TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name HOME ROYALTY A-2 Test No. 1 Date 7/29/94

Company HELMERICH & PAYNE Zone CHESTER

Address 1579 EAST 21st ST TULSA OK 74114-1398 Elevation 2867

Co. Rep./Geo. DON HUBER Cont. CHEYENNE RIG #4 Est. Ft. of Pay 10

Location: Sec. 17 Twp. 31S Rge. 34W Co. SEWARD State KS

Interval Tested 5563-5573 Drill Pipe Size 4.5" FH

Anchor Length 10 Wt. Pipe I.D. - 2.7 Ft. Run

Top Packer Depth 5558 Drill Collar – 2.25 Ft. Run 706

Bottom Packer Depth 5563 Mud Wt. 9.0 lb/Gal.

Total Depth 5573 Viscosity 46 Filtrate 8.4

Tool Open @ 12:10 A.M. Initial Blow GOOD BLOW BOTTOM OF BUCKET IN 8 MIN

Final Blow STRONG BLOW BOTTOM AS TOOL OPENED GAS TO SURFACE IN 15 MIN

Recovery - Total Feet 5 Flush Tool? NO

Rec. 5 Feet of SLIGHT GAS CUT MUD 5%GAS/95%MUD

Rec. Feet of

Rec. Feet of

Rec. Feet of

Rec. Feet of

BHT 130 °F Gravity °API @ °F Corrected Gravity °API

RW @ °F Chlorides ppm Recovery Chlorides 1800 ppm System

(A) Initial Hydrostatic Mud 2726.0 PSI AK1 Recorder No. 13337 Range 3975

(B) First Initial Flow Pressure 18.8 PSI @ (depth) 5565 w / Clock No. 26191

(C) First Final Flow Pressure 18.8 PSI AK1 Recorder No. 10333 Range 4050

(D) Initial Shut-in Pressure 1370.2 PSI @ (depth) 5570 w / Clock No. 14389

(E) Second Initial Flow Pressure 19.8 PSI AK1 Recorder No. Range

(F) Second Final Flow Pressure 19.8 PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure 1389.1 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 2718.2 PSI Initial Shut-in 60 Final Shut-in 120

Our Representative ROBERT COLLINS

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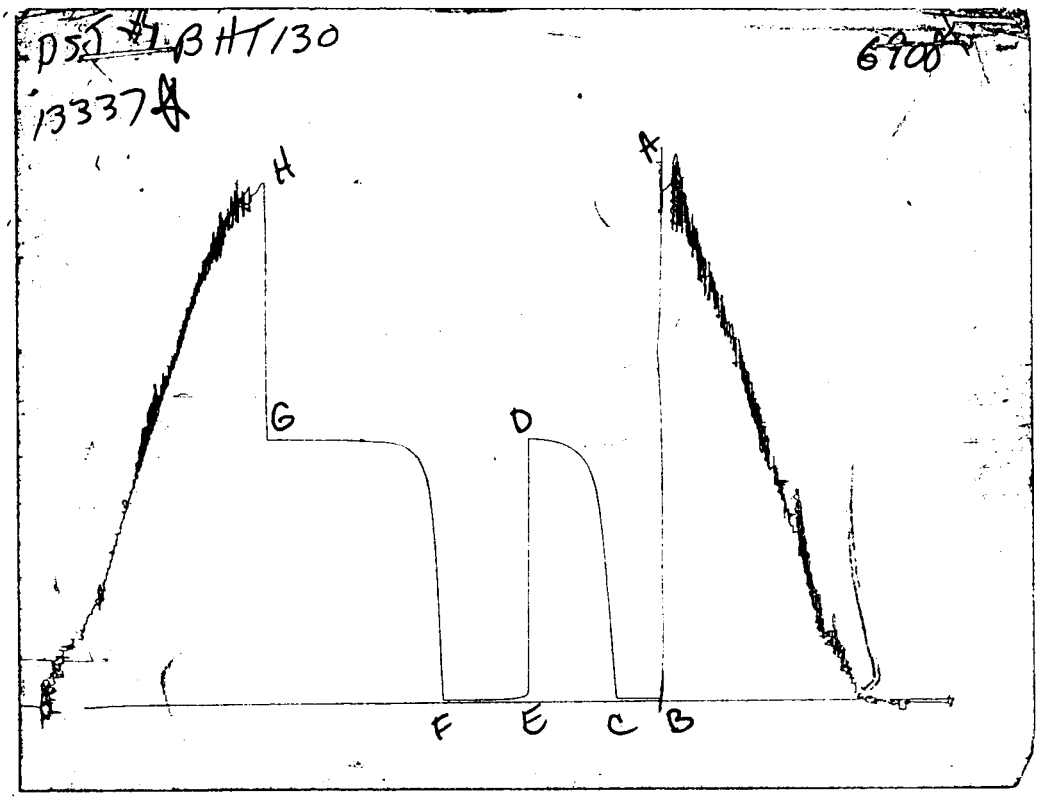

