



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET NO: 11702

P. O. BOX 159 WICHITA, KANSAS 67201
PHONE (316) 262-5861

Elevation 2077 KB Formation Lansing Eff. Pay Ft.

District Draft Date 11-28-86 Customer Order No.

COMPANY NAME Hummon Corporation

ADDRESS 400 One Main Place Wichita KS 67202

LEASE AND WELL NO. Schultz #1 COUNTY Edwards STATE KS Sec. 14 Twp. 26S Rge. 16W

Mail Invoice To Same Co. Name #1 Schultz Address No. Copies Requested Reg

Mail Charts To Same #1 Schultz Address No. Copies Requested Reg

Formation Test No. 1 Interval Tested From 4045 ft. to 4065 ft. Total Depth 4065 ft.

Packer Depth 4040 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 4045 ft. Size 6 1/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4055 ft. Recorder Number 2604 Cap. 4150

Bottom Recorder Depth (Outside) 4058 ft. Recorder Number 3849 Cap. 4200

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor H-30 #7 Drill Collar Length 60 I. D. 2.2 in.

Mud Type Chem Viscosity 42 Weight Pipe Length I. D. in.

Weight 9.2 Water Loss 10.2 cc. Drill Pipe Length 3965 I. D. 3.8 in.

Chlorides 5000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.

Jars: Make - Serial Number - Anchor Length 20 ft. Size 5 1/2 OD in.

Did Well Flow? NO Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/8 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 XH in.

Blow: Strong GTS 30 min - see Gas Flow Report

Recovered 50 ft. of Slightly Oil Cut Gassy Mud 3% Oil

Recovered 60 ft. of Oil Cut Gassy Mud 30% Oil 10% Gas 60% Mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Chlorides P.P.M. Sample Jars used 2 Remarks:

Time On Location 12:00 A.M. Time Pick Up Tool 3:30 P.M. Time Off Location 12:00 P.M.

Time Set Packer(s) 5:15 A.M. Time Started Off Bottom 10:00 P.M. Maximum Temperature 114 degrees

Initial Hydrostatic Pressure (A) 2000 P.S.I.

Initial Flow Period Minutes 30 (B) 31 P.S.I. to (C) 31 P.S.I.

Initial Closed In Period Minutes 45 (D) 920 P.S.I.

Final Flow Period Minutes 120 (E) 31 P.S.I. to (F) 42 P.S.I.

Final Closed In Period Minutes 90 (G) 899 P.S.I.

Final Hydrostatic Pressure (H) 2000 P.S.I.

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made. All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By [Signature] Signature of Customer or his authorized representative

Western Representative [Signature]

Thank you 1625.

FIELD INVOICE

Table with 2 columns: Item Name and Amount. Items include Open Hole Test, Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage, Fluid Sampler, Extra Charts, Insurance, Telecopier, and TOTAL.

WESTERN TESTERS INC.
SUBSURFACE PRESSURE SURVEY

DATE : 11-28-86 TICKET : 11702
CUSTOMER : HUMMON CORPORATION LEASE : SCHULTZ
WELL : #1 TEST: 1 GEOLOGIST : R.C. LEWELLYN
ELEVATION : 2077 KB FORMATION : LANSING
SECTION : 14 TOWNSHIP : 26S
RANGE : 16W COUNTY : EDWARDS STATE : KANSAS
GAUGE SN# : 2604 RANGE : 4150 CLOCK : 12

INTERVAL FROM : 4045 TO : 4065 TOTAL DEPTH : 4065
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 4040 SIZE : 6.75
PACKER DEPTH : 4045 SIZE : 6.75
PACKER DEPTH : SIZE :
PACKER DEPTH : SIZE :

DRILLING CON. : H-30 DRILLING RIG #7
MUD TYPE : CHEMICAL VISCOSITY : 42
WEIGHT : 9.2 WATER LOSS (CC) : 10.2
CHLORIDES (PPM) : 5000
JARS-MAKE : - SERIAL NUMBER :
DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 60 FT I.D. inch : 2.20
WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00
DRILL PIPE LENGTH : 3965 FT I.D. inch : 3.80
TEST TOOL LENGTH : 20 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 20 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 : STRONG BLOW. GAS TO SURFACE IN 30 MINUTES.
BLOW COMMENT #2 : SEE ATTACHED FLOW CHART.
BLOW COMMENT #3 :
BLOW COMMENT #4 :

GAS FLOW REPORT

Date : 11-28-86	Ticket # : 11702	
Customer : HUMMON CORPORATION	Lease : SCHULTZ	
Well : #1	Test : 1	Geologist : R.C. LEWELLYN
Elevation (KB) : 2077	Formation : LANSING	
Section : 14	Township : 26S	
Range : 16W	County : EDWARDS	State : KANSAS
Gauge SN # : 2604	Range : 4150	Clock : 12

