

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

Operator: License # 5952

Name: Amoco Production Company

Address PO Box 800 Room 924

City/State/Zip Denver, CO 80201

Purchaser: Texaco

Operator Contact Person: Susan R. Potts

Phone (303) 830-5323

Contractor: Name: Cheyenne Drilling

License: 5382

Wellsite Geologist: Charles Schmaltz

Designate Type of Completion

New Well Re-Entry Workover

Oil SWD S1OW Temp. Abd.
 Gas ENHR SIGW
 Dry Other (Core, WSW, Expl., Cathodic, etc)

If Workover:

Operator: _____

Well Name: _____

Comp. Date _____ Old Total Depth _____

Deepening Re-perf. Conv. to Inj/SWD
 Plug Back PBDT
 Commingled Docket No. _____
 Dual Completion Docket No. _____
 Other (SWD or Inj?) Docket No. _____

12/10/95 12/21/95 1/16/96
Spud Date Date Reached TD Completion Date

API NO. 15- 187-20806-0000

County Stanton

C - NW - NW Sec. 35 Twp. 29S Rge. 40W ^E _W

660 Feet from S/N (circle one) Line of Section

660 Feet from E/W (circle one) Line of Section

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

Lease Name Abbey Michelle Well # 1-35

Field Name Little Arrow

Producing Formation St. Louis

Elevation: Ground 3259.20' KB 3270'

Total Depth 5770' PBDT 5719'

Amount of Surface Pipe Set and Cemented at 1578 Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set 2854 Feet

If Alternate II completion, cement circulated from _____

feet depth to _____ w/ _____ sx cmt.

Drilling Fluid Management Plan ALT 1 9th 12-17-96
(Data must be collected from the Reserve Pft)

Chloride content 4400 ppm Fluid volume 3000 bbls

Dewatering method used Dried and Filled

Location of fluid disposal, if hauled offsite: _____

Operator Name _____

Lease Name _____ license No. _____

Quarter _____ Twp. _____ S Rng. _____ E/W

County _____ Docket No. _____

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, 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 Juan L. BHS

Title Senior Staff Assistant Date 3-29-96

Subscribed and sworn to before me this 29th day of March, 1996.

Notary Public Sherry Reynolds

Date Commission Expires June 24, 1998

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)

RELEASED

ADD 6 1998

FROM CONFIDENTIAL

Form ACO-1 (7-91)
RECEIVED
KANSAS CORPORATION COMMISSION
4-1-96
APR 01 1996

Operator Name Amoco Production Company

SIDE TWO

CONFIDENTIAL

Lease Name Abbey Michelle Well # 1-35

Sec. 35 Twp. 29S Rge. 40

East
 West

County Stanton

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
(Attach Additional Sheets.)

Samples Sent to Geological Survey Yes No

Cores Taken Yes No

Electric Log Run Yes No
(Submit Copy.)

Log **Formation (Top), Depth and Datum** Sample

Name	Top	Datum
Stone Corral Chase	1668'	
Council Grove	2240'	
Base Heebner	2528'	
Lansing	3705'	
Marmaton	3760'	
Cherokee	4370'	
Morrow	4552'	
Chester	5072'	
St. Genevieve	5457'	
St. Louis	5492'	
	5602'	

List All E.Logs Run: Dual Induction Laterolog, Spectral Density Dual Spaced Neutron II Log EVR, Microlog

CASING RECORD

Production- New Used-Surface

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	12.25"	8.625"	28	1578'	Premium Plus	150	2%CC+1/4#Flocele
Production-1st Stage	7.875"	4.5"	10.5	5760'	Premium Plus Light Premium	460 250	2%CC+1/4#Flocele 1%CC, 7%EA-2, .6% Halad-322, 15%alt,
Production-2nd Stage	7.875"	4.5"	10.5	2854'	Premium Plus	430	1/4#D-Air, 1/4#Flocele 1/4#Flocele

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		1100		

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
4	5604-5613'		

TUBING RECORD Size 2.375" 4.7# J-55 EUE T&C Set At 5679' Packer At 5679'	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumed Production, SWD or Inj. First Oil 2/15/96	Producing Method <input checked="" type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)
Estimated Production Per 24 Hours	Oil 103 BOPD Bbls. Gas Mcf Water 23 BWPD Bbls. Gas-Oil Ratio Gravity

Disposition of Gas: **METHOD OF COMPLETION** **Production Interval**

Vented Sold Used on Lease Open Hole Perf. Dually Comp. Commingled 5604-5613'
(If vented, submit ACO-18.) Other (Specify) _____

8001 A 008

AMOCO PRODUCTION COMPANY
ABBY MICHELLE 1-35
SECTION 35-T29S-R40W
STANTON COUNTY, KANSAS

CONFIDENTIAL

ORIGINAL

COMMENCED: 12-10-95
COMPLETED: 12-21-95

15-187-20806

SURFACE CASING: 1578' OF 8 5/8" CMTD
W/460 SKS PREMIUM PLUS LITE + 2% CC + 1/4
#/SK FLOCELE, TAILED IN W/150 SKS
CLASS C + 2% CC + 1/4 #/SK FLOCELE.

