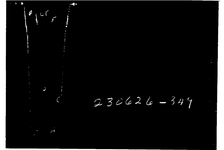
HALLIBURTON SERVICES

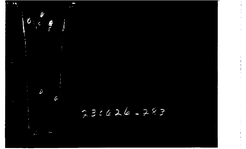
TICKET NO. 23002800
02-26-95
FARMINGTON

FORMATION TESTING SERVICE REPORT



GAUGE NO: 347 DEPTH: 3201.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE MINUTES	PRESSURE	TIME MINUTES	TIME	TYPE
A	INITIAL HYDROSTATIC	2071	2064.8			
B	INITIAL FIRST FLOW	132	153.6	35.0	34.7	F
C	FINAL FIRST FLOW	238	335.9			
C	INITIAL FIRST CLOSED-IN	238	335.9	30.0	26.1	C
D	FINAL FIRST CLOSED-IN	1265	1293.2			
E	INITIAL SECOND FLOW	199	196.6	30.0	34.2	F
F	FINAL SECOND FLOW	310	301.0			
F	INITIAL SECOND CLOSED-IN	310	301.0	60.0	55.8	C
G	FINAL SECOND CLOSED-IN	1544	1554.9			
H	FINAL HYDROSTATIC	1951	1973.5			



GAUGE NO: 293 DEPTH: 3330.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE MINUTES	PRESSURE	TIME MINUTES	TIME	TYPE
A	INITIAL HYDROSTATIC	2069	2002.2			
B	INITIAL FIRST FLOW	215	200.8	35.0	34.7	F
C	FINAL FIRST FLOW	275	344.2			
C	INITIAL FIRST CLOSED-IN	275	344.2	30.0	26.1	C
D	FINAL FIRST CLOSED-IN	1329	1334.1			
E	INITIAL SECOND FLOW	208	212.5	30.0	34.2	F
F	FINAL SECOND FLOW	328	328.1			
F	INITIAL SECOND CLOSED-IN	328	328.1	60.0	55.8	C
G	FINAL SECOND CLOSED-IN	1583	1588.9			
H	FINAL HYDROSTATIC	2035	2034.2			

EQUIPMENT & HOLE DATA

FORMATION TESTED: 3201-3330
NET PAY (ft): 0.0
GROSS TESTED FOOTAGE: 129.0
ALL DEPTHS MEASURED FROM: BELL NIPPLE
CASING PERF.: (ft): NONE
HOLE OR CASING SIZE (in): 7.875
ELEVATION (ft): 5300
TOTAL DEPTH (ft): 3330.0
PACKER DEPTH(S) (ft): 3201, 3241
FINAL SURFACE CHOKE (in): 0.25000
BOTTOM HOLE CHOKE (in): 0.0000
MUD WEIGHT (lb/gal): 12.20
MUD VISCOSITY: 45.0000
ESTIMATED HOLE TEMP. (°F): 122
ACTUAL HOLE TEMP. (°F): 118.4 @ 3330.0 ft

TICKET NUMBER: 23002800
DATE: 02-26-95 TEST NO: 2
TYPE DST: DRILL STEM
HALLIBURTON CORP. FARMINGTON
TESTER: D. MULLO
WITNESS: BILL DUNN
DRILLING CONTRACTOR: FOR CONWAY #4

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
PIT	0.140 @ 68 °F	200 ppm
TOP	0.080 @ 68 °F	300 ppm
MIDDLE	0.080 @ 68 °F	300 ppm
BOTTOM	0.080 @ 68 °F	300 ppm

SAMPLER DATA

PRESS PSI SURFACE: 100.0
cu.ft. OF GAS: 0.295
cc OF OIL:
cc OF WATER: 1875.0
cc OF MUD:
TOTAL LIQUID cc: 1875.0

HYDROCARBON PROPERTIES

OIL GRAVITY (API): @ °F
GAS/OIL RATIO (cu.ft. per bbl):
GAS GRAVITY: 0.6800

CUSHION DATA

TYPE: AMOUNT: WEIGHT:

RECOVERED:
150' OF MUD
60' OF WATER CUT MUD
570' OF GAS WATER CUT MUD

GOOD WORKING ORDER

REMARKS:
REMARKS INDICATE POSSIBLE PARTIAL PLUGGING OF THE ANCHOR PIPE PERFORATIONS DURING THE INITIAL FLOW PERIOD. THE INNER-FLOW PRESSURE RESPONDS DURING THE SECOND FLOW PERIOD. THIS IS BELIEVED TO BE DRILLING TAKING PLACE WITHOUTHED FLUID.

