

plugged 4-26-94

FORM MUST BE TYPED

SIDE ONE

STATE CORPORATION COMMISSION OF KANSAS  
OIL & GAS CONSERVATION DIVISION  
WELL COMPLETION FORM  
ACO-1 WELL HISTORY  
DESCRIPTION OF WELL AND LEASE

API NO. 15- 033-20,884-0000 ORIGINAL  
County Comanche  
SE - SW - NW - Sec. 16 Twp. 34S Rge. 20 X E W

CONFIDENTIAL

Operator: License # 31232

2050 Feet from X(N) (circle one) Line of Section

Name: Cody Energy, Inc.

990 Feet from X(W) (circle one) Line of Section

Address 7555 East Hampden Ave., Suite 4600

Footages Calculated from Nearest Outside Section Corner:  
NE, SE, NW or SW (circle one)

City/State/Zip Denver, CO 80231

Lease Name Bluff Creek Well # 16-1

Purchaser: NA

Field Name Schumacher North

Operator Contact Person: Rock Petty

Producing Formation NA (Dry Hole)

Phone (915) 686 0181

Elevation: Ground 1762' KB 1775'

Contractor: Name: H-40 Drilling, Inc.

Total Depth 6,750' PBSD NA

License: 30692

Amount of Surface Pipe Set and Cemented at 716 Feet

Wellsite Geologist: Greg Smith

Multiple Stage Cementing Collar Used? Yes X No

Designate Type of Completion  
X New Well Re-Entry Workover

If yes, show depth set          Feet

Oil SWD S10W Temp. Abd.  
X Gas ENHR SIGW  
Dry Other (Core, WSW, Expl., Cathodic, etc)

If Alternate II completion, cement circulated from         

feet depth to          w/          sx cnt.

If Workover/Re-Entry: old well info as follows:

Drilling Fluid Management Plan D&A J 9/ 1-11-95  
(Data must be collected from the Reserve Pit)

Operator:         

Chloride content 6500 ppm Fluid volume 2720 bbls

Well Name:         

Dewatering method used RELEASED Hauled offsite

Comp. Date          Old Total Depth         

Location of fluid disposal if hauled offsite:  
OCT 26 1995

Deepening Re-perf. CONV. to Oil/SWD  
Plug Back PBSD  
Commingled Docket No.           
Dual Completion Docket No.           
Other (SWD or Inj?) Docket No.         

4-7-94 4-24-94 4/26/94  
Spud Date Date Reached TD Completion Date

Operator Name KBW

Lease Name Harmon SWD License No. 5993

NW Quarter Sec. 11 Twp. 33 S Rng. 20 E W

County Comanche Docket No. 98239

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated by the State of Kansas and the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature Rock Petty Rock Petty 8-5-94

Title District Engineer Date 8/1/94

Subscribed and sworn to before me this 1st day of August 1994

Notary Public Nicki Waldrep

Notary Public, State of Texas  
My Commission Expires 8-29-96  
VICKI WALDREP

RECEIVED  
KANSAS CORPORATION COMMISSION  
8-5-94

AUG 05 1994

AUGUSTON DIVISION  
WICHITA, KS

K.C.C. OFFICE USE ONLY  
F  Letter of Confidentiality Attached  
C  Wireline Log Received  
G  Geologist Report Received  
Distribution  
KCC  SWD/Rep  NGPA  
KGS  Plug  Other  
(Specify)

Operator Name Cody Energy, Inc. Lease Name Bluff Creek Well # 16-1  
 Sec. 16 Twp. 34S Rge. 20  East County Comanche  
 West

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken (Attach Additional Sheets.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Elgin	4065'	-2290'
Electric Log Run (Submit Copy.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Toronto	4154'	-2379'
List All E.Logs Run:		Lansing	4325'	-2550'
Neutron-Density, Induction, Sonic, Microlog, Dipmeter		SWOPE	4758'	-2983'
		Marmaton	4847'	-3092'
		Pawnee	4955'	-3180'
		Chester	5104'	-3329'
		Osage	5674'	-3899'
		Viola	6191'	-4416'
		Simpson	6359'	-4584'
		Arbuckle	6551'	-4776'

**CASING RECORD**  New  Used  
 Report all strings let-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs./Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Conductor	30"	20"		50'	5 yards grout		
Surface	12-1/4"	8-5/8"	24#	716'	Lite	230	2% cc
					Class A	150	2% cc 2% gel

**ADDITIONAL CEMENTING/SQUEEZE RECORD**

Purpose:	Depth		Type of Cement	#Sacks Used	Type and Percent Additives
	Top	Bottom			
<input type="checkbox"/> Perforate					
<input type="checkbox"/> Protect Casing					
<input type="checkbox"/> Plug Back TD					
<input type="checkbox"/> Plug Off Zone					

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated		Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)		Depth

**TUBING RECORD**

Size	Set At	Packer At	Liner Run
			<input type="checkbox"/> Yes <input type="checkbox"/> No

Date of First, Resumed Production, SWD or Inj. \_\_\_\_\_ Producing Method  Flowing  Pumping  Gas Lift  Other (Explain) \_\_\_\_\_

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

Disposition of Gas:  Vented  Sold  Used on Lease (If vented, submit ACO-18.)

