	6287.12		-0.06
13:38:17	75.688	6287.14		0.02
13:39:43	75.712	6287.06		-0.07
13:42:36	75.760	6287.20		0.13
13:44:02	75.784		254.94	
13:46:55	75.832	6287.34		0.15
13:48:22	75.856	6287.26		-0.09
13:51:14	75.904		254.98	
13:52:41	75.928	6287.08		-0.17
13:55:34	75.976	6286.75		-0.34
13:57:00	76.000	6286.72		-0.03
13:59:53	76.048	6286.98		0.26
14:01:19	76.072	6286.97	•	-0.01
14:04:12	76.120	6286.66		-0.31
14:05:38	76.144		255.05	
14:08:31	76.192	6286.71 🥦		0.05
14:09:58	76.216	6286.71		0.00
14:12:50	76.264		255.06	a 22
14:14:17	76.288	6286.93	•	0.22
14:17:10	76.336	6286.88	₹.	-0.04
14:18:36	76.360	6286.93		0.04
14:21:29	76.408	6287.08		0.15
14:22:55	76.432	6287.02		-0.06 -0.04
14:25:48	76.480	6286.98	מרכ מת	-0.04
14:27:14	76.504	C30C 00	255.09	0.00
14:30:07	76.552	6286.98		0.00
14:31:34	76.576	6286.98	255.09	0.00
14:34:26	76.624	6286.98	255.05	0.00
14:35:53	76.648 76.696	6287.20		0.22
14:38:46	76.720	6287.24		0.04
14:40:12	76.768	6287.46		0.22
14:43:05	76.792	6287.42		-0.04
14:44:31	No.	6287.68		0.26
14:47:24	76.840	6207.00	255.09	0.20
14:48:50	76.864 76.912	6287.81	200.00	0.13
14:51:43		6287.72		-0.09
14:53:10	76.936	0401.14	255.09	0.00
14:56:02	76.984	6287.72	200.00	0.00
14:57:29	77.008	6288.18		0.46
15:00:22	77.056	6288.27		0.09
15:01:48	77.080 77.128	6288.31		0.04
15:04:41	77.128 77.152	6288.44		0.13
15:06:07	(1.154	0200.77		

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Real Time	Delta Time	Pressure	Темр	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
		5300 53		0.18
15:09:00	77.200	6288.62	255.10	v.10
15:10:26	77.224	C200 71	233.10	0.09
15:13:19	77.272	6288.71 6288.84		0.13
15:14:46	77.296 77.344	0200.04	255.12	
15:17:38 15:19:05	77.368	6289.20	200	0.37
15:21:58	77.416	6289.56		0.35
15:23:24	77.440	6289.80		0.25
15:26:17	77.488	6289.91		0.10
15:27:43	77.512	6290.26		0.35
15:30:36	77.560	6290.39		0.13
15:32:02	77.584		255.12	
15:34:55	77.632	6290.93	•	0.54
15:36:22	77.656	6291.15		0.22
15:39:14	77.704		255.13	
15:40:41	77.728	6291.42		0.26
15:43:34	77.776	6291.29		-0.13
15:45:00	77.800	6291.42		0.13
15:47:53	77.848	6291.11		-0.31
15:49:19	77.872	6291.20		0.09
15:52:12	77.920	6291.29		0.09
15:53:38	77.944		255.13	
15:56:31	77.992	6290.93	The state of the s	-0.35
15:57:58	78.016	6291.37	acr 17	0.44
16:00:50	78.064		255.13	0.40
16:02:17	78.088	6291.77		0.40 0.04
16:05:10	78.136	6291.81		0.04
16:06:36	78.160	6291,86	•	0.18
16:09:29	78.208	6292.03		-0.09
16:10:55	78.232	6291.95 6292.12		Ø.18
16:13:48	78.280	6232.12	255.13	0.10
16:15:14	78.304	6292.25	233.10	0.13
16:18:07	78.352	6292.25		0.00
16:19:34	78.376 78.424	0232.23	255.13	
16:22:26 16:23:53	78.448	6292.74		0.48
16:26:46	78.496	6292.84		0.10
16:28:12	78.520	6292.84		0.00
16:31:05	78.568	6292.52		-0.32
16:32:31	78.592	6292.71		0.19
16:35:24	78.640	6292.78		0.07
16:36:50	78.664	•	255.14	
16:39:43	78.712	6292.86		0.08
16:41:10	78.736	6292.64		-0.22
16:44:02	78.784	-	255.16	
16:45:29	78.808	6292.78		0.15
16:48:22	78.856	6293.36		0.57
16:49:48	78.880	6293.56		0.21
16:52:41	78.928	6293.69		0.13
16:54:07	78.952	6293.72		0.03
, <del>-</del> · <del>-</del> ·				

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189 Well No.: Anemone # 1A

Real Time	, Delta Time	Pressure	Темр	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
		6293.99	•	0.26
16:57:00	79.000	6233.33	255.19	0.20
16:58:26	79.024	6294.41	200.10	0.43
17:01:19	79.072 79.096	6294.41		0.00
17:02:46	79.036	0234.41	255.21	
17:05:38	79.168	6294.69		0.28
17:07:05	79.216	6294.81		0.12
17:09:58	79.240	6294.86		0.04
17:11:24	79.288	6294.61		-0.25
17:14:17 17:15:43	79.312	6294.78		0.18
17:18:36	79.360	6294.49		-0.30
17:20:02	-79.384	0201110	255.21	
17:22:55	79.432	6294.53		0.04
17:24:22	79.456	6294.80		0.26
17:27:14	79.504		255.24	
17:28:41	79.528	6295.00		0.21
17:31:34	79.576	6295.74		0.73
17:33:00	79.600	6295.96		0.22
17:35:53	79.648	6295.84		-0.12
17:37:19	79.672	6296.02		0.18
17:40:12	79.720	6296.23		0.21
17:41:38	79.744		255.35	
17:44:31	79.792	6296.45		0.23
17:45:58	79.816	6296.41		-0.04
17:48:50	79.864	,	255.41	
17:50:17	79.888	6296.72		0.31
17:53:10	79.936	6296.69	7,4	-0.03
17:54:36	79.960	6296.77	•	0.08
17:57:29	80.008	6296.80		0.03
17:58:55	80.032	6296.84		0.05
18:01:48	80.080	6296.95		0.10
18:03:14	80.104		255.54	
18:06:07	80.152	6297.21		0.27
18:07:34	80.176	6297.30		0.09
18:10:26	80.224		255.61	
18:11:53	80.248	6297.29		-0.01
18:14:46	80.296	6297.54		0.25
18:16:12	80.320	6297.65		0.10
18:19:05	80.368	6297.78		0.13
18:20:31	80.392	6297.97		0.19
18:23:24	80.440	6298.08		0.10
18:24:50	80.464		255.69	0.40
18:27:43	80.512	6298.25		0.18
18:29:10	80.536	6298.21		-0.04
18:32:02	80.584		255.73	a ac
18:33:29	80.608	6298.26		0.05
18:36:22	80.656	6298.01		-0.25
18:37:48	80.680	6297.97		-0.04
18:40:41	80.728	6297.98		0.02
18:42:07	80.752	6298.10		0.12

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

	·			4
Real Time	Delta Time	Pressure	Темр	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
•		6000 75		0.25
18:45:00	80.800	6298.35	255.80	0.23
18:46:26	80.824	C200 02	255.00	0.47
18:49:19	80.872	6298.82		0.13
18:50:46	80.896	6298.95	255.86	W.13
18:53:38	80.944	6299.62	255.00	Ø.66
18:55:05	80.968	6299.90		0.28
18:57:58	81.016	6300.15		0.25
18:59:24	. 81.040	6300.30		0.15
19:02:17	81.088	6300.43		0.13
19:03:43	81.112	6300.66		0.24
19:06:36	81.160	00.00	255.93	0.24
19:08:02	81.184	6300.81	233.33	0.15
19:10:55	81.232	6300.85		0.04
19:12:22	81.256	60.00.00	255.96	Q. U.
19:15:14	81.304	6301.24	233.30	0.38
19:16:41	81.328	6301.63		0.40
19:19:34	81.376	6301.84		0.21
19:21:00	81.400	6302.05		0.20
19:23:53	81.448	6302.25	,	0.21
19:25:19	81.472	6302.28		0.03
19:28:12	81.520	0302.20	256.03	
19:29:38	81.544	6302.86	230.03	0.57
19:32:31	81.592	6303.08		0.22
19:33:58	81.616	6303.06	256.05	0.22
19:36:50	81.664	6303.17	230.03	0.09
19:38:17	81.688	6303.58		0.41
19:41:10	81.736	6303,65		0.08
19:42:36	81.760	6303.52		-0.13
19:45:29	81.808	6303.81	• •	0.29
19:46:55	81.832 81.880	6303.99		0.18
19:49:48	81.904	0262.22	256.10	5,,,5
19:51:14	81.952	6304.28	230.10	0.30
19:54:07	81.976	6304.46		0.18
19:55:34 19:58:26	82.024	0504.40	256.11	
19:59:53	82.048	6304.78	250111	0.32
20:02:46	82.096	6305.15		0.37
20:04:12	82.120	6305.26		0.10
20:07:05	82.168	6305.64		0.38
20:07:05	82.192	6305.69		0.06
20:11:24	82.240	6305.96		0.27
20:12:50	82.264		256.16	
20:15:43	82.312	6306.31		0.35
20:17:10	82.336	6306.31		0.00
20:20:02	82.384	0000101	256.20	
20:20:02	82.408	6306.45		0.14
20:21:25	82.456	6306.62		0.18
20:25:48	82.480	6306.92		0.30
20:25:48	82.528	6307.14		0.22
20:30:07	82.552	6307.38		0.24
20.30.01	UL.JJL .	22000		

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

		,	D	Темр	Pn-P( n-1 )
	Real Time HH:MM:SS	<b>Delta Time</b> Hours	<b>Pressure</b> PSIA	Deg F	PSIA
•	пп-1111-33	rioui s	,		
	20:33:00	82.600	6307.73		0.35
	20:34:26	82.524		256.23	2.24
	20:37:19	82.672	6307.96		0.24
	20:38:46	82.696	6307.87	255 27	-0.09
	20:41:38	82.744		256.27	0.52
	20:43:05	82.768	6308.39		0.00
	20:45:58	82.816	6308.39		0.06
	20:47:24	82.840	6308.45		0.00
	20:50:17	82.888	6308.64		0.02
	20:51:43	82.912	6308.66		0.21
	20:54:36	82.960	6308.86	256.32	0.21
	20:56:02	82.984	C700 2C	250.52	0.40
	20:58:55	83.032	6309.26 6309.17		-0.09
	21:00:22	83.056	11.5068	256.32	0.00
	21:03:14	83.104 83.128	6309.42	200.02	0.25
	21:04:41	83.176	6309.66	•	0.24
	21:07:34 21:09:00	83.200	6309.82		0.16
	21:11:53	83.248	6309.89		0.08
	21:17:55	83.272	6310.02	-	0.13
	21:15:13	83.320	6310.39		0.37
	21:17:38	83.344		256.35	
	21:20:31	83.392	6310.63	ب ند مسعد	0.24
	21:21:58	83.416	6310.85	,	0.22
	21:24:50	83.464		256.35	
	21:26:17	83.488	6311.23		0.38
	21:29:10	83.536	6311.59	: D:	0.37
	21:30:36	83.560	6311.86		0.26
	21:33:29	83.608	6312.08		0.22
	21:34:55	83.632	6312.25		0.18
	21:37:48	83.680	6312.34		0.09
	21:39:14	83.704		256.37	
	21:42:07	83.752	6313.15	·	0.81
	21:43:34	83.776	6313.15	*	0.00
	21:46:26	83.824		256.39	
	21:47:53	83.848	6313.74		Ø.59
	21:50:46	83.896	6314.12		0.38
	21:52:12	83.920	6314.13		0.02
	21:55:05	83.968	6314.28		0.15
	21:56:31	83.992	6314.50		0.22 0.28
	21:59:24	84.040	6314.78	256.41	<b>v.</b> 20
	22:00:50	84.064		230.41	0.54
	22:03:43	84.112	6315.32		0.00
	22:05:10	84.136	6315.32	255 47	ช.ชช
	22:08:02	84.184	C71F 54	256.43	0.41
	22:09:29	84.208	6315.74		0.37
	22:12:22	84.256	6316.10		Ø.28
	22:13:48	84.280	6316.38 6316.65		0.26
	22:16:41	84.328	6316.69		0.04
	22:18:07	84.352	001000		• • •

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Real Time HH:MM:SŞ	Delta Time Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
22:21:00	84.400	6317.10	•	0.41
22:22:26	84.424	0511110	256.46	
22:25:19	84.472	6317.72		0.62
22:26:46	84.496	6317.89		0.18
22:29:38	84.544		256.47	
22:31:05	84.568	6317.89		0.00
22:33:58	84.616	6318.29		0.40
22:35:24	84.640	6318.39		0.10
22:38:17	84.688	6318.55		0.16
22:39:43	84.712	6318.73		0.18
22:42:36	84.760	6318.82		0.09
22:44:02	84.784		256.47	.*
22:46:55	84.832	6319.05	•	0.24
22:48:22	84.856	6319.19		0.13
22:51:14	84.904		256.48	
22:52:41	84.928	6319.41	•	0.22
22:55:34	84.976	6319.55	-	0.15
22:57:00	85.000	6319.55		0.00
22:59:53	85.048	6319.90		0.35
23:01:19	85.072	6319.83		-0.07
23:04:12	85.120	6320.10		0.26
23:05:38	85.144		256.49	a 20
23:08:31	85.192	6320.39	لمعينتم	0.29
23:09:58	85.216	6320.52	255 54	0.13
23:12:50	85.264		256.50	0.24
23:14:17	85.288	6320.76		0.24
23:17:10	85.336	6321.08		-0.03
23:18:36	85.360	6321.05		0.26
23:21:29	85.408	6321.31 6321.33	• •	0.02
23:22:55	85.432 85.480	6321.74		0.41
23:25:48 23:27:14	85.504	0321.74	256.51	
23:30:07	85.552	6322.00	230.01	0.26
23:31:34	85.576	6322.14		0.13
23:34:26	85.624	0522.14	256.51	23.2
23:35:53	85.648	6322.44		0.31
23:38:46	85.696	6322.55		0.10
23:40:12	85.720	6322.53		-0.02
23:43:05	85.768	6323.03		0.50
23:44:31	85.792	6323.14		0.10
23:47:24	85.840	6323.30		0.16
23:48:50	85.864	9	256.53	
23:51:43	85.912	6323.58		0.28
23:53:10	85.936	6323.62		0.04
23:56:02	85.984		256.54	
23:57:29	86.008	6323.75		0.13
00:00:22	86.056	6323.90		0.15
00:01:48	86.080	6323.99		0.09
00:04:41	86.128	6324.13		0.14
00:06:07	86.152	6324.15		0.02

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

,	,	_	<b>*</b>	Pn-P(n-1)
Real Time	Delta Time	Pressure	Temp	PSIA
HH:MM:SS	Hours	PSIA	Deg F	L21U
	05 300	6324.32	•	0.18
00:09:00	86.200 86.224	0524.52	256.55	
00:10:26 00:13:19	86.272	6324.57	200.00	0.25
00:14:46	86.296	6324.66		0.09
00:17:38	86.344	00200	256.55	
00:17:35	86.368	6325.00		0.34
00:13:03	86.416	6324.78		-0.22
00:21:30	85.440	6324.40		-0.38
00:25:24	86.488	6324.53		0.13
00:27:43	86.512	6324.49		-0.04
00:30:36	86.560	6324.66		0.18
00:32:02	86.584		256.57	
00:34:55	86.632	6325.12		0.46
00:36:22	86.656	6325.16		0.04
00:39:14	86.704		256.57	
00:40:41	86.728	6325.34		0.18
00:43:34	86.776	6325.51		0.13
00:45:00	86.800	6325.60		0.09
00:47:53	86.848	6325.78		0.18
00:49:19	86.872	6325.91		0.13
00:52:12	86.920	6326.00		0.09
00:53:38	86.944		256.58	
00:56:31	86.992	6326.19	»	0.19
00:57:58	87.016	6326.28	•	0.09
01:00:50	87.064		256.57	
01:02:17	87.088	6326.39		0.12
01:05:10	87.136	6326.61	ī.	0.22
01:06:36	87.160	6326.64		0.03
01:09:29	87.208	6326.83		0.19
01:10:55	87.232	6326.88		0.04
01:13:48	87.280	6326.92		0.04
01:15:14	87.304		256.58	
01:18:07	87.352	6327.33		0.41
01:19:34	87.376	6327.38		0.04
01:22:26	87.424		256.58	
01:23:53	87.448	6327.51		0.13
01:26:46	87.496	6327.75		0.24
01:28:12	87.520	6327.83		0.09
01:31:05	87.568	6327.85		0.02
01:32:31	87.592	6327.94		0.09
01:35:24	87.640	6328.13		0.19
01:36:50	87.664		256.61	
01:39:43	87.712	6328.31		0.18
01:41:10	87.736	6328.35		0.04
01:44:02	87.784		256.62	
01:45:29	87.808	6328.53		0.18
01:48:22	87.856	6328.48		-0.04
01:49:48	87.880	6328.70		0.22
01:52:41	87.928	6328.83		0.13
01:54:07	87.952	6328.79		-0.04
	•			

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189 Well No.: Anemone # 1A

	,			
Real Time	Delta Time	Pressure	Temp	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA `
•		6700 22	•	-0.07
01:57:00	88.000	6328.72	256.63	-0.07
01:58:26	88.024	C720 70	250.05	0.67
02:01:19	88.072	6329.39 6329.52		0.13
02:02:46	88.096 88.144	0323.32	256.61	2112
02:05:38	88.168	6329.70	20012	0.18
02:07:05 02:09:58	88.216	6329.89		0.19
02:11:24	88.240	6329.99		0.10
02:14:17	88.288	6330.21		0.22
02:15:43	88.312	6330.21		0.00
02:18:36	88.360	6330.26		0.04
02:70:30	88.384		256.63	
02:22:55	88.432	6330.52	•	0.26
02:24:22	88.456	6330.57		0.04
02:27:14	88.504		256.64	
02:28:41	88.528	6330.76		0.19
02:31:34	88.576	6330.87		0.12
02:33:00	88.600	6330.98		0.10
02:35:53	88.648	6331.01		0.03
02:37:19	88.672	6331.23		0.22
02:40:12	88.720	6331.31		0.09
02:41:38	88.744		256.63	
02:44:31	88.792	6331.36		0.04
02:45:58	88.816	6331.53	•	0.18
02:48:50	88.864		256.63	
02:50:17	88.88	6331.84		0.31
02:53:10	88.936	6331.99		0.15
02:54:36	88.960	6332.03		0.04
02:57:29	89.008	6332.11	• •	0.07
02:58:55	89.032	6332.12		0.02 0.18
03:01:48	89.080	6332.30	255 55	W.18
03:03:14	89.104	0777 40	256.65	0.10
03:06:07	89.152	6332.40		0.04
03:07:34	89.176	6332.44	מכני ניב	0.04
03:10:26	89.224	C777 00	256.65	-0.44
03:11:53	89.248	6332.00 6332.66		0.66
03:14:46	89.296	6332.75		0.09
03:16:12	89.320	6333.15		0.40
03:19:05	89.368	6333.10		-0.04
03:20:31	89.392	6333.38		0.28
03:23:24	89.440	6333.30	256.67	0.20
03:24:50	89.464	C777 72	230.01	0.34
03:27:43	89.512	6333.72 6333.63		-0.09
03:29:10	89.536	9999.00	256.67	
03:32:02	89.584	6333.96	200.01	0.32
03:33:29	89.608 89.656	6334.00		0.04
03:36:22	89.680	6334.00	•	0.00
03:37:48	89.728	6334.28		0.28 \
03:40:41 03:42:07	89.752	6334.46		0.18
47.47.6	00.134			

Exal Reservoir Services Ltd.