TIME GAUGE (MIN)	TESTER TYPE	ORFICE SIZE	PRESSURE (PSI)	FLOW DESCRIPTION
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PRE FLOW

30				GAS TO SURFACE
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SECOND FLOW

10	MERLA	1/2"	8 " WTR	17200 CFPD
20	MERLA	1/2"	6 " WTR	15400 CFPD
30	MERLA	1/2"	6 " WTR	15400 CFPD
40	MERLA	1/2"	6 " WTR	15400 CFPD
50	MERLA	1/2"	6 " WTR	15400 CFPD
60	MERLA	1/2"	6 " WTR	15400 CFPD
70	MERLA	1/2"	6 " WTR	15400 CFPD
80	MERLA	1/2"	6" WTR	15400 CFPD
90	MERLA	1/2"	6" WTR	15400 CFPD
100	MERLA	1/2"	6" WTR	15400 CFPD
110	MERLA	1/2"	6" WTR	15400 CFPD
120	MERLA	1/2"	6" WTR	15400 CFPD

WESTERN TESTERS INC.
WICHITA - KANSAS

Pressure Transient Report

COMPANY : HUMMON CORPORATION
RIG : EDWARDS-KANSAS
FIELD : SCHULTZ
WELL : #1
DATE : 11-28-86
GAUGE NO : 2604

OPERATIONAL COMMENTS

COMPANY : HUMMON CORPORATION
 WELL : #1
 GAUGE # : 2604
 DATE : 28/11/86

FIELD : SCHULTZ
 JOB # : 11702
 DEPTH : 4065
 TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
1	5:15:0	0.000	37.000	45.56	0.000
2	5:19:60	0.083	37.000	45.56	0.000
3	5:25:1	0.167	37.000	45.56	0.000
4	5:30:0	0.250	37.000	45.56	0.000
5	5:34:60	0.333	37.000	45.56	0.000
6	5:40:1	0.417	37.000	45.56	0.000
7	5:45:0	0.500	37.000	45.56	0.000
8	5:48:0	0.550	301.000	45.56	264.000
9	5:51:0	0.600	476.000	45.56	175.000
10	5:54:0	0.650	599.000	45.56	123.000
11	5:57:0	0.700	687.000	45.56	88.000
12	6:0:0	0.750	745.000	45.56	58.000
13	6:3:0	0.800	782.000	45.56	37.000
14	6:6:0	0.850	805.000	45.56	23.000
15	6:9:0	0.900	829.000	45.56	24.000
16	6:12:0	0.950	849.000	45.56	20.000
17	6:15:0	1.000	866.000	45.56	17.000
18	6:18:0	1.050	880.000	45.56	14.000
19	6:21:0	1.100	891.000	45.56	11.000
20	6:24:0	1.150	900.000	45.56	9.000
21	6:27:0	1.200	907.000	45.56	7.000
22	6:30:0	1.250	915.000	45.56	8.000
23	6:31:1	1.267	40.000	45.56	-875.000
24	6:34:60	1.333	40.000	45.56	0.000
25	6:40:1	1.417	40.000	45.56	0.000
26	6:45:0	1.500	40.000	45.56	0.000
27	6:49:60	1.583	41.000	45.56	1.000
28	6:55:1	1.667	42.000	45.56	1.000
29	7:0:0	1.750	43.000	45.56	1.000
30	7:4:60	1.833	43.000	45.56	0.000
31	7:10:1	1.917	43.000	45.56	0.000
32	7:15:0	2.000	43.000	45.56	0.000
33	7:19:60	2.083	43.000	45.56	0.000
34	7:25:1	2.167	43.000	45.56	0.000
35	7:30:0	2.250	43.000	45.56	0.000
36	7:34:60	2.333	43.000	45.56	0.000
37	7:40:1	2.417	43.000	45.56	0.000
38	7:45:0	2.500	43.000	45.56	0.000
39	7:49:60	2.583	43.000	45.56	0.000
40	7:55:1	2.667	44.000	45.56	1.000
41	8:0:0	2.750	45.000	45.56	1.000
42	8:4:60	2.833	46.000	45.56	1.000
43	8:10:1	2.917	47.000	45.56	1.000
44	8:15:0	3.000	47.000	45.56	0.000
45	8:19:60	3.083	48.000	45.56	1.000
46	8:25:1	3.167	48.000	45.56	0.000
47	8:30:0	3.250	48.000	45.56	0.000
48	8:33:0	3.300	191.000	45.56	143.000
49	8:36:0	3.350	331.000	45.56	140.000
50	8:39:0	3.400	451.000	45.56	120.000
51	8:42:0	3.450	531.000	45.56	80.000
52	8:45:0	3.500	591.000	45.56	60.000