METHOD OF COMPLETION:  Open Hole  Perf.  Dually Comp.  Commingled  Other (Specify) DRY HOLE

Production Interval \_\_\_\_\_

# TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

## Drill-Stem Test Data

RECEIVED  
MAY 23 1994  
ORIGINAL

Well Name BLUFF CREEK 16-1 Test No. 1 Date 4/12/94  
 Company CODY ENERGY Zone LANSING  
 Address 7555 E HAMPDEN AVE-#600 DENVER CO 80231 Elevation 1775 KB  
 Co. Rep./Geo. CHUCK EMERSON Cont. H-40 DRLG RIG #2 Est. Ft. of Pay 7  
 Location: Sec. 16 Twp. 34S Rge. 20W Co. COMANCHE State KS

Interval Tested 4362-4383 Drill Pipe Size 4.5" XH  
 Anchor Length 21 Wt. Pipe I.D. - 2.7 Ft. Run 621  
 Top Packer Depth 4357 Drill Collar - 2.25 Ft. Run 9 lb/Gal.  
 Bottom Packer Depth 4362 Mud Wt. 50 Filtrate 10.2  
 Total Depth 4383 Viscosity 50

Tool Open @ 6:10 PM Initial Blow FAIR BLOW BUILT TO BOTTOM OF BUCKET IN 5 MINUTES  
 Final Blow WEAK BLOW BUILT TO BOTTOM IN 17 MIN THROUGHOUT FOR 23 MINUTES  
BLEED OFF BLOW FOR 10 MIN-WEAK SURFACE BLOW BUILT TO BOTTOM IN 40 MINUTES

RELEASED

Recovery - Total Feet 623 Flush Tool? NO  
 OCT 26 1995 AUG 1

Rec. 540 Feet of GAS IN PIPE  
 Rec. 30 Feet of SLTLY OIL & GAS CUT WTRY MUD- 10%GAS/10%OIL/10%WTR /  
 Rec. 50 Feet of % MUD - (WITH 20% EMULSION)  
 Rec. 593 Feet of MUDDY WATER- 90% WTR/ 10% MUD  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_

CONFIDENTIAL

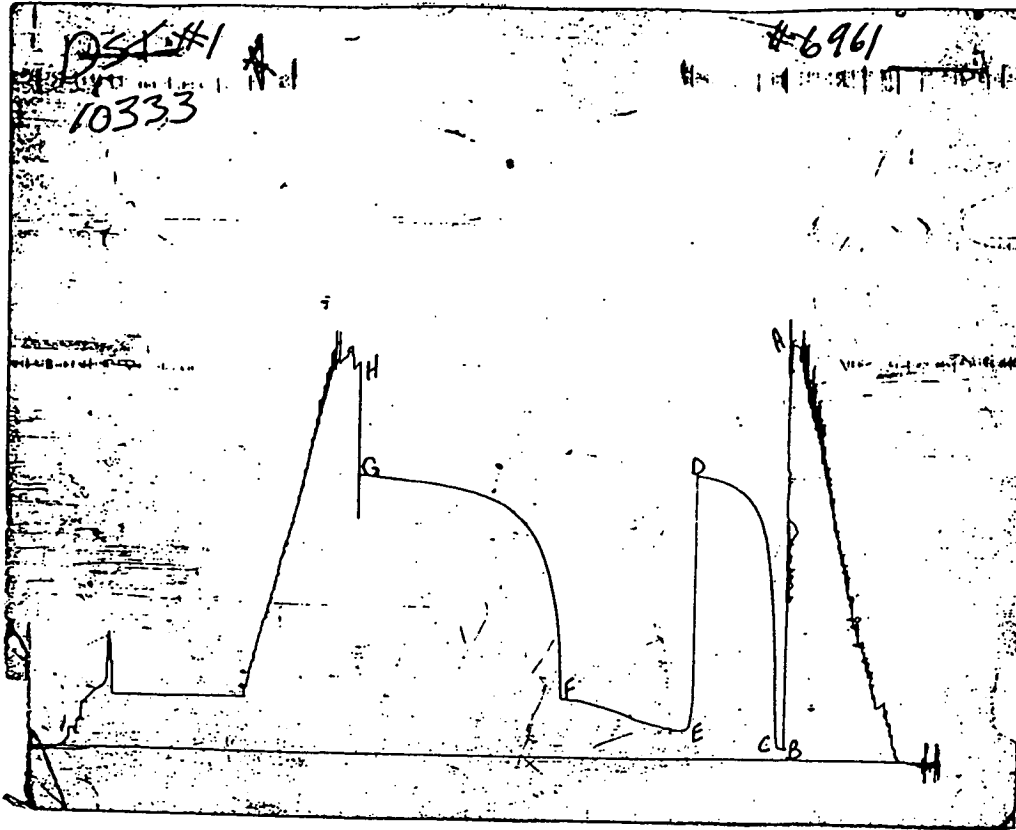
BHT 110 °F Gravity \_\_\_\_\_ °API @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW 0.102 @ 66 °F Chlorides 125000 ppm Recovery Chlorides 16000 ppm System