FORMATION

DEPTH

SURFACE HOLE	0 - 1578
SHALE & LIMESTONE	1578 - 1890
STONE CORRAL	1890 - 2305
CHASE & COUNCIL GROVE	2305 - 2650
COUNCIL GROVE	2650 - 3523
COUNCIL GROVE & HEBNER	3523 - 3745
HEBNER	3745 - 4180
LANSING	4180 - 4345
MARMATON	4345 - 4533
MARMATON & CHEROKEE	4533 - 4669
CHEROKEE	4669 - 4990
CHEROKEE & MORROW	4990 - 5140
MORROW	5140 - 5323
MORROW & CHESTER	5323 - 5490
CHESTER & ST. GENEVEIVE	5490 - 5580
ST. GENEVEIVE & ST. LOUIS	5580 - 5648
ST LOUIS	5648 - 5800 RTD

RELEASED
APR 6 1998
FROM CONFIDENTIAL
KCC
MAR 29
CONFIDENTIAL

I DO HEREBY CERTIFY THAT THE FOREGOING STATEMENTS ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

CHEYENNE DRILLING, INC.

Wray Valentine

WRAY VALENTINE

STATE OF KANSAS : ss:

SUBSCRIBED AND SWORN TO BEFORE ME THIS 28TH DAY OF DECEMBER, 1995



JOLENE K. RUSSELL

Jolene K. Russell

NOTARY PUBLIC

RECEIVED
KANSAS CORPORATION COMMISSION

APR 01 1996

CONSERVATION DIVISION
WICHITA KS

JOB LOG HAL-2013-C

CUSTOMER Amoco Production	WELL NO. 1-35	LEASE ARBA NICHOLS - 8 1/2 SURFACE O.C.	JOB TYPE TICKET NO. ER1053
------------------------------	------------------	--	----------------------------------

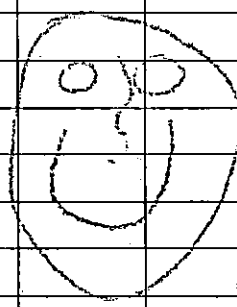
CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1000							CALLED OUT - READY 1330
	1330							oil lock - LD.O.P.
	1415							START RUNNING OSG.
	1530							hook up port ahead
	1540							CIRCULATION TO PIT - SAFETY MEETING
	1545							hook up port line
	1547	5.7	169			0/230		START LEAD CNT 12.3 "/gal
	1617	5.7	36			2/10		START TRAIL CNT 14.8 "/gal
	1623	0	0			0		SHUT OFF DROP PLUG
	1624	5.4	86			0/400		START DISPLACEMENT 1/20
	1640	2	10			450/1000		SLOW RATE - (96 TOTAL BBL)
	1645	-	-			500		PLUG LANDED - TRAIL HOLD Job held

ORIGINAL

CONFIDENTIAL

MAR 29
CONFIDENTIAL

RELEASED
APR 6 1998



FROM CONFIDENTIAL

THANKS FOR CALLING
HALLIBURTON ENERGY SERVICES
LIBERAL, TX
KYLE A. GOOD DAY

BRANDT-PARKER-SANJAY

MIS DS GIVEN TO B. MAIL
90 BBL'S CNT PIT - 24.5 SEC.

LOST TIME
JOB TIME

RECEIVED
KANSAS CORPORATION COMMISSION

APR 01 1996

CONSERVATION DIVISION
WICHITA KS

WELL DATA

FIELD ~~Starvation~~ **Wildcat** SEC **2** TWP. **29** RING. **40W** COUNTY **Starvation** 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. _____
PACKER TYPE _____ SET AT _____
BOTTOM HOLE TEMP. _____ PRESSURE _____
MISC. DATA _____ TOTAL DEPTH _____

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	1	28	8 5/8	K12	1578	
LINER						
TUBING						
OPEN HOLE			12 1/4	K13	1578	SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

JOB DATA

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE 12-11-95	DATE 12-11-95	DATE 12-11-95	DATE 12-11-95
TIME 1020	TIME 1330	TIME 1545	TIME 1645

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR 1.5" x 11"	1	H
FLOAT SHOE 7.125" O.D.	1	
GUIDE SHOE		D
CENTRALIZERS	4 1/2"	
BOTTOM PLUG		W
TOP PLUG 501	1 EA	
HEAD		C
BACKER HOOPER WELLS 11" x 11"	1 EA	
OTHER		D

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
IT Brandt	420045	Liberal KS
D. P. ...	50947	"
C. P. ...	25196	"
D. ...	21037	Hugoton KS
H. ...	16610	"
P. ...	4673	"
	7620	"

CONFIDENTIAL

NEW
MAR 29
CONFIDENTIAL

DEPARTMENT **Cementing**

DESCRIPTION OF JOB **Cement IT Surface Casing**

JOB DONE THRU: TUBING CASING ANNULUS TBG./ANN.