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2652	2726
(B) FIRST INITIAL FLOW PRESSURE	19	18.8
(C) FIRST FINAL FLOW PRESSURE	19	18.8
(D) INITIAL CLOSED-IN PRESSURE	1344	1370.2
(E) SECOND INITIAL FLOW PRESSURE	19	19.8
(F) SECOND FINAL FLOW PRESSURE	19	19.8
(G) FINAL CLOSED-IN PRESSURE	1354	1389.1
(H) FINAL HYDROSTATIC MUD	2633	2718.2

GAS VOLUME REPORT

HELMERICH & PAYNE

HOME ROYALTY A-2 DST # 1

MIN	PSIG	ORIFICE	MCF/D	MIN	PSIG	ORIFICE	MCF/D
				25	10	0.38	11.3
				30	14	0.38	13.4
				35	18	0.38	15.1
				40	20	0.38	15.9
				45	20	0.38	15.9
				50	20	0.38	15.9
				55	22	0.38	16.7
				60	22	0.38	16.7

Remarks: GAS TO SURFACE IN 18 MIN-GAS WILL BURN

FLUID SAMPLER DATA

Ticket No.: 6908 Date: 7/29/94

Company: HELMERICH & PAYNE

Lease: HOME ROYALTY A-2 Test No.: 1

County: SEWARD Sec.: 17 Twp.: 31S Rng.: 34W

SAMPLER RECOVERY

Gas 4000

Oil

Mud

Water

Other

Pressure 500

TOTAL 4000

SAMPLER ANALYSIS

Resistivity ohms@ F

Chlorides ppm.

Gravity corrected @60F

PIT MUD ANALYSIS

Chlorides 1800

Resistivity ohms@ F

Viscosity 46

Mud Wt. 9.0

Filtrate 8.4

Other

PIPE RECOVERY

TOP

Resistivity ohms@ F

Chlorides ppm

MIDDLE

Resistivity ohms@ F

Chlorides ppm

BOTTOM

Resistivity ohms@ F

Chlorides ppm

NATURAL GAS ANALYSIS REPORT

Sampled by:
Trilobite Testing, L.L.C.
Hays, Kansas
Scott City, Kansas
Phone: 800-728-5369
Fax: 913-625-5620

Analyzed by:
Caraway Analytical, L.L.C.
728 North Roosevelt
Liberal, Kansas 67901
Phone: 316-324-5389
Fax: 316-626-7108

Lab Number:	940373	Analyzed:	08/01/94
Sample From:	Home Royalty A-2 DST 1	Pressure:	
Producer:	Helmerich & Payne	Temperature:	
Date:		Location:	7-31S-34W
Time:		County:	Seward
Sampler:		State:	Kansas
Source:		Formation:	Chester

