

DRILLING FLUID PROPERTIES



Well: 1/9-1 Mud company: Baroid (U.K.) Ltd.

Date	Depth	Mud wt	Funnel visc.	Water loss	Hi-temp filter loss	P.V.	Y.P.	Gels. 0/10	Filter cake	PH	ALK	Cl x 1000	Ca	Volume %			Cation exchng. capacity	Remarks
														Oil	Sand	Solids		
12.10		Rig on move to new location																
13.10		W.O.W.																
14.10		1.04	Mixing spud mud															
15.10	143	1.04	120+Mixing spud mud															
16.10	152	1.04	120+Mixing spud mud															
17.10	152	1.04	60 Mixing spud mud															
18.10	269	1.09	68 Mixing spud mud															
19.10	425	1.08	56			17	32			11.6								
20.10	432		Spud mud															
21.10	432		50	Spud mud														
22.10	422	1.37	50	Spud mud														
23.10	422	1.39	44	Spud mud														
24.10	771	1.40	45	12.8	-	24	14	3/12	3	9	0.5	22.000	80	-	1	13		
25.10	1139	1.40	47	8.8	-	24	12	3/5	3	9	0.1	4.000	72	-	½	15		
26.10	1358	1.46	48	7.9	-	26	15	4/12	2	9.5	0.25	4.000	70	-	½	15		
27.10	1358	1.46	56	7	-	22	14	3/8	2	10	0.24	4.000	TR	-	1/4	16		
28.10	1358	Cementing																
29.10	1358	1.47	46	10	-	23	16	3.10	2	12.8	5.2	19.000	260	-	TR	10		
30.10	1371	1.64	59	6	-	29	17	3/16	2	12.5	5	19.000	250	-	TR	17		
31.10	1559	1.70	57	4.8	-	36	15	2/9	2	12.5	6	20.000	220	-	TR	23		

DRILLING FLUID PROPERTIES



Well: 1/9-1 Mud company: Baroid (U.K.) Ltd.

Date	Depth	Mud wt.	Funnel visc.	Water loss	Hi-temp filter loss	P.V.	Y.P.	Gels. 0/10	Filter cake	PH	ALK	Cl x 1000	Ca	Volume %			Cation exchng. capacity	Remarks
														Oil	Sand	Solids		
1.11	1559	1.71	56	7	-	37	13	2/11	2	12.5	5	20.000	240	-	TR	25		
2.11	1838	1.81	62	8	-	40	15	2/16	2	12.5	5.5	20.000	200	-	TR	26		
3.11	1960	1.91	59	10	-	36	10	1/7	2	12.3	4.5	20.000	200	-	TR	27		
4.11	1960	1.85	54	8	-	35	15	1/10	2	12.5	4	20.000	200	-	TR	26		
5.11	2042	1.86	65	8	-	47	22	5/30	2	12.5	3.8	20.000	TR	-	1/2	28		
6.11	2123	1.85	63	4	-	45	16	4/9	2	12.5	6.75	21.000	140	-	1	27		
7.11	2300	1.84	53	8.2	-	39	11	2/8	2	12	1	16.000	280	-	3/4	22		
8.11	2487	1.84	60	7.7	26.4	47	17	2/15	2	12	5.5	13.000	TR	2	3/4	28		
9.11	2577	1.84	59	6.3	28	49	19	2.20	2	12.8	8	16.000	140	2	1	28		
10.11	2728	1.84	55	5	26	35	17	4/7	2	12	5	17.000	200	2	1/2	26		
11.11	2800	1.84	53	6.4	28	36	15	2/10	2	12.4	5.2	19.500	180	3	1/2	27		
12.11	2836	1.84	60	5.6	28	38	14	1/7	2	12.5	4.5	20.000	200	3	1/2	27		
13.11	2865	1.84	56	6.6	26	36	15	1/7	2	12.4	5	20.000	200	3	1/2	28		
14.11	2836	1.84	57	5	23	35	14	2/10	2	12.4	5	19.500	200	3	1/2	28		
15.11	2735	1.84	60	4.4	24.3	38	14	2/8	2	12	3.7	20.000	200	3	1/2	26		
16.11	2825	1.84	61	5	25	37	12	2/10	2	11.5	2.3	20.000	220	3	TR	27		
17.11	2836	1.84	59	5.3	26	35	12	1/7	2	12.1	2.2	20.000	240	2	TR	25		
18.11	2884	1.68	56	4.8	23	33	11	2/10	2	11.8	1.9	19.500	240	2	TR	25		
19.11	2916	1.68	62	4.6	24	34	12	2/10	2	11.6	2.3	19.500	260	1	TR	25		
20.11	2975	1.68	62	4.4	24.2	36	15	8/18	2	11.8	2.3	20.000	200	1	TR	25		

DRILLING FLUID PROPERTIES



Well: 1/9-1 Mud company: Baroid (U.K.) Ltd.