CUSTOMER REPRESENTATIVE **X**

HALLIBURTON OPERATOR **Chris ...** COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
	460	C 24 wt		B	270 C.C. 1/4" 1/4" Fiber	2.06	12.3
	150	Rem Plug		B	370 C.C. 1/4" 1/4" Fiber	1.32	14.8

APR 01 1996

PRESSURES IN PSI

SUMMARY

VOLUMES

CIRCULATING _____ DISPLACEMENT _____ PRESLUSH: BBL.-GAL. _____
 BREAKDOWN _____ MAXIMUM _____ LOAD & BKDN: BBL.-GAL. _____
 AVERAGE _____ FRACTURE GRADIENT _____ TREATMENT: BBL.-GAL. _____
 SHUT-IN: INSTANT _____ 5-MIN. _____ 15-MIN. _____ CEMENT SLURRY: BBL.-GAL. **169 - 301**
 HYDRAULIC HORSEPOWER _____ TOTAL VOLUME: BBL.-GAL. _____
 ORDERED _____ AVAILABLE _____ USED _____
 AVERAGE RATES IN BPM _____
 TREATING _____ DISPL. _____ OVERALL _____
 CEMENT LEFT IN PIPE _____
 FEET **58.91** REASON **Shut in**

REMARKS

MSOS G. H. ...
90 BBL CEMENT = 215 ...
Job well done - No Accidents

CUSTOMER: **Amoco Production**
LEASE: **Abby Mitchell**
WELL NO.: **1-25**
JOB TYPE: **Surface Casing**
DATE: **12-11-95**



HALLIBURTON ENERGY SERVICES

HAL-1906-N

CHARGE TO: *A no fee on*
 ADDRESS: *2223 W ORLA AVE.*
 CITY, STATE, ZIP CODE: *Wichita, KS 67227*

CUSTOMER COPY

TICKET

No. **881053 - 8**

PAGE **1** OF **2**

SERVICE LOCATIONS <i>1. 25111 KE</i>	WELL/PROJECT NO. <i>1-35</i>	LEASE <i>Alley M... ..</i>	COUNTY/PARISH <i>Ste. P.</i>	STATE <i>KS</i>	CITY/OFFSHORE LOCATION	DATE <i>10-07-95</i>	OWNER <i>Same</i>
<i>2. H... .. KE</i>	TICKET TYPE <input checked="" type="checkbox"/> SERVICE <input type="checkbox"/> SALES	NITROGEN JOB? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	CONTRACTOR	RIG NAME/NO. <i>Chryanne #3</i>	SHIPPED <i>PA</i>	DELIVERED TO <i>1001 1/2 Big B...</i>	ORDER NO.
<i>3.</i>	WELL TYPE <i>02</i>	WELL CATEGORY <i>01</i>	JOB PURPOSE <i>010</i>	WELL PERMIT NO.	WELL LOCATION <i>35-05 200</i>		
<i>4.</i>	REFERRAL LOCATION	INVOICE INSTRUCTIONS					

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		U/M		UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
<i>000 117</i>					MILEAGE	<i>170</i>	<i>mi</i>	<i>1</i>	<i>unit</i>	<i>2.95</i>	<i>484.50</i>
<i>000 119</i>					<i>Gross Mileage</i>	<i>170</i>	<i>mi</i>	<i>1</i>	<i>unit</i>	<i>1.50</i>	<i>255.00</i>
<i>24A</i>	<i>815.19501</i>				<i>Insert Fluid Valve</i>	<i>1</i>		<i>1</i>	<i>EA</i>		<i>180.00</i>
<i>27</i>	<i>815.19415</i>				<i>Insert Fluid Fill Assembly</i>			<i>1</i>	<i>EA</i>		<i>54.00</i>
<i>41</i>	<i>806.61048</i>				<i>Centralizers</i>			<i>4</i>	<i>EA</i>	<i>61.00</i>	<i>244.00</i>
<i>35C</i>	<i>890.10802</i>				<i>Weld A</i>	<i>1</i>		<i>1</i>	<i>LB</i>		<i>16.75</i>
<i>001-016</i>					<i>Pump Chances</i>	<i>1500</i>		<i>6</i>	<i>hrs</i>		<i>1300.00</i>
<i>050-012</i>					<i>SW 1/2" Plug</i>	<i>87</i>		<i>1</i>	<i>EA</i>		<i>1.00</i>

CONFIDENTIAL ORIGINAL

CONFIDENTIAL

RECEIVED TRANSMISSION DIVISION APR 07 1996

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, **PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY** provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS

SUB SURFACE SAFETY VALVE WAS:
 TOGGLED & RETURN PULLED RUN

TYPE LOCK: *APR 6 1996*

DEPTH: _____

BEAN SIZE: _____

TYPE OF EQUALIZING SUB.: _____

CASING PRESSURE: _____

TUBING SIZE: _____

TUBING PRESSURE: _____

WELL DEPTH: _____

TREE CONNECTION: _____

TYPE VALVE: _____

SURVEY

OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?

WE UNDERSTOOD AND MET YOUR NEEDS?

OUR SERVICE WAS PERFORMED WITHOUT DELAY?

WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?

ARE YOU SATISFIED WITH OUR SERVICE?
 YES NO

CUSTOMER DID NOT WISH TO RESPOND

PAGE TOTAL	<i>2676</i>	<i>25</i>
FROM CONTINUATION PAGE(S)	<i>9588</i>	<i>77</i>
SUB-TOTAL APPLICABLE TAXES WILL BE ADDED ON INVOICE	<i>12234</i>	<i>77</i>

DATE SIGNED: *12-11-95*

TIME SIGNED: *1:40*

do do not require IPC (Instrument Protection). Not offered.