COMPANY : HUMMON CORPORATION
WELL : #1
GAUGE.# : 2604
DATE : 28/11/86

FIELD : SCHULTZ
JOB # : 11702
DEPTH : 4065
TEST :

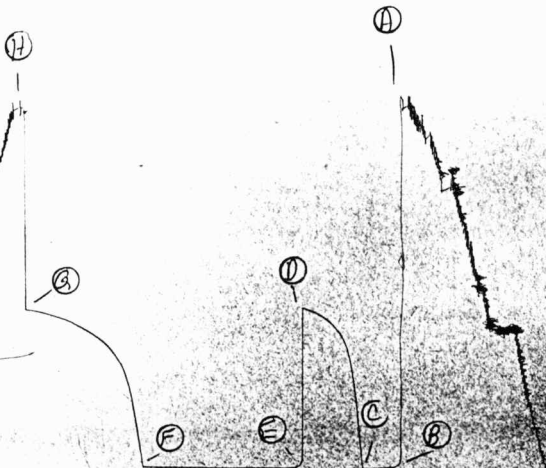
DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P $P_i - P_{(i-1)}$
53	8:48: 0	3.550	627.000	45.56	36.000
54	8:51: 0	3.600	665.000	45.56	38.000
55	8:54: 0	3.650	694.000	45.56	29.000
56	8:57: 0	3.700	719.000	45.56	25.000
57	9: 0: 0	3.750	736.000	45.56	17.000
58	9: 3: 0	3.800	755.000	45.56	19.000
59	9: 6: 0	3.850	771.000	45.56	16.000
60	9: 9: 0	3.900	783.000	45.56	12.000
61	9:12: 0	3.950	796.000	45.56	13.000
62	9:15: 0	4.000	809.000	45.56	13.000
63	9:18: 0	4.050	821.000	45.56	12.000
64	9:21: 0	4.100	831.000	45.56	10.000
65	9:24: 0	4.150	842.000	45.56	11.000
66	9:27: 0	4.200	851.000	45.56	9.000
67	9:30: 0	4.250	858.000	45.56	7.000
68	9:33: 0	4.300	866.000	45.56	8.000
69	9:36: 0	4.350	873.000	45.56	7.000
70	9:39: 0	4.400	880.000	45.56	7.000
71	9:42: 0	4.450	887.000	45.56	7.000
72	9:45: 0	4.500	891.000	45.56	4.000
73	9:48: 0	4.550	897.000	45.56	6.000
74	9:51: 0	4.600	901.000	45.56	4.000
75	9:54: 0	4.650	905.000	45.56	4.000
76	9:57: 0	4.700	908.000	45.56	3.000

WESTERN TESTERS INC.

2609
DST #1

KT 11702

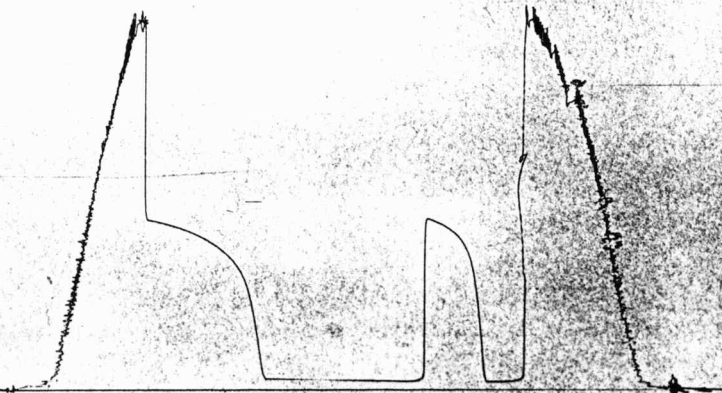
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3849
DST #1

TK+11702

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WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET NO 11703

P. O. BOX 1599 WICHITA, KANSAS 67201

Elevation 2077 KB Formation Cherokee Eff. Pay Ft.

District Pcg# Date 11-29-86 Customer Order No.

COMPANY NAME Hummon Corp.

ADDRESS 400 One Main Place Wichita KS 67202

LEASE AND WELL NO. Schultz #1 COUNTY Edwards STATE KS Sec. 14 Twp. 26S Rge. 16W

Mail Invoice To Same Co. Name No. Copies Requested Reg

Mail Charts To Same #1 Schultz Address No. Copies Requested Reg

Formation Test No. 2 Interval Tested From 4340 ft. to 4375 ft. Total Depth 4375 ft.

Packer Depth 4335 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 4340 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4365 ft. Recorder Number 2604 Cap. 4150

Bottom Recorder Depth (Outside) 4368 ft. Recorder Number 3849 Cap. 4200

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor H-30 #7 Drill Collar Length I. D. in.