Date	Depth	Mud wt.	Funnel visc.	Water loss	Hi-temp filter loss	P.V.	Y.P.	Gels. 0/10	Filter cake	PH	ALK	Cl x 1000	Ca	Volume %			Cation exchng. capacity	Remarks
														Oil	Sand	Solids		
21.11	3046	1.68	63	4.3	22.8	37	15	8/22	2	11.8	3	20.000	240	1	TR	25		
22.11	3047	1.68	62	4.1	22	36	16	8/23	2	11.8	3	20.000	240	1	TR	26		
23.11	3075	1.68	59	3.6	23,8	33	13	4/14	2	12	3.4	20.000	200	1	TR	24		
24.11	3075	1.68	59	3.5	23,8	33	13	4/14	2	12	3.4	20.000	200	1	TR	24		
25.11	3075	1.68	60	3.6	23,5	34	13	4/15	2	12	3.4	20.000	200	1	TR	24		
26.11	3075	1.68	57	3.5	22	33	12	4/14	2	12.2	4.5	20.000	230	1	TR	23		
27.11	3106	1.68	55	3.1	21	31	11	3/13	2	11.9	4.1	20.000	230	2	TR	23		
28.11	3141	1.68	56	4	23	34	13	4/17	2	12.3	4.3	20.000	210	2	TR	23		
29.11	3160	1.68	54	1.9	19	32	11	2/15	2	11.9	1.8	20.000	200	2	TR	23		
30.11	3199	1.68	56	2.4	20	33	11	2/14	2	12.1	2	20.000	190	2	TR	24		
01.12	3232	1.68	57	2.8	21	33	10	12	2	12	2.8	20.000	200	2	TR	24		
02.12	3328	1.65	58	2.7	21	34	12	3/15	2	12	2.9	20.000	220	1	TR	24		
03.12	3337	1.66	52	3.1	20.8	32	13	3/16	2	11.8	2.9	20.000	260	1	TR	24		
04.12	3337	1.66	52	2.9	20.8	32	13	3/16	2	11.8	2	20.000	260	1	TR	24		
05.12	3402	1.66	54	2.8	20.4	34	13	4/16	2	12	1.8	20.000	220	1	TR	25		
06.12	3456	1.66	54	3	22.2	33	14	6/15	2	11.8	1.8	19.500	200	1	0.3	24		
07.12	3490	1.66	52	3	20.8	34	13	6/16	2	11.9	1.9	19.500	220	1	0.3	24		
08.12	3536	1.63	52	2.6	22.6	33	12	4/17	2	11.7	1.4	19.500	220	1	TR	23		
09.12	3608	1.65	52	2.5	23	30	14	5/19	2	11.8	1.4	19.000	220	1	0.4	24		
10.12	3683	1.65	50	1.9	21	29	14	3/12	2	12	2.2	20.000	160	1	0.5	24		

DRILLING FLUID PROPERTIES



Well: I/9-1 Mud company: Baroid (U.K.) Ltd.

