

WELL NAME

Merrill Ranch #1-21

COMPANY

Castelli Exploration Inc.

LOCATION

21-33s-16w

Comanche co Kansas

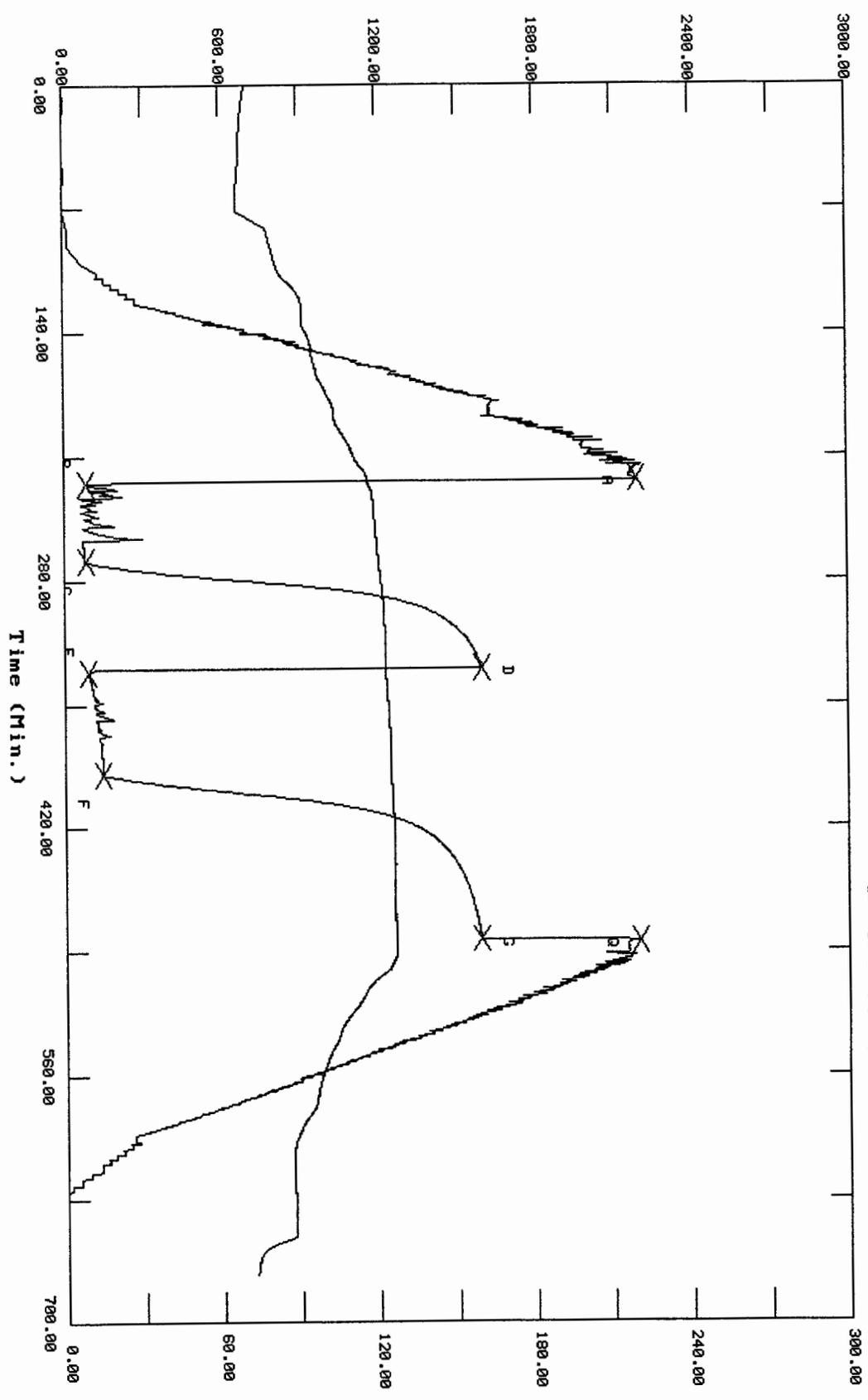
DATE

10/31/00

TEST HISTORY

TK#13244 DST#1 Merrill Ranch #1-21 Castelli Exploration

t (Min.)	P (PSig)	Flag Points
R: 0.00	2197.22	
B: 0.00	79.22	
C: 43.67	80.06	
D: 61.00	1595.38	
E: 0.00	87.61	
F: 57.67	144.43	
G: 93.67	1590.34	
Q: 0.00	2199.91	