(A) Initial Hydrostatic Mud 2117.4 PSI AK1 Recorder No. 13337 Range 3975  
 (B) First Initial Flow Pressure 50.8 PSI @ (depth) 4365 w / Clock No. 25810  
 (C) First Final Flow Pressure 64.0 PSI AK1 Recorder No. 10333 Range 4050  
 (D) Initial Shut-in Pressure 1440.5 PSI @ (depth) 4380 w / Clock No. 14389  
 (E) Second Initial Flow Pressure 147.3 PSI AK1 Recorder No. \_\_\_\_\_ Range \_\_\_\_\_  
 (F) Second Final Flow Pressure 291.6 PSI @ (depth) \_\_\_\_\_ w / Clock No. \_\_\_\_\_  
 (G) Final Shut-in Pressure 1424.1 PSI Initial Opening 10 Final Flow 90  
 (H) Final Hydrostatic Mud 2003.6 PSI Initial Shut-in 60 Final Shut-in 140

Our Representative ROBERT COLLINS

API#15-033-20884

CHART PAGE



This is an actual photograph of recorder chart #10333

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2113	2117.4
(B) FIRST INITIAL FLOW PRESSURE	40	50.8
(C) FIRST FINAL FLOW PRESSURE	60	64
(D) INITIAL CLOSED-IN PRESSURE	1436	1440.5
(E) SECOND INITIAL FLOW PRESSURE	142	147.3
(F) SECOND FINAL FLOW PRESSURE	264	291.6
(G) FINAL CLOSED-IN PRESSURE	1415	1424.1
(H) FINAL HYDROSTATIC MUD	2002	2003.6

CONFIDENTIAL

# TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

ORIGINAL

## Drill-Stem Test Data

Well Name BLUFF CREEK 16-1 Test No. 2 Date 4/14/94  
 Company CODY ENERGY Zone MARMATON  
 Address 7555 E HAMPDEN AVE-#600 DENVER CO 80231 Elevation 1775 KB  
 Co. Rep./Geo. CHUCK EMERSON Cont. H-40 DRLG RIG #2 Est. Ft. of Pay 5  
 Location: Sec. 16 Twp. 34S Rge. 20W Co. COMANCHE State KS

Interval Tested 4840-4891 Drill Pipe Size 4.5" XH  
 Anchor Length 51 Wt. Pipe I.D. - 2.7 Ft. Run \_\_\_\_\_  
 Top Packer Depth 4835 Drill Collar - 2.25 Ft. Run 590  
 Bottom Packer Depth 4840 Mud Wt. \_\_\_\_\_ 9 lb/Gal.  
 Total Depth 4891 Viscosity 39 Filtrate 11.4

Tool Open @ 10:50 PM Initial Blow WEAK SURFACE BLOW BUILT TO 1/2"  
 Final Blow NO BLOW

Recovery - Total Feet 10 Flush Tool? NO

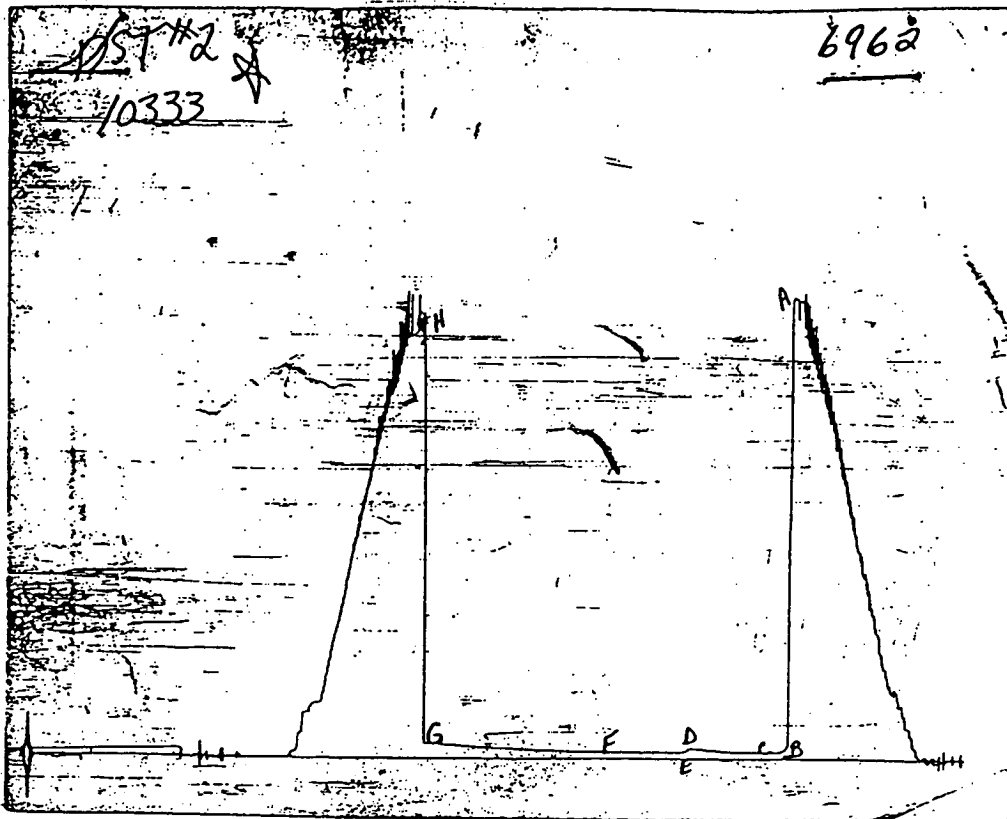
Rec. 10 Feet of DRILLING MUD **RELEASED**  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ **DOI 2 6 1995**  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ **FROM CONFIDENTIAL**  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_