Date	Depth	Mud wt.	Funnel visc.	Water loss	Hi-temp filter loss	P.V.	Y.P.	Gels. 0/10	Filter cake	PH	ALK	Cl x 1000	Ca	Volume %			Cation exchng. capacity	Remarks
														Oil	Sand	Solids		
25.12	3370	1.66	60	13	NC	31	14	4/20	2	12	3	14.500	190	1	TR	25		
26.12	3370	1.66	60	13	NC	31	14	4/20	3	12	3	14.500	190	1	TR	25		
27.12	3370	1.66	65	12	NC	33	15	5/19	3	12	3	14.000	190	1	TR	24		
28.12	3370	1.66	63	11	NC	35	14	5/21	3	12	1.7	14.500	260	1	TR	25		
29.12	3370	1.66	66	12	NC	38	13	5/24	3	11.9	2	14.500	350	1	TR	22		
30.12	3370	1.66	62	11.8	NC	35	12.0	5/18	3	12	2.2	14.500	370	1	TR	23		
31.12	3370	1.66	64	11.8	NC	35	12.0	5/19	3	11.8	2.2	14.500	350	1	TR	23		
1977																		
01.01	3370	1.67	64	11.4	NC	35	12	4/18	3	11.8	2.2	14.000	400	1	TR	23		
02.01	3370	1.68	64	11.6	NC	35	12	4/19	3	11.8	2.3	14.000	400	1	TR	23		
03.01	3370	1.66	63	11.6	NC	35	12	4/18	3	11.8	2.2	14.000	410	1	TR	23		
04.01	3370	1.68	60	11.6	NC	36	12	3/18	2	11.6	2	16.000	480	1	TR	23		
05.01	3370	1.68	61	12	NC	35	12	3/18	3	11.8	2.1	15.000	400	1	TR	23		
06.01	3370	1.68	61	12.4	NC	36	12	4/12	3	11.6	1.4	14.000	420	1	TR	23		
07.01	3370	1.68	60	12.5	NC	34	11	4/18	3	11.5	1.5	14.000	400	1	TR	23		
08.01	3370	1.68	59	12.1	NC	33	12	4/21	3	11.5	1.3	14.000	450	1	TR	23		
09.01	3370	1.68	62	12.5	NC	34	13	4/23	3	11.5	1.4	14.000	450	1	TR	23		
10.01	3370	Making new mud																
11.01	3370	1.68	60	9.5	NC	37	13	5/26	3	11.4	0.5	14.000	500	1	TR	23		
12.01	3370	1.67	59	10	NC	38	14	5/25	3	11.8	1	14.000	550	1	TR	23		

DEN NORSKE OLJESELSKAP

Well: 1/9-1

MUD ADDITIONS

Mud company: Baroid (U.K.) Ltd.

T = Metric tons
dr. = Drums
sk. = Sacks

Date	Depth	Barite	Lignosulfonate	Lignite	Caustic (50kg)	Drispac SL	Drispac R	Con Det	Mica C	Walnut C	Walnut M	W. Bentonite	Lime	Caustic (25kg)	Surflo W-300	Cost	Remarks: \$1.00 = kr.5.30
		T	sk.	sk.	sk.	sk.	sk.	dr.	sk.	sk.	sk.	sk.	sk.	sk.	dr.		
1976	mtr.																
13.11	2865	47	35	9	15	10		2								46.054	Cond. mud for logging
14.11	2836	19	23	80				4	16	4	8					29.706	Logging
15.11	2836	84.3	60	60				6	16	4	8	135	5	4		83.399	Cond. mud to run csg.
16.11	2825	38	36	22		8		2					7	6	1	50.479	Soltex 43 Run 9 5/8" casing
17.11	2836	10	2		6							56				10.297	Test B.O.P.R.i.h. w/8 1/2" bit
18.11	2884	35	33	24	15		3					198	12			79.894	Soltex 33 Aktaflo-S 16
																	Drilling Cement and formation
19.11	2916	10	90	50												35.094	Soltex 27 Aktaflo-S 6 Check for wash out.
20.11	2975	3	24		5											5.812	Drilling ahead ,
21.11	3046	18	36		6											17.555	Aktaflo-S 1 P.o.o.h. for coring
22.11	3 046	5	22		4											8.368	Akt-S 1 / Cut 30' of core
23.11	3 054	4	12		3											5.091	Cut 61' of core
24.11	3 075																W.O.W.
25.11	3 075	2														1.197	Work on broken anchor
26.11	3 075															-	Cond. mud before coring
27.11	3 106	19	20	15	5						20					25.244	Cut 37' of core
28.11	3141	3														1.796	Cut 2 cores no 5 and 6.

DEN NORGE STATIS OLJESELSKAP

Well: 1/9-1

MUD ADDITIONS

Mud company: Baroid(U.K.) Ltd.