Mud Type Chem Viscosity 42 Weight Pipe Length I. D. in.

Weight 9.4 Water Loss 10.4 cc. Drill Pipe Length 4320 I. D. 3.8 in.

Chlorides 6200 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.

Jars: Make Serial Number Anchor Length 35 ft. Size 5 1/2 OD in.

Did Well Flow? NO Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 x 4 in.

Blow: Weak Building to Strong I.F. Strong thru F.F. GTS 55min FF TSTM

Recovered 60 ft. of Mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Chlorides 7000 P.P.M. Sample Jars used Remarks:

Time On Location 11:00 A.M. P.M. Time Pick Up Tool 2:30 A.M. P.M. Time Off Location 10:00 A.M. P.M.

Time Set Packer(s) 3:30 A.M. P.M. Time Started Off Bottom 8:15 A.M. P.M. Maximum Temperature 116 degrees

Initial Hydrostatic Pressure (A) 2221 P.S.I.

Initial Flow Period Minutes 30 (B) 42 P.S.I. to (C) 42 P.S.I.

Initial Closed In Period Minutes 45 (D) 878 P.S.I.

Final Flow Period Minutes 120 (E) 42 P.S.I. to (F) 31 P.S.I.

Final Closed In Period Minutes 90 (G) 899 P.S.I.

Final Hydrostatic Pressure (H) 2221 P.S.I.

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By [Signature] Signature of Customer or his authorized representative

Western Representative [Signature]

Thank you 1625.

FIELD INVOICE

Table with 2 columns: Item Name and Amount. Items include Open Hole Test, Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage, Fluid Sampler, Extra Charts, Insurance, Telecopier, and TOTAL.

WESTERN TESTERS INC.
SUBSURFACE PRESSURE SURVEY

DATE : 11-29-86 TICKET : 11703
CUSTOMER : HUMMON CORPORATION LEASE : SCHULTZ
WELL : #1 TEST: 2 GEOLOGIST : R.C. LEWELLYN
ELEVATION : 2077 KB FORMATION : CHEROKEE
SECTION : 14 TOWNSHIP : 26S
RANGE : 16W COUNTY : EDWARDS STATE : KANSAS
GAUGE SN# : 2604 RANGE : 4150 CLOCK : 12

INTERVAL FROM : 4340 TO : 4375 TOTAL DEPTH : 4375
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 4335 SIZE : 6.75
PACKER DEPTH : 4340 SIZE : 6.75
PACKER DEPTH : SIZE :
PACKER DEPTH : SIZE :

DRILLING CON. : H-30 DRILLING RIG #7
MUD TYPE : CHEMICAL VISCOSITY : 42
WEIGHT : 9.4 WATER LOSS (CC) : 10.4
CHLORIDES (PPM) : 6200
JARS-MAKE : - SERIAL NUMBER :
DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 0 FT I.D. inch : 0.00
WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00
DRILL PIPE LENGTH : 4320 FT I.D. inch : 3.80
TEST TOOL LENGTH : 20 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 35 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 : WEAK BLOW BUILDING TO STRONG ON THE INITIAL FLOW.
BLOW COMMENT #2 : STRONG BLOW ON THE FINAL FLOW. GAS TO SURFACE IN
BLOW COMMENT #3 : 55 MINUTES ON THE FINAL FLOW-TOO SMALL TO MEASURE.
BLOW COMMENT #4 :

RECOVERED : 60 FT OF: MUD.

Total Barrels Fluid = 0.84
Total Fluid Prod Rate = 8.08 BFPD
Indicated Wtr Rate = 7.27 BWPD

REMARK 1 :
REMARK 2 :
REMARK 3 :
REMARK 4 :

SET PACKER(S) :	3:30 PM	TIME STARTED OFF BOTTOM :	8:15 PM
WELL TEMPERATURE :	116		
INITIAL HYDROSTATIC PRESSURE		(A)	2230
INITIAL FLOW PERIOD MIN:	30	(B)	60 PSI TO (C) : 60
INITIAL CLOSED IN PERIOD MIN:	42	(D)	880
FINAL FLOW PERIOD MIN:	120	(E)	62 PSI TO (F) : 54
FINAL CLOSED IN PERIOD MIN:	90	(G)	914
FINAL HYDROSTATIC PRESSURE		(H)	2217

