

CONFIDENTIAL 15-175-21773

ORIGINAL 17-31-34W

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

RECEIVED
STATE CORPORATION COMMISSIONAPR 3 12015
2000

Test Ticket

Well Name & No. <u>Home Royalty A-4</u>	Test No. <u>1</u>	Date <u>12-6-99</u>
Company <u>Helmerich & Payne</u>	Zone Tested <u>KL "B"</u>	
Address <u>1579 East 21st Tulsa, OK 74114</u>	Elevation <u>2868'</u> KB <u>2857'</u> GL	
Co. Rep / Geo. <u>Brad Rine</u>	Cont. <u>Cheyenne #3</u>	Est. Ft. of Pay <u> </u> Por. <u> </u> %
Location: Sec. <u>17</u> Twp. <u>31E</u> Rge. <u>34W</u> Co. <u>Seward</u> State <u>Ks</u>		
No. of Copies <u>Norm</u> Distribution Sheet (Y, N) <u> </u> Turnkey (Y, N) <u>N</u> Evaluation (Y, N) <u> </u>		

Interval Tested 4586' **RELEASED** 4630' Initial Str Wt/Lbs. 64,000 Unseated Str Wt/Lbs. 74,000
 Anchor Length 44' Wt. Set Lbs. 26,000 Wt. Pulled Loose/Lbs. 90,000
 Top Packer Depth 4581' Tool Weight 5,000
 Bottom Packer Depth 4586' Hole Size — 7 7/8" ☒ Rubber Size — 6 3/4" ☒
 Total Depth 4630' Wt. Pipe Run Drill Collar Run 291' H-90
 Mud Wt. 9.1 LCM 5 Vis. 46 WL 9.6 Drill Pipe Size 7 1/2 XH Ft. Run 437'
 Blow Description B.O.B in 1/2 min. Gas to Surface 4 1/2 min.

Bleed off throughout
B.O.B @ open - gauging gas, oil spray 5 min. to open.
Bleed off throughout (reached fluid @ 5:15 a.m. left hand until daylight) by order of

Recovery — Total Feet 2976' GIP B.T.S. Ft. in DC 291' Ft. in DP 2685'
 Rec. 2852' Feet Of clean gas & oil (reversed) %gas 40 %oil 40 %water %mud
 Rec. 124' Feet Of underside sub %gas 35 %oil 30 %water 35 %mud
 Rec. Feet Of (Heavy oil cut gas & mud) %gas %oil %water %mud
 Rec. Feet Of %gas %oil %water %mud
 Rec. Feet Of %gas %oil %water %mud
 BHT 124° °F Gravity 40 °API D @ 30° °F Corrected Gravity 43 °API
 RW @ °F Chlorides 1,300 ppm Recovery Chlorides 1,300 ppm System

	AK-1	Alpine	PSI Recorder No.	T-On Location
(A) Initial Hydrostatic Mud	2255	2216	2346	18:50 p.m.
(B) First Initial Flow Pressure	266	181	(depth) 4593'	T-Started 20:00 p.m.
(C) First Final Flow Pressure	277	244	PSI Recorder No. 11058	T-Open 23:00 p.m.
(D) Initial Shut-In Pressure	1297	1278	(depth) 4627'	T-Pulled 04:15 a.m.
(E) Second Initial Flow Pressure	388	308	PSI Recorder No. <u> </u>	T-Out 10:55 a.m.
(F) Second Final Flow Pressure	669	632	(depth) <u> </u>	T-Off Location <u> </u>
(G) Final Shut-In Pressure	1286	1262	PSI Initial Opening 15	Test <u>x</u>
(Q) Final Hydrostatic Mud	2244	2181	PSI Initial Shut-in 60	Jars <u>x</u>
			Final Flow 60	Safety Joint <u>x</u>
			Final Shut-in 180	Straddle <u> </u>
				Circ. Sub <u>35"</u>

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF 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, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST, TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By

Our Representative

Post-It™ brand fax transmittal memo 7671 # of pages > 5

To <u>Tam Heinicke</u>	From <u>Brad Rine</u>
Co. <u>H + P</u>	Co. <u>Home Royalty A-4</u>
Dept. <u>Geology</u>	Phone <u>(316)</u>
Fax <u>(918) 748-5420</u>	Fax <u>772-6829</u>

CONFIDENTIAL

TRILOBITE TESTING L.L.C.

ORIGINAL

OPERATOR : Helmerich & Payne
 WELL NAME: Home Royalty A-4
 LOCATION : 17-31s-34w Seward, county
 INTERVAL : 4586.00 To 4630.00 ft

DATE 12-6-99
 KB 2868.00 ft
 GR 2857.00 ft
 TD 4630.00 ft

TICKET NO: 12015
 FORMATION: KC "B"
 TEST TYPE: CONV.
 DST #1

RECORDED DATA

Field	1	2	3	4	TIME DATA
PF 15 Rec.	11058	2346			PF Fr. 2300 to 2315 hr
SI 60 Range (Psi)	4500.0	4995.0	0.0	0.0	IS Fr. 2315 to 1215 hr
SR 60 Clock (hrs)	12	alpin	0.0	0.0	SF Fr. 1215 to 0115 hr
PS 180 Depth (ft)	4627.0	4593.0	0.0	0.0	FS Fr. 0115 to 0415 hr

Field	1	2	3	4
A. Init Hydro	2255.0	2216.0	0.0	0.0
B. First Flow	266.0	181.0	0.0	0.0
Bl. Final Flow	277.0	244.0	0.0	0.0
C. In Shut-in	1297.0	1278.0	0.0	0.0
D. Init Flow	388.0	308.0	0.0	0.0
E. Final Flow	669.0	632.0	0.0	0.0
F. In Shut-in	1286.0	1262.0	0.0	0.0
G. Final Hydro	2244.0	2181.0	0.0	0.0
Inside/Outside	1	0		

