

FORMATION TEST REPORT



Home Office:

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COMPANY THUNDERBIRD DRILLING, INC. LEASE & WELL NO. SCHROEDER #1 SEC. 18 TWP 10S RGE 31W TEST 1 DATE 1/17/90

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE	:	1/17/90	TICKET	:	15288
CUSTOMER	:	THUNDERBIRD DRILLING INC.	LEASE	:	SCHROEDER
WELL	:	#1	TEST:	:	1
ELEVATION	:	3007 GL	GEOLOGIST	:	CAULK
SECTION	:	18	FORMATION	:	JOHNSON
RANGE	:	31W	TOWNSHIP	:	10S
GAUGE SN#	:	4376	STATE	:	KANSAS
		COUNTY :	RANGE :		CLOCK :
		THOMAS	4000		12

INTERVAL FROM	:	4533	TO	:	4570	TOTAL DEPTH	:	4570
DEPTH OF SELECTIVE ZONE	:							
PACKER DEPTH	:	4528	SIZE	:	6.75			
PACKER DEPTH	:	4533	SIZE	:	6.75			
PACKER DEPTH	:		SIZE	:				
PACKER DEPTH	:		SIZE	:				

DRILLING CON.	:	ABERCROMBIE DRILLING RIG #5			
MUD TYPE	:	CHEMICAL	VISCOSITY	:	49
WEIGHT	:	9.1	WATER LOSS (CC)	:	8.
CHLORIDES (PPM)	:	1000			
JARS-MAKE	:		SERIAL NUMBER	:	
DID WELL FLOW ?	:	NO	REVERSED OUT ?	:	NO

DRILL COLLAR LENGTH	:	0	FT	I.D. inch	:	0.00
WEIGHT PIPE LENGTH	:	479	FT	I.D. inch	:	3.20
DRILL PIPE LENGTH	:	4034	FT	I.D. inch	:	3.80
TEST TOOL LENGTH	:	20	FT	TOOL SIZE	:	5.50
ANCHOR LENGTH	:	37	FT	ANCHOR SIZE	:	5.50
SURFACE CHOKE SIZE	:	.75	IN	BOTTOM CHOKE SIZE	:	.75
MAIN HOLE SIZE	:	7.875	IN	TOOL JOINT SIZE	:	4.5 XH

BLOW COMMENT #1	:	INITIAL FLOW PERIOD-WEAK SURFACE BLOW-DEAD IN 25 MINUTES
BLOW COMMENT #2	:	FINAL FLOW PERIOD-WEAK INTERMITTENT SURFACE BLOW
BLOW COMMENT #3	:	
BLOW COMMENT #4	:	

RECOVERED : 10 FT OF: OIL CUT MUD 50% OIL 50% MUD
RECOVERED : 1 FT OF: OIL
RECOVERED : 0 FT OF: CHLORIDES 1000 PPM

Total Barrels Fluid = 0.11
Total Fluid Prod Rate = 2.63 BFPD
Indicated Oil Rate = 1.43 BOPD
Indicated Wtr Rate = 0.02 BWPD

REMARK 1 :
REMARK 2 : NOT ENOUGH FOR GRAVITY CHECK
REMARK 3 :
REMARK 4 :

SET PACKER(S) : 8:30 AM TIME STARTED OFF BOTTOM : 10:30 AM
WELL TEMPERATURE : 126
INITIAL HYDROSTATIC PRESSURE (A) 2203
INITIAL FLOW PERIOD MIN: 30 (B) 35 PSI TO (C) : 35
INITIAL CLOSED IN PERIOD MIN: 30 (D) 72
FINAL FLOW PERIOD MIN: 30 (E) 39 PSI TO (F) : 39
FINAL CLOSED IN PERIOD MIN: 36 (G) 85
FINAL HYDROSTATIC PRESSURE (H) 2194

