

15-109-20631

7-12s-33w

WELL NAME: Bertrand #1-7
COMPANY: Landmark Energy Exploration Inc
LOCATION: 7-12S-33W
Logan County Kansas
DATE: 09/16/96

TRILOBITE TESTING L.L.C.

OPERATOR : Landmark Energy Exp. Inc
 WELL NAME: Bertrand #1-7
 LOCATION : 7-12S-33W, Logan Cty KS
 INTERVAL : 4161.00 To 4186.00 ft

DATE 09/14/96
 KB 3168.00 ft
 GR 3163.00 ft
 TD 4186.00 ft

TICKET NO: 9532
 FORMATION: "D"
 TEST TYPE: CONV

DST #1

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF 30	Rec.	11057	11057	11058			PF Fr. 1045 to 1115 hr
SI 30	Range(Psi)	4500.0	4500.0	4475.0	0.0	0.0	IS Fr. 1115 to 1145 hr
SF 30	Clock(hrs)	12	12	12			SF Fr. 1145 to 1215 hr
FS 30	Depth(ft)	4162.0	4162.0	4183.0	0.0	0.0	FS Fr. 1215 to 1245 hr

	Field	1	2	3	4	
A. Init Hydro	2230.0	2201.0	0.0	0.0	0.0	T STARTED 0920 hr
B. First Flow	78.0	50.0	0.0	0.0	0.0	T ON BOTM 1043 hr
B1. Final Flow	67.0	50.0	0.0	0.0	0.0	T OPEN 1045 hr
C. In Shut-in	1163.0	1141.0	0.0	0.0	0.0	T PULLED 1245 hr
D. Init Flow	78.0	63.0	0.0	0.0	0.0	T OUT 1420 hr
E. Final Flow	67.0	63.0	0.0	0.0	0.0	
F. Fl Shut-in	1107.0	1090.0	0.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2208.0	2183.0	0.0	0.0	0.0	Tool Wt. 4000.00 lbs
Inside/Outside	I	I	O			Wt Set On Packer 26000.00 lbs
						Wt Pulled Loose 55000.00 lbs
						Initial Str Wt 44000.00 lbs
						Unseated Str Wt 44000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 0.00 ft
						D.P. Length 4166.00 ft

RECOVERY

Tot Fluid 40.00 ft of 0.00 ft in DC and 40.00 ft in DP
 40.00 ft of Watery mud - 50% water, 50% mud

RW .36 @ 55 F

SALINITY 22400.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow -
 Weak .125" blow

Initial Shutin -
 No return

Final Flow -
 Weak .125" blow in 16 min, stayed .125"

Final Shutin -
 No return

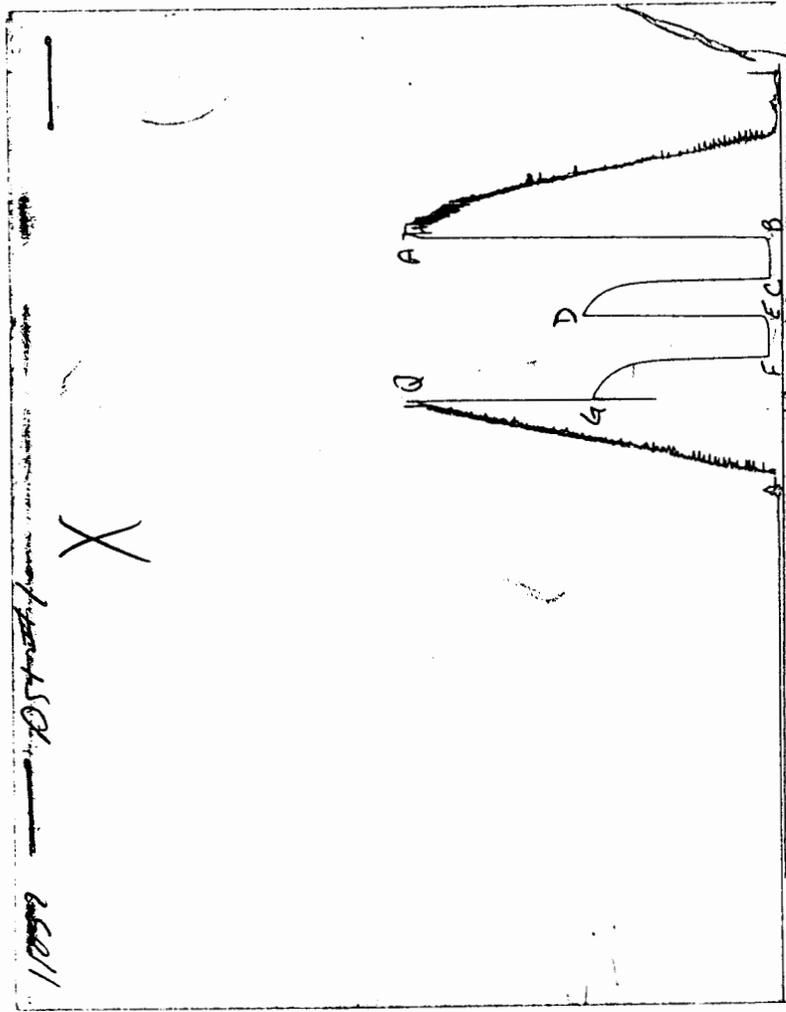
MUD DATA-----

Mud Type	Chemical
Weight	9.20 lb/cf
Vis.	51.00 S/L
W.L.	10.40 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	113.00 F
Hole Condition	
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	
Tester	Shane McBride
Co. Rep.	Craig Caulk
Contr.	LD
Rig #	
Unit #	
Pump T.	