WESTERN TESTERS INC.
WICHITA - KANSAS

Pressure Transient Report

COMPANY : HUMMON CORPORATION
RIG : EDWARDS-KANSAS
FIELD : SCHULTZ
WELL : #1
DATE : 11-29-86
GAUGE NO : 2604

OPERATIONAL COMMENTS

COMPANY : HUMMON CORPORATION
 WELL : #1
 GAUGE # : 2604
 DATE : 29/11/86

FIELD : SCHULTZ
 JOB # : 11703
 DEPTH : 4375
 TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
1	3:30:0	0.000	60.000	46.67	0.000
2	3:34:60	0.083	60.000	46.67	0.000
3	3:40:1	0.167	60.000	46.67	0.000
4	3:45:0	0.250	60.000	46.67	0.000
5	3:49:60	0.333	60.000	46.67	0.000
6	3:55:1	0.417	60.000	46.67	0.000
7	4:0:0	0.500	60.000	46.67	0.000
8	4:3:0	0.550	147.000	46.67	87.000
9	4:6:0	0.600	265.000	46.67	118.000
10	4:9:0	0.650	368.000	46.67	103.000
11	4:12:0	0.700	466.000	46.67	98.000
12	4:15:0	0.750	558.000	46.67	92.000
13	4:18:0	0.800	630.000	46.67	72.000
14	4:21:0	0.850	692.000	46.67	62.000
15	4:24:0	0.900	742.000	46.67	50.000
16	4:27:0	0.950	784.000	46.67	42.000
17	4:30:0	1.000	810.000	46.67	26.000
18	4:33:0	1.050	833.000	46.67	23.000
19	4:36:0	1.100	854.000	46.67	21.000
20	4:39:0	1.150	868.000	46.67	14.000
21	4:42:0	1.200	880.000	46.67	12.000
22	4:43:1	1.217	62.000	46.67	-818.000
23	4:46:60	1.283	62.000	46.67	0.000
24	4:52:1	1.367	62.000	46.67	0.000
25	4:57:0	1.450	62.000	46.67	0.000
26	5:1:60	1.533	62.000	46.67	0.000
27	5:7:1	1.617	62.000	46.67	0.000
28	5:12:0	1.700	62.000	46.67	0.000
29	5:16:60	1.783	59.000	46.67	-3.000
30	5:22:1	1.867	58.000	46.67	-1.000
31	5:27:0	1.950	57.000	46.67	-1.000
32	5:31:60	2.033	56.000	46.67	-1.000
33	5:37:1	2.117	55.000	46.67	-1.000
34	5:42:0	2.200	54.000	46.67	-1.000
35	5:46:60	2.283	54.000	46.67	0.000
36	5:52:1	2.367	54.000	46.67	0.000
37	5:57:0	2.450	54.000	46.67	0.000
38	6:1:60	2.533	54.000	46.67	0.000
39	6:7:1	2.617	54.000	46.67	0.000
40	6:12:0	2.700	54.000	46.67	0.000
41	6:16:60	2.783	54.000	46.67	0.000
42	6:22:1	2.867	54.000	46.67	0.000
43	6:27:0	2.950	54.000	46.67	0.000
44	6:31:60	3.033	54.000	46.67	0.000
45	6:37:1	3.117	54.000	46.67	0.000
46	6:42:0	3.200	54.000	46.67	0.000
47	6:45:0	3.250	257.000	46.67	203.000
48	6:48:0	3.300	401.000	46.67	144.000
49	6:51:0	3.350	527.000	46.67	126.000
50	6:54:0	3.400	619.000	46.67	92.000
51	6:57:0	3.450	698.000	46.67	79.000
52	7:0:0	3.500	759.000	46.67	61.000

COMPANY : HUMMON CORPORATION
WELL : #1
GAUGE # : 2604
DATE : 29/11/86

FIELD : SCHULTZ
JOB # : 11703
DEPTH : 4375
TEST :

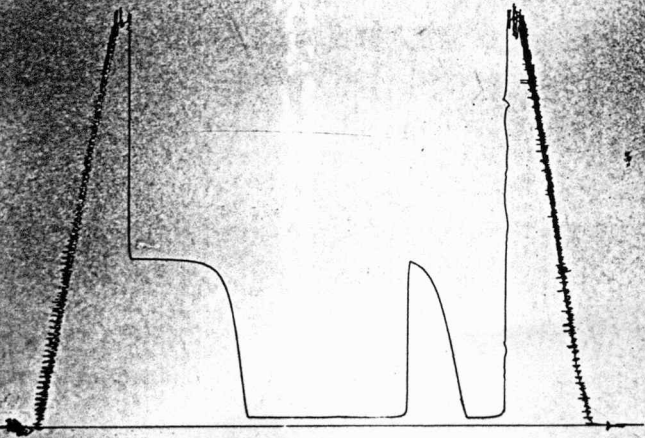
DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
53	7: 3: 0	3.550	791.000	46.67	32.000
54	7: 6: 0	3.600	828.000	46.67	37.000
55	7: 9: 0	3.650	851.000	46.67	23.000
56	7:12: 0	3.700	868.000	46.67	17.000
57	7:15: 0	3.750	878.000	46.67	10.000
58	7:18: 0	3.800	887.000	46.67	9.000
59	7:21: 0	3.850	891.000	46.67	4.000
60	7:24: 0	3.900	895.000	46.67	4.000
61	7:27: 0	3.950	897.000	46.67	2.000
62	7:30: 0	4.000	899.000	46.67	2.000
63	7:33: 0	4.050	901.000	46.67	2.000
64	7:36: 0	4.100	903.000	46.67	2.000
65	7:39: 0	4.150	905.000	46.67	2.000
66	7:42: 0	4.200	906.000	46.67	1.000
67	7:45: 0	4.250	907.000	46.67	1.000
68	7:48: 0	4.300	908.000	46.67	1.000
69	7:51: 0	4.350	909.000	46.67	1.000
70	7:54: 0	4.400	910.000	46.67	1.000
71	7:57: 0	4.450	911.000	46.67	1.000
72	8: 0: 0	4.500	912.000	46.67	1.000
73	8: 3: 0	4.550	913.000	46.67	1.000
74	8: 6: 0	4.600	914.000	46.67	1.000
75	8: 9: 0	4.650	914.000	46.67	0.000
76	8:12: 0	4.700	914.000	46.67	0.000

