RAPPORT

FRA

PRODUKSJONS-TEST NR 2

AV OLJE SONE

BRØNN: 31/2-2

RIG: WEST VENTURE

KARL GJERDE

Kopi

RAPPORT

FRA

PRODUKSJONS-TEST NR 2

AV OLJE SONE

BRØNN: 31/2-2

RIG: WEST VENTURE

KARL GJERDE

INNHOLD:

zczc◎
west venture

from shell tananger ep ++ eppd eppd/1 eppo eppo/1 (epp eppp/1/2/5)
urgent to west venture eppd/2 eppo/2 eppp/51
copy to npd, stavanger attn. f.aamodt/t.wathn/s.heidberg.

ref tan140801 14.08.80.

recompletion of 31/2-2 for oil zone and micaceous sand gas zone tests.

following discussions between norske shell as licence 05% operator, partners and npd, it has been agreed to proceed as follows:-

(1) rih and open xa-ssd. circulate well with brine. pick up to pull seal stinger out of packer then circulate well with brine again.

(2) poh with 3-1/2'' tubing string.

(3) rig up schlumberger and run ccl/gr from bottom inside gp liner to 1350 m to obtain schlumberger depths for the gp liner collars. (n.b. throughout this programme telex, all depths will be quoted with reference to isf/sonic, run 3, of 11/4/80. driller's depths must be corrected to make allowance for the 2 m deeper readings obtained by schlumberger).

(4) rih with cutting assembly on 5'' dp and cut 5-1/2'' gp blank pipe at 1578 m. poh.

(5) retrieve cut off blank pipe and sc-1 gp packer as per programme, page 17, steps (5), (6) and (7). (in the event the safety joint shears during programme, page 17, step 6, the remaining cut off portion of blank pipe must be recovered).

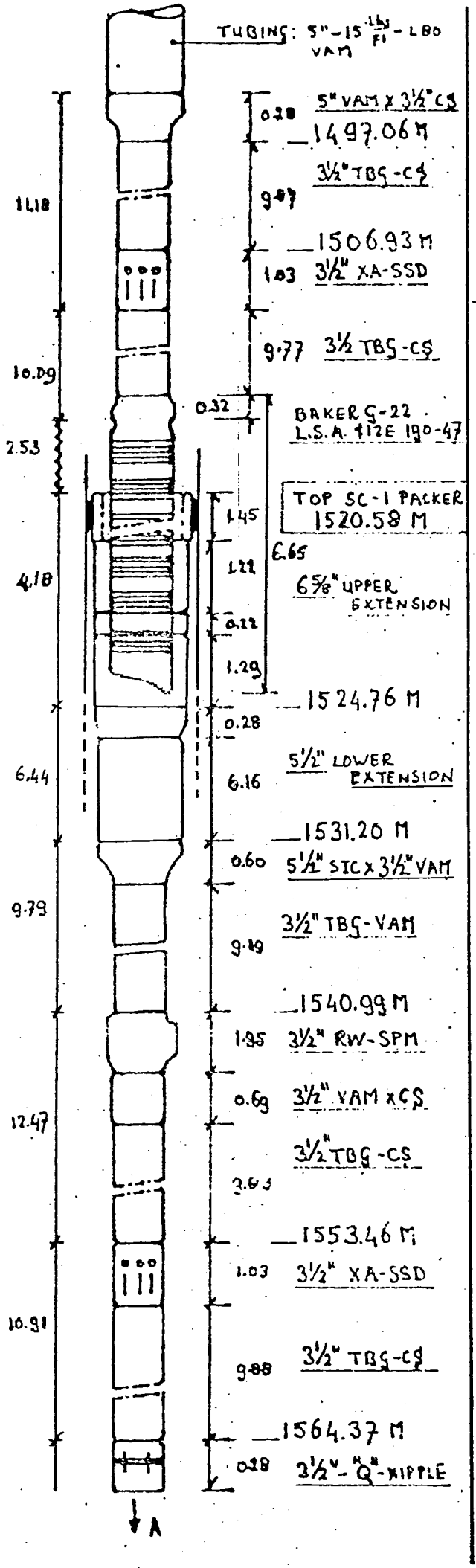
(6) rih with 30 m, 2-7/8'' tubing on 5'' dp. stab into gp liner and reverse hole clean from bottom to remove any gp sand from inside the liner. reverse circulate hole to clean filtereo brine then poh.

(7) perforate interval 1570 - 1575 m with 2-1/8'' hyperdome scallop guns, 4 spf, 0 degree phasing using the perforation procedure outlined in the programme, page 28, steps (1), (2), (4) - adjust perforating depths - and (6).

(8) rih with 9-5/8'' casing scraper with 12.5 m, 2-7/8'' tubing below, using 5'' dp/6-1/4'' dc's as running string. scrape interval 1540 m - 1578 m (i.e. to top of cut off gp liner) then reverse clean when scraper is at 1578 m and 2-7/8'' tubing-tailpipe shoe at 1590.5 m, just above lower gp tell tale screen. poh.

(9) rig up schlumberger and run gauge ring/junk basket to top of cut off gp liner. poh.

(10) run and set baker model ''db'' packer with top of packer at 1576 m. poh. check setting tool to ensure packer satisfactorily set. rig down schlumberger.



CASING: 9⅝"-47-N80-VAM/BTC

DRAWING 18081980
AUTHOR W.M.J.R.

G A S L I F T

GENERELT

Første produksjonstest av oljesonen ble utført med enkel kompletering andre produksjonstest ble utført med dobbel kompletering. Gas ble injisert fra overliggende gas sone. Det ble brukt to "packers", og "side pocket mandrel" mellom disse. Som "flow controler" ble det brukt en "chemical injection valve". Den øverste del av denne ventilen er en fjærbelastet port som åpner for gas ved et bestemt minste-trykk. Denne ble justert til et åpningstrykk på null for å få minst mulig trykktap på gassen.

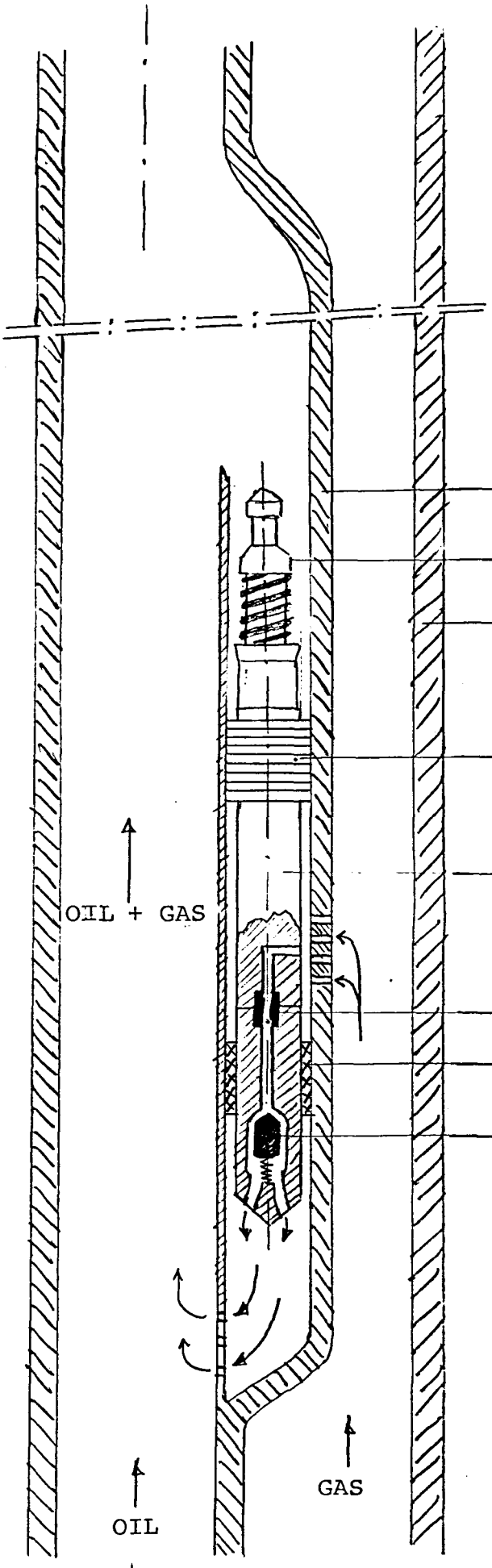
Ventilen består av to enheter:

- en choke-enhet for gass injeksjonen. Ventilen leveres med "choke" størrelser på 3/16" og 5/16".

- en "check-valve" for å hindre retur av eventuell olje med høyt trykk gjennom "flow controler" og ut i annulus.

Etter avsluttet produksjonstest av olje sone, setter en plug i "S-I"-nipple, åpner 2 7/8" XO SSD og 3½" XA SSD for produksjon kun fra "Micaceous sand zone".

GAS-LIFT "FLOW-CONTROLER"



SIDE POCKET MANDREL no. 211-RW·30209-4

"BK" LATCH no. 210-BO-5

CASING

VEE-PACKING

FLOW-CONTROLER no. 221-RCV-1000

CHOKE: 3/26 OR 5/16

VEE-PACKING

CHECK VALVE

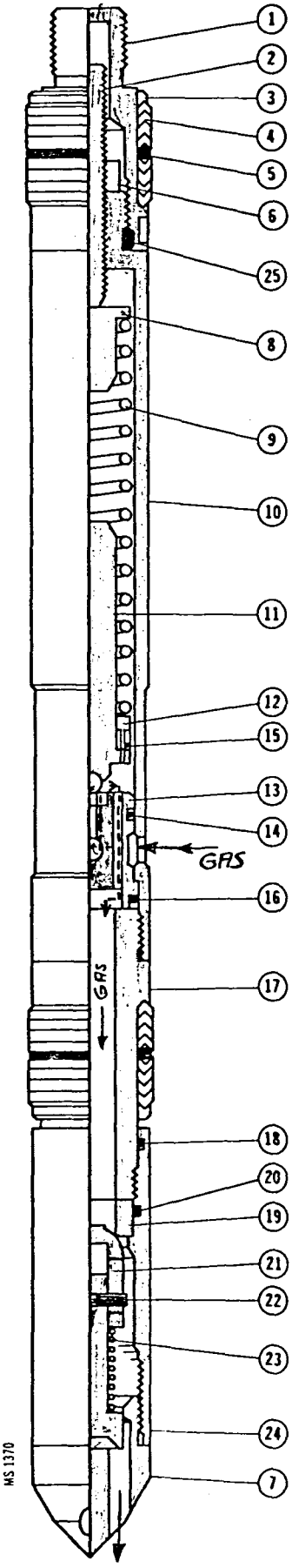
"FLOW CONTROLER"

TYPE RCV CHEMICAL INJECTION VALVES

ASSEMBLY NUMBER	221RCV1000-*	221RCV1001-*
Size/Inches	1	1
Port Size/Inches	0.187 (3/16)	0.3125 (5/16)

DETAIL	PART NAME	QTY	PART NO.	PART NO.
1	Upper Packing Sub	1	221S1300	221S1300
2	Set Screw	1	412SS555	412SS555
3	Female Adapter	2	210F4	210F4
4	Vee-Packing	16	91V352	91V352
5	O-Ring	2	91Q1210-H	91Q1210-H
6	Lock Nut	1	221S1301	221S1301
7	Nose	1	221S1208	221S1208
8	Retainer	1	221S1302	221S1302
9	Spring*	1	See Table*	See Table*
10	Spring Body	1	221S1303	221S1303
11	Stem	1	221S1304	221S1305
12	Spacer	See Table	None	221S1307
13	Seat	1	221S1311	221S1312
14	O-Ring	1	91Q1016-S	91Q1016-S
15	Back-Up Ring	1	91T1114	91T1114
16	O-Ring	1	91Q1114-S	91Q1114-S
17	Packing Mandrel	1	221S1036	221S1036
18	O-Ring	1	91Q1019-S	91Q1019-S
19	Seat	1	221S1117	221S1117
20	O-Ring	1	91Q1018-S	91Q1018-S
21	Valve	1	221S1213	221S1213
22	Pin	1	221S1187	221S1187
23	Spring	1	90CN266	90CN266
24	Valve Housing	1	221S1091	221S1091
25	O-Ring	1	91QV1113-S	91QV1113-S

*Indicate spring setting when ordering by adding letters as shown in following tables.



