

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 20887 -0000

ORIGINAL

County Comanche

-NW - SW - NE Sec. 16 Twp. 34 Rge. 20 X ^E _W

Operator: License # 31232

1665 Feet from S (circle one) Line of Section

Name: Cody Energy, Inc.

2365 Feet from E (circle one) Line of Section

Address 7555 E. Hampden Ave.,

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

Suite 600

City/State/Zip Denver, CO 80231

Lease Name Selzer Well # 16-4

Purchaser: Koch Oil Company & Northern Nat. Gas

Field Name Schumacher North

Operator Contact Person: Rock Petty

Producing Formation Arbuckle

Phone (915) 686 0181

Elevation: Ground 1755' KB 1768'

Contractor: Name: Brandt Drilling Co.

Total Depth 6500' PBD 6395'

License: 5840

Amount of Surface Pipe Set and Cemented at 697 Feet

Wellsite Geologist: None

Multiple Stage Cementing Collar Used? Yes X No

Designate Type of Completion
X New Well Re-Entry Workover

If yes, show depth set NA Feet

X Oil SWD S10W Temp. Abd.
Gas ENHR SIGW
Dry Other (Complete) CONFIDENTIAL

If Alternate II completion, cement circulated from NA

feet depth to w/ sx cmt.

RELEASED
OCT 26 1995

Drilling Fluid Management Plan ALT 1 9/4 3-6-95
(Data must be collected from the Reserve Pt)

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

Chloride content 9500 ppm Fluid volume 1500 bbls

Operator: _____

Dewatering method used Evaporation

Well Name: 16-4

Location of fluid disposal if hauled offsite: _____

Comp. Date _____ Old Total Depth 6395'

Operator Name _____
KANSAS CORPORATION COMMISSION

Deepening Re-perf. CONFIDENTIAL
Plug Back PBD
Commingled Docket No. _____
Dual Completion Docket No. _____
Other (SWD or inj?) Docket No. _____

Lease Name 9-2-94
SEP 02 1994

5/5/94 5/25/94 6/9/94
Spud Date Date Reached TD Completion Date

County _____ Docket WICHITA, KS

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 to regulate 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

Title District Engineer Date 9/1/94

Subscribed and sworn to before me this 1st day of September, 19 94.

Notary Public Vicki Waldrep Vicki Waldrep

Date Commission Expires 8/29/96

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

SIDE TWO

Operator Name Cody Energy, Inc. Lease Name Selzer Well # 16-4
 Sec. 16 Twp. 34 Rge. 20 East West
 County Comanche

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	Lansing	4293'	-2525'
Electric Log Run (Submit Copy.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Swope	4718'	-2950'
List All E.Logs Run:		Marmaton	4828'	-3060
		Pawnee	4916'	-3148'
		Miss.	5070'	-3302'
		Osage	5591'	-3823'
		Viola	5991'	-4223'
		Simpson	6152'	-4384'
		Arbuckle	6292'	-4524'

PRECISION STRATA DIPMETER
 DUAL INDUCTION
 LONG-SPACED SONIC
 COMPENSATED SONIC
 MICRO-RESISTIVITY

CASING RECORD

New Used

Report all strings set-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
Surface	12 1/4	8 5/8	23#	697'	Lite(65/35)	200	6%gel, 2% CaCl, 1/4# flocele
Production	7 7/8	5 1/2	17#	6500'	H/50-50Poz	125	2%CaCl, 2%gel, 8%salt, .5%Hallad
					H	100	5% calseal, 18% salt, 75% Hallad

ADDITIONAL CEMENTING/SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<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
2	6404' - 6442'	A/2000 gal 15% HCL	6404' to 6442'
	CIBP set @ 6395' / dumped 2 sx cmt		
2	6293'-6303'	A/1000 gal 15% HCL	

TUBING RECORD	Size	Set At	Packer At	Liner Run
	2 7/8	6355'	NA	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumed Production, SWD or Inj.	Producing Method			
6/24/94	<input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)			
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio
	69	58	136	840.57
				Gravity 42

Disposition of Gas: Vented Sold Used on Lease Open Hole Perf. Dually Comp. Commingled

METHOD OF COMPLETION

Production Interval 6293'-6303'

15-033-20887-0000

CONFIDENTIAL

ORIGINAL

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

6376

Home Office P. O. Box 31

Russell, Kansas 67665

New Well

Date	Sec.	Twp.	Range	Called Out	On Location	Job Start	Finish
5-6-94	16	34S	20W	1:30 AM	5:30 AM	9:00	10:15
Lease	Well No.	Location		County	State		
SEIZER	16-4	PROTECTION 5S-1/2W-2S-1/2W-1/4S		COMANCHE	KANSAS		

Contractor	BRANDT Oil & Gas, Reg #2	
Type Job	SURFACE CSB:	
Hole Size	12 1/4	I.D. 7 1/2'
Csg.	8 5/8 - 20"	Depth 697' - 40'
Tbg. Size		Depth
Drill Pipe	RELEASED	Depth
Tool		Depth
Cement Left in Csg.		Shoe Joint 43'
Press Max.	FROM CONFIDENTIAL	Minimum
Meas Line		Displace 41.75
Perf.		