SAMPLES:
 SENT TO:

Test Successful: Y

CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

*** TOOL DIAGRAM *** CONV

WELL NAME: Bertrand #1-7

LOCATION : 7-12S-33W, Logan Cty KS

TICKET No. 9532 D.S.T. No. 1 DATE 09/14/96

TOTAL TOOL TO BOTTOM OF TOP PACKERS 22

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 25

TOTAL TOOL 47

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 47

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands Single Total 4166

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4213

TOTAL DEPTH 4186

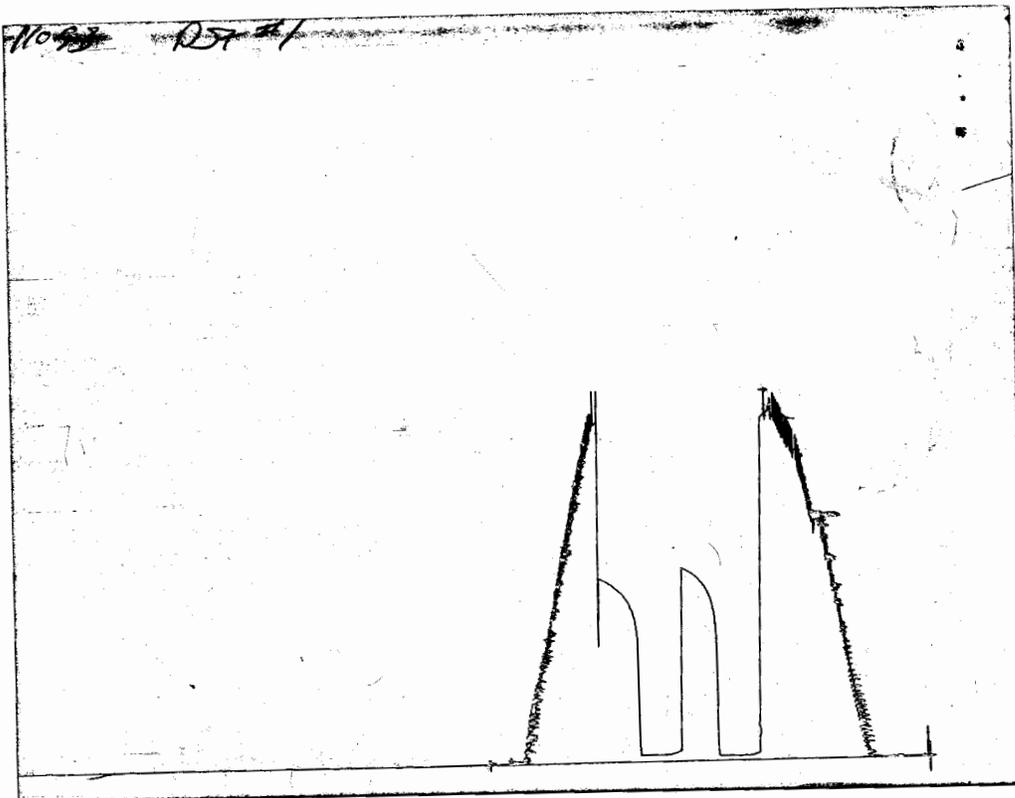
TOTAL DRILL PIPE ABOVE K.B. 27

REMARKS:

P.O. SUB	
C.O. SUB	4139
S.I. TOOL	4145
HMV	4150
JARS N/A	
SAFETY JOINT	4152
PACKER	4156
PACKER	4161
DEPTH 4161	
STUBB	4162
ANCHOR	
AK-1 recorder	4162
perf	
T.C.	
DEPTH	
AK-1 recorder	4183
BULLNOSE bull plug	
T.D.	4186

Well name Benthard
DST # 1
Recorder # 11057

A		2201	
B		50	
C		50	
D		1141	
E		63	
F		63	
G		1090	
H		2183	



TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 9532

Well Name & No. <u>Bestman #1-7</u>		Test No. <u>1</u>	Date <u>7-14-94</u>
Company <u>Landmark Energy Exploration Inc.</u>		Zone Tested <u>70' "D"</u>	
Address <u>1861 N Rock Road, Suite 205 Wichita, KS 67206</u>		Elevation <u>3148'</u>	KB <u>3163'</u> GL
Co. Rep / Geo. <u>Craig Casik</u>	Cont. <u>L.D.</u>	Est. Ft. of Pay	Por. %
Location: Sec. <u>7</u>	Twp. <u>12</u>	Rge. <u>33</u>	Co. <u>Logan</u> State <u>KS</u>
No. of Copies <u>Norm</u> Distribution Sheet (Y, N)	Turnkey (Y, N)	Evaluation (Y, N)	

Interval Tested <u>4161'</u>	<u>4186'</u>	Initial Str Wt./Lbs. <u>4400</u>	Unseated Str Wt./Lbs. <u>44000</u>
Anchor Length	<u>25'</u>	Wt. Set Lbs. <u>26000</u>	Wt. Pulled Loose/Lbs. <u>55,000</u>
Top Packer Depth	<u>4156'</u>	Tool Weight <u>4,000</u>	
Bottom Packer Depth	<u>4161'</u>	Hole Size — <u>7 7/8"</u>	Rubber Size — <u>6 3/4"</u>
Total Depth	<u>4186'</u>	Wt. Pipe Run	Drill Collar Run
Mud Wt. <u>9.2</u> LCM <u>1/2"</u> Vis. <u>51</u> WL <u>10.4</u>		Drill Pipe Size <u>4 1/2 XH</u>	Ft. Run <u>4166'</u>
Blow Description <u>Weak 1/8" in blow.</u>			

F.S.I: No return

F.F: weak 1/8" in Blow in 16 min stayed 1/8" in

F.S.I: No return

Recovery — Total Feet <u>40'</u>	GIP <u>—</u>	Ft. in DC <u>—</u>	Ft. in DP <u>40'</u>
Rec. <u>40'</u> Feet Of <u>Water, M.D</u>	%gas	%oil	<u>50</u> %water <u>50</u> %mud
Rec. _____ Feet Of _____	%gas	%oil	%water %mud
Rec. _____ Feet Of _____	%gas	%oil	%water %mud
Rec. _____ Feet Of _____	%gas	%oil	%water %mud

BHT 113° °F Gravity — °API D@ — °F Corrected Gravity — °API

RW .36 @ 55 °F Chlorides 22,400 ppm Recovery Chlorides 3,200 ppm System

(A) Initial Hydrostatic Mud	<u>2230</u> PSI	Recorder No. <u>11057</u>	T-Started <u>09:20 AM.</u>
(B) First Initial Flow Pressure	<u>78</u> PSI	(depth) <u>4162'</u>	T-Open <u>10:45 AM.</u>
(C) First Final Flow Pressure	<u>67</u> PSI	Recorder No. <u>11058</u>	T-Pulled <u>12:45 P.M.</u>
(D) Initial Shut-in Pressure	<u>1163</u> PSI	(depth) <u>4183'</u>	T-Out <u>14:20 P.M.</u>
(E) Second Initial Flow Pressure	<u>78</u> PSI	Recorder No. _____	
(F) Second Final Flow Pressure	<u>67</u> PSI	(depth) _____	
(G) Final Shut-in Pressure	<u>1107</u> PSI	Initial Opening <u>30</u>	Test <u>X</u> <u>600</u>
(H) Final Hydrostatic Mud	<u>2208</u> PSI	Initial Shut-in <u>30</u>	Jars _____

Final Flow 30 Safety Joint X 50

Final Shut-in 30 Straddle _____

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 [Signature]

Circ. Sub X N/C

Sampler _____

Extra Packer _____

Elect. Rec. _____

Other _____

TOTAL PRICE \$ 650

TRILOBITE TESTING L.L.C.