SPRING SELECTION CHARTS

VALVE 221RCV1000

221RCV1000-	DIFFERENTIAL SPRING SETTINGS/ INCHES	SPRING
221RCV1000-A	500	90CN2035
221RCV1000-B	1000	90CN2035
221RCV1000-C	1500	90CN2035
221RCV1000-D	2000	90CN2036
221RCV1000-E	2000	90CN2036
221RCV1000-F	3000	90CN2036
221RCV1000-G	3500	90CN2036
221RCV1000-H	4000	90CN2037
221RCV1000-J	4500	90CN2037
221RCV1000-K	5000	90CN2037
221RCV1000-L	5500	90CN2037
221RCV1000-M	6000	90CN2037

VALVE 221RCV1001

221RCV1001-	DIFFERENTIAL SPRING SETTING/ INCHES	SPRING
221RCV1001-A	500	90CN2038
221RCV1001-B	1000	90CN2038
221RCV1001-C**	1500	90CN2038
221RCV1001-D	2000	90CN2035
221RCV1001-E	2500	90CN2035
221RCV1001-F	3000	90CN2035
221RCV1001-G	3500	90CN2035
221RCV1001-H	4000	90CN2036
221RCV1001-J	4500	90CN2036
221RCV1001-K	5000	90CN2036
221RCV1001-L	5500	90CN2036
221RCV1001-M	6000	90CN2036

**Valve requires one spacer.

GAS LIFT VALVE LATCHES AND DUMMIES

ype M Latches — used in all Type RW Mandrels. **Type T2 .atches** — used in Type RL Mandrels. These are collet-type atches designed so that a minimum force is required to pass he collet into the lock recess. This feature is very important vhere deviated wells prevent forceful downward jarring. Juring installation, the collet moves up and deflects as it asses the lock recess. Upward movement is designed to hear the running tool, causing the collet to move into posi- ion and be securely locked. When retrieving, a pin is heared, allowing the latch body to move upward and the collet to defect, passing out of the lock recess.

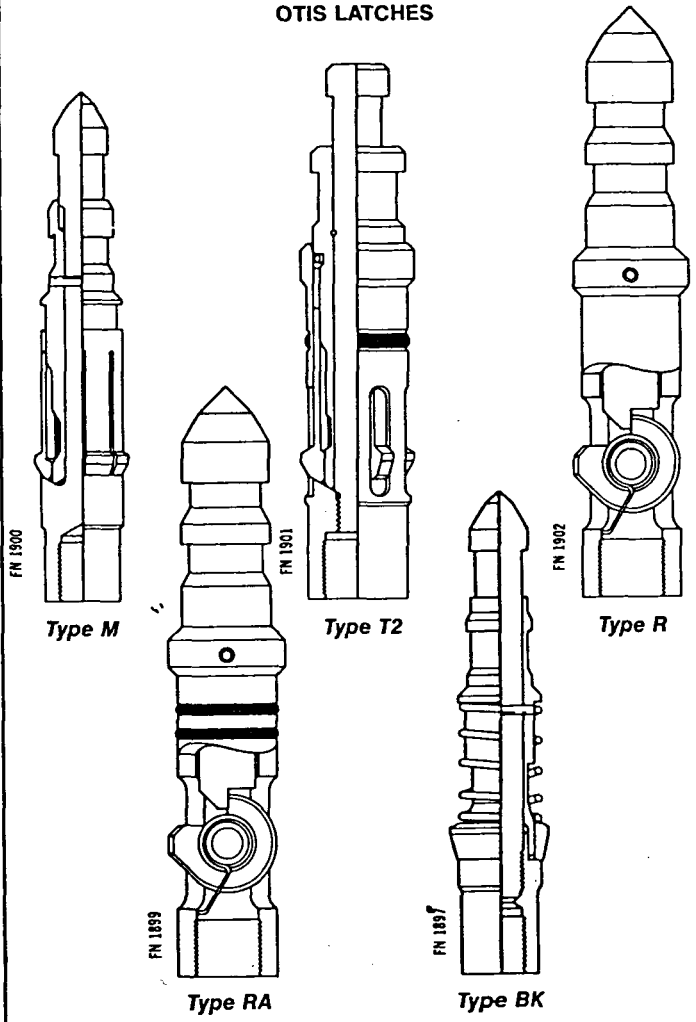
Type BK Latch — used in all 1-inch Type RW Side-Pocket Mandrels. This is a spring-loaded, ring-style latch. The locking mechanism used is a spring-loaded ring that is designed to lock in the pocket-locking recess of the mandrel. Latch can be installed with a minimum of force. When retrieving, a pin is sheared, allowing the ring to move upward and permitting the valve to be pulled from the pocket.

Types R and RA Latches — used in all sizes of RL mandrels, except Type RLF that uses Type R Latches only. The locking mechanism for these latches is a spring-loaded rotating cam that is designed to lock in the pocket-locking recess of the mandrel. They may be installed with a minimum of force. When retrieving, a pin is sheared, and the latch-release pin lifted to allow the latch cam to rotate freely out of the way. Both latches are identical in function: Type RA contains two exterior O-ring seals and a shorter cam nose than the Type R. In the Type RLC, RLE and RLS Ported Mandrels, the Type T2 Latch is often used due to its inherently stronger 360° latch retention.

OTIS GAS LIFT VALVE DUMMIES

Dummy valves are installed in side-pocket, gas lift mandrels by wireline to block the mandrel's injection gas ports. Dummies can be run prior to or after completion for testing tubing, packers and other equipment. In new installations, dummies can be retained in the mandrel until gas lift valves are required to maintain production. Dummies are pulled and gas lift valves installed by wireline. Also during the life of the well, expensive gas lift valves, installed above the fluid level, can be replaced with dummies, blocking off injection gas. Dummies are available in special materials, so indicate service when specifying.

OTIS LATCHES



GUIDE TO TYPE M, BK, T2, RA and R OTIS LATCHES

Otis Assembly Number	Type	Material	Pulling Neck Diameter/ Inches	Running Neck Diameter/ Inches	Maximum O.D./ Inches	Pulling Tool	Running Tool
96M02	M	Standard	.875	.750	1.328	40SM4	96M038
210B05	BK	Standard	.875	.750	1.358	40SM4	96M038
210B03	BK	Monel	.875	.750	1.358	40SM4	96M038
96C05	BK	Standard	.875	.750	1.358	40SM4	96M038
96M05	T2	Standard	1.375	1.000	1.750	40SM1	96M037
210R03	RA	Standard	1.375	1.359	1.750	40SM1	96M020
210R01	RA	Monel	1.375	1.359	1.750	40SM1	96M020
210R04	R	Standard	1.375	1.359	1.750	40SM1	96M020
210R02	R	Monel	1.375	1.359	1.750	40SM1	96M020

NOTE: Call Otis for sizes and types not listed, or write Dallas direct.

CODE DESCRIPTION FOR OTIS WIRELINE SIDE-POCKET MANDRELS

Example: 211RW — 20401-1

Class number for mandrels

Wireline mandrel

Size valve to be set in pocket:
- W — 1-in. O.D. gas lift valve
- L — 1½-in. O.D. gas lift valve

This space used to designate following:
- C — Ported mandrel
- F — Waterflood mandrel
- S — Special external port outlet
- X — Special clearance

NOTE: When mandrels cannot fit this code due to variations or features requested, a partially coded number will be assigned with a complete description of side-pocket mandrel appearing on drawing or specification sheet.

1. — Without positioning sleeve and deflector
2. — With positioning sleeve only
3. — With deflector only
4. — With both positioning sleeve and deflector
5. — Two-pocket mandrel with both positioning sleeve and deflector
6. — Side-string mandrel with both positioning sleeve and deflector

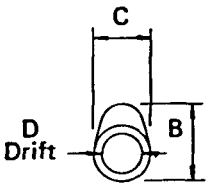
Type threads (See Thread Code)

Material and coating (See Material Code)

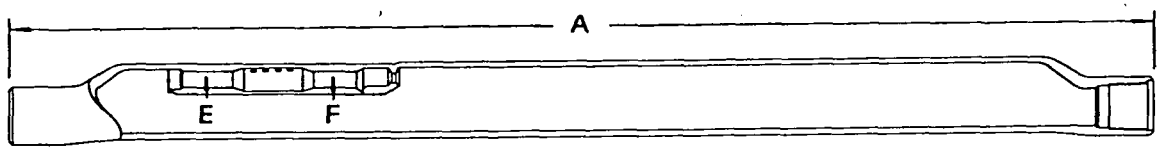
Nominal size
- 20 — 2 inch
- 25 — 2½ inch
- 30 — 3 inch

And other sizes see Drift Code.

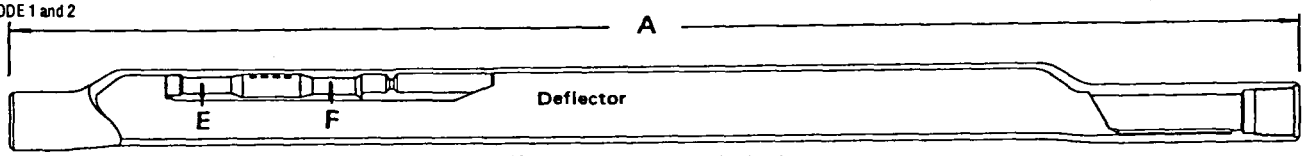
TYPE RW OTIS OVAL-O-D MANDRELS — Dimensions and Code Drawings



SIZE: 2-3/8-in., 2-7/8-in., 3-1/2-in. CODE 1 and 2

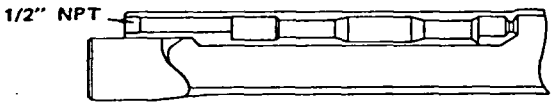


CODE 1—without deflector or positioning sleeve.