REQUESTED CALCULATION SERVICE COULD NOT BE PERFORMED DUE TO INSUFFICIENT PRESSURE BUILDUP DURING THE CLOSED IN PERIODS.
.....SEE NEXT PAGE FOR THE REMAINDER OF REMARKS.....

TYPE 4 SIZE MEASURING DEVICES: TICKET NO: 23002800

TIME	GAUGE SIZE	SURFACE PRESSURE PSIG	GAS RATE MCF/D	LIQUID RATE BPD	REMARKS
1800					REMARKS CONTINUED
1900	.25	27	11.4		OPENED CHOKE TO .25"
1904		33	12.2		REVERSED IN GAUGE 349
1905		36	14.8		QUESTIONABLE DUE TO STICK-SLIPPING
1906		42	15.5		STEPPING
1911		36	14.8		
1916		31.5	13.1		FORMATION TESTER'S MODELE
1921		31	12.8		FALTERING CLOCK
1926		29.5	11		
1931		29	12.8		PRODUCTION TEST DATA:
8-25-95					
0812					ON LOCATION
0845					PICKED UP TOOL
1009					TOOL ON-STOPPED IN
1136	1/2BH	0			OPENED TOOL
1137		4.1E.			
1138		10.0			
1139		11.0.			
1200		18.0.			
1201		22.0.			
1202		2.5e			
1203		5.			
1204		5.5			
1205		5.25			
1206		4.			
1207		5.25			
1208		15.5			
1209		14			
1210		17			
1211		20			
1214		25			
1221	.25	23			OPENED CHOKE TO .25"
1222					SAW TO SWIVEL
1223		23	12.8		
1230		23	12.4		CLOSED TOOL
1231	BH				OPENED TOOL

TYPE 4 SIZE MEASURING DEVICES: TICKET NO: 23002800

TIME	GAUGE SIZE	SURFACE PRESSURE PSIG	GAS RATE MCF/D	LIQUID RATE BPD	REMARKS
1232					
1233	.25	27	11.4		OPENED CHOKE TO .25"
1234		33	12.2		
1235		36	14.8		
1236		42	15.5		
1241		36	14.8		
					FORMATION TESTER'S MODELE
					FALTERING CLOCK
					PRODUCTION TEST DATA:
					CLOSED TOOL
					OPENED BYPASS-TRIPPED OUT
					JOB COMPLETED