OPERATOR : Landmark Energy Exp Inc
 WELL NAME: Bertrand #1-7
 LOCATION : 7-12S-33W, Logan Cty KS
 INTERVAL : 4252.00 To 4282.00 ft

DATE 09/15/96
 KB 3168.00 ft TICKET NO: 9533 DST #2
 GR 3163.00 ft FORMATION: "H"
 TD 4282.00 ft TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF 30	Rec.	11057	11057	11058			PF Fr. 0325 to 0355 hr
SI 30	Range(Psi)	4500.0	4500.0	4475.0	0.0	0.0	IS Fr. 0355 to 0425 hr
SF 30	Clock(hrs)	12	12	12			SF Fr. 0425 to 0455 hr
FS 30	Depth(ft)	4253.0	4253.0	4279.0	0.0	0.0	FS Fr. 0455 to 0525 hr

	Field	1	2	3	4	
A. Init Hydro	2242.0	2238.0	0.0	0.0	0.0	T STARTED 0140 hr
B. First Flow	67.0	54.0	0.0	0.0	0.0	T ON BOTM 0323 hr
B1. Final Flow	56.0	54.0	0.0	0.0	0.0	T OPEN 0325 hr
C. In Shut-in	660.0	638.0	0.0	0.0	0.0	T PULLED 0525 hr
D. Init Flow	67.0	53.0	0.0	0.0	0.0	T OUT 0720 hr
E. Final Flow	56.0	53.0	0.0	0.0	0.0	
F. Fl Shut-in	694.0	688.0	0.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2208.0	2192.0	0.0	0.0	0.0	Tool Wt. 4000.00 lbs
Inside/Outside	I	I	O			Wt Set On Packer 26000.00 lbs
						Wt Pulled Loose 78000.00 lbs
						Initial Str Wt 45000.00 lbs
						Unseated Str Wt 45000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 0.00 ft
						D.P. Length 4258.00 ft

RECOVERY

Tot Fluid 5.00 ft of 0.00 ft in DC and 5.00 ft in DP
 5.00 ft of Drilling mud

SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow -
 Weak surface blow, died in 19 min

Initial Shutin -
 No return

Final Flow -
 No blow

Final Shutin -
 No return

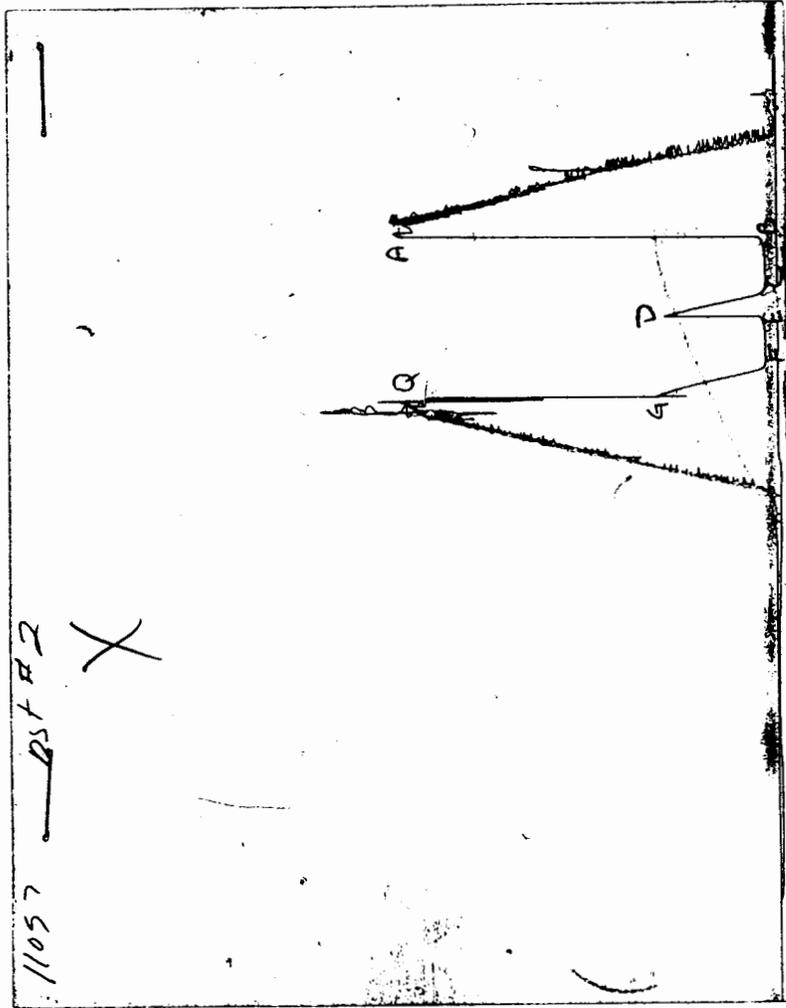
SAMPLES:
 SENT TO:

MUD DATA-----

Mud Type	Chemical
Weight	9.10 lb/cf
Vis.	51.00 S/L
W.L.	10.40 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	114.00 F
Hole Condition	
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	
Tester	Shane McBride
Co. Rep.	Craig Caulk
Contr.	LD Drilling
Rig #	
Unit #	
Pump T.	