Location: Zapata Arctic Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Real Time HH:MM:SS	Delta Time Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
03:45:00	89.800	6334.40	•	-0.06
03:45:00	89.824		256.68	
03:49:19	89.872	6334.59		0.19
03:43:15	89.896	6334.10		-0.48
03:53:38	89.944		256.68	
03:55:05	89.968	6334.32		0.22
03:57:58	90.016	6334.08		-0.25
03:59:24	90.040	6333.37		-0.70
04:02:17	90.088	6334.03		0.66
04:03:43	90.112	6334.54		0.51
04:06:36	90.160	6335.22		0.68
04:08:02	90.184		256.69	
04:10:55	90.232	6335.31		0.09
04:12:22	90.256	6335.26		-0.04
04:15:14	90.304		256.70	
04:16:41	90.328	6335.63		0.37
04:19:34	90.376	6335.68		0.04
04:21:00	90.400	6335.68		0.00
04:23:53	90.448	6335.85		0.18
04:25:19	90.472	6335.88		0.03
04:28:12	90.520	6335.85		-0.03
04:29:38	90.544		256.70	0.40
04:32:31	90.592	6336.03		0.18
04:33:58	90.616	6335.94		-0.09
04:36:50	90.664		256.68	0.14
04:38:17	90.688	6336.09		0.14
04:41:10	90.736	6336.35	F.#	0.26
04:42:36	90.760	6336.44		0.09
04:45:29	90.808	6336.53		0.09
04:46:55	90.832	6336.45		-0.08 0.25
04:49:48	90.880	6336.70	255 54	W.25
04:51:14	90.904	C77C 07	256.64	0.12
04:54:07	90.952	6336.82		0.09
04:55:34	90.976	6336.91	256.69	
04:58:26	91.024	6337.03	250.03	0.12
04:59:53 05:02:46	91.048 91.096	6337.04		0.02
05:04:12	91.120	6337.17		0.13
	91.168	6337.35		0.18
05:07:05		6337.48		0.13
05:08:31	91.192 91.240	6337.66		0.18
05:11:24		0337.00	256.70	0.10
05:12:50	91.264 91.312	6336.97	230.70	-0.69
05:15:43	91.336	6336.84		-0.13
05:17:10	91.384	6550.04	256.71	00
05:20:02	91.408	6337.98	£40.11	1.14
05:21:29	91.456	6337.98		0.00
05:24:22	91.480	6337.67		-0.31
05:25:48	91.528	6337.54		-0.13
05:28:41	91.552	6337.58		0.04
05:30:07	31.334	0001.00		,

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189 \*

Well No.: Anemone # 1A

	;			
Real Time	Delta Time	Pressure	Темр	Pn-P(n-1)
HH:MM:S\$	Hours	FSIA	Deg F	PSIA
	01 600	6337.58	•	- 0.00
05:33:00	91.600 91.624	9337.30	256.72	0.00
05:34:26	91.672	6337.89	2.50 . 12	0.31
05:37:19	91.696	6337.98		0.09
05:38:46 05:41:38	91.744	0557.50	256.72	
05:41:36 05:43:05	91.768	6338.08		0.10
05:45:58	91.816	6338.26		0.18
05:47:24	91.840	6338.33		0.07
05:50:17	91.888	6338.13		-0.20
05:51:43	91.912	6338.39		0.26
05:54:36	91.960	6338.66		0.26
05:56:02	91.984		256.71	
05:58:55	92.032	6338.86	•	0.20
06:00:22	92.056	6334.33		-4.53
06:03:14	92.104		256.72	
06:04:41	92.128	6336.32		2.00
06:07:34	92.176	6337.13		0.81
06:09:00	92.200	6337.48		0.35
06:11:53	92.248	6337.88		0.40
06:13:19	92.272	6337.91		0.03
06:16:12	92.320	6337.79		-0.12
06:17:38	92.344		256.72	
06:20:31	92.392	6338.00	خيري	0.20
06:21:58	92.416	6338.08		0.09
06:24:50	92.464		256.72	5 54
06:26:17	92.488	6338.13		0.04
06:29:10	92.536	6338.32		0.19
06:30:36	92.560	6338.28		-0.04
06:33:29	92.608	6338.58	• 1	0.31 -0.04
06:34:55	92.632	6338.54		-0.04 0.09
06:37:48	92.680	6338.63	256.75	<b>v.v</b> 5
06:39:14	92.704	C770 70	250.75	0.16
06:42:07	92.752	6338.79		0.22
06:43:34	92.776	6339.01	256.76	0.22
06:46:26	92.824	6338.31	230.10	-0.70
06:47:53	92.848 92.896	6338.66		0.35
06:50:46 06:52:12	92.920	6339.10		0,.44
06:55:05	92.968	6339.00		-0.10
06:56:31	92.992	6339.20		0.20
06:59:24	93.040	6339.46		0.26
07:00:50	93.064	0000110	256.70	
07:03:43	93.112	6339.30		-0.17
07:05:10	93.136	6339.30		0.00
07:08:02	93.184		256.65	
07:08:02 07:09:29	93.208	6339.66		0.37
07:12:22	93.256	6339.71		0.05
07:12:22	93.280	6339.77		0.06
07:15:41	93.328	6339.85		0.08
07:18:07	93.352	6339.86		0.02
5 5 - 5 .				

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189 Well No.: Anemone # 1A

Real Time HH:MM:SS	Delta Time Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
07:21:00	93.400	6339.82	• •	-0.04
07:22:26	93.424		256.74	
07:25:19	93.472	6340.02		0.20
07:25:15	93.496	6340.07		0.04
07:29:38	93.544		256.74	
07:31:05	93.568	6340.26		0.19
07:33:58	93.616	6340.27		0.02
07:35:24	93.640	6340.36		0.09
07:38:17	93.688	6340.45		0.09
07:39:43	93.712	6340.54		0.09
07:42:36	93.760	6340.43		-0.10
07:44:02	93.784		256.74	-
07:46:55	93.832	6340.83		0.40
07:48:22	93.856	6341.01		0.18
07:51:14	93.904		256.74	
07:52:41	93.928	6340.87	-	-0.13
07:55:34	93.976	6340.92		- 0.04
07:57:00	94.000	6340.89		-0.03
07:59:53	94.048	6341.11		0.22
08:01:19	94.072	6340.49		-0.62
08:04:12	94.120	6340.93		0.44
08:05:38	94.144		256.76	
08:08:31	94.192	6340.76		-0.18
08:09:58	94.216	6340.98		0.22
08:12:50	94.264		256.75	
08:14:17	94.288	6341.20		0.22
08:17:10	94.336	6341.39		0.19
08:18:36	94.360	6341.37	·	-0.02
08:21:29	94.408	6341.52		0.15
08:22:55	94.432	6341.51		-0.02
08:25:48	94.480	6341.61		0.10
08:27:14	94.504		256.76	0.04
·08:30:07	94.552	6341.57		-0.04
08:31:34	94.576	6341.83	255 22	0.26
08:34:26	94.624	0744 45	256.77	-0.38
08:35:53	94.648	6341.45		0.13
08:38:46	94.696	6341.58		-0.19
08:40:12	94.720	6341.39		0.47
08:43:05	94.768	6341.86 6341.99		0.13
08:44:31	94.792	6342.12		0.13
08:47:24	94.840	0342.12	256.75 <sup>-</sup>	
08:48:50	94.864		730.13	0.32
08:51:43	94.912	6342.45		-0.04
08:53:10	94.936	6342.40	256.78	-₩.₩4
08:56:02	94.984	C749 70	430.10	-0.01
08:57:29	95.008	6342.39		-0.98
09:00:22	95.056	6341.40		0.59
09:01:48	95.080	6341.99		-0.35
09:04:41	95.128	6341.64		0.38
09:06:07	95.152	6342.02		W.50

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Real Time HH:MM:SŞ	Delta Time Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
09:09:00	95.200	6341.95	•	-0.07
09:10:26	95.224	0541.55	256.78	
09:10:26 09:13:19	95.272	6342.71		Ø.76
09:14:46	95.296	6342.76		0.04
09:17:38	95.344	0542.10	256.78	
09:19:05	95.368	6342.65		-0.10
09:21:58	95.416	6342.70		0.04
09:23:24	95.440	6342.83		0.13
09:26:17	95.488	6343.11		0.28
09:27:43	95.512	6343.09		-0.02
09:30:36	95.560	6343.01		-0.09
09:32:02	95.584	-	256.78	•
09:34:55	95.632	6343.37	•	0.37
09:36:22	95.656	6342.10		-1.28
09:39:14	95.704		256.78	
09:40:41	95.728	6342.39	•	0.29
09:43:34	95.776	6343.27		0-88
09:45:00	95.800	6343.27		0.00
09:47:53	95.848	6343.52		0.25
09:49:19	95.872	6343.65		0.13
09:52:12	95.920	6343.75		0.10
09:53:38	95.944		256.78	
09:56:31	95.992	6343.68	A Part of the second	-0.07
09:57:58	96.016	6343.95		0.26
10:00:50	96.064		256.79	
10:02:17	96.088	6343.90		-0.04
10:05:10	96.136	6343.90		0.00
10:06:36	96.160	6343.89	•	-0.02
10:09:29	96.208	6343.99		0.10
10:10:55	96.232	6344.03		0.04
10:13:48	96.280	6344.18		0.15
10:15:14	96.304		256.79	0.00
10:18:07	96.352	6344.24		0.06
10:19:34	96.376	6344.37	050 00	0.13
10:22:26	96.424		256.79	0.19
10:23:53	96.448	6344.56		0.04
10:26:46	96.496	6344.61		0.04 0.26
10:28:12	96.520	6344.87	•	0.19
10:31:05	96.568	6345.06		-0.44
10:32:31	96.592	6344.62		0.10
10:35:24	96.640	6344.73	256.81	0.10
10:36:50	96.664		250.01	-0.44
10:39:43	96.712	6344.28		-0.44
10:41:10	96.736	6344.68	255 01	0.40
10:44:02	96.784		256.81	0.69
10:45:29	96.808	6345.37		-0.29
10:48:22	96.856	6345.08		-0.29 0:16
10:49:48	96.880	6345.24		-0.03 \
10:52:41	96.928	6345.21		0.04
10:54:07	96.952	6345.25		<b>U.U</b> T.
*				

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

			-	n. n/= 1)
Real Time	Delta Time	Pressure	Темр	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
	07 000	6345.34	•	0.09
10:57:00	97.000 97.024	0343.34	256.82	
10:58:26	97.072	6345.74	200.02	0.40
11:01:19	97.096	6345.74		0.00
11:02:46 11:05:38	97.144	0040	256.82	
11:07:05	97.168	6345.83		0.09
11:09:58	97.216	6345.78		-0.04
11:11:24	97.240	6345.78		0.00
11:14:17	97.288	6346.09		0.31
11:15:43	97.312	6346.05		-0.04
11:18:36	97.360	6345.96		-0.09
11:20:02	97.384		256.83	
11:22:55	97.432	6346.24		0.28
11:24:22	97.456	6346.33		0.09
11:27:14	97.504		256.83	
11:28:41	97.528	6344.87		-1.45
11:31:34	97.576	6345.78		0.91
11:33:00	97.600	6345.62		-0.16
11:35:53	97.648	6345.80		0.18
11:37:19	97.672	6346.05		0.25
11:40:12	97.720	6346.35		0.31
11:41:38	97.744		256.83	
11:44:31	97.792	6346.19		-0.16
11:45:58	97.816	6346.24		0.04
11:48:50	97.864		256.82	
11:50:17	97.888	6346.53		0.29
11:53:10	97.936	6346.62	, For a	0.09
11:54:36	97.960	6346.68		0.06
11:57:29	98.008	6346.85		0.18
11:58:55	98.032	6346.77		-0.09
12:01:48	98.080	6346.81	050 07	0.04
12:03:14	98.104	_	256.83	
12:05:00	Rig up Bottom h		s with gauge	_0 OC
12:06:07	98.152	6345.95		-0.86 0.44
12:07:34	98.176	6346.39	bland off abo	
12:10:00	Close Lubricato	r valve and	256.84	<b>VV</b> C
12:10:26	98.224	6481.06	230.04	134.67
12:11:53	98.248	6635.35		154.29
12:14:46	98.296 Close choke man		such valve	
12:15:00		6704.88	SMGO AGIAC	69.53
12:16:12	98.320	6825.27		120.39
12:19:05	98.368	6875.86		50.59
12:20:31	98.392	6967.57		91.72
12:23:24	98.440	030(.3(	256.79	31.12
12:24:50	98.464	7096.67	# 40 · 1 3	129.10
12:27:43	98.512 98.536	7131.54		34.87
12:29:10	98.536 98.584	(131.54	256.69	5,,0,
12:32:02	98.608	7223.14	<u> </u>	91.60
12:33:29	98.656	7278.07		54.93
12:36:22	30.030	1210.01		_ · · · · ·

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Real Time	Delta Time	Pressure	Темр	Pn-P(n-1)
HH:MM:SŞ		PSIA	Deg F	PSIA
1111-1111-25	·			•
12:37:48	98.680	7302.77	•	-24.71
12:40:41	98.728	7353.25		50.47
12:42:07	98.752	7374.44		21.19
12:43:00	Open kill valve,		test Lubrica	itor to 3500 psi
12:45:00	98.800	7415.56		41.12
12:46:26	98.824		256.47	
12:49:19	98.872	7473.89		58.33
12:50:46	98.896	7498.72		24.83
12:53:38	98.944		256.40	_
12:55:00	Bleed down lubri		1250 psi, ope	en Lubricator valve
12:55:05	98.968	7561.71		62.99
12:57:58	99.016	7586.42		24.71
12:59:24	99.040	7603.99	•	17.57
13:00:00	Close Lubricator		leed down to	1000 psi
13:02:17	99.088	7635.54		31.55
13:03:30	Open lubricator,		increase to	1250, R.I.H.
13:03:43	99.112	7632.37		-3.17
13:06:36	99.160	7641.31	252.42	8.93
13:08:02	99.184		256.12	E7 70
13:10:55	99.232	7694.62		53.32 14.91
13:12:22	99.256	7709.54	250.00	14.51
13:15:14	99.304	nace 27	256.00	46.20
13:16:41	99.328	7755.73		34.56
13:19:34	99.376	7790.29		9.11
13:21:00	99.400	7799.40	to Gauge tank	
13:22:00		6338.86	to bauge talk	-1460.54
13:23:53	99.448	6337.68		-1.18
13:25:19	99.472 99.520	6336.62	•	-1.06
13:28:12	99.544	0550.02	255.78	
13:29:38	99.592	6337.42	200	0.80
13:32:31 13:33:58	99.616	6338.16		0.75
13:36:50	99.664	0550.15	255.87	9
13:38:17	99.688	6339.93		1.77
13:41:10	99.736	6342.08		2.14
13:42:36	99.760	6342.48		0.40
13:45:29	99.808	6343.45		0.97
13:46:55	99.832	6343.05		-0.39
13:49:48	99.880	6343.55		0.50
13:51:14	99.904		256.03	
13:54:07	99.952	6346.26		2.70
13:55:34	99.976	6346.96		0.70
13:58:26	100.024		256.11	
13:59:53	100.048	6345.79		-1.17
14:02:46	100.096	6345.54		-0.25
.14:04:12	100.120	6345.62		0.08
14:07:05	100.168	6344.09		-1.53
14:08:31	100.192	6344.04		<b>~0.0</b> 6
14:11:24	100.240	6343.94		-0.10 °
14:12:50	100.264		256.21	