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.

CUSTOMER OR CUSTOMER'S AGENT (PLEASE PRINT) <i>SMITH CARMACK</i>	CUSTOMER OR CUSTOMER'S AGENT (SIGNATURE) <i>X</i>	HALLIBURTON OPERATOR/ENGINEER <i>02-15</i>	EMP # <i>04604</i>	HALLIBURTON APPROVAL
---	--	---	-----------------------	----------------------

TERMS AND CONDITIONS

For good and valuable consideration received, Customer (as identified on the face of this document) and Halliburton Energy Services, a division of Halliburton Company (hereinafter "Halliburton") agree as follows:

A. **CUSTOMER REPRESENTATION** - Customer warrants that the well is in proper condition to receive the services, equipment, products, and materials to be supplied by Halliburton.

B. **PRICE AND PAYMENT** - The services, equipment, products, and/or materials to be supplied hereunder are priced in accordance with Halliburton's current price list. All prices are exclusive of taxes. If Customer does not have an approved open account with Halliburton, all sums due are payable in cash at the time of performance of services or delivery of equipment, products or materials. If Customer has an approved open account, invoices are payable on the twentieth day after the date of invoice. Customer agrees to pay interest on any unpaid balance from the date payable until paid at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event Halliburton employs an attorney for collection of any account, Customer agrees to pay attorney fees of 20% of the unpaid account, plus all collection and court costs.

C. **RELEASE AND INDEMNITY** - CUSTOMER AGREES TO RELEASE HALLIBURTON GROUP FROM ANY AND ALL LIABILITY FOR ANY AND ALL DAMAGES, WHATSOEVER TO PROPERTY OF ANY KIND OWNED BY, IN THE POSSESSION OF, OR LEASED BY CUSTOMER AND THOSE PERSONS AND ENTITIES CUSTOMER HAS THE ABILITY TO BIND BY CONTRACT. CUSTOMER ALSO AGREES TO DEFEND, INDEMNIFY, AND HOLD HALLIBURTON GROUP HARMLESS FROM AND AGAINST ANY AND ALL LIABILITY, CLAIMS, COSTS, EXPENSES, ATTORNEY FEES AND DAMAGES WHATSOEVER FOR PERSONAL INJURY, ILLNESS, DEATH, PROPERTY DAMAGE AND LOSS RESULTING FROM:

LOSS OF WELL CONTROL; SERVICES TO CONTROL A WILD WELL WHETHER UNDERGROUND OR ABOVE THE SURFACE; RESERVOIR OR UNDERGROUND DAMAGE, INCLUDING LOSS OF OIL, GAS, OTHER MINERAL SUBSTANCES OR WATER; SURFACE DAMAGE ARISING FROM UNDERGROUND DAMAGE; DAMAGE TO OR LOSS OF THE WELL BORE; SUBSURFACE TRESPASS OR ANY ACTION IN THE NATURE THEREOF; FIRE; EXPLOSION; SUBSURFACE PRESSURE; RADIOACTIVITY; AND POLLUTION AND ITS CLEANUP AND CONTROL.

CUSTOMER'S RELEASE, DEFENSE, INDEMNITY AND HOLD HARMLESS OBLIGATIONS WILL APPLY EVEN IF THE LIABILITY AND CLAIMS ARE CAUSED BY THE SOLE, CONCURRENT, ACTIVE OR PASSIVE NEGLIGENCE, FAULT, OR STRICT LIABILITY OF ONE OR MORE MEMBERS OF THE HALLIBURTON GROUP, THE UNSEAWORTHINESS OF ANY VESSEL OR ANY DEFECT IN THE DATA, PRODUCTS, SUPPLIES, MATERIALS OR EQUIPMENT FURNISHED BY HALLIBURTON GROUP WHETHER IN THE DESIGN, MANUFACTURE, MAINTENANCE OR MARKETING THEREOF OR FROM A FAILURE TO WARN OF SUCH DEFECT. "HALLIBURTON GROUP" IS DEFINED AS HALLIBURTON, ITS PARENT, SUBSIDIARY, AND AFFILIATED COMPANIES AND ITS THEIR OFFICERS, DIRECTORS, EMPLOYEES, AND AGENTS. CUSTOMER'S RELEASE, DEFENSE, INDEMNITY AND HOLD HARMLESS OBLIGATIONS APPLY WHETHER THE PERSONAL INJURY, ILLNESS, DEATH, PROPERTY DAMAGE OR LOSS IS SUFFERED BY ONE OR MORE MEMBERS OF THE HALLIBURTON GROUP, CUSTOMER, OR ANY OTHER PERSON OR ENTITY AND THE CUSTOMER WILL SUPPORT SUCH OBLIGATIONS ASSUMED HEREIN WITH LIABILITY INSURANCE TO THE MAXIMUM EXTENT ALLOWED BY APPLICABLE LAW.