Owner	Cody Energy	
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	Cody Energy Inc.	
Street	7555 E. Hampden Ave Ste. 600	
City	Denver	State CO. 80231
The above was done to satisfaction and supervision of owner agent or contractor.		
Purchase Order No.	94455	
X	<i>[Signature]</i>	

EQUIPMENT

No.	Cementer	272	NEAL R
Pumptrk 255/265	Helper		CARL B
No.	Cementer		
Pumptrk	Helper		
	Driver		MARK B.
Bulktrk 256/250	Driver		

CEMENT	
Amount Ordered	200 SK 65/35 6% GEL + 2% CC + 1/4# FLO-SEAL/SK
Consisting of	
Common	280
Poz. Mix	70
Gel.	13 KANSAS CORPORATION COMMISSION
Chloride	8
Quickset	SEP 02 1994
Flo-SEAL	50
Handling	350
Mileage	60

DEPTH of Job	697'	
Reference:		
60	Pump Charge	584.83
1	Pump Mileage	135.00
1	8 5/8 Top Rubber Plug	83.00
	Total	802.83

Conservation Division	WICHITA, KS
Handling	350
Mileage	60
TOTAL	\$4560.83
Disc	912.17
	<u>\$3648.66</u>
Floating Equipment	

Remarks: RAN 8 5/8 TO 697' CEMENTED WITH 200 SK 65/35 6% GEL + 2% CC + 1/4# CELLULOSE-FLAKE Followed by 150 SK CLASS A 2% CC + 2% GEL Pumped Plug TO 654' WITH 41.75 Brls H₂O - CEMENT DID CIRCULATE, b

1 - 8 5/8 Baffle Plate	105.00
1 - 8 5/8 Centralizer	61.00
1 - 8 5/8 Basket	180.00
1 PT Baker Lock	30.00
	\$376.00

THANKS b

WELL DATA

FIELD _____ SEC. 15 TWP. 34 RING. 20W COUNTY COMANCHE STATE KS

FORMATION NAME _____ TYPE _____
 FORMATION THICKNESS _____ FROM _____ TO _____
 INITIAL PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD
 PRESENT PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD
 COMPLETION DATE _____ MUD TYPE _____ MUD WT. 9.14
 PACKER TYPE _____ SET AT _____
 BOTTOM HOLE TEMP. _____ PRESSURE _____
 MISC. DATA _____ TOTAL DEPTH 6560

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING		15 1/2 / 17	5 1/2	0	6499.5	
LINER						
TUBING						
OPEN HOLE					4500	SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

ORIGINAL

JOB DATA

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR <u>COMP. FLOAT EQUIP. (USCATED)</u>		
FLOAT SHOE <u>FLOAT SHOE, FLOAT COLLAR</u>		
GUIDE SHOE <u>STAGE COLLAR, 2 PALM BASKETS</u>		
CENTRALIZERS <u>29 CENTRALIZERS, 77 CABLE WINCHES</u>		
BOTTOM PLUG		
TOP PLUG		
HEAD <u>P.C.</u>	<u>1</u>	<u>H.E.S.</u>
PACKER		
OTHER <u>T & J ALLOC EQUIP</u>		<u>H.C.D.</u>

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <u>5-24</u> TIME <u>1200</u>	DATE <u>5-24</u> TIME <u>1640</u>	DATE <u>5-26</u> TIME <u>2204</u>	DATE <u>5-27</u> TIME <u>0730</u>

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
<u>M. BOLYARD 50848</u>	<u>38423 P/M</u>	<u>PRATI KS</u>
<u>K. GORDLEY 85500</u>	<u>51934 COMB.</u>	<u>PRATI KS</u>
<u>L. GARDNER G 2723</u>	<u>50808 BULK</u>	<u>PRATI KS</u>
<u>T. SCIBA G 1060</u>	<u>3711 7488 BULK</u>	<u>PRATI KS</u>

