

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

Operator: License # 7448
Name Burck, Exploration, Inc.
Address 11205 E. 10th St. W. 4th

City/State/Zip Parker, Colo. 80134

Purchaser Koch Oil Co.

Operator Contact Person Melvin L. Taylor
Phone 303-345-3214

Contractor: License # 2682
Name GOLDEN EAGLE DRILLING INC.

Wellsite Geologist Paul P. Hatch
Phone 303-544-7111

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

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

WELL HISTORY

Drilling Method:
 Mud Rotary Air Rotary Cable
9-10-87 9-18-87 10-27-87
Spud Date Date Reached TD Completion Date
4350 4313
Total Depth PBD

Amount of Surface Pipe Set and Cemented at 305 feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set.....feet
If alternate 2 completion, cement circulated
from 305 feet depth to 5175 cmt
Cement Company Name B.T. TITAN SERVICES
Invoice # HLV 116
ALT I 5-10-88

API NO. 15-153-20692-00-00

County RAWLINS

E/R NE NE Sec. 14 Twp. 15 Rge. 35 East West

4620 Ft North from Southeast Corner of Section
330 Ft West from Southeast Corner of Section

(Note: Locate well in section plat below)

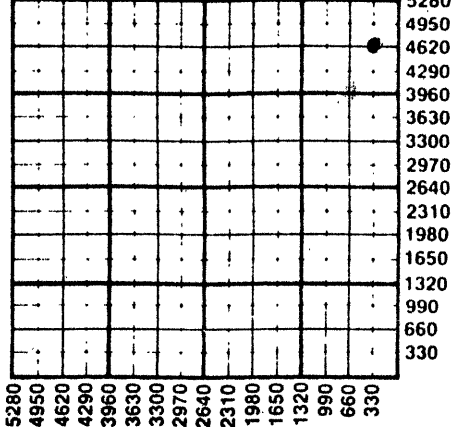
Lease Name S.A.V.A.G.E. Well # 1

Field Name WEST CATHOD

Producing Formation LANSING KANSAS CITY

Elevation: Ground 3143.5 KB 3150.5

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: NIA
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. #)

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 Burck

Title GENERAL MANAGER Date 3-8-88

Subscribed and sworn to before me this 8th day of March 1988

Notary Public [Signature]

Date Commission Expires 11-13-90

K.C.C. OFFICE USE ONLY
Letter of Confidentiality Attached
Wireline Log Received
Drillers Time Log Received
Distribution
KCC SWD/Rep. NGPA
KGS PTug Other
(Specify)
3-11-88

MAR 11 1988
03-11-1988
CONSERVATION DIVISION
Wichita, Kansas

Sec. 14 Twp. Range 35 W

Operator Name Burch EXPLOIATION INC. Lease Name SALVAGE Well # 2

Sec. 14 Twp. 15 Rge. 35 East West County RAWLINS

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	4077	
KANSAS CITY		

CASING RECORD <input checked="" type="checkbox"/> New <input type="checkbox"/> 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
3.4x5.75" P.C.P.	12.75"	8.5/8"	28	305	PORTLAND		
Production String	7.75"	5.75"	11.5	4352	HP-1 PORTLAND	275	
PERFORATION RECORD				Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used) Depth			
Shots Per Foot	Specify Footage of Each Interval Perforated						
4	4270 TO 4274			M.G.R. 50.0 GAL. 15.70 4270.674			
4	4179 TO 4187			M.G.R. 200.9 GAL. 15.70 4179.687			
TUBING RECORD				Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Date of First Production		Producing Method					
11-9-1987		<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	Gravity	
38		38	Ø	60	6	36	

METHOD OF COMPLETION

Production Interval

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

Dually Completed Commingled

~~15-15-30100-00-00~~
CHENEY TESTING COMPANY, INC.

P. O. Box 367 HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA 15-153-20692-00-00

Company	Burch Exploration Inc.	Test No.	1
Well Name & Number	Burch-Sauvge #1	Zone Tested	Lansing "C"
Company Address	11225 Edinborough Way, Parker, Co. 80134	Date	9-16-87
Company Rep.	Paul Prijatel	Tester	Gary Pevoteaux
Contractor	Golden Eagle Drlg.	Elevation	3137 K.B.
Location: Sec. 14 Twp. 1S Rge. 35W CoRawlins State Kan		Est. Feet of Pay	

Recorder No. 13638 Type AK-1 Range 4675 PSI

Recorder Depth 4187 Clock # 27785

(A) Initial Hydrostatic Mud 2182 PSI

(B) First Initial Flow Pressure 77 PSI

(C) First Final Flow Pressure 109 PSI

(D) Initial Shut-in Pressure 1108 PSI

(E) Second Initial Flow Pressure 125 PSI

(F) Second Final Flow Pressure 257 PSI

(G) Final Shut-in Pressure 1073 PSI

(H) Final Hydrostatic Mud 2032 PSI

Temperature 122

Mud Weight 9.2 Viscosity 40

Fluid Loss 7.6

Interval Tested 4154-4190

Anchor Length 36

Top Packer Depth 4149

Bottom Packer Depth 4154

Total Depth 4190

Drill Pipe Size 4 1/2 EX.H.