WESTERN TESTING CO. INC.
WICHITA-KANSAS

Pressure Transient Report

COMPANY : THUNDERBIRD DRILLING INC.
RIG : THOMAS-KANSAS
FIELD : SCHROEDER
WELL : #1
DATE : 1/17/90
GAUGE NO : 4376

OPERATIONAL COMMENTS

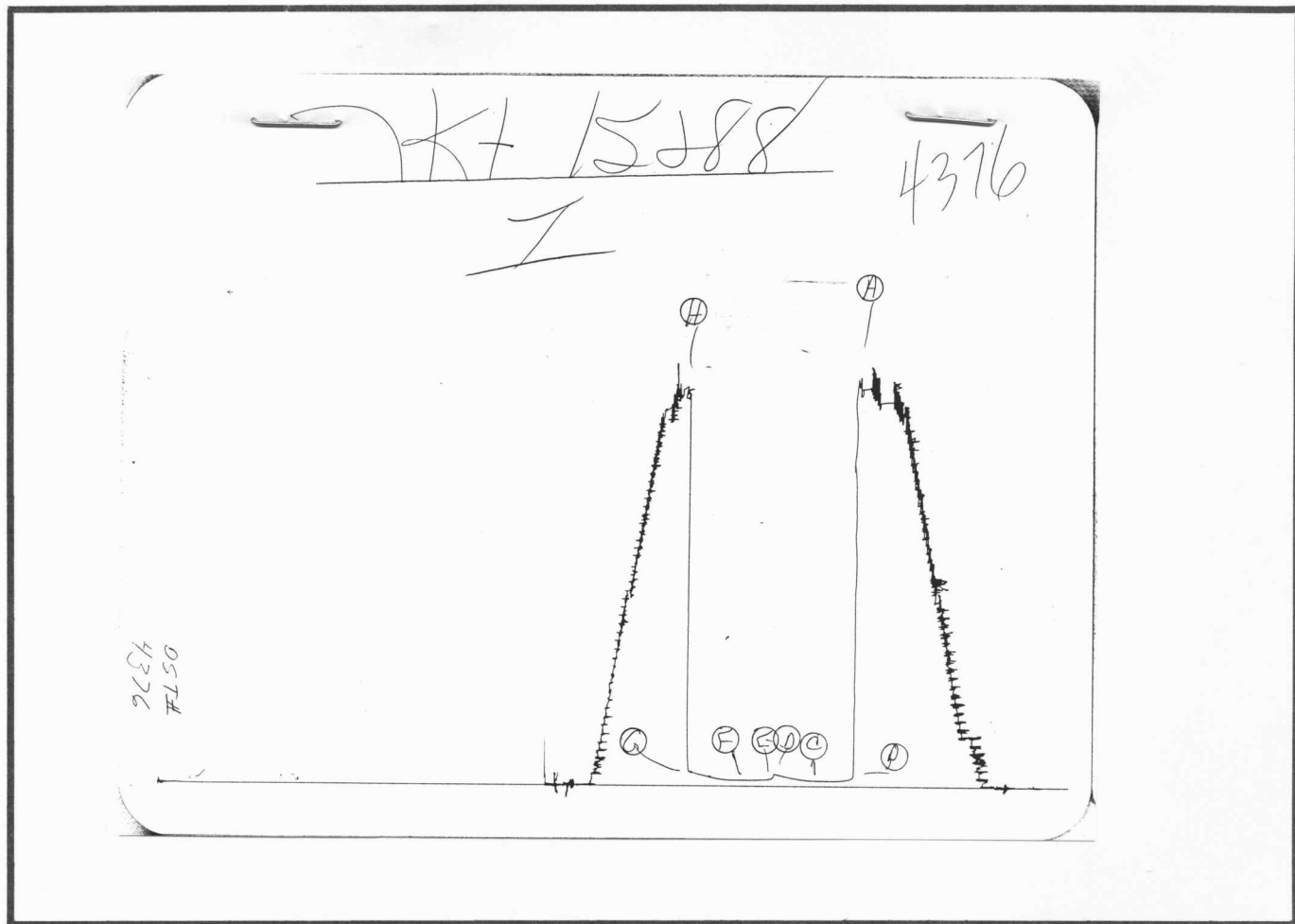
NOT ENOUGH FOR GRAVITY CHECK

COMPANY : THUNDERBIRD DRILLING INC.
WELL : #1
GAUGE # : 4376
DATE : 17/ 1/90

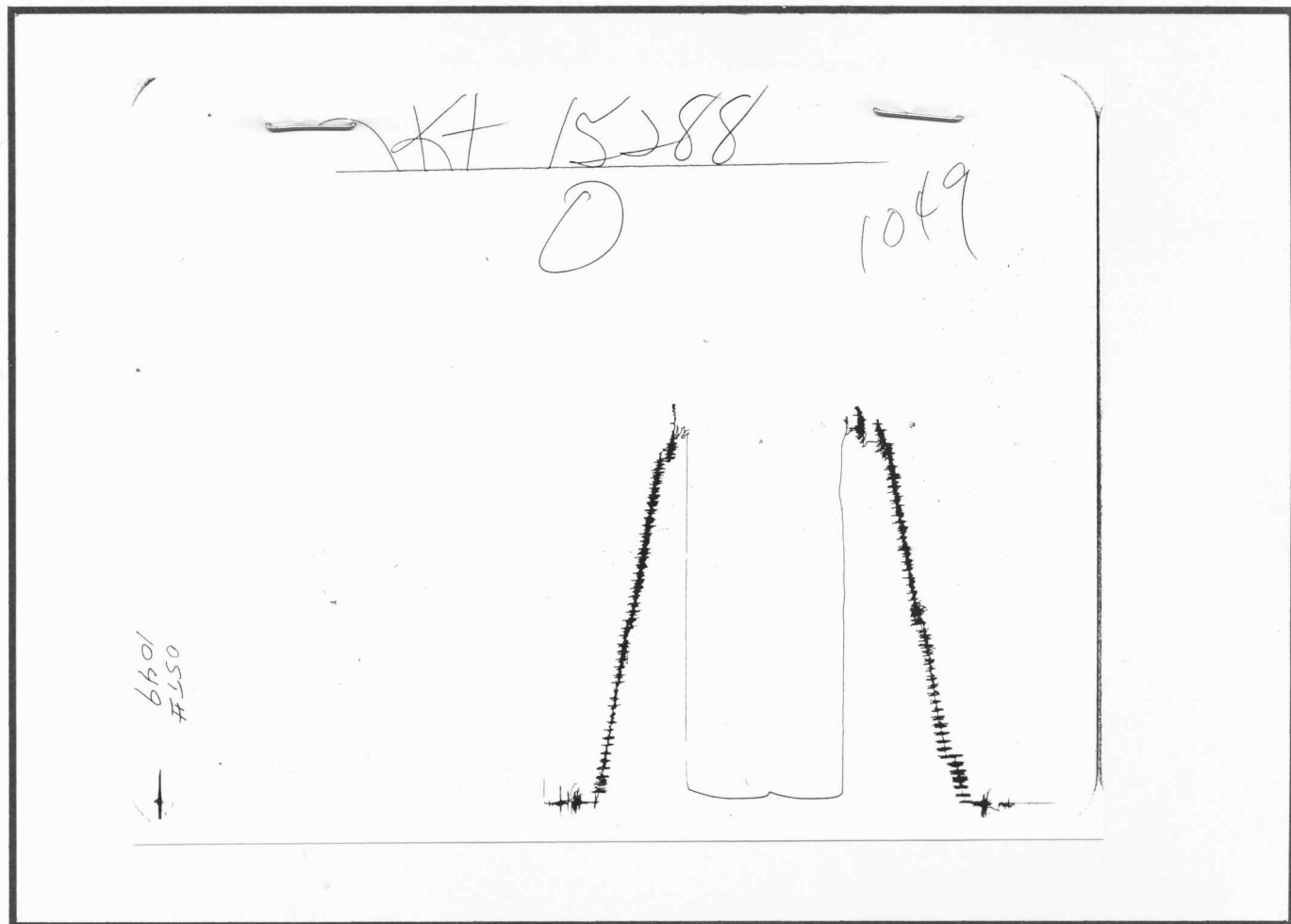
FIELD : SCHROEDER
JOB # : 15288
DEPTH : 4570
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
INITIAL FLOW PERIOD					
2	8:30: 0	0.000	35.000	126.00	0.000
3	8:34:59	0.083	35.000	126.00	0.000
4	8:40: 0	0.167	35.000	126.00	0.000
5	8:45: 0	0.250	35.000	126.00	0.000
6	8:49:59	0.333	35.000	126.00	0.000
7	8:55: 0	0.417	35.000	126.00	0.000
8	9: 0: 0	0.500	35.000	126.00	0.000
INITIAL SHUT-IN PERIOD					
9	9: 3: 0	0.550	35.000	126.00	0.000
10	9: 6: 0	0.600	37.000	126.00	2.000
11	9: 9: 0	0.650	40.000	126.00	3.000
12	9:12: 0	0.700	42.000	126.00	2.000
13	9:15: 0	0.750	46.000	126.00	4.000