T = Metric tons
dr. = Drums
sx. = Sacks

Date	Depth	Barite	W. Bentonite	Aktaflo-S	Lignite	Soltex	Caustic (50kg)	Lignosulfonate	Lime	Caustic (25kg)	Cost	Remarks: \$1.00 = kr.5.30
1976	mtr.	T	sx.	dr.	sx.	sx.	sx.	sx.	sx.	sx.	1000kr.	
29.11	3160	3	20	5	50	15		45			22.490	Cut core no 7 and 8
30.11	3199	3									1.796	Cut 2 cores
01.12	3232	2	22	2							5.821	Cut 2 cores
02.12	3328	3	53	10	30	10					26.317	Cut 1 core. Decr mud wt. 13.7p
03.12	3337	8		3	10						3.750	Cut 31' core
04.12	3337	6				1					10.593	Start logging
05.12	3402				20		5	10	4		3.261	Drilling in limestone
06.12	3456		35		14		3	41	4		7.092	For chalk and limestone
07.12	3490	2	20		22		4	32			7.307	For chalk and limestone
08.12	3536	2		1			4	34			6.358	For chalk and limestone
09.12	3608	1	10	1			4	19	5		5.237	Drilling ahead.
10.12	3683	2		5	16	6	12	22	7		16.216	Drilling ahead.
11.12	3705	5			14	4		16			6.349	T.D.P.O.O.H. for logging
12.12	3705										-	Logging
13.12	3705		9	20	8		6	8	3		6.194	Logging
14.12	3705	32	104				2	2			25.584	Increased gel strength
15.12	3705	7	19			8					6.534	Run 7" liner

DEN NORSKE STATSKULJESELSKAP

Well: 1/9-1

MUD ADDITIONS

Mud company: Baroid (U.K.) Ltd.

T = Metric tons
dr. = Drums
sx. = Sacks

Date	Depth	Caustic (50kg)		W. Bentonite	Barite	Lignosulfonate										Cost	Remarks: \$1.00 = kr. 5.30
		sx.	sx.														
1976	mtr.	sx.	sx.	T	sx.											1000kr.	
16.12	3370	4	42													3.028	Casing set at 3370m.
17.12	3370	2	170	25	2											25.415	Mixing bentonite to prevent barite settling.
18.12	3370		80		4											6.966	Run CBL log.
19.12	3370		34		3											3.739	Cemented
20.12	3370		15		6											4.449	Drilled cement.
21.12	3370		15		2											2.054	Perforate sone no 1
22.12	3370		15		1											1.456	R.i.h. with test string
23.12	3370															-	R.i.h. with test string
24.12	3370															-	Testing sone no 1
25.12	3370															-	Testing
26.12	3370															-	Testing
27.12	3370				1											.599	Finished test no 1
28.12	3370		39		7											6.419	Perforate sone no 2
29.12	3370															-	R.i.h. POOH with test tool
30.12	3370															-	R.i.h. with test string
31.12	3370															-	Testing test tools

DEN NORGE STATSKOJSELSKAP

Well: 1/9-1

MUD ADDITIONS

Mud company: Baroid (U.K.) Ltd.

T = Metric tons
dr. = Drums
sx. = Sacks

Date	Depth	Mud Additions										Cost	Remarks: \$1.00 = kr. 5.30		
		Barite	W. Bentonite	Caustic (50kg)	Drispac R	Lignosulfonate	Mica M	Mica F	Walnut M						
1976	mtr.	T	sx.	sx.	sx.	sx.	sx.	sx.	sx.					1000kr.	
01.01	3370	2	20											2.340	Testing sone no 2
02.01	3370													-	Testing sone no 2
03.01	3370													-	Killed well. W.O.W.
04.01	3370		56											3.200	Lost mud in riser
05.01	3370													-	Displ. water in riser w/mud
06.01	3370	6	85											8.449	Cemented sone no 2
07.01	3370													-	R.i.h. to test sone no 1
08.01	3370													-	P.o.o.h. with test string
09.01	3370	10	120	4										13.472	Cemented sone no 3
10.01	3370		60	3										3.900	100 bbls water leaking into mud system
11.01	3370	29			3									19.447	Made up 200 bbls. Q-mix Test no 4
12.01	3370	21	55	6		5	6	6	6					18.348	Killed well with 13.9 ppg mud
13.01	3370	6	78	3										8.520	R.i.h. with stinger squeezed
14.01	3370													-	Perforated sone no5
15.01	3370													-	W.O.W.
16.01	3370													-	Squeezed 100 bbls HCL into for

VI TESTING SUMMARY

General: When obtainable all bottom hole pressure readings are from the 72 hrs Amerada bomb. In the other cases readings are from the 120 hrs Amerada bomb, and approx 1 kg/cm^2 is subtracted to account for the systematic reading difference between the two bombs.