D. **EQUIPMENT LIABILITY** - Customer shall at its risk and expense attempt to recover any Halliburton equipment lost or lodged in the well. If the equipment is recovered and repairable, Customer shall pay the repair costs, unless caused by Halliburton's sole negligence. If the equipment is not recovered or is irreparable, Customer shall pay the replacement cost, unless caused by Halliburton's sole negligence. If a radioactive source becomes lost or lodged in the well, Customer shall meet all requirements of Section 39.15(a) of the Nuclear Regulatory Commission regulations and any other applicable laws or regulations concerning retrieval or abandonment and shall permit Halliburton to monitor the recovery or abandonment efforts all at no risk or liability to Halliburton. Customer shall be responsible for damage to or loss of Halliburton equipment, products, and materials while in transit aboard Customer-supplied transportation, even if such is arranged by Halliburton at Customer's request, and during loading and unloading from such transport. Customer will also pay for the repair or replacement of Halliburton equipment damaged by corrosion or abrasion due to well effluents.

E. **LIMITED WARRANTY** - Halliburton warrants only title to the equipment, products, and materials supplied under this agreement and that same are free from defects in workmanship and materials for one year from date of delivery. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE. Halliburton's sole liability and Customer's exclusive remedy in any cause of action (whether in contract, tort, breach of warranty or otherwise) arising out of the sale, lease or use of any equipment, products, or materials is expressly limited to the replacement of such on their return to Halliburton or, at Halliburton's option, to the allowance to Customer of credit for the cost of such items. In no event shall Halliburton be liable for special, incidental, indirect, consequential, or punitive damages. Because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others, HALLIBURTON IS UNABLE TO GUARANTEE THE EFFECTIVENESS OF THE EQUIPMENT, MATERIALS, OR SERVICE, NOR THE ACCURACY OF ANY CHART-INTERPRETATION, RESEARCH ANALYSIS, JOB RECOMMENDATION OR OTHER DATA FURNISHED BY HALLIBURTON. Halliburton personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but Customer agrees that Halliburton shall not be liable for and CUSTOMER SHALL INDEMNIFY HALLIBURTON GROUP AGAINST ANY DAMAGES ARISING FROM THE USE OF SUCH INFORMATION, even if such is contributed to by Halliburton's negligence or fault. Halliburton also does not warrant the accuracy of data transmitted by electronic process, and Halliburton will not be responsible for accidental or intentional interception of such data by third parties.

F. **GOVERNING LAW** - The validity, interpretation and construction of this agreement shall be determined by the laws of the jurisdiction where the services are performed or the equipment or materials are delivered.

G. **WAIVER** - Customer agrees to waive the provisions of the Texas Deceptive Trade Practices-Consumer Protection Act or any similar federal or state statute to the extent permitted by law.

H. **MODIFICATIONS** - Customer agrees that Halliburton shall not be bound by any modifications to this agreement, except where such modification is made in writing by a duly authorized executive officer of Halliburton. Requests for modifications should be directed to the Vice President - Legal, 5151 San Felipe, Houston, Texas 77056.



JOB LOG HAL-2013-C

CUSTOMER Amoco Pearl WELL NO. 1-35 LEASE Honey Michelle JOB TYPE 1 1/2" DV 2 STAGE TICKET NO. 880996

CHART NO. TIME RATE (BPM) VOLUME (BBL) (GAL) PUMPS T C PRESSURE (PSI) TUBING CASING DESCRIPTION OF OPERATION AND MATERIALS

1700 Time Collected
1930 Time Ready
2045 Time on loc

ORIGINAL

CONFIDENTIAL

2100 Start Pumping Casing

0030 Casing in Hole
0031 Hook up To Circulate Casing

MAR 29 CONFIDENTIAL

0042 Circulate Casing w/ pig Pump
0045 Circulate Mud To Ground Level

0145 Hook up To Pump Truck
0150 Start Mixing Cement

0201 Finish Mixing Cement
0202 Shut Down

0203 Wash Pumps & Lines
0206 Start Displacement

0230 Pig Down Float Held
Circulate Fluid Thru out shoe

0237 Deep Beam

0300 1600 Pressure open DV Tool
Hook up To Pig Pump To Circ 4 Hours

0715 Hook up To Pump Truck Load Top Pig
0720 Start Mixing Cement

0745 Finish Mixing Cement
0748 Shut Down

0742 Wash Pumps & Lines
0800 Start Displacement

0800 Pig Down Shut DV Tool AT 2000 PSI Float Held

Lost Circulation AT 2.5 BBL in Disp. 2.0 BBL To The PIT

NO Green Slugs Seen NO Returns 454 FT Down on loc

RELEASED APR 6 1998

Thanks For Calling
Halliburton Energy

WELL DATA

FIELD _____ SEC. *35* TWP. *29 S* RNG. *40 W* COUNTY *Stanton* 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. _____

PACKER TYPE _____ SET AT _____

BOTTOM HOLE TEMP. _____ PRESSURE _____

MISC. DATA _____ TOTAL DEPTH _____

ORIGINAL CONFIDENTIAL

JOB DATA

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <i>12-20</i>	DATE <i>12-20</i>	DATE <i>12-21</i>	DATE <i>12-21</i>
TIME <i>1700</i>	TIME <i>0845</i>	TIME _____	TIME <i>0800</i>

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
<i>Blaine</i>	<i>420041</i>	<i>Lucas Ks</i>
<i>J Taylor</i>	<i>59129</i>	<i>Lucas Ks</i>
<i>Casey</i>	<i>E0554</i>	<i>Lucas Ks</i>
<i>D Compton</i>	<i>44061</i>	<i>Horton Ks</i>
	<i>4037</i>	<i>Lucas Ks</i>
	<i>42441</i>	<i>Lucas Ks</i>

