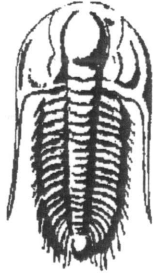


PH-34-16W KGS ✓



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Castelli Exploration Inc**

6908 W 112th
Oklahoma City OK 73162

ATTN: Rick Pope

4 34 16W Comanche KS

Merrill Ranch # 2-4

Start Date: 2008.04.22 @ 00:36:11

End Date: 2008.04.22 @ 09:44:41

Job Ticket #: 29886 DST #: 1

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

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Castelli Exploration Inc

Merrill Ranch # 2-4

4 34 16W Comanche KS

DST # 1

Miss.

2008.04.22



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Castelli Exploration Inc
6908 W 112th
Oklahoma City OK 73162
ATTN: Rick Pope

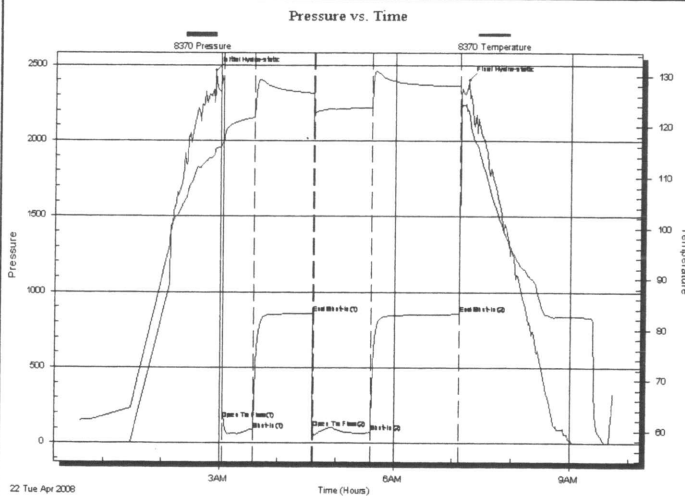
Merrill Ranch # 2-4
4 34 16W Comanche KS
Job Ticket: 29886 **DST#: 1**
Test Start: 2008.04.22 @ 00:36:11

GENERAL INFORMATION:

Formation: **Miss.**
Deviated: **No** Whipstock: **ft (KB)**
Time Tool Opened: 03:03:41
Time Test Ended: 09:44:41
Test Type: **Conventional Bottom Hole**
Tester: **Esak Hadley**
Unit No: **23**
Interval: **4883.00 ft (KB) To 4951.00 ft (KB) (TVD)**
Reference Elevations: **1700.00 ft (KB)**
1687.00 ft (CF)
Total Depth: **4951.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: **Fair**
KB to GR/CF: **13.00 ft**

Serial #: 8370 **Inside**
Press@RunDepth: **75.44 psig @ 4884.00 ft (KB)** Capacity: **7000.00 psig**
Start Date: **2008.04.22** End Date: **2008.04.22** Last Calib.: **2008.04.22**
Start Time: **00:36:16** End Time: **09:44:41** Time On Btm: **2008.04.22 @ 02:54:56**
Time Off Btm: **2008.04.22 @ 07:16:11**

TEST COMMENT: IF Fair to strong blow BOB in 45 sec. GTS in 8 min.(see gas flow report)
ISI No blow
FF Strong blow BOB in 2 sec. (see gas flow report)
FSI No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2460.45	115.49	Initial Hydro-static
9	157.08	116.30	Open To Flow (1)
41	86.58	121.78	Shut-In(1)
101	855.15	126.59	End Shut-In(1)
102	96.45	121.46	Open To Flow(2)
161	75.44	123.77	Shut-In(2)
253	854.86	127.98	End Shut-In(2)
262	2401.22	123.13	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
185.00	GM 5%G 95%M	0.96

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	12.00	9.88
Last Gas Rate			
Max. Gas Rate	0.13	40.00	20.36



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Castelli Exploration Inc
6908 W 112th
Oklahoma City OK 73162
ATTN: Rick Pope

Merrill Ranch # 2-4
4 34 16W Comanche KS
Job Ticket: 29886 **DST#: 1**
Test Start: 2008.04.22 @ 00:36:11

Tool Information

Drill Pipe:	Length: 4688.00 ft	Diameter: 3.80 inches	Volume: 65.76 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 22000.00 lb
Drill Collar:	Length: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 66.65 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 74000.00 lb
Depth to Top Packer:	4883.00 ft			Final 74000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	68.00 ft			
Tool Length:	96.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description