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A Date : 10/10/89

Real Time				T	Pn-P( n-1)
14:15:43	Real Time			Temp	
	HH:MM:SS	Hours	P21H	beg r	1 3111
14:17:10	14.15.43	100 312	6346.54	•	2.60
14:20:02     100.384     256.26       14:21:29     100.408     6345.82     -0.44       14:24:22     100.480     6345.82     -0.20       14:25:48     100.480     6345.62     -0.20       14:30:07     100.528     6341.25     -4.37       14:30:07     100.600     6347.26     0.85       14:33:26     100.600     6347.26     256.33       14:37:19     100.672     6348.32     1.06       14:38:46     100.696     6348.72     0.40       14:41:38     100.744     256.36       14:43:05     100.696     6351.25     2.53       14:47:24     100.80     6361.93     -0.07       14:50:17     100.88     6349.25     -12.68       14:51:43     100.912     6348.56     -0.69       14:56:02     100.984     256.41     -0.69       14:55:02:10     100.96     6367.56     5.30       15:00:22     101.056     6363.02     -4.54       15:00:22     101.056     6363.02     -4.54       15:00:31     101.176     6348.58     0.40       15:00:22     101.056     6363.02     -4.54       15:00:23     101.20     6349.58     0.69       15:11:15					-0.31
14:21:29			90,2120	256.26	
14:22:22			6346.26		0.03
14:25:48       100.480       6345.62       -0.20         14:28:41       100.528       6341.25       -4.37         14:30:07       100.528       6347.26       0.85         14:33:00       100.600       6347.26       0.85         14:33:26       100.624       256.33       1.06         14:38:46       100.696       6348.72       0.40         14:41:38       100.768       6351.25       2.53         14:45:58       100.816       6362.01       10.76         14:45:58       100.816       6362.201       10.76         14:47:24       100.840       6361.93       -0.07         14:50:17       100.888       6349.25       -12.68         14:51:43       100.912       6348.56       -0.69         14:56:02       100.984       256.41         14:56:02       100.984       256.41         14:58:55       101.032       6367.56       5.30         15:00:22       101.056       6363.02       256.41         15:00:314       101.104       256.44         15:07:34       101.16       6348.19       -14.84         15:09:30       101.200       6349.26       0.69					-0.44
14:28:41       100.528       6341.25       -4.37         14:30:07       100.552       6346.41       5.17         14:33:00       100.600       6347.26       0.85         14:33:19       100.672       6348.32       1.06         14:38:46       100.696       6348.72       0.40         14:41:38       100.744       256.36         14:45:50       100.816       6362.01       10.76         14:45:50       100.816       6362.01       10.76         14:47:24       100.840       6361.93       -0.07         14:50:17       100.888       6349.25       -12.68         14:51:43       100.912       6348.56       -0.69         14:56:02       100.984       256.41         14:58:55       101.032       6367.56       5.30         15:00:22       101.056       6363.02       -4.54         15:00:22       101.056       6348.19       -14.84         15:00:22       101.056       6348.58       0.40         15:01:31:9       101.272       6348.49       -0.69         15:11:53       101.248       6348.51       -0.75         15:16:12       101.320       6348.17       -0.26			6345.62		-0.20
14:33:07       100.552       6346.41       5.17         14:33:00       100.600       6347.26       0.85         14:37:19       100.624       256.33       1.06         14:38:46       100.696       6348.32       1.06         14:41:38       100.764       256.36       2.53         14:41:38       100.768       6351.25       2.53         14:45:58       100.816       6362.01       10.76         14:47:24       100.884       6361.93       -0.07         14:50:17       100.888       6349.25       -12.68         14:51:43       100.912       6362.26       13.70         14:56:02       100.984       256.41         14:58:55       101.032       6367.56       5.30         15:00:22       101.056       6363.02       -4.54         15:03:14       101.104       256.44         15:09:00       101.206       6348.58       0.40         15:09:00       101.206       6348.58       0.40         15:09:00       101.206       6348.58       0.69         15:11:53       101.248       6348.51       -0.75         15:17:38       101.276       6348.49       -0.26			6341.25		-4.37
14:33:00       100.600       6347.26       256.33         14:37:19       100.672       6348.32       1.06         14:38:46       100.696       6348.72       0.40         14:41:38       100.744       256.36         14:45:58       100.816       6351.25       2.53         14:45:58       100.816       6362.01       10.76         14:47:24       100.840       6361.93       -0.07         14:50:17       100.888       6349.25       -12.60         14:51:43       100.912       6348.56       -0.69         14:56:02       100.984       256.41       13.70         14:56:02       100.984       256.41       5.30         15:00:21       10.056       6367.56       5.30         15:00:22       101.056       6348.19       -4.54         15:07:34       101.176       6348.58       0.40         15:09:44       101.176       6348.58       0.40         15:09:00       101.200       6349.26       0.69         15:11:53       101.248       6348.51       -0.75         15:16:12       101.320       6348.71       15.53         15:17:38       101.464       256.47 <td></td> <td>100.552</td> <td>6346.41</td> <td></td> <td></td>		100.552	6346.41		
14:34:26       100.624       256.33         14:37:19       100.672       6348.32       1.06         14:38:46       100.696       6348.72       0.40         14:41:38       100.744       256.36         14:45:58       100.768       6351.25       2.53         14:45:58       100.816       6362.01       10.76         14:47:24       100.840       6361.93       -0.07         14:50:17       100.888       6349.25       -12.68         14:54:36       100.912       6348.56       -0.69         14:55:50       100.980       6362.26       13.70         14:56:02       100.984       256.41         14:56:02       100.984       256.41         14:50:31:1       101.032       6367.56       5.30         15:00:22       101.056       6363.02       -4.54         15:03:14       101.104       256.44         15:07:34       101.176       6348.58       0.40         15:09:00       101.200       6349.26       0.68         15:11:53       101.248       6348.51       -0.75         15:12:10:10       101.320       6348.17       -0.26         15:17:38       101.344 <td></td> <td>100.600</td> <td>6347.26</td> <td></td> <td>0.85</td>		100.600	6347.26		0.85
14:37:19       100.672       6348.32       1.06         14:38:46       100.696       6348.72       0.40         14:41:38       100.744       256.36       14:43:05       100.768       6351.25       2.53         14:45:58       100.816       6362.01       10.76       10.76       10.76       10.76       10.76       11.47:24       100.884       6361.93       -0.07       -0.07       14:50:17       100.888       6349.25       -12.68       -12.68       14:50:17       100.980       6362.26       13.70       14:56:02       100.994       256.41       14:54:36       100.994       256.41       14:56:02       100.984       256.41       5.30       15:00:22       101.056       6363.02       -4.54       5.30       15:00:22       101.056       6363.02       -4.54       5.30       15:00:22       101.056       6363.02       -4.54       5.30       15:03:14       101.104       256.44       15:04:41       101.128       6348.58       0.40       6361.50       6.68       15:11:53       101.248       6348.58       0.40       6.68       15:13:19       101.272       6348.58       0.69       6.68       15:13:19       101.272       6348.17       -0.07       -0.07       15:13:19       101.344 </td <td></td> <td>100.624</td> <td></td> <td>256.33</td> <td></td>		100.624		256.33	
14:41:38       100.744       256.36         14:43:05       100.768       6351.25       2.53         14:45:58       100.840       6362.01       10.76         14:47:24       100.840       6361.93       -0.07         14:50:17       100.888       6349.25       -12.68         14:51:43       100.912       6348.56       -0.69         14:54:36       100.980       6362.26       13.70         14:56:02       100.984       256.41         14:58:55       101.032       6367.56       5.30         15:00:22       101.056       6363.02       -4.54         15:03:14       101.104       256.44         15:04:41       101.128       6348.19       -14.84         15:07:34       101.176       6348.58       0.40         15:09:00       101.200       6349.26       0.69         15:11:53       101.248       6348.51       -0.75         15:16:12       101.320       6348.17       -0.69         15:21:58       101.464       256.47         15:22:50       101.464       256.47         15:29:10       101.536       6344.95       -1.01         15:33:29       101.608		100.672	6348.32		
14:43:05	14:38:46	100.696	6348.72		0.40
14:45:58       100.816       6362.01       10.76         14:47:24       100.840       6361.93       -0.07         14:50:17       100.888       6349.25       -12.68         14:51:43       100.912       6348.56       -0.69         14:54:36       100.960       6362.26       13.70         14:56:02       100.984       256.41         14:58:55       101.032       6367.56       5.30         15:00:22       101.056       6363.02       -4.54         15:03:14       101.104       256.44         15:07:34       101.176       6348.58       0.40         15:09:00       101.200       6349.26       0.68         15:11:53       101.248       6348.51       -0.75         15:13:19       101.272       6348.44       -0.07         15:17:38       101.344       256.47         15:20:31       101.344       256.47         15:22:158       101.416       6362.69       -1.01         15:24:50       101.464       256.50         15:30:36       101.560       5344.79       -0.16         15:33:29       101.608       6344.36       -0.42         15:37:48       101.608	14:41:38	100.744		256.36	
14:47:24	14:43:05				
14:50:17 100.888 6349.25 -0.69 14:51:43 100.912 6348.56 -0.69 14:54:36 100.960 6362.26 13.70 14:56:02 100.984 256.41 14:58:55 101.032 6367.56 5363.02 -4.54 15:03:14 101.104 256.44 15:04:41 101.128 6348.19 -14.88 15:07:34 101.176 6348.58 0.49 15:09:00 101.200 6349.26 0.68 15:11:53 101.248 6348.51 -0.75 15:13:19 101.272 6348.44 -0.07 15:16:12 101.320 6348.17 -0.26 15:17:38 101.344 256.47 15:20:31 101.392 6363.71 15.53 15:21:58 101.416 6362.69 -1.01 15:24:50 101.464 256.50 15:29:10 101.536 6344.95 -1.01 15:30:36 101.560 6344.79 -0.16 15:30:36 101.560 6344.79 -0.16 15:33:329 101.608 6344.79 -0.16 15:33:34:55 101.632 6344.79 -0.42 15:34:00 First sample taken at 4478 m 15:34:55 101.632 6344.10 -0.03 15:39:14 101.704 256.58 15:43:34 101.776 6343.47 0.09 15:43:34 101.776 6343.47 256.57 15:46:26 101.824 256.57 15:50:46 101.896 6342.02 -1.54 15:55:21:2 101.920 6342.24 0.22 15:55:05 101.968 6342.02 -0.22 15:56:31 101.992 6342.24 0.22 15:55:05 101.968 6342.02 -0.22 15:55:505 101.968 6342.02 -0.22 15:56:31 101.992 6342.24 0.22	14:45:58				
14:51:43       100.912       6348.56       -0.69         14:54:36       100.960       6362.26       13.70         14:56:02       100.984       256.41         14:58:55       101.032       6367.56       5.30         15:00:22       101.056       6363.02       -4.54         15:03:14       101.104       256.44         15:04:41       101.128       6348.19       -14.84         15:07:34       101.176       6348.58       0.40         15:09:00       101.200       6349.26       0.68         15:11:53       101.248       6348.151       -0.75         15:13:19       101.272       6348.44       -0.07         15:16:12       101.320       6348.17       -0.26         15:17:38       101.344       256.47         15:20:31       101.392       6363.71       15.53         15:21:58       101.416       6362.69       -1.01         15:29:10       101.536       6344.95       -1.01         15:33:29       101.608       6344.79       -0.16         15:33:29       101.608       6344.79       -0.03         15:37:48       101.632       6344.07       -0.03	14:47:24	100.840		-	
14:54:36	14:50:17				
14:56:02 100.984 256.41  14:58:55 101.032 6367.56 5.30  15:00:22 101.056 6363.02 -4.54  15:03:14 101.104 256.44  15:04:41 101.128 6348.19 -14.84  15:09:00 101.200 6349.26 0.68  15:11:53 101.248 6348.51 -0.75  15:13:19 101.272 6348.44 -0.07  15:16:12 101.320 6348.17 -0.26  15:17:38 101.344 256.47  15:20:31 101.392 6363.71 15.53  15:21:58 101.416 6362.69 256.50  15:22:50 101.464 256.50  15:23:29 10 101.536 6344.95 5.14  15:30:36 101.560 6344.79 -0.16  15:33:29 101.608 6344.79 -0.16  15:33:29 101.608 6344.79 -0.16  15:33:34:00 First sample taken at 4478 m  15:34:00 First sample taken at 4478 m  15:39:14 101.704 256.59  15:42:07 101.752 6343.38 -0.42  15:43:34 101.776 6343.47 256.57  15:46:26 101.824 256.57  15:50:46 101.896 6342.02 -0.22  15:55:05 101.968 6342.02 -0.22  15:55:05 101.968 6342.02 -0.22  15:55:05 101.968 6342.02 -0.22  15:55:05 101.968 6342.02 -0.22  15:55:05 101.968 6342.02 -0.22  15:55:05 101.968 6342.02 -0.22	14:51:43				
14:58:55	14:54:36		6362.26	050 44	13.70
15:00:22				256.41	F 70
15:03:14 101.104 256.44  15:04:41 101.128 6348.19 -14.84  15:09:00 101.200 6349.26 0.68  15:11:53 101.248 6348.51 -0.75  15:13:19 101.272 6348.44 -0.07  15:16:12 101.320 6348.17 -0.26  15:17:38 101.344 256.47  15:20:31 101.392 6363.71 15.53  15:21:58 101.416 6362.69 -1.01  15:24:50 101.464 256.50  15:24:50 101.488 6339.81 -22.88  15:29:10 101.536 6344.95 5.14  15:30:36 101.560 6344.79 -0.16  15:33:29 101.608 6344.79 -0.16  15:33:29 101.608 6344.79 -0.16  15:33:29 101.608 6344.79 -0.16  15:33:34:00 First sample taken at 4478 m  15:34:55 101.632 6344.10 -0.26  15:37:48 101.680 6344.07 -0.03  15:39:14 101.704 256.58  15:42:07 101.752 6343.38 -0.69  15:43:34 101.776 6343.47 256.57  15:50:46 101.824 256.57  15:50:46 101.824 256.57  15:55:05 101.968 6342.02 -1.54  15:55:505 101.968 6342.02 -0.22  15:55:05 101.968 6342.02 -0.22  15:55:05 101.968 6342.02 -0.22  15:55:05 101.968 6342.02 -0.22  15:55:05 101.968 6342.02 -0.22  15:55:05 101.968 6342.02 -0.22  15:55:56:31 101.992 6341.11 -0.91	14:58:55				
15:04:41			6363.02	755 44	-4.54
15:07:34			2742 40	256.44	_14 04
15:09:00				,	
15:11:53					
15:13:19					
15:16:12       101.320       6348.17       -0.26         15:17:38       101.344       256.47         15:20:31       101.392       6363.71       15.53         15:21:58       101.416       6362.69       -1.01         15:24:50       101.488       6339.81       -22.88         15:26:17       101.488       6339.81       -22.88         15:29:10       101.550       6344.95       5.14         15:30:36       101.560       6344.79       -0.16         15:33:29       101.608       6344.36       -0.42         15:34:00       First sample taken at 4478 m       -0.26         15:37:48       101.632       6344.10       -0.26         15:39:14       101.704       256.58         15:42:07       101.752       6343.38       -0.69         15:43:34       101.776       6343.47       0.09         15:46:26       101.824       256.57         15:50:46       101.896       6342.02       -1.54         15:55:05       101.968       6342.02       -0.22         15:56:31       101.992       6341.11       -0.91				; ;	
15:17:38       101.344       256.47         15:20:31       101.392       6363.71       15.53         15:21:58       101.416       6362.69       -1.01         15:24:50       101.488       6339.81       -22.88         15:26:17       101.488       6339.81       -22.88         15:29:10       101.536       6344.95       5.14         15:30:36       101.560       6344.79       -0.16         15:33:29       101.608       6344.36       -0.42         15:34:00       First sample taken at 4478 m       -0.42         15:37:48       101.632       6344.07       -0.03         15:39:14       101.704       256.58         15:42:07       101.752       6343.38       -0.69         15:43:34       101.776       6343.47       0.09         15:46:26       101.824       256.57         15:50:46       101.896       6342.02       -1.54         15:52:12       101.920       6342.02       -0.22         15:55:05       101.968       6342.02       -0.22         15:56:31       101.992       6341.11       -0.91			_		
15:20:31			6348.17	256 47	0.20
15:21:58			CZCZ 71	230.47	15.53
15:24:50					
15:26:17			0302.03	256.50	,
15:29:10			6339 81	200700	-22.88
15:30:36					
15:33:29					
15:34:00 First sample taken at 4478 m  15:34:55					-0.42
15:34:55       101.632       6344.10       -0.26         15:37:48       101.680       6344.07       -0.03         15:39:14       101.704       256.58         15:42:07       101.752       6343.38       -0.69         15:43:34       101.776       6343.47       0.09         15:46:26       101.824       256.57         15:47:53       101.848       6343.56       0.09         15:50:46       101.896       6342.02       -1.54         15:52:12       101.920       6342.24       0.22         15:55:05       101.968       6342.02       -0.22         15:56:31       101.992       6341.11       -0.91				} m	•
15:37:48       101.680       6344.07       -0.03         15:39:14       101.704       256.58         15:42:07       101.752       6343.38       -0.69         15:43:34       101.776       6343.47       0.09         15:46:26       101.824       256.57         15:47:53       101.848       6343.56       0.09         15:50:46       101.896       6342.02       -1.54         15:52:12       101.920       6342.24       0.22         15:55:05       101.968       6342.02       -0.22         15:56:31       101.992       6341.11       -0.91					-0.26
15:39:14       101.704       256.58         15:42:07       101.752       6343.38       -0.69         15:43:34       101.776       6343.47       0.09         15:46:26       101.824       256.57         15:47:53       101.848       6343.56       0.09         15:50:46       101.896       6342.02       -1.54         15:52:12       101.920       6342.24       0.22         15:55:05       101.968       6342.02       -0.22         15:56:31       101.992       6341.11       -0.91					-0.03
15:42:07       101.752       6343.38       -0.69         15:43:34       101.776       6343.47       0.09         15:46:26       101.824       256.57         15:47:53       101.848       6343.56       0.09         15:50:46       101.896       6342.02       -1.54         15:52:12       101.920       6342.24       0.22         15:55:05       101.968       6342.02       -0.22         15:56:31       101.992       6341.11       -0.91				256.58	
15:43:34     101.776     6343.47     0.09       15:46:26     101.824     256.57       15:47:53     101.848     6343.56     0.09       15:50:46     101.896     6342.02     -1.54       15:52:12     101.920     6342.24     0.22       15:55:05     101.968     6342.02     -0.22       15:56:31     101.992     6341.11     -0.91			6343.38		-0.69
15:46:26     101.824     256.57       15:47:53     101.848     6343.56     0.09       15:50:46     101.896     6342.02     -1.54       15:52:12     101.920     6342.24     0.22       15:55:05     101.968     6342.02     -0.22       15:56:31     101.992     6341.11     -0.91					0.09
15:47:53       101.848       6343.56       0.09         15:50:46       101.896       6342.02       -1.54         15:52:12       101.920       6342.24       0.22         15:55:05       101.968       6342.02       -0.22         15:56:31       101.992       6341.11       -0.91				256.57	
15:50:46       101.896       6342.02       -1.54         15:52:12       101.920       6342.24       0.22         15:55:05       101.968       6342.02       -0.22         15:56:31       101.992       6341.11       -0.91			6343.56		0.09
15:52:12     101.920     6342.24     0.22       15:55:05     101.968     6342.02     -0.22       15:56:31     101.992     6341.11     -0.91					-1.54
15:55:05     101.968     6342.02     -0.22       15:56:31     101.992     6341.11     -0.91					
15:56:31 101.992 6341.11 -0.91					
1 10			6341.11		
		102.040	6340.01		-1.10

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

	,			
Real Time	Delta Time		Темр	Pn-P(n-1)
HH:MM:5S	Hours	PSIA	Deg F	PSIA
				•
16:00:50	102.064		256.60	0.20
16:03:43	102.112	6340.29		0.28
16:04:00	•	taken at 390	4 m	0.17
16:05:10	102.136	6340.42	050.00	0.13
16:08:02	102.184		256.60	2.44
16:09:29	102.208	6338.31		-2.11
16:12:22	102.256	6337.93		-0.38
16:13:48	102.280	6337.99		0.06
16:16:41	102.328	6337.17		-0.82
16:18:07	102.352	6337.43		0.26
16:21:00	102.400	6337.12		-0.31
16:22:00	Shut in well	at choke mani		
16:22:26	102.424		- 256.64	
16:25:19	102.472	6350.04		12.91
16:26:46	102.496	6357.57		7.53
16:29:38	102.544		256.63	
16:31:05	102.568	6392.63		35.06
16:33:58	102.616	6432.24		39.61
16:35:24	102.640	6458.16		25.92
16:38:17	102.688	6521.99		63.83
16:39:43	102.712	6560.07		38.08
16:42:36	102.760	6639.68		79.62
16:44:02	102.784		256.64	
16:46:55	102.832	6767.14		127.46
16:48:22	102.856	6807.14	*	39.99
16:51:14	102.904		256.63	
16:52:41	102.928	6911.59		104.45
16:55:34	102.976	6957.99		46.40
16:57:00	103.000	6989.51	•	31.52
16:59:53	103.048	7044.48	•	54.97
17:01:19	103.072	7068.81		24.33
17:04:12	103.120	7123.16		54.35
17:05:38	103.144		256.49	
17:08:31	103.192	7188.23		65.07
17:09:58	103.216	7206.00		17.77
17:12:50	103.264		256.39	
17:14:17	103.288	7256.88		50.88
17:17:10	103.336	7286.39		29.51
17:18:36	103.360	7301.57		15.18
17:21:29	103.408	7334.98		33.41
17:22:55	103.432	7355.05		20.06
17:25:48	103.480	7388.24		33.19
17:27:14	103.504		256.20	•
17:27:14	103.552	7433.57		45.33
	103.532	7442.79	•	9.22
17:31:34	103.624	1776.13	256.06	_ <del></del>
17:34:26	103.648	7467.88	200100	25.09
17:35:53		7497.56		31.66
17:38:46	103.696 103.720	7512.64		13.11
17:40:12	103.768	7572.04		24.34
17:43:05	100.100	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

		D	Темр	Pn-P(n-1)
Real Time		Pressure	Deg F	PSIA
HH:MM:SS	Hours	PSIA	veg r	73111
17:44:31	103.792	7545.40	•	8.42
17:47:24	103.840	7545.39		-0.02
17:48:50	103.864		255.96	
17:51:43	103.912	7555.91		10.52
17:53:10	103.572	7560.05		4.15
17:56:02	103.984	,000	255.85	
17:57:29	104.008	7570.32		10.27
18:00:22	104.056	7578.18	· ·	7.85
18:01:48	104.080	7581.96		3.78
18:04:41	104.128	7587.39		5.43
18:06:07	104.152	7590.32		2.93
18:09:00	104.200	7598.03		7.71
18:10:26	104.224		255.68	
18:13:19	104.272	7627.47		29.45
18:14:46	104.296	7635.65		8.17
18:17:38	104.230	, 000.00	255.59	
18:19:05	104.368	7652.39		16.75
18:21:58	104.416	7655.06		2.66
18:23:24	104.440	7656.94		1.89
18:26:17	104.488	7661.30		4.36
18:27:43	104.512	7674.06		12.77
18:30:36	104.560	7708.46		34.39
18:32:02	104.584		255.44	
18:34:55	104.632	10892.56		3184.10
18:36:22	104.656	7774.81		-3117.75
18:39:14	104.704		255.38	
18:40:00	Samoler string	to surface.	close Lubricate	or valve & bleed of
18:40:41	104.728	7813.65		38.83
18:43:34	104.776	7842.54		28.89
18:45:00	104.800	7855.83		13.29
18:47:53	104.848	7881.24		25.41
18:49:19	104.872	7892.52		11.28
18:52:12	104.920	7912.99		20.47
18:53:38	104.944		255.23	
18:56:31	104.992	7940.61		27.62
18:57:58	105.016	7949.45		8.84
19:00:00	Close swab valve	e and choke,	open kill val	ve
19:00:50	105.064		255.15	
19:02:17	105.088	7972.88		23.42
19:05:10	105.136	7987.27		14.40
19:06:36	105.160	7993.82		6.55
19:07:00	Pressurise above	<b>Lubricator</b>	to 1500 psi	
19:08:00	Open Lubricator	valve, well	open to choke	manifold
19:09:29	105.208	8003.43		9.61
19:10:00	Open well at che		tank	
19:10:55	105.232	6327.33		-1676.10
19:13:48	105.280	6320.52		-6.81
19:15:14	105.304		254.96	·
19:18:07	105.352	6317.18		-3.34
19:19:34	105.376	6315.86		-1.32