Test Successful: Y

CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

*** TOOL DIAGRAM *** CONV

WELL NAME: Bertrand #1-7

LOCATION : 7-12S-33W, Logan Cty KS

TICKET No. 9533 D.S.T. No. 2 DATE 09/15/96

TOTAL TOOL TO BOTTOM OF TOP PACKERS 22

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 30

TOTAL TOOL 52

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 52

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands Single Total 4258

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4310

TOTAL DEPTH 4282

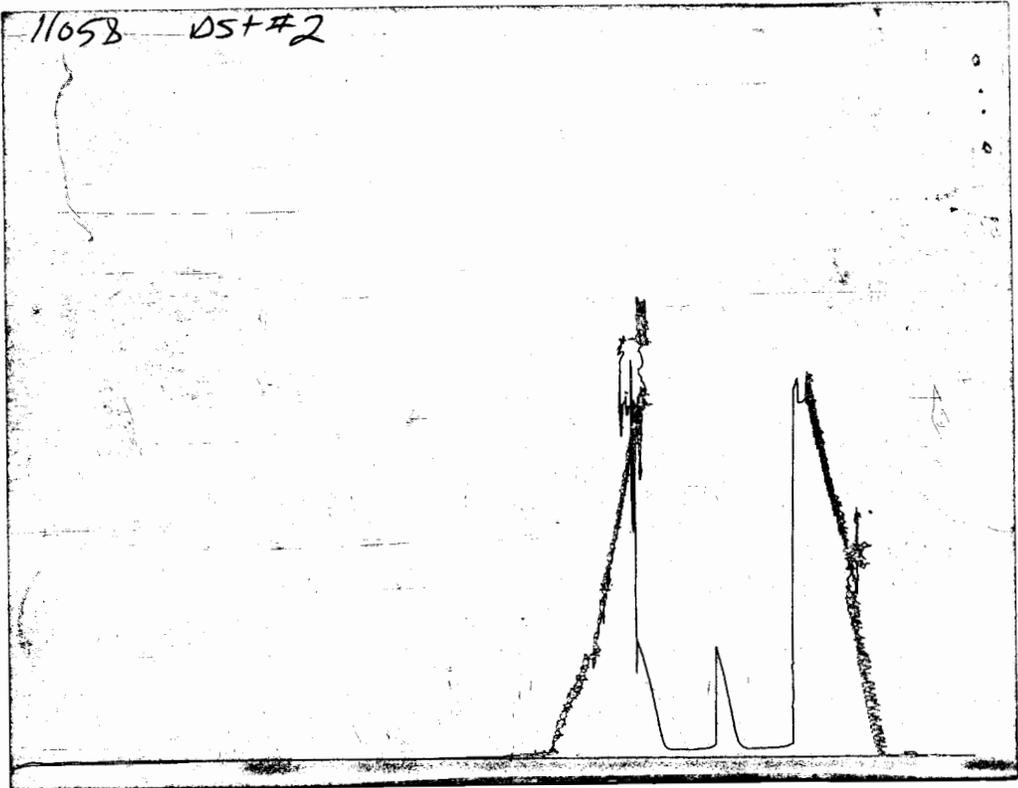
TOTAL DRILL PIPE ABOVE K.B. 28

REMARKS:

P.O. SUB	
C.O. SUB	4230
S.I. TOOL	4236
HMV	4241
JARS N/A	
SAFETY JOINT	4243
PACKER	4247
PACKER	4252
DEPTH 4252	
STUBB	4253
ANCHOR	
AK-1 recorder	4253
Perf	
T.C.	
DEPTH	
AK-1 recorder	4279
BULLNOSE Bull Plug	
T.D.	4282

Well name Bertrand
DST # 2
Recorder # 11057

A		2238	
B		54	
C		54	
D		638	
E		53	
F		53	
G		688	
H		2192	



TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 9533

Well Name & No. <u>Bertrand # 1-7</u>	Test No. <u>2</u>	Date <u>9-15-96</u>
Company <u>Landmark Energy Inc.</u>	Zone Tested <u>"H"</u>	
Address <u>1861 N. Rock Road, Suite 205 Wichita KS 67206</u>		Elevation <u>3168</u> KB <u>3163</u> GL
Co. Rep / Geo. <u>Gary Cault</u>	Cont. <u>L.D. Drilling</u>	Est. Ft. of Pay <u> </u> Por. <u> </u> %
Location: Sec. <u>7</u>	Twp. <u>12</u>	Rge. <u>33</u> Co. <u>Logan</u> State <u>KS</u>
No. of Copies <u>Norm</u> Distribution Sheet (Y, N) <u>N</u>	Turnkey (Y, N) <u>N</u>	Evaluation (Y, N) <u>N</u>

Interval Tested <u>4252'</u>	<u>4282'</u>	Initial Str Wt./Lbs. <u>45,000</u>	Unseated Str Wt./Lbs. <u>75,000</u>
Anchor Length <u> </u>	<u>30'</u>	Wt. Set Lbs. <u>26,000</u>	Wt. Pulled Loose/Lbs. <u>78,000</u>
Top Packer Depth <u> </u>	<u>4247'</u>	Tool Weight <u>4,000</u>	
Bottom Packer Depth <u> </u>	<u>4252'</u>	Hole Size — 7 7/8" <input checked="" type="checkbox"/>	Rubber Size — 6 3/4" <input checked="" type="checkbox"/>
Total Depth <u> </u>	<u>4282'</u>	Wt. Pipe Run <u> </u>	Drill Collar Run <u> </u>
Mud Wt. <u>9.1</u> LCM <u>1/2"</u> Vis. <u>51</u> WL <u>10.4</u>		Drill Pipe Size <u>4 1/2 X H</u>	Ft. Run <u>4258</u>
Blow Description <u>Weak surface blow died in 19 min.</u>			

I.S.I: No return

F.I: No Blow

F.S.I: No return

Recovery — Total Feet <u>5'</u>	GIP <u> </u>	Ft. in DC <u> </u>	Ft. in DP <u>5'</u>
Rec. <u>5'</u> Feet Of <u>DNIS MVD</u>	%gas	%oil	%water <u>100</u> %mud
Rec. <u> </u> Feet Of <u> </u>	%gas	%oil	%water <u> </u> %mud
Rec. <u> </u> Feet Of <u> </u>	%gas	%oil	%water <u> </u> %mud
Rec. <u> </u> Feet Of <u> </u>	%gas	%oil	%water <u> </u> %mud
Rec. <u> </u> Feet Of <u> </u>	%gas	%oil	%water <u> </u> %mud