WESTERN TESTERS INC.

3849
DST#2

TKF 11703

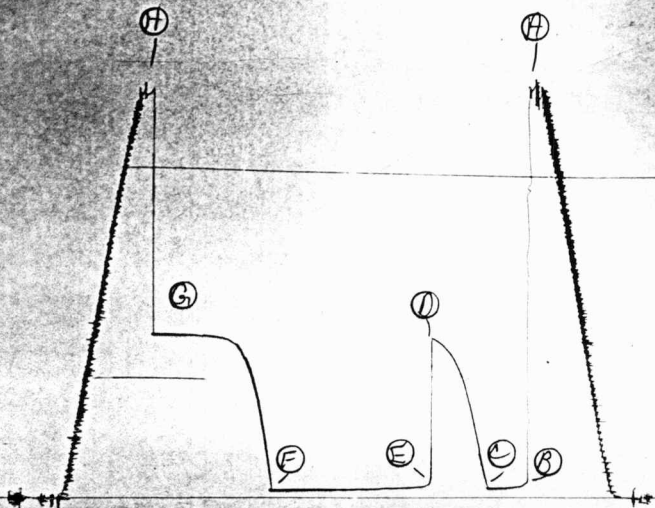
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2604
DST #2

TKF 11703

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WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET NO 11704

P. O. BOX 1599 WICHITA, KANSAS 67201
PHONE (316) 262-5861

Elevation 2077 KB Formation Cherokee Eff. Pay Ft.

District Pratt Date 11-30-86 Customer Order No.

COMPANY NAME Hummon Corp.

ADDRESS 400 One Main Place Wichita KS 67202

LEASE AND WELL NO. Schultz #1 COUNTY Edwards STATE KS Sec. 14 Twp 26s Rge. 16w

Mail Invoice To Same No. Copies Requested Reg

Mail Charts To Same #1 Schultz Address No. Copies Requested Reg

Formation Test No. 3 Interval Tested From 4336 ft. to 4388 ft. Total Depth 4388 ft.

Packer Depth 4331 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 4336 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4378 ft. Recorder Number 2604 Cap. 4150

Bottom Recorder Depth (Outside) 4381 ft. Recorder Number 3849 Cap. 4200

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor H-30 #7 Drill Collar Length I. D. in.

Mud Type Chem Viscosity 42 Weight Pipe Length I. D. in.

Weight 9.4 Water Loss 10.4 cc. Drill Pipe Length 4316 I. D. 3.8 in.

Chlorides 6200 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.

Jars: Make Serial Number Anchor Length 52 ft. Size 5 1/2 OD in.

Did Well Flow? NO Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 x H in.

Blow: Strong - GTS 25min IF - See Gas Flow Report

Recovered 80 ft. of Gas Cut Mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Chlorides 7,000 P.P.M. Sample Jars used Remarks:

Time On Location 4:00 A.M. Time Pick Up Tool 5:00 P.M. Time Off Location 1:30 A.M. P.M.

Time Set Packer(s) 6:50 A.M. Time Started Off Bottom 11:35 A.M. P.M. Maximum Temperature 116°

Initial Hydrostatic Pressure (A) 2200 P.S.I.

Initial Flow Period Minutes 30 (B) 41 P.S.I. to (C) 41 P.S.I.

Initial Closed In Period Minutes 45 (D) 857 P.S.I.

Final Flow Period Minutes 120 (E) 63 P.S.I. to (F) 63 P.S.I.

Final Closed In Period Minutes 90 (G) 857 P.S.I.

Final Hydrostatic Pressure (H) 2179 P.S.I.