MATERIALS

TREAT. FLUID _____ DENSITY _____ LB./GAL. °API
 DISPL. FLUID _____ DENSITY _____ LB./GAL. °API
 PROP. TYPE _____ SIZE _____ LB.
 PROP. TYPE _____ SIZE _____ LB.
 ACID TYPE RELEASED GAL. _____ %
 ACID TYPE _____ GAL. _____ %
 ACID TYPE SEP 2 6 1995 GAL. _____ %
 SURFACTANT TYPE _____ GAL. _____
 NE AGENT TYPE _____ IN _____
 FLUID LOSS ADD. TYPE _____ GAL.-LB. _____
 GELLING AGENT TYPE _____ GAL.-LB. _____
 FRIC. RED. AGENT TYPE _____ GAL.-LB. _____
 BREAKER TYPE _____ GAL.-LB. _____
 BLOCKING AGENT TYPE _____ GAL.-LB. _____
 PERFPAC BALLS TYPE _____ QTY. _____
 OTHER _____
 OTHER _____

CONFIDENTIAL

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KANSAS CORPORATION COMMISSION

SEP 02 1994

DEPARTMENT DMT
 DESCRIPTION OF JOB DMT 5 1/2" 15 1/2 & 17"
 CONSERVATION DIVISION
 WICHITA, KS

JOB DONE THRU: TUBING CASING ANNULUS TBG/ANN.

CUSTOMER REPRESENTATIVE X Ch...

HALLIBURTON OPERATOR M. R. Bolyard COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
1	125	50/100 - 50/PRGM.			2% GEL 2% C.C. 12% 7% CIL 5% HALAD 9		
1	106	50/102 - 50/PRGM.			5% CACSEAL 12.5% CIL 7.5% HALAD 322 10% SALT	1.53	13.19
2	550	50/102 - 50/PRGM.			2% GEL 5% SALT 5% HALAD 9 PEXCIL	1.53	13.2

PRESSURES IN PSI

SUMMARY

VOLUMES

CIRCULATING _____ DISPLACEMENT _____
 BREAKDOWN _____ MAXIMUM _____
 AVERAGE _____ FRACTURE GRADIENT _____
 SHUT-IN: INSTANT _____ 5-MIN _____ 15-MIN _____
 HYDRAULIC HORSEPOWER _____

ORDERED _____ AVAILABLE _____ USED _____
 AVERAGE RATES IN BPM _____

TREATING _____ DISPL. _____ OVERALL _____
 CEMENT LEFT IN PIPE _____

FEET 18 REASON SCOUR COLLAR

PRESLUSH: BBL. 20 12 TYPE H₂O / surfactant
 LOAD & BKDN: BBL. - GAL. _____ PAD: BBL. - GAL. _____
 TREATMENT: BBL. - GAL. _____ DISPL: BBL. - GAL. _____
 CEMENT SLURRY: BBL. - GAL. 20.34.06 + 26.57 2576 149.87
 TOTAL VOLUME: BBL. - GAL. 60.95

REMARKS
DMT 15 1/2" 153.83 GPM
17.9 H₂O 135.8 GPM
DMT 20 1/2" 135.8 H₂O

CUSTOMER: COOK COUNTY, OK
 LEASE: SELZING
 WELL NO: 16-4
 JOB TYPE: CEMENT
 DATE: 5-27

JOB LOG FORM 2013 R-4

CUSTOMER		WELL NO.		LEASE		JOB TYPE		TICKET NO.	
COIN ENERGY INC.		16-4		SELER		CEMENT		014259	
CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS	
				T	C	TUBING	CASING		
	1200							CALLED OUT 5-26-94	
	1640							ON LOCATION RIG JUST GETTING READY TO RUN JOB	
								ORIGINAL	
								BREAK CIRC.	
								1 ST STAGE 125 SCS ⁵⁰ / ₃₀ 100 PEGM (LEAD) 100 SCS EA ² PEGM (TAIL)	
	2204	7	0			600		PUMPING 11 ³ FLUSH 20 BBL.	
		7	25			600		PUMPING SUPERFLUSH 12 BBL. TAKE ON 1 TANK MUD MIX CMT. (60.95 BBL TOTAL)	
		6 1/2	32			500	NO	PUMPING	
	2231		92.95					SHUT DOWN SHUT IN INSTALL FLUG READY TO DISP.	
	2232							FLUSH LINES	
	2234	4 1/2	0					START DISP.	
		7	4			400		PSI	
	2240	6	26			200		SLOW RATE NOT KEEPING UP W/ MUD	
	2245	6 1/2				250		RATE	
	2257		98					LIFT PSI.	
		4	130			400		SLOW RATE	
			154					FLUG DIDN'T LAND DISC. W/ EXCESS MUD APPLICATION	
		1/2	158.4					3% EXCESS NOT LANDED	
	2330	3/4	163.4					6% EXCESS DIDN'T LAND 3000 CUST SAID HE WOULD RATHER DRIC SOME THAN TAKE A CHANCE	
								FLUG PROB NOT DOWN NOT CHANGING RELEASED & HELD	
								DROP OPEN FLUG LET FALL 30 MIN. WASH UP TRK.	
								ON LINE TO WELL.	
	2408		0			900		PUMP TO PSI & OPEN STAGE TOOL	
	2410	6						CIRC. W/ TRK. TILL CMT. CLEAR	
			250			400		MUD THICKER UP (FLUSH SHOW)	
			280					CMT CONTAINED MUD	
			310					CLEAR	
	0105		320					SHUT DOWN	
								HOOK UP RIG PUMP TO CIRC.	
								RIG LAST CIRC & GOT IT OK	