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189 Well No.: Anemone # 1A

	,			•
Real Time	Delta Time	Pressure	Темр	Pn-P(n-1)
HH:MM:S\$	Hours	PSIA	Deg F	PSIA ·
4				•
19:22:26	105.424		255.10	•
19:23:53	105.448	6312.27		-3.58
19:26:46	105.496	6309.01		-3.26
19:28:12	105.520	6307.49		-1.52
19:31:05	105.568	6303.59		-3.90
19:32:31	105.592	6299.24		-4.35
19:35:24	105.640	6296.48		-2.76
19:36:50	105.664		255.37	
19:39:43	105.712	6298.49		2.02
19:41:10	105.736	6298.41		-0.09
19:44:02	105.784		255.51	
19:45:29	105.808	6297.56	-	-0.84
19:48:22	105.856	6296.29	•	-1.27
19:49:48	105.880	6296.69		0.40
19:52:41	105.928	6298.41		1.72
19:54:07	105.952	6296.93		-1.48
19:57:00	106.000	6295.92		-1.01
19:58:26	106.024	• • • • • • • • • • • • • • • • • • • •	255.70	
20:00:00	100% mud flowi	no to surface		
20:00:00	106.072	6298.39		2.47
20:02:46	106.096	6295.44		-2.95
20:02:48	106.144	02001	255.80	
20:05:00	Divert flow to	flace	المنتينين	
20:07:05	106.168	6296.68		1.24
20:07:03	106.216	6298.69		2.01
20:11:24	106.240	6299.12		0.43
20:11:24	106.288	6300.28		1.16
20:14:17	106.312	6299.49		-0.79
20:13:43	106.360	6299.43		-0.06
20:10:30	106.384	0233.43	255.94	
20:20:02	106.432	6298.84	20210.	-0.60
20:24:22	106.456	6297.74		-1.10
20:24:22	106.504	023111	255.99	
20:27:14	106.528	6298.16	20070	0.43
20:20:41	106.576	6296.30		-1.86
20:31:34	106.600	6296.25		-0.06
20:35:53	106.648	6296.18		-0.07
20:37:19	106.672	6294.87		-1.30
20:37:13	106.720	6294.20		-0.67
	105.744	0207120	256.10	
20:41:38		6293.06	230.10	-1.14
20:44:31	106.792	6292.27		-0.79
20:45:58	106.816	0232.21	256.15	0
20:48:50	106.864	C202 27	230.13	0.00
20:50:17	106.888	6292.27		-1.36
20:53:10	106.936	6290.91		-0.45
20:54:36	106.960	6290.46		-1.05
20:57:29	107.008	6289.40		-0.45
20:58:55	107.032	6288.95		-0.10
21:01:48	107.080	6288.85	מכני מכ	₩. IV
21:03:14	107.104		256.25	

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189 Well No.: Anemone # 1A

Real Time	Delta Time	Pressure	Temp	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
			•	4 55
21:06:07	107.152	6287.23		-1.62
21:07:34	107.176	6286.92	050 30	-0.31
21:10:26	107.224	C205 54	256.28	-0.28
21:11:53	107.248	6286.64		-1.64
21:14:46	107.296	6285.00 6284.90		-0.10
21:16:12	107.320	6284.13		-Ø.78
21:19:05	107.368	6282.08		-2.05
21:20:31	107.392	6281.68		-0.40
21:23:24	107.440 107.464	0201.00	256.37	37,5
21:24:50	107.464	6279.80	230.31	-1.89
21:27:43	107.572	6279.71		-0.09
21:29:10 21:32:02	107.584	0213.11	256.40	
21:32:02	107.608	6278.63	2001.0	-1.08
21:36:22	107.656	6277.85		-0.78
21:37:48	107.680	6276.96	•	-0.89
21:40:41	107.728	6275.92		-1.04
21:42:07	107.752	6276.02		0.10
21:45:00	107.800	6272.53		-3.50
21:46:26	107.824		256.48	
21:49:19	107.872	6272.54		0.02
21:50:46	107.896	6271.53		-1.01
21:53:38	107.944		256.51	
21:55:05	107.968	6268.19		-3.34
21:57:58	108.016	6267.83		-0.36
21:59:24	108.040	6268.23		0.40
22:02:17	108.088	6266.92		-1.30
22:03:43	108.112	6265.97		-0.95
22:06:36	108.160	6265.53		-0.44
22:08:02	108.184		256.56	
22:10:55	108.232	6262.45		-3.09
22:12:22	108.256	6262.58	250.05	0.13
22:15:14	108.304		256.62	2 02
22:16:41	108.328	6260.56		-2.02
22:19:34	108.376	6259.14		-1.42 -1.19
22:21:00	108.400	6257.96		-1.73
22:23:53	108.448	6256.68		0.25
22:25:19	108.472	6256.93 6253.42		-3.51
22:28:12	108.520 108.544	6253.42	256.68	3.31
22:29:38	108.592	6252.01	230.00	-1.41
22:32:31	108.616	6251.65		-0.35
22:33:58		0231.03	256.67	
22:36:50	108.664 108.688	6250.31	200.01	-1.35
22:38:17	108.688	6248.30		-2.00
22:41:10	108.750	6247.92		-0.38
22:42:36 22:45:29	108.808	6246.11		-1.81
22:45:29	108.832	6244.34		-1.77
22:49:48	108.880	6242.73		-1.61
22:51:14	108.904	02,21,0	256.74	
77.71.14	100.307			

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

	,	•		5 54 41
Real Time	Delta Time	Pressure	Temp	Pn-P(n-1)
HH:MM:SS <sub>:</sub>	Hours	PSIA	Deg F	PSIA
•			,	-2.94
22:54:07	108.952	6239.79		-1.67
22:55:34	108.976	6238.12	950 55	-1.67
22:58:26	109.024		256.77	7 01
22:59:53	109.048	6234.51		-3.61
23:02:46	109.096	6232.06		-2.46 -1.74
23:04:12	109.120	6230.32		-2.45
23:07:05	109.168	6227.86		-2.46 -1.67
23:08:31	. 109.192	6226.19		
23:11:24	109.240	6223.58	255 25	-2.62
23:12:50	109.264		256.79	י חר
23:15:43	109.312	6220.72		-2.85 -1.67
23:17:10	109.336	6219.06		-1.67
23:20:02	109.384		-256.81	-2.70
23:21:29	109.408	6216.35		-2.70
23:24:22	109.456	6213.75		-2.50 -0.57
23:25:48	109.480	6213.18	m.	-0.57 -1.96
23:28:41	109.528	6211.23		-0.75
23:30:07	109.552	6210.48		-1.83
23:33:00	109.600	6208.65	מרר פר	-1.05
23:34:26	109.624	C20C 14	256.86	-2.51
23:37:19	109.672	6206.14		-0.22
23:38:46	109.696	6205.92	256.89	0.22
23:41:38	109.744	6204.49	250.05	-1.43
23:43:05	109.768	6204.45		-0.44
23:45:58	109.816	6201.57		-2.48
23:47:24	109.840	6201.04		-0.53
23:50:17	109.888 109.912	6200.99		-0.06
23:51:43	109.960	6200.05		-0.94
23:54:36 23:56:02	109.984	0200.03	256.91	
23:58:55	110.032	6194.72	20275	-5.33
00:00:22	110.056	6194.24		-0.48
00:00:22	110.104	0,0,,2,	256.95	
00:04:41	110.128	6194.14		-0.10
00:04:41	110.176	6193.57		-0.57
00:07:34	110.200	6193.67		0.10
00:03:00	110.248	6193.86		0:19
00:17:33	110.272	6194.37		0.51
00:15:13	110.320	6192.44		-1.93
00:17:38	110.344		256.96	
00:20:31	110.392	6193.86		1.42
00:21:58	110.416	6192.59		-1.27
00:24:50	110.464		256.99	
00:24:30	110.488	6190.78		-1.81
00:29:10	110.536	6189.07		-1.71
00:30:36	110.560	6189.07		0.00
00:33:29	110.608	6189.03		-0.04
00:33:25	110.632	6188.98		-0.04
00:37:48	110.680	6187.13		-1.85
00:39:14	110.704		257.03	
00.00.17				

Client : Petrofina Australia Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Date : 11/10/89

Real Time HH:MM:SS	Delta Time Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
,			•	
00:42:07	110.752	6186.43	•	-0.70
00:43:34	110.776	6184.19		-2.23
00:46:26	110.824		257.04	
00:47:53	110.848	6181.82		-2.38
00:50:46	110.896	6181.26		-0.55
00:52:12	110.920	6182.18		0.92
00:55:05	110.968	6181.35		-0.83
00:56:31	110.992	6181.63		0.28
00:59:24	111.040	6181.76		0.13
01:00:50	111.064		257.06	
01:03:43	111.112	6181.25		-0.51
01:05:10	111.136	6179.50		-1.75
01:08:02	111.184	•	257.09	
01:09:29	111.208	6179.86		0.37
01:12:22	111.256	6177.73		-2.13
01:13:48	111.280	6178.21		0.48
01:16:41	111.328	6178.13		-0.09
01:18:07	111.352	6177.03		-1.10
01:21:00	111.400	6176.61	055 11	-0.42
01:22:26	111.424		257.11	0.70
01:25:19	111.472	6175.82		-0.79
01:26:46	111.496	6174.37	057 12	-1.45
01:29:38	111.544		257.12	a 70
01:31:05	111.568	6174.08		-0.29
01:33:58	111.616	6173.34	•	-0.74
01:35:24	111.640	6173.47		0.13
01:38:17	111.688	6172.42	4	-1.05
01:39:43	111.712	6170.83		-1.59
01:42:36	111.760	6170.49	202 12	-0.33
01:44:02	111.784	0400.05	257.12	-1.45
01:46:55	111.832	6169.05		2.28
01:48:22	111.856	6171.32	257 17	2.20
01:51:14	111.904	9494 95	257.13	-0.07
01:52:41	111.928	6171.25		
01:55:34	111.976	6169.01		-2.25 -1.14
01:57:00	112.000	6167.87		0.64
01:59:53	112.048	6168.51		-0.88
02:01:19	112.072	6167.64		Ø.98
02:04:12	112.120	6168.61	257.19	W.30
02:05:38	112.144	6167.13	257.15	-1.49
02:08:31	112.192	6167.08		-0.04
02:09:58	112.216	0107.00	257 10	0.01
02:12:50	112.264	C1CC 77	257.19	-0.35
02:14:17	112.288	6166.73		-0.35 -0.29
02:17:10	112.336	6166.44		0.09
02:18:36	112.360	6166.53		-1.77
02:21:29	112.408	6164.76		Ø.28
02:22:55	112.432	6165.04		-1.23
02:25:48	112.480	6163.81	257.20	1.23
02:27:14	112.504		231.20	

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

	, D 11 Time	0	Темр	Pn-P(n-1)
Real Time	Delta Time Hours	Pressure PSIA	Deg F	PSIA
HH:MM:SS	Hours	LOIM	DCg 1	
02:30:07	112.552	6163.72		-0.09
02:31:34	112.576	6162.59		-1.14
02:34:26	112.624		257.20	
02:35:53	112.648	6163.77		1.18
02:38:46	112.696	6164.95		1.18
02:40:12	112.720	6164.27		-0.68
02:43:05	112.768	6164.79		0.53
02:44:31	. 112.792	6164.35		-0.44
02:47:24	112.840	6163.13		-1.23
02:48:50	112.864		257.23	
02:51:43	112.912	6164.47		1.35
02:53:10	112.936	6163.55		-0.92
02:56:02	112.984		- 257.23	7.00
02:57:29	113.008	6160.47		-3.08
03:00:22	113.056	6159.44		-1.04
03:01:48	113.080	6160.23		0.79
03:04:41	113.128	6159.22		-1.01
03:06:07	113.152	6158.05		-1.17 -0.88
03:09:00	113.200	6157.18	257 24	-W.88
03:10:26	113.224	0150 77	257.24	1.05
03:13:19	113.272	6158.23		-0.31
03:14:46	113.296	6157.92	207 24	-0.51
03:17:38	113.344	0.450 07	257 <b>,2</b> 4	-1.90
03:19:05	113.368	6156.02		-0.25
03:21:58	113.416	6155.77 6154.67		-1.11
03:23:24	113.440	6154.58		-0.09
03:26:17	113.488	6155.05		0.47
03:27:43 03:30:36	113.512 113.560	6155.22		0.18
03:32:02	113.584		257.30	
03:34:55	113.632	6154.52		-0.70
Ø3:36:22	113.656	6154.48		-0.04
03:39:14	113.704	B.15 . 1 . 1	257.30	• •
03:40:41	113.728	6154.22		-0.26
03:43:34	113.776	6153.47		-0.74
03:45:00	113.800	6152.99		-0.48
03:47:53	113.848	6152.47		-0.53
03:49:19	113.872	6151.77		-0.70
03:52:12	113.920	6151.75		-0.02
03:53:38	113.944		257.27	
03:56:31	113.992	6151.25		-0.50
03:57:58	114.016	6151.08		-0.18
04:00:50	114.064		257 <b>.</b> 3 <b>0</b>	
04:02:17	114.088	6151.37		0.29
04:05:10	114.136	6149.25		-2.12
04:06:36	114.160	6148.77		-0.48
04:09:29	114.208	6149.45		0.67
04:10:55	114.232	6150.03		0.58
04:13:48	114.280	6148.32	055 55	-1.71
04:15:14	114.304		257.32	•

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Date : 11/10/89

Real Time	Delta Time	Pressure	Темр	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
			¥.	
04:18:07	114.352	6148.12	•	-0.20
04:19:34	114.376	6148.56		0.44
04:22:26	114.424		257.32	
04:23:53	114.448	6148.86		0.31
04:26:46	114.496	6147.84		-1.02
04:28:12	114.520	6147.36		-0.48
04:31:05	114.568	6146.09		-1.27
04:32:31	114.592	6146.17		0.08
04:35:24	114.640	6146.60	257 74	0.44
04:36:50	114.664	<b>7.15.11</b>	257.34	-0.16
04:39:43	114.712	6146.44		Ø.83
04:41:10	114.736	6147.28	252 77	Ø.05
04:44:02	114.784	5445 45	257.37	-1.81
04:45:29	114.808	6145.47		0.61
04:48:22	114.856	6146.08		-0.57
04:49:48	114.880	6145.51		-1.44
04:52:41	114.928	6144.07		-0.31
04:54:07	114.952	6143.76		-0.25
04:57:00	115.000	6143.52	257.39	0.23
04:58:26	115.024	6142.60	257.35	-0.92
05:01:19	115.072	6142.68		0.09
05:02:46	115.096	6142.68	257.39	0.03
05:05:38	115.144	6139.72	231.33	-2.96
05:07:05	115.168	6141.21		1.49
05:09:58	115.216	6141.63		0.42
05:11:24	115.240 115.288	6140.99		-0.64
05:14:17	115.312	6140.73	::	-0.26
05:15:43 05:18:36	115.360	6139.91		-0.82
05:18:36 05:20:02	115.384	0,00.01	257.40	
05:20:02 05:22:55	115.432	6140.29		0.38
05:24:22	115.456	6141.34		1.05
05:27:14	115.504	0	257.38	
05:28:41	115.528	6139.80	•	-1.55
05:20:41	115.576	6139.50		-0.29
05:37:54	115.600	6140.07		0.57
05:35:53	115.648	6140.13		0.06
05:37:19	115.672	6140.36		0.23
05:40:12	115.720	6140.92		0.55
05:41:38	115.744		257.37	
05:44:31	115.792	6140.92		0.00
05:45:58	115.816	6138.90		-2.01
05:48:50	115.864		257.39	-
05:50:17	115.888	6141.82		2.92
05:53:10	115.936	6140.73		-1.09
05:54:36	115.960	6141.88		1.15
05:57:29	116.008	6141.66		-0.22
05:58:55	116.032	6140.67		-0.99
06:01:48	116.080	6140.28		-0.39
06:03:14	116.104	-	257.40	
50.05.14	,			

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189 Well No.: Anemone # 1A Date : 11/10/89

Real Time HH:MM:SS	Delta Time Hours	Pressur <b>e</b> PSIA	lemp Deg F	Pn-P(n-1) PSIA
06:06:07	116.152	6139.97	•	0.31
06:07:34	116.176	6139.80		-0.18
06:10:26	116.224		257.42	
06:11:53	116.248	6141.08		1.28
06:14:46	116.296	6141.17		0.09
06:16:12	116.320	6141.99		0.82
06:19:05	116.368	6141.64		-0.35
06:20:31	116.392	6141.48		-0.16
06:23:24	116.440	6140.30		-1.18
06:24:50	116.464		257.42	
06:27:43	116.512	6140.09		-0.21
06:29:10	116.536	6139.78		-0.31
06:32:02	116.584		. 257.42	2 25
06:33:29	116.608	6140.03		0.25
<b>06:36:22</b>	116.656	6139.81		-0.22
06:37:48	116.680	6138.37		-1.44
06:40:41	116.728	6139.77		1.40 -0.57
06:42:07	116.752	6139.20		-0.37 0.35
<b>06:45:0</b> 0	116.800	6139.55	257 45	พ.วอ
06:46:26	116.824	6470 10	257.45	-1.46
06:49:19	116.872	6138.10		1.27
06:50:46	116.896	6139.36	257 44	1 • 6 1
06:53:38	116.944	6139.92	257.44	0.55
06:55:05	116.968	6138.93		-0.99
06:57:58	117.016	6139.23		Ø.33
06:59:24	117.040 117.088	6138.45		-0.79
07:02:17 07:03:43	117.112	6137.72		-0.73
07:05:45 07:06:36	117.160	6135.66		-2-06
07:08:02	117.184	0133.00	257.46	
07:10:55	117.232	6135.94	2011	0.28
07:10:33	117.256	6136.73		Ø.79
07:15:14	117.304		257.46	
07:16:41	117.328	6137.54		0.82
07:19:34	117.376	6135.40		-2.14
07:21:00	117.400	6133.75		-1.65
07:23:53	117.448	6135.06		1.31
07:25:19	117.472	6132.99		-2.07
07:28:12	117.520	6135.06		2.07
07:29:38	117.544		257.46	
07:32:31	117.592	6135.66		0.60
07:33:58	117.616	6134.39		-1.27
07:36:50	117.664		257.46	
07:38:17	117.688	6135.18		0.79
07:41:10	117.736	6134.36		-0.82
07:42:36	117.760	6133.64		-0.73
07:45:29	117.808	6132.94		-0.70
07:46:55	117.832	6132.31		-0.63
07:49:48	117.880	6133.64		1.33
07:51:14	117.904		257.48	

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Real Time	Delta Time	Pressure	Темр	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
			, in the second	2.04
07:54:07	117.952	6130.79		-2.84 1.31
07:55:34	117.976	6132.10	257.45	1.31
07:58:26	118.024	0170 14	257.45	0.04
07:59:53	118.048	6132.14		0.04 0.39
08:02:46	118.096	6132.54 6130.57		-1.97
08:04:12	118.120			1.34
08:07:05	118.168	6131.91 6130.48		-1.43
08:08:31	118.192 118.240	6131.06		0.58
08:11:24	118.264	0151.00	257.44	0.03
08:12:50	118.312	6131.21	237.44	0.15
08:15:43 08:17:10	118.336	6130.73		-0.48
08:17:10	118.384		257.42	
08:21:29	118.408	6130.28		-0.45
08:21:23	118.456	6130.28		0.00
08:25:48	118.480	6129.37		-0.90
08:28:41	118.528	6129.40		0.03
08:30:07	118.552	6128.67		-0.73
08:33:00	118.600	6128.91		0.23
08:34:26	118.624		257.45	
08:37:19	118.672	6126.95		-1.95
08:38:46	118.696	6127.44		0.48
08:41:38	118.744		257.47	
08:43:05	118.768	6127.01		-0.42
08:45:58	118.816	6128.68		1.66
08:47:24	118.840	6128.85		0.17
08:50:17	118.888	6126.29	· ::	-2.57
08:51:43	118.912	6127.38		1.09
08:54:36	118.960	6125.10		-2.27
08:56:02	118.984		257.48	
08:58:55	119.032	6126.33		1.22
09:00:22	119.056	6126.33	055 45	0.00
09:03:14	119.104	0400 47	257.49	Ø 10
09:04:41	119.128	6126.43		0.10 0.38
09:07:34	119.176	6126.81		-0.99
09:09:00	119.200	6125.82 6125.09		-0.73
09:11:53	119.248	6125.28		0.19
09:13:19	119.272 119.320	6123.89		-1.38
09:16:12	119.344	0123.03	257.46	, ,,,,
09:17:38 09:20:31	119.392	6123.63	201110	-0.26
09:21:58	119.416	6125.07		1.44
	119.464	0.22.0	257.48	
09:24:50 09:26:17	119.488	6124.27	201110	-0.80
09:26:17 09:29:10	119.536	6121.79		-2.48
09:29:70 09:30:36	119.560	6123.13		1.34
09:33:29	119.608	6122.77		-0.37
09:33:29 09:34:55	119.632	6122.79		0.03
09:37:48	119.680	6123.86		1.07
09:39:14	119.704	5,25,00	257.45	
41.00.04	113.107		<del></del>	