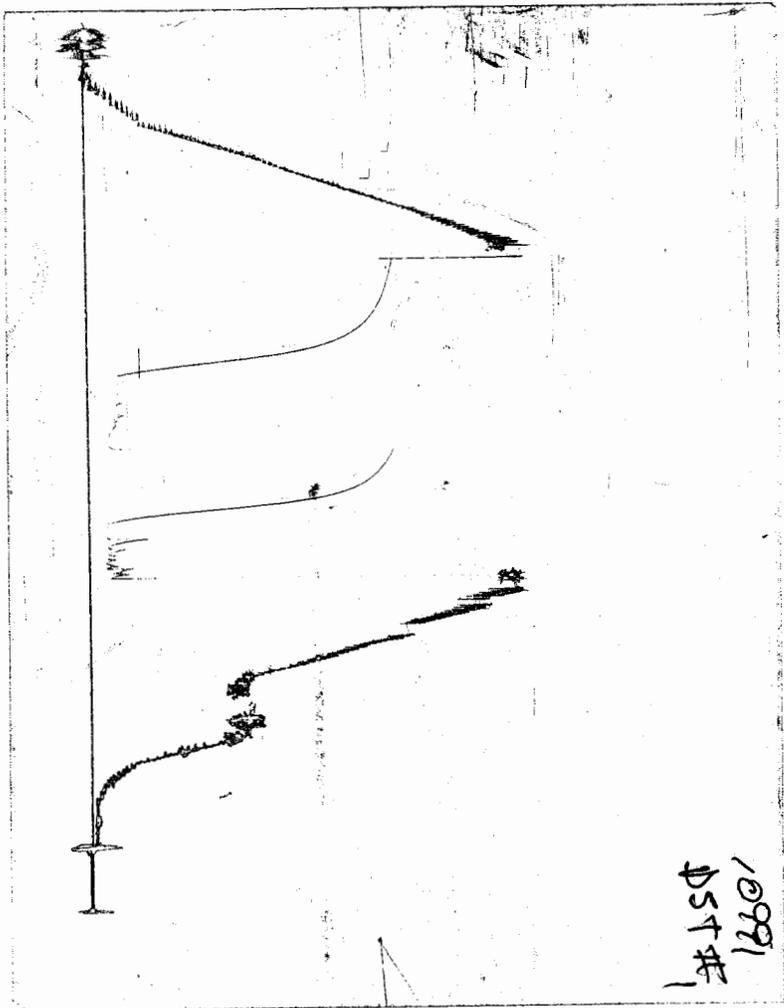


Pressure (PSig)

Temperature (DEG F)

Time (Min.)

CHART PAGE



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

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

No 13244

Test Ticket

Well Name & No. Merrill Ranch #1-21 Test No. #1 Date 10/28/00
 Company Castell Exploration Inc Zone Tested Pawnee
 Address 9300 Westgate Drive Suite 101 Oklahoma City OK Elevation 1784 KB 1774 GL
 Co. Rep / Geo. Craig Padgett Cont. Val Energy #2 Est. Ft. of Pay Por. %
 Location: Sec. 21 Twp. 33^S Rge. 16^W Co. Comanche State KS
 No. of Copies 5 Distribution Sheet (Y, N) Turnkey (Y, N) Evaluation (Y, N)

Interval Tested 4837 - 4889 Initial Str Wt./Lbs. 22000 Unseated Str Wt./Lbs. 92000
 Anchor Length 52' Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 110,000
 Top Packer Depth 4832' Tool Weight 2100
 Bottom Packer Depth 4837 Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Total Depth 4889 Wt. Pipe Run N/A Drill Collar Run 579.77
 Mud Wt. 8.9 LCM 3[#] Vis. 48 WL Drill Pipe Size 4 1/2 KH Ft. Run 4293.23

Blow Description IF: Strong blow h.o.b. in 90 sec.
ISI: Bled down for 5 min weak surface blow back
FF: Strong blow h.o.b. in 2 mins.
FST: Bled down for 5 mins. built back to 1/8"

Recovery — Total Feet	GIP	Ft. in DC	Ft. in DP
Rec. <u>80'</u> Feet Of <u>HGC WM</u>	<u>2204'</u>	<u>296'</u>	<u> </u>
Rec. <u>216</u> Feet Of <u>GEWCM</u>		<u>5% gas</u>	<u>80% water</u>
Rec. <u>2204</u> Feet Of <u>Gas in pipe</u>		<u> </u>	<u>15% mud</u>
Rec. <u> </u> Feet Of <u> </u>		<u> </u>	<u> </u>
Rec. <u> </u> Feet Of <u> </u>		<u> </u>	<u> </u>

