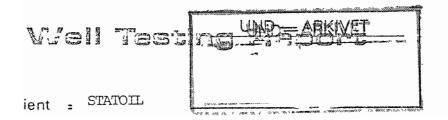
34/10-5



		Client: STATOIL	Section :_	INDEX
STAVANGER		Field:34/10-5	Page : Report N : 80	1/2301/02
oase:		Well:	Report N:	7/2501/02
	pa e	a be based being a la		
		- TEST PROCEDURE		
	المسامع الما	- MAIN RESULTS		
	e di e			
		- OPERATING AND ME	ASURING CONDITIONS	
		- SURFACE EQUIPMENT	T DATA	
		- WELL COMPLETION	DATA	
		- SEQUENCE OF EVEN	TS	
	0 7	- WELL TESTING DATA		

Flopeirol Chief operater

Chent representativ

Name · P. Gaymard.

Name :

	Client :	Section :	<b>1</b>
Base :STAVANGER	Field : Well :34/10-5	Page : 2 Report N° : 80/23	01/02

#### - TEST PROCEDURE -

DST No.1
Halliburton opens APR Valve
Well open on 20/64 for clean-up
Through separator when BSW <1%
Shut in well in to rig up wire line
Flow well on 8/64
Sheet in to run bottom hole samplers
Open up well on 8/64 for sampling flow.
Shut in to get samplers out of hole
Open up well on 24/64, and increased choke
size when flow stable for one hour, until
well produces sand.
Shut in for build up.

**************************************	Ē	(D)		ans Long	ensisee	200	(	
Bu.	127 - TE	BUSINES.	£	a exact	ž.	La E	Carrie Line	de 17 47 2

Client :\_\_\_ STATOIL

Section

Base : STAVANGER

Field :\_ Well :\_

34/10-5

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### SEQUENCE OF EVENTS

DATE	TIME	OPERATION
28/12-79		Exercise bellows on Ameradas
	02.10	Hang Ameradas in tail pipe on DST hanger
29/12-79	04.45	Start surface sampling
		Take two oil samples and two gas samples
	08.30	Frepare bottom hole samplers
	08.50	Set clocks on samplers and put them on wire line string
	09.30	Otis starts re-running samplers in the hole
		well flowing on 8/64
	10.16	Samplers on bottom (6000ft)
	11.50	Pull samplers out of the hole
	12.15	Take samplers out of lubricator
	12.30	Start transfer
	19.00	Finish transfer
30/12-79	10.00	Take Ameradas out of DST string
	11.00	Start reading calibrations on pressure recording
		END OF TEST.
	<u> </u>	

### Las free Court has been sales ton from free

DIVISION : NUD

BASE : STAVANGER

REPORT N: 80/2301/02

### Well Testing Report Annexes \_\_\_\_

Client = STATOIL

Well = 34/10-5 Field =

Zone = BRENT SAND Date = 28/12 - 30/12 1979.
DELTA STRUCTURE

	Client : STATOIL	Section : ANNEX
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# ENDEX of ANNEXES

X	1 _ BOTTOM HOLE PRESSURE AND TEMPERATURI MEASUREMENT _
	<ul> <li>☒ 1.1 - B.H. gauge calibration -</li> <li>☒ 1.2 - B.H. pressure calculation -</li> <li>☐ 1.3 - B.H. temperature calculation -</li> </ul>
	2_LIQUID PRODUCTION RATE MEASUREMENT _
	3. GAS PRODUCTION RATE MEASUREMENT _
X	☐ SAMPLING SHEETS _  ☐ 4.1 Bottom hole sampling _  ☐ 4.2 Surface sampling _
	5_CHARTS AND MISCELLANEOUS_

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	DFE			Client :ST		Sectio	n:ANNE	X T. E. T.
Base	STAV	ANGER		Field :34 Well :34	1/10-5	Page Repo	:_( rt N <u>80</u> /	5 /2301/02
<u>_ BO</u>	TTOM	HOLE F	RESSU	RE GAUGE	CALIBRAT	TION SHEE	<u> T_</u>	
	D 4 T 1	E :18/	12 1979	^	ALIDOATION	u - 1		
	DATI				ALIBRATION I	Vo. :		THE RESERVE THE PROPERTY OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COL
Ca	alibration	cell M	JIPMENT o.: 214	7	facturer : Flor			
De Re	ead weight	tester N	o. : 1287	7 Manu Manu	facturer : <u>Cole</u> facturer : <u>G.</u> R.		ge : <u>10.00</u>	00 psi
Pr	essure eler	lement N nent N	o. 3132	29 Mani	facturer : G.R.		ge : <u>60.00</u>	00 psi
_		- MIS	CELLANE	OUS INFOR	MATION -			
Re	ise line d eference li	rawing te ne data	emperatur - temperat	e :	pressure P <sub>R</sub> step drawin	:rea	ading YR:	
Ca	ilibration	data	. temperat	ure: <u>160°F</u>	step drawin	g: ∑with c ☐with c	rank łock	
Eq	uivalent Level	pressure	p of lev	el difference b	etween Dwt a	and bellows	t above	
	Oil si	pecific gra	evity:	p =	zero 🔲 +	in case of Dw	t beneath	bellows
		<u>- CAL</u>	IBRATION	READING A	ND CALCULA	TIONS .		
	P (Dwt)		ΔΥ		YP	Pc = KY+a	C=P-Pc	
	PSIG	INCH	INCH	Units on the	nis line -	PSIG	PSIG	
	500	0.1665				502.29	-2.29	
	1000	0.3322	.1657			1002.61	-2.61	
	1500	0.4968	.1646			1499.61	0.39	
	2000	0.6616	.1648			1997.21	2.78	
	2500	0.8275	.1659			2498.14	1.86	
	3000	0.9928	.1653			2997.25	2.75	
	3500	1.1589	.1661			3498.78	1.22	
	4000	1.3252	.1663			4000.91	-0.91	
	4500	1.4910	.1658			4501.53	-1.53	
	5000	1.6567	.1657			5001.85	-1.85	
	5500	1.8211	.1644			5498.24	1.76	
	6000	1.9878	.1667	PRENITORIAL DESCRIPTION AND AUTOMOTIVA DE L'ANNO D	acust the section of	6001758	11.58	
	hatter to the same	EAST WHEN TO A TOP OF THE	5	CORALDO THE POLICE OF THE PARTY	CONTRACTA WILLIAM STATE A SAME STATE OF THE SAME	\$ + \$_	10.76	2. La company (10
	AN AND STREET STREET STREET	THE LACT COURSE STORY	A. TOROGOTA A. A. CONTROL OF CONT	Charles and the way with the Contract of the C	A STATE OF THE PROPERTY OF THE	THE RESIDENCE OF THE PROPERTY OF THE PARTY O	THE PERSON NAMED IN	-