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

			Т	Pn-P(.n-1)
Real Time	- ·	Pressure PSIA	Temp Deg F	PSIA
HH:MM:SŞ	Hours	r51u	beg r	( )
09:42:07	119.752	6122.45		-1.41
09:43:34	119.776	6123.54		1.09
09:46:26	119.824	4,2012	257.45	
09:47:53	119.848	6121.95		-1.59
09:50:46	119.896	6122.45		0.50
09:52:12	119.920	6121.35		-1.09
09:55:05	119.968	6121.33		-0.03
09:56:31	119.992	6121.34		Ø.02
09:59:24	120.040	6120.70		-0.64
10:00:50	120.064		257.48	
10:03:43	120.112	6119.78		-0.92
10:05:10	120.136	6117.33		-2.45
10:06:00	Close PCT, bleed		re .	
10:08:02	120.184	•	256.99	·
10:09:29	120.208	6843.15		725.81
10:11:00	Close choke at m	anifold		·
10:12:22	120.256	7037.36		194.21
10:13:48	120.280	7104.92		67.57
10:16:41	120.328	7209.42		104.50
10:18:07	120.352	7251.07		41.66
10:21:00	120.400	7320.09		69.01
10:22:26	120.424		256.86	
10:25:19	120.472	7402.60		82.51
10:26:00	Open kill valve,	open MIDRV	(@ Z800 psi)	, close kill valve
10:26:46	120.496	7426.92	•	24.32
10:29:38	120.544		256.69	
10:30:00			g, maintainin	g tubing pressure
10:31:05	120.568	7488.31		61.39
10:33:58	120.616	7526.18	•	37.87
10:35:24	120.640	7540.75		14.57
10:38:17	120.688	7571.97		31.22
10:39:43	120.712	7586.39		14.42
10:42:36	120.760	7613.37	055 31	26.98
10:44:02	120.784	<b>55.45.55</b>	256.71	30.03
10:46:55	120.832	7648.99		35.62 11.47
10:48:22	120.856	7660.46	3CC 47	11.47
10:51:14	120.904	7C02 00	256.47	31.63
10:52:41	120.928	7692.09 7711.71		19.62
10:55:34	120.976 121.000	7721.03		9.32
10:57:00	121.048	7739.10		18.07
10:59:53		7747.81		8.72
1.1:01:19	121.072 121.120	7764.95		17.13
11:04:12	121.120	1104.33	256.32	,,,,,
11:05:38	121.192	7787.41	230.32	22.46
11:08:31	121.192	7795.30		7.89
11:09:58	121.216	1133.34	256.14	, , , , ,
11:12:50	121.284	7816.81	200117	21.51
11:14:17 11:17:10	121.200	7830.40		13.59
11:17:10	121.350	7836.79		6.40
11.10.70	121.500	, 000110		

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

5 1 Tr -	Dalda Tima	Pressure	Тетр	Pn-P( n-1 )
Real Time	Delta Time Hours	PSIA	Deg F	PSIA
HH:MM:SS	nours	1 3111	beg i	7 0 217
11:21:29	121.408	7850.00	•	13.21
11:22:55	121.432	7855.62		5.62
11:25:48	121.480	7867.98		12.36
11:27:14	121.504	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	255.94	
11:30:07	121.552	7885.34		17.36
11:31:34	121.576	7891.27		5.93
11:34:26	121.624		255.87	
11:35:53	121.648	7906.65		15.38
11:38:46	121,696	7917.16		10.51
11:40:12	121.720	7922.14		4.99
11:43:05	121.768	7931.62		9.48
11:44:31	121.792	7937.01		5.39
11:47:24	121.840	7946.14		9.13
11:48:50	121.864		255.65	
11:51:43	121.912	7959.38		13.23
11:53:10	121.936	7963.94		4.56
11:56:02	121.984		255.47	
11:57:29	122.008	7977.16		13.23
12:00:22	122.056	7984.99		7.82
12:01:48	122.080	7987.72		2.73
12:04:00	Open kill valve,	, close Ml	DRV	
12:04:41	122.128	7996.71		8.99
12:06:07	122.152	8001.06		4.35
12:09:00	122.200	8016.04		14.98
12:10:00	Pressurise annul	lus to ope	en PCT (PCT rema	ins closed)
12:10:26	122.224		255.70	
12:12:00			increase in gau	ge pressure)
12:13:19	122.272	8022.89		6.85
12:14:46	122.296	8025.80		2.91
12:17:38	122.344		255.79	0.00
12:19:05	122.368	8035.77		9.97
12:21:58	122.416	8041.16		5.39
12:23:24	122.440	8045.53		4.37
12:26:17	122.488	8052.38		6.85
12:27:43	122.512	8055.66		3.28
12:30:36	122.560	8062.08	555 54	6.42
12:32:02	122.584		255.54	0.40
12:34:55	122.632	8071.57		9.49
12:36:22	122.656	8074.71	255 44	3.14
12:39:14	122.704	0007 03	255.44	9.11
12:40:41	122.728	8083.82		5.95
12:43:34	122.776	8089.77		2.87
12:45:00	122.800	8092.63		
12:47:53	122.848	8098.43		5.80
12:49:19	122.872	8101.27		2.84
12:52:12	122.920	8106.82		5.55
12:53:38	122.944	:	255.29	0.22
12:56:31	122.992	8115.04	•	8.22
12:57:58	123.016	8117.81	acc ".	1 2.78
13:00:50	123.064		255.21	

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189 Well No.: Anemone # 1A Date : 11/10/89

	,				
Real Time	Delta Time	Pressure	Temp	Pn-P(n-1)	
HH:MM:SS	Hours	PSIA	Deg F	PSIA	
	•			•	
13:02:17	123.088	8119.40		1.59	
13:05:10	123.136	8128.77		9.36	
13:06:36	123.160	8131.93		3.16	
13:09:29	123.208	8136.45		4.52	
13:10:55	123.232	8141.11		4.66	
13:13:48	123.280	8161.68		20.57	
13:15:14	123.304		255.21		
13:18:07	123.352	8150.70		-10.98	
13:19:34	123.376	8154.73		4.03	
13:22:26	123.424		254.43		
13:23:53	123.448	8162.82		8.09	
13:26:46	123.496	8166.79		3.97	
13:28:12	123.520	8170.05	•	3.26	
13:31:05	123.568	8174.27		4.22	
13:32:31	123.592	8175.03		0.76	
13:35:24	123.640	8178.95		3.92	
13:36:50	123.664		254.35		
13:37:00	Unseat nacker	and circulate	(transient	pulse seen downhole)	
13:39:43	123.712	8565.83		386.88	
13:41:10	123.736	8469.00		-96.84	
13:44:02	123.784	• . • • • • • • • • • • • • • • • • • •	256.06		
13:45:29	123.808	8349.95		-119.05	
13:48:22	123.856	8317.09	شن .	-32.86	
13:49:48	123.880	8306.28	,* *	-10.81	
13:52:41	123.928	8291.83		-14.45	
13:52:41	123.952	8286.46		-5,38	
13:57:00	124.000	8278.65		-7.81	
13:58:26	124.024	0210.03	255.31	: • · · · · · · · · · · · · · · · · · ·	
14:01:19	124.072	8272.47	,	-6.18	
14:02:46	124.072	8271.03	• 4	-1.44	
14:02:40	124.144	0211103	255.05		
	124.144	8269.57	202100	-1.46	
14:07:05	124.216	8269.03		-0.54	
14:09:58 14:11:24	124.240	8269.46		0.43	
	124.288	8269.88		0.42	
14:14:17	124.312	8270.18		0.29	
14:15:43	124.360	8271.09		0.91	
14:18:36 14:20:02	124.384	0271.03	254.72	2.3.	
14:20:02	124.432	8272.80	234.12	1.70	
	124.456	8273.54		0.74	
14:24:22		0213134	254.62		
14:27:14	124.504	0275 51	234.02	1.97	
14:28:41	124.528	8275.51		1.56	
14:31:34	124.576	8277.07		0.84	
14:33:00	124.600	8277.91		0.64 1.58	
14:35:53	124.648	8279.49		0.85	
14:37:19	124.672	8280.34		1.52	
14:40:12	124.720	8281.86	254 47	1.54	
14:41:38	124.744	0005 05	254.43	3.19	
14:44:31	124.792	8285.05		3.19 \ 1.35	
14:45:58	124.816	8286.40		1.00	

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Real Time HH:MM:SS	Delta Time Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
14:48:50	124.864		254.36	
14:50:17	124.888	8288.79		2.39
14:53:10	124.936	8291.21		2.42
14:54:36	124.960	8292.17		Ø.96
14:57:29	125.008	8294.71		2.54
14:58:55	125.032	8296.45		1.74
15:01:48	125.080	8298.17		1.72
15:03:14	125.104		254.18	
15:06:07	125.152	8303.27		5.10
15:07:34	125.176	8304.90		1.63
15:10:26	125.224		254.18	
15:11:53	125.248	8309.39		4.50
15:14:46	125.296	8312.12		2.73
15:16:12	125.320	8313.35		1.23
15:19:05	125.368	8316.11		2.76
15:20:31	125.392	8317.29		1.18
15:23:24	125.440	8320.19		2.90
15:24:50	125.464		253.96	
15:27:43	125.512	8323.73		3.54
15:29:10	125.536	8324.98		1.26
15:32:02	125.584		253.93	
15:33:29	125.608	8328.83		3.85
15:36:22	125.656	8331.08		2.25
15:37:48	125.680	8332.26		1.18
15:40:41	125.728	8334.93		2.67
15:42:07	125.752	8336.23		1.30
15:45:00	125.800	8338.02		1.78
15:46:26	125.824		253.81	2 02
15:49:19	125.872	8341.25		3.23
15:50:46	125.896	8342.32		1.07
15:53:38	125.944		253.78	7 67
15:55:05	125.968	8345.95		3.63
15:57:58	126.016	8348.19		2.24
15:59:24	126.040	8349.35		1.16
16:02:17	126.088	8351.71		2.36
16:03:43	126.112	8353.08		1.37 2.17
16:06:36	126.160	8355.25	257 60	2.17
16:08:02	126.184	0750 40	253.69	7 77
16:10:55	126.232	8358.48		3.23 1.16
16:12:22	126.256	8359.65	253.66	1.10
16:15:14	126.304	0707 17	253.00	3.53
16:16:41	126.328	8363.17		1.46
16:19:34	126.376	8364.63		
16:21:00	126.400	8365.39		0.76 1.51
16:23:53	126.448	8366.90		
16:25:19	126.472	8367.88		0.98 2.07
16:28:12	126.520	8369.94	207 01	2.W(
16:29:38	126.544	0774 65	253.61	4.05
16:32:31	126.592	8374.00		1.26
16:33:58	126.616	8375.26		1.20

Client : Petrofina Australia Gauge No

Location: Zapata Arctic Well No.: Anemone # 16

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Date : 11/10/89

Real Time	Delta Time	Pressure	Темр	Pn-P(n-1)
HH:MM:SS		PSIA	Deg F	PSIA
				•
16:36:50	126.664		253.54	•
16:38:17	126.688	8374.71		-0.54
16:41:10	126.736	8376.27		1.55
16:42:36	126.760	8377.46		1.20
16:45:29	126.808	8379.65		2.19
16:46:55	126.832	8380.77		1.12
16:49:48	126.880	8382.87		2.10
16:51:14	126.904		253.51	7 70
16:54:07	126.952	8386.23		3.36 0.65
16:55:34	126.976	8386.88		C0.W
16:58:26	127.024		253.48	
16:59:53	127.048	8390.21		3.33
17:02:46	127.096	8392.41	•	2.21
17:04:12	127.120	8393.35		0.93
17:07:05	127.168	8395.54		2.19
17:08:31	127.192	8396.55		1.01
17:11:24	127.240	8398.82	n== 44	2.27
17:12:50	127.264		253.41	5 63
17:15:43	127.312	8401.74		2.92
17:17:10	127.336	8402.72		0.98
17:20:02	127.384		253.38	
17:21:29	127.408	8405.69		2.97
17:24:22	127.456	8407.81	مني ني	2.11
17:25:48	127.480	8409.00		1.20
17:28:41	127.528	8410.76	•	1.76
17:30:07	127.552	8411.88		1.12
17:33:00	127.600	8412.16		0.28
17:34:26	127.624		253.31	<b>.</b>
17:37:19	127.672	8414.71	• •	2.55
17:38:46	127.696	8415.55		0.84
17:41:38	127.744		253.27	7 70
17:43:05	127.768	8418.85		3.30
17:45:58	127.816	8421.12		2.27
17:47:24	127.840	8422.26		1.14
17:50:17	127.888	8424.18		1.93
17:51:43	127.912	8425.34		1.15
17:54:36	127.960	8426.92	057 00	1.59
17:56:02	127.984	2400 04	253.22	2.12
17:58:55	128.032	8429.04		1.54
18:00:22	128.056	8430.58	057 00	1.34
18:03:14	128.104		253.22	2 04
18:04:41	128.128	8433.52		2.94
18:07:34	128.176	8436.03		2.51
18:09:00	128.200	8436.24		0.22
18:11:53	128.248	8435.81		-0.44
18:13:19	128.272	8436.62		0.81
18:16:12	128.320	8436.31		-0.31
18:17:38	128.344		253.09	
18:18:00	Pump slug, prior			CA4 70
18:20:31	128.392	9041.08		604.78

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

			_	5 5/ 1)
Real Time	Delta Time	Pressure	Темр	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
18:21:58	128.416	9074.98	•	33.89
18:24:50	128.464	3014.30	255.37	
18:26:17	128.488	9056.29		-18.69
18:29:10	128.536	9053.34		-2.95
18:30:36	128.560	9048.64		-4.70
18:33:29	128.608	9041.99		-6.65
18:34:55	128.632	9039.26		-2.73
18:37:48	128.680	9034.59		-4.67
18:39:14	128.704		254.30	
18:42:07	128.752	9028.18		-6.40
18:43:34	128.776	9025.10		-3.08
18:46:26	128.824	-	254.06	
18:47:53	128.848	9022.78		-2.32
18:50:46	128.896	9019.97	•	-2.81
18:52:12	128.920	9017.36		-2.61
18:55:05	128.968	9016.95		÷Ø.4∅
18:56:31	128.992	9018.24		1.28
18:59:24	129.040	9014.27		-3.96
19:00:50	129.064		253.68	
19:03:43	129.112	9009.93		-4.34
19:05:10	129.136	9007.89		-2.04
19:08:02	129.184		253.54	
19:09:29	129.208	9006.37		-1.53
19:12:22	129.256	9002.31		-4.06
19:13:48	129.280	9003.76		1.46
19:16:41	129.328	9001.50		-2.26
19:18:07	129.352	8999.32	1:	-2.18
19:21:00	129.400	8992.36		-6.97
19:22:26	129.424	•	253.36	7 00
19:25:19	129.472	8988.46		-3.90
19:26:46	129.496	8993.25		4.79
19:29:38	129.544		253.27	44 45
19:31:05	129.568	9004.40		11.16
19:33:58	129.616	9002.90		-1.50
19:35:24	129.640	9006.62		3.71
19:38:17	129.688	9003.08		-3.54
19:39:43	129.712	9009.59		6.51 -78.64
19:42:36	129.760	8930.95	252.37	-70.04
19:44:02	129.784	9021.61	232.37	90.65
19:46:55	129.832	9017.05	•	-4.55
19:48:22	129.856	בט. וושכ	251.57	7.00
19:51:14	129.904	0011 00	231.37	-6.05
19:52:41	129.928	9011.00		-4.04
19:55:34	129.976	9006.96		-106.71
19:57:00	130.000	8900.25		98.63
19:59:53	130.048	8998.88		13.88
20:01:19	130.072	9012.76		10.35
20:04:12	130.120	9023.11	240 70	10.55
20:05:38	130.144	0000 10	249.30	-13.95
20:08:31	130.192	9009.16		-(3.33

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Date : 11/10/89

Real Time HH:MM:SS	Delta Time Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
20.20.50	130.216	9015.75		. 6.59
20:09:58 20:12:50	130.264	3013.13	248.57	
20:14:17	130.288	8988.54	2.0.0.	-27.21
20:17:10	130.336	8862.17		-126.37
20:18:36	130.360	8822.68		-39.49
20:10:30	130.408	8985.21		162.53
20:21:25	130.432	8983.17		-2.04
20:25:48	130.480	9058.42		75.25
20:27:14	130.504		247.44	
20:30:07	130.552	8860.03		-198.38
20:31:34	130.576	8821.70		-38.34
20:34:26	130.624		247.10	
20:35:53	130.648	8748.74		-72.95
20:38:46	130.696	8955.76		207.02
20:40:12	130.720	9006.31		50.55
20:43:05	130.768	8998.26		-8.05
20:44:31	130.792	8931.67		-66.59
20:47:24	130.840	9013.18		81.51
20:48:50	130.864		244.20	
20:51:43	130.912	9028.36		15.18
20:53:10	130.936	9013.03		-15.33
20:56:02	130.984		241.41	•
20:57:29	131.008	8954.81		-58.23
21:00:22	131.056	8983.39		28.58
21:01:48	131.080	8972.88	•	-10.50
21:04:41	131.128	8982.35		9.47
21:06:07	131.152	8962.25		-20.10
21:09:00	131.200	8982.96		20.70
21:10:26	131.224		226.37	2.05
21:13:19	131.272	8980.10		-2.86
21:14:46	131.296	8969.52		-10.58
21:17:38	131.344		221.63	0.27
21:19:05	131.368	8960.25		-9.27
21:21:58	131.416	8970.65		10.40
21:23:24	131.440	8996.55		25.90
21:26:17	131.488	8973.10		-23.45
21:27:43	131.512	8925.95		-47.14 -17.50
21:30:36	131.560	8908.45	231.01	-17.50
21:32:02	131.584		231.01	ר רנ
21:34:55	131.632	8901.79		-6.66 6.49
21:36:22	131.656	8908.28	225 14	6.49
21:39:14	131.704		225.10	24 77
21:40:41	131.728	8883.95		-24.33 AF
21:43:34	131.776	8878.89		-5.05 -3.65
21:45:00	131.800	8875.25		-3.65 -17.10
21:47:53	131.848	8858.14		-17.10 -3.58
21:49:19	131.872	8854.56		-3.56 -22.94
21:52:12	131.920	8831.62	212 60	6 6 9 4
21:53:38	131.944	0000 17	217.69	-22.49
21:56:31	131.992	8809.13		L.L. + TJ