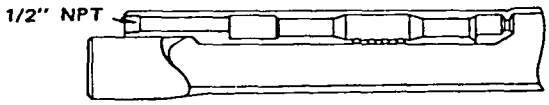


CODE 4—with deflector and positioning sleeve.

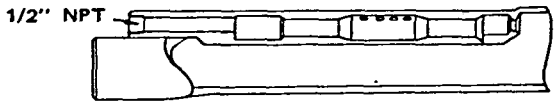
PORTING VARIATIONS



CODE F—waterflood mandrel, no ports.



CODE C—ported mandrel.



CODE S—chamber lift mandrel, special external ports.

DIMENSIONS — Type RW

Tubing O.D./Inches	Mandrel*	Dimensions—Inches A (EU)	B	C	D	E	F	Weight/ Pounds
2-3/8 NU**		64	3.875	2.90	1.901	1.027	1.027	60
2-3/8		63	4.25	2.90	1.901	1.027	1.027	64
2-3/8	(With Positioning Sleeve)	73	4.25	2.90	1.901	1.027	1.027	74
2-7/8		63	4.75	3.56	2.375	1.027	1.027	90
2-7/8	(With Positioning Sleeve)	73	4.75	3.56	2.375	1.027	1.027	106
3-1/2		64	5.62	4.37	2.875	1.027	1.027	117
3-1/2	(With Positioning Sleeve)	73	5.62	4.37	2.875	1.027	1.027	142
4		75	5.85	5.00	3.351	1.027	1.027	185
4-1/2		75	6.05	5.00	3.375	1.027	1.027	185
4-1/2		77	6.62	5.35	3.833	1.027	1.027	185

*When specifying, include port data, drift I.D., material, thread type and accessory items. **Positioning sleeve not available. NOTE: The addition of deflector does not alter dimensions. For availability of additional sizes not listed, contact your local Otis Specialist or write Dallas direct.

OTIS TRU-GUIDE SIDE-POCKET TUBING MANDREL AND KICKOVER TOOL

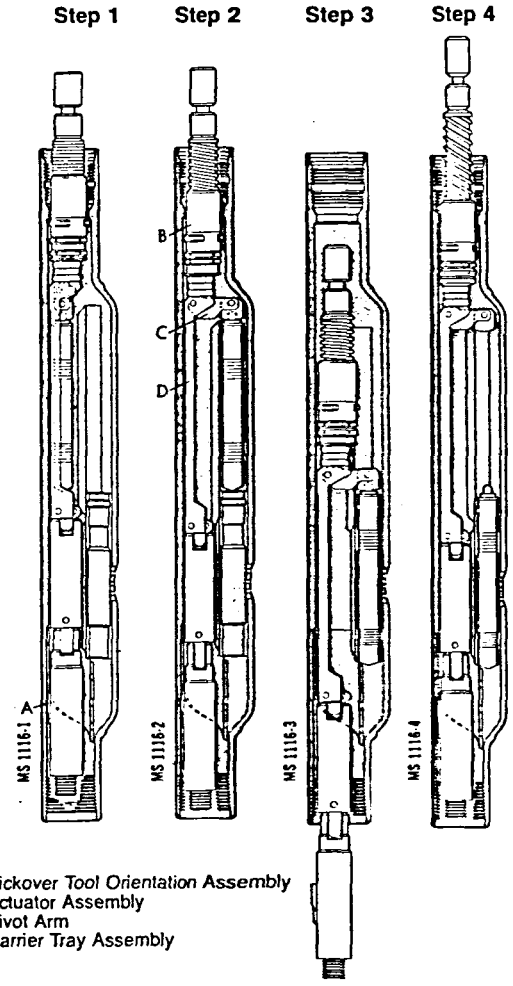
The Otis Tru-Guide Side-Pocket Tubing Mandrel is designed for installing gas lift valves in tubing and still permits a relative full opening through the mandrel. The Otis Tru-Guide Kickover Tool has many exclusive features for installing gas lift valves and other subsurface controls in deviated wells by pumpdown as well as wireline techniques. Quite often, several trips can be eliminated by running kickover tools in tandem to pull and install gas lift valves.

BENEFITS OF DESIGN PRINCIPLE

- Full-opening, side-pocket tubing mandrel.
- Unique, flexible kickover tool for going around five-foot radius loops in pumpdown installations.
- Gas lift valves may be serviced by either pumpdown or wireline methods.
- Exclusive full-length transfer guide rails in mandrel allow gas lift valves to be installed and removed, utilizing straight forces to help keep the kickover tool from bending the valve.
- Transfer guide rails are designed to prevent other service tools from lodging on top of pocket.
- Patented muleshoe alignment assembly is designed for engagement and orientation of kickover tool.
- Continuous stop shoulder is designed to prevent accidental travel past mandrel.
- Gas lift valves can be run in tandem with Tru-Guide kickover tools.

APPLICATION

Side-pocket mandrels (with tensile strength greater than the tubing) can be run in the initial tubing string of a flowing well completion, so well can be converted to gas lift at a future date without a major workover. Using pumpdown or standard wireline methods, kickover tools can be run to insert or pull gas lift valves. Unique transfer guide rails in mandrel and the pivot arm of the kickover tool are designed to insert or pull gas lift valves straight in or out of the pocket to protect valves from bending.



A. Kickover Tool Orientation Assembly
B. Actuator Assembly
C. Pivot Arm
D. Carrier Tray Assembly

OPERATING DESIGN PRINCIPLE

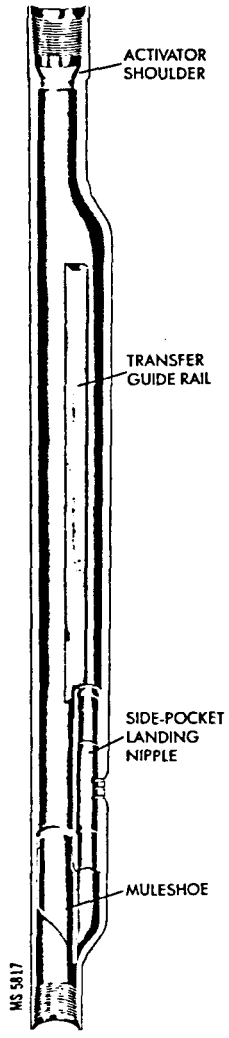
These drawings illustrate how simple it is to install a gas lift valve with Otis Tru-Guide equipment. Similar steps are used to retrieve the valve from the side-pocket landing nipple.

Step 1—After the kickover tool has moved through the Tru-Guide Mandrel, it is reversed and moved back up through the mandrel. The spring-loaded alignment key on the kickover tool orientation assembly (A) is designed to align the kickover tool and hold it in the proper position to be activated.

Step 2—Upward movement shears the first shear ring on the actuator assembly (B), permitting the pivot arm (C) to move out and lock at right angles to the carrier tray assembly (D) for positioning on the center line of the side-pocket landing nipple for setting or pulling the gas lift valve.

Step 3—Downward movement of the gas lift valve is controlled by the transfer guide rails for a straight line into or out of the landing nipple. A no-go on the locking mandrel locates the gas lift valve in the nipple. Continual downward movement releases the locking keys, locking the valve in the nipple. When pulling a gas lift valve, this downward action engages the pulling tool on the fishing neck of the valve.

Step 4—After setting the gas lift valve (installing) or engaging the valve with a pulling tool (retrieving), upward movement shears a second shear ring in the actuator assembly (B), unlatching the pivot arm and allowing the kickover tool to move up and out of the mandrel.



Otis Tru-Guide Side-Pocket Mandrel

SEQUENCE OF EVENTS
WELL 31/2-2. WEST VENTURE
P.T. no. 2

DATE	TIME	OPERATION
CUTTING OF 5½" GP-LINER AND RETRIEVING OF SC-1 GP PACKER		
15/8	00:00	POOH 3½" tubing and prod. assy.
	05:30	Rig up Schlumberger
	06:00	Run Schlumberger CCL/GR-loggers, T.D.1588.8 m. Located top of Production packer at 1550 m at 30 cm low tide
	08:30	Rig down Schlumberger
	09:00	Make up servco cutter and assy. RIH.
	12:3½	Cut 5½" liner at 1578.5 m
	13:30	POOH cutter assy. - same hung up at 1564 m. Took 70 000 lbs. Overpull to work free.
	14:30	Continue POOH - lay down cutting tool - all 3 knives broken
	17:30	Make up packer retrieving tool, A set of jars, 3 stands 6½" Drill collars, 5 STD HW and 5" drill pipes. RIH
	20:30	Engage tool into packer. Took 80 000 LBS. overpull to pick up cut-off section.
	21:30	POOH

SEQUENCE OF EVENTS

WELL 31/2-2, WEST VENTURE

P.T. no. 2

DATE	TIME	OPERATION
16/8	01:00	Got all cut-offs - a total of 27.3 m including packer length.
	01:00	Lay down jars, packer and cut-off liner section.
PREPARING OF WELL BEFORE RUNNING GAS LIFT PROD. STRING:		
	03:00	Service of production equipment: Replace swivel on Otis surface X-mas tree and replace connections on lubricator valve.
	05:00	RIH with 2 7/8, 30 m stinger, HW drill pipe and 5" drill pipe to clean out hole from sand.
	07:30	Rig up Dowell and filtercleaners
	08:00	Tag sand at 1583 m - shut hydril and reserve circulate and wash down to 1589 m with Hydril closed. 3 - 4 bbl/min and 400 - 480 pump press. and cleaning brine 25 - 5 - 2 microns approx. 50 litre sand retn.
	17:00	Rig down Dowell, POOH and lay down 2 7/8" stringer.
	19:00	Rig up Schlumberger
	19:30	Load perfo. guns.
	20:30	Perforated interval 1570 - 1575 m with 2 1/8" hyperdome scallop guns, 4 SPF.
	22:30	Rig down Schlumberger
	23:00	Make up 9 5/8" casing scrapper

SEQUENCE OF EVENTS

WELL 31/2-2, WEST VENTURE

P.T. no. 2

DATE	TIME	OPERATION
17/8	00:00	RIH with scrape and 2 7/8" tail pipe below
	02:00	Scrape interval 1540 - 1576 m
	02:30	Rig up chicksand and circ. head
	03:00	Lower string with tail pipe to 1589 m. Reverse out with 400 psi pump pressure. No more sand returns
	04:00	POOH
	06:00	Rig up Schlumberger
	06:30	Schlumberger run gauge ring and junk basket to 1579 m. Than pull out same

RUNNING OF PACKERS AND PRODUCTION STRING:

	07:30	Pick up model "DB" packer and run it with Schlumberger. Set it at 1576 m
	09:30	Rig down Schlumberger
	10:00	Make up tail pupe for SC-1 packer. Pressure test to 3000 psi for 15 min. Rig up Otis wire-line and retrieve S-1 plug
	14:00	Rig down Otis wire-line
	15:30	RIH with SC-1 packer and tail pipe assy.
	17:00	Make up circ. head and chicksand. Circulate slowly with 50 psi. Obsurve entry of seal assy. into "DB" packer. Pressure increase to 200 psi upon entering. Bled off same. Space out tubing to get tubing in the right position in BOP-stack drop ball. Pressure test in stages: 800 psi, 1000 psi, 1300 psi, 1500 psi, 1800 psi.