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
<i>Float Collar Latch Down Plug</i>	<i>1</i>	<i>Houco</i>
<i>Float Shoe Latch Down Plug</i>	<i>1</i>	<i>Houco</i>
<i>GUIDE SHOE</i>	<i>1</i>	<i>Houco</i>
<i>CENTRALIZERS 6" x 8" T-300</i>	<i>14</i>	<i>Houco</i>
<i>BOTTOM PLUG DV Tool</i>	<i>1</i>	<i>Houco</i>
<i>TOP PLUG SET DV</i>	<i>1</i>	<i>Houco</i>
<i>HEAD</i>	<i>1</i>	<i>Houco</i>
<i>PACKER Baskett</i>	<i>1</i>	<i>Houco</i>
<i>OTHER Houco A</i>	<i>143</i>	<i>Houco</i>

MATERIALS

TREAT. FLUID _____ DENSITY _____ LB/GAL. API

DISPL. FLUID _____ DENSITY _____ LB/GAL. API

PROP. TYPE _____ SIZE _____ LB.

ACID TYPE _____ GAL.

ACID TYPE **RELEASED** _____ GAL.

ACID TYPE _____ GAL.

SURFACTANT TYPE **APR 6 1998** _____ GAL.

NE AGENT TYPE _____ GAL.

FLUID LOSS AND TYPE _____ GAL.

GELLING AGENT TYPE _____ GAL.-LB.

FRIC. RED. AGENT TYPE _____ GAL.-LB.

BREAKER TYPE _____ GAL.-LB. **APR 0 1996**

BLOCKING AGENT TYPE _____ GAL.-LB.

PERFPAC BALLS TYPE _____ CONCENTRATION DIVISION

OTHER _____ MICHIGAN

OTHER _____

DEPARTMENT *Cement*

DESCRIPTION OF JOB *1 1/2 DV 2 Stage DV*

JOB DONE THRU: TUBING CASING ANNULUS TBG./ANN.

CUSTOMER REPRESENTATIVE *X Sam Cornock (Co Rep.)*

HALLIBURTON OPERATOR *Dennis Coar* COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
<i>250</i>	<i>Premium</i>				<i>1% CE 78EA2, 6% HMA 322, 15% SF</i>	<i>1.35</i>	<i>15.6</i>
<i>1430</i>	<i>1300 PL</i>	<i>LTWT</i>			<i>1/4 # / 1700 PL</i>	<i>2.06</i>	<i>12.3</i>

PRESSURES IN PSI

SUMMARY

VOLUMES

CIRCULATING _____ DISPLACEMENT _____ PRESFLUSH: BBL.-GAL. _____ TYPE _____

BREAKDOWN _____ MAXIMUM _____ LOAD & BKDN: BBL.-GAL. _____ PAD: BBL.-GAL. _____

AVERAGE _____ FRACTURE GRADIENT _____ TREATMENT: BBL.-GAL. _____ DISPL: BBL.-GAL. *# 91.56*

SHUT-IN: INSTANT _____ 5-MIN _____ 15-MIN _____ CEMENT SLURRY: BBL.-GAL. *2 Stage 60 10* *2 # 146.15*

HYDRAULIC HORSEPOWER _____ TOTAL VOLUME: BBL.-GAL. *2 Stage 157.76*

ORDERED _____ AVAILABLE _____ USED _____ REMARKS _____

AVERAGE RATES IN BPM _____

TREATING _____ DISPL. _____ OVERALL _____

CEMENT LEFT IN PIPE _____

FEET *40 41* REASON *Shoe Jaw*

CUSTOMER *Amoco Production*

LEASE *Amoco Mitchell*

WELL NO. *1-35*

JOB TYPE *4 1/2 DV 2 Stage*

DATE *12-20-95*



HALLIBURTON ENERGY SERVICES

HAL-1906-N

CHARGE TO: *Amoco Production*
 ADDRESS: *Amoco Production*
 CITY: STATE: ZIP CODE: *MA 01901*

CUSTOMER COPY

TICKET

CONFIDENTIAL

No. **880996 - 6**

PAGE 1 OF 1

SERVICE LOCATIONS <i>125540 Lizard Ks</i>	WELL/PROJECT NO. <i>1-35</i>	LEASE <i>Aray Michelle</i>	COUNTY/PARISH <i>Ks</i>	STATE <i>Ks</i>	CITY/OFFSHORE LOCATION	DATE <i>12-20-95</i>	OWNER <i>Amoco</i>
<i>25535 Heger Ks</i>	TICKET TYPE <input checked="" type="checkbox"/> SERVICE	NITROGEN JOB? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	CONTRACTOR <i>Chapman Dely</i>	RIG NAME/NO <i>3</i>	SHIPPED VIA <i>Loc</i>	ORDER NO.	
3.	WELL TYPE	WELL CATEGORY <i>01.03</i>	JOB PURPOSE <i>035 4 1/2 DV 2 Stage</i>	WELL PERMIT NO.	WELL LOCATION <i>SE of Johnson</i>		
4.	REFERRAL LOCATION	INVOICE INSTRUCTIONS					