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Real Time HH:MM:SS	Delta Time Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
21:57:58	132.016	8802.80	•	-6.33
22:00:50	132.064	0002.04	215.81	
22:00:30	132.088	8779.93		-22.87
22:05:10	132.136	8764.31		-15.62
22:05:76	132.160	8753.96		-10.36
22:00:30	132.208	8748.52		-5.43
22:10:55	132.232	8711.35		-37.18
22:13:48	132.280	8730.19		18.84
22:15:14	132.304		215.36	
22:18:07	132.352	8706.72		-23.46
22:19:34	132.376	8700.36		-6.36
22:22:26	132.424		214.79	
22:23:53	132.448	8601.97		-98.39
22:26:46	132.496	8588.51		-13.46
22:28:12	132.520	8680.79		92.28
22:31:05	132.568	8649.35	-	-31.45
22:32:31	132.592	8625.14		-24.21
22:35:24	132.640	8592.30		-32.84
22:36:50	132.664		214.99	<u>.</u>
22:39:43	132.712	8622.62		30.33
22:41:10	132.736	8619.66		-2.96
22:44:02	132.784	•	214.85	
22:45:29	132.808	8619.41		-0.25
22:48:22	132.856	8612.38		-7.03
22:49:48	132.880	8617.45		5.07
22:52:41	132.928	8610.47		-6.98
22:54:07	132.952	8613.09		2.62
22:57:00	133.000	8606.84		-6.26
22:58:26	133.024	•	215.41	
23:01:19	133.072	8604.09		-2.74
23:02:46	133.096	8601.89		-2.21
23:05:38	133.144		215.62	4 00
23:07:05	133.168	8599.96		-1.92
23:09:58	133.216	8511.45		-88.51
23:11:24	133.240	8567.73		56.28
23:14:17	133.288	8532.90		-34.83
23:15:43	133.312	8587.10		54.20
23:18:36	133.360	8582.73	245 22	-4.37
23:20:02	133.384		215.98	~ ~ ~
23:22:55	133.432	8575.23		-7.50
23:24:22	133.456	8573.50		-1.74
23:27:14	133.504		216.21	4 07
23:28:41	133.528	8571.86		-1.63
23:31:34	133.576	8569.25	•	-2.61
23:33:00	133.600	8568.48		-0.77
23:35:53	133.648	8562.73		-5.76
23:37:19	133.672	8560.59		-2.14
23:40:12	133.720	8558.93		-1.66
23:41:38	133.744		216.66	a 05
23:44:31	133.792	8558.07		-0.86

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: **75189** 

Well No.: Anemone # 1A

Real Time HH:MM:SŞ	Delta Time Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
67 45.50	177 010	8557.65	•	-0.42
23:45:58	133.816 133.864	0337.03	216.86	0.42
23:48:50	133.888	8366.12	210.00	-191.53
23:50:17 23:53:10	133.936	8580.90		214.78
23:53:10	133.960	8620.77		39.87
23:57:29	134.008	8585.28		-35.49
23:58:55	134.032	8584.94		-0.34
00:01:48	134.080	8576.33		-8.61
00:01:48	134.104		216.95	
00:05:07	134.152	8568.19		-8.14
00:03:07	134.176	8571.90		3.71
00:10:26	134.224		216.75	
00:10:20	134.248	8579.16		7.27
00:14:45	134.296	8571.87		-7.29
00:14:48	134.320	8571.49		-0.39
00:19:05	134.368	8569.03		-2.46
00:20:31	134.392	8365.27		-203.75
00:23:24	134.440	8505.86		140.58
00:24:50	134.464		219.45	
00:27:43	134.512	8476.18		-29.68
00:29:10	134.536	8428.92		-47.25
00:32:02	134.584		217.95	
00:33:29	134.608	8416.27		-12.66
00:36:22	134.656	8398.55	•	-17.71
00:37:48	134.680	8380.98		-17.57
00:40:41	134.728	8346.48		-34.50
00:42:07	134.752	8091.55		-254.93
00:45:00	134.800	8294.14		202.59
00:46:26	134.824	·	213.30	
00:49:19	134.872	8231.49		-62.65
00:50:46	134.896	8235.17		3.67
00:53:38	134.944		212.91	
00:55:05	134.968	8085.10		-150.06
00:57:58	135.016	8167.12		82.01
00:59:24	135.040	8149.96		-17.16
01:02:17	135.088	7944.89		-205.07
01:03:43	135.112	8110.05		165.17
01:06:36	135.160	8064.49	7.2.25	-45.56
01:08:02	135.184	2224 50	210.05	70 O1
01:10:55	135.232	8024.68		-39.81 -173.59
01:12:22	135.256	7851.09	000 55	-173.55
01:15:14	135.304		208.56	440.07
01:16:41	135.328	7964.06		112.97
01:19:34	135.376	7926.46		-37.60
01:21:00	135.400	7904.41		-22:05
01:23:53	135.448	7803.64		-100.77
01:25:19	135.472	7860.72		57.07
01:28:12	135.520	7820.46	00	-40.25
01:29:38	135.544		205.57	CA 04
01:32:31	135.592	7759.52		-60.94
			· ·	

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Real Time HH:MM:SS	Delta Time Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA		
01:33:58	135,616	7738.91	•	-20.61		
01:36:50	135.664	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	203.48			
01:38:17	135.688	7519.99		-218.92		
01:41:10	135.736	7658.30		138.31		
01:42:36	135.760	7636.57		-21.72		
01:45:29	135.808	7591.04		-45.53		
01:46:55	135.832	7575.67		-15.37		
01:49:48	135.880	7535.87		-39.80		
01:51:14	135.904		200.01			
01:54:07	135.952	7474.93		-60.94		
01:55:34	135.976	7453.02		-21.91		
01:58:26	136.024		197.96			
01:59:53	136.048	7398.27		-54.75		
02:02:46	136.096	7349.68		-48.59		
02:04:12	136.120	7335.44		-14.24		
02:07:05	136.168	7314.93		-20.51		
02:08:31	-136.192	7292.00		-22.92		
02:11:24	136.240	7250.75		-41.25		
02:12:50	136.264		195.03			
02:15:43	136.312	7209.02		-41.73		
02:17:10	136.336	7185.41		-23.61		
02:20:02	136.384		192.69			
02:21:29	136.408	7123.97		-61.44		
02:24:22	136.456	7105.28		-18.69		
02:25:48	136.480	7081.12		-24.16		
02:28:41	136.528	7062.11		-19.01		
02:30:07	136.552	7042.14	, :	-19.97		
02:33:00	136.600	7022.18		-19.96		
02:34:26	136.624		189.56			
02:37:19	136.672	6959.31		-62.87		
02:38:46	136.696	6940.31		-19.00		
02:41:38	136.744		187.96			
02:43:05	136.768	6897.14		-43.17		
02:45:58	136.816	6877.51		-19.63		
02:47:24	136.840	6856.21		-21.30		
02:50:17	136.888	6639.74	•	-216.47		
02:51:43	136.912	6816.77		177.02		
02:54:36	136.960	6770.69		-46.08		
02:56:02	136.984		184.56	70.04		
02:58:55	137.032	6731.05		-39.64		
03:00:22	137.056	6701.19		-29.86		
03:03:14	137.104		183.00			
03:04:41	137.128	6673.64		-27.55		
03:07:34	137.176	6651.06		-22.57		
03:09:00	137.200	6631.53		-19.54		
03:11:53	137.248	6563.32		-68.21		
03:13:19	137.272	6591.27		27.95		
03:16:12	137.320	6549.93		-41.34		
03:17:38	137.344		180.19	<b></b>		
03:20:31	137.392	6522.52		-27.41		

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Real Time	Delta Time	Pressure	Temp Deg F	Pn-P(n-1) PSIA
HH:HM:55	Hours	PSIA	uey r	1 3111
03:21:58	137.416	6490.43	•	32.09
03:21:50	137.464	0430.45	178.59	
03:24:30	137.488	6452.06		-38.37
03:20:17	137.536	6408.83		-43.23
03:23:16	137.560	6386.18		-22.66
03:33:29	137.608	6334.09		-52.09
03:34:55	137.632	6343.52		9.43
03:37:48	137.680	6072.84		-270.68
03:39:14	137.704		175.91	•
03:42:07	137.752	6258.84		186.00
03:43:34	137.776	6241.39		-17.45
03:46:26	137.824		174.75	
03:47:53	137.848	6200.33	•	-41.06
03:50:46	137.896	6175.08		-25.24
03:52:12	137.920	6162.39		-12.69
03:55:05	137.968	6136.90		-25.50
03:56:31	137.992	6114.67		-22.23
03:59:24	138.040	6095.91		-18.75
04:00:50	138.064		172.51	
04:03:43	138.112	5862.90		-233.02
04:05:10	138.136	6038.76		175.86
04:08:02	138.184		171.44	42.24
04:09:29	138.208	5996.52		-42.24 70.70
04:12:22	138.256	5958.22		-38.30
04:13:48	138.280	5937.99		-20.23
04:16:41	138.328	5851.37		-86.62 42.40
04:18:07	138.352	5893.77		-16.44
04:21:00	138.400	5877.32	169.11	-10.44
04:22:26	138.424	E07E 40	163.11	-40.84
04:25:19	138.472	5836.48 5816.14		-20.34
04:26:46	138.496	5010.14	168.12	20.54
04:29:38	138.544 138.568	5755.76	100.12	-60.38
04:31:05		5715.61		-40.16
04:33:58	138.616 138.640	5647.99		-67.62
04:35:24	138.688	5672.25		24.26
04:38:17 04:39:43	138.712	5651.01		-21.24
04:35:45 04:42:36	138.760	5630.14		-20.87
04:44:02	138.784		165.58	
04:46:55	138.832	5465.86		-164.28
04:48:22	138.856	5563.40		97.54
04:40:22	138.904		164.66	
04:51:14	138.928	5523.95		-39.45
04:55:34	138.976	5483.13		-40.82
04:57:00	139.000	5426.86		-56.26
04:57:50	139.048	5231.98		-194.89
05:01:19	139.072	5216.40		-15.58
05:04:12	139.120	5376.95		160.55
05:05:38	139.144		161.72	<u>, , , , , , , , , , , , , , , , , , , </u>
05:08:31	139.192	5323.07		-53.88

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Real Time HH:MM:SS	Delta Time Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
1111-1111-55	nour s	102	•	
05:09:58	139.216	5300.79	•	-22.28
05:12:50	139.264		160.15	
05:14:17	139.288	5240.86		-59.92
05:17:10	139.336	5216.76		-24.10
05:18:36	139.360	5196.19		-20.57
05:21:29	139.408	5154.33		-41.87
05:22:55	139.432	5158.35		4.03
05:25:48	139.480	5117.04		-41.32
05:27:14	139.504		157.09	217 10
05:30:07	139.552	4903.85		-213.18
05:31:34	139.576	5058.56		154.71
05:34:26	139.624		155.81	
05:35:53	139.648	5014.03		-44.53
05:38:46	139.696	4986.32		-27.70
05:40:12	139.720	4972.39		-13.94
05:43:05	139.768	4952.40		-19.99
05:44:31	139.792	4931.42		-20.98 -
05:47:24	139.840	4891.52	157.01	-39.90
05:48:50	139.864		153.01	-46.24
05:51:43	139.912	4845.28		-46.24 -5.76
05:53:10	139.936	4839.52	151.62	-3.70
05:56:02	139.984	4202 50	151.04	-51.93
05:57:29	140.008	4787.59		-39.72
06:00:22	140.056	4747.87		-26.72
06:01:48	140.080	4721.15		-59.98
06:04:41	140.128	4661.17		-153.90
06:06:07	140.152	4507.27	7.1	124.53
06:09:00	140.200	4631.80	147 50	124.33
06:10:26	140.224	4501 10	147.90	-50.62
06:13:19	140.272	4581.18		-163.29
06:14:46	140.296	4417.89	146.13	103.23
06:17:38	140.344	4518.86	140.13	100.96
06:19:05	140.368			-45.05
06:21:58	140.416	4473.80 4459.25		-14.56
06:23:24	140.440 140.488	4493.23		-51.26
06:26:17	140.400	4393.93	•	-14.05
06:27:43 06:30:36	140.560	4376.16		-17.77
06:32:02	140.584	4570.10	142.48	
06:34:55	140.632	4309.96		-66.20
	140.656	4292.89		-17.07
06:36:22	140.704	4232.03	140.47	.,,,,,
06:39:14		4210.39	140.41	-82.50
06:40:41	140.728 140.776	4166.30		-44.10
06:43:34		4153.03		-13.27
06:45:00	140.800	4106.00		-47.03
06:47:53	140.848	4091.72		-14.28
06:49:19	140.872	4051.72		-40.52
06:52:12	140.920	4031.40	136.38	
06:53:38	140.944	3992.93	130.30	-58.27
06:56:31	140.992	JJ32.3J		00.21

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

				5 5/ 1)
Real Time	Delta Time	Pressure	Темр	Pn-P(n-1)
HH:MM:SS	Hours	PSIA	Deg F	PSIA
	444 016	7007 70		-89.57
06:57:58	141.016	3903.36	134.36	03.31
07:00:50	141.064	3914.52	154.50	11.16
07:02:17	141.088 141.136	3882.46		-32.06
07:05:10	141.150	3859.09		-23.38
07:06:36	141.208	3819.04		-40.05
07:09:29	141.252	3799.27		-19.77
07:10:55 07:13:48	141.280	3754.45		-44.82
	141.304	3134.43	130.39	
07:15:14 07:18:07	141.352	3714.74	100.00	-39.71
	141.376	3682.79		-31.96
07:19:34 07:22:26	141.424	5002.75	128.61	
07:23:53	141.448	3634.73		-48.05
07:25:35 07:26:46	141.496	3598.39		-36.34
07:28:12	141.520	3575.38		-23.01
07:28:12	141.568	3533.04		-42.34
07:32:31	141.592	3513.43		-19.61
07:35:24	141.640	3469.56		-43.88
07:36:50	141.664	0,40,00	124.61	
07:39:43	141.712	3410.68	. =	-58.88
07:41:10	141.736	3384.17		-26.51
07:44:02	141.784		122.85	
07:45:29	141.808	3340.59		-43.58
07:48:22	141.856	3303.99		-36.60
07:49:48	141.880	3282.54		-21.46
07:52:41	141.928	3084.99		-197.55
07:54:07	141.952	3178.87		93.88
07:57:00	142.000	3045.12		-133.75
07:58:26	142.024		119.65	
08:01:19	142.072	3148.65	• *	103.53
08:02:46	142.096	3128.27		-20.38
08:05:38	142.144		117.68	
08:07:05	142.168	3057.87		-70.40
08:09:58	142.216	3024.32		-33.55
08:11:24	142.240	2924.29		-100.03
08:14:17	142.288	2836.37		-87.92
08:15:43	142.312	2798.63		-37.74
08:18:36	142.360	2879.81		81.17
08:20:02	142.384		113.48	
08:22:55	142.432	2824.04		-55.76
08:24:22	142.456	2802.02		-22.03
08:27:14	142.504		111.59	•
08:28:41	142.528	2742.46		-59.55
08:31:34	142.576	2741.81		-0.65
08:33:00	142.600	2623.92		-117.90
08:35:53	142.648	2675.21		51.29
08:37:19	142.672	2507.51		-167.70
08:40:12	142.720	2600.38		92.87
08:41:38	142.744		108.29	
08:44:31	142.792	2538.34		-62.05

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Date : 12/10/89

		0	Темр	Pn-P(n-1)
Real Time	Delta Time	<b>Pressure</b> PSIA	Deg F	PSIA
HH:MM:SS	Hour s	L21U	Day 1	, , , , , ,
08:45:58	142.816	2481.49	•	-56.85
08:43:50	142.864	<del>-</del>	106.57	
08:50:17	142.888	2476.16		-5.32
08:53:10	142.936	2432.66		-43.50
08:54:36	142.960	2416.85		-15.81
08:57:29	143.008	2395.23		-21.63
08:58:55	143.032	2369.65		-25.58
09:01:48	143.080	2330.08		-39.57
09:03:14	143.104		103.35	
09:06:07	143.152	2286.97		-43.10
09:07:34	143.176	2250.20		-36.78
09:10:26	143.224		101.99	
09:11:53	143.248	2226.75		-23.45
09:14:46	143.296	2192.69		-34.06
09:16:12	143.320	2167.56		-25.13
09:19:05	143.368	2132.38		-35.18
09:20:31	143.392	2116.48		-15.90
09:23:24	143.440	2089.85	00.07	-26.63
09:24:50	143.464		98.23	-140.85
09:27:43	143.512	1949.00		11.15
09:29:10	143.536	1960.14	02.07	11.15
09:32:02	143.584		97.03	-4.19
09:33:29	143.608	1955.96		-89.36
09:36:22	143.656	1866.60		53.89
09:37:48	143.680	1920.49		-36.92
09:40:41	143.728	1883.57		-71.76
09:42:07	143.752	1811.81 1845.08	1 4	33.27
09:45:00	143.800	1845.00	94.35	55.21
09:46:26	143.824	1795.69	34.55	-49.39
09:49:19	143.872	1778.59		-17.10
09:50:46	143.896 143.944	1770.33	92.99	,,,,,
09:53:38	143.968	1750.24	52.55	-28.35
09:55:05	144.016	1698.68		-51.56
09:57:58 09:59:24	144.040	1675.53		-23.15
10:02:17	144.088	1636.72		-38.81
10:03:43	144.112	1591.61		-45.11
10:05:45	144.160	1529.09		-62.52
10:08:02	144.184	• = = = = = =	89.27	
10:10:55	144.232	1544.63	,	15.54
10:12:22	144.256	1545.94	•	1.31
10:15:14	144.304		88.17	
10:15:41	144.328	1517.45		-28.48
10:10:41	144.376	1500.81		-16.64
10:13:34	144.400	1495.88		-4.93
10:23:53	144.448	1429.16		-66.72
10:25:19	144.472	1430.05		0.89
10:28:12	144.520	1395.33		-34.72
10:29:38	144.544		85.80	
10:32:31	144.592	1334.53		-60.80

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Date : 12/10/89

	· · - ·		Town	Pn-P(n-1)
Real Time	Delta Time	Pressure	Temp Deg F	PSIA
HH:MM:SŞ	Hours	PSIA	Deg F	. 3111
10:33:58	144.616	1316.63	•	-17.90
10:36:50	144.664	10.0.00	83.71	
10:38:17	144.688	1254.04		-62.59
10:41:10	144.736	1126.38		-127.66
10:42:36	144.760	1094.74		-31.65
10:45:29	144.808	1154.26		59.53
10:46:55	144.832	1069.22		-85.05
10:49:48	144.880	1047.47		-21.75
10:51:14	144.904		79.64	
10:54:07	144.952	1007.08		-40.39
10:55:34	144.976	986.48		-20.60
10:58:26	145.024		77.05	
10:59:53	145.048	920.24	•	-66.24
11:02:46	145.096	930.11		9.87
11:04:12	145.120	913.27		-16.85
11:07:05	145.168	871.28		-41.99
11:08:31	145.192	847.99		-23.29
11:11:24	145.240	810.04		-37.95
11:12:50	145.264		72.53	40.01
11:15:43	145.312	769.13		-40.91
11:17:10	145.336	751.12	50.70	-18.01
11:20:02	145.384		69.30	CA A1
11:21:29	145.408	691.11		-60.01
11:24:22	145.456	617.05		-74.06
11:25:48	145.480	603.30	•	-13.75
11:28:41	145.528	589.72		-13.58 -24.18
11:30:07	145.552	565.54		2.08
11:33:00	145.600	567.62	r ca it	۷.,۰۷٥
11:34:26	145.624.	ECC 00	60.11	-0.63
11:37:19	145.672	566.99		0.37
11:38:46	145.696	567.37	59.43	0.57
11:41:38	145.744	567.56	33.43	Ø.19
11:43:05	145.768	561.71		-5.85
11:45:58	145.816	556.58		-5.14
11:47:24	145.840 145.888	549.25		-7.33
11:50:17	145.866	548.32		-0.92
11:51:43 11:54:36	145.960	549.07		0.75
11:56:02	145.984	343.01	59.38	
11:58:55	146.032	534.09		-14.98
12:00:22	146.056	530.28		-3.81
12:03:14	146.104		59.45	
12:04:41	146.128	530.08		-0.20
12:07:34	146.176	521.27		-8.81
12:09:00	146.200	516.33		-4.94
12:05:00	146.248	515.57		-0.76
12:13:19	146.272	515.11		-0.46
12:16:12	146.320	515.24		0.14
12:17:38	146.344		59.40	•.
12:20:31	146.392	497.19		-18.05
12.20.01	,			

Exal Reservoir Services Ltd.