SEQUENCE OF EVENTS

WELL 31/2-2, WEST VENTURE

P.T. no. 2

DATE	TIME	OPERATION
17/8	17:00	Shear tool. Packer is set at 1520.5 m. loggers and 1518.5 m Drl. depth Pressure test annulus to 500 psi for 15 min. release setting tool 14 x right for retracting of setting tool
	19:00	POOH and lay down setting tool
	20:30	Make up 20', G22 locator seal assy. with mule shoe, 3½" tubing, 3½" "XA-SSD" and 5" VAM tubing.
18/8	00:00	Continue RIH with 5" VAM tubing on 5" drill pipe to SC-1 packer to space out same.
	05:00	Pressure test annulus too 500 psi.
	05:30	POOH with 5" drill pipe
	06:00	Space out 5" VAM tubing. Adding 1 PUP-joint. Pressure up EZ tree for release test and pressure test lines to 3000 psi . RIH with 4½" riser with control lines. Testing every tubing conn. Kooke up X-mas tree and surface lines.
	15:00	Stabe into SC-1 packer. Landed EZ-tree in well head and pressure test casing to 500 psi.

PRESSURE TESTING OF SURFACE EQUIPMENT ON RIG FLOOR.

	18:00	Pressure test wire-line lubricator and wire-line BOP. Difficulties due to leaks.

SEQUENCE OF EVENTS

WELL 31/2-2, WEST VENTURE

P.T. no. 2

DATE	TIME	OPERATION
PRESSURE TESTING OF PRODUCTION STRING		
19/8	00:30	Rig up Otis wire-line with 2.2" drift.
	00:45	RIH with 2" drift to 1590 m
	01:30	Rig up N-type test tool
	01:45	Pressure test wire-line lubricator to 3000 psi
	02:00	RIH with N-type test tool stuch in EX-tree valve
		POOH. Hang up in lubricator valve
	03:00	Recovere tools
		Covere in pipe dope
	03:30	RIH with lib. diam. 2.78".
		Hang up in lubricator valve.
		Diam. of impression: ID obstruction = 2.74".
	04:00	Rig up S-1 plug
	04:30	RIH with S-1 plug
		Loadcell stucy when pull over 250 LBS.
		Set at 1580 m in S-1 nipple
	05:30	Rig up pulling tool for S-1 plug
	05:45	Pressure test tubing
		S-1 plug leaking at 1500 psi
	06:00	RIH with 2" "RS" to retrieve
		S-1 plug stuch at 1580 m
		Jaring with 750 LBS and shear off "RS" tool
	11:00	POOH with "RS" tool
	11:30	Make up 2.313" "B" shifting tool. RIH.
		To close "XO SSD"

SEQUENCE OF EVENTS

WELL 31/2-2, WEST VENTURE

P.T. no. 2.

DATE	TIME	OPERATION
19/8	13:30	Pressure test production string against S-1 plug to 3000 psi
	14:00	RIH with 2" "RS", prong, 10' x stem and hyd.jars. latch on S-1 plug. POOH

PRESSURE TESTING OF EQUIP. FROM X-MAS TREE TO BURNERS:

	17:10	Pressure test against choke manifold, sandtrap - linlet and bypass valves: 5000 psi.
	17:17	Pressure test against sandtrap outlet and bypass valves: 5000 psi
	17:30	Pressure test against Thornton manifold inlet and by-pass valves: 5000 psi
	17:40	Pressure test against Thornton manifold inlet and outlet valves: 5000 psi
	17:50	Pressure test against Thornton manifold body complete: 5000 psi
	18:00	bypass sand trap. Pressure test back to choke manifold valves: 5000 psi
	18:08	Pressure test heater inlet and by-pass valve: 3000 psi
	18:17	Pressure test heater coils against outlet valve: 1400 psi
	18:30	Pressure test separator inlet, oil by-pass and gas bypass valve: 2000 psi
	18:40	Pressure test automatic high pressure pilot in automatic shut down system.
	19:05	Pressure test separator vessel against oil and gas outlet valves: 1300 psi

SEQUENCE OF EVENTS

WELL 31/2-2, WEST VENTURE

P.T. no. 2

DATE	TIME	OPERATION
19/8	19:11	Pressure test separator safety valves Lift at 1500 psi
	19:12	Retest separator vessel to check valve seating: 1300 psi
	19:28	Pressure test oil-lines against burner head valves. Leak at Weco-union
	19:38	Retest oil lines: 1500 psi Waiting to start acidizing. Will start to flow well in day-light and do azidizing just before.

THIRD RE-ACIDIZATION JOB ON THE OIL ZONE:

20/8	00:45	Rig up wireline and RIH with "B" shifting tool. Open 3½" XA-SSD at 1553.46 m. POOH Wireline operator open up SSD at 1553.46 m instead of SSD at 1506.93 m. after order from Shell services supervisor
	02:00	Change "B" shifting tool. RIH and close bottom 3½" XA SSD POOH
	03:45	Rig up "B" shifting tool RIH and open top 3½" XA SSD. POOH
	05:05	Pump 10 BBLS diesel, 21 galls tretolite and 42 galls UGG initial/final pump pressure = 500 psi Fluid rate = 1.5 BBLS/min.
	05:12	Pumpe 20 BBLS 15% HCL 84 galls UGG and 9 galls A-200 initial/final pump pressure = 200 psi Fluid rate = 0.8 BBLS/min

SEQUENCE OF EVENTS

WELL 31/2-2, WEST VENTURE

P.T. no. 2

DATE	TIME	OPERATION
20/8	05:30	Pumpe 10 bbls diesel and 42 galls UGG. Initial/final pump pressure = 400 psi Fluid rate = 1.2 BBLS/min.
	05:38	Pump 37 BBLS diesel Initial/final pump pressure = 650 psi Fluid rate = 4.5 BBLS/min Static THP = 550 psi Close upper 3½" XA-SSD Pressure test annulus to 500 psi for 15 min.
	06:35	Dicplace and bullhead fluid with 62 BBLS diesel After 17 BBLS of diesel, the pressure drop from a steady rate of 1625 psi and 0.5 BBLS/min. to 800 psi over 45 seconds. It came back to 1624 psi with same rate 0.5 BBLS/min. Pumpe a total of 40 BBLS with 0.5 BBLS/min and pump pressure = 1625 psi. The excess of 22 BBLS with 1 BBLS/min and final pump pressure = 1700 psi

FIRST FLOW PERIOD:

	09:35	Start to flow (See "Otis field readings" on next page)

(6)

• WELL NUMBER 31/2-2.
~~WELL NAME~~

Otis Field Readings

DATE 10-8-80
~~OSI No.~~ P.T.2.

ENGR: EC.

FLOWING CONDITIONS								SAMPLES							OIL	GAS	WATER	GOR
TIME	CHOKE SIZE	SEPARATOR SAMPLES	WELLHEAD		SEPARATOR			OIL GRAVITY	GAS GRAVITY	CO_2	H_2S	MERCAPTANS	BS & W	CHLORIDES P.H.	METERED	SEPARATOR FLOW RATE MSCFD	~~METERED~~ TANK ~~BWPD~~ LEVEL	SCF/bl
			PRESS	TEMP	PRESS DIFF	SHRINKAGE	OIL T GAS T											
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
09-34	32		407	OPEN WELL THRU POSITIVE CHOKE TO STOCK ~~TANK~~.													16.5BBLS	
09-35	32		0-50	53	—		—							—				
09-36	32		0-50	53	—		—							—				
09-37	32		39	53	—		—							—				
09-38	32		38	53	—		—							—				
0939	32		36	52	—		—							—				
09-40	32		35	52	—		—							—				
09-41	32		34	51	—		—							—				
0942	32		33	51	—		—							—				
09-43	32		33	51	—		—							—				
0944	32		32	51	—		—							—				
0945	32		32	51	—		—							—			27BBLS	
0946	32		32	51	—		—							—				
09-47	32		32	50	—		—							—				
0948	32.		31	50	—		—							—				

PERFORATED INTERVAL:

WELL NUMBER 31/2-2.
WELL NAME

Otis Field Readings

DATE 20-8-80
DST No. P.T. 2.

ENGR: FC

TIME	CHOKE SIZE	FLOWING CONDITIONS: SEPARATOR SAMPLES	WELLHEAD: PRESS	WELLHEAD: TEMP	SEPARATOR: PRESS DIFF	SEPARATOR: SHRINKAGE FACTOR	SEPARATOR: OIL T / GAS T	SAMPLES: OIL GRAVITY	SAMPLES: GAS GRAVITY	SAMPLES: CO_2	SAMPLES: H_2S	SAMPLES: MERCAPTANS	SAMPLES: BS & W	SAMPLES: CHLORIDES P.H.	OIL: METERED	GAS: SEPARATOR FLOW RATE	WATER: TANK METERED LEVEL	G
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD	MSCFD	BWPD	SCI
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	1
09-49	32		32	50														
09-50	32		31	50														
09-51	32		31	50														
09-52	32		34	50														
09-53	32		36	50														
09-54	32		37	50														
09-55	32		38	50														
09-56	32		38	50														
09-57	32		38	50														
09-58	32		40	50														
0959	32		42	50														
10-00	32		45	50													38 BBLS	
10-01	32		48	50														
10-02	32		50	50														
10-03	32		52	50														

PERFORATED INTERVAL:

WELL NUMBER 31/2-2
WELL NAME

Otis Field Readings

DATE 20-8-80
DST No. P.T. 2.

ENGR: E.C.

