

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

SIDE ONE

15-53-20687-00-00 ✓

API NO. 15-..... 153-20,687

County RAWLINS

N $\frac{1}{2}$ S $\frac{1}{2}$ NW $\frac{1}{4}$ Sec. 13 Twp. 15 Rge. 35 East
West

3630 Ft North from Southeast Corner of Section
3960 Ft West from Southeast Corner of Section

(Note: Locate well in section plat below)

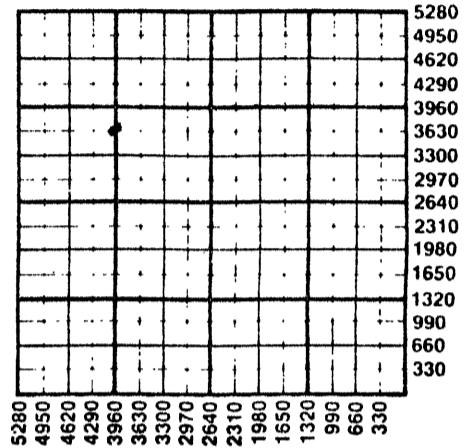
Lease Name Chadderton Well # 4

Field Name West CAHaji

Producing Formation WANSING KANSAS CITY

Elevation: Ground 3119 KB 3176

Section Plat



WATER SUPPLY INFORMATION

Disposition of Produced Water: Disposal
Docket # Repressuring

Questions on this portion of the ACO-1 call:
Water Resources Board (913) 296-3717

Source of Water:
Division of Water Resources Permit #.....

Groundwater.....Ft North from Southeast Corner
(Well)Ft West from Southeast Corner of
Sec Twp Rge East West

Surface Water.....Ft North from Southeast Corner
(Stream, pond etc).....Ft West from Southeast Corner
Sec Twp Rge East West

Other (explain).....
(purchased from city, R.W.D. #)

Operator: License # 7448
Name Burch Exploration, Inc.
Address 1225 E. 1st St. W. W. 1124
City/State/Zip Pomeroy, Colo. 80651

Purchaser K&K Oil Co.
Wichita, Kan. 67201

Operator Contact Person M. Taylor
Phone 303-345-3214

Contractor: License # 8682
Name GOLDEN FIELD DRILLING CO.

Wellsite Geologist Paul D. Wright
Phone 303-541-3111

Designate Type of Completion
 New Well Re-Entry Workover
 Oil SWD Temp Abd.
 Gas Inj Delayed Comp.
 Dry Other (Core, Water Supply, etc.)

If ONWO: old well info as follows:
Operator
Well Name
Comp. Date Old Total Depth.....

WELL HISTORY

Drilling Method:
 Mud Rotary Air Rotary Cable
7-1-87 7-11-87 7-31-87
Spud Date Date Reached TD Completion Date
4218 4285
Total Depth PBTD

Amount of Surface Pipe Set and Cemented at 314 feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set.....feet
If alternate 2 completion, cement circulated
from 315 feet depth to surface cmt
Cement Company Name B.T. TOWN HILLS
Invoice #

RECORDED
STATE CORPORATION COMMISSION
01-15-1988
WICHITA, KANSAS
CONSERVATION DIVISION
Wichita, Kansas

INSTRUCTIONS: This form shall be completed in triplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date of any well. Rule 82-3-130, 82-3-107 and 82-3-106 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 drillers time log shall be attached with this form. 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 J. David Burch
Title Gen. Mgr. Date 1/12/88

Subscribed and sworn to before me this 12th day of January
1988
Notary Public Linda Cannon
Date Commission Expires 4-1-90

K.C.C. OFFICE USE ONLY

F Letter of Confidentiality Attached
C Wireline Log Received
C Drillers Timelog Received

Distribution

KCC SWD/Rep NGPA
 KGS Plug Other
(Specify)

Sec. 13, Twp. 15, Rge. 35 E

Operator Name Burch Exploration Inc Lease Name Chadwick Well # 4

Sec. 13 Twp. 1-5 Rge. 35 East West County Lawrence

WELL LOG

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 Yes No
 Samples Sent to Geological Survey Yes No
 Cores Taken Yes No