		Mole %	GPM
Helium	He:		0.000
Oxygen	O2:	0.000	0.000
Nitrogen	N2:	4.537	0.000
Carbon Dioxide	CO2:	0.054	0.000
Methane	C1:	86.900	0.000
Ethane	C2:	4.523	1.210
Propane	C3:	2.120	0.584
Iso Butane	iC4:	0.383	0.125
Normal Butane	nC4:	0.639	0.201
Iso Pentane	iC5:	0.206	0.075
Normal Pentane	nC5:	0.203	0.074
Hexanes Plus	C6+:	0.435	0.190
	TOTAL:	100.000	2.459
	Z Fact:	0.9975	
	SP.GR.:	0.6516	
	BTU (SAT):	1069.3 @ 14.73 psia	
	BTU (DRY):	1088.2 @ 14.73 psia	
	OCTANE RATING:	121.0	

COMMENTS: Sample entered under vacuum
Insufficient pressure for Helium analysis

0.343	338.9209
0.566	558.9352
0.788	777.022
1.008	993.2535
1.14	1124.696
1.209	1193.575
1.254	1238.471
1.288	1272.415
1.31	1294.374
1.328	1312.33
1.339	1323.305
1.349	1333.284
1.357	1341.268
1.362	1346.259
1.368	1352.248
1.374	1358.238
1.377	1361.233
1.379	1363.23
1.381	1365.227
1.383	1367.224
1.385	1369.221
1.386	1370.219

0.907	893.8827
1.217	1201.554
1.305	1289.387
1.342	1326.299
1.368	1352.248
1.38	1364.229
1.386	1370.219
1.388	1372.216
1.391	1375.212
1.393	1377.209
1.394	1378.208
1.396	1380.205
1.398	1382.203
1.4	1384.2
1.401	1385.197
1.402	1386.195
1.404	1388.19
1.405	1389.187

FSI

-3

-3

WELL NAME Nona Royalty DST # 1 RECORDER # 13337

INIT. HYD. MUD. _____ _____ FINAL HYD. MUD _____ _____

INITIAL FLOW MINUTES _____ INTERVAL _____		INITIAL SHUTIN MINUTES _____ INTERVAL _____			FINAL FLOW MINUTES 60 INTERVAL _____		FINAL SHUTIN MINUTES 120 INTERVAL 6	
.019	18.8	—		1	.020	19.8	—	
		.343		2			.907	
		.566		3			1.217	
		.788		4			1.305	
		1.008		5			1.342	
		1.140		6			1.368	
		1.209		7			1.380	
		1.254		8			1.386	
		1.288		9			1.388	
		1.310		10			1.391	
.019	18.8	1.328		11			1.393	
		1.339		12			1.394	
		1.349		13			1.396	
		1.357		14			1.398	
		1.362		15			1.400	
		1.368		16			1.401	
		1.374		17			1.402	
		1.377		18			1.402	
		1.379		19			1.402	
		1.381		20			1.404	
		1.383		21	.020		1.405	
		1.385		22			1.405	
		1.386		23			1.405	
				24				
				25				
				26				
				27				

HOME ROYALTY A-2 DST #1
INITIAL SHUTIN

30 INITIAL FLOW TIME

SLOPE
P*

PSI/CYCLE
PSI

TIME(MIN)	Pws (psi)	Log Horn T	<> PRESSURE	Horn T
3	338.9	1.041	338.9	11
6	558.9	0.778	220.0	6
9	777.1	0.637	218.2	4
12	993.2	0.544	216.1	4
15	1124.6	0.477	131.4	3
18	1193.5	0.426	68.9	3
21	1238.4	0.385	44.9	2
24	1272.4	0.352	34.0	2
27	1294.3	0.325	21.9	2
30	1312.3	0.301	18.0	2
33	1323.3	0.281	11.0	2
36	1333.2	0.263	9.9	2
39	1341.2	0.248	8.0	2
42	1346.2	0.234	5.0	2
45	1352.2	0.222	6.0	2
48	1358.2	0.211	6.0	2
51	1361.2	0.201	3.0	2
54	1363.2	0.192	2.0	2
57	1365.2	0.184	2.0	2
60	1367.2	0.176	2.0	2
63	1369.2	0.169	2.0	1
66	1370.2	0.163	1.0	1