BHT 126° °F Gravity °API D@ °F Corrected Gravity °API
 RW .2 @ 65 °F Chlorides 55,000 ppm Recovery Chlorides 5,000 ppm System

	AK-1	Alpine	PSI Recorder No.	T-On Location
(A) Initial Hydrostatic Mud	<u>2298</u>	<u>2197</u>	<u>2350</u>	<u>0430</u> 2:00
(B) First Initial Flow Pressure	<u>111</u>	<u>79</u>	(depth) <u>4843'</u>	T-Started <u>0630</u>
(C) First Final Flow Pressure	<u>111</u>	<u>80</u>	PSI Recorder No. <u>10991</u>	T-Open <u>1030</u>
(D) Initial Shut-In Pressure	<u>1620</u>	<u>1595</u>	(depth) <u>4886'</u>	T-Pulled <u>1445</u> 10:30
(E) Second Initial Flow Pressure	<u>122</u>	<u>88</u>	PSI Recorder No. <u> </u>	T-Out <u>1700</u> 12:30
(F) Second Final Flow Pressure	<u>162</u>	<u>144</u>	(depth) <u> </u>	T-Off Location <u>1830</u>
(G) Final Shut-in Pressure	<u>1600</u>	<u>1590</u>	PSI Initial Opening <u>45</u>	Test <u>✓ 150</u>
(Q) Final Hydrostatic Mud	<u>2308</u>	<u>2200</u>	PSI Initial Shut-in <u>60</u>	Jars <u>✓ 200</u>
			Final Flow <u>60</u>	Safety Joint <u>✓ 50</u>
			Final Shut-in <u>90</u>	Straddle <u> </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 Craig Padgett
 Our Representative Carver J. Osmeire
 Mileage 77
 Other 3.5 10.5
 TOTAL PRICE \$ 1332

TK#13245 DST#2 Merrill Ranch #1-21 Castelli Exploration

TEST HISTORY

Flag Points

t (Min.)	P (PSig)
A: 0.00	2427.44
B: 0.00	73.34
C: 23.33	191.85
D: 60.00	1397.22
E: 0.00	74.60
F: 56.33	101.88
G: 89.67	1390.42
Q: 0.00	2213.84