RECEIVED
 KANSAS CORPORATION COMMISSION
 SEP 02 1994
 CONSERVATION DIVISION
 WICHITA, KS

CONFIDENTIAL

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

RECEIVED
MAY 31 1994

Drill-Stem Test Data API# 15-033-20887

Ans'd.....

Well Name SELZER #16-4 Test No. 1 Date 5/11/94
Company CODY ENERGY Zone _____
Address 7555 E HAMPDEN AVE-#600 DENVER CO 80231 Elevation 1767 KB
Co. Rep./Geo. CHUCK EMERSON Cont. BRANDT DRLG RIG #2 Est. Ft. of Pay _____
Location: Sec. 16 Twp. 34S Rge. 20W Co. COMANCHE State KS

Interval Tested 3906-4036 Drill Pipe Size 4.5" XH
Anchor Length 130 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 3901 Drill Collar - 2.25 Ft. Run 536
Bottom Packer Depth 3906 Mud Wt. 8.9 lb/Gal.
Total Depth 4036 Viscosity 54 Filtrate 11.8

Tool Open @ 9:10 AM Initial Blow VERY STRONG BLOW-BOTTOM OF BUCKET AS TOOL OPENED
ISI: BLED OFF BLOW-NO BLOW BACK
Final Blow BOTTOM OF BUCKET AS TOOL OPENED
FSI: BLED OFF BLOW-NO BLOW BACK

ORIGINAL

Recovery - Total Feet 2530 **RELEASED** Flush Tool? NO
Rec. 1160 Feet of DRILLING MUD **OCT 26 1995**
Rec. 1370 Feet of SALT WATER **NO**
Rec. _____ Feet of **FROM CONFIDENTIAL**
Rec. _____ Feet of **SEP 1**
Rec. _____ Feet of **CONFIDENTIAL**