Wt. Pipe I. D. Collars 2.25 Ft. Run 360

Recovery-Total Feet 532

Recovered 2 Feet Of Clean Oil

Recovered 50 Feet Of O.C.W.M. (10% Oil 15% Wtr. 75% Mud)

Recovered 120 Feet Of M.W. W/oil specks (28% Mud 72% Mud)

Recovered 360 Feet Of M.W. W/few oil specks (2% Mud) RW o.10 ohm meters @ 63° F.

Recovered _____ Feet Of _____

Recovered _____ Feet Of _____

Extra Equipment _____ Price of Job _____

Recorder No. 13639 Type AK-1 Range 4675 PSI

Recorder Depth 4182 Clock # 19127

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 @ 1:35 A.M.

Blow Remarks 1st open: Fair blow. 8" in wtr. after 15 min.

2nd open: Fair to strong blow. Bottom of bucket in 65 min.

Slid tool 5 or 6' to bottom.

Well Chlorides: 800 P.P.M.

Recovery Chlorides: 62,000 P.P.M.

15-153-20692-00-00

~~15-153-30100-00-00~~

CHENEY TESTING CO., INC.

P. O. BOX 367

HILL CITY, KANSAS 67642

FLUID SAMPLER DATA

Ticket No.	11839	Date	9-16-87
Company Name	Burch Exploration Inc.		
Lease	Sauvge #1	Test No.	1
County	Rawlins	Sec. 14	Twp. 1S Rge. 35W

SAMPLER RECOVERY

Gas - ML
 Oil Trace ML
 Mud 220 ML
 Water 1980 ML
 Other - ML
 Pressure 205 P.S.I.
 Total 2200 ML

PIT MUD ANALYSIS

Chlorides 800 ppm
 Resistivity 3.44 ohms @ 65 °F
 Viscosity 40
 Wt. 9.2
 Filtrate 7.6 cc
 Other _____

SAMPLER ANALYSIS

Resistivity 0.10 ohms @ 62 °F
 Chlorides 62,000 ppm
 Gravity N.A. Corrected @ 60°F

PIPE RECOVERY

TOP: 2' clean oil, 50' O.C.W.M.
 120' W.M. w/oil specks
 Resistivity 0.10 ohms @ 68 °F
 Chlorides 57,000 ppm
 MIDDLE: 180' M.W. w/oil specks
 Resistivity 0.10 ohms @ 62 °F
 Chlorides 62,000 ppm
 BOTTOM: 180' M.W. w/oil specks
 Resistivity 0.10 ohms @ 62 °F
 Chlorides 62,000 ppm

15-153-20692-00-00
~~15-153-30100-00-00~~

CHENEY TESTING CO, INC.
CALCULATION OF FORMATION CHARACTERISTICS
FROM DST DATA

FOR: BURCH EXPLORATION INC.
BURCH-SAUVGE #1 DST # 1
14-1S-35W FORMATION: LANSING
RAWLINS CO., KANSAS ELEVATION: 3137 KB

TEST PARAMETERS

TEST INTERVAL: 4154 - 4190	EST PAY: 4
TIME INTERVAL: 15 - 30 - 90 - 90	VISCOSITY OF FLUID: 3
INITIAL FLOW PRESS: 105.6- 125.1	HOLE SIZE: 7.875
FINAL FLOW PRESS: 153.8- 277.7	D.C. CAPACITY: 0.00492
SHUT-IN PRESS(I-F): 1128.0-1099.3	W.P. CAPACITY: 0.00000
BOTTOM HOLE TEMPERATURE: 122	D.P. CAPACITY: 0.01402
TOTAL FEET OF RECOVERY: 532	TOTAL BARRELS RECOVERY: 4.1810

EXTRAPOLATED INITIAL SHUT-IN PRESSURE (PSI): 1160
SLOPE (PSI-CYCLE): 173 POINTS USED: 6

EXTRAPOLATED FINAL SHUT-IN PRESSURE (PSI): 1140
SLOPE (PSI-CYCLE): 120 POINTS USED: 3

CALCULATIONS

PRODUCTION POTENTIAL (B/D)	: 57.34
TRANSMISSIBILITY (MD-FT/CP)	: 77.69
EFFECTIVE PERMEABILITY (MD)	: 58.27
PRODUCTIVITY INDEX (B/D/PSI)	: 0.0878
DAMAGE RATIO	: 1.315
APPROXIMATE RADIUS OF INVESTIGATION (FT)	: 78.2
DRAWDOWN FACTOR (%)	: 1.724
POTENTIOMETRIC SURFACE (FT)	: 1590.66

15-153-20692-00-00
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INITIAL SHUT-IN

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RECORDER NO: 13639 DEPTH: 4190 FT.
INITIAL FLOW TIME (T): 15 MIN.