BHT 114° °F Gravity °API D@ °F Corrected Gravity °API

RW @ °F Chlorides ppm Recovery Chlorides 3,200 ppm System

- (A) Initial Hydrostatic Mud 2242 PSI Recorder No. 11057 T-Started 01:40 AM
- (B) First Initial Flow Pressure 67 PSI (depth) 4253' T-Open 03:25 AM
- (C) First Final Flow Pressure 56 PSI Recorder No. 11058 T-Pulled 05:25 AM
- (D) Initial Shut-in Pressure 660 PSI (depth) 4279' T-Out 07:20 AM
- (E) Second Initial Flow Pressure 67 PSI Recorder No.
- (F) Second Final Flow Pressure 56 PSI (depth)
- (G) Final Shut-in Pressure 694 PSI Initial Opening 30 Test X 600
- (H) Final Hydrostatic Mud 2208 PSI Initial Shut-in 30 Jars

Final Flow 30 Safety Joint X 50
 Final Shut-in 30 Straddle

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 [Signature]

Our Representative [Signature]

Revised 1 new packer Circ. Sub X N/C h
 Sampler
 Extra Packer
 Elect. Rec.
 Other
 TOTAL PRICE \$ 650

TRILOBITE TESTING L.L.C.

OPERATOR : Landmark Energy Exp Inc
 WELL NAME: Bertrand #1-7
 LOCATION : 7-12S-33W, Logan Cty KS
 INTERVAL : 4276.00 To 4308.00 ft

DATE 09/15/96
 KB 3168.00 ft TICKET NO: 9534 DST #3
 GR 3163.00 ft FORMATION: "I"
 TD 4308.00 ft TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF 30	Rec.	11057	11057	11058			PF Fr. 1647 to 1717 hr
SI 30	Range(Psi)	4500.0	4500.0	4475.0	0.0	0.0	IS Fr. 1717 to 1747 hr
SF 30	Clock(hrs)	12	12	12			SF Fr. 1747 to 1817 hr
FS 30	Depth(ft)	4277.0	4277.0	4305.0	0.0	0.0	FS Fr. 1817 to 1847 hr

	Field	1	2	3	4	
A. Init Hydro	2355.0	2355.0	0.0	0.0	0.0	T STARTED 1425 hr
B. First Flow	33.0	31.0	0.0	0.0	0.0	T ON BOTM 1645 hr
B1. Final Flow	22.0	31.0	0.0	0.0	0.0	T OPEN 1647 hr
C. In Shut-in	1174.0	1175.0	0.0	0.0	0.0	T PULLED 1847 hr
D. Init Flow	33.0	40.0	0.0	0.0	0.0	T OUT 2030 hr
E. Final Flow	22.0	40.0	0.0	0.0	0.0	
F. Fl Shut-in	1163.0	158.0	0.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2208.0	2226.0	0.0	0.0	0.0	Tool Wt. 4000.00 lbs
Inside/Outside	I	I	O			Wt Set On Packer 26000.00 lbs

RECOVERY

Tot Fluid 5.00 ft of 0.00 ft in DC and 5.00 ft in DP
 5.00 ft of Drilling mud

Initial Str Wt 45000.00 lbs
 Unseated Str Wt 45000.00 lbs
 Bot Choke 0.75 in
 Hole Size 7.88 in
 D Col. ID 2.25 in
 D. Pipe ID 3.80 in
 D.C. Length 0.00 ft
 D.P. Length 4289.00 ft

SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow -
 Weak .125" blow

Initial Shutin -
 No return

Final Flow -
 No blow, flushed tool after 7 min
 surge, no blow, flushed tool again
 after 13 min, no blow

Final Shutin -
 No return

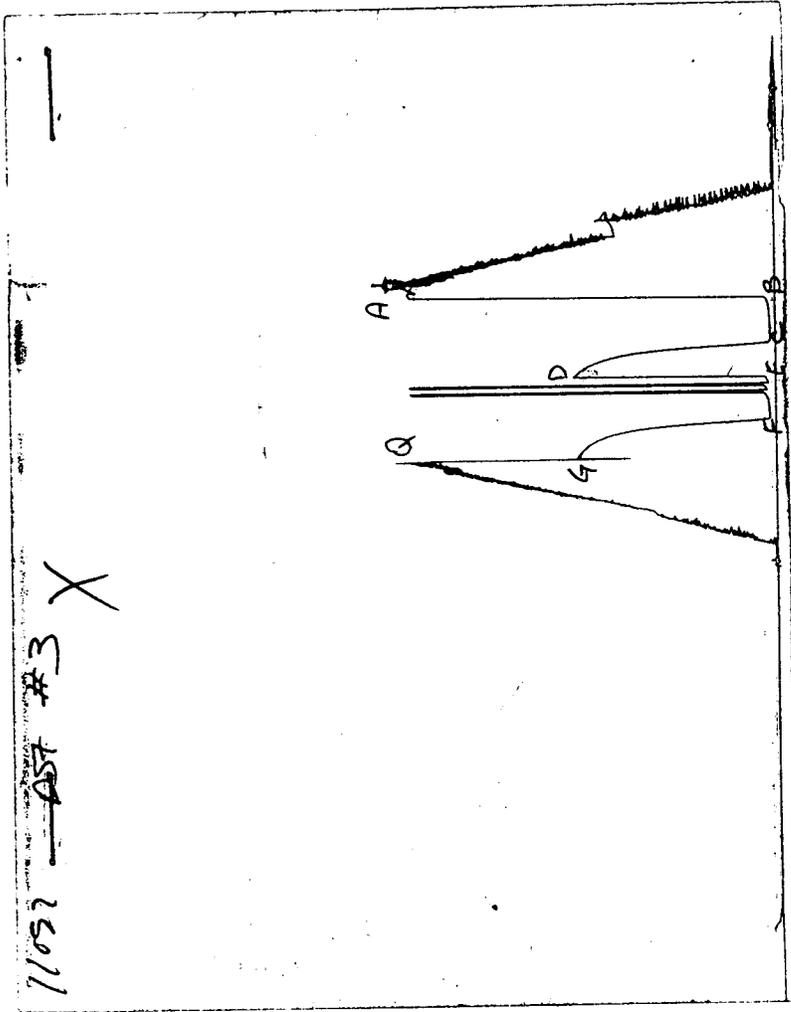
SAMPLES:

SENT TO:

MUD DATA-----
 Mud Type Chemical
 Weight 9.20 lb/cf
 Vis. 54.00 S/L
 W.L. 11.20 in3
 F.C. 0.00 in
 Mud Drop
 Amt. of fill 0.00 ft
 Btm. H. Temp. 114.00 F
 Hole Condition
 % Porosity 0.00
 Packer Size 6.75 in
 No. of Packers 2
 Cushion Amt. 0.00
 Cushion Type
 Reversed Out
 Tool Chased
 Tester Shane McBride
 Co. Rep. Craig Caulk
 Contr. LD Drilling
 Rig #
 Unit #
 Pump T.