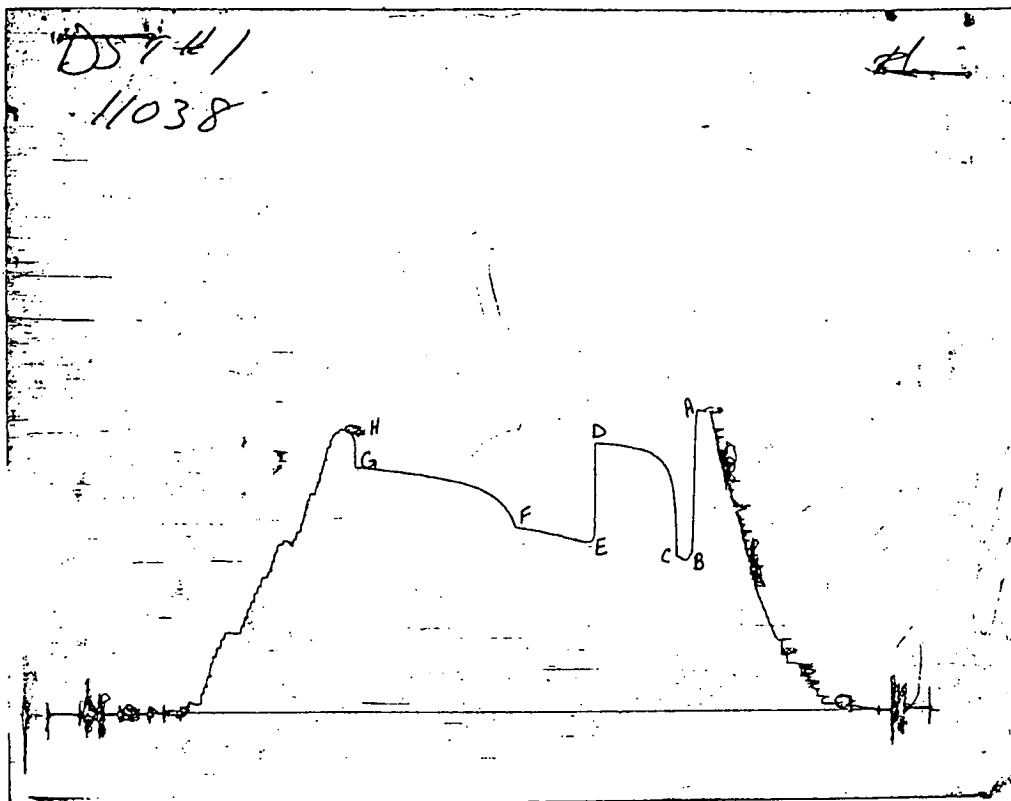
ORIGINAL

BHT 108 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 0.135 @ 95 °F Chlorides 43000 ppm Recovery Chlorides 15000 ppm System

(A) Initial Hydrostatic Mud 1938.3 PSI AK1 Recorder No. 13615 Range 4575
(B) First Initial Flow Pressure 982.8 PSI @ (depth) 4002 w / Clock No. 25813
(C) First Final Flow Pressure 1020.7 PSI AK1 Recorder No. 11038 Range 5075
(D) Initial Shut-in Pressure 1739.6 PSI @ (depth) 4033 w / Clock No. 25814
(E) Second Initial Flow Pressure 1115.5 PSI AK1 Recorder No. _____ Range _____
(F) Second Final Flow Pressure 1209.9 PSI @ (depth) _____ w / Clock No. _____
(G) Final Shut-in Pressure 1585.9 PSI Initial Opening 15 Final Flow 60
(H) Final Hydrostatic Mud 1821.7 PSI Initial Shut-in 60 Final Shut-in 120

Our Representative TOM HORACEK

CHART PAGE



This is an actual photograph of recorder chart #11038

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1940	1938.3
(B) FIRST INITIAL FLOW PRESSURE	995	982.8
(C) FIRST FINAL FLOW PRESSURE	1020	1020.7
(D) INITIAL CLOSED-IN PRESSURE	1738	1739.6
(E) SECOND INITIAL FLOW PRESSURE	1109	1115.5
(F) SECOND FINAL FLOW PRESSURE	1209	1209.9
(G) FINAL CLOSED-IN PRESSURE	1587	1585.9
(H) FINAL HYDROSTATIC MUD	1852	1821.7

FLUID SAMPLER DATA

CONFIDENTIAL

Ticket No.: 7005 Date: 5/11/94
 Company: CODY ENERGY
 Lease: SELZER #16-4 Test No.: 1
 County: COMANCHE Sec.: 16 Twp.: 34S Rng.: 20W

SEP 1
 CONFIDENTIAL

SAMPLER RECOVERY

PIT MUD ANALYSIS

Gas
 Oil trace
 Mud
 Water 4000
 Other
 Pressure 1400
 TOTAL 4000

Chlorides 15000
 Resistivity ohms@ F
 Viscosity 54
 Mud Wt. 8.9
 Filtrate 11.8
 Other

RELEASED
 OCT 26 1995
 FROM CONFIDENTIAL

ORIGINAL

SAMPLER ANALYSIS

PIPE RECOVERY

Resistivity 0.135 ohms@ 95 F
 Chlorides 43000 ppm.
 Gravity corrected @60F

TOP
 Resistivity 0.137 ohms@ 93 F
 Chlorides 42000 ppm

MIDDLE
 Resistivity 0.137 ohms@ 93 F
 Chlorides 42000 ppm

BOTTOM
 Resistivity 0.135 ohms@ 95 F
 Chlorides 43000 ppm

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

ORIGINAL

Drill-Stem Test Data

CONFIDENTIAL

Well Name SELZER #16-4 Test No. 2 Date 5/13/94
 Company CODY ENERGY Zone LWR LANSING
 Address 7555 E HAMPDEN AVE-#600 DENVER CO 80231 Elevation 1767 KB
 Co. Rep./Geo. CHUCK EMERSON Cont. BRANDT DRLG RIG #2 Est. Ft. of Pay 3
 Location: Sec. 16 Twp. 34S Rge. 20W Co. COMANCHE State KS

Interval Tested 4540-4587 Drill Pipe Size 4.5" XH
 Anchor Length 47 Wt. Pipe I.D. - 2.7 Ft. Run _____
 Top Packer Depth 4535 Drill Collar - 2.25 Ft. Run 595
 Bottom Packer Depth 4540 Mud Wt. 8.8 lb/Gal.
 Total Depth 4587 Viscosity 53 Filtrate 11.6