BHT 118 °F Gravity \_\_\_\_\_ °API @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery Chlorides 10000 ppm System

(A) Initial Hydrostatic Mud 2356.2 PSI AK1 Recorder No. 13337 Range 3975  
 (B) First Initial Flow Pressure 35.5 PSI @ (depth) 4843 w / Clock No. 21058  
 (C) First Final Flow Pressure 35.5 PSI AK1 Recorder No. 10333 Range 4050  
 (D) Initial Shut-in Pressure 54.8 PSI @ (depth) 4854 w / Clock No. 14389  
 (E) Second Initial Flow Pressure 35.5 PSI AK1 Recorder No. 1055 Range 4100  
 (F) Second Final Flow Pressure 35.5 PSI @ (depth) 4888 w / Clock No. 25810  
 (G) Final Shut-in Pressure 76.2 PSI Initial Opening 10 Final Flow 60  
 (H) Final Hydrostatic Mud 2255.1 PSI Initial Shut-in 60 Final Shut-in 120

Our Representative ROBERT COLLINS

CHART PAGE



This is an actual photograph of recorder chart #10333

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2356	2356.2
(B) FIRST INITIAL FLOW PRESSURE	30	35.5
(C) FIRST FINAL FLOW PRESSURE	30	35.5
(D) INITIAL CLOSED-IN PRESSURE	50	54.8
(E) SECOND INITIAL FLOW PRESSURE	30	35.5
(F) SECOND FINAL FLOW PRESSURE	30	35.5
(G) FINAL CLOSED-IN PRESSURE	71	76.2
(H) FINAL HYDROSTATIC MUD	2275	2255.1

FLUID SAMPLER DATA

ORIGINAL

CONFIDENTIAL

Ticket No.: 6962 Date: 4/14/94  
 Company: CODY ENERGY  
 Lease: BLUFF CREEK 16-1 Test No.: 2  
 County: COMANCHE Sec.: 16 Twp.: 34S Rng.: 20W

SAMPLER RECOVERY

Gas  
 Oil  
 Mud 4000  
 Water  
 Other  
 Pressure  
 TOTAL 4000

PIT MUD ANALYSIS

Chlorides 10000  
 Resistivity ohms@ F  
 Viscosity 39  
 Mud Wt. 9  
 Filtrate 11.4  
 Other

SAMPLER ANALYSIS

Resistivity ohms@ F  
 Chlorides ppm.  
 Gravity corrected @60F

PIPE RECOVERY

TOP  
 Resistivity ohms@ F  
 Chlorides ppm  
 MIDDLE  
 Resistivity ohms@ F  
 Chlorides ppm  
 BOTTOM  
 Resistivity ohms@ F  
 Chlorides ppm

REC  
 AUG 1  
 CONFIDENTIAL

ORIGINAL

# TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

CONFIDENTIAL

## Drill-Stem Test Data

Well Name BLUFF CREEK 16-1 Test No. 3 Date 4/15/94  
 Company CODY ENERGY Zone PAWNEE  
 Address 7555 E HAMPDEN AVE-#600 DENVER CO 80231 Elevation 1775 KB  
 Co. Rep./Geo. CHUCK EMERSON Cont. H-40 DRLG RIG #2 Est. Ft. of Pay 7  
 Location: Sec. 16 Twp. 34S Rge. 20W Co. COMANCHE State KS

Interval Tested 4950-4982 Drill Pipe Size 4.5" XH  
 Anchor Length 32 Wt. Pipe I.D. - 2.7 Ft. Run \_\_\_\_\_  
 Top Packer Depth 4945 Drill Collar - 2.25 Ft. Run 621  
 Bottom Packer Depth 4950 Mud Wt. 8.9 lb/Gal.  
 Total Depth 4982 Viscosity 44 Filtrate 10.8

Tool Open @ 2:55 AM Initial Blow TOOL SLID 15' -STRONG BLOW BUILT TO 9"  
bled off blow for 10 min-no blow back  
 Final Blow NO BLOW-FLUSHED TOOL-FAIR BLOW BUILT TO BOTTOM OF BUCKET IN 90 MIN  
bled off blow for 10 minutes

Recovery - Total Feet 560 Flush Tool? YES  
 Rec. 290 Feet of DRILLING MUD  
 Rec. 270 Feet of SALT WATER  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_