Test Successful: Y

CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

*** TOOL DIAGRAM *** CONV

WELL NAME: Bertrand #1-7

LOCATION : 7-12S-33W, Logan Cty KS

TICKET No. 9534 D.S.T. No. 3 DATE 09/15/96

TOTAL TOOL TO BOTTOM OF TOP PACKERS 22

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 32

TOTAL TOOL 54

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 54

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands Single Total 4289

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4343

TOTAL DEPTH 4308

TOTAL DRILL PIPE ABOVE K.B. 35

REMARKS:

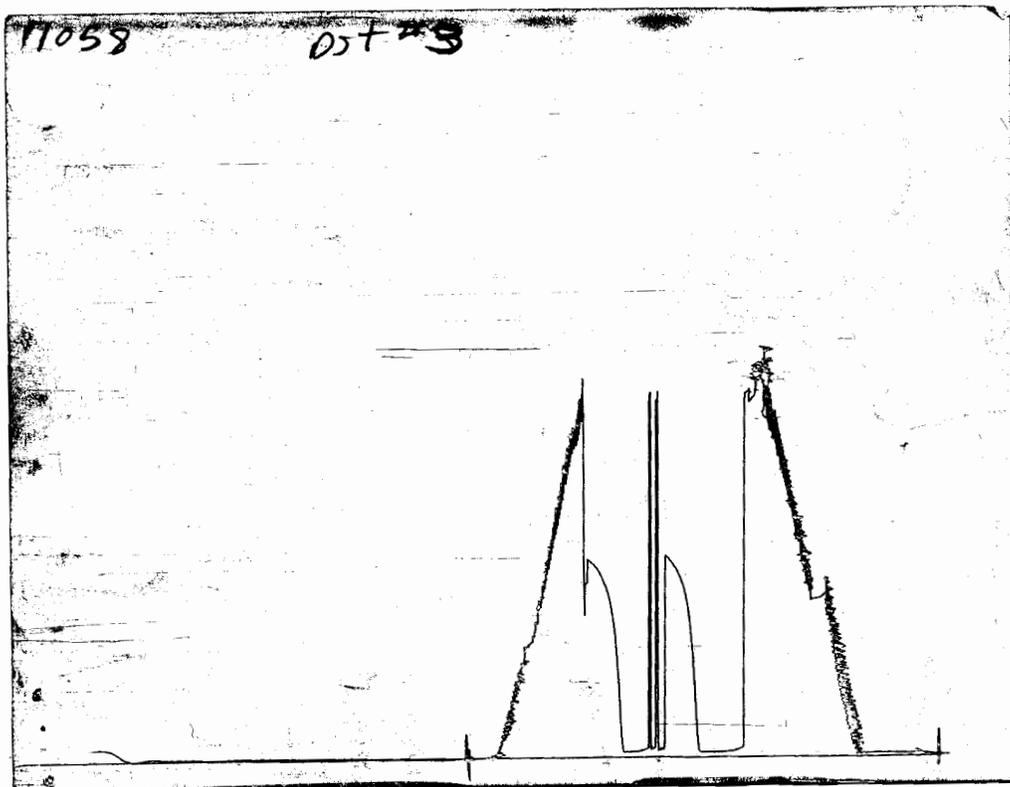
P.O. SUB	
C.O. SUB	4254
S.I. TOOL	4260
HMV	4265
JARS N/A	
SAFETY JOINT	4267
PACKER	4271
PACKER	4276
DEPTH 4276	
STUBB	4277
ANCHOR	
AK-1 recorder	4277
Perf	
T.C.	
DEPTH	
AK-1 recorder	4305
BULLNOSE Bull Plug	
T.D.	4308

Well-name Bertrand

DST # 3

Recorder # 11057

A	2355	1
B	31	2
C	31	3
D	1175	4
E	40	5
F	40	6
G	1158	7
H	2226	8
		9
		10
		11
		12



TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 9534

Well Name & No. <u>Bertrand #1-7</u>	Test No. <u>3</u>	Date <u>9-15-96</u>
Company <u>Landmark Energy Inc.</u>	Zone Tested <u>"I"</u>	
Address <u>1861 N. Rock Road, Suite 205 Wichita KS 67206</u>	Elevation <u>3168</u>	KB <u>3163</u> GL
Co. Rep / Geo. <u>Craig Cook</u>	Cont. <u>L.D. Dilling</u>	Est. Ft. of Pay _____ Por. _____ %
Location: Sec. <u>7</u> Twp. <u>12</u> Rge. <u>33</u>	Co. <u>Logan</u>	State <u>K-5</u>
No. of Copies <u>None</u> Distribution Sheet (Y, N) _____	Turnkey (Y, N) <u>N</u>	Evaluation (Y, N) _____

Interval Tested <u>4276'</u> - <u>4308'</u>	Initial Str Wt./Lbs. <u>45,000</u>	Unseated Str Wt./Lbs. <u>45,000</u>
Anchor Length _____	Wt. Set Lbs. <u>26,000</u>	Wt. Pulled Loose/Lbs. <u>74,000</u>
Top Packer Depth _____	Tool Weight <u>4,000</u>	
Bottom Packer Depth <u>4276'</u>	Hole Size - <u>7 7/8"</u> ✓	Rubber Size - <u>6 3/4"</u> ✓
Total Depth <u>4308</u>	Wt. Pipe Run _____	Drill Collar Run _____
Mud Wt. <u>9.2</u> LCM <u>#1/2</u> Vis. <u>54</u> WL <u>11.2</u>	Drill Pipe Size <u>4 1/2 XH</u>	Ft. Run <u>4289'</u>
Blow Description <u>weak 1/2" in Blow</u>		

I.S.I. No return

F.E. No Blow Flush tool after 7 min surge no blow flush again after 13 no Blow.