Log and core values given were taken as the arithmetic average in the interval.

Sm^3 is defined at 1 atm and 60°F .

DST 1A (Dec. 22-23) 1976

TEST OF UPPER CREATACEOUS.

Interval: 3298-3302 & 3306-3312 m (4 JSPF)
 Checking two streaks of good porosity in
 the lower part of the Upper Cretaceous.

Logs: 74.5% Water.
 27.4% Porosity

Cores: Not cored.

Packer: 7" RTTS at 3270 m

PBTD: 3331m

Teststring: 5" O.D. drillpipe

Bottom choke size: 1.75"

Cushion: 26m³ sea water

Acid: -

Gas to surface: -

Oil to surface: -

Max B.H.T. 120⁰C

Pressure Data: 72 hr Amerada at 3282 m

	Time Elapsed (min)	Pressure (kg/cm ²)
Initial hydrostatic pressure	-	550.3
Initial shut in pressure	164	533.3
Final flowing pressure (32/64" Choke)	16	354.5
(48/64" Choke)	855	359.8
Pressure from build up plot		538.3

Average flow rate: 27.8m³/dayComments: Reversed out traces of oil, S.G. = 0.865

DST IB (Dec. 24-26)

TEST OF UPPER CREATACEOUS

Interval: 3298-3302 & 3306-3312m (4 JSPF)
Retesting after acidizing.

Logs: 74.5% Water
27.4% Porosity

Cores: Not cored

Packer: 7" RTTS at 3270 m

PBTD: 3331 m

Teststring: 5" O.D. drillpipe

Bottom choke size: 1.75"

Cushion: 27 m³ sea water

Acid: 12.15 m³/m

Gas to surface: 146 min (only small amounts)

Oil to surface: 168 min. (traces)

Pressure data: 72 hr Amerada at 3282.2 m

	Time Elapsed (min)	Pressure (kg/cm ²)
Initial hydrostatic pressure		545.8
Initial shut in pressure	488	463.5
Final flowing pressure (48/64" Choke)	414	325.8
(48/64" Choke)	656	331.2
(48/64" Choke)	693	333.0
Pressure from build up plot:		N/A

Average flow:

Initial flow period: 177.5 m³/day.
2nd flow period: 23-153m³/day.
3th flow period: 23-68m³/day.

Comments: One bottom hole sample was collected contained only water. Oil traces partly due to diesel cushion while acidizing.

DST 2 (Dec 28-29)

TEST OF UPPER CRETACEOUS

Interval: 3210 - 3220 m (4 JSPF)
 Logs: 100% water
 30.7% Porosity
 Cores: 27.6% Porosity
 1.27 md Permeability
 Packer: 7" RTTS at 3183 m
 PBTB: 3273 m
 Teststring: 5" O.D. drillpipe
 Bottom choke size: 1.75"
 Cushion: 24.6 m³ sea water
 Acid: -
 Gas to surface: -
 Oil to surface: -
 Max BHT: 112°C
 Pressure data: 72 hr Amerada at 3195 m

	Time Elapsed (min)	Pressure (kg/cm ²)
Initial hydrostatic pressure		538.0

Comments: Johnston sub sea test tree did not open after pressure test from below.

DST 2A (Dec. 31-Jan.2)

TEST OF UPPER CREATACEOUS

Interval: 3210 - 3220m(4 JSPF)
 Logs : 100% water
 30.7% Porosity
 Cores: 27.6% porosity
 1.27 md Permeability
 Packer: 7" RTTS at 3183 m
 PBTD: 3273m
 Teststring: 5" O.D. drillpipe
 Bottom choke size: 1.75"
 Cushion: 24.8 m³ Sea water
 Acid: -
 Gas to surface: 522 min.
 Oil to surface: 567 min, traces only.
 Max BHT: 116⁰C
 Pressure data: 72 hrs Amerada at 3195 m

	Time Elapsed (min)	Pressure (kg/cm ²)
Initial hydrostatic pressure	-	536.0
Initial shut in pressure	183	496.6
Final flowing pressure (48/64" choke)	20	339.9
(48/64" choke)	1847	329.4
Pressure from build up plot:	-	500.4

Production data

Choke	FWHP	Water rate (m ³ /day)
48/64	0.5	57
48/64	1.0	46-54

Comments: Well was killed due to bad weather.