Tool Open @ 9:00 AM Initial Blow 1/2" BLOW-BUILT TO BOTTOM OF BUCKET IN 4 MINUTES

ISI: BLED OFF BLOW-NO BLOW BACK

Final Blow BOTTOM OF BUCKET AS TOOL OPENED

FSI: BLED OFF BLOW-NO BLOW BACK

ORIGINAL

Recovery - Total Feet 180 Flush Tool? NO

Rec. 370 Feet of GAS IN PIPE
 Rec. 180 Feet of OIL CUT MUD- 5% GAS/ 40% OIL / 55% MUD
 Rec. _____ Feet of _____
 Rec. _____ Feet of _____
 Rec. _____ Feet of _____

SEP 1
CONFIDENTIAL

BHT 118 °F Gravity 43 °API @ 84 °F Corrected Gravity 41.1 °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 21000 ppm System

(A) Initial Hydrostatic Mud 2228.9 PSI AK1 Recorder No. 13615 Range 4575

(B) First Initial Flow Pressure 61.8 PSI @ (depth) 4543 w / Clock No. 25813

(C) First Final Flow Pressure 55.1 PSI AK1 Recorder No. 11038 Range 5075

(D) Initial Shut-in Pressure 953.6 PSI @ (depth) 4584 w / Clock No. 25814

(E) Second Initial Flow Pressure 122.8 PSI AK1 Recorder No. _____ Range _____

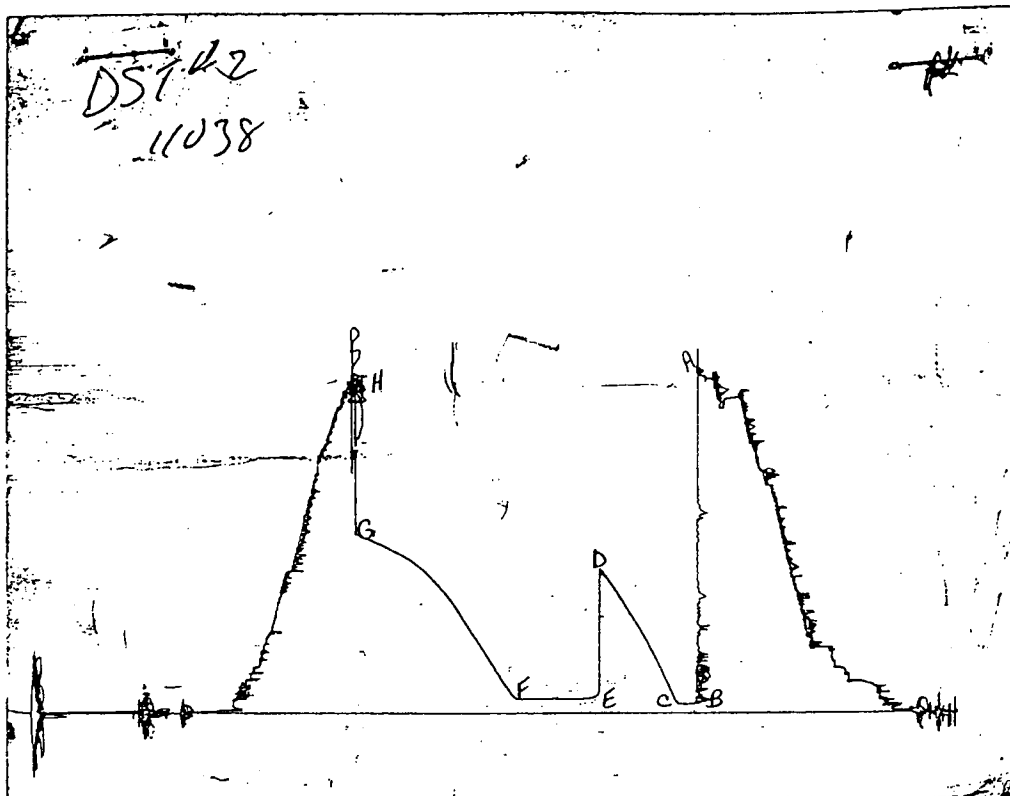
(F) Second Final Flow Pressure 94.4 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 1178.4 PSI Initial Opening 15 Final Flow 60