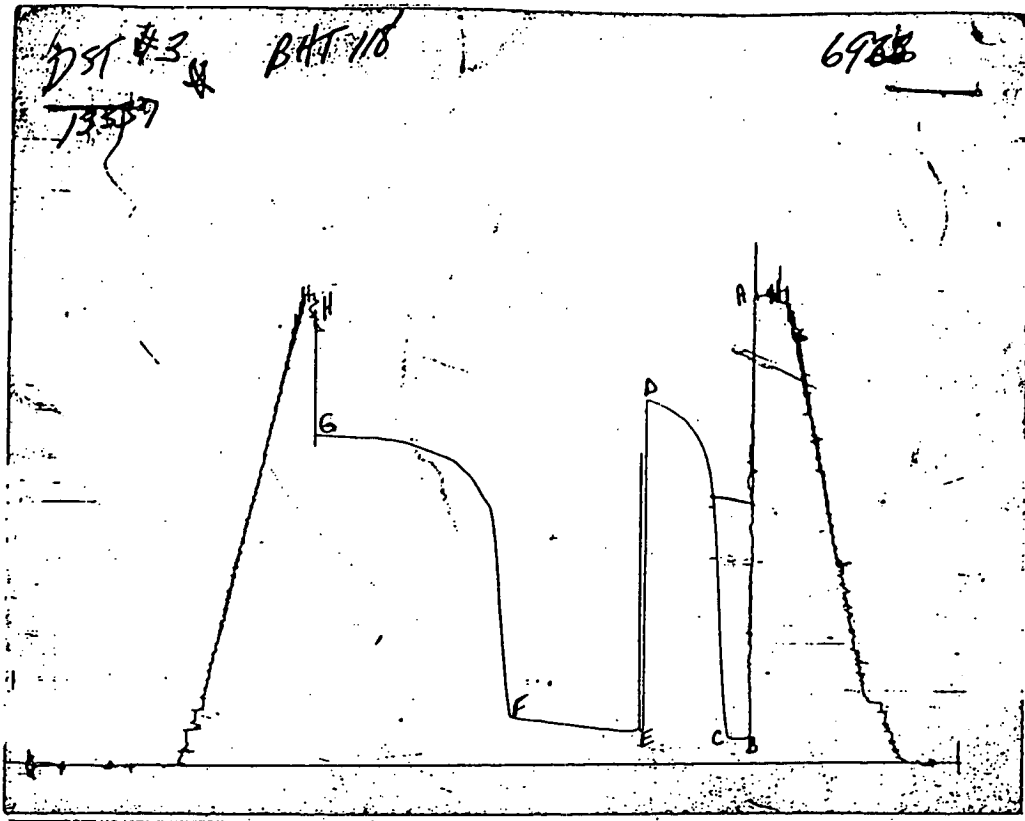
BHT 118 °F Gravity \_\_\_\_\_ °API @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW 0.096 @ 76 °F Chlorides 70000 ppm Recovery Chlorides \_\_\_\_\_ ppm System

(A) Initial Hydrostatic Mud 2308.6 PSI AK1 Recorder No. 13337 Range 3975  
 (B) First Initial Flow Pressure 125.4 PSI @ (depth) 4953 w / Clock No. 14389  
 (C) First Final Flow Pressure 135.3 PSI AK1 Recorder No. 10333 Range 4050  
 (D) Initial Shut-in Pressure 1806.6 PSI @ (depth) 4979 w / Clock No. 21058  
 (E) Second Initial Flow Pressure 162.1 PSI AK1 Recorder No. \_\_\_\_\_ Range \_\_\_\_\_  
 (F) Second Final Flow Pressure 237.1 PSI @ (depth) \_\_\_\_\_ w / Clock No. \_\_\_\_\_  
 (G) Final Shut-in Pressure 1638.6 PSI Initial Opening 15 Final Flow 90  
 (H) Final Hydrostatic Mud 2226.2 PSI Initial Shut-in 60 Final Shut-in 135

Our Representative ROBERT COLLINS



CHART PAGE



This is an actual photograph of recorder chart #13337

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2308	2308.6
(B) FIRST INITIAL FLOW PRESSURE	128	125.4
(C) FIRST FINAL FLOW PRESSURE	138	135.3
(D) INITIAL CLOSED-IN PRESSURE	1806	1806.6
(E) SECOND INITIAL FLOW PRESSURE	158	162.1
(F) SECOND FINAL FLOW PRESSURE	237	237.1
(G) FINAL CLOSED-IN PRESSURE	1630	1638.6
(H) FINAL HYDROSTATIC MUD	2229	2226.2

FLUID SAMPLER DATA

ORIGINAL

CONFIDENTIAL

Ticket No.: 6963

Date: 4/15/94

Company: CODY ENERGY

Lease: BLUFF CREEK 16-1

Test No.: 3

County: COMANCHE

Sec.: 16

Twp.: 34S

Rng.: 20W

SAMPLER RECOVERY

Gas 1.0 cu ft

Oil

Mud 4000

Water

Other

Pressure 25

TOTAL 4000

SAMPLER ANALYSIS

Resistivity 0.096 ohms@ 76 F

Chlorides 70000 ppm.

Gravity corrected @60F

PIT MUD ANALYSIS

Chlorides

Resistivity ohms@ F

Viscosity 44

Mud Wt. 8.9

Filtrate 10.8

Other

NOV

AUG 1

PIPE RECOVERY

CONFIDENTIAL

TOP

Resistivity ohms@ F

Chlorides ppm

MIDDLE

Resistivity 0.133 ohms@ 73 F

Chlorides 50000 ppm

BOTTOM

Resistivity 0.096 ohms@ 76 F

Chlorides 70000 ppm

ORIGINAL

# TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

CONFIDENTIAL

## Drill-Stem Test Data

Well Name BLUFF CREEK 16-1 Test No. 4 Date 4/22/94  
 Company CODY ENERGY Zone VIOLA  
 Address 7555 E HAMPDEN AVE-#600 DENVER CO 80231 Elevation 1775 KB  
 Co. Rep./Geo. CHUCK EMERSON Cont. H-40 DRLG RIG #2 Est. Ft. of Pay \_\_\_\_\_  
 Location: Sec. 16 Twp. 34S Rge. 20W Co. COMANCHE State KS