A = \(\frac{\xi}{n}\) =	B = \frac{\xi Y}{n} = \frac{\text{V}}{n} = \t	Δ _ 3019.4283
D = \frac{\xi (YP)}{\xi \text{V}} =	$C = \frac{\xi(y^2)}{\xi(y^2)} = \frac{C}{C}$	$\frac{A}{B} = \frac{3019.4283}{}$
$a' = A - BK = \frac{-0.4397}{}$		97
FINAL RES K = 3019.4283 /psi/in	<u>ULTS.</u> PRC = KYR + a =	
a = a' + D = = -0.4397 ps	sig	

			Client :STATOIL			Section : ANNEX [[			
al capera	: STAVANO			Field :   Well : <u>34/10-5</u>			Page Repo	rt N <u>-</u> 80,	7 /2301/0
_ <u>BO</u>	_ BOTTOM HOLE PRESSURE GAUGE CALIBRATION SHEET _ Page a)								
	DATE : 18/12 1979 CALIBRATION No. : 1								
	Dr	<u>. EQL</u>	JIPMENT 2147	DATA -	Flo	petrol			•
De	ad weight	tester N	o.: o.:	, IVIan Man	ufacturer : Floufacturer : Colufacturer : G.R	eman -C	 Ranç	ge : <u>10.00</u> 0	O psi
Re Pre	cording el essure elen	nent N	o.:8167 o.:	, Ivlan Man	ufacturer : G.R	c.C.	 Ranç	је: <u>8000</u>	psi
Ro	se line d	<u>. MIS</u>	CELLANE	OUS INFOR	MATION -				
Re Ca	ference li	ne data . data	temperat temperat	ure: 160°F	MATION _ pressure P <sub>R</sub> step drawir	:	rea	ding YR:	
					petween Dwt	\ <u></u> \	with cl	ock	
	Level Oil si	differenc pecific ara	e :		zero -	in case	of Dw of Dw	t above t beneath	bellows
	·				AND CALCULA				
	P (Dwt)		ΔΥ	Y <sup>2</sup>	YP	1	(Y+a	C=P-Pc	A TOTAL COMPANY
	PSIG 500	INCH 0.1191	INCH	Units on t	his line _	PSIG 487.5	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	PSIG 12.48	- sales programme of the control of
	1000	0.2400	.1209			990.6		9.40	
	1500	0.3616	.1216			1496.5		3.41	ence of the control o
	2000	0.4831				2002.1		-2.17	
	2500	0.6033	.1202			2502.3		-2.33	
-	3000	0.7240	.1207			3004.5	8	-4.58	
	3500	0.8445	.1205			3505.9	9	-5.99	
	4000	0.9653	.1208			4008.6	6	-8.66	
	4500	1.0849	.1196			4506.3	2	-6.32	
	5000	1.2060	.1211			5010.2	4	-10.24	A F
	5500	1.3260	.1200			5509.5	7	- 9.57	
	A TOTAL CONTROL CONTRO	Rest of	calibra	tion on next	page	DESTRUCTION OF THE PROPERTY OF	MUMEEN THE ENGINEERS		er typestere
	KUNUNUNUNUN TUNUN P	P. MENOCHER VONCERS	***********				€ <b>+</b> € _ :	= = ==================================	
А	= \frac{\xi P}{0} = _		E	3 = <u>{Y</u> =		v D	۸		
$A = \underbrace{\xi P}_{n} = $ $D = \underbrace{\xi (YP)}_{\xi Y} = $ $C = \underbrace{\xi (Y^{2})}_{\xi Y} = $ $K = \underbrace{D - A}_{C - B} = $									
b	a' = A -BK = a' = D - CK =								
K	FINAL RESULTS .								
а	K = Prc = K Yr + a = a = a' + p =								