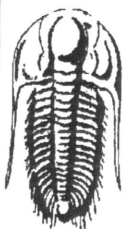
Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4856.00	
Shut In Tool	5.00			4861.00	
Hydraulic tool	5.00			4866.00	
Jars	5.00			4871.00	
Safety Joint	2.00			4873.00	
Packer	5.00			4878.00	28.00 Bottom Of Top Packer
Packer	5.00			4883.00	
Stubb	1.00			4884.00	
Recorder	0.00	8370	Inside	4884.00	
Recorder	0.00	8289	Inside	4884.00	
Perforations	28.00			4912.00	
Change Over Sub	1.00			4913.00	
Blank Spacing	32.00			4945.00	
Change Over Sub	1.00			4946.00	
Bullnose	5.00			4951.00	68.00 Bottom Packers & Anchor
Total Tool Length:	96.00				

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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Castelli Exploration Inc

Merrill Ranch # 2-4

6908 W 112th
Oklahoma City OK 73162

4 34 16W Comanche KS

Job Ticket: 29886

DST#: 1

ATTN: Rick Pope

Test Start: 2008.04.22 @ 00:36:11

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 57.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.79 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 6000.00 ppm			
Filter Cake: 0.20 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
185.00	GM 5%G 95%M	0.955

Total Length: 185.00 ft Total Volume: 0.955 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

GAS RATES

Castelli Exploration Inc

Merrill Ranch # 2-4

6908 W 112th
Oklahoma City OK 73162

4 34 16W Comanche KS

Job Ticket: 29886

DST#: 1

ATTN: Rick Pope

Test Start: 2008.04.22 @ 00:36:11

Gas Rates Information

Temperature: 59 deg C
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m ³ /d)
1	10	0.13	12.00	9.88
1	10	0.13	12.00	9.88
1	15	0.13	20.00	12.88
1	20	0.13	24.00	14.37
1	25	0.13	30.00	16.62
1	30	0.13	40.00	20.36
2	5	0.13	25.00	14.75
2	10	0.13	35.00	18.49
2	20	0.25	12.00	41.88
2	30	0.25	14.00	45.05
2	40	0.25	16.00	48.23
2	50	0.25	16.00	48.23
2	60	0.25	16.00	48.23
0	-	-999999.00	-999999.00	-999999.00