DST 3 (Jan.6-7)

TEST OF UPPER CRETACEOUS

Interval: 3174 - 3182m (4 JSPF)
 Logs: 82% Water
 23% Porosity
 Cores: 21.8% Porosity
 0.47 md permeability
 Packer: 7" RTTS at 3146 m
 PBDT: 3200 m
 Teststring: 5" O.D. drillpipe
 Bottom choke size: 1.75"
 Cushion: 24.3 m³ Sea water
 Acid: -
 Gas to surface: -
 Oil to surface: -
 Max BHT: 117°C

Pressure data: 72 hr. Amerada at 3158 m

	Time Elapsed (min)	Pressure (kg/cm ²)
Initial hydrostatic pressure	-	534.4
Initial shut in pressure	180	493.6
Final flowing pressure (48/64" Choke)	30	336.6
(48/64" Choke)	1059	333.1
Final shut in pressure	160	461.7
Pressure from build up plot:		497.7

PRODUCTION DATA:

<u>Choke</u>	<u>Water rate (m³/day)</u>
48/64	14
48/64	15

Comments: Reversed out fluid in test string during final build up period.

DST 4 (Jan. 9-12)

TEST OF UPPER CREATACEOUS

Interval: 3148 - 3157 m (4 JSPF)
 Logs: 58.2% Water
 26.9% Porosity
 Cores: 25.3% Porosity
 0.60 md Permeability
 Packer: 7" RTTS at 3119 m
 PBSD: 3165 m
 Teststring: 5" O.D. Drillpipe
 Bottom choke size: 1.75"
 Cushion: 23.8 m³ drill water
 Acid: 1.27 m³/m after 2 flow period
 Gas to surface: 233 min.
 Oil to surface: 238 min. traces
 Max BHT: 120° C
 Pressure data: 72 hr Amerada at 3131 m

	Time Elapsed (min.)	Pressure (kg/cm ²)
Initial Hydrostatic	-	536.0
Initial shut in	58	480.7
Final flowing pressure (48/64" choke)	31	327.4
(48/64" choke)	459	177.3
(24/64" choke)	415	244.5
Final shut in pressure	492	467.0
Pressure from build up plot:		496.1

PRODUCTION DATA:

Choke	Oil rate m ³ /day	Gas rate 10 ³ Sm ³ /day	GOR Sm ³ /m ³	Oil Grav.	Gas Grav.	FWHP kg/cm ²	H2O %
48/64	14	-	-	-	-	-	-
48/64	24-146	-	-	0.873	0.824	0.3-19.3	59-70
24/64	253-420	154-142	380-544	0.849	0.699	123-167	15-35

Comments: Two gas samples and two oil samples were collected from the separator for PVT purposes.

DST 5 (Jan. 13-18)

TEST OF UPPER CRETACEOUS

Interval: 3120 - 3133 m (4JSPF)
 Logs: 24.7% Water
 32.7% Porosity
 Cores: 32.7% Porosity
 2.63 md Permeability
 Packer: 7" RTTS at 3092 m
 PBTD: 3141 m
 Teststring: 5" O.D. drillpipe
 Bottom choke size: 1.75"
 Cushion: 23.6 m³ sea water
 Acid: 1.47 m³ acidizing after second flow period.
 Gas to surface: 17 min.
 Oil to surface: 31 min.
 Max BHT: 120°C
 Pressure data: 72 hr Amerada at 3113 m

	Time Elapsed (min)	Pressure (kg/cm ²)
Initial hydrostatic	-	532.1
Initial shut in	181	489.9
Final flowing pressure(48/64 Choke)	15	297.6
(24/64 Choke)	360	255.2
(24/64 Choke)	361	407.2
(14/64 Choke)	362	454.4
(32/64 Choke)	299	353.0
(48/64 Choke)	354	247.5
Final shut in	-	450.6
Pressure from build up plot:		494.0