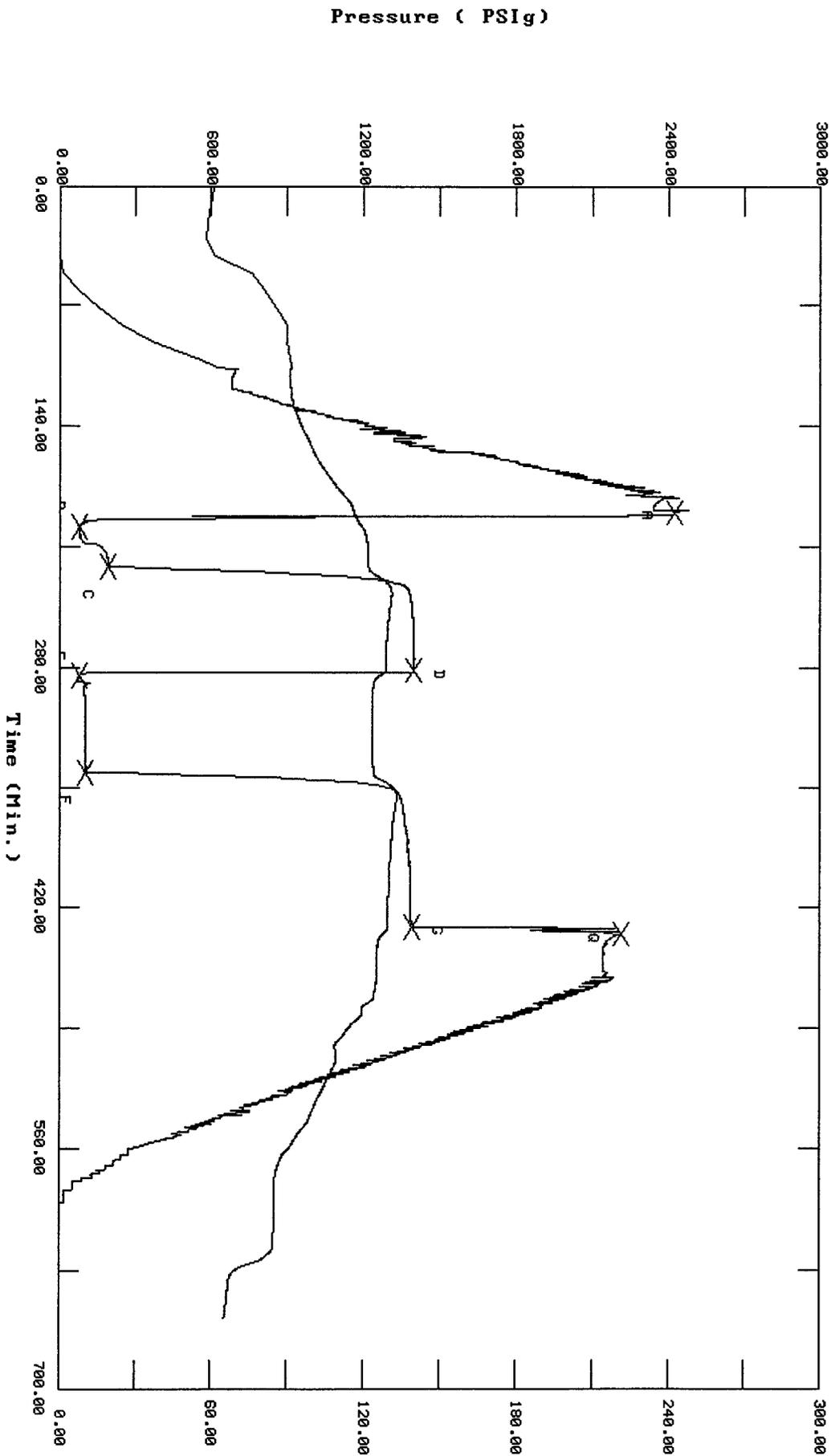
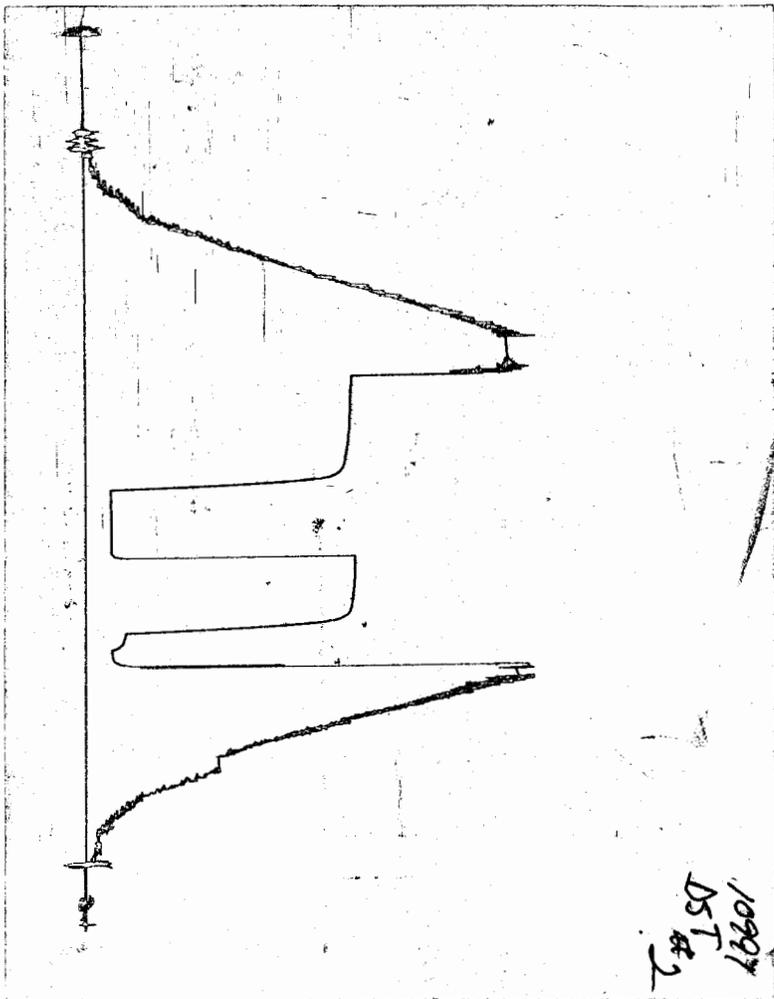


CHART PAGE



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

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

N^o 13245

Test Ticket

Well Name & No. Merrill Ranch #1-21 Test No. #2 Date 10/29/00
 Company Castelli Exploration Inc 9500 westgate Zone Tested M. 55
 Address Drive Suite 101 Oklahoma City Oklahoma Elevation 1784 KB 1774 GL
 Co. Rep / Geo. Craig Padget Cont. Val Energy #2 Est. Ft. of Pay Por. %
 Location: Sec. 21 Twp. 33^s Rge. 16^w Co. Comanche State KS
 No. of Copies 5 Distribution Sheet (Y, N) Turnkey (Y, N) Evaluation (Y, N)