FLOWING CONDITIONS								SAMPLES							OIL	GAS	WATER	GOR
TIME	CHOKE SIZE	SEPARATOR SAMPLES	WELLHEAD PRESS	WELLHEAD TEMP	SEPARATOR PRESS / DIFF	SEPARATOR SHRINKAGE FACTOR	SEPARATOR OIL T / GAS T	OIL GRAVITY	GAS GRAVITY	CO_2	H_2S	MERCAPTANS	BS & W	CHLORIDES / P.H.	METERED	SEPARATOR FLOW RATE MSCFD	~~TANK~~ ~~METERED~~ LEVEL BWPD	SCF/
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
10.04	32		53	50														
10.05	32		57	50														
10.10	32	D.W.T.	75	50													56 BBLS	
10.15	32		98	50				36.9									64 BBLS	
10.20	32		140	50													72 BBLS	
10.25	32		202	50		SWITCH FLOW TO SEPARATOR												
10.30	32		295	51				37.0					1.0					
10.35	32		524	51														
10.40	32		615	51		FLOW TO BURNERS												
10.45	32		670	51		FLOW THRU SEPARATOR							37.0					
10.47	0					SHUT IN WELL DUE TO STOP OF WATER PUMPS												
10.48	0		720	50														
10.49	0		760	50														
10.50	0		800	50														
10.51	32		820	50		OPEN WELL TO BURNERS												

PERFORATED INTERVAL:

WELL NUMBER 31/2-2
WELL NAME

Otis Field Readings

DATE 20-8-8[illegible]
~~DOWN~~ P.T. 2

ENGR: E.C

TIME	CHOKE SIZE	FLOWING CONDITIONS: SEPARATOR SAMPLES	WELLHEAD: PRESS	WELLHEAD: TEMP	SEPARATOR: PRESS / DIFF	SEPARATOR: SHRINKAGE	SEPARATOR: OIL T / GAS T	SAMPLES: OIL GRAVITY	SAMPLES: GAS GRAVITY	SAMPLES: CO_2	SAMPLES: H_2S	SAMPLES: MERCAPTANS	SAMPLES: BS & W	SAMPLES: CHLORIDES / P.H.	OIL: METERED	GAS: SEPARATOR FLOW RATE	WATER: METERED	GO
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD	MSCFD	BWPD	SCF
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
10.52	32		800	50														
10.53	32		740	50		FLOW THRU SEPARATOR												
10.54	32		750	50														
10.55	32		730	50														
11.00	32		685	49		1.00		20.3	0.606				35					
11.15	32		665	50	80 / 70	1.00		23.0					21	1.0				
11.30	32		632	50	80 / 70	1.00	66 / 61						14		1561	1577		10
11.45	32		629	50	85 / 65	1.00	62 / 61	24.6					8	1.0	1074	1562		14
12.00	32		704	50	80 / 67	1.00	60 / 61						12	2.0	1277	1545		12
12.15	32		692	50		1.00		23.1					6					
12.30	32		690	50	80 / 65	1.00	55 / 55						6	2.0	1409	1531		10
12.45	32		694	50		1.00		23.4					5	2.0				
13.00	32		694	50	8[illegible] / 67	1.00	52 / 50				0		8		1416	1563		11
13.15	32		695	50		1.00		23.3					6					
13.30	32		679	50	65 / 76	1.00	52 / 45								1242	1536		12

PERFORATED INTERVAL:

REVISED 3/79 Page 1 of 2

WELL NUMBER 31/2-2
WELL NAME

Otis Field Readings

DATE 20-8-8?
~~OGT No.~~ P.T. 2

ENGR: EC

FLOWING CONDITIONS								SAMPLES							OIL	GAS	WATER	GO
TIME	CHOKE SIZE	SEPARATOR SAMPLES	WELLHEAD PRESS	WELLHEAD TEMP	SEPARATOR PRESS / DIFF	SEPARATOR SHRINKAGE FACTOR	SEPARATOR OIL T / GAS T	OIL GRAVITY	GAS GRAVITY	CO_2	H_2S	MERCAPTANS	BS & W	CHLORIDES / P.H.	METERED	SEPARATOR FLOW RATE	METERED	
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD	MSCFD	BWPD	SCF/
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
13.45	32		679	50	[illegible] / 55			23.0					7					
14.00	32		683	50	85 / 55	1.00	50 / 45		0.62							1459		
14.15	32		672	50				26.0					7	2.5		1		
14.30	32		660	50	100 / 55	1.00	50 / 47								1393	1571		112
14.45	32		665	50				26.0					3	3.0				
15.00	32		674	50	95 / 62	1.00	50 / 48								1431	1620		113

PERFORATED INTERVAL:

WELL NUMBER 31/2-2.
WELL NAME

Otis Field Readings

DATE 20-8-80
~~DST No.~~ P.T.2

ENGR:

TIME	CHOKE SIZE	FLOWING CONDITIONS: SEPARATOR SAMPLES	WELLHEAD PRESS	WELLHEAD TEMP	SEPARATOR PRESS / DIFF	SEPARATOR SHRINKAGE FACTOR	SEPARATOR OIL T / GAS T	SAMPLES: OIL GRAVITY	GAS GRAVITY	CO_2	H_2S	MERCAPTANS	BS & W	CHLORIDES P.H.	OIL METERED	GAS SEPARATOR FLOW RATE	WATER METERED	GC
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	PPM /	BOPD	MSCFD	BWPD	SCF
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	1
15:30	32		679	50	135/56	1.0	50/45	23.5	.606		0		7	3.5	1402	1804		12
16:00	32		680	50	135/63	1.0	50/50		.606						1431	1910		13
16:30	32		685	51	135/62	1.0	59/77	25.5	.606	0.3	0		6	10,000 PPM 3.0	1378	1842		13
17:00	32		695	53	165/47	1.0	53/77		.606						1456	1.759		12
17:30	32		685	53	135/55	1.0	57/77	25.7	.606	0.2	0		18	21,000 4.0	1360	1.739		127
18:00	32		685	50	75/52	1.0	61/77		.606						1426	1.710		120
18:30	32		689	53	75/52	1.0	62/73	25.7	.606	0.3	0		3	10,000 3	1410	1.708		121
19:00	32		690	54	75/50	1.0	63/79		.606						1352	1.675		123
19:30	32		670/690	55	75/54	1.0	56/78	25.8	.606	0.4	0		1.5% BS 2	Too Little water	1375	1.741	3.8 BBLS DUMPED	126
20:00	32		701	57	75/50	1.0	54/78		.606						1123	1.675		149
20:30	32		676	57	75/50	1.0	52/78	25.7	.606	0.3	0		3% BS 5	15000 2	1355	1.675		123
21:00	32		695	57	75/74	1.0	59/78		.606						1330	1606		120
21:30	32		702	57	80/54	1.0	74/78	25.5	.606				2% BS 2%	69000 3	1315	1.789		135
22:00	32		695	56	80/57	1.0	122/78		.606						1292	INACCURATE GAS		
22:30	32		700	57	80/58	1.0	128/72	25.5	.606	0.3	0		1.5% BS 2	Too Little water	1259	RATES FOR THESE TIM		

PERFORATED INTERVAL:

WELL NUMBER 31/2-2
WELL NAME

Otis Field Readings

DATE 20-08-80
PROD TEST ~~DST~~ No. 2

ENGR:		FLOWING CONDITIONS						SAMPLES							OIL	GAS	WATER	GO
TIME	CHOKE SIZE	SEPARATOR SAMPLES	WELLHEAD PRESS	WELLHEAD TEMP	SEPARATOR PRESS / DIFF	SEPARATOR SHRINKAGE	SEPARATOR OIL T / GAS T	OIL GRAVITY	GAS GRAVITY	CO_2	H_2S	MERCAPTANS	BS & W	CHLORIDES / P.H.	METERED	SEPARATOR FLOW RATE MSCFD	METERED	SCF/
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD		BW/PD	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
2300	32		701	57	75 / 58		128 / 126								1254	1.726		137
2330	32		701	57	75 / 54		122 / 116	25.5		0.3	0		3	20000 / 3	1234	1.680		136

PERFORATED INTERVAL:

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WELL NUMBER 31/2-2.
WELL NAME

Otis Field Readings

DATE 21-8-80
DST No. P.T. 2.

ENGR: E.C.

TIME	CHOKE SIZE	FLOWING CONDITIONS: SEPARATOR SAMPLES	WELLHEAD: PRESS	WELLHEAD: TEMP	SEPARATOR: PRESS / DIFF	SEPARATOR: SHRINKAGE	SEPARATOR: OIL T / GAS T	SAMPLES: OIL GRAVITY	SAMPLES: GAS GRAVITY	SAMPLES: CO_2	SAMPLES: H_2S	SAMPLES: MERCAPTANS	SAMPLES: BS & W	SAMPLES: CHLORIDES / P.H.	OIL: METERED	GAS: SEPARATOR FLOW RATE	WATER: METERED	GOR
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD	MMSCFD	BWPD	SCF/b
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
24:00	32		701	57	80 / 54	1.00	106 / 117		.606						1297.58	1.725	0	132
00:30	32		701	57	80 / 50	1.00	104 / 112	25.5	.606	0.2	0	—	1.5	Too little H_2O	1196.35	1.667	0	139
01:00	32	ATM. WATER	695	57	80 / 53	1.00	102 / 109		.606					2	1228.70	1.722	2.2 BBL	140
01:30	32		698	57	75 / 52	1.00	102 / 108	24.6	.606	0.2	0	—	4	63000 / 3.5	123768	1.661	0	134
02:00	32		693	57	75 / 50	1.00	102 / 107		.606						1242.51	1.6295	0	131
02:30	32		697	57	75 / 52	1.00	101 / 107	25.2	.606	0.1	0	—	1	61000 / 2.5	1224.00	1.662	0	135
03:00	32		695	57	75 / 52	1.00	102 / 108		.606						1235.75	1.661	0	134
03:30	32		693	52	75 / 52	1.00	102 / 109	25.4	.606	0.1	0	—	5	[illegible]	1231.06	1.659	0	1348
04:00	32	ATM OIL	690	57	75 / 52	1.00	103 / 110		.606						1211.21	1.657	0	136
04:30	32		692	57	75 / 51	1.00	103 / 110	25.5	.606	0.2	0	—	1	[illegible] / 3	1209.00	1.641	0	135
05:00	32		686	57	75 / 51	1.00	103 / 111		.606						1197.53	1.640	0	136
05:30	32		688	57	75 / 51	1.00	104 / 112	24.6	.606	0.2	0	—	3	52000 / 3.5	1206.95	1.639	0	135
06:00	32					1.00			.606									

PERFORATED INTERVAL: 1586.5 – 1588.5

WELL NUMBER 31/2-2
WELL NAME

Otis Field Readings

DATE 21-08-8
~~DST~~ No. P.T. 2

ENGR: E.C.

TIME	CHOKE SIZE	SEPARATOR SAMPLES	WELLHEAD PRESS	WELLHEAD TEMP	SEPARATOR PRESS / DIFF	SHRINKAGE	SEPARATOR OIL T / GAS T	OIL GRAVITY	GAS GRAVITY	CO_2	H_2S	MERCAPTANS	BS & W	CHLORIDES / P.H.	OIL METERED	GAS SEPARATOR FLOW RATE	WATER METERED	GC
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD	MSCFD	BWPD	SCF
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
6.00	32		687	57	75 / 49	1.00	105 / 112								1185.24	1.606	0	135
6.30	32		686	57	80 / 50		106 / 108	25.4		0.3	0		6.0	49000 / 4.0	1212.36	1.673	0	13
7.00	32		685	57	80 / 49		104 / 110	SWITCH TO PORT BURNER @ 7							1189.97	1.653	0	13
7.30	32		683	57	80 / 49		101 / 109	25.5		0.4	0		6.0	50.000 / 4.0	1175.84	1.654	0	14
8.00	32		683	57	80 / 50		99 / 108								1164.51	1.673	0	14
8.30	32		603	56	75 / 50		100 / 108	25.2		0.4			3.0	Too Little / H_2O	1153.17	1.628	0	14
9.00	32	OIL #4	545	57	80 / 29		121 / 107	CHECK ORIFICE PLATE					40	—	1088.20	1.273	0	117
9.30	32		550	57	75 / 27		102 / 107	FLOW THRU ADJ. CHOKE @ 9						52.000 / 4.0	1177.25	1.195	0	10
10.00	32		550	57	70 / 28		122 / 106	BSW @ 9 = 4%					1.0		1173.19	1.184	0	100
10.30	32		550	56	75 / 27		100 / 105	BSW @ 10 = 1%					3.0	58.000 / 4.5	1176.79	1.198	0	101
								BSW @ 10 = 7										