D.S.T. 5
PRODUCTION DATA

<u>Choke</u>	<u>Oil rate</u> <u>m³/day</u>	<u>Gas rate</u> <u>10³Sm³/day</u>	<u>GOR</u> <u>Sm³/m³</u>	<u>Oil</u> <u>Gravity</u>	<u>Gas</u> <u>Gravity</u>	<u>FWHP</u> <u>kg/cm²</u>	<u>H2O</u> <u>%</u>
48/64	717	-	-	-	-	21	-
24/64	140-197	71.1-90.0	453.540	0.837	0.694	130	01.-20
24/64	405-461	242-251	534-618	0.818	0.680	267	-
14/64	130	90-93	613-730	0.816	0.700	302	-
32/64	426-636	320-325	570-712	0.820	0.692	239	-
48/64	337-620	792-838	1514-2352	0.811	0.688	140	9

COMMENTS: Two bottom hole samples, and six of each of separator gas and oil were collected for PVT analysis.

DST 5 A (Jan. 22-24)

TEST OF UPPER CREATACEOUS

Intervall: 3129 - 3133 m (4 JSPF)
 Logs: 29.2% Water
 31.4% Porosity
 Cores: 31.8% Porosity
 2.26 md permeability
 Packer: 7" RTTS at 3102 m
 PBTD: 3141 m
 Teststring: 5" O.D. Drillpipe
 Bottom Choke size: 1.75"
 Cushion: 24 m³ sea water
 Acid: -
 Gas to surface: 97 min.
 Oil to surface: 97 min.
 Max BHT: 121°C
 Pressure data: 72 hr Amerada at 3122 m

	Time Elapsed (min)	Pressure (kg/cm ²)
Initial hydrostatic	-	525.0
Initial shut in pressure	N/A	N/A
Final flowing pressure (14/64" Choke)	14	435.0
(12/64" Choke)	547	372.2
Final build up pressure:	887	489.0
Pressure from build up plot:		494.6

PRODUCTION DATA:

Choke	Oil rate m ³ /day	Gas rate 10 ³ Sm ³ /day	GOR Sm ³ /m ³	Oil grav.	Gas grav.	FWHP kg/cm ²	H2O %
14/69	32	-	-	-	-	-	-
12/64	71-98	34-45	409-640	0.836	0.710	196-215	1

Comments: Four bottom hole samples, and four of each of separator gas and oil were collected for PVT analysis.

DST 6 (Jan. 26-27)

TEST OF UPPER CRETACEOUS

Interval: 3105 - 3108.5 m (4 JSPF)
 Log: 15% Water
 36.9% Porosity
 Cores: 36.7% Porosity
 3.83 md Permeability
 Packer: 7" RTTS at 3075 m
 PBSD: 3113 m
 Teststring: 5" O.D. drillpipe
 Bottom choke size: 1.75"
 Cushion: 23.7 m³ sea water
 Acid: -
 Gas to surface: 58 min.
 Oil to surface: 60 min.
 Max BHT: 118°C
 Pressure data: 72 hr Amerada at 3087

	Time Elapsed (min)	Pressure (kg/cm ²)
Initial hydrostatic pressure	-	521.5
Initial shut in pressure	674	485.8
Final flowing pressure (3/64" & 22/64" choke)	694	213.1
Pressure from build up plot		493.4

PRODUCTION DATA:

Choke	Oil rate m ³ /day	Gas rate 10 ³ Sm ³ /day	GOR Sm ³ /m ³	Oil grav.	Gas grav.	FWHP kg/cm ²	H ₂ O %
3/64	56- 95	67- 80	760-1263	0.804	0.708	178-225	0.1-0.5
22/64	111-127	125-130	989-1201	0.796	0.708	125-143	0.1-0.6

Comments: Five gas samples and three oil samples were collected from the separator for PVT purposes.

DST 7 (Jan. 28)

TEST OF DANIAN

Interval: 3082 - 3088 m (4 JSPF)
 Log: 57.2% Water
 22.0% Porosity
 Cores: 17.2% Porosity
 0.08 md Permeability
 Packer: 7" RTTS set at 3055 m
 PBTD: 3098 m
 Teststring: 5" O.D. drillpipe
 Bottom choke size: 1.75"
 Cushion: 23.5m³ sea water
 Acid: -
 Gas to surface: -
 Oil to surface: -
 Max BHT: 106⁰C
 Pressure data: 72 hr Amerada at 3065 m

	Time Elapsed (min)	Pressure (kg/cm ²)
Initial hydrostatic	-	514.4
Well open for flow	19	325.0

Comments:

No production from this interval. Three attempts to inject into formation, all failed.