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Serial #: 8370

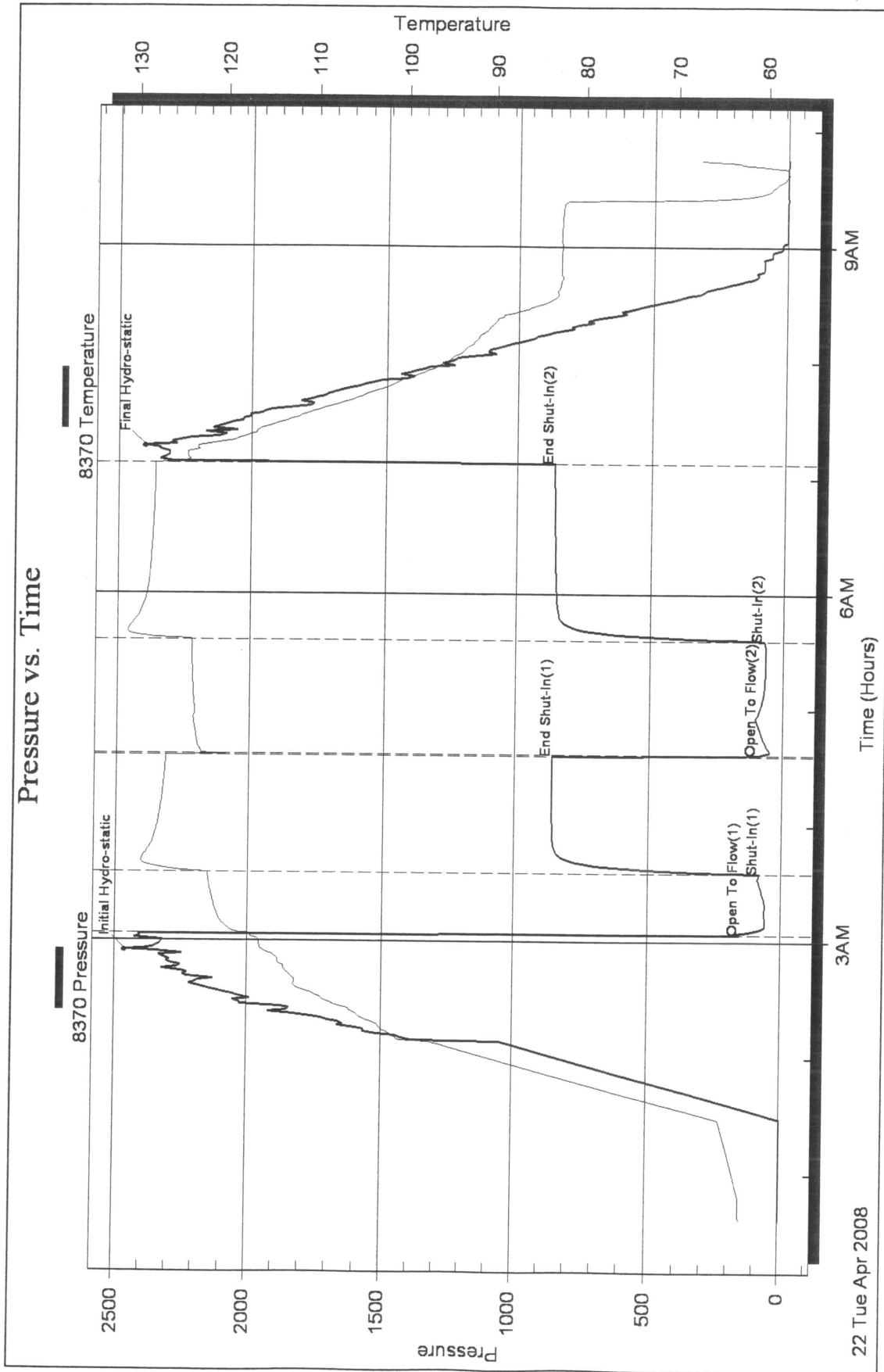
Inside

Castelli Exploration Inc

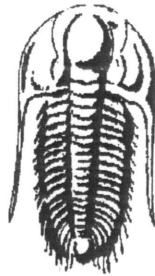
4 34 16W Comanche KS

DST Test Number: 1

Pressure vs. Time



22 Tue Apr 2008



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Castelli Exploration Inc**

6908 W 112th
Oklahoma City OK 73162

ATTN: Rick Pope

4 34 16W Comanche KS

Merrill Ranch # 2-4

Start Date: 2008.04.22 @ 18:07:06

End Date: 2008.04.23 @ 05:19:21

Job Ticket #: 29887 DST #: 2

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Castelli Exploration Inc
6908 W 112th
Oklahoma City OK 73162
ATTN: Rick Pope

Merrill Ranch # 2-4
4 34 16W Comanche KS
Job Ticket: 29887 **DST#:2**
Test Start: 2008.04.22 @ 18:07:06

GENERAL INFORMATION:

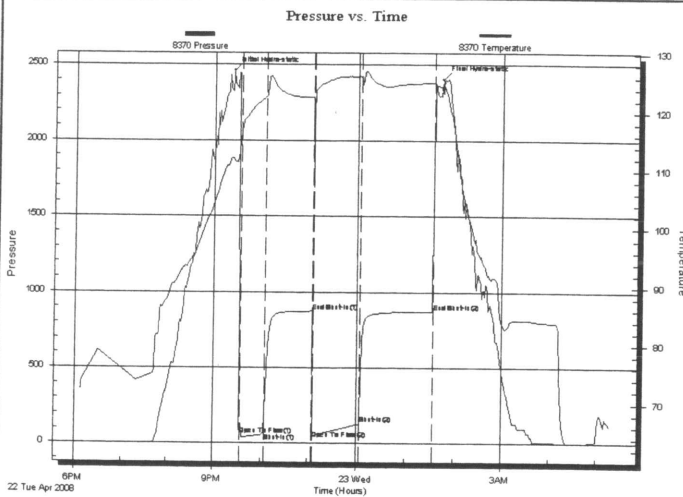
Formation: **Miss.**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:34:36
Time Test Ended: 05:19:21
Test Type: Conventional Bottom Hole
Tester: Esak Hadley
Unit No: 23
Interval: **4946.00 ft (KB) To 4978.00 ft (KB) (TVD)**
Total Depth: 4978.00 ft (KB) (TVD)
Reference Elevations: 1700.00 ft (KB)
1687.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair
KB to GR/CF: 13.00 ft