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By [Signature] Signature of Customer or his authorized representative

Western Representative [Signature]

Thank you 1685

FIELD INVOICE

Table with 2 columns: Item, Amount. Items include Open Hole Test, Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage, Fluid Sampler, Extra Charts, Insurance, Telecopier, TOTAL.

WESTERN TESTERS INC.
SUBSURFACE PRESSURE SURVEY

DATE : 11-30-86 TICKET : 11704
CUSTOMER : HUMMON CORPORATION LEASE : SCHULTZ
WELL : #1 TEST: 3 GEOLOGIST : R.C. LEWELLYN
ELEVATION : 2077 KB FORMATION : CHEROKEE
SECTION : 14 TOWNSHIP : 26S
RANGE : 16W COUNTY : EDWARDS STATE : KANSAS
GAUGE SN# : 2604 RANGE : 4150 CLOCK : 12

INTERVAL FROM : 4336 TO : 4388 TOTAL DEPTH : 4388
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 4331 SIZE : 6.75
PACKER DEPTH : 4336 SIZE : 6.75
PACKER DEPTH : SIZE :
PACKER DEPTH : SIZE :

DRILLING CON. : H-30 DRILLING RIG #7
MUD TYPE : CHEMICAL VISCOSITY : 42
WEIGHT : 9.4 WATER LOSS (CC) : 10.4
CHLORIDES (PPM) : 6200
JARS-MAKE : - SERIAL NUMBER :
DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 0 FT I.D. inch : 0.00
WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00
DRILL PIPE LENGTH : 4316 FT I.D. inch : 3.80
TEST TOOL LENGTH : 20 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 52 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 : STRONG BLOW. GAS TO SURFACE IN 25 MINUTES ON THE
BLOW COMMENT #2 : INITIAL FLOW. SEE ATTACHED FLOW CHART.
BLOW COMMENT #3 :
BLOW COMMENT #4 :

RECOVERED : 80 FT OF: GAS CUT MUD.

Total Barrels Fluid = 1.12
Total Fluid Prod Rate = 10.77 BFPD
Indicated Wtr Rate = 9.70 BWPD

REMARK 1 :
REMARK 2 :
REMARK 3 :
REMARK 4 :

SET PACKER(S) :	6:50 AM	TIME STARTED OFF BOTTOM :	11:35 AM
WELL TEMPERATURE :	116		
INITIAL HYDROSTATIC PRESSURE		(A)	2206
INITIAL FLOW PERIOD MIN:	30	(B)	48 PSI TO (C) : 48
INITIAL CLOSED IN PERIOD MIN:	45	(D)	854
FINAL FLOW PERIOD MIN:	120	(E)	60 PSI TO (F) : 60
FINAL CLOSED IN PERIOD MIN:	90	(G)	863
FINAL HYDROSTATIC PRESSURE		(H)	2196