T STARTED 2000 hr
 T ON BOTM 2257 hr
 T OPEN 2300 hr
 T PULLED 0415 hr
 T OUT 1055 hr

TOOL DATA

Tool Wt.	5000.00	lbs
Wt Set On Packer	26000.00	lbs
Wt Pulled Loose	90000.00	lbs
Initial Str Wt	64000.00	lbs
Unseated Str Wt	74000.00	lbs
Bot Choke	0.75	in
Hole Size	7.88	in
D Col. ID	2.25	in
D. Pipe ID	3.50	in
D.C. Length	291.00	ft
D.P. Length	4329.00	ft

RECOVERY

Net Fluid 2976.00 ft of 291.00 ft in DC and 2685.00 ft in DP
 2852.00 ft of clean gassy oil reversed out 60%g 40%
 124.00 ft of under circ. sub heavy oil cut gassy drilling
 0.00 ft of mud 30%g 35%g 35%g

SALINITY 1300.00 P.P.M. A.P.I. Gravity 43.00

BLOW DESCRIPTION

I.O.-B.O.B. in 1/2 min. Gas to surface
 in 4 1/2 min.

I.S.I.- Bleed off throughout

F.F.- B.O.B. @ open gauging gas.
 t 56 min. into open

F.S.I.- Bleed off throughout.
 uid @ 5:15am left hanging until daylight
 s. by order of geo:

SAMPLES: gas
 SENT TO: Caraway, Liberal, Ka

Test Successful: Y

MUD DATA

Mud Type	chem
Weight	9.10 lb/cf
Vis.	46.00 S/L
W.L.	9.60 in3
F.C.	0.00 in
Mud Drop N	

Amt. of fill	0.00	ft
Btm. H. Temp.	124.00	F
Hole Condition	good	
% Porosity	0.00	
Packer Size	6.75	in
No. of Packers	2	
Cushion Amt.	0.00	
Cushion Type		
Reversed Out N		
Tool Chased N		
Tester	Shane McBride	
Co. Rep.	Brad Rine	
Contr.	Cheyenne	
Rig #	3	
Unit #		
Pump T.		

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APR 25 2002

FROM CONFIDENTIAL

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 STATE CORPORATION COMMISSION

APR 3 2000

CONSERVATION DIVISION
 Wichita, Kansas

CONFIDENTIAL

*** TOOL DIAGRAM *** CONV.

ORIGINAL

WELL NAME: Home Royalty A-4

LOCATION : 17-31s-34w Seward, county

TICKET No. 12015 D.S.T. No. 1 DATE 12-6-99

TOTAL TOOL TO BOTTOM OF TOP PACKERS 30

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 44

TOTAL TOOL 74

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single 1 Total 31

TOTAL ASSEMBLY 105

D.C. ABOVE TOOLS.Stands5 Single Total 291

D.P. ABOVE TOOLS.Stands69 Single 1 Total 4267

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4663

TOTAL DEPTH 4630

TOTAL DRILL PIPE ABOVE K.B. 33

REMARKS:

Gas: .6 cubic ft.

Oil: 2600 ml

Water:

Mud:

Total: 2600 ml oil - .6 cubic ft gas

Pressure 560 psi.

BHS

P.O. SU	4555
C.O. SUB 1'	4561
S.I. TOOL 5'	4564
sampler 3'	4569
HMV 5'	4574
JARS 5'	4576
SAFETY JOINT 2'	4581
PACKER top	4586
PACKER bottom	4587
DEPTH 4586	4592
STUBB 1'	4593
ANCHOR 5' perf	4593
1' c.o.	4593
alpine recorder	4624
31' drillpipe	4625
1' c.o.	
T.C.	
DEPTH	
ak-1 recorder	4627
BULLNOSE 5' bullplug	4630
T.D.	4630

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STATE CORPORATION COMMISSION

APR 3 2000

REGISTRATION DIVISION
VICTORIA, KANSAS

CONFIDENTIAL

GAS RECOVERY

ORIGINAL

COMPANY: Helmerich & Payne

DATE: 12-6-99

WELL NAME: Home Royalty A-4

KB Elev: 2868.00 ft TICKET #12015 DST #1

WELL LOCATION: 17-31s-34w Seward, county

GR Elev: 2857.00 ft FORMATION: KC "B"

INTERVAL Fr.: 4586.00 To 4630.00 T.D.: 4630.00 ft TEST TYPE: CONV.

GAS RECOVERY MEASURED WITH merla

***** GAS RATES FOR FLOW #1

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
5	0.75	4	0	156.0
10	0.75	5	0	175.0
15	0.75	2	0	93.0

***** GAS RATES FOR FLOW #2

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
10	0.50	0	2	8.9
20	0.25	0	22	7.9
30	0.25	0	14	6.3
40	0.25	0	10	5.3
50	0.25	0	7	4.4
60	0.25	0	5	3.7

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CONSERVATION DIVISION
Topeka, Kansas

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Temperature (DEG F)

Flag Points
PC PSIG
<Min.> Paying
Helmerich & Payne
B: 0.00 2216.70
C: 12.00 181.09
D: 57.00 244.32
E: 0.00 1279.02
F: 58.00 308.00
G: 182.00 632.00
Q: 0.00 1262.30
2101.23

TEST HISTORY

12015 DST #1 Home Royalty A-4

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STATE DEPARTMENT OF REVENUE
APR 3 2000

DELEGATION DIVISION
Wichita, Kansas

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APR 25 2002
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