F.S.I. No return

Recovery - Total Feet <u>5'</u>	GIP _____	Ft. in DC _____	Ft. in DP <u>5'</u>
Rec. <u>5'</u> Feet Of <u>Oil & mud</u>	%gas _____	%oil _____	%water <u>100</u> %mud _____
Rec. _____ Feet Of _____	%gas _____	%oil _____	%water _____ %mud _____
Rec. _____ Feet Of _____	%gas _____	%oil _____	%water _____ %mud _____
Rec. _____ Feet Of _____	%gas _____	%oil _____	%water _____ %mud _____

BHT 114° °F Gravity _____ °API D@ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 4,000 ppm System

(A) Initial Hydrostatic Mud <u>2355</u> PSI	Recorder No. <u>11057</u>	T-Started <u>14:25 P.M.</u>
(B) First Initial Flow Pressure <u>33</u> PSI	(depth) <u>4277'</u>	T-Open <u>16:47 P.M.</u>
(C) First Final Flow Pressure <u>22</u> PSI	Recorder No. <u>11058</u>	T-Pulled <u>18:42 P.M.</u>
(D) Initial Shut-in Pressure <u>1174</u> PSI	(depth) <u>4305'</u>	T-Out <u>20:30 P.M.</u>
(E) Second Initial Flow Pressure <u>33</u> PSI	Recorder No. _____	
(F) Second Final Flow Pressure <u>22</u> PSI	(depth) _____	
(G) Final Shut-in Pressure <u>1163</u> PSI	Initial Opening <u>30</u>	Test <u>X</u> <u>600</u>
(H) Final Hydrostatic Mud <u>2208</u> PSI	Initial Shut-in <u>30</u>	Jars _____

Final Flow 30 Safety Joint X 50

Final Shut-in 30 Straddle _____

Circ. Sub X N/C

Sampler _____

Extra Packer _____

Elect. Rec. _____

Other _____

TOTAL PRICE \$ 650

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 [Signature]

TRILOBITE TESTING L.L.C.

OPERATOR : Landmark Energy Exp Inc
 WELL NAME: Bertrand #1-7
 LOCATION : 7-12S-33W, Logan Cty KS
 INTERVAL : 4306.00 To 4334.00 ft

DATE 09/16/96
 KB 3168.00 ft TICKET NO: 9535 DST #4
 GR 3163.00 ft FORMATION: "J"
 TD 4334.00 ft TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF 30	Rec.	11058	11058	11057			PF Fr. 0505 to 0535 hr
SI 30	Range(Psi)	4475.0	4475.0	4500.0	0.0	0.0	IS Fr. 0535 to 0605 hr
SF 30	Clock(hrs)	12	12	12			SF Fr. 0605 to 0635 hr
FS 30	Depth(ft)	4329.0	4329.0	4307.0	0.0	0.0	FS Fr. 0635 to 0705 hr

	Field	1	2	3	4	
A. Init Hydro	2311.0	2291.0	0.0	0.0	0.0	T STARTED 0330 hr
B. First Flow	33.0	19.0	0.0	0.0	0.0	T ON BOTM 0502 hr
B1. Final Flow	22.0	19.0	0.0	0.0	0.0	T OPEN 0505 hr
C. In Shut-in	1120.0	1113.0	0.0	0.0	0.0	T PULLED 0705 hr
D. Init Flow	33.0	24.0	0.0	0.0	0.0	T OUT 0835 hr
E. Final Flow	33.0	24.0	0.0	0.0	0.0	
F. Fl Shut-in	1131.0	1113.0	0.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2278.0	2247.0	0.0	0.0	0.0	Tool Wt. 4000.00 lbs
Inside/Outside	O	O	I			Wt Set On Packer 26000.00 lbs

RECOVERY

Tot Fluid 40.00 ft of 0.00 ft in DC and 40.00 ft in DP
 40.00 ft of Watery mud - 30% water, 70% mud

Initial Str Wt	45000.00 lbs
Unseated Str Wt	45000.00 lbs
Bot Choke	0.75 in
Hole Size	7.88 in
D Col. ID	2.25 in
D. Pipe ID	3.80 in
D.C. Length	0.00 ft
D.P. Length	4289.00 ft

RW .38 @ 50 F

SALINITY 24000.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow -
 Weak .125" blow

Initial Shutin -
 No return

Final Flow -
 Weak surface blow in 15 min

Final Shutin -
 No return

MUD DATA-----

Mud Type	Chemical
Weight	9.20 lb/cf
Vis.	54.00 S/L
W.L.	11.20 in3
F.C.	0.00 in
Mud Drop	

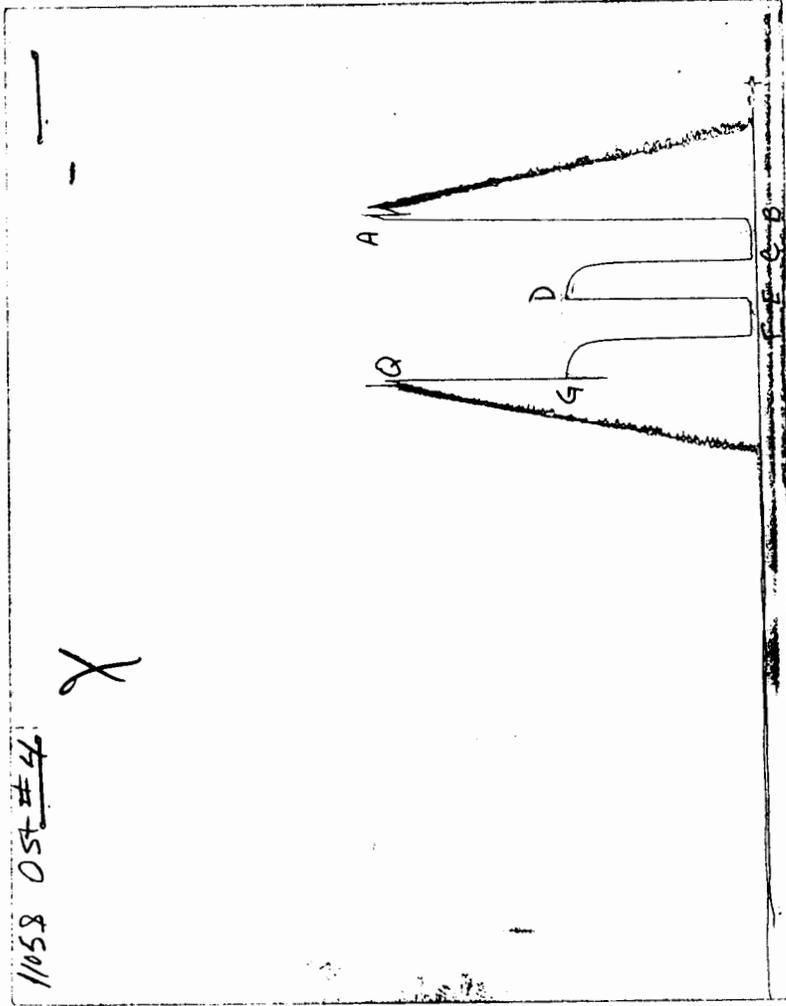
Amt. of fill	0.00 ft
Btm. H. Temp.	115.00 F
Hole Condition	
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	