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		UNIT PRICE		AMOUNT
		LOC	ACCT	DF		QTY.	U/M	QTY.	U/M	
000-117		1			MILEAGE	170	miles	2	85	1484.50
007-013		1			Pump charge	5763	FT			2000.00
007-161		1			Additional STAG	2856	48			1400.00
000-119		1			Crow Mileage	170	miles	1	50	NC
12 A	825-201	1			Guide Shoe	1	Each	4 1/2	95	95.00
40	806-60004	1			Centralizers	6			45	270.00
50	806-46104	1			Centralizers Fluid Master	8			60	480.00
71	813-80100	1			DV Tool 2 Stage w/atch Down Plg	1			2790	2790.00
75	813-16411	1			Plg Set 2 Stage + BAFFLE	1			760	760.00
220	806-71415	1			Basket	1			97	97.00
350	890-10802	1			Hawco weld A	1	LB		16	16.75

RECEIVED KANSAS CORPORATION COMMISSION APR 01 1996 CONSERVATION DIVISION WICHITA KS

ORIGINAL

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to; **PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY** provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS

Sam Cornack Rep. DATE SIGNED

Amoco Co TIME SIGNED

A.M. P.M.

do do not require IPC (Instrument Protection). Not offered

SUB SURFACE SAFETY VALVE WAS:
 PULLED & RETURN PULLED RUN

TYPE LOCK DEPTH

BEAN SIZE **RELEASED**

TYPE OF EQUALIZING SUB **APR 6 1998**

TUBING SIZE TUBING PRESSURE WELL DEPTH **FROM CONFIDENTIAL**

TREE CONNECTION TYPE VALVE

SURVEY AGREE UN-DECIDED DIS-AGREE

OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?

WE UNDERSTOOD AND MET YOUR NEEDS?

OUR SERVICE WAS PERFORMED WITHOUT DELAY?

WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?

ARE YOU SATISFIED WITH OUR SERVICE?
 YES NO

CUSTOMER DID NOT WISH TO RESPOND

PAGE TOTAL **8393.25**

FROM CONTINUATION PAGE(S) **12647.36**

SUB-TOTAL APPLICABLE TAXES WILL BE ADDED ON INVOICE

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.

CUSTOMER OR CUSTOMER'S AGENT (PLEASE PRINT) X	CUSTOMER OR CUSTOMER'S AGENT (SIGNATURE) <i>Dennis Cozar</i>	HALLIBURTON OPERATOR/ENGINEER <i>Dennis Cozar</i>	EMP # 59179	HALLIBURTON APPROVAL
---	---	--	-----------------------	----------------------

TERMS AND CONDITIONS

For good and valuable consideration received, Customer (as identified on the face of this document) and Halliburton Energy Services, a division of Halliburton Company (hereinafter "Halliburton") agree as follows:

A. **CUSTOMER REPRESENTATION** - Customer warrants that the well is in proper condition to receive the services, equipment, products, and materials to be supplied by Halliburton.

B. **PRICE AND PAYMENT** - The services, equipment, products, and/or materials to be supplied hereunder are priced in accordance with Halliburton's current price list. All prices are exclusive of taxes. If Customer does not have an approved open account with Halliburton, all sums due are payable in cash at the time of performance of services or delivery of equipment, products or materials. If Customer has an approved open account, invoices are payable on the twentieth day after the date of invoice. Customer agrees to pay interest on any unpaid balance from the date payable until paid at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event Halliburton employs an attorney for collection of any account, Customer agrees to pay attorney fees of 20% of the unpaid account, plus all collection and court costs.

C. **RELEASE AND INDEMNITY** - CUSTOMER AGREES TO RELEASE HALLIBURTON GROUP FROM ANY AND ALL LIABILITY FOR ANY AND ALL DAMAGES WHATSOEVER TO PROPERTY OF ANY KIND OWNED BY, IN THE POSSESSION OF, OR LEASED BY CUSTOMER AND THOSE PERSONS AND ENTITIES. CUSTOMER HAS THE ABILITY TO BIND BY CONTRACT. CUSTOMER ALSO AGREES TO DEFEND, INDEMNIFY, AND HOLD HALLIBURTON GROUP HARMLESS FROM AND AGAINST ANY AND ALL LIABILITY, CLAIMS, COSTS, EXPENSES, ATTORNEY FEES AND DAMAGES WHATSOEVER FOR PERSONAL INJURY, ILLNESS, DEATH, PROPERTY DAMAGE AND LOSS RESULTING FROM:

LOSS OF WELL CONTROL; SERVICES TO CONTROL A WILD WELL WHETHER UNDERGROUND OR ABOVE THE SURFACE; RESERVOIR OR UNDERGROUND DAMAGE, INCLUDING LOSS OF OIL, GAS, OTHER MINERAL SUBSTANCES OR WATER; SURFACE DAMAGE ARISING FROM UNDERGROUND DAMAGE; DAMAGE TO OR LOSS OF THE WELL BORE; SUBSURFACE TRESPASS OR ANY ACTION IN THE NATURE THEREOF; FIRE; EXPLOSION; SUBSURFACE PRESSURE; RADIOACTIVITY; AND POLLUTION AND ITS CLEANUP AND CONTROL.