Field : Page : <u>8</u> Base : <u>STAVANGER</u> Well : <u>34/10-5</u> Report N : <u>80/2301</u>	
10port 14 - 0072301	_/02
BOTTOM HOLE PRESSURE GAUGE CALIBRATION SHEET _ Page b) . DATE: 18/12 1979 CALIBRATION No.:1	LUNCTHOC
. EQUIPMENT DATA.  Calibration cell No.: 2147 Manufacturer: Flopetrol  Dead weight tester No.: 1287 Manufacturer: Coleman Range: 10.000 psi  Recording element No.: Manufacturer: G.R.C.  Pressure element No.: 8167 Manufacturer: G.R.C. Range: 8000 psi	
Base line drawing temperature: $AMB$ Reference line data -temperature:pressure $P_R$ :reading $Y_R$ :  Calibration data -temperature: $160^{\circ}F$ step drawing: $A$ with crankwith clock  Equivalent pressure $P$ of level difference between $P$ and bellows Level difference: $P$ =	ws.
- CALIBRATION READING AND CALCULATIONS .	
P (Dwt) Y AY Y <sup>2</sup> YP Pc = KY+a C=P-Pc PSIG INCH Units on this line - PSIG PSIG	
6000 1.4448 .1188 6003.91 -3.91	
6500 1.5635 .1187 6497.83 2.17	
7000 1.6833 .1198 6996.33 3.66	
2500 1.8017 .1184 . 7489.01 10.99	
Completed with H.P. 55.	
$A = \underbrace{SP}_{n} =                                   $	- <del></del>
a' = A - BK = a' = D - CK =	
$K = \frac{4161.1140 \text{ FINAL RESULTS.}}{\text{PRC}}$ $A = A^{2} + D = \frac{-8.0680 \text{ psig}}{\text{PRC}}$	

No DOP 114

GET.	7		D-PLOT	Contraction of the Contraction o	EGE03	7		
<u> </u>	heers	Same in	E. Sector	A.Zareve		E	COLUMN ST	S. STORES

Client :\_\_

STATOIL

Section:ANNEX

Base : STAVANGER

Calibration range

a, (calibrated chart):

Field :\_

Well : 34/10-5

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GAUGE 8000 psi

72 hrs

#### \_ BOTTOM HOLE PRESSURE CALCULATIONS \_

Well producing through . Tasting / drill pipe Bottom hole temperature:\_\_\_\_\_at depth\_\_\_\_\_

INSTRUMENT DATA	LOWER GAUGE	UPPER
Instrument type Press element No and range	RPG3 31329 6000 psi	RPG3 8167
Recording element No . Clock No. and capacity	A5640 10853 72 hrs	37644 E5578
CALIBRATION DATA Calibration No. and date: Calibration temperature:	160 <sup>©</sup> F	160
•	0 6000 / 500	0 0000

0- 6000 / 500 psi 3019.428 psig/inch 0- 8000 / 500 psi 4161.1140 psi/inch -8.0680 psi -0.4397 psig

Р	RC , (non c	alıbrated	chart)		***					
DATE -	Cumul	Choke sıze	W H. pressure	Depth	Υ	C *	Р	Y	C *	Р
	Hrs/Min	64th	psi	М	Inches		PSI	Inches		PSI
29/12	1979									
00.56		00	1660	1919	1.4980		4523	1.0879		4519
01.00	00.00	00	1614	tī.	1.4980		4523	1.0879		4519
01.01	00.01	48/64		"	1.4873		4490	1.0811		4490
01.02	00.02	20/64		11	1.4871		4489	1.0811		4490
01.05	00.05	11	1520	u	1.4873		4490	1.0817		4493
01.10	00.10	11	1640	ţţ	1.4860		4486	1.0810		4490
01.15	00.15	11	1775	11	1.4857		4486	1.0800		4486
01.20	00.20	<b>51</b>	1915	II.	1.4930		4509	1.0842		4503
01.25	00.25	rı .	2120	TI.	1.4875		4491	1.0817		4493
01.30	00.30	11	2260	ti	1.4855		4485	1.0800		4486
01.45	00.45	11	2255	11	1.4843		4481	1.0788		4481
02.00	01.00	11	2250	11	1.4838		4480	1.0786		4480
02.15	01.15	11	2255	11	1.4823		4475	1.0775		4476
02.30	01.30	"	2265	11	1.4823		4475	1.0775		4476
02.45	01.45	"	2260	11	1.4819		4474	1.0770		4473
03.00	02.00	11	2265	11	1.4812		4472	1.0770		4473
03.15	02.15	"	2255	11	1.4812		4472	1.0766		4472

REMARKS:

Only used if its value is significant compared to the accuracy of the gauge

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- B.H. PRESSURE CALCULATIONS (Confinuation) -