Interval Tested 4920' - 4980' Initial Str Wt./Lbs. 94000 Unseated Str Wt./Lbs. 94000
 Anchor Length 60' Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 135,000
 Top Packer Depth 4915' Tool Weight 2100
 Bottom Packer Depth 4920' Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Total Depth 4980' Wt. Pipe Run N/A Drill Collar Run 579.77
 Mud Wt. 9.2 LCM 2[#] Vis. 45 WL 10.4 Drill Pipe Size 4 1/2 x 14 Ft. Run 4353.23

Blow Description IF: Fair blow built to b.o.b in 2 mins GTS in 10 mins.
ISI: Bled down for 10 mins. No blow back.
FF: Strong blow b.o.b in 20 sec. Gauge Gas.
FST: Bled down for 10 mins. No blow back.

Recovery — Total Feet 150 GIP Ft. in DC 150' Ft. in DP
 Rec. 150' Feet Of 56CM %gas 10 %oil %water 90 %mud
 Rec. 4752 Feet Of Gas Tap pipe %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 132° °F Gravity °API D@ °F Corrected Gravity °API
 RW @ °F Chlorides ppm Recovery Chlorides 7000 ppm System

	AK-1	Alpine	PSI Recorder No.	T-On Location
(A) Initial Hydrostatic Mud	<u>2523</u>	<u>2427</u>	<u>2350</u>	<u>0530 11:12</u>
(B) First Initial Flow Pressure	<u>160</u>	<u>73</u>	(depth) <u>4926'</u>	T-Started <u>0642</u>
(C) First Final Flow Pressure	<u>213</u>	<u>192</u>	PSI Recorder No. <u>10991</u>	T-Open <u>1015</u>
(D) Initial Shut-In Pressure	<u>1513</u>	<u>1397</u>	PSI (depth) <u>4977'</u>	T-Pulled <u>1415</u>
(E) Second Initial Flow Pressure	<u>149</u>	<u>75</u>	PSI Recorder No. <u> </u>	T-Out <u>1715</u>
(F) Second Final Flow Pressure	<u>149</u>	<u>102</u>	PSI (depth) <u> </u>	T-Off Location <u>1900</u>
(G) Final Shut-in Pressure	<u>1502</u>	<u>1390</u>	PSI Initial Opening <u>30</u>	Test <u>✓ 750</u>
(Q) Final Hydrostatic Mud	<u>2502</u>	<u>2214</u>	PSI Initial Shut-in <u>60</u>	Jars <u>✓ 200</u>
			Final Flow <u>60</u>	Safety Joint <u>✓ 50</u>
			Final Shut-in <u>90</u>	Straddle <u> </u>
				Circ. Sub <u> </u>
				Sampler <u> </u>
				Extra Packer <u> </u>
				Elec. Rec. <u>✓ 150</u>
				Mileage <u>77</u>
				Other <u>2.5 75</u>
				TOTAL PRICE \$ <u>1302</u>

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Approved By Craig Padget
 Our Representative Darren L. Linn

10:33
11:45

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, Inc
P. O. Box 2137
Liberal, Kansas 67905
Phone: 316-624-5389
Fax: 316-626-7108

Lab Number: 20005803

Analyzed: 11/02/00

Sample From: Merrill Ranch 1-21 DST 2
Producer: Castelli Exploration

Pressure:
Temperature:

Date: Location: 21-33-16

Time:
Sampler:
Source:

County: Comanche
State: Kansas
Formation: Miss

	Mole %	GPM
Helium	He: 0.073	0.000
Hydrogen	H2: 0.004	0.000
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 1.012	0.000
Carbon Dioxide	CO2: 0.072	0.000
Methane	C1: 92.922	0.000
Ethane	C2: 3.553	0.950
Propane	C3: 1.245	0.343
Iso Butane	iC4: 0.187	0.061
Normal Butane	nC4: 0.379	0.119
Iso Pentane	iC5: 0.117	0.043
Normal Pentane	nC5: 0.129	0.047
Hexanes Plus	C6+: 0.307	0.134

TOTAL: 100.000 1.697

Z Fact: 0.9977

SP.GR.: 0.6106

BTU (SAT): 1062.9 @ 14.73 psia

BTU (DRY): 1081.7 @ 14.73 psia

OCTANE RATING: 126.4

COMMENTS:

0.000