Formation Description Log Sample

| Name | Top | Bottom |
|--------------|------|--------|
| STONE CORRAL | 3018 | 3054 |
| TOPEKA | 3855 | |
| DEER CREEK | 3900 | |
| OREAD | 3952 | |
| LANSING K.C. | 4077 | 4353 |

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 | 7 5/8 | 2.1 | 311 | Water | 185 | 3% SPT |
| Production | 10 1/8 | 4 1/2 | 10.5 | 4317 | Water | 360 | 3% SPT |

PERFORATION RECORD Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used) Depth

| Shots Per Foot | Specify Footage of Each Interval Perforated | Depth |
|----------------|---------------------------------------------|-----------------------|
| 4 | 42.40 TB 3.13 | 500.98 1.3 11.5 15.70 |
| 4 | 43.87 TB 1.285 | 500.98 1.3 11.5 15.70 |

TUBING RECORD Size 2 3/8 Set At 4254 Packer at _____ Liner Run Yes No

Date of First Production 8-1-57 Producing Method Flowing Pumping Gas Lift Other (explain) _____

| Estimated Production Per 24 Hours | Oil | Gas | Water | Gas-Oil Ratio | Gravity |
|-----------------------------------|--------|-----|----------|---------------|---------|
| | 5 Bbls | MCF | 115 Bbls | CFPB | |

METHOD OF COMPLETION

Production Interval

Disposition of gas: Vented Open Hole Perforation
 Sold Other (Specify) _____
 Used on Lease Dually Completed _____
 Commingled _____

CHENEY TESTING COMPANY, INC.

P. O. Box 367

HILL CITY, KANSAS 67642

15-153-20687-00-00

DRILL-STEM TEST DATA

| | |
|------------------------------------------------------------------------------------------------|------------------------------------|
| Company <u>Burch Exploration Inc.</u> | Test No. <u>1</u> |
| Well Name & Number <u>Chadderdon #4</u> | Zone Tested <u>Kansas City "C"</u> |
| Company Address <u>11225 Edinborough Way, Parker, Colo. 80134</u> | Date <u>7-10-87</u> |
| Company Rep. <u>Paul Prijatel- Dave Burch</u> | Tester <u>Gary Hartwell</u> |
| Contractor <u>Golden Eagle Drilling Co.</u> | Elevation <u>3130 G.L.</u> |
| Location: Sec. <u>13</u> Twp. <u>1S</u> Rge. <u>35W</u> Co. <u>Rawlins</u> State <u>Kansas</u> | Est. Feet of Pay _____ |

Recorder No. 13363 Type AK-1 Range 3800 PSI

Recorder Depth 4164 Clock # 23859

(A) Initial Hydrostatic Mud 1998 PSI

(B) First Initial Flow Pressure 57 PSI

(C) First Final Flow Pressure 57 PSI

(D) Initial Shut-in Pressure 200 PSI

(E) Second Initial Flow Pressure 66 PSI

(F) Second Final Flow Pressure 66 PSI

(G) Final Shut-in Pressure - PSI

(H) Final Hydrostatic Mud 1995 PSI

Temperature 126'

Mud Weight 9.0 Viscosity 9.0

Fluid Loss 6.8

Interval Tested 4130-4170

Anchor Length 40'

Top Packer Depth 4125

Bottom Packer Depth 4130

Total Depth 4170

Drill Pipe Size 4 1/2" X. H.

COLLARS
Wt. 2.25 Ft. Run 357

Recovery-Total Feet 60'

Recovered 60 Feet Of Mud.

Recovered _____ Feet Of _____

Recovered _____ Feet Of _____

Recovered _____ Feet Of _____

Recovered _____ Feet Of _____

Recovered _____ Feet Of _____

Extra Equipment Dw. Hole Ins, Sampler, Bowen Jars, Safety Joint Price of Job \$526.00

Recorder No. 13371 Type AK-1 Range 3900 PSI

Recorder Depth 4167 Clock # 25561

Tool Open Before I.S.I. 15 Mins

Initial Shut-in 30 Mins

Flow Period 25 Mins

Final Shut-in - Mins.