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				1	101//50	C 4 11 C F	lannaka. Man saat 1 kalifolisi da lantur 1 ka di 1 kana, 110 ci iliya ka da lantur.	1		<u> </u>
		·	***************************************		LOWER	GAUGE		UPF	ER GAU	GE
Date -	- fime Cumul	Choke size	W.H. pressure	Depih	Y	C*	Р	Y	C*	Р
	HRS/mi	n 64tl	n psi	m	inches		psi	inches		psi
03.30	02.30	20/64	2255	1919	1.4805		4470	1.0762		4470
04.00	03.00	16	2260	*1	1.4805		4470	1.0760		4469
04.30	03.30	11	2270	11	1.4805	***************************************	4470	1.0759		4469
05.00	04.00	11	2275	lf.	1.4802		4469	1.0759		4469
05.30	04.30	11	2275	11	1.4802		4469	1.0759		4469
06.00	05.00	11	2275	11	1.4802		4469	1.0759		4469
06.10	05.10	11	2275	1f	1.4802		4469	1.0759		4469
06.12	00.02	00		ŧī	1.4970		4520	1.0865		4512
06.15	00.05	Ħ	2395	71	1.4979		4522	1.0877		4518
06.20	00.10	tr		rs	1.4985		2524	1.0885		4521
06.25	00.15	31		I (	1.4980		4523	1.0885		4521
06.30	00.20	11		11	1.4989		4525	1.0888		4523
06.45	00.35	ŧ1		tı	1.4992		4526	1.0889		4523
07.00	00.50	11		11	1.4992		4526	1.0889		4523
07.15	01.05	11		11	1.4992		4526	1.0889	•	4523
07.30	01.20	11		11	1.4992		4526	1.0889		4523
07.45	01.35	31		11	1.4992		4526	1.0889		4523
07.53	00.05	8/64	2355	11	1.4985		4524	1.0886		4522
07.58	00.10	11		11	1.4985		4524	1.0886		4522
08.03	00.15	11		*11	1.4985		4524	1.0886		4522
08.18	00.30	.,		,,	1.4985		4524	1.0886		4522
08.33	00.45	11	2360	11	1.4985		4524	1.0886		4522
08.34	00.46	11		"	1.4985	~144 144 144 144 144 144 144 144 144 144	4524	1.0886		4522
0839	00.05	00.		11	1.5003		4530	1.0898		4527
08.44	00.10	11		11	1.5003		4530	1.0898		4527
08.49	00.15	l n		11	1.5003		4530	1.0898	********************	4527
09.04	00.30	11		11	1.5003		4530	1.0898		4527
09.19	00.45	11		11	1.5003		4530	1.0898		4527
09.28	00.54	00.	2385	1919	1.5003		4530	1.0898.		4527
1								ı		

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- B.H. PRESSURE CALCULATIONS (Continuation) -

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r w hije olicop, na ole, mare a con-co		ı	r		LOWER	GAUGE	~~===	UP	PER GAU	IGE
Dale - Time	- time Cumul	Choke size	W.H. pressure	Depth	Y	C•	P	Y	C*	Р
	HRS/mi	n 64tl	n psi	m	inches	*	psi	inches		psi
09.28	00.54	00	2385	1919	1.5003		4530	1.0898		4527
09.33	00.05	8/64		11	1.4988		4525	1.0888		4523
09.38	00.10	15		tı	1. 4988		4525	1.0888		4523
09.43	00.15	11	2355	ΤT	1.4988		4525	1.0888		4523
09.58	00.30	11	2359	11	1.4988		4525	1.0888		4523
10.13	00.45	11	2360	11	1.4988		4525	1.0888		4523
10.28	01.00	11	2360	11	1.4988		4525	1.0888		4523
10.43	01.15	8/64	2360	1919	1.4988		4525	1.0888		4523
10.58	01.30	11	ŧī	11	1.4988		4525	1.0888		4523
11.13	01.45	11	11	11	1.4988		4525	1.0888		4523
11.28	02.00	11	11	II	1.4988		4525	1.0888		4523
11.43	02.15	11	11	11	1.4988		4525	1.0888		4523
11.55	02.27	11	11	11	1.4988		4525	1.0888		4523
12.00	00.05	00	2370	"	1.5004		4530	1.0902		4528
12.05	00.10	11		11	1.5004		4530	1.0902		4528
12.10	00.15	11		11	1.5004		4530	1.0902		4528
12.25	00.30	11		11	1.5004		4530	1.0902		4528
12.40	00.45	11		11	1.5004		4530	1.0902		4528
12.47	00.52	11		11	1.5004		4530	1.0902		4528
12.48	00.01	24/64	2140	11	1.4769		4459	1.0739		4460
12.50	00.03	11	2129	11	1.4750		4453	1.0722		4453
12.55	00.08	11	2142	11	1.4740		4450	1.0713		4450
13.00	00.13	11	2160	11	1.4734		4448	1.0709		4448
13.15	00.28	"	2167	Ħ	1.4723		4445	1.0709		4448
13.30	00.43	11	2168	31	1.4723		4445	1.0709		4448
13.45	00.58	11	2189	rt	1.4754		4454	1.0725		4455
14.00	01.13	11	2190	11	1.4754		4454	1.0725		4455
14.04	01.17	II	2190	11	1.4754		4454	1.0725		4455
14.05	00.01	28/64	2100	11	1.4679		4432	1.0676		4434
1										1