SAMPLES:
 SENT TO:

Tester Shane McBride
 Co. Rep. Craig Caulk
 Contr. LD Drilling
 Rig #
 Unit #
 Pump T.

Test Successful: Y

CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

*** TOOL DIAGRAM *** CONV

WELL NAME: Bertrand #1-7

LOCATION : 7-12S-33W, Logan Cty KS

TICKET No. 9535 D.S.T. No. 4 DATE 09/16/96

TOTAL TOOL TO BOTTOM OF TOP PACKERS 22

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 28

TOTAL TOOL 50

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 50

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands Single Total 4289

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4339

TOTAL DEPTH 4334

TOTAL DRILL PIPE ABOVE K.B. 5

REMARKS:

P.O. SUB	
C.O. SUB	4284
S.I. TOOL	4290
HMV	4295
JARS N/A	
SAFETY JOINT	4297
PACKER	4301
PACKER	4306
DEPTH 4306	
STUBB	4307
ANCHOR	
AK-1 recorder	4307
Perf	
T.C. DEPTH	
AK-1 recorder	4329
BULLNOSE Bull Plug	
T.D.	4334

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 9535

Well Name & No. <u>Burtrand #1-7</u>	Test No. <u>4</u>	Date <u>9-16-96</u>
Company <u>Landmark Energy Inc.</u>	Zone Tested <u>"J"</u>	
Address <u>1861 N. Lock Road, Suite 205 Wichita KS 67206</u>	Elevation <u>3168</u>	KB <u>3163GL</u>
Co. Rep / Geo. <u>Craig Clark</u>	Cont. <u>L.D. Drilling</u>	Est. Ft. of Pay _____ Por. _____ %
Location: Sec. <u>7</u>	Twp. <u>12</u>	Rge. <u>33</u> Co. <u>Logan</u> State <u>KS</u>
No. of Copies <u>Norm.</u> Distribution Sheet (Y, N) _____	Turnkey (Y, N) _____	Evaluation (Y, N) _____

Interval Tested 4306' — 4334' Initial Str Wt./Lbs. 45,000 Unseated Str Wt./Lbs. 45,000
Anchor Length _____ 28' Wt. Set Lbs. 24,000 Wt. Pulled Loose/Lbs. 51,000
Top Packer Depth _____ 4301' Tool Weight 4,000
Bottom Packer Depth _____ 4306' Hole Size — 7 7/8" ✓ Rubber Size — 6 3/4" ✓
Total Depth _____ 4334' Wt. Pipe Run _____ Drill Collar Run _____
Mud Wt. 9.2 LCM Trace Vis. 5.4 WL 11.2 Drill Pipe Size 4 1/2 x H Ft. Run 4289'
Blow Description Weak 1/8" in blow

I.S.I: No return

F.F: Weak Surface Blow in 15min

F.S.I: no return

Recovery — Total Feet	GIP	Ft. in DC	Ft. in DP
<u>40'</u>	—	—	<u>40'</u>
Rec. <u>40'</u> Feet Of <u>Watery mud</u>		%gas _____ %oil _____	%water <u>30</u> %mud <u>70</u>
Rec. _____ Feet Of _____		%gas _____ %oil _____	%water _____ %mud _____
Rec. _____ Feet Of _____		%gas _____ %oil _____	%water _____ %mud _____
Rec. _____ Feet Of _____		%gas _____ %oil _____	%water _____ %mud _____
Rec. _____ Feet Of _____		%gas _____ %oil _____	%water _____ %mud _____

BHT 115° °F Gravity _____ °API D@ _____ °F Corrected Gravity _____ °API

RW .38 @ 50 °F Chlorides 24,000 ppm Recovery Chlorides 4,000 ppm System

(A) Initial Hydrostatic Mud 2311 PSI Recorder No. 11057 T-Started 03:30 AM.
(B) First Initial Flow Pressure 33 PSI (depth) 4307' T-Open 05:05 AM.
(C) First Final Flow Pressure 22 PSI Recorder No. 11058 T-Pulled 07:05 AM.
(D) Initial Shut-in Pressure 1120 PSI (depth) 4329' T-Out 08:35 AM.
(E) Second Initial Flow Pressure 33 PSI Recorder No. _____
(F) Second Final Flow Pressure 33 PSI (depth) _____
(G) Final Shut-in Pressure 1131 PSI Initial Opening 30 Test X 600
(H) Final Hydrostatic Mud 2278 PSI Initial Shut-in 30 Jars _____

Final Flow 30 Safety Joint X 50
Final Shut-in 30 Straddle _____

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Approved By _____

Our Representative _____

Circ. Sub X N/C
Sampler _____
Extra Packer _____
Elect. Rec. _____
Other _____
TOTAL PRICE \$ 650

Well name Bertrand
DST # 4
Recorder # 11058

			1
A		2291	2
B		19	3
C		19	4
D		1113	5
E		24	6
F		24	7
G		1113	8
H		2247	9
			10
			11
			12