Top Choke Size 1" Hole Size 7 7/8"

Bottom Choke Size 3/4" Rubber Size 6 3/4

Tool Open @ 1:30 A.M.

Blow Remarks 1st Open: Weak 2 1/2" Blow.

No Blow. Flushed Tool. Weak surge. No Blow.

Flushed Tool.

2nd Open: Weak Surge. No Blow.

Tool Slid 4'-5' when opened!

CHENEY TESTING CO., INC.

P. O. BOX 367

HILL CITY, KANSAS 67642

15-153-20687-00-00 FLUID SAMPLER DATA

| | | | |
|--------------|-------------------------|----------|------------------|
| Ticket No. | 14375 | Date | 7-10-87 |
| Company Name | Burch Exploration, Inc. | | |
| Lease | Chadderdon #4 | Test No. | 1 |
| County | Rawlins Co. , Ks. | Sec. 13 | Twp. 1S Rge. 35W |

SAMPLER RECOVERY

Gas _____ ML
Oil _____ ML
Mud _____ 2,000 ML
Water _____ ML
Other _____ ML
Pressure _____ 30 P.S.I.
Total _____ 2,000 ML

PIT MUD ANALYSIS

Chlorides _____ 2,000 ppm
Resistivity _____ 2.34 ohms @ _____ 78 °F
Viscosity _____ 55
Wt. _____ 9.0
Filtrate _____ 6.8 cc
Other _____ 4 lbs. LCM

SAMPLER ANALYSIS

Resistivity _____ 2.52 ohms @ _____ 73 °F
Chlorides _____ 2,100 ppm
Gravity _____ - Corrected @ 60°F

PIPE RECOVERY

TOP:

Resistivity _____ - ohms @ _____ - °F
Chlorides _____ - ppm

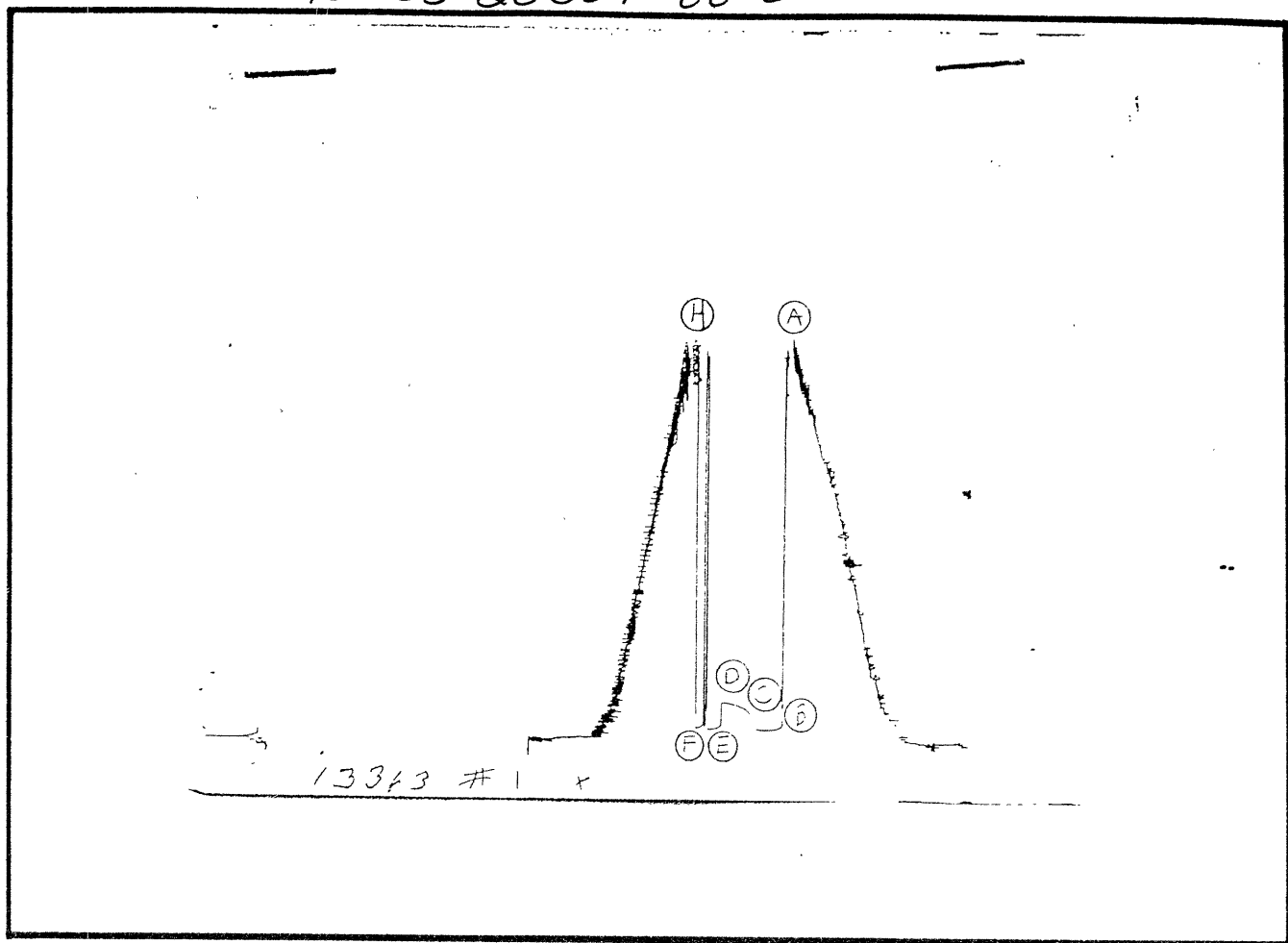
MIDDLE:

Resistivity _____ - ohms @ _____ - °F
Chlorides _____ - ppm

BOTTOM:

Resistivity _____ 2.56 ohms @ _____ 74 °F
Chlorides _____ 2,000 ppm

15-153-20687-00-00



This is an actual photograph of recorder chart.

| POINT | PRESSURE | | PSI |
|----------------------------------|---------------|----------------|-----|
| | Field Reading | Office Reading | |
| (A) Initial Hydrostatic Mud | 1998 | | PSI |
| (B) First Initial Flow Pressure | 57 | | PSI |
| (C) First Final Flow Pressure | 57 | | PSI |
| (D) Initial Closed-in Pressure | 200 | | PSI |
| (E) Second Initial Flow Pressure | 66 | | PSI |
| (F) Second Final Flow Pressure | 66 | | PSI |
| (G) Final Closed-in Pressure | - | | PSI |
| (H) Final Hydrostatic Mud | 1995 | | PSI |

CHENEY TESTING COMPANY, INC.

P. O. Box 367

HILL CITY, KANSAS 67642

15-153-20687-00-00 DRILL-STEM TEST DATA

| | |
|------------------------------------------------------------------------------------------------|------------------------------------|
| Company <u>Burch Exploration, Inc.</u> | Test No. <u>2</u> |
| Well Name & Number <u>Chadderdon #4</u> | Zone Tested <u>Kansas City "E"</u> |
| Company Address <u>11225 Edinborough Way, Parker, Colo. 80134</u> | Date <u>7-10-87</u> |
| Company Rep. <u>Paul Prijatel - Dave Burch</u> | Tester <u>Gary Hartwell</u> |
| Contractor <u>Golden Eagle Drilling Co.</u> | Elevation <u>3130 G.L.</u> |
| Location: Sec. <u>13</u> Twp. <u>1S</u> Rge. <u>35W</u> Co. <u>Rawlins</u> State <u>Kansas</u> | Est. Feet of Pay _____ |

Recorder No. 13363 Type AK-1 Range 3800 PSI

Recorder Depth 4259 Clock # 23859

(A) Initial Hydrostatic Mud 2103 PSI

(B) First Initial Flow Pressure 85 PSI

(C) First Final Flow Pressure 104 PSI

(D) Initial Shut-in Pressure 324 PSI

(E) Second Initial Flow Pressure 133 PSI

(F) Second Final Flow Pressure 209 PSI

(G) Final Shut-in Pressure 324 PSI

(H) Final Hydrostatic Mud 2103 PSI

Temperature 132^o

Mud Weight 9.0 Viscosity 52

Fluid Loss 7.2

Interval Tested 4228-4265

Anchor Length 37

Top Packer Depth 4223

Bottom Packer Depth 4228

Total Depth 4265

Drill Pipe Size 4 1/2" X.H.