DT(MIN)	LOG((T+DT)/DT)	PRESSURE(P SIG)
0	0.000	125.1
5	0.602	1053.4
10	0.398	1090.1
15	0.301	1105.0
20	0.243	1116.5
25	0.204	1122.2
30	0.176	1128.0

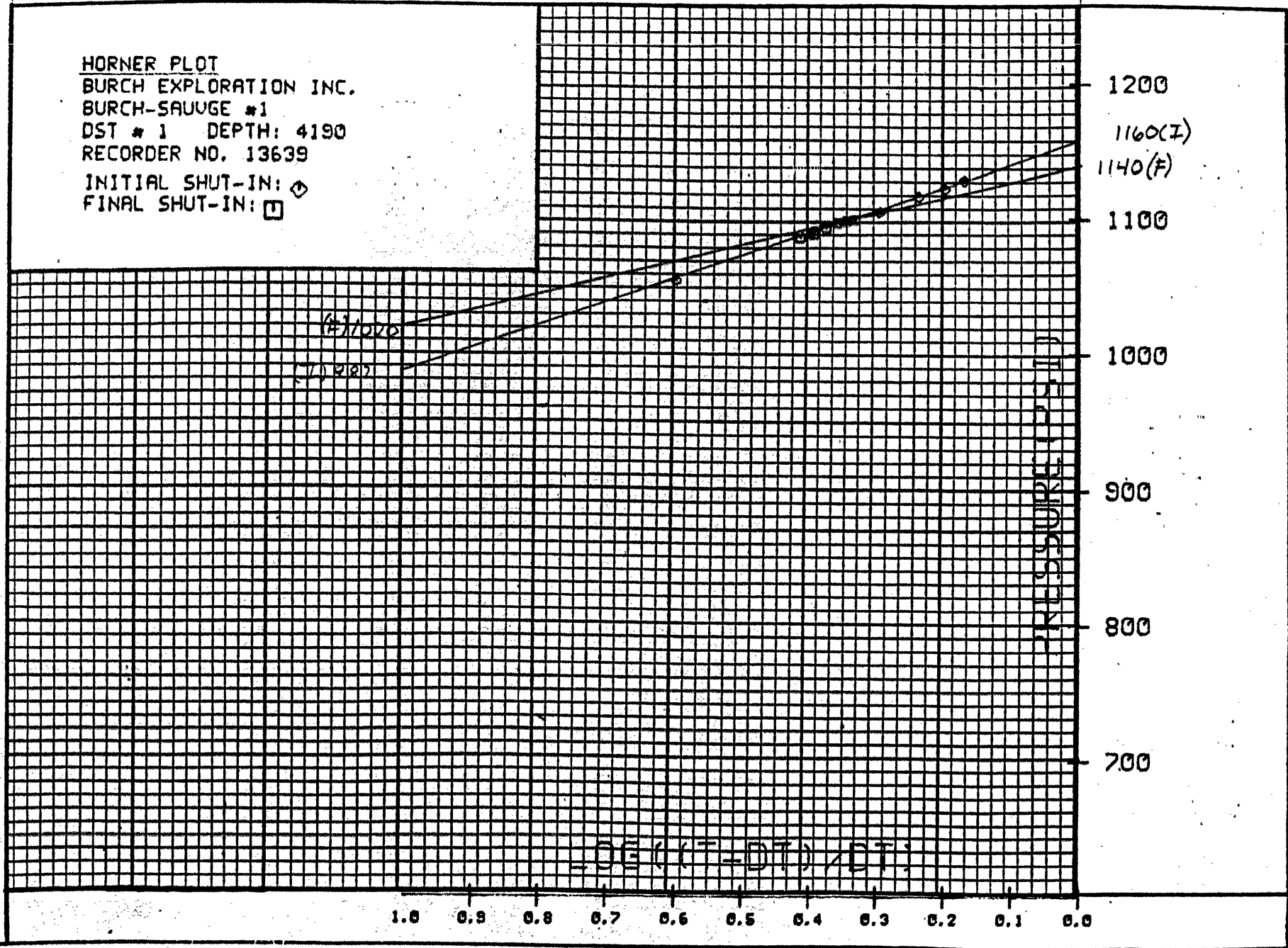
FINAL SHUT-IN

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RECORDER NO: 13639 DEPTH: 4190 FT.
TOTAL FLOW TIME: 105 MIN.