HOME ROYALTY A-2 DST #1
FINAL SHUTIN

90 TOTAL FLOW TIME

SLOPE P* | PSI/CYCLE PSI

TIME(MIN)	Pws(psi)	Log Horn T	<> PRESSURE	Horn T
6	893.8	1.204	893.8	16
12	1201.5	0.929	307.7	9
18	1289.3	0.778	87.8	6
24	1326.2	0.677	36.9	5
30	1352.2	0.602	26.0	4
36	1364.2	0.544	12.0	4
42	1370.2	0.497	6.0	3
48	1372.2	0.459	2.0	3
54	1375.2	0.426	3.0	3
60	1377.2	0.398	2.0	3
66	1378.2	0.374	1.0	2
72	1380.2	0.352	2.0	2
78	1382.2	0.333	2.0	2
84	1384.2	0.316	2.0	2
90	1385.1	0.301	0.9	2
96	1386.1	0.287	1.0	2
102	1388.1	0.275	2.0	2
108	1388.1	0.263	0.0	2
114	1389.1	0.253	1.0	2
120	1389.1	0.243	0.0	2

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name HOME ROYALTY A-2 Test No. 2 Date 7/30/94

Company HELMERICH & PAYNE Zone CHESTER

Address 1579 EAST 21st ST TULSA OK 74114-1398 Elevation 2867

Co. Rep./Geo. DON HUBER Cont. CHEYENNE RIG #4 Est. Ft. of Pay 9

Location: Sec. 17 Twp. 31S Rge. 34W Co. SEWARD State KS

Interval Tested 5574-5602 Drill Pipe Size 4.5" FH

Anchor Length 28 Wt. Pipe I.D. - 2.7 Ft. Run

Top Packer Depth 5569 Drill Collar – 2.25 Ft. Run 706

Bottom Packer Depth 5574 Mud Wt. 8.9 lb/Gal.

Total Depth 5602 Viscosity 47 Filtrate 8.8

Tool Open @ 2:05 A.M. Initial Blow VERY WEAK SURFACE BLOW DIED IN 10 MIN

Final Blow NO BLOW FLUSH TOOL NO BLOW IN 15 MIN

Recovery - Total Feet 5 Flush Tool? YES

Rec. 5 Feet of DRILLING MUD 100% MUD

Rec. Feet of

Rec. Feet of

Rec. Feet of

Rec. Feet of

BHT 130 °F Gravity °API @ °F Corrected Gravity °API

RW @ °F Chlorides ppm Recovery Chlorides 6500 ppm System

(A) Initial Hydrostatic Mud 2800.4 PSI AK1 Recorder No. 13337 Range 3975

(B) First Initial Flow Pressure 50.3 PSI @ (depth) 5566 w / Clock No. 26191

(C) First Final Flow Pressure 50.3 PSI AK1 Recorder No. 10333 Range 4050

(D) Initial Shut-in Pressure 67.2 PSI @ (depth) 5570 w / Clock No. 14389

(E) Second Initial Flow Pressure 63.2 PSI AK1 Recorder No. Range

(F) Second Final Flow Pressure 63.2 PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure 73.1 PSI Initial Opening 30 Final Flow 45