COLLARS
Pipe I. D. 2.25 Ft. Run 357

Recovery-Total Feet 420

Recovered 60 Feet Of Oil-Spotted Mud.

Recovered 60 Feet Of Slightly Oil-Spotted Muddy Water.

Recovered 120 Feet Of Water /few Oil Specks.

Recovered 180 Feet Of Water.

Recovered _____ Feet Of _____

Recovered _____ Feet Of _____

Extra Equipment Down Hole Ins., Bowen Jars, Safety Joint, Sam Price of Job \$526.00

Recorder No. 13371 Type AK-1 Range 3900 PSI

Recorder Depth 4262 Clock # 25561

Tool Open Before I.S.I. 15 Mins.

Initial Shut-in 30 Mins.

Flow Period 90 Mins.

Final Shut-in 90 Mins.

Top Choke Size 1" Hole Size 7 7/8"

Bottom Choke Size 3/4" Rubber Size 6 3/4"

Tool Open @ 9:11 P.M.

Blow Remarks Fair Building Blow 6"- 1st Open.

Weak Building Blow 5" . - 2nd Open.

15-153-20687-00-00
CHENEY TESTING CO., INC.
 P. O. BOX 367 HILL CITY, KANSAS 67642

FLUID SAMPLER DATA

| | | | |
|--------------|-------------------------|--------------------------|---------|
| Ticket No. | 11801 | Date | 7-10-87 |
| Company Name | Burch Exploration, Inc. | | |
| Lease | Chadderdon #4 | Test No. | 2 |
| County | Rawlins Co., Ks. | Sec. 13 Twp. 1S Rge. 35W | |

SAMPLER RECOVERY

Gas _____ TSM _____ ML
 Oil _____ 25 _____ ML
 Mud _____ - _____ ML
 Water _____ 1975 _____ ML
 Other _____ - _____ ML
 Pressure _____ 75 _____ P.S.I.
 Total _____ 2000 _____ ML

PIT MUD ANALYSIS

Chlorides _____ 2,000 _____ ppm
 Resistivity _____ 2.02 _____ ohms @ _____ 91 _____ °F
 Viscosity _____ 52 _____
 Wt. _____ 9.0 _____
 Filtrate _____ 7.2 _____ cc
 Other _____ 21b. LLM _____

SAMPLER ANALYSIS

Resistivity _____ 0.21 _____ ohms @ _____ 78 _____ °F
 Chlorides _____ 28,000 _____ ppm
 Gravity _____ - _____ Corrected @ 60°F