## Free Foundation of Land Company of Land Compan

- B.H. PRESSURE CALCULATIONS (Continuation) -

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					LOWER	GAUGE		UP	PER GAU	GE
Date -	time Cumul	Choke size	W.H. pressure	Depth	Y	c•	Р	Y	C*	Р
	Hrs/mi	n 64t	n psi	m	inches		psi	inches		psi
L4.10	00.06	28/64	2094	1919	1.4676		4431	1.0671		4432
L4.15	00.11	51	2100	ti	1.4676		4431	1.0671		4432
L4.30	00.26	11	2102	<b>1</b> 1	1.4673		4430	1.0670		4432
L4.45	00.41	11	2102	11	1.4673		4430	1.0670		4432
L5.00	00.56	tı	2102	11	1.4673		4430	1.0670		4432
15.15	01.11	ŧí	2102	11	1.4673		4430	1.0670		4432
L5.17	01.13	н	2102	11	1.4673		4430	1.0670		4432
15.18	00.01	24/64		FT	1.4753		4454	1.0705		4446
15.19	00.02	11		11	1.4754		4454	1.0715		4450
15.20	00.03	11		11	1.4754		4454	1.0718		4452
15.22	00.05	11		tı	1.4754		4454	1.0718		4452
5.23	00.01	32/64		11	1.4579		4402	1.0641		4419
5.25	00.03	n	1975	11	1.4568		4398	1.0605		4405
L5.30	00.08	11	1977	11	1.4568		4398	1.0592		4399
L5.35	00.13	11	1980	11	1.4562		4396	1.0589		4398
L5.40	00.18	11	1980	11	1.4562		4396	1.0589		4398
15.45	00.23	se s	1980	11	1.4565		4397	1.0589		4398
L6.00	00.38	<b>11</b>	1992	11	1.4600		4408	1.0612		4407
L6.15	00.53	н	1990	11	1.4573		4400	1.0595		4401
16.30	01.08	rt .	1990	IT	1.4573		4400	1.0595		4401
6.45	01.23	II.	1995	ŧr	1.4573		4400	1.0595		4401
7.00	01.38	11	1995	11	1.4573		4400	1.0595		4401
7.15	01.53	11	1995	11	1.4562		4396	1.0590		4398
7.30	02.08	11	1995	11	1.4565		4397	1.0590		4398
7.45	02.23	11	1995	t i	1.4565		4397	1.0590		4398
8.00	02.38	11	1995	31	1.4565		4397	1.0590		4398
	02.39	11	1995	н	1.4565		4397	1.0590		4398
				in wel	ll on AP,	R Val	ve			
					7					

## Les posse france from the first from

- B.H. PRESSURE CALCULATIONS (Continuation) -

Section: Annex

13

Page :  $\frac{13}{80/2301/02}$ 

					LOWER	GAUGE		UP	PER GAU	GE
Date . Time	Cumul	Choke size	W.H. pressure	Depth	Y	C*	Р	Y	C*	Р
	Hrs/mi	n 64tl	n psi	m	inches		psi	inches		psi
L8.02	00.01	00		1919	1.4904		4500	1.0826		4497
18.03	00.02	Ħ		11	1.4910		4502	1.0826		4497
L8.04	00.03	11		Ħ	1.4914		4503	1.0830		4498
18.05	00.04	ŦĬ		91	1.4919		4504	1.0836		4501
18.06	00.05	11		11	1.4924		4506	1.0840		4503
18.07	00.06	п		II	1.4927		4507	1.0842		4503
L8.08	00.07	11		1919	1.4930		4508	1.0842		4503
18.09	00.08	ţī		11	1.4934		4509	1.0845		4505
18.10	00.09	11		11	1.4956	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	4515	1.0861		4511
L8.11	00.10	**		11	1.4958		4516	1.0865		4513
18.16	00.15	11		11	1.4965		4518	1.0870		4515
18.21	00.20	rī		ti	1.4970		4520	1.0875		4517
L8.26	00.25	u		11	1.4975		4521	1.0880		4519
L8.31	00.30	15		11	1.4975		4521	1.0880		4519
L8.46	00.45	tī		11	1.4980	· · · · · · · · · · · · · · · · · · ·	4523	1.0882		4520
L9.01	01.00	II		n n	1.4986		4524	1.0888		4522
9.16	01.15	11		11	1.4992		4526	1.0888		4522
19.31	01.30	11		11	1.4995		4527	1.0890		4523
20.01	02.00	tı		11	1.4997		4528	1.0890		4523
20.31	02.30	11		ī¶	1.4997		4528	1.0890		4523
21.01	03.00	11		11	1.5000		4529	1.0890		4523
21.21	03.20	11		11	1.5000		4529	1.0890		4523
				END C	F BUILD	-UP.	<del> </del>			
									i .	
							 		!	1
<del></del>	!								!	
										; ;
	_							1	i !	
								!		

Less [ The Carty	E Car LECT CE From	Client:_ S	TATOIL		Section: Annex
Base : STAV	JANGER	Field :3 Well :3	4/10-5		Page : Report N° : 80/2301/02
Dase:		\veil ;			Теропти, 20/2002/
	Ĭ.	BOTTOM HOL	E SAMPLING	, pep-	
Date of sa Sample n	ampling: 29/12 1979 ature: 0il	Service o	rder :	Samplin	g No.: 1 1830 m
		RVOIR AND W			
Producing					ng interval :
Depth ori	gin:R.K.B.	Tubing D	ia.:2 7/8	Casing	7" Dia.:
Surface el	levation: 161 M	Shoe :	925M(tai	l pipelloe:	2209 M
Bottom hole static conditions	Initial pressure :	529psig	_at depth : _at depth : _at depth :	919m.	date : date :date :
Sampler : Type	B - SAMPLI and No. FLOPETROL	NG AND TRAN			y:600 cc
	sample was taken :11.3		Test duration	Running start:_ Pulling end:	09.30
□ Well shut in	since :8/64		Production d	I since closing w uration through t	2 Hrc
	Hom hole pressure: 4525g 919m temp:	Si Well head	pressure: 2	ı	parator pressure : temp. :
Produc cond c sampli before	ow rates:	OPD Prod. G.O.I	; R. :	1 .	pecific Gas (air : 1) : ravify Oil :
Opening pressu	ure of the first valve (if necessary)	. 2320 ps	i		
		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Temp:	·	er bottom hole conditions : Pressure :
Transfer conditi	ions.	By pumping	Hg coll	ected at fransferi naining in the ship	ing end : 600 CC
Final condition Temp.: 45	F Pressure: 2550	oression : OSİ	Hg volume w	ithdrawn for bot 3 CC	tle decompression :
	C - ID	ENTIFICATION	OF THE SAM	IPLE -	
	20175/67			<del></del>	order No. :
Coupled with	Printed and the contract and the contrac	Liquid			Gas
<u>Bottom ha</u>	ole samples No.: 2 1625.	-35			
<u>Surface sa</u>	imples No. :				
	D - REMARKS -				Visa Chief operator
For fur	other information	refer to	Otis/Lyn	es report	· · · · · · · · · · · · · · · · · · ·