(H) Final Hydrostatic Mud 2756.3 PSI Initial Shut-in 60 Final Shut-in 90

Our Representative ROBERT COLLINS

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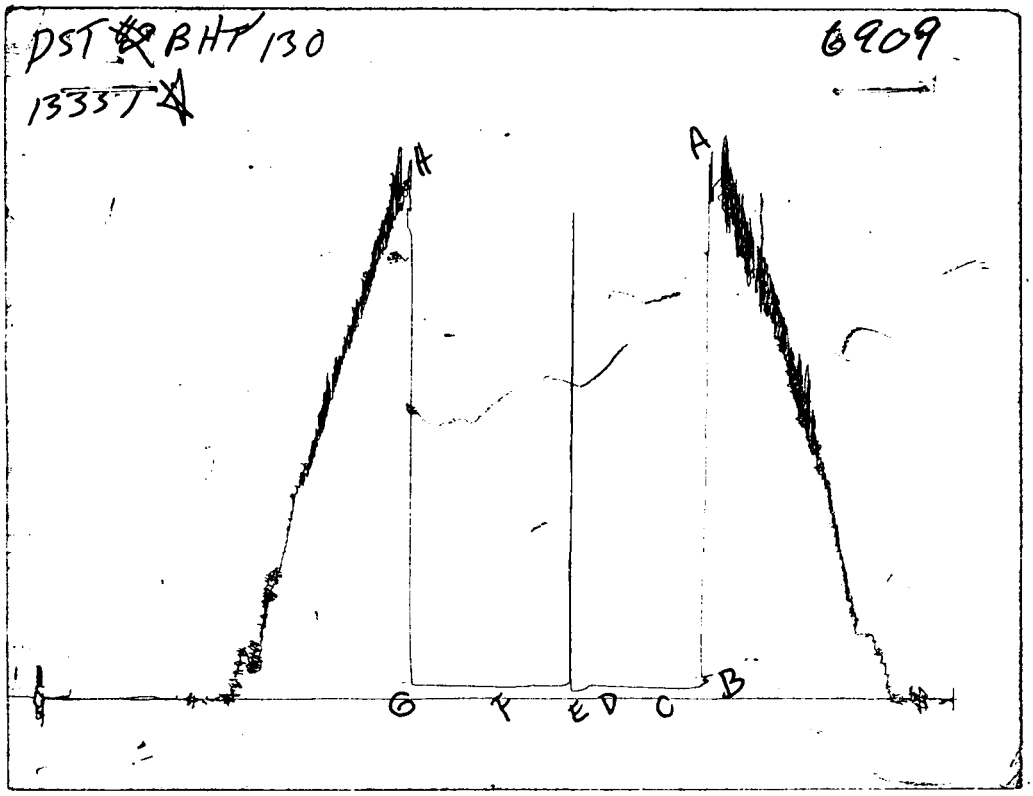

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2809	2800.4
(B) FIRST INITIAL FLOW PRESSURE	49	50.3
(C) FIRST FINAL FLOW PRESSURE	49	50.3
(D) INITIAL CLOSED-IN PRESSURE	59	67.2
(E) SECOND INITIAL FLOW PRESSURE	49	63.2
(F) SECOND FINAL FLOW PRESSURE	49	63.2
(G) FINAL CLOSED-IN PRESSURE	59	73.1
(H) FINAL HYDROSTATIC MUD	2760	2756.3

FLUID SAMPLER DATA

Ticket No.: 6909 Date: 7/30/94

Company: HELMERICH & PAYNE

Lease: HOME ROYALTY A-2 Test No.: 2

County: SEWARD Sec.: 17 Twp.: 31S Rng.: 34W

SAMPLER RECOVERY

Gas

Oil

Mud 4000

Water

Other

Pressure

TOTAL 4000

SAMPLER ANALYSIS

Resistivity ohms@ F

Chlorides ppm.

Gravity corrected @60F

PIT MUD ANALYSIS

Chlorides 6500

Resistivity ohms@ F

Viscosity 47

Mud Wt. 8.9

Filtrate 8.8

Other

PIPE RECOVERY

TOP

Resistivity ohms@ F

Chlorides ppm

MIDDLE

Resistivity ohms@ F

Chlorides ppm

BOTTOM

Resistivity ohms@ F

Chlorides ppm