PERFORATED INTERVAL: 1586.5 - 1588.5 M

WELL NUMBER 31/2-2

WELL NAME

Otis Field Readings

DATE 2/-8-8(

~~DST No.~~ P.T. 2

ENGR:		FLOWING CONDITIONS						SAMPLES							OIL	GAS	WATER	GO
TIME	CHOKE SIZE	SEPARATOR SAMPLES	WELLHEAD PRESS	WELLHEAD TEMP	SEPARATOR PRESS / DIFF	SEPARATOR SHRINKAGE FACTOR	SEPARATOR OIL T / GAS T	OIL GRAVITY	GAS GRAVITY	CO_2	H_2S	MERCAPTANS	BS & W	CHLORIDES / P.H.	METERED	SEPARATOR FLOW RATE	METERED	SCF/
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD	MSCFD	BWPD	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
11.00	32		540	56	80 / 27		100 / 104						3%	58,000	1155.53	1232		106
1130	32		540	56	80 / 26		100 / 104	25.4					6%		1129.35	1.209	0	107
1200	32		530	56	80 / 28		99 / 104						5%	59000 / 4	1143.24	1.255		109
1215	32		~~540~~	~~56~~									4%					
1230	32		540	56	80 / 28		96 / 103						3%		1123.31	1.256		1118
1245	32												6%					
1300	32		525	56	75 / 28		97 / 102	25.2		0.3			2%	43000 / 4.5				
1309	42 ADJ		480	56	CHOKE		CHANGE	ADJUSTABLE										
1310	44 ADJ		460	56														
1311	46 ADJ		400	55														
1312	46 ADJ		405	55														
1313	46 ADJ		410	55														
1314	48 ADJ		405	55														
1315	48 ADJ		400	55									9%					
1316	48		380	55	CHOKE		CHANGE	POSITIVE										

PERFORATED INTERVALS:

WELL NUMBER 31/2-2
WELL NAME

Otis Field Readings

DATE 21-8-80
PROD. TEST TOUR No. 2

ENGR:

TIME	CHOKE SIZE	FLOWING CONDITIONS: SEPARATOR SAMPLES	WELLHEAD: PRESS	WELLHEAD: TEMP	SEPARATOR: PRESS / DIFF	SEPARATOR: SHRINKAGE	SEPARATOR: OIL T / GAS T	SAMPLES: OIL GRAVITY	SAMPLES: GAS GRAVITY	SAMPLES: CO_2	SAMPLES: H_2S	SAMPLES: MERCAPTANS	SAMPLES: BS & W	SAMPLES: CHLORIDES / P.H.	OIL: METERED	GAS: SEPARATOR FLOW RATE	WATER: METERED	GOR
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD	MSCFD	BWPD	SCF/
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1317	48		385	55														
1318	"		355	55														
1319	"		360	54														
1320	"		355	54														
1325	"		330	53														
1330	"		310	53									7%					
1335	"		315	52														
1340	"		315	52														
1345	"		320	52									6%					
1350	"		325	52														
1355	"		320	52														
1400	"		315	52				25.8					17%		1309.2	1344		102
1405	"		345	52														
1410			320	52														
1415			310	52									5%					

PERFORATED INTERVAL:

WELL NUMBER 31/2-2
WELL NAME

Otis Field Readings

DATE 21-08-8

PROD TEST ~~DST~~ No. 2

ENGR:		FLOWING CONDITIONS						SAMPLES							OIL	GAS	WATER	G
TIME	CHOKE SIZE	SEPARATOR SAMPLES	WELLHEAD PRESS	WELLHEAD TEMP	SEPARATOR PRESS DIFF	SEPARATOR SHRINKAGE FACTOR	SEPARATOR OIL T GAS T	OIL GRAVITY	GAS GRAVITY	CO_2	H_2S	MERCAPTANS	BS & W	CHLORIDES P.H.	METERED	SEPARATOR FLOW RATE	METERED	SC
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD	MSCFD	BWPD	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
1420	48		305	52														
1425	"		300	52														
1430	"		305	52	70 / 55		98 / 102						4%		1286.01	1.272		98

PERFORATED INTERVAL:

WELL NUMBER 31/2-2
WELL NAME

Otis Field Readings

DATE 21-09-80
PROD. TEST OUT No. 2

ENGR:		FLOWING CONDITIONS						SAMPLES							OIL	GAS	WATER	GOR
TIME	CHOKE SIZE	SEPARATOR SAMPLES	WELLHEAD PRESS	WELLHEAD TEMP	SEPARATOR PRESS / DIFF	SEPARATOR SHRINKAGE FACTOR	SEPARATOR OIL T / GAS T	OIL GRAVITY	GAS GRAVITY	CO_2	H_2S	MERCAPTANS	BS & W	CHLORIDES / P.H.	METERED	SEPARATOR FLOW RATE	METERED	SCF/bbl
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD	MSCFD	BWPD	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1445	48		300	52		1·00			·606								0	
1500	48		330	52	70 / 58	1·00	98 / 104	26·0	·606	0.3			10	43 000 / 4·5	1277·03	1·304	0	1021
1515	48		330	52		1·00			·606				5				1·6885	
1530	48		295	51	85 / 56	1·00	98 / 102		·606				4		1166·40	1·245	0	1067
15·45	"												10					
16·00	"		295	51	60 / 55	1·00	99 / 103	25·8	·606				8	40 000 / 4·5	1199·01	1·193	0	995
1615			290	51									4					
1630			290	51	60 / 55	1·00	99 / 101		·606				10		1214 13	1·196	0	987
1645													6					
1700			330	55	50 / 55	1·00	99 / 103	25·6	·606				26	37 000 / 4·5	1121·97	1·111		990
1715			FLARE WENT OUT. ATTEMPT TO RELIGHT										10					
1730			225	51									7		1097.842	NO GAS RATE AVAILABLE		
1745													3					
1800			ATTEMPT TO LIGHT BURNER					25·8					2					
1807			SHUT IN WELL AT CHOKE MANIFOLD															

PERFORATED INTERVAL:

WELL NUMBER 31/2-2
WELL NAME

Otis Field Readings

DATE 21-08-80
PROD. TEST DAY No. 2

ENGR:

TIME	CHOKE SIZE	FLOWING CONDITIONS: SEPARATOR SAMPLES	WELLHEAD: PRESS	WELLHEAD: TEMP	SEPARATOR: PRESS DIFF	SEPARATOR: SHRINKAGE	SEPARATOR: OIL T GAS T	SAMPLES: OIL GRAVITY	SAMPLES: GAS GRAVITY	SAMPLES: CO_2	SAMPLES: H_2S	SAMPLES: MERCAPTANS	SAMPLES: BS & W	SAMPLES: CHLORIDES P.H.	OIL: METERED	GAS: SEPARATOR FLOW RATE	WATER: METERED	GOR
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD	MSCFD	BWPD	SCF/bbl
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1808	SHUT IN		360															
1809	"		380															
1810	"		419															
1811	"		442															
1812	"		469															
1813	"		497															
1814	"		517															
1815	"		540										9.					
1816	"		565															
1817	"		590															
1818	"		610															
1819			629															
1820			660															
1821			680															
1822			700															

PERFORATED INTERVAL:

WELL NUMBER 31/2-2
WELL NAME

Otis Field Readings

DATE 21-08-80
Prod. TEST ~~OFF~~ No. 2

ENGR:		FLOWING CONDITIONS						SAMPLES							OIL	GAS	WATER	GOR
TIME	CHOKE SIZE	SEPARATOR SAMPLES	WELLHEAD PRESS	WELLHEAD TEMP	SEPARATOR PRESS DIFF	SEPARATOR SHRINKAGE FACTOR	SEPARATOR OIL T GAS T	OIL GRAVITY	GAS GRAVITY	CO_2	H_2S	MERCAPTANS	BS & W	CHLORIDES P.H.	METERED	SEPARATOR FLOW RATE MSCFD	METERED	SCF/bbl
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD		BWPD	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1823	SHUT IN		722															
1824			750															
1825			785					PUMPED 9 BBLS OUT OF ~~GAUGE~~ TANK										
1826			805															
1827			830															
1828			860															
1829			895															
1830			915															
1835			1040															
1840			1135															
1845			1210															
1850			1265															
1855			1280															
1900			1310															

WELL NUMBER 31½-2
WELL NAME

Otis Field Readings

DATE 21-08-80
Prod. Test ~~OBT~~ No. 2

ENGR:		FLOWING CONDITIONS						SAMPLES							OIL	GAS	WATER	GOR
TIME	CHOKE SIZE	SEPARATOR SAMPLES	WELLHEAD PRESS	WELLHEAD TEMP	SEPARATOR PRESS DIFF	SEPARATOR SHRINKAGE	SEPARATOR OIL T GAS T	OIL GRAVITY	GAS GRAVITY	CO_2	H_2S	MERCAPTANS	BS & W	CHLORIDES P.H.	METERED	SEPARATOR FLOW RATE	METERED	SCF/BBL
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD	MSCFD	BWPD	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1910	SHUT IN		1320															
1915			1328															
1920			1330															
1925			1340															
1930			1340															
1945			1346															
2000			1368															
2030			1385															
2100			1390															
2130			HYDRAULIC MASTER VALVE CLOSED															
2140			W/L LUBRICATOR CONNECTED ON WITH KICK OVER TOOL IN.															
2148			WIRE BROKE. TOOL STRING FELL ON TOP OF SWAB VALVE.															
2150			HYDRAULIC WING VALVE CLOSED															
2155			LUBRICATOR DISCONNECTED															
2200			W/L TOOL STRING DROPPED ON DRILL FLOOR DAMAGED TOOL STRING															

WELL NUMBER 31/2-2
WELL NAME

Otis Field Readings

DATE 21-08-80
PROD-TEST No. 2

ENGR:

TIME	CHOKE SIZE	FLOWING CONDITIONS: SEPARATOR SAMPLES	WELLHEAD: PRESS	WELLHEAD: TEMP	SEPARATOR: PRESS / DIFF	SEPARATOR: SHRINKAGE	SEPARATOR: OIL T / GAS T	SAMPLES: OIL GRAVITY	SAMPLES: GAS GRAVITY	SAMPLES: CO_2	SAMPLES: H_2S	SAMPLES: MERCAPTANS	SAMPLES: BS & W	SAMPLES: CHLORIDES / P.H.	OIL: METERED	GAS: SEPARATOR FLOW RATE	WATER: METERED	GOR
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD	MSCFD	BWPD	SCF/bbl
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
2205	SHUT	AT SURF.	LUBRICATOR		STABBED		ON											
22-08 02.30	PRESSURE	TESTED	S.T.		MASTER VALVE		LEAKED DOWN. FIXED. TEST GOOD											

PERFORATED INTERVAL:

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WELL NUMBER 31/2-2
WELL NAME

Otis Field Readings

DATE 22-8-80
~~DST NO.~~ P.T. 2

ENGR: E.C.