	EETECL	Client:	TATOIL	Section : Annex
Base :		Field :	4/10-5	Page : 15 Report N° : 80/2301/02
		- BOTTOM HOL	E SAMPLING -	
	mpling: 29/12 1979	Samiana	rder : San	2
	ature: Oil		Sampling depth :	1830 m
Producino			ELL CHARACTERISTICS ons: 1925–1927m <sub>Sai</sub>	
	gin: R.K.B.	Tubing D	ia.: 2 7/8" Ca	sing Dia. :
Surface el	evation: 161m			
Bottom hole static conditions	Initial pressure : Latest pressure measured : Temperature :	4529psig	_at depth : _at depth : _at depth :	date : date :date :
			SFER CHARACTERISTIC	On Salden College Coll
	and No. Flopetrol			09.30
Time at which s	ample was taken : 11.30		Test Running sta duration Pulling end	rt: 09.30 : 12.15
_	since : g through choke :8/64			gh this choke: 2 hrs.
	of the pressure in the pressur	1	pressure: 2360psi	Separator pressure:
Sample before of old	w rales : S tank336 B	)	;	Specific Gas (air : 1) : gravity Oil :
Opening pressu	re of the first valve (if necessary	): 2120 ps	<u> </u>	
			Estimated bubble point Temp: No possible (	under bottom hole conditions :  Pressure : estimation
Transfer conditi	ons By gravity Pressure :		Ha   collected at tran	sfering end: 600 cc shipping bottle: 18 cc
Final conditions Temp.: 45	s of shipping bottle after decom OF 2560 Pressure:	pression : psi	Hg volume withdrawn for	bottle decompression :
	C - IT	ENTIFIC ATION	OF THE SAMPLE -	
	No.: 16251/35 sent o	n:	by :Ship	ping order No. :
Coupled with	graspaulinanssa cont. in contract of the	Liquid		Gas
Bottom ho	le samples No. : No 1,	20475/67		
20110111110	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3			
Surface sa	mples No. ·			
				TO STEEL AND SHAPE WE SHAPE TO SHAPE TO SHAPE TO SHAPE TO SHAPE TO SHAPE THE SHAPE TO SHAPE THE SHAPE TO SHAPE THE S
	D - REMARKS -		-	Visa Chie! operator
For furth	er information re	efer to Ot:	is/Lynes report	s. P. Gaymard

	D Com I For Cont For	Client:	STATOIL		Section: A	NNEX	42
Base: STA	AVANGER	Field : Well :	34/10-5		Page : Report N°:	<i>1</i> 6 80 <u>7</u> 2	301/02
		SURFACE SAM	PLING				
Date of same	oling:29/12 1980				amplina No		1
Sample natur	oling: 29/12 1980 re : <u>Oil</u>	Jervice orac	Sampling	g point : Ot	is test	seper	ator
H .	one :Brent Sand		1925-192	27 Sampl			N N
Depth origin Surface eleva	: RKB ation : 161 m	Tubing Dia. : Shoe : .	2 7/8" 1925(tai	Casi 1 pipe Sho	ng Dia. :	7 <b>"</b> 2209m	
Bottom hole	Intial pressure Latest pressure measur	: 4529 ps	at dep	oth:	date	:	12-79
static conditions	Temperature	ed: 1323 FD.	at dep	oth:	date date	:	
	B - MEASUI	REMENT AND SA	MPLING CON	NDITIONS			
l	h sample was taken:(	)500	. Time elap	osed since stabi			
Boffom hole	Choke size : 20/64 Bottom hole pressure : _	since: 0100	Well head pr	essure: 2275	psi Well he	ad temp	62°F
dynamic conditions	Bottom hole pressure: Bottom hole temp. :_	4469psig	at depth : at depth :	1 ) 1 ) 11	date : . date : .	23/1.	2 13
1	ement of sampled gas - Gr		•				ě
Values used	for calculations :	avily (air. 1)		racior rpv	<u>√Z</u> : _		
Separator	Pressure: 125 PSIG	Rates - Gas	:1.03	33,000 SCF	D GOR	:	469
	Pressure: 125 PSIG Temp.: 70 °F	Oil (separator co	ond.):	2204 BOI	PD (sepa	arator co	ond.)
Stock tank	Atmosphere : Tank temperature :			Oil at 60°F :		BOPD	A[B]C a b
BSW: 0	.5 °/o WLR :	0/0	<u> </u>				
Transfering fl	luid: Mercury		Transfer du	ırafion :	30 mm		
Final condition	ons of the shipping bottle						
Pressure:	ons of the shipping bottle 80 psiTemp.:	400F	23 cc F	Hg left in	bottle		
	Hle No. : 20475/75 C	- IDENTIFICATIO	N OF THE SA	MPLE			
Shipping bot Addressee :	file No.: 20475775	sent on :	by: _		Shipping or	der No.	:
Coupled wit	h	LIQUID			GAS	5	
	hole samples No.						
***							
	Oi	I no 2 162.	51/39	Gas r			7706
Surface	samipes No.			Gas	10 2	A	7092
Measurment o		B Meier-	F-1 -		Dump -		
	a Corrcted with :	snrinkage tester -	[Ы С	orrected with t	- The Walland Comment	Chee to secure and the	etcomogramache lebelles (2
	D - REMARKS -				<b></b>		perator
For furth	ner details refer	to Otis/Ly	nes repo	ort.	P. (	Gaymaı	rd