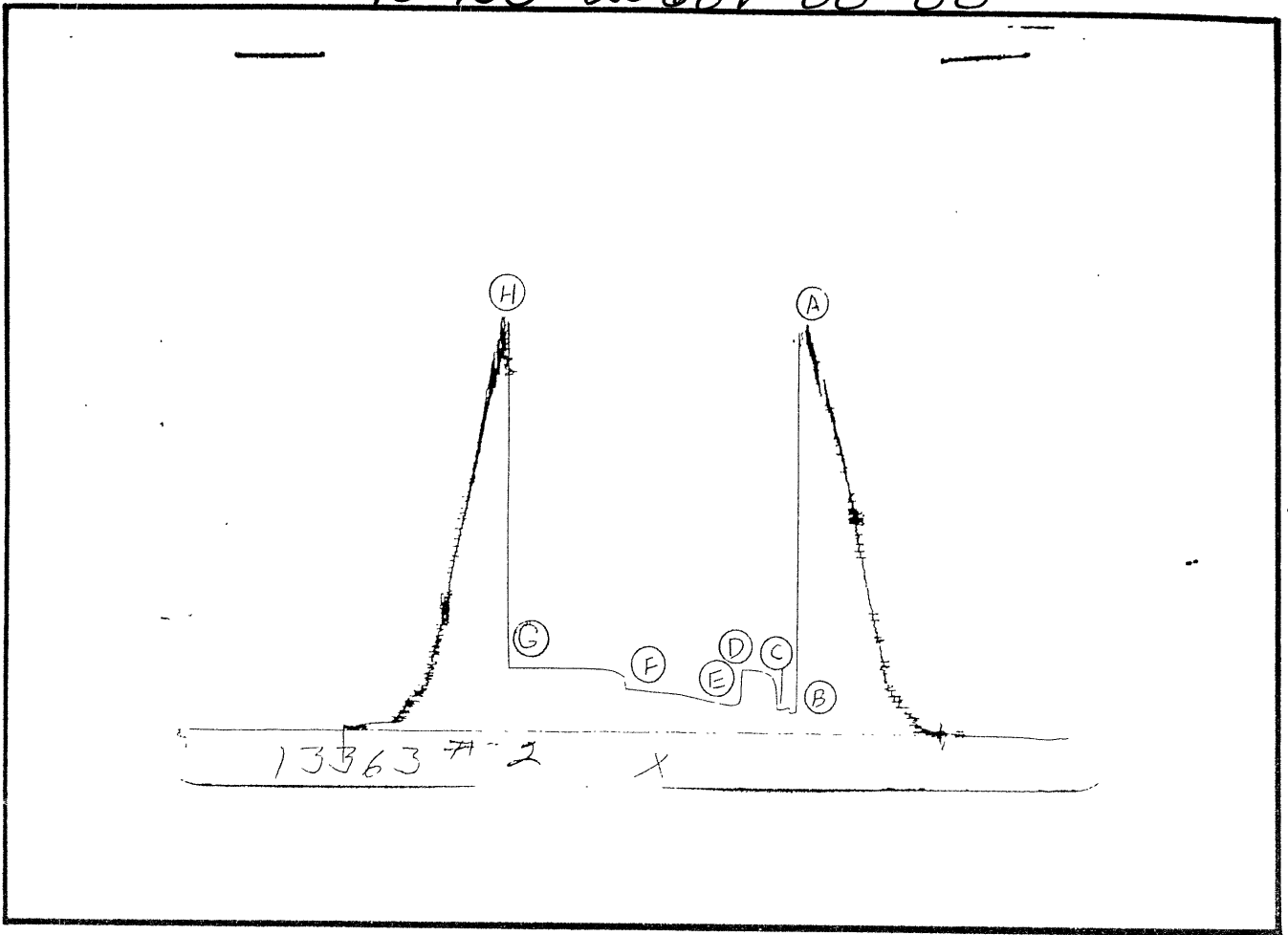
PIPE RECOVERY

TOP:
 Resistivity _____ 0.65 _____ ohms @ _____ 78 _____ °F
 Chlorides _____ 8,000 _____ ppm

MIDDLE:
 Resistivity _____ 0.24 _____ ohms @ _____ 78 _____ °F
 Chlorides _____ 24,000 _____ ppm

BOTTOM:
 Resistivity _____ 0.23 _____ ohms @ _____ 77 _____ °F
 Chlorides _____ 26,000 _____ ppm

15-153-20687-00-00



This is an actual photograph of recorder chart.

| POINT | PRESSURE | | |
|----------------------------------------|---------------|----------------|-----|
| | Field Reading | Office Reading | |
| (A) Initial Hydrostatic Mud | 2103 | | PSI |
| (B) First Initial Flow Pressure | 85 | | PSI |
| (C) First Final Flow Pressure | 104 | | PSI |
| (D) Initial Closed-in Pressure | 324 | | PSI |
| (E) Second Initial Flow Pressure | 133 | | PSI |
| (F) Second Final Flow Pressure | 209 | | PSI |
| (G) Final Closed-in Pressure | 324 | | PSI |
| (H) Final Hydrostatic Mud | 2103 | | PSI |