Interval Tested <u>6195-6293</u>	Drill Pipe Size <u>4.5" XH</u>
Anchor Length <u>98</u>	Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth <u>6190</u>	Drill Collar - 2.25 Ft. Run <u>559</u>
Bottom Packer Depth <u>6195</u>	Mud Wt. _____ <u>8.9</u> lb/Gal.
Total Depth <u>6293</u>	Viscosity <u>49</u> Filtrate <u>10</u>

Tool Open @ 7:55 AM Initial Blow VERY WEAK BLOW-DEAD IN 6 MINUTES  
 Final Blow NO BLOW

Recovery - Total Feet 15 Flush Tool? NO

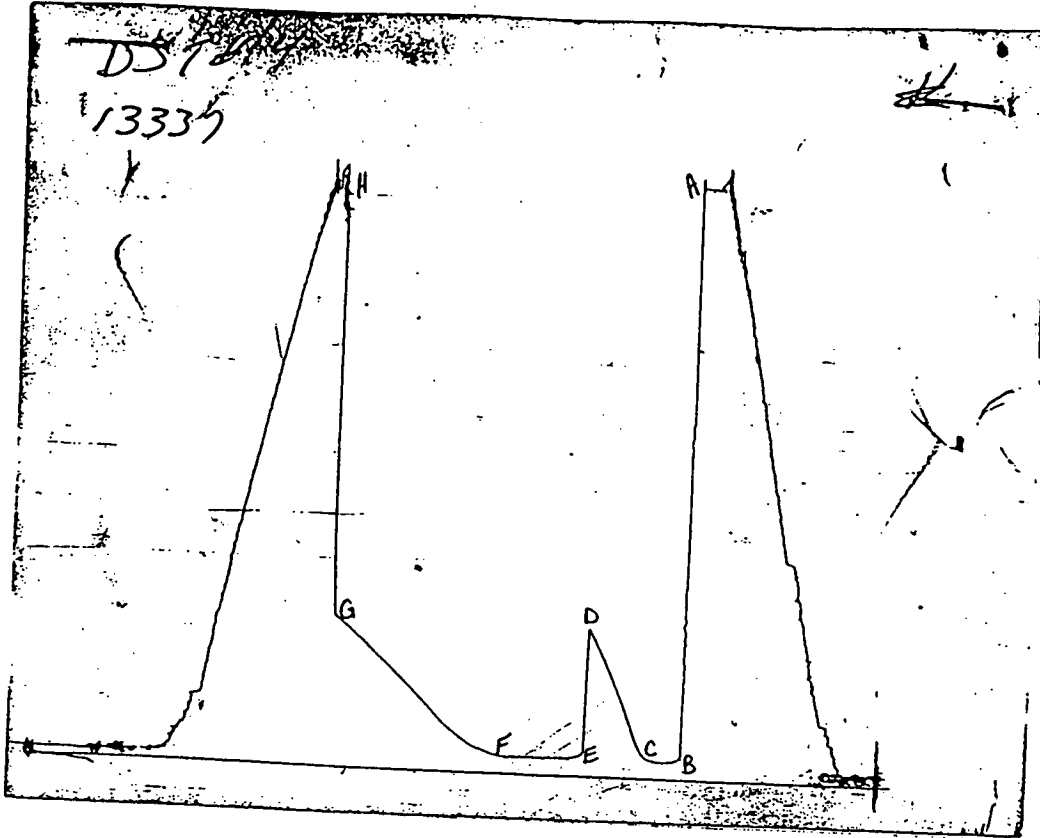
Rec. 15 Feet of DRILLING MUD  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_

BHT 131 °F Gravity \_\_\_\_\_ °API @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery Chlorides 6500 ppm System

(A) Initial Hydrostatic Mud <u>2936.4</u> PSI	AK1 Recorder No. <u>13337</u> Range <u>3975</u>
(B) First Initial Flow Pressure <u>87.9</u> PSI	@ (depth) <u>6201</u> w / Clock No. <u>27475</u>
(C) First Final Flow Pressure <u>90.2</u> PSI	AK1 Recorder No. <u>10333</u> Range <u>4075</u>
(D) Initial Shut-in Pressure <u>741.6</u> PSI	@ (depth) <u>6290</u> w / Clock No. <u>26191</u>
(E) Second Initial Flow Pressure <u>95.8</u> PSI	AK1 Recorder No. _____ Range _____
(F) Second Final Flow Pressure <u>95.8</u> PSI	@ (depth) _____ w / Clock No. _____
(G) Final Shut-in Pressure <u>757.3</u> PSI	Initial Opening <u>15</u> Final Flow <u>60</u>
(H) Final Hydrostatic Mud <u>2808.2</u> PSI	Initial Shut-in <u>60</u> Final Shut-in <u>135</u>

Our Representative TOM HORACEK

CHART PAGE



This is an actual photograph of recorder chart #13337

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2926	2936.4
(B) FIRST INITIAL FLOW PRESSURE	79	87.9
(C) FIRST FINAL FLOW PRESSURE	79	90.2
(D) INITIAL CLOSED-IN PRESSURE	720	741.6
(E) SECOND INITIAL FLOW PRESSURE	79	95.8
(F) SECOND FINAL FLOW PRESSURE	79	95.8
(G) FINAL CLOSED-IN PRESSURE	749	757.3
(H) FINAL HYDROSTATIC MUD	2877	2808.2