TIME	CHOKE SIZE	FLOWING CONDITIONS: SEPARATOR SAMPLES	WELLHEAD: PRESS	WELLHEAD: TEMP	SEPARATOR: PRESS / DIFF	SEPARATOR: SHRINKAGE	SEPARATOR: OIL T / GAS T	SAMPLES: OIL GRAVITY	SAMPLES: GAS GRAVITY	SAMPLES: CO_2	SAMPLES: H_2S	SAMPLES: MERCAPTANS	SAMPLES: BS & W	SAMPLES: CHLORIDES / P.H.	OIL: METERED	GAS: SEPARATOR FLOW RATE	WATER: METERED	GOR
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD	MSCFD	BWPD	SCF/bbl
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
4¹²	0		1607					OPEN FLOW & MASTER VALVES										
4.16	32		1620					OPEN WELL AT CHOKE MANIFOLD										
4.17	0							SHUT IN WELL AT CHOKE MANIFOLD. PILOT WENT OUT										
4.20	0		1622															
4.24	ADJ		1630					OPEN WELL, BURNER LIGHTED										
4.25	ADJ.		1320															
4.26	18		1170															
4.27	18		1190					START INJECT GLYCOL										
4.28	18		1213															
4.29	18		1225															
4.30	18		1260															
4.31	18		1270															
4.32	18		1275															
4.33	18		1285															

PERFORATED INTERVAL:

WELL NUMBER 31/2-2
WELL NAME

Otis Field Readings

DATE 22-8-80
~~DST No.~~ P.T. 2

ENGR: E.C

FLOWING CONDITIONS								SAMPLES							OIL	GAS	WATER	GOR
TIME	CHOKE SIZE	SEPARATOR SAMPLES	WELLHEAD PRESS	WELLHEAD TEMP	SEPARATOR PRESS DIFF	SEPARATOR SHRINKAGE FACTOR	SEPARATOR OIL T GAS T	OIL GRAVITY	GAS GRAVITY	CO_2	H_2S	MERCAPTANS	BS & W	CHLORIDES P.H.	METERED	SEPARATOR FLOW RATE MSCFD	METERED	SCF/bbl
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD		BWPD	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
4-34	18		1285															
4.35	18		1283					<										
4-36	0							SHUT IN WELL										
4.37	0		1290															
4.38	0		1313															
4-39	0		1320															
4-40	0		1344															
4.41	18		1345					OPEN WELL										
4.42	18		1349					START PUMP										
4.43	18		1342					STOP PUMP										
~~4.43~~	~~18~~																	
4-44	0		1349					SHUT IN WELL										
4-45	0		1365															
4-46	0		1380															
4-47	0		1390															

PERFORATED INTERVAL:

WELL NUMBER 31/2-2
WELL NAME

Otis Field Readings

DATE 22-8-80
~~DST No.~~ PT. 2

ENGR: E.C.

FLOWING CONDITIONS								SAMPLES							OIL	GAS	WATER	GOR
TIME	CHOKE SIZE	SEPARATOR SAMPLES	WELLHEAD PRESS	WELLHEAD TEMP	SEPARATOR PRESS / DIFF	SEPARATOR SHRINKAGE	SEPARATOR OIL T / GAS T	OIL GRAVITY	GAS GRAVITY	CO_2	H_2S	MERCAPTANS	BS & W	CHLORIDES P.H.	METERED	SEPARATOR FLOW RATE	METERED	
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD	MSCFD	BWPD	SCF/bbl
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
4.48	0		1402															
4.49	0		1409															
4.50	0		1414															
4.51	0		1429															
4.52	0		1430															
4.53	0		1449															
4.54	0		1455															
4.55	0		1465															
4.56	0		1472															
4.57	0		1477															
4.58	0		1480															
4.59	0		1487															
5.00	0		1489															
5.01	0		1492															
5.02	0		1499															

PERFORATED INTERVAL:

WELL NUMBER 34-2 - 2
WELL NAME

Otis Field Readings

DATE 22-08-80
~~DST No.~~ P.T. 2

ENGR: E.C.

TIME	CHOKE SIZE	FLOWING CONDITIONS: SEPARATOR SAMPLES	WELLHEAD: PRESS	WELLHEAD: TEMP	SEPARATOR: PRESS DIFF	SEPARATOR: SHRINKAGE	SEPARATOR: OIL T / GAS T	SAMPLES: OIL GRAVITY	SAMPLES: GAS GRAVITY	SAMPLES: CO_2	SAMPLES: H_2S	SAMPLES: MERCAPTANS	SAMPLES: BS & W	SAMPLES: CHLORIDES / P.H.	OIL: METERED	GAS: SEPARATOR FLOW RATE	WATER: METERED	GOR
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD	MSCFD	BWPD	SCF/bbl
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
5·03	0		1500															
5·04	0		1505															
5·05	0		1507															
5·06	0		1507															
5·07	0		1512															
5·08	0		1514															
5·09	0		1515															
5·10	0		1517															
5·11	0		1519															
5·12	0		1519															
5·13	0		1520															
5·14	0		1527															
5·15	0		1529															
5·16	0		1529															
5·17	18		1529					OPEN WELL										

PERFORATED INTERVAL:

WELL NUMBER 31/2-2
WELL NAME

Otis Field Readings

DATE 22-08-80
DST No. P.T. 2

ENGR: E.C

TIME	CHOKE SIZE	FLOWING CONDITIONS: SEPARATOR SAMPLES	WELLHEAD: PRESS	WELLHEAD: TEMP	SEPARATOR: PRESS / DIFF	SEPARATOR: SHRINKAGE	SEPARATOR: OIL T / GAS T	SAMPLES: OIL GRAVITY	SAMPLES: GAS GRAVITY	SAMPLES: CO_2	SAMPLES: H_2S	SAMPLES: MERCAPTANS	SAMPLES: BS & W	SAMPLES: CHLORIDES / P.H.	OIL: METERED	GAS: SEPARATOR FLOW RATE	WATER: METERED	GOR
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD	MSCFD	BWPD	SCF/bbl
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
5-18	18		1520															
5-19	0		1510					SHUT IN WELL										
5-20	0		1517															
5-21	0		1519															
5-22	0		1522															
5-23	0		1524															
5-24	~~18~~		1524					OPEN WELL										
5-25	18		1520															
5-26	18		1520															
5-27	18		1513															
5-28	18		1519															
5-29	18		1519															
5-30	18		1517															
5-31	18		1515															
5-32	18		1515															

PERFORATED INTERVAL:

WELL NUMBER 31/2-2
WELL NAME

Otis Field Readings

DATE 22-08-80
~~DST No.~~ PT. 2

ENGR: E.C

TIME	CHOKE SIZE	FLOWING CONDITIONS						SAMPLES							OIL	GAS	WATER	GOR
		SEPARATOR SAMPLES	WELLHEAD		SEPARATOR			OIL GRAVITY	GAS GRAVITY	CO_2	H_2S	MERCAPTANS	BS & W	CHLORIDES P.H.	METERED	SEPARATOR FLOW RATE	METERED	SCF/bbl
HOURS	64th IN.	TYPE	PRESS PSIG	TEMP °F	PRESS DIFF PSIG	SHRINKAGE FACTOR	OIL T GAS T °F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD	MSCFD	BWPD	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
5.33	18		1512															
5-34	18		1512															
5-35	0		1512	50				SHUT IN WELL										
5-36	0		1525															
5-37	0		1529															
5-38	18		1527					OPEN WELL										
5-39	48		1525	50														
5-40	18		1525															
5-41	18		1525	50														
5-42	18		1527															
5-43	18		1530	50														
5-44	18		1531															
5-45	18		1533															
5-46	24		1510					CHANGE CHOKE										
5-47	24		1460	50														

PERFORATED INTERVAL:

WELL NUMBER 31/2-2
WELL NAME

Otis Field Readings

DATE 22-08-80
~~DST No.~~ P.T. 2

ENGR: E. C.

TIME	CHOKE SIZE	FLOWING CONDITIONS. SEPARATOR SAMPLES	WELLHEAD PRESS	WELLHEAD TEMP	SEPARATOR PRESS/DIFF	SEPARATOR SHRINKAGE	SEPARATOR OIL T/GAS T	SAMPLES OIL GRAVITY	SAMPLES GAS GRAVITY	SAMPLES CO_2	SAMPLES H_2S	SAMPLES MERCAPTANS	SAMPLES BS & W	SAMPLES CHLORIDES P.H.	OIL METERED	GAS SEPARATOR FLOW RATE	WATER METERED	GOR
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD	MSCFD	BWPD	SCF/bbl
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
5.48	24		1430															
5.49	24		1380	48														
5.50	0		1385					SHUT IN WELL										
5.51	0		1395															
5.52	0		1412															
5.53	0		1435															
5.54	0		1440															
5.55	0		1450															
5.56	0		1455	48														
5.57	0		1460															
5.58	0		1480															
5.59	0		1485															
6.00	0		1495															
6.01	0		1500															
6.02	0		1510															

PERFORATED INTERVAL:

WELL NUMBER 31/2-2
WELL NAME

Otis Field Readings

DATE 22-08-80
~~DST NO.~~ P.T. 2

ENGR: F.C.

TIME	CHOKE SIZE	FLOWING CONDITIONS: SEPARATOR SAMPLES	WELLHEAD: PRESS	WELLHEAD: TEMP	SEPARATOR: PRESS DIFF	SEPARATOR: SHRINKAGE	SEPARATOR: OIL T / GAS T	SAMPLES: OIL GRAVITY	SAMPLES: GAS GRAVITY	SAMPLES: CO_2	SAMPLES: H_2S	SAMPLES: MERCAPTANS	SAMPLES: BS & W	SAMPLES: CHLORIDES P.H.	OIL: METERED	GAS: SEPARATOR FLOW RATE	WATER: METERED	GOR
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD	MSCFD	BWPD	SCF/bbl
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
6-03	0		1575															
6-04	24							OPEN WELL										
6-05	24		1450															
6-06	24		1425	48														
6-07	24		1400															
6-08	24		1360															
6-09	24		1330	48														
6-10	24		1285	48														
6-11	24		1220	47														
6-12	24		1215	47														
6-13	24		1205															
6-14	24		1190															
6-15	24		1185	48														
6-16	24		1180															
6-17	24		1170															

PERFORATED INTERVAL:

WELL NUMBER 31/2 - 2
WELL NAME

Otis Field Readings

DATE 22-8-80
~~DST No.~~ P.T. 2

ENGR: E.C

TIME	CHOKE SIZE	FLOWING CONDITIONS: SEPARATOR SAMPLES	WELLHEAD PRESS	WELLHEAD TEMP	SEPARATOR PRESS DIFF	SEPARATOR SHRINKAGE	SEPARATOR OIL T GAS T	SAMPLES: OIL GRAVITY	GAS GRAVITY	CO_2	H_2S	MERCAPTANS	BS & W	CHLORIDES P.H.	OIL METERED	GAS SEPARATOR FLOW RATE	WATER METERED	GOR
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD	MSCFD	BWPD	SCF/bbl
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
6-18	24		1150															
6-19	24		1100	48														
6-20	24		1080															
6-21	24		1050															
6-22	28		1000					CHANGE CHOKE										
6-23	28		970															
6-24	28		950															
6-25	28		965															
6-26	28		960															
6-27	28		920															
6-28	28		880															
6-29	28		850															
6-30	32		820					CHANGE CHOKE										
6-31	32		750															
6-32	32		660															

PERFORATED INTERVAL:

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WELL NUMBER 31/2-2
WELL NAME

Otis Field Readings

DATE 22-8-80
DST No. P.T. 2

ENGR: E.C.