		me brane	Chem.	STATOI	L	Section: Al	NEX	Rest Leta
Base :	STAVANGER	# H H H H H H H H H H H H H H H H H H H	Field : Well :	34/10-	·5	Page : Report N°:	80/23	17 01/02
Date of sam	pling: 29/12	1980	Sorvico	AMPLING	S	Sampling No.	. 1	
Sample natu	ure : Gas		Jervice (	Sampl	ing point :	sampling No		
	one :	Pe	erforation		927 Samp			
Depth origi Surface elev	n : <u>RKB</u> vation: <u>161 m</u>	Tu	ıbing Dia noe	.: 2 7/8' : 1925(t	Cas cail pipesho	ing Dia. :	7" 2209m	
Bottom hole static conditions	Intial pressure Latest pressure Temperature	measured : .	4529	atd psig atd atd	epth:1919 epth:	date date	29/1	2-79
Time at whic	B - A ch sample was taken	MEASUREME :	RPAND	SAMPLING CO	ONDITIONS apsed since stab	oilisation :	2.5	Hrs.
Bottom hole dynamic conditions	Choke size : 2 Bottom hole press Bottom hole temp	sure :4	469 ps	<u>sig</u> at depth : .	1919m	date:_	29/12	2-79
Flow measu Values used	rement of sampled of for calculations:	gas - Gravity	(air: 1) :	0.578	Factor Fpv	$v = \frac{1}{\sqrt{Z}}$ :		
Separator	Pressure : 125 Temp. : 70	_PSIG Rate _ °F Oil	es - Gas (separato	: 1 . ( or cond.) :	033.000 SC 2204 BO	FD GOR PD B (sepa	:rafor co	469 nd.)
Stock	Afmosphere	:	mmHa	°E	Oil at 60°E		BOPD	
fank	Tank temperature	:		°F	011 001		1	BCa
	Tank temperature	LR:		°F	Gir Gir Gir 7		[2	A B C a
fank  BSW:  Transfering	Tank temperature  0.5 % WI fluid: Vacuum	LR :		°F	duration:	A-18-18-18-18-18-18-18-18-18-18-18-18-18-	[2	A B C a
fank  BSW:  Transfering  Final condit	Tank temperature	: LR : bottle :		°F		A-18-18-18-18-18-18-18-18-18-18-18-18-18-		A B C a
fank  BSW:  Transfering  Final condit  Pressure:  Shipping be	Tank temperature  0.5 % WI  fluid: Vacuum  ions of the shipping	bottle :	OF ENTIFICA	°F Transfer o	duration :30	min.		A B C a
fank  BSW:  Transfering  Final condit  Pressure:  Shipping be	Tank temperature  0.5 % WI  fluid: Vacuum  ions of the shipping 125 psi Tem  offle No.: A 770	bottle :	OF ENTIFICA	°F Transfer o	duration :30	min.	der No.	A B C a
fank  BSW:  Transfering  Final condit  Pressure:  Shipping be Addressee  Coupled with	Tank temperature  0.5 % WI  fluid: Vacuum  ions of the shipping 125 psi Tem  offle No.: A 770	bottle :	OF ENTIFICA	Transfer o	duration :30	min.	der No.	A B C a
fank  BSW:  Transfering  Final condit  Pressure:  Shipping be Addressee  Coupled with  Bofford	Tank temperature  0.5 % WI  fluid: Vacuum  ions of the shipping 125 psi Tem  offle No.: A 770  :	bottle :	NTIFICA	Transfer of Transf	SAMPLE Gas	min.	der No.	:
fank  BSW:  Transfering  Final condit  Pressure:  Shipping be Addressee  Coupled with  Bofford	Tank temperature  0.5 % WI  fluid: Vacuum  ions of the shipping 125 psi Tem  offle No.: A 770  :  the hole samples No.  e samlpes No.  conditions.	bottle:  Do C-IDE sent co  Oil no Oil no	NTIFICA on: LIQI 1 2	Transfer of the State of the St	SAMPLE Gas	Min. Shipping ord GAS  no 2	der No.	:
tank  BSW:  Transfering  Final condit  Pressure:  Shipping be Addressee  Coupled with Bottom  Surface  Measurment	Tank temperature  0.5 % WI  fluid: Vacuum  ions of the shipping 125 psi Tem  offle No.: A 770  :  the hole samples No.  e samlpes No.  conditions.	bottle:  pp.: 40  C-IDE  sent c  Oil no  Oil no	NTIFICA on: LIQI 1 2	Transfer of the State of the St	SAMPLE  Gas	Shipping ord	der No.	:

	Client:	STATOIL	Section	on: ANNEX	4.21
Base: STAVANGER	Field : Well :	34/10-5	Page Repo	e: orf N°: 80/ <u>23</u>	18 301/02
	SURFACE SAM	APLING			
Date of sampling: 29/12 1979 Sample nature: Oil	_ Service ord	er: Sampling poin	Samplir f:_ Otis t	ng No.: test separ	2 rator
A - RESERVC Producing zone : <u>Brent Sand</u>		HARACTERISTICS- 1925-1927		ferval :	
Depth origin : RKB  Surface elevation : 161 m	_ Tubing Dia. : - Shoe ::	2 7/8" 1925(tail pi	_ Casing Dia De) Shoe	7 " : 2209	) m
Bottom hole Intial pressure static Latest pressure measure conditions Temperature	d: 4529 psi	at depth: g at depth:_ at depth:_	1919m	_ date : <u>29/</u> _ date :	12-79
B - MEASURI Time at which sample was taken:	EMENT AND SAM .30 Hrs.	MPLING CONDITIO  Time elapsed si	NS nce stabilisatio	n:03 Hi	rs.
Bottom hole Choke size: 20/64 s dynamic Bottom hole pressure: 2 Bottom hole temp. : 2		. at depth :		dafe:	
Flow measurement of sampled gas - Gra  Values used for calculations:	vity (air: 1) :	0.578 Fa	$ctor Fpv = \frac{1}{\sqrt{2}}$	7	
Separator Pressure: 125 PSIG Temp. : 70 °F	Rates - Gas Oil (separator c	: 1,033,0 ond.): 220	SCFD BOPD B	GOR: 46	ond.)
Stock Atmosphere :	mmHg	°F Oil at		BOPD	
BSW: 0.5 % WLR:					
Transfering fluid : Mercury		Transfer duration	:30 MlI	1	
Final conditions of the shipping bottle :  Pressure: 80 psi Temp.:		1	Hg left :	in bottle	
Shipping bottle No.: 16251/39 C- Addressee:	IDENTIFICATIC	by:	Shipp	oing order No.	:
Coupled with  Bottom hale samples No.	LIQUID			GAS	
Surface samipes No.	1 no 1	20475/75	Gas no . Gas no .		
Measurment conditions.  A Tank -  a Corrcled with sh	B Meter - nrinkage tester -	b Correct	C Dumed with fank -	np -	
D - REMARKS -			- 60 escare	Visa Chief C	perator
For further details refer	to Otis/Ly	nes report	endyste seadouriembasticher	P. Gaym	ard

	Client:	STATOLL	Section: AN	NEX
Base: STAVANGER	Field : Well :	34/10-5	Page: Report N°:	<u>/4</u> 8 <u>0/2301-0</u> 2
	SURFACE SAM	PLING		
Date of sampling: 29/12 19 Sample nature: Gas	979 Service orde	er: _ Sampling poin	Sampling No.: N: Otis test se	2 parator
A - RES	SERVOIR AND WELL Cand Perforations:			
Depth origin : RKB  Surface elevation : 161	Tubing Dia. :	2 7/8 1925m(tail	Casing Dia.: _piBfde :	7 <b>"</b> 2209
Bottom hole Intial pressure static Latest pressure me conditions Temperature	easured : 4529 psi	at depth:_ g at depth:_ at depth:_	date : 1919m date : date :	29/12-79
B - ME Time at which sample was taken :	ASUREMENT AND SAM	MPLING CONDITION Time elapsed s	DNS ince stabilisation :	3 Hrs
Bottom hole Choke size: 20, dynamic Bottom hole pressu conditions Bottom hole temp.	/64 since: 01.00 re: 4469psig	Well head pressure at depth: at depth:	e:_2275psiWell hea n date : date :	d femp. : <u>62<sup>0</sup>F</u> 29/12-79
Flow measurement of sampled ga  Values used for calculations:	s - Gravity (air: 1) : 0 - 5	578 Fa	ctor $Fpv = \frac{1}{\sqrt{Z}}$ :	
Separator Pressure: 125 Temp.: 70	PSIG Rates - Gas °F Oil (separator co	: <u>1,033,0</u> and.): <u>2204</u>	00 SCFD GOR: BOPD B (separ	469 afor cond.)
Stock Atmosphere :	mmHg	°F Oil at		
BSW: 0.5 % WLR	0/c			
Transfering fluid : Vacuum		Transfer duration	30 min	
Final conditions of the shipping bearing the Pressure: 125 psi Temp	ottle: o.: 40° F			
Shipping bottle No.: A 7092		N OF THE SAMPLI	Shipping ord	ler No. :
Addressee:				
Coupled with	LIQUID		GAS	
			GAS	
Coupled with  Bottom hole samples No.	LIQUID	0475/75 6251/39	GAS Gas no l	A 7706
Coupled with  Bottom hole samples No.  Surface samlpes No.  Measurment conditions.  A Tank -	Oil no l 2 1		Gas no l	A 7706
Coupled with  Bottom hole samples No.  Surface samlpes No.  Measurment conditions.  A Tank -	Dil no l 2 1  Oil no 2 1  B Meter - with shrinkage tester -	0475/75 6251/39	Gas no l  C Dump - led with tank -	A 7706  Chief Operator