14	9:18: 0	0.800	50.000	126.00	4.000
15	9:21: 0	0.850	54.000	126.00	4.000
16	9:24: 0	0.900	58.000	126.00	4.000
17	9:27: 0	0.950	63.000	126.00	5.000
18	9:30: 0	1.000	72.000	126.00	9.000
FINAL FLOW PERIOD					
19	9:31: 0	1.017	39.000	126.00	-33.000
20	9:34:59	1.083	39.000	126.00	0.000
21	9:40: 0	1.167	39.000	126.00	0.000
22	9:45: 0	1.250	39.000	126.00	0.000
23	9:49:59	1.333	39.000	126.00	0.000
24	9:55: 0	1.417	39.000	126.00	0.000
25	10: 0: 0	1.500	39.000	126.00	0.000
FINAL SHUT-IN PERIOD					
26	10: 3: 0	1.550	39.000	126.00	0.000
27	10: 6: 0	1.600	39.000	126.00	0.000
28	10: 9: 0	1.650	40.000	126.00	1.000
29	10:12: 0	1.700	43.000	126.00	3.000
30	10:15: 0	1.750	48.000	126.00	5.000
31	10:18: 0	1.800	51.000	126.00	3.000
32	10:21: 0	1.850	58.000	126.00	7.000
33	10:24: 0	1.900	61.000	126.00	3.000
34	10:27: 0	1.950	67.000	126.00	6.000
35	10:30: 0	2.000	71.000	126.00	4.000
36	10:33: 0	2.050	79.000	126.00	8.000
37	10:36: 0	2.100	85.000	126.00	6.000

WESTERN TESTING CO. INC.



Inside Recorder



Outside Recorder