TIME	CHOKE SIZE	FLOWING CONDITIONS: SEPARATOR SAMPLES	WELLHEAD: PRESS	WELLHEAD: TEMP	SEPARATOR: PRESS DIFF	SEPARATOR: SHRINKAGE	SEPARATOR: OIL T / GAS T	SAMPLES: OIL GRAVITY	SAMPLES: GAS GRAVITY	SAMPLES: CO_2	SAMPLES: H_2S	SAMPLES: MERCAPTANS	SAMPLES: BS & W	SAMPLES: CHLORIDES P.H.	OIL: METERED	GAS: SEPARATOR FLOW RATE	WATER: METERED	GOR
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD	MSCFD	BWPD	SCF/bbl
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
6-33	38		640					CHANGE CHOKE										
6-34	38		560															
6-35	38		590															
6-36	38		600															
6-37	38		575															
6-38	38		550															
6-39	38		460															
6-40	38		450															
6-41	38		440	48														
6-42	38		420															
6-43	44		400					CHANGE CHOKE										
6-44	44		370															
6-45	44		360															
6-46	44		330															
6-47	44		260															

PERFORATED INTERVAL:

WELL NUMBER 31/2-2
WELL NAME

Otis Field Readings

DATE 22-8-80
~~DST No.~~ P.T. 2.

ENGR: E.C.

TIME	CHOKE SIZE	FLOWING CONDITIONS: SEPARATOR SAMPLES	WELLHEAD: PRESS	WELLHEAD: TEMP	SEPARATOR: PRESS DIFF	SEPARATOR: SHRINKAGE	SEPARATOR: OIL T / GAS T	SAMPLES: OIL GRAVITY	SAMPLES: GAS GRAVITY	SAMPLES: CO_2	SAMPLES: H_2S	SAMPLES: MERCAPTANS	SAMPLES: BS & W	SAMPLES: CHLORIDES / P.H.	OIL: METERED	GAS: SEPARATOR FLOW RATE	WATER: METERED	GOR
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD	MSCFD	BWPD	SCF/bbl
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
6·48	44		240	48														
6·49	44		320															
6·50	48		320					CHANGED CHOKE										
6·51	48		320															
6·52	48							CHANGED TO POSITIVE CHOKE.										
6·53	48		310															
6·54	48		270															
6·55	48		320															
6·56	48		310															
6·57	48		260															
6·58	48		320															
6·59	48		300															
7·00	48		250					25.6		0.6			10.0	50,000 / 4.0				
7·05	48		300	49														
7·10	48		260															

PERFORATED INTERVAL:

V.J.

WELL NUMBER 31/2 - 2
WELL NAME

Oils Field Readings

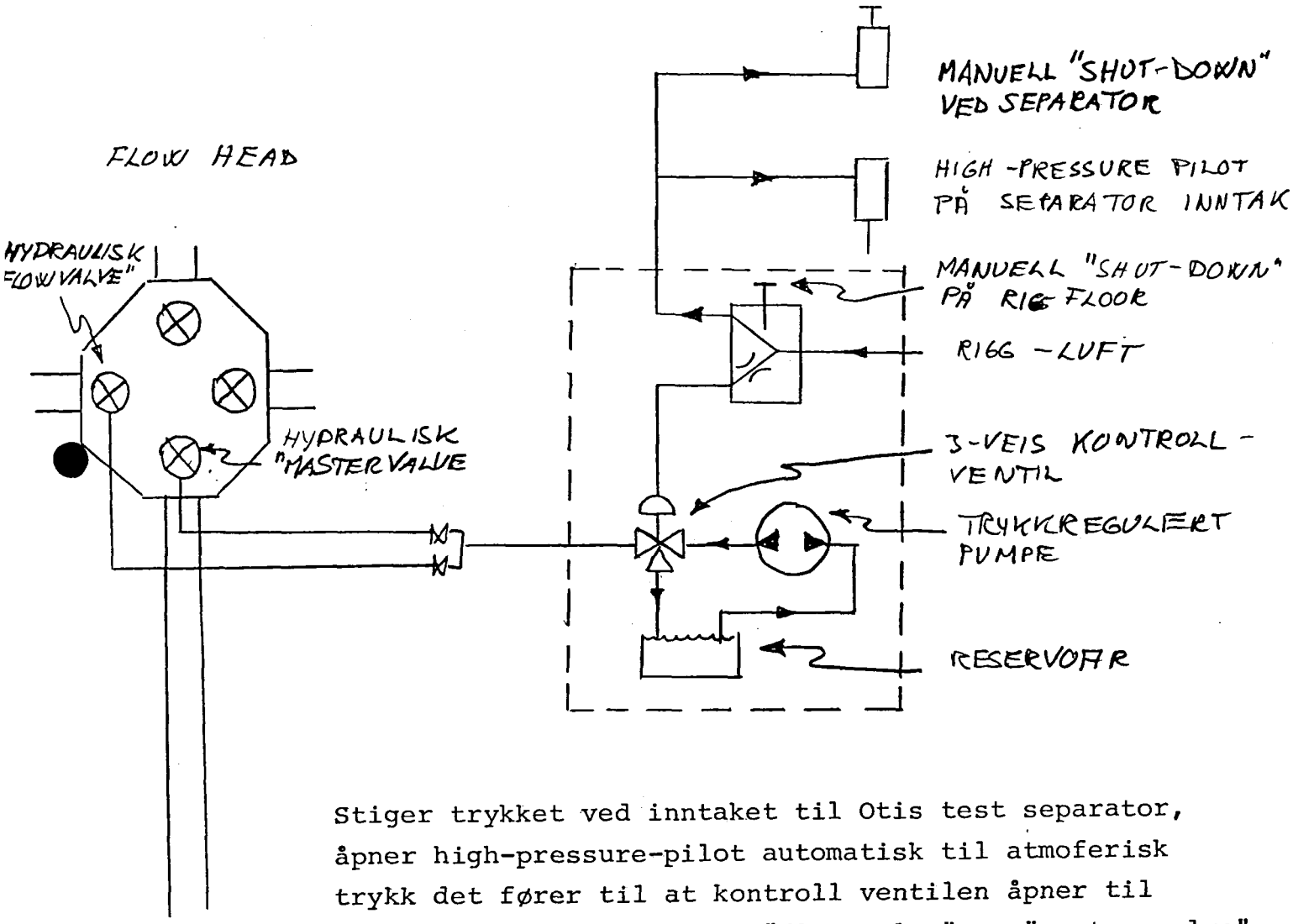
DATE 22-08-8
~~DST No.~~ P.T. 2

ENGR: E.C.

TIME	CHOKE SIZE	FLOWING CONDITIONS: SEPARATOR SAMPLES	WELLHEAD: PRESS	WELLHEAD: TEMP	SEPARATOR: PRESS DIFF	SEPARATOR: SHRINKAGE FACTOR	SEPARATOR: OIL T GAS T	SAMPLES: OIL GRAVITY	SAMPLES: GAS GRAVITY	SAMPLES: CO_2	SAMPLES: H_2S	SAMPLES: MERCAPTANS	SAMPLES: BS & W	SAMPLES: CHLORIDES P.H.	OIL: METERED	GAS: SEPARATOR FLOW RATE	WATER: METERED	GO
HOURS	64th IN.	TYPE	PSIG	°F	PSIG	FACTOR	°F	°API	S.G.	%	PPM	PPM	%	mg/l	BOPD	MMSCFD	BWPD	SCF
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
7.15	48		155					SOME WAX PRESENT IN ALL SAMPLES										
7.20	48		230	49														
7.25	48		210															
7.30	48		215		50 / 60		90 / 104		0.627				10.0		999.80	1.141	0	114
7.45	48		294	49														
8.00	48		305	50	40 / 59		92 / 100	25.8		0.4			2.0	LITTLE H2S / 4.5	1210.35	1.045	0	186
8.15	48		190	50	28 / 40		88 / 102								675.93	0.995	0	147
8.30	48		240	50	25 / 32		90 / 102						7.0		810.08	0.857	0	105
8.45	48		265	49	25 / 45		92 / 103								1258.19	1.018	0	80
9.00	48		225	49	30 / 55		90 / 103	25.6					7.0	40.000 / 4.5	1033.00	1.195	0	115
9.15	48		230	49											STOP INJECTING GLYCO			
9.30	48		275	50	35 / 45		92 / 102				HIGH WAX		6.0		953.97	1.138	0	119
9.45	48		255	50														
10.00	48		250	50	30 / 45		92 / 103			0.5	HIGH WAX		7.0		959.66	1.079	0	112
10.15	48		265	50														

PERFORATED INTERVAL:

OTIS "SAFETY SHUT DOWN" SYSTEM PÅ WEST VENTURE



Stiger trykket ved inntaket til Otis test separator, åpner high-pressure-pilot automatisk til atmoferisk trykk det fører til at kontroll ventilen åpner til reservoaret fra flow head "flow-valve" og "master valve" vil da stenge. (Disse ventilene må ha trykk for å åpnes).

På "rig-floor" og ved separator kan en stenge manuelt.

SIKKERHETSYSTEM PÅ OTIS SEPARATOR:

Det er etter ønske fra Shell instalert to sikkerhets-ventiler av typen "Farris" på separatoren. Begge ventilene skal åpne på 1460 psi. Det er ingen "Rupture-disc" på separator fra sikkerhetsventilene er det montert en 3" linje med uttak under platformen.

PROBLEMER MED OTIS S-1 PLUG

Ved nedkjøring av S-1 plug, for test av prod. string, ble det påvist feil ved dybde-indikatoren i "Otis W/L winch".

Pluggen ble så satt i S-1 nippelen. Strengen skulle trykk-testes til 3000 psi. En oppnådde kun et trykk på 1500 psi.

Ved trekking av pluggen måtte en bruke en jar-kraft på 750 LBS. Satte deretter S-1 plugen igjen. Uten å oppnå den forventede trykk økningen. Etter en tid steg trykket og en oppnådde 3000 psi. Før denne trykktesten ble det kjørt "Drift-run". En påviste da en del forurensing. Blant annet en del DOP. Dette kan muligens være årsaken til problemene med S-1 pluggen.

PROBLEMER MED FLOPETROLS SSTT

SSTT fra Flopetrol er utstyrt med injiserings-system for Glykol.

Etter oppstart fikk en problemer med pumping av Glykol.

En antar at grunnen kan være forurensning i linjen plugget utaksventilen i SSTT,

Etter at Glykol - linjen har fått skade ved ned-kjøring.