TICKET NO: 23002800 HALLIBURTON GAUGE NO: 349
CLOCK NO: 41218 HOUR: 24 DEPTH: 3201.0

REF	MINUTES	PRESSURE	ΔP	DIF MIN	DIF ΔP
		FIRST FLOW			
B	0.0	153.6			
C	34.7	335.9	182.3		
		FIRST CLOSED-IN			
D	0.0	335.9			
E	1.0	1.1	1.1	2.3	1.08
F	2.0	1.1	1.1	4.6	1.08
G	3.0	1.1	1.1	6.9	1.08
H	4.0	1.1	1.1	9.2	1.08
I	5.0	1.1	1.1	11.5	1.08
J	6.0	1.1	1.1	13.8	1.08
K	7.0	1.1	1.1	16.1	1.08
L	8.0	1.1	1.1	18.4	1.08
M	9.0	1.1	1.1	20.7	1.08
N	10.0	1.1	1.1	23.0	1.08
O	12.0	1.1	1.1	27.6	1.08
P	14.0	1.1	1.1	32.2	1.08
Q	16.0	1.1	1.1	36.8	1.08
R	18.0	1.1	1.1	41.4	1.08
		SECOND FLOW			
E	0.0	196.6			
F	34.2	301.0	104.4		
		SECOND CLOSED-IN			
F	0.0	301.0			
G	1.0	488.8	187.8	1.0	1.000
H	2.0	1.1	1.1	2.0	1.000
I	3.0	1.1	1.1	3.0	1.000
J	4.0	1.1	1.1	4.0	1.000
K	5.0	1.1	1.1	5.0	1.000
L	6.0	1.1	1.1	6.0	1.000
M	7.0	1.1	1.1	7.0	1.000
N	8.0	1.1	1.1	8.0	1.000
O	10.0	1.1	1.1	9.9	1.000
P	12.0	1.1	1.1	11.9	1.000
Q	14.0	1.1	1.1	13.9	1.000
R	16.0	1.1	1.1	15.9	1.000
S	18.0	1.1	1.1	17.9	1.000
T	20.0	1.1	1.1	19.9	1.000
U	22.0	1.1	1.1	21.9	1.000
V	24.0	1.1	1.1	23.9	1.000
W	26.0	1.1	1.1	25.9	1.000
X	28.0	1.1	1.1	27.9	1.000
Y	30.0	1.1	1.1	29.9	1.000
Z	32.0	1.1	1.1	31.9	1.000
AA	34.0	1.1	1.1	33.9	1.000
AB	36.0	1.1	1.1	35.9	1.000
AC	38.0	1.1	1.1	37.9	1.000
AD	40.0	1.1	1.1	39.9	1.000
AE	42.0	1.1	1.1	41.9	1.000
AF	44.0	1.1	1.1	43.9	1.000
AG	46.0	1.1	1.1	45.9	1.000
AH	48.0	1.1	1.1	47.9	1.000
AI	50.0	1.1	1.1	49.9	1.000
AJ	52.0	1.1	1.1	51.9	1.000
AK	54.0	1.1	1.1	53.9	1.000
AL	56.0	1.1	1.1	55.9	1.000
AM	58.0	1.1	1.1	57.9	1.000
AN	60.0	1.1	1.1	59.9	1.000
AO	62.0	1.1	1.1	61.9	1.000
AP	64.0	1.1	1.1	63.9	1.000
AQ	66.0	1.1	1.1	65.9	1.000
AR	68.0	1.1	1.1	67.9	1.000
AS	70.0	1.1	1.1	69.9	1.000
AT	72.0	1.1	1.1	71.9	1.000
AU	74.0	1.1	1.1	73.9	1.000
AV	76.0	1.1	1.1	75.9	1.000
AW	78.0	1.1	1.1	77.9	1.000
AX	80.0	1.1	1.1	79.9	1.000
AY	82.0	1.1	1.1	81.9	1.000
AZ	84.0	1.1	1.1	83.9	1.000
BA	86.0	1.1	1.1	85.9	1.000
BB	88.0	1.1	1.1	87.9	1.000
BC	90.0	1.1	1.1	89.9	1.000
BD	92.0	1.1	1.1	91.9	1.000
BE	94.0	1.1	1.1	93.9	1.000
BF	96.0	1.1	1.1	95.9	1.000
BG	98.0	1.1	1.1	97.9	1.000
BH	100.0	1.1	1.1	99.9	1.000
BI	102.0	1.1	1.1	101.9	1.000
BJ	104.0	1.1	1.1	103.9	1.000
BK	106.0	1.1	1.1	105.9	1.000
BL	108.0	1.1	1.1	107.9	1.000
BM	110.0	1.1	1.1	109.9	1.000
BN	112.0	1.1	1.1	111.9	1.000
BO	114.0	1.1	1.1	113.9	1.000
BP	116.0	1.1	1.1	115.9	1.000
BQ	118.0	1.1	1.1	117.9	1.000
BR	120.0	1.1	1.1	119.9	1.000

LEGEND:
REMARKS:

TICKET NO: 23002800 HALLIBURTON GAUGE NO: 293
CLOCK NO: 11741 HOUR: 24 DEPTH: 3330.0

REF	MINUTES	PRESSURE	ΔP	DIF MIN	DIF ΔP
		FIRST FLOW			
B	0.0	200.8			
C	34.7	344.2	143.5		
		FIRST CLOSED-IN			
C	0.0	344.2			
D	1.0	1.1	1.1	1.0	1.100
E	2.0	1.1	1.1	2.0	1.100
F	3.0	1.1	1.1	3.0	1.100
G	4.0	1.1	1.1	4.0	1.100
H	5.0	1.1	1.1	5.0	1.100
I	6.0	1.1	1.1	6.0	1.100
J	7.0	1.1	1.1	7.0	1.100
K	8.0	1.1	1.1	8.0	1.100
L	9.0	1.1	1.1	9.0	1.100
M	10.0	1.1	1.1	9.9	1.100
N	12.0	1.1	1.1	11.9	1.100
O	14.0	1.1	1.1	13.9	1.100
P	16.0	1.1	1.1	15.9	1.100
Q	18.0	1.1	1.1	17.9	1.100
R	20.0	1.1	1.1	19.9	1.100
S	22.0	1.1	1.1	21.9	1.100
T	24.0	1.1	1.1	23.9	1.100
		SECOND FLOW			
F	0.0	212.5			
G	34.2	328.1	115.6		
		SECOND CLOSED-IN			
F	0.0	328.1			
G	1.0	483.7	155.6	1.0	1.000
H	2.0	1.1	1.1	2.0	1.000
I	3.0	1.1	1.1	3.0	1.000
J	4.0	1.1	1.1	4.0	1.000
K	5.0	1.1	1.1	5.0	1.000
L	6.0	1.1	1.1	6.0	1.000
M	7.0	1.1	1.1	7.0	1.000
N	8.0	1.1	1.1	8.0	1.000
O	10.0	1.1	1.1	9.9	1.000
P	12.0	1.1	1.1	11.9	1.000
Q	14.0	1.1	1.1	13.9	1.000
R	16.0	1.1	1.1	15.9	1.000
S	18.0	1.1	1.1	17.9	1.000
T	20.0	1.1	1.1	19.9	1.000
U	22.0	1.1	1.1	21.9	1.000
V	24.0	1.1	1.1	23.9	1.000
W	26.0	1.1	1.1	25.9	1.000
X	28.0	1.1	1.1	27.9	1.000
Y	30.0	1.1	1.1	29.9	1.000
Z	32.0	1.1	1.1	31.9	1.000
AA	34.0	1.1	1.1	33.9	1.000
AB	36.0	1.1	1.1	35.9	1.000
AC	38.0	1.1	1.1	37.9	1.000
AD	40.0	1.1	1.1	39.9	1.000
AE	42.0	1.1	1.1	41.9	1.000
AF	44.0	1.1	1.1	43.9	1.000
AG	46.0	1.1	1.1	45.9	1.000
AH	48.0	1.1	1.1	47.9	1.000
AI	50.0	1.1	1.1	49.9	1.000
AJ	52.0	1.1	1.1	51.9	1.000
AK	54.0	1.1	1.1	53.9	1.000
AL	56.0	1.1	1.1	55.9	1.000
AM	58.0	1.1	1.1	57.9	1.000
AN	60.0	1.1	1.1	59.9	1.000
AO	62.0	1.1	1.1	61.9	1.000
AP	64.0	1.1	1.1	63.9	1.000
AQ	66.0	1.1	1.1	65.9	1.000
AR	68.0	1.1	1.1	67.9	1.000
AS	70.0	1.1	1.1	69.9	1.000
AT	72.0	1.1	1.1	71.9	1.000
AU	74.0	1.1	1.1	73.9	1.000
AV	76.0	1.1	1.1	75.9	1.000
AW	78.0	1.1	1.1	77.9	1.000
AX	80.0	1.1	1.1	79.9	1.000
AY	82.0	1.1	1.1	81.9	1.000
AZ	84.0	1.1	1.1	83.9	1.000
BA	86.0	1.1	1.1	85.9	1.000
BB	88.0	1.1	1.1	87.9	1.000
BC	90.0	1.1	1.1	89.9	1.000
BD	92.0	1.1	1.1	91.9	1.000
BE	94.0	1.1	1.1	93.9	1.000
BF	96.0	1.1	1.1	95.9	1.000
BG	98.0	1.1	1.1	97.9	1.000
BH	100.0	1.1	1.1	99.9	1.000
BI	102.0	1.1	1.1	101.9	1.000
BJ	104.0	1.1	1.1	103.9	1.000
BK	106.0	1.1	1.1	105.9	1.000
BL	108.0	1.1	1.1	107.9	1.000
BM	110.0	1.1	1.1	109.9	1.000
BN	112.0	1.1	1.1	111.9	1.000
BO	114.0	1.1	1.1	113.9	1.000
BP	116.0	1.1	1.1	115.9	1.000
BQ	118.0	1.1	1.1	117.9	1.000
BR	120.0	1.1	1.1	119.9	1.000

REMARKS:

TICKET NO: 23002800

		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE	4.500	3.826	2945.0	
2	DRILL COLLARS	6.500	2.500	486.0	
3	IMPACT REVERSING SUB	6.500	3.500	1.0	3345.0
4	DRILL COLLARS	6.500	2.500	61.0	
5	CROSSOVER	5.000	2.500	1.0	
6	DUAL CIP SAMPLER	5.030	1.870	7.1	
7	HYDROSPRING TESTER	5.000	1.750	5.0	3416.0
8	AP RUNNING CASE	5.000	2.250	4.0	3420.0
9	JAR	5.000	1.750	5.0	
10	AP SAFETY JOINT	5.000	1.000	3.0	
11	OPEN HOLE PACKER	6.750	1.500	6.0	3426.0
12					
13	OPEN HOLE PACKER	6.750	1.500	6.0	3441.0
14	CROSSOVER	4.500	3.500	1.0	
15	DRILL COLLARS	4.500	2.500	60.0	
16	CROSSOVER	4.500	3.500	1.0	
17	FLOW-JOINT ANCHOR	5.750	2.500	29.0	
18	BLANKED-OFF RUNNING CASE	5.750		4.0	3506.0
	TOTAL DEPTH				3506.0

EQUIPMENT DATA