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Real Time HH:MM:SS	<b>Delta Time</b> Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
12:21:58	146.416	496.34	•	-0.86
12:24:50	146.464	700.01	59.57	
12:24:30	146.488	475.20		-21.14
12:29:10	146.536	461.98		-13.22
12:30:36	146.560	456.55		-5.43
12:33:29	146.608	456.74		0.19
12:34:55	146.632	436.81		-19.93
12:37:48	146.680	436.65		-0.16
12:39:14	146.704		59.40	
12:42:07	146.752	417.06		-19.58
12:43:34	146.776	397.41		-19.66
12:46:26	146.824		58.80	
12:47:53	146.848	377.23		-20.18
12:50:46	146.896	358.19		-19.04
12:52:12	146.920	357.75		-0.43
12:55:05	146.968	338.84		-18.92
12:56:31	-146.992	338.64		-0.20
12:59:24	147.040	319.13		-19.51
13:00:50	147.064		58.32	10.00
13:03:43	147.112	299.44		-19.69 -18.10
13:05:10	147.136	281.34	ED 00	-18.10
13:08:02	147.184	220 45	58.08	-2.89
13:09:29	147.208	278.45		-18.13
13:12:22	147.256	260.32		-19.86
13:13:48	147.280	240.46 228.13		-12.33
13:16:41	147.328	221.34		-6.79
13:18:07	147.352 147.400	201.78	Ť.	-19.55
13:21:00	147.424	201.70	57.39	
13:22:26 13:25:19	147.472	182.14	0.100	-19.64
13:26:46	147.496	182.44		0.30
13:29:38	147.544	102111	57.16	
13:31:05	147.568	160.75		-21.68
13:33:58	147.616	159.57		-1.18
13:35:24	147.640	159.63		0.06
13:38:17	147.688	159.89		0.26
13:39:43	147.712	159.62		-0.27
13:42:36	147.760	106.71		-52.91
13:44:02	147.784		57.49	
13:46:55	147.832	103.86		-2.86
13:48:22	147.856	103.49		-0.37
13:51:14	147.904		58.69	
13:52:41	147.928	100.19		-3.30
13:55:34	147.976	98.13		-2.06
13:57:00	148.000	96.83		-1.30
13:59:53	148.048	95.75		-1.08
14:01:19	148.072	94.85	f	-0.90
14:04:12	148.120	86.61	<b></b>	-8.24
14:05:38	148.144		61.19	40 00
14:08:31	148.192	40.34		-46.28

Location: Zapata Arctic

Test No.: DST # 2

Gauge No: 75189

Well No.: Anemone # 1A

Real Time HH:MM:SS	Delta Time Hours	Pressure PSIA	Temp Deg F	Pn-P(n-1) PSIA
				•
14:09:58	148.216	39.23	•	1.10
14:12:50	148.264		65.28	
14:14:17	148.288	37.94		-1.30
14:17:10	148.336	30.41		-7.52
14:18:36	148.360	29.51		-0.90
14:21:29	148.408	21.19		-8.32
14:22:55	148.432	23.04		1.84
14:25:48	148.480	22.36		-0.68
14:27:14	148.504		66.62	
14:30:07	148.552	25.12		2.76
14:31:34	148.576	26.59		1.47
14:34:26	148.624		61.96	
14:35:53	148.648	26.12	•	-0.47
14:38:46	148.696	25.76		-0.36

PANSYSTEM ANALYSIS PROGRAM

E.P.D.S. Ltd.

File: 75189A.0IL

Test type: CRB

Date: 15/10/89 Time: 10:18

Analyst name..... R.Weir

Company..... Petrofina Exploration Australia SA

Well..... Anemone # 1a

Field..... Wildcat

Date..... 06/10/89-12/10/89

Rig Name/Number.....: Zapata Arctic

Vertical..:

Producing Formation..Top:

Bottom:

Perforated interval...Top: 4536.3-4546.3

Bottom:

Depth Reference - MSL...: Remarks....:

#### TEST PARAMETERS

#### Test type - Constant rate buildup

Flow rate at surface (q)	50.000	STB/day
Pressure prior to shut-in (p(dt=0)):	6249.216	psia
Equivalent production time (Tp)	0.1670	hr
Time when dt=0:	54.320	hr

File: 75189A.0IL

Test type: CRB

Date: 15/10/89 Time: 10:18

R	E	S	Ε	R	V	0	Ι	R	CONS	T	A	N.	TS
---	---	---	---	---	---	---	---	---	------	---	---	----	----

Formation thickness (h):	32.800	ft
Average formation porosity (0):	0.1600	
Well radius (rw)	0.4000	ft
Water saturation (Sw):	1.000	
Gas saturation (Sg):	0.0000	

## PRODUCED FLUID PROPERTIES

Oil gravity:	0.0000	API
Gas gravity:		sp grav
Gas-oil ratio:		scf/STB
Produced WOR:		
Water salinity		ppm

## FLUID PROPERTIES AT :

Reservoir pressure:	9000.000	psia
Temperature (T):	260.000	deg F

· ·		
CORRELATIONS:	Bo,Pb,Rs :ST	ANDING
	Oil viscosity :BE	665

Gas-oil ratio:	0.0000	scf/STB
Bubble-point pressure (Pb)	0.0000	psia
Oil density:	74.700	1b/ft3
Water density:	59.610	1b/ft3
Gas density:	24.198	16/ft3

	FVF (	U / U	>	VISCOS	SITY		COMPRE	SSIBIL	ITY
OIL:	Bo.:	1.000	RB/STB	Uo.:	0.0000	ср	Co.:	0.0000	ps1-1
WATER .:	Bw.∶	1.050	RB/STB	Uw.:	0.2258	ср	Cw.:3	.07E-06	psi-1
GAS:							Cg.:	0.0000	psi-1
	_					ROCK	Cf.:4	.00E-06	psi-1
						TOTAL	Ct.:7	07E-06	psi-1

CARTESIAN PLOT 

PANSYSTEM (C) EPDS 1986; 87, 88.

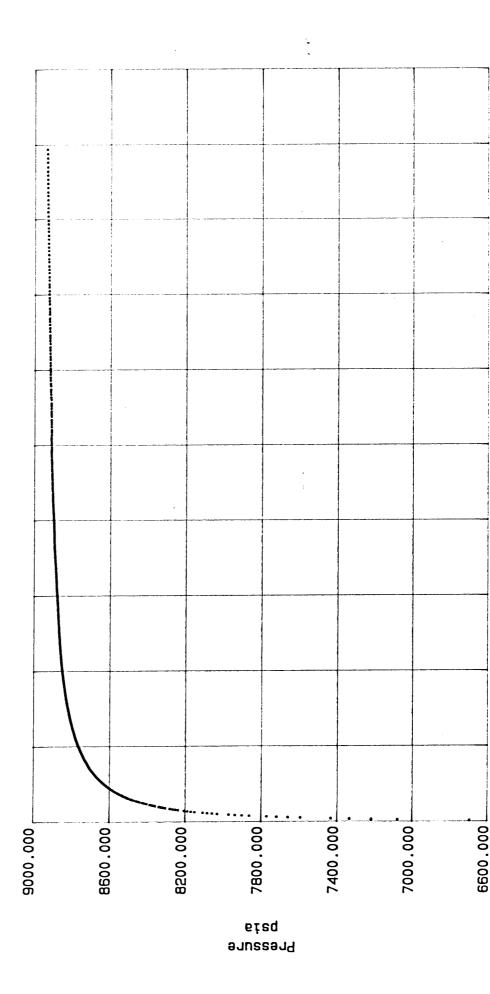
Analyst name...... R.Weir

Company...... Petrofina Exploration Australia SA

Date....: 06/10/89-12/10/89

Rig Name/Number..... Zapata Arctic

Test...... DST #2



dt (hours)

15.00

13.50

12.00

10.50

9.00

7.50

6.00

4.50

3.00

1.50

Qata	Time	Pressure	
Point	Hours	psia	
1.	54.3360	6694.265	
2 .	54.3520	7079.733	
3.	54.3600	7218.329	
4.	54.3680	7334.315	
5.	54.3760	7433.189	
6.	54.3920	7593.413	
7.	54.4000	7659.580	
8.	54.4080	7718.405	
9.	54.4160	7771.320	
10.	54.4320	7862.641	
11.	54,4400	7902.421	
12.	54.4480	7938.790	
13.	54.456 <u>0</u>	7972.199	
14.	54,4720	8032.243	
15.	54.4800	8059.175	
16.	54.4880	8084.323	
17.	54.4960 54.4960	8107.916	
18.	54.4360 54.5120	8150.837	
	54.5120 54.5200	8170,393	
19. 20.	54.5280	8188.846	
∠₩. 21.	54.5260 54.5360	8206.149	
22.	54.5520	8238.317	
23.	54.5520 54.5600	8253.134	
23. 24.	54.5680	8267.307	
25.	54.5760	8280.834	
25. 26.	54.5700 54.5920	8305.871	
29. 27.	54.6000	8317.551	
	54.6080	8328.769	
28.		8339.664	
29.	54.6160 54.6330	836 <b>0.113</b>	
3 <b>0</b> .	54.6320	8369.759	
31.	54.6400		
32.	54.6480	8378,988	
33.	54.6560	8387.893 8404.714	
<u>34.</u>	54.6720	8404.714	
35.	54.6800	8412.646	
3 <u>6</u> .	54.6880	8420.346	
37.	54.6960	8427.720	
. 38.	54.7120	8441.867	
39.	54.7200	8448.546	
40.	54.7280	8454.992	
41.	54.7360	8461.486	
42.	54.7520	8473.930	
43.	54.7600	8479.820	
44.	54.7680	8485.570	
45.	54.7760	8491.275	
46.	54.7920	8501.828	
47.	54.8000	8506.927	
4 <u>8</u> .	54.8080	8512.073	
49.	54.8160	8516.939	
50.	54.8320	8526.268	
	<del></del>		

•		
Data	Time	Pressure
Point	Honce	psia
, wans		·
51.	54.8400	8530.855
52.	54.8480	8535.349
53.	54.8560	8539.563
54.	54.8720	8547.820
<u>5</u> 5.	54.8800	8551.942
5 <u>6</u> .	54.8880	8555.876 8559.624
<b>57.</b>	54.89 <u>6</u> 0 54.9120	8566.996
58.	54.9200	857 <b>0.</b> 604
59. 60.	54.9280	8574.072
61.	54.9360	8577.446
62.	54.9520	8584.102
63.	54.9600	8587.337
64.	54,9680	8590.619
65.	54.9760	8593,761
66.	<b>54.9920</b> .	8599.810
67.	55.0000	8602.671
<b>58</b> .	55,0080	8605.720
69.	55.0160	8608,581
7@.	55.0320	8614.133
71.	55.0400	8616.855
72.	55.0480	8619.529
73.	55.0560	8622.063
74.	55.0720	8627,163
75.	55.0800	8629.6 <b>0</b> 4
76.	55.0880	8632 <b>.0</b> 91 8634 <b>.</b> 532
77.	55.0960	8639.227
78. 70	55.1120 55.1200	8641.481
79. 80.	55.1280	8643.781.
81. 56.	55.1360	8646.035
82.	55.1520	8650.340
83.	55.1600	8652.454
84.	55.1680	8654.520
85.	55.1760	8656.540
86.	55.1920	8650.580
87.	55.2000	8662.506
. 88.	55.2080	8664.526
89.	55.2160	8666.405
ÐØ.	55.2320	8670.227
91.	55.2400	8672.013
92.	55.2480	8673.846
93.	55.2560	8675.631
94.	55.2720	8679.109
95.	\$5.2800	868 <b>0.801</b> 8682.493
96.	55.2880 55.2880	8684.232
97. no	55.2960 55.3120	8687.523
98.	55.3120 55.3200	8689.121
99. 100.	55.3280	8690.767
i 6.ñ.'	55 · 04 58	eeverief

Data	Time	Pressure
Point	Hours	psia
101.	55.3360	8692,412
102.	55.3520	8695.485
103.	55.3600	8697.037
104.	55.3680	8698.588
105.	55.3760	8700.045
106.	55.3920	8702.947
107.	55.4000	8704.264
iõ8.	55.4080	8705.722
109.	55.4160	8707.086
110.	55.432 <b>0</b>	8709.657
111.	55.4400	8710.833
112.	55.4480	8711.915
113.	55.4560	8713.091
114.	55.4720	8715.522
115.	55.4800	8716.651
116.	55.4880	8717.734
117.	55.4960	8718,957
118.	55.5120	8721.388
119.	55.5200	8722.753
120.	55.5280	8723.929
121.	55.5360	8725.247
122.	55.5520	8727.632
123.	55.5600	8728.855
124.	55.5680	8730.032
125.	55.5760	8731.161
126.	55.5920	8733.358
127.	55,6000	8734.347
128.	55.6080	8735.476
129.	55.6160	8736.465
130.	55.6320	8738.615
131.	55.6400	8739.698
132.	55.6480	8740.733
133.	55.6560	8741.769
134.	55.6720	8743.841
135.	55.6800	8744.782
136.	55.6960	8746.760
137.	55.7120	8748.596
138.	55.7200	8749.444
139.	55.7280	8750.339
140.	55.7360	8751.233
141.	55.7520	8753.149
142.	55.7600	8754.138
143.	55.7680	8755.033
144.	55.7760	8755.928
145.	55.7920	8757.702
146.	55.8080	8759.539
147.	55.8160	8760.434
148.	55.8320	8762.114
149.	55.8480	8763.763
150.	55.8560	8764.658
1001		

. ....

	Pressure	Time	Data
	psia	Hours	Point
	8766.213	55.8720	151.
	8767.909	55.8880	152.
	8768.710	55.8960	153.
	8770.281	55.9120	154.
	8771.553	55.9280	155.
	8772.307	55.9360	156.
	8773.815	55.9520	157.
	8774,569	55.9600	158.
	8775.276	55.9680	159.
	8776.030	55.9760	160.
	8777.287	55,9920	161.
	8778.041	56,0000	162.
	8779.455	56.0160	163.
	8780.853	56.0320	164.
	8782.173	56.0480	165.
	8782.880	56.0560	166.
	8784.169	56.0720	167.
	8784.829	56.0800	158.
	8785.489	56.0880	169.
	8787.297	55.1120	170.
	8788.522	56.1280	171.
	8789.135	56.1360	172.
	8790.297	56.1520	173.
	8790.910	56.1600	174.
	8792 <b>.0</b> 88	56.1760	175.
	8793.235	56.1920	176.
	8793.801	56.2000	177.
	8794.366	56.2080	178.
	8796.645	56.2400	179.
	8797.163	56.2480	180.
	8797.729	56.2560	181.
	8798.844	56.2720	182.
	8799.834	56.2880	183.
	8800.353	56.2960	184.
	8801.406	56.3120	185.
	8802.396	56.3280	186.
	8802.868	56.3360	187.
	8803.843	56.3520	188.
	8804.833	56.3680	189.
	8805.305	56.3760	190.
	8806.185	56.3920	191.
	8807.129	56.4080	192.
	8807.647	56.4160	193.
	8808.607	56.4320	194.
	8809.503	56.4480	195.
-	8809.881	56.4560	196.
	8810.715	56.4720	197.
	8811.752	56.4880	198.
	8813.545	56.5200	199.
	8814.488	56.5360	200.

Data	Time	Pressure
Point	Hours	psia
,		
201.	56.5520	8815.337
202.	56.5600	8815.762
203.	56.5760	8816.517
204.	56.5920	8817.350
205.	56.6080	8818.247
206.	56,6160	8818.719
207.	56.6400	8819.930
208.	56.6560	8820.874
209.	56.6720	8821.723
210.	56.6800	8822.147
211.	56.6960	8822.902
212.	56.7120	8823.563
213.	56.7280	8824.459
214.	56.7520	8825.482
215.	56.7600	8825.860
216.	56.7760	8826.568
217.	56.7920	8827.260
218.	56.8080	8827.921
219.	56.8320	8829.101
220.	56.8400	8829.384
221.	56.8560	8830.139
222.	56.8800	8831.035
223.	56.8960	8831.602
224.	<u>56</u> .9120	8832.342
225.	56.9280	8832.719
226.	56.9520	8833.710
227.	56.9600	8833.899
228.	56.9760	8834.513
229.	57.0000	8835.409
230,	57.0160	8836.070
231.	57.0320	8836.669
232.	57.0480	8837.377
233.	57.0720	8838.132
234.	57.0880	8838.651
235.	57.0960	8839.076
236.	57.1200	8839.816
237.	57.1360	8840.382
238.	57.1600	8841.421
239.	57.1760	8841.940
240.	57.2000	8842.727
241.	57,2160	8843.152
242.	57.2320	8843.734
243.	57.2560	8844.537
244.	57.2720	8845.103
245.	57.2960	8845.859
245.	57.3120	8846.363
247.	57.3280	8846.929
	57.3520	8847.685
248.	57.3680	8848.157
249. 250	57.3920	8848.991
250.	0110000	22.2.22,

()

		•	
Data	Time	Pressure	
Point	Hours	psia	
251.	57.4080	8849.369	
252	57.4320	8849.936	
253.	57.4560	8850.786	
254.	57.4720	8851.290	
255.	57.4960	8851.904	
256.	57.5120	8852.344	
257.	57.5360	8852.911	
258.	57.5600	8853.509	
259.	57.5760	8853.934	
260.	57.5000	8854.454	
261.	57.6160	8854.926	
262.	57.6480	8855.398	
263.	57.6720	8856 <b>.059</b>	
264.	57.6880	8856.295	
265.	57.7120	8856.847	
266.	57.7360	8857.508	
267.	57.7520	8857.744	
268.	57.7760	8858.26 <b>4</b>	
269.	57.8000	8858.925	
270.	57.8160	8859 <b>.30</b> 3	
271.	57.8480	8859.996	
272.	57.8720	8860.515	
273.	57.8960	8861.082	
274.	57.9120	8861.460	
275.	57.9360	8861.791	
276.	57.9680	8862.169	
277.	57.9920	8862.594	
278.	58.0160	8862,972	
279.	58.0320	8863.255	
280.	58.0560	8863.727	
281.	58.0880	8864.247	
282.	58.1120	8864.373	
283.	58.1360	8864.657	
284.	58.1600	8864.940	
285.	58.1760	8865.035	
286.	58.2160	8865.649	
287.	58.2320	8865.979	
288.	58.2720	886.688	
289.	58.2880	88 <b>67.06</b> 6	
290.	58.3120	8867.476	
291.	58.3360	8867.665	
292.	58.3680	8868.279	
293.	58.3920	8868.689	
294.	58.4160	8869.067	
295.	58,4480	8869.539	
296.	58.4720	8869.823	-
297.	58.5120	8870.484	
298.	58.5360	8870.862	
299.	58.5520	8871.098	
300.	58.5760	8871.476	
565:			

	Data	Time	Pressure	
	Point	Hours	psia	
	1 01110	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<b>F</b> 2 2 2 2	
1	301.	58.6160	8872.090	
ţ	302.	58.6480	8872.705	
	303.	58,6800	8873.256	
	304.	58.6960	8873.445	
	305.	58.7360	8874.201	
	306.	58.7520	8874.390	
	307.	58.7920	8875.052	
	308.	58.8160	8875.430	
	309.	58.8480	8875.745	
	310.	58.8720	8876.280	
	311.	58.9120	8877.068	
	312.	58,9360	8877.588	
	313.	58.9680	8878.344	
	314.	58.9920	8878.612	
	315.	59.0320	8879.195	
	316.	59.0560	8879.384	
	317.	59.0960	8879.762	
	318.	59.1200	8880.187	
. · ·	319.	59.1600	8880.660	
$(\ )$	320.	59.1920	8881.164	
` .	321.	59.2160	8881.684	
	322.	59.2560	8882.015	
	323.	59.2800	8881.920	
	324.	59.3200	8882.724	
	325.	59.3600	8883.574	
	326.	59.3760	8883.716	
	327.	59.4160	8884.236	
	328.	59.4560	8885.134 8885.450	
	329.	59.4800	8886.316	
	330.	59.5200 50.5534	8886.835	
	331.	59.5520 50.5838	8887.766	
	332.	59.5920 50.550	8888.049	
	333.	59.6160 59.6560	8888.711	
	334.	59.6960	8889.373	
	335.	59.7280	8889.751	
	336.	59.7600	8890.365	
( · ·	337. 338.	23.1968	8890.838	
$(\ )$	339.	59.8320	8891.059	
	340.	59.8800	8891.532	
	341.	59.9120	8891.815	
	342.	59.9520	8892.067	
	343.	59.9760	8892.067	
	344.	60.0160	8892.005	
	345.	60.0560	8892.415	
	346.	60.0960	8892.761	
	347.	60.1360	8893.234	
	348.	60.1680	8893.423	
	349.	50.2 <u>08</u> 0	8893.738	
	350.	60.2480	8894.179	
		ee i baee		