Serial #: 8370

Inside

Press@RunDepth: 128.38 psig @ 4947.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2008.04.22 End Date: 2008.04.23 Last Calib.: 2008.04.23
Start Time: 18:07:11 End Time: 05:19:21 Time On Btm: 2008.04.22 @ 21:24:06
Time Off Btm: 2008.04.23 @ 01:44:21

TEST COMMENT: IF Fair to strong blow BOB in 60 sec. GTS in 30 min. (see gas flow report)
ISI Weak blow Surged up to 2" but settled to 1"
FF Strong blow BOB in 2 sec. (see gas flow report)
FSI Weak blow Surged



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2459.24	112.23	Initial Hydro-static
11	53.26	116.50	Open To Flow (1)
41	65.55	122.58	Shut-In(1)
101	873.44	122.60	End Shut-In(1)
102	31.41	107.29	Open To Flow (2)
160	128.38	126.19	Shut-In(2)
250	871.91	125.16	End Shut-In(2)
261	2405.13	123.28	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	GOCVM 15%G 15%O 20%W 50%M	0.30
60.00	GOCMV 15%G 20%O 25%M 40%W	0.30
120.00	GOCMV 5%G 15%O 15%M 65%W	1.14

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	8.00	8.38
Last Gas Rate			
Max. Gas Rate	0.13	48.00	23.35



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Castelli Exploration Inc
6908 W 112th
Oklahoma City OK 73162

ATTN: Rick Pope

Merrill Ranch # 2-4
4 34 16W Comanche KS
Job Ticket: 29887 **DST#: 2**
Test Start: 2008.04.22 @ 18:07:06

Tool Information

Drill Pipe:	Length: 4751.00 ft	Diameter: 3.80 inches	Volume: 66.64 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 22000.00 lb
Drill Collar:	Length: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 67.53 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 75000.00 lb
Depth to Top Packer:	4946.00 ft			Final 76000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	32.00 ft			
Tool Length:	60.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

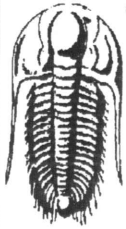
Change Over Sub	1.00			4919.00	
Shut In Tool	5.00			4924.00	
Hydraulic tool	5.00			4929.00	
Jars	5.00			4934.00	
Safety Joint	2.00			4936.00	
Packer	5.00			4941.00	28.00 Bottom Of Top Packer
Packer	5.00			4946.00	
Stubb	1.00			4947.00	
Recorder	0.00	8370	Inside	4947.00	
Recorder	0.00	8289	Inside	4947.00	
Perforations	26.00			4973.00	
Bullnose	5.00			4978.00	32.00 Bottom Packers & Anchor

Total Tool Length: 60.00

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TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Castelli Exploration Inc
6908 W 112th
Oklahoma City OK 73162

ATTN: Rick Pope

Merrill Ranch # 2-4
4 34 16W Comanche KS
Job Ticket: 29887 **DST#: 2**
Test Start: 2008.04.22 @ 18:07:06

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 57.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.77 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 6000.00 ppm			
Filter Cake: 0.20 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	GOCWM 15%G 15%O 20%W 50%M	0.295
60.00	GOCMW 15%G 20%O 25%M 40%W	0.295
120.00	GOCMW 5%G 15%O 15%M 65%W	1.137

Total Length: 240.00 ft Total Volume: 1.727 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

GAS RATES

Castelli Exploration Inc

Merrill Ranch # 2-4

6908 W 112th
Oklahoma City OK 73162

4 34 16W Comanche KS

Job Ticket: 29887

DST#: 2

ATTN: Rick Pope

Test Start: 2008.04.22 @ 18:07:06

Gas Rates Information

Temperature: 59 deg C
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m ³ /d)
2	5	0.13	8.00	8.38
2	10	0.13	10.00	9.13
2	20	0.13	17.00	11.75
2	30	0.13	25.00	14.75
2	40	0.13	32.00	17.37
2	60	0.13	48.00	23.35
0	-	-999999.00	-999999.00	-999999.00

KANSAS CORPORATION COMMISSION

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Serial #: 8370

Inside

Castelli Exploration Inc

4 34 16W Comanche KS

DST Test Number: 2