(H) Final Hydrostatic Mud 2185.3 PSI Initial Shut-in 60 Final Shut-in 120

Our Representative TOM HORACEK

CHART PAGE



This is an actual photograph of recorder chart #11038

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2208	2228.9
(B) FIRST INITIAL FLOW PRESSURE	55	61.8
(C) FIRST FINAL FLOW PRESSURE	55	55.1
(D) INITIAL CLOSED-IN PRESSURE	957	953.6
(E) SECOND INITIAL FLOW PRESSURE	95	122.8
(F) SECOND FINAL FLOW PRESSURE	95	94.4
(G) FINAL CLOSED-IN PRESSURE	1184	1178.4
(H) FINAL HYDROSTATIC MUD	2157	2185.3

C
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FLUID SAMPLER DATA

CONFIDENTIAL
ORIGINAL

Ticket No.: 7006

Date: 5/13/94

Company: CODY ENERGY

Lease: SELZER #16-4

Test No.: 2

County: COMANCHE

Sec.: 16

Twp.: 34S

Rng.: 20W

SAMPLER RECOVERY

PIT MUD ANALYSIS

Gas 4 CU FT

Chlorides 21000

Oil 2200

Resistivity ohms@ F

Mud

Viscosity 53

Water

Mud Wt. 8.8

Other

Filtrate 11.6

Pressure 825

Other

TOTAL 4000

NOV
SEP 1
CONFIDENTIAL

SAMPLER ANALYSIS

PIPE RECOVERY

Resistivity ohms@ F

TOP

Chlorides ppm.

Resistivity ohms@ F

Gravity 41.1 corrected @60F

Chlorides ppm

MIDDLE

Resistivity ohms@ F

Chlorides ppm

BOTTOM

Resistivity ohms@ F

Chlorides ppm

We
Con
Ad
Co.
Loc

Inte
Anc
Top
Bot
Tot

Toc
C
Fin:
4

Rec

Rec
Rec
Rec
Rec
Rec

BH1
RW

(A)

(B)

(C)

(D)

(E) :

(F) :

(G)

(H) :

Our

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

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Drill-Stem Test Data

Well Name SELZER #16-4 Test No. 3 Date 5/21/94
 Company CODY ENERGY Zone VIOLA
 Address 7555 E HAMPDEN AVE-#600 DENVER CO 80231 Elevation 1767 KB
 Co. Rep./Geo. CHUCK EMERSON Cont. BRANDT DRLG RIG #2 Est. Ft. of Pay 20
 Location: Sec. 16 Twp. 34S Rge. 20W Co. COMANCHE State KS

Interval Tested 5962-6035 Drill Pipe Size 4.5" XH
 Anchor Length 73 Wt. Pipe I.D. - 2.7 Ft. Run _____
 Top Packer Depth 5957 Drill Collar - 2.25 Ft. Run 65.6
 Bottom Packer Depth 5962 Mud Wt. 9.1 lb/Gal.
 Total Depth 6035 Viscosity 55 Filtrate 10

Tool Open @ 6:30 AM Initial Blow GOOD BLOW OFF BOTTOM IN 30 SECONDS
GAS TO SURFACE IN 11 MINUTES
 Final Blow OFF BOTTOM IN 10 SECONDS - 2 PSI ON 1/2" ORIFICE =
47.7 MCF/DAY

Recovery - Total Feet 1170 Flush Tool? NO

Rec. 4750 Feet of GAS IN PIPE
 Rec. 1170 Feet of MUDDY OIL
 Rec. _____ Feet of _____
 Rec. _____ Feet of _____
 Rec. _____ Feet of _____