		•	
Data	Time	Pressure	
Point	Hours	psia	
351.	60.2800	8894.557	
352;	60.3200	8894.967	
353.	60.3600	8895.503	
354.	60.4000	8895.866	
355.	60.4400	8896.575	
356 -	60.4800	8897,299	
357.	60.5200	8897.899	
358.	60.5600	8898.324	
359.	60.6080	8898.750	
360.	60.6480	8899.364	
361.	60.6960	8899.884	
362.	60.7360	8900.200	
363.	60.7760	8900.484	
364.	60.8160	8900.862	
365.	60.8560	8901.335	•
366.	60.9120	8901.855	
367.	60.9600	8902.895	
368.	60.9920	8903.179	
369.	61.0400	8903.699	-
370.	61.0800	8903.746	i
371.	61.1360	8904.125	
372.	61.1680	8904.550	
373.	61.2160	8904.976	
374.	61.2560	8905.150	
375.	61.3120	8906.001	
376.	61.3520	8906.379	
377.	61.4080	8906.852	
378.	61.4560	8906.947	
379.	61.4880	8907.215	
380.	61.5360	8907.925	
381.	61.5920	8908.318	
382.	61.6400	8908.602	
383.	61.6880	8909.996	
384.	61.7280	8908.333	
385.	61.7760	8908.176	
386.	61.8400	8908.712	
387.	61.8880	8909.264	
388.	61.9360	8909.894	
389.	61.9760	8910.131	
390.	62.0320	8908.555	
391.	62.0880	8908.034	
392.	62.1280	8908.555	
393.	62.1920	8908.744	
394.	62.2480	8909.090	
<b>395</b> .	62.2960	8909.359	
396.	62.3360	8909.516	•
397.	62.4000	8909.800	
398.	62.4480	8910.098	
399.	62.4960	8910.225	
400.	62.5600	8910.414	
· <del></del> -			

Data	Time	Pressure
Point	Hours	psia
401.	62.6160	8910.414
402.	62,6560	8910.320
403.	62.7280	8911.266 🐫
404.	62.7760	8912.321
405.	62.8400	8913.315
405.	62.8960	8913.835
407.	62.9360	8913,504
408.	63.0080	8913.740
409.	63.0560	8914.387
410.	63.1200	8915.475
411.	63.1760	8916.153
412.	63.2400	8915.901
412.	63.2960	8915.632
412. 414.	63,2520 63,3520	8915.886
	63.4160	8916.516
415.	63.4720	8916.879
416.	63.5360	8916.832
417.	63,5920	8917.131
418.	63.6560	8917.604
419.		8918.109
420.	63.7200 63.7700	8918.266
421.	63.7760	8917.778
422.	63.8480	8918.677
423.	63.9120	8918.960
424.	63,9680	
425.	64.0160	8919.055
426.	64.0960	8919.765
427.	64.1600	8920,143
428.	64.2320	8920.332
429.	64.2960	8920.758
430.	64.3520	8921.027
431.	64.4320	8921.137
432.	<b>64.4880</b>	8921.027
433.	64.5520	8921.736
434.	64.6320	8922.083
435.	64.6960	8922.556
436.	64.7600	8922.698
437.	64.8320	8922.887
438.	64.8960	8923.360
439.	64.9760	8923.786
440.	65.0320	8923.786
440.	65.1120	8923.407
441.	65.1760	8923.407
442.	65.2560	8924.117
	65.3280	8924.590
444.		8925.063
445.	65.3920	8925.678
446.	65.4720	8925.868
447.	65.5360	
448.	65.6160	8926.199
449.	65.6960	8926.435
	65.7680	8927.050

()

 $\bigcirc$ .

Data	Time	Pressure
Point	Hours	psia
451.	65,8400	8927.145
452.	65.9280	8927.476
453.	<u> </u>	8927.334 🔍
454.	66.0800	8927.902
455.	66.1520	8928.423
456.	66.2320	8928.801
457.	66.2960	8928.990
458.	66.3920	8929.937
459.	<u>66.4720</u>	8930.836
460.	66,5520	8930.189
461.	66.6320	8929.984
462.	66.7120	8930.709
463.	66,8000	8931.167
464.	66.8720	8931.514
465.	66.9600	8931.593
466.	67.0480	8931.750
467.	67.1280	8932.129
468.	67.2160	8932.350
469.	67.2880	8932.634
470.	67.3760	8932.555
471.	67.4720	8932.744
472.	67.5520	8933.170
473.	67.6400	8933.312
474.	67.7280	8935.078

100.000			2.000
Slope: 1.000 Intercept: 4.452 C(Storage): 7.357E-05 CD(Storage): 5.802			1.000
PLOT	*		0.0000
LOG-LOG PLOT  Wildcat  06/10/89-12/10/89  Per  DST #2  Real Time (hours)  0.1000			-1.000 Log [dt]
Field			-2.000
PANSYSTEM (C) EPDS 1986, 87,88.         File	3.000	(oq-q) goJ	1.000

E.P.D.S. Ltd.

PANSYSTEM ANALYSIS PROGRAM

File: 75189A.OIL

Test type: CRB

Date: 15/10/89 Time: 11:21

RESULTS FROM LOG-LOG ANALYSIS

Line :

Intercept....: 4.442

Slope....: 1.000

Wellbore storage coefficient (C)...... 7.525E-05 bbl/psi

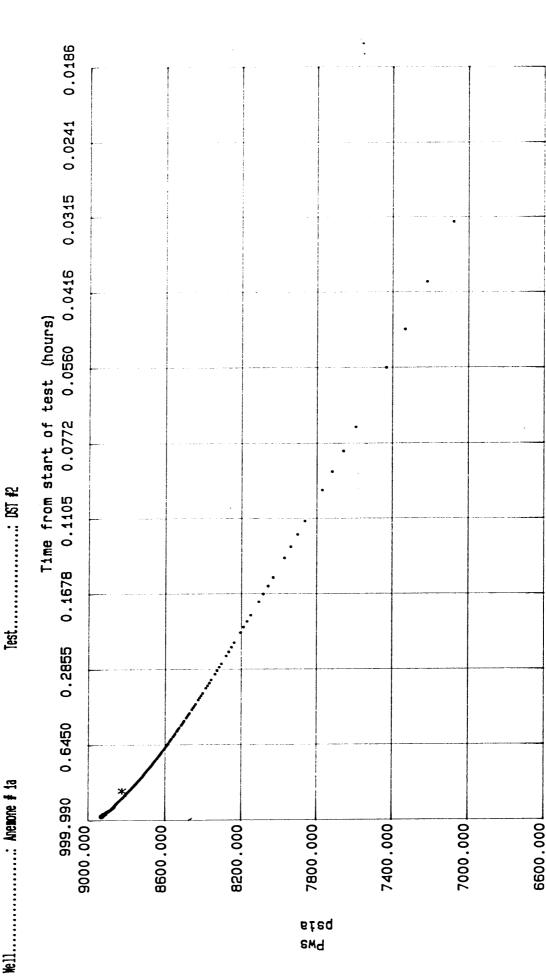
Dim. wellbore storage constant (Cd)....: 11.332

PANSYSTEM (C) EPDS 1960, 87, 88.

HORNEH PLOT

Rig Name/Number..... Zapata Arctic Field..... Wildcat Company...... Petrofina Exploration Australia SA File..... 751894.011 Analyst name...... R.Weir

Date..... 06/10/89-12/10/89



1.00

0.90

0.80

0.70

0.60

0.50

0.40

0.30

0.20

0.10

0.1670)

Log [(tp+dt)/dt] (tp =

	48	Tint	<b>5</b>					വ	
	0.4048						•	0.15	
Line 2 5366.497 8859.963 0.0110 -1.057	0.4581	: : :						0.14	
Line 1 Line -3771.963 -5366.497 8935.487 8959.963 0.0156 0.0110 -0.9947 -1.057	0.5247	· · · · · · · · · · · · · · · · · · ·						0.12	
Slope Intercept Permeability	urs) 0.6106							0.11	0.1670)
LOT	test (hours) 0.7252 0				\	;		0.09	n
HORNER PLOT dcat 10/89-12/10/89 ata Arctic	start of 0.8859							0.08	[(tp+dt)/dt] (tp
HORNER  ### ### ############################	Time from s 0 1.127							0.06	
;	1.530			f				0.05	Log
	2.335							0.03	
ploration Austu	4.752							0.02	
PANSYSTEM (C) EPOS 1986, 87, 88.  File: 75189A.OIL Analyst name: R.Weir COmpany: Petrofina Exploration Australia SA	9000.0006	8900.000	8800.000		B700.000	8500.000 8500 000	000000000000000000000000000000000000000		
PANSYSTEN (C) File Analyst name. Company					wq teq				

 $(\ )$ 

PANSYSTEM ANALYSIS PROGRAM

E.P.D.S. Ltd.

File: 75189A.OIL

Test type: CRB

Date: 15/10/89 Time: 10:40

RESULTS FROM HORNER ANALYSIS using Real time

#### First Line :

Intercept:	8935.487		
Slope:	-3771.963		
Start of line(	0.0248	,	8841.421)
End of line(	0.0184	,	8865.036)
Coefficient of determination:	0.9977		
Number of points:	48		

Pressure at dt = 1 hour:	8682.543	psia
Extrapolated pressure:	8935.487	psia
Permeability-thickness (kh):	0.5110	md.ft
Effective permeability to oil (Ko):	0.0156	md
Total skin factor (S):	-0.9947	
dP skin (constant rate):	-3258.458	psi
Total skin factor (S):	-0.9947	

Radius of investigation..... 2.927 ft

PANSYSTEM ANAL	YSIS	PROGRAM
----------------	------	---------

E.P.D.S. Ltd.

File: 75189A.OIL

Test type: CRB

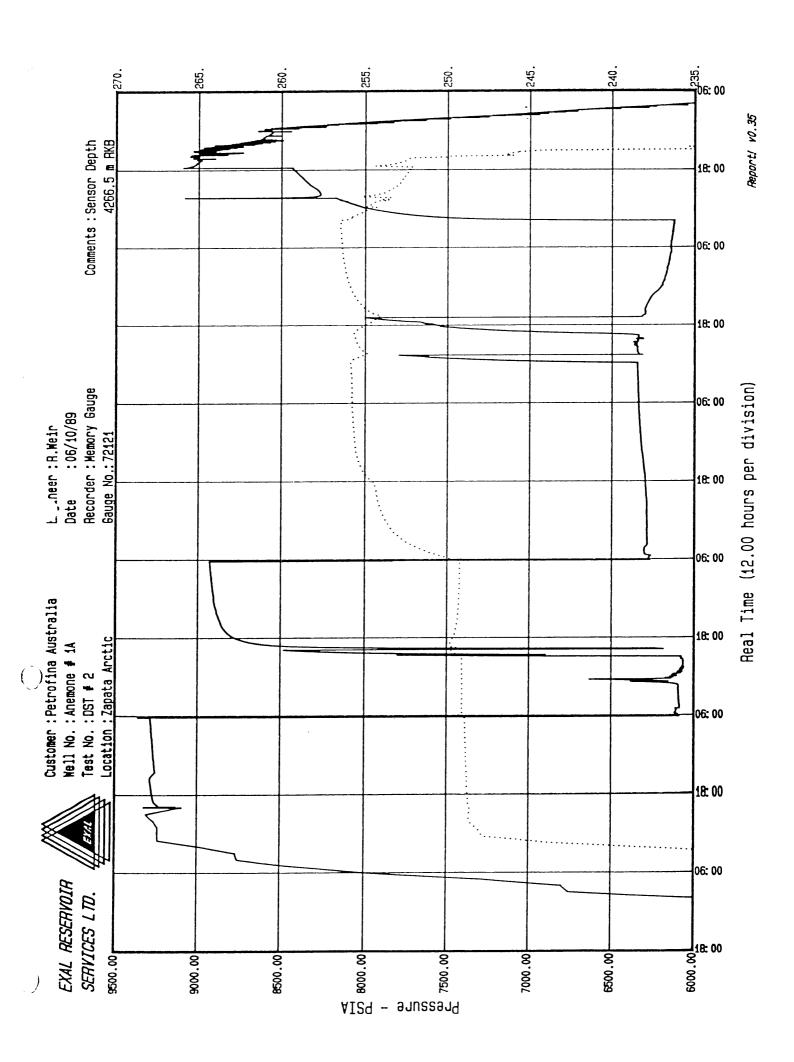
Date: 15/10/89 Time: 10:40

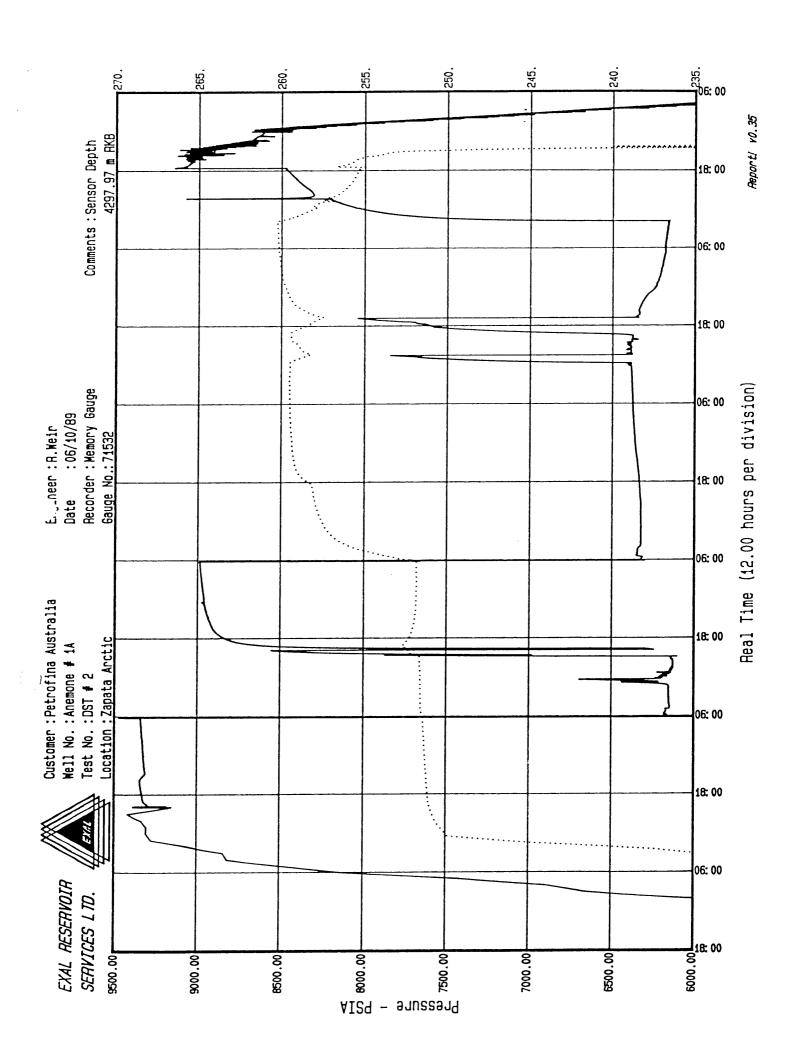
RESULTS FROM HORNER ANALYSIS using Real time

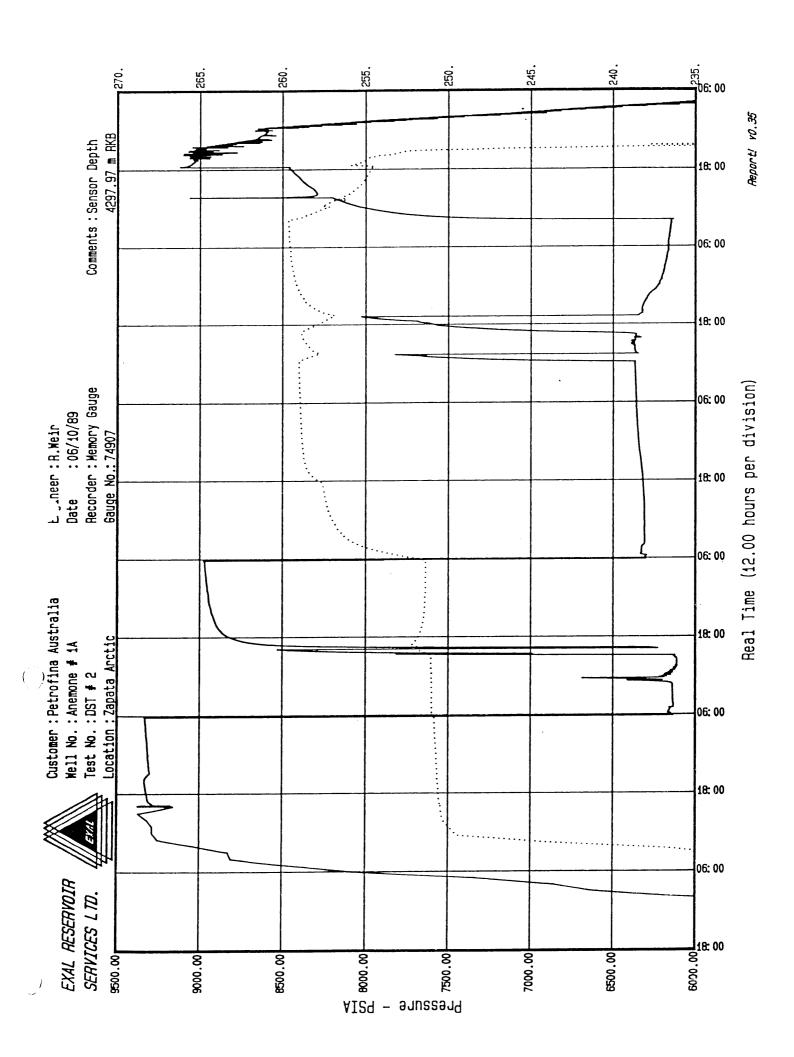
## Second Line :

Intercept:	8959.983	
Slope:	-5366.497	
Start of line(	0.0171	8869.824)
End of line(	5.376E-03 ,	8935.079)
Coefficient of determination:	0.9952	
Number of points:	179	

Pressure at dt = 1 hour:	8600.112	psia
Extrapolated pressure:	8959.983	psia
Permeability-thickness (kh):	0.3592	md.ft
Effective permeability to oil (Ko):	0.0110	md
Total skin factor (S):	-1.057	
dP skin (constant rate):	-4925.407	psi
Radius of investigation:	2.454	ft







# EXAL

# RESERVOIR SERVICES



## GAUGE COMPARISON

Client: Petrofina Exploration Australia S.A. Client Engineer: D. Sousa

Field: Wildcat Well: Anemone # 1A Test : DST # 2

Date : 6th- 12th October 1989 Job No. : AB 256

Perforations: 4536.3-4546.3 m RKB

Gauge No	·····		. 75188	72121	71532	74907
Sensing	point (m mdrkb)		4266.50	4266.50	4297.97	4297.97
Maximum	Temperature (degF)		. 257.0	256.5	260.3	259.7
			Pro	essure	Pre	essure
Nate	Event/End of	Time	psia	psia	psia	psia
08/10/89						
	Initial Hydrostatic	Ø8:00	6088.5	6087.9	6119.1	6134.6
	Prior to 10 minute flow	16:05	8485.9	8478.3	8518.6	8527.7
	Final flowing pressure	16:16	6239.0	6237.1	6330.1	6285.8
09/10/89						
	Final Buildup pressure	05:43	8935.2	8929.3	8990.2	8971.0
11/10/89				G454 G	C450 5	5144 1
	End of Main Drawdown	10:04	6121.9	6121.0	6159.7	6144.1
	End of Main Buildup	18:17	8437.3	8433.7	8476.2	8461.3