ORIGINAL

FLUID SAMPLER DATA

CONFIDENTIAL

Ticket No.: 6967

Date: 4/22/94

Company: CODY ENERGY

Lease: BLUFF CREEK 16-1

Test No.: 4

County: COMANCHE

Sec.: 16

Twp.: 34S

Rng.: 20W

SAMPLER RECOVERY

Gas

Oil

Mud 4000

Water

Other

Pressure 170

TOTAL 4000

PIT MUD ANALYSIS

Chlorides 6500

Resistivity ohms@ F

Viscosity 49

Mud Wt. 8.9

Filtrate 10

Other

REC  
AUG 1  
CONFIDENTIAL

SAMPLER ANALYSIS

Resistivity ohms@ F

Chlorides ppm.

Gravity corrected @60F

PIPE RECOVERY

TOP

Resistivity ohms@ F

Chlorides ppm

MIDDLE

Resistivity ohms@ F

Chlorides ppm

BOTTOM

Resistivity ohms@ F

Chlorides ppm

Date 4-25-94 District MD Large Ks Ticket No. 6320  
 Company Cody Energy, Inc. Rig H-40 Drif.  
 Lease Bluff Creek Well No. 16-1  
 County COMANCHE State KANSAS  
 Location PRODUCTION 5-1/2" - 25-4" Well Field Schmacker North

CEMENT DATA:  
 Spacer Type: \_\_\_\_\_  
 Amt \_\_\_\_\_ Skts Yield \_\_\_\_\_ ft<sup>3</sup>/sk Density \_\_\_\_\_ PPG

CASING DATA: PTA  Squeeze   
 Surface  Intermediate  Production  Liner   
 Size \_\_\_\_\_ Type \_\_\_\_\_ Weight \_\_\_\_\_ Collar \_\_\_\_\_

LEAD: Pump Time \_\_\_\_\_ hrs. Type 60:40:POZEMEX  
1 6 1/2 GEL Excess \_\_\_\_\_  
 Amt 155 Skts Yield 1.58 ft<sup>3</sup>/sk Density 13.8 PPG

Casing Depths: Top 85/8 718' Bottom \_\_\_\_\_

TAIL: Pump Time \_\_\_\_\_ hrs. Type \_\_\_\_\_  
 Excess \_\_\_\_\_  
 Amt \_\_\_\_\_ Skts Yield \_\_\_\_\_ ft<sup>3</sup>/sk Density \_\_\_\_\_ PPG

Drill Pipe: Size 4 1/2 Weight \_\_\_\_\_ Collars \_\_\_\_\_  
 Open Hole: Size 7 7/8 T.D. 6750 ft P.B. to 6550 ft

WATER: Lead 7.8 gals/sk Tail \_\_\_\_\_ gals/sk Total 28.25 Bbls.  
 Pump Trucks Used 266 CARL B  
 Bulk Equip. 242 MARK B

CAPACITY FACTORS:  
 Casing: Bbls/Lin. ft. .0637 Lin. ft./Bbl. 15.70  
 Open Holes: Bbls/Lin. ft. .0602 Lin. ft./Bbl. 16.5993  
 Drill Pipe: Bbls/Lin. ft. .0142 Lin. ft./Bbl. 70.32  
 Annulus: Bbls/Lin. ft. .0406 Lin. ft./Bbl. 24.6474  
4 1/2 OP - 8 7/8 CS Bbls/Lin. ft. .0440 Lin. ft./Bbl. 22.72  
 Perforations: From \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Amt. \_\_\_\_\_

Floater Equip: Manufacturer \_\_\_\_\_  
 Shoe: Type \_\_\_\_\_ Depth \_\_\_\_\_  
 Floater: Type AUG 1 Depth \_\_\_\_\_  
 Centralizers: Quantity \_\_\_\_\_ Plugs Top \_\_\_\_\_ Btm \_\_\_\_\_  
 Stage Collars \_\_\_\_\_  
 Special Equip. \_\_\_\_\_  
 Disp. Fluid Type MUD Amt. FROM CONFIDENTIAL Bbls Weight \_\_\_\_\_ PPG  
 Mud Type \_\_\_\_\_ Weight \_\_\_\_\_ PPG

COMPANY REPRESENTATIVE Chuck Emerson JR.