WESTERN TESTERS INC.
WICHITA - KANSAS

Pressure Transient Report

COMPANY : HUMMON CORPORATION
RIG : EDWARDS-KANSAS
FIELD : SCHULTZ
WELL : #1
DATE : 11-30-86
GAUGE NO : 2604

OPERATIONAL COMMENTS

COMPANY : HUMMON CORPORATION
 WELL : #1
 GAUGE # : 2604
 DATE : 30/11/86

FIELD : SCHULTZ
 JOB # : 11704
 DEPTH : 4388
 TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
1	6:50:0	0.000	48.000	46.67	0.000
2	6:54:60	0.083	48.000	46.67	0.000
3	7:0:1	0.167	48.000	46.67	0.000
4	7:5:0	0.250	48.000	46.67	0.000
5	7:9:60	0.333	48.000	46.67	0.000
6	7:15:1	0.417	48.000	46.67	0.000
7	7:20:0	0.500	48.000	46.67	0.000
8	7:23:0	0.550	340.000	46.67	292.000
9	7:26:0	0.600	533.000	46.67	193.000
10	7:29:0	0.650	645.000	46.67	112.000
11	7:32:0	0.700	714.000	46.67	69.000
12	7:35:0	0.750	742.000	46.67	28.000
13	7:38:0	0.800	770.000	46.67	28.000
14	7:41:0	0.850	786.000	46.67	16.000
15	7:44:0	0.900	801.000	46.67	15.000
16	7:47:0	0.950	811.000	46.67	10.000
17	7:50:0	1.000	822.000	46.67	11.000
18	7:53:0	1.050	831.000	46.67	9.000
19	7:56:0	1.100	840.000	46.67	9.000
20	7:59:0	1.150	846.000	46.67	6.000
21	8:2:0	1.200	852.000	46.67	6.000
22	8:5:0	1.250	854.000	46.67	2.000
23	8:6:1	1.267	60.000	46.67	-794.000
24	8:9:60	1.333	60.000	46.67	0.000
25	8:15:1	1.417	60.000	46.67	0.000
26	8:20:0	1.500	60.000	46.67	0.000
27	8:24:60	1.583	60.000	46.67	0.000
28	8:30:1	1.667	60.000	46.67	0.000
29	8:35:0	1.750	60.000	46.67	0.000
30	8:39:60	1.833	60.000	46.67	0.000
31	8:45:1	1.917	60.000	46.67	0.000
32	8:50:0	2.000	60.000	46.67	0.000
33	8:54:60	2.083	60.000	46.67	0.000
34	9:0:1	2.167	60.000	46.67	0.000
35	9:5:0	2.250	60.000	46.67	0.000
36	9:9:60	2.333	60.000	46.67	0.000
37	9:15:1	2.417	60.000	46.67	0.000
38	9:20:0	2.500	60.000	46.67	0.000
39	9:24:60	2.583	60.000	46.67	0.000
40	9:30:1	2.667	60.000	46.67	0.000
41	9:35:0	2.750	60.000	46.67	0.000
42	9:39:60	2.833	60.000	46.67	0.000
43	9:45:1	2.917	60.000	46.67	0.000
44	9:50:0	3.000	60.000	46.67	0.000
45	9:54:60	3.083	60.000	46.67	0.000
46	10:0:1	3.167	60.000	46.67	0.000
47	10:5:0	3.250	60.000	46.67	0.000
48	10:8:0	3.300	364.000	46.67	304.000
49	10:11:0	3.350	515.000	46.67	151.000
50	10:14:0	3.400	588.000	46.67	73.000
51	10:17:0	3.450	632.000	46.67	44.000
52	10:20:0	3.500	664.000	46.67	32.000

COMPANY : HUMMON CORPORATION
WELL : #1
GAUGE # : 2604
DATE : 30/11/86

FIELD : SCHULTZ
JOB # : 11704
DEPTH : 4388
TEST :

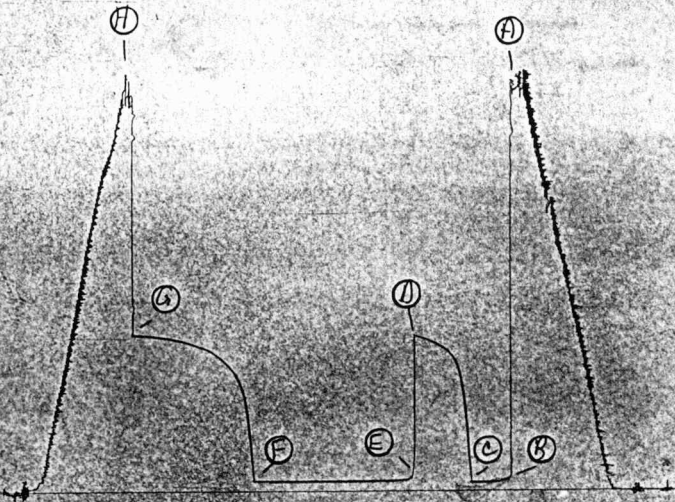
DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
53	10:23: 0	3.550	688.000	46.67	24.000
54	10:26: 0	3.600	711.000	46.67	23.000
55	10:29: 0	3.650	730.000	46.67	19.000
56	10:32: 0	3.700	746.000	46.67	16.000
57	10:35: 0	3.750	763.000	46.67	17.000
58	10:38: 0	3.800	776.000	46.67	13.000
59	10:41: 0	3.850	786.000	46.67	10.000
60	10:44: 0	3.900	791.000	46.67	5.000
61	10:47: 0	3.950	801.000	46.67	10.000
62	10:50: 0	4.000	809.000	46.67	8.000
63	10:53: 0	4.050	816.000	46.67	7.000
64	10:56: 0	4.100	822.000	46.67	6.000
65	10:59: 0	4.150	829.000	46.67	7.000
66	11: 2: 0	4.200	834.000	46.67	5.000
67	11: 5: 0	4.250	840.000	46.67	6.000
68	11: 8: 0	4.300	843.000	46.67	3.000
69	11:11: 0	4.350	846.000	46.67	3.000
70	11:14: 0	4.400	851.000	46.67	5.000
71	11:17: 0	4.450	855.000	46.67	4.000
72	11:20: 0	4.500	857.000	46.67	2.000
73	11:23: 0	4.550	859.000	46.67	2.000
74	11:26: 0	4.600	860.000	46.67	1.000
75	11:29: 0	4.650	861.000	46.67	1.000
76	11:32: 0	4.700	862.000	46.67	1.000
77	11:35: 0	4.750	863.000	46.67	1.000

WESTERN TESTERS INC.

2604
DST#3

TK4 11704

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3849
D57#3

TR4 11704

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