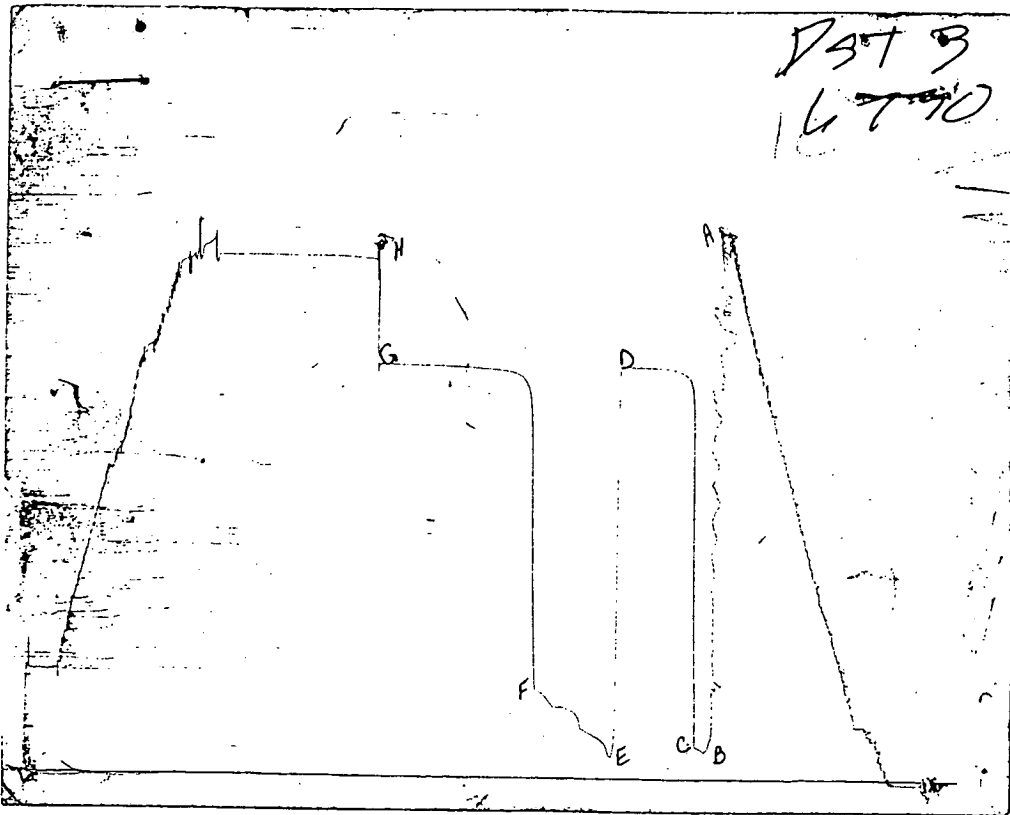
CONFIDENTIAL

BHT 128 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 10000 ppm System

(A) Initial Hydrostatic Mud 2862.2 PSI AK1 Recorder No. 6730 Range 4200
 (B) First Initial Flow Pressure 150.8 PSI @ (depth) 5964 w / Clock No. 25114
 (C) First Final Flow Pressure 174.5 PSI AK1 Recorder No. 10332 Range 4050
 (D) Initial Shut-in Pressure 2205.6 PSI @ (depth) 6030 w / Clock No. 21061
 (E) Second Initial Flow Pressure 118.5 PSI AK1 Recorder No. _____ Range _____
 (F) Second Final Flow Pressure 481.3 PSI @ (depth) _____ w / Clock No. _____
 (G) Final Shut-in Pressure 2203.5 PSI Initial Opening 15 Final Flow 60
 (H) Final Hydrostatic Mud 2836.8 PSI Initial Shut-in 60 Final Shut-in 120

Our Representative MARK HERSKOWITZ

CHART PAGE



This is an actual photograph of recorder chart #6730

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2830	2862.2
(B) FIRST INITIAL FLOW PRESSURE	150	150.8
(C) FIRST FINAL FLOW PRESSURE	183	174.5
(D) INITIAL CLOSED-IN PRESSURE	2206	2205.6
(E) SECOND INITIAL FLOW PRESSURE	107	118.5
(F) SECOND FINAL FLOW PRESSURE	474	481.3
(G) FINAL CLOSED-IN PRESSURE	2206	2203.5
(H) FINAL HYDROSTATIC MUD	2780	2836.8

FLUID SAMPLER DATA

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ORIGINAL

ORIGINAL

Ticket No.: 6486

Date: 5/21/94

Company: CODY ENERGY

Lease: SELZER #16-4

Test No.: 3

County: COMANCHE

Sec.: 16

Twp.: 34S

Rng.: 20W

SAMPLER RECOVERY

Gas
Oil
Mud
Water
Other
Pressure 1950
TOTAL 4000

PIT MUD ANALYSIS

Chlorides 10000
Resistivity 0.4 ohms@ 98 F
Viscosity 55
Mud Wt. 9.1
Filtrate 10
Other

SEP 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

GAS VOLUME REPORT

CODY ENERGY

SELZER #16-4

DST # 3

MIN	PSIG	ORIFICE	MCF/D	MIN	PSIG	ORIFICE	MCF/D
5	1	0.5	33.9	5	5	0.5	78.1
10	1	0.5	33.9	10	5	0.5	78.1
15	1	0.5	33.9	15	4	0.5	68.8
				20	4	0.5	68.8
				25	3	0.5	59.2
				30	3	0.5	59.2
				35	3	0.5	59.2
				40	2	0.5	47.7
				45	2	0.5	47.7
				50	2	0.5	47.7
				55	2	0.5	47.7
				60	2	0.5	47.7

Remarks: RECOVERED 1170' FLUID-REVERSED OUT 2BBL -95% OIL
14.5 BBL - 50% OIL/ 50% MUD
TOTAL RECOVER - 16.5 BBL