DT(MIN)	LOG((T+DT)/DT)	PRESSURE(P SIG)
0	0.000	277.7
5	1.342	963.9
10	1.061	1001.7
15	0.903	1021.2
20	0.796	1032.7
25	0.716	1041.9
30	0.653	1053.4
35	0.602	1060.3
40	0.559	1064.9
45	0.523	1069.4
50	0.491	1074.0
55	0.464	1076.3
60	0.439	1080.9
65	0.418	1085.5
70	0.398	1087.8
75	0.380	1092.4
80	0.364	1097.0
85	0.349	1098.1
90	0.336	1099.3

HORNER PLOT
 BURCH EXPLORATION INC.
 BURCH-SAUUGE #1
 DST # 1 DEPTH: 4190
 RECORDER NO. 13639
 INITIAL SHUT-IN: \diamond
 FINAL SHUT-IN: \square



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CHENEY TESTING COMPANY, INC.

P. O. Box 367

HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company	Burch Exploration Inc.	Test No.	2
Well Name & Number	Burch-Sauvge #1	Zone Tested	Lansing "D"
Company Address	11225 Edinborough Way, Parker, Co. 80134	Date	9-16-87
Company Rep.	Paul Prijatel	Tester	Gary Pevoreaux
Contractor	Golden Eagle Drlg.	Elevation	3137 K.B.
Location: Sec. 14 Twp. 1S Rge. 35W CoRawlins State Kan		Est. Feet of Pay	

Recorder No. 13638 Type AK-1 Range 4675 PSI
 Recorder Depth 4237 Clock # 27785
 (A) Initial Hydrostatic Mud 2109 PSI
 (B) First Initial Flow Pressure 45 PSI
 (C) First Final Flow Pressure 47 PSI
 (D) Initial Shut-in Pressure 200 PSI
 (E) Second Initial Flow Pressure 47 PSI
 (F) Second Final Flow Pressure 47 PSI
 (G) Final Shut-in Pressure - PSI
 (H) Final Hydrostatic Mud 2051 PSI
 Temperature 119
 Mud Weight 9.0 Viscosity 50
 Fluid Loss 7.2
 Interval Tested 4218-4240
 Anchor Length 22
 Top Packer Depth 4213
 Bottom Packer Depth 4218
 Total Depth 4240
 Drill Pipe Size 4 1/2 EX.H.

Wt. Pipe I. D. Collars 2.25 Ft. Run 360
 Recovery-Total Feet 20
 Recovered 20 Feet Of Drlg. Mud Scum of oil @ top of tool
 Recovered _____ Feet Of _____
 Recovered _____ Feet Of _____
 Recovered _____ Feet Of _____
 Recovered _____ Feet Of _____
 Recovered _____ Feet Of _____
 Extra Equipment _____

Recorder No. 13639 Type AK-1 Range 4675 PSI
 Recorder Depth 4232 Clock # 19127
 Tool, Open Before I.S.I. 15 Mins.
 Initial Shut-in 30 Mins.
 Flow Period 15 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 @ 7:38 P.M.

Blow Remarks 1st open: Weak to very weak blow, 1" down to 1/2"
2nd open: No blow. Flushed tool 7 min. into second open. No blow returned after good flush. 10' of fill up. Slid to 5' of bottom.

Well Chlorides: 1,300 P.P.M.
 Rec. Chlorides: 1,400 P.P.M.

Price of Job _____

15-153-20092 00-00
~~15-153-30100 00-00~~

CHENEY TESTING CO., INC.

P. O. BOX 367 HILL CITY, KANSAS 67642

FLUID SAMPLER DATA

Ticket No.	11840	Date	9-16-87
Company Name	Burch Exploration Inc.		
Lease	Burch-Sauvge #1	Test No.	2
County	Rawlins	Sec. 14	Twp. 1S Rge. 35W

SAMPLER RECOVERY

Gas _____ ML
Oil specs _____ ML
Mud 2200 _____ ML
Water _____ ML
Other _____ ML
Pressure 18 _____ P.S.I.
Total 2200 _____ ML

PIT MUD ANALYSIS

Chlorides 1300 _____ ppm
Resistivity 2.42 ohms @ 70 °F
Viscosity 50 _____
Wt. 9.0 _____
Filtrate 7.2 _____ cc
Other _____

SAMPLER ANALYSIS

Resistivity 2.59 ohms @ 66 °F
Chlorides 1500 _____ ppm
Gravity N.A. Corrected @60°F

PIPE RECOVERY

TOP:
Resistivity _____ ohms @ _____ °F
Chlorides _____ ppm
MIDDLE:
Resistivity _____ ohms @ _____ °F
Chlorides _____ ppm
BOTTOM: 20' Drlg. Mud
Resistivity 2.59 ohms @ 67 °F
Chlorides 1400 _____ ppm