CEMENTER Neal Rupp

TIME	PRESSURES PSI		FLUID PUMPED DATA			REMARKS
	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min.	
7:40-8:00	450					ARRIVED ON LOCATION 4:30P - REG UP RAN DRILL PIPE TO 6550' (REGULATE - 1st Plug 6550 w 40 SK.
8:10	600				6	START H <sub>2</sub> O SPACER
	500		33.25	11.25	5	SPACER IN - START SLURRY
	500		37.25	4.0	6	SLURRY IN - START H <sub>2</sub> O SPACER
8:30	300		123.25	86.0	0	SPACER IN - START MUD DISPLACEMENT
	0					MUD IN - SHUT DOWN - Plug DOWN CEMENT TOP PIPE OUT 6364' 2ND Plug 750 w 50 SK
11:35						LOAD HOLE
11:40	200				5	START H <sub>2</sub> O SPACER
	250				6	SPACER IN - START SLURRY
	150		26.0	14.0	5	SLURRY IN - START H <sub>2</sub> O SPACER
	150		22.0	0.2	5	SPACER IN - START MUD DISPLACEMENT
11:45	0		27.25	5.25		MUD IN - SHUT DOWN - Plug DOWN CEMENT TOP PIPE OUT 526' IN 8 5/8 CS
11:50						3RD Plug 400 w 30 SK
11:55	150				4	LOAD HOLE
12:00 AM	150			3.0	4	START H <sub>2</sub> O SPACER
	100		11.5	8.5	4	SPACER IN - START SLURRY
	0		12.5	1.0	4	SLURRY IN - START H <sub>2</sub> O SPACER
12:00 AM			15.0	2.5		SPACER IN - START MUD DISPLACEMENT
1:35			10.0	10.0		MUD IN - SHUT DOWN - Plug DOWN CEMENT TOP PIPE OUT 267' IN 8 5/8
1:45						40' w 10 SK - KATHOLE w 15 SK - MOUSE HOLE 10 SK Job COMPLETE

FINAL DISP. PRESS: \_\_\_\_\_ PSI BUMP PLUG TO \_\_\_\_\_ PSI BLEEDBACK \_\_\_\_\_ BBLs. THANK YOU NR

CONFIDENTIAL

ORIGINAL

Phone 913-483-2627, Russell, KS  
Phone 316-793-5861, Great Bond, KS

Phone 913-625-5516, Hays, KS  
Phone 913-672-3471, Oakley, KS

Phone 316-886-5926, Medicine Lodge, KS  
Phone 913-798-3843, Ness City, KS

# ALLIED CEMENTING CO., INC.

6329

Home Office P. O. Box 31

Russell, Kansas 67665

NEW

Date	4/8/94	Sec.	16	Twp.	34s	Range	20W	Called Out	8:30 PM	On Location	10:30 PM	Job Start	12:00 AM	Finish	3:00 AM	
Lease	Bluff Creek	Well No.	16-1	Location				Protection 5s 4w 2s 4w 5s	County	Comanche	State	145				

Contractor	H-40 Drilling	
Type Job	Cmt 8 3/4 Surface Csg	
Hole Size	12 1/4	T.D. 725
Csg.	8 3/4 24 #	Depth 720
Tbg. Size		Depth
Drill Pipe		Depth
Tool		Depth
Cement Left in Csg.	38	Shoe Joint 38
Press Max.	500	Minimum 50
Meas Line		Displace 43.4 BB
Perf.		

Owner Cody Energy Inc  
 To Allied Cementing Co., Inc.  
 You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Charge To H-40 Drilling Co Inc.  
 Street 251 N. Water Suite 10  
 City Wichita State Ko 67202  
 The above was done to satisfaction and supervision of owner agent or contractor.

Purchase Order No. X  
 CEMENT

Amount 230 SKS 68/35 16% gel 2% cacl<sup>2</sup> 4# Flo-Seal  
 Ordered 150 SKS Class A + 2% gel 2% cacl<sup>2</sup>

### EQUIPMENT

Pumptrk	No.	Cementer	<u>Max Ball</u>
	<u>266</u>	Helper	<u>Justin Hart</u>
Pumptrk	No.	Cementer	
		Helper	
Bulktrk	<u>258</u>	Driver	<u>John Kelley</u>
		Driver	

Consisting of				
Common	<u>300</u>	<u>RELEASED</u>	<u>5.75</u>	<u>1725.00</u>
Poz. Mix	<u>80</u>		<u>3.00</u>	<u>240.00</u>
Gel.	<u>15</u>	<u>OCT 26 1995</u>	<u>9.00</u>	<u>135.00</u>
Chloride	<u>9</u>		<u>25.00</u>	<u>225.00</u>
Quickset				
Flo-Seal	<u>58</u>		<u>1.10</u>	<u>63.80</u>
				Sales Tax

DEPTH of Job 720'

Reference:	<u>Pump Charge</u>	<u>59994.80</u>
	<u>50 mi Mileage</u>	
	<u>1 8 3/4 Rubber Plug</u>	<u>100.00</u>
Sub-Total		<u>59994.80</u>
Tax		<u>189.30</u>
Total		<u># 60184.10</u>

Handling	<u>380</u>	<u>1.00</u>	<u>380.00</u>
Mileage	<u>50</u>		<u>760.00</u>
Sub-Total			
<b>CONFIDENTIAL</b>			
Total			<u>3528.80</u>

Remarks: Cmt 8 3/4 surface Csg with 150 SKS Class A + 2% gel 2% cacl<sup>2</sup> Prop Plug Displace 43.4 BB Land Plug close in Cmt did not Circulate Top off with 80 SKS 68/35 16% gel

Floating Equipment	
<u>1-8 3/4 Baffle</u>	<u>105.00</u>
<u>1-8 3/4 Centralizer</u>	<u>61.00</u>
<u>1-8 3/4 Cement Basket</u>	<u>180.00</u>
<u># 346.00</u>	
Total	<u># 4664.10</u>
Disc -	<u>933.82</u>
	<u># 3730.28</u>