DST 8 (Jan. 31. - Feb. 1)

TEST OF DANIAN

Interval: 3055 - 3068 m (4 JSPF)
 Log: 23.0% Water
 35.5% Porosity
 Cores: 34.8% Porosity
 0.84 md Permeability
 Packer: 7" RTTS set at 3028 m
 PBTD: 3076 m
 Teststring: 5" O.D. Drillpipe
 Bottom choke size: 1.75"
 Cushion: 23 m³ sea water
 Acid: -
 Gas to surface: 40 min.
 Oil to surface: 85 min.
 Max BHT: 116°C
 Pressure data: 72 hr Amerada at 3038 m

	Time Elapsed (min)	Pressure (kg/cm ²)
Initial hydrostatic pressure		515.5
Initial shut in pressure	181	490.0
Final flowing pressure (48/64" Choke)	15	313.8
(12/64" Choke)	499	176.8
Pressure from build up plot		490.9

PRODUCTION DATA:

Choke	Oil rate m ³ /day	Gas rate 10 ³ /Sm ³ /day	GOR Sm ³ /m ³	Oil grav.	Gas grav.	FWHP kg/cm ²	H ₂ O %
48/64	122	-	-	-	-	-	-
12/64	79-90	198-218	2330-2740	0.760	0.691	133-111	0.5

DST 8A (Feb 2)

TEST OF DANIAN

Interval: 3055 - 3068 m (4 JSPF)
 Log: 23.0% Water
 35.5% Porosity
 Cores: 34.8% Porosity
 0.84 md Permeability
 Packer: 7" RTTS at 3024 m
 PBTD: 3076 m
 Teststring: 3.5" O.D. tubing
 Bottom Choke size: 1.75"
 Cushion: 10.9 m³ sea water
 Acid: 3.45 m³/m Acidizing after first flow.
 Gas to surface: 34 min.
 Oil to surface: 36 min.
 Max BHT: 111°C
 Pressure data: 72 hr Amerada at 3034 m

	Time Elapsed (min)	Pressure (kg/cm ²)
Initial hydrostatic pressure	-	508.6
Initial shut in pressure		N/A
Final flowing pressure (48/64" Choke)	66	257.5
Pressure from build up plot:		N/A

PRODUCTION DATA:

Choke	Oil rate m ³ /day	Gas rate 10 ³ Sm ³ /day	GOR Sm ³ /m ³	Oil grav.	Gas grav.	FWHP kg/cm ²	H2O %
48/64	1007	-	-	-	-	35-133	-

Comments: Impossible to close apr-valve after acidizing. Well was killed by bullheading into formation.

DST 8B (Feb. 10-11)

TEST OF DANIAN

Interval: 3055 - 3068 m (4JSPF)
 Log: 23.0% Water
 35.5% Porosity
 Cores: 34.8% Porosity
 0.84 md Permeability
 Packer: 7" RTTS at 3024 m
 PBTD: 3076 m
 Teststring: 3.5" O.D. tubing
 Bottom choke size: 1.75"
 Cushion: 10.9 m³ sea water
 Acid: -
 Gas to surface: -
 Oil to surface: -
 Max BHT: 112°C
 Pressure data: 72 hr Amerada at 3034 m

	Time Elapsed (min)	Pressure (kg/cm ²)
Initial hydrostatic pressure	-	524.2
Initial shut in pressure	4403	484.4
Final flowing pressure (24/64" & 48/64" Choke)	660	135.1
Pressure from build up plot		491.5

PRODUCTION DATA:

Choke	Oil rate m ³ /day	Gas rate 10 ³ /Sm ³ /day	GOR Sm ³ /m ³	Oil grav.	Gas grav.	FWHP kg/cm ²	H ₂ O %
24/64	91-108	161-173	1505-1899	-	-	144-158	9-30
48/64	79	273	3455	0.771	0.71	58-92	7-11

Comments: Well never did clear-up after the prolonged acid contact time.
 Test aborted due to weather. Well abandoned with reentry possibility due to failures in anchor chains.