CUSTOMER'S RELEASE, DEFENSE, INDEMNITY AND HOLD HARMLESS OBLIGATIONS WILL APPLY EVEN IF THE LIABILITY AND CLAIMS ARE CAUSED BY THE SOLE, CONCURRENT, ACTIVE OR PASSIVE NEGLIGENCE, FAULT, OR STRICT LIABILITY OF ONE OR MORE MEMBERS OF THE HALLIBURTON GROUP, THE UNSEAWORTHINESS OF ANY VESSEL OR ANY DEFECT IN THE DATA, PRODUCTS, SUPPLIES, MATERIALS OR EQUIPMENT FURNISHED BY HALLIBURTON GROUP WHETHER IN THE DESIGN, MANUFACTURE, MAINTENANCE OR MARKETING THEREOF OR FROM A FAILURE TO WARN OF SUCH DEFECT. HALLIBURTON GROUP IS DEFINED AS HALLIBURTON, ITS PARENT, SUBSIDIARY, AND AFFILIATED COMPANIES AND ITS/THEIR OFFICERS, DIRECTORS, EMPLOYEES, AND AGENTS. CUSTOMER'S RELEASE, DEFENSE, INDEMNITY AND HOLD HARMLESS OBLIGATIONS APPLY WHETHER THE PERSONAL INJURY, ILLNESS, DEATH, PROPERTY DAMAGE OR LOSS IS SUFFERED BY ONE OR MORE MEMBERS OF THE HALLIBURTON GROUP, CUSTOMER, OR ANY OTHER PERSON OR ENTITY AND THE CUSTOMER WILL SUPPORT SUCH OBLIGATIONS ASSUMED HEREIN WITH LIABILITY INSURANCE TO THE MAXIMUM EXTENT ALLOWED BY APPLICABLE LAW.

D. **EQUIPMENT LIABILITY** - Customer shall at its risk and expense attempt to recover any Halliburton equipment lost or lodged in the well. If the equipment is recovered and repairable, Customer shall pay the repair costs, unless caused by Halliburton's sole negligence. If the equipment is not recovered or is irreparable, Customer shall pay the replacement cost, unless caused by Halliburton's sole negligence. If a radioactive source becomes lost or lodged in the well, Customer shall meet all requirements of Section 39.15(a) of the Nuclear Regulatory Commission regulations and any other applicable laws or regulations concerning retrieval or abandonment and shall permit Halliburton to monitor the recovery or abandonment efforts all at no risk or liability to Halliburton. Customer shall be responsible for damage to or loss of Halliburton equipment, products, and materials while in transit aboard Customer-supplied transportation, even if such is arranged by Halliburton at Customer's request, and during loading and unloading from such transport. Customer will also pay for the repair or replacement of Halliburton equipment damaged by corrosion or abrasion due to well effluents.

E. **LIMITED WARRANTY** - Halliburton warrants only title to the equipment, products, and materials supplied under this agreement and that same are free from defects in workmanship and materials for one year from date of delivery. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE. Halliburton's sole liability and Customer's exclusive remedy in any cause of action (whether in contract, tort, breach of warranty or otherwise) arising out of the sale, lease or use of any equipment, products, or materials is expressly limited to the replacement of such on their return to Halliburton or, at Halliburton's option, to the allowance to Customer of credit for the cost of such items. In no event shall Halliburton be liable for special, incidental, indirect, consequential, or punitive damages. Because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others, HALLIBURTON IS UNABLE TO GUARANTEE THE EFFECTIVENESS OF THE EQUIPMENT, MATERIALS, OR SERVICE, NOR THE ACCURACY OF ANY CHART INTERPRETATION, RESEARCH ANALYSIS, JOB RECOMMENDATION OR OTHER DATA FURNISHED BY HALLIBURTON. Halliburton personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but Customer agrees that Halliburton shall not be liable for and CUSTOMER SHALL INDEMNIFY HALLIBURTON GROUP AGAINST ANY DAMAGES ARISING FROM THE USE OF SUCH INFORMATION, even if such is contributed to by Halliburton's negligence or fault. Halliburton also does not warrant the accuracy of data transmitted by electronic process, and Halliburton will not be responsible for accidental or intentional interception of such data by third parties.

F. **GOVERNING LAW** - The validity, interpretation and construction of this agreement shall be determined by the laws of the jurisdiction where the services are performed or the equipment or materials are delivered.

G. **WAIVER** - Customer agrees to waive the provisions of the Texas Deceptive Trade Practices-Consumer Protection Act or any similar federal or state statute to the extent permitted by law.

H. **MODIFICATIONS** - Customer agrees that Halliburton shall not be bound by any modifications to this agreement, except where such modification is made in writing by a duly authorized executive officer of Halliburton. Requests for modifications should be directed to the Vice President - Legal, 5151 San Felipe, Houston, Texas 77056.

ORIGINAL

Well Name: ABBEY MICHELLE #1-35
Company : AMOCO PRODUCTION COMPANY
Location - Sec: 35
County: STANTON
Date: 12/18/95

Twp: 29S
State: KS

CONFIDENTIAL

Rge: 40W

15-187-20806

NOO

MAR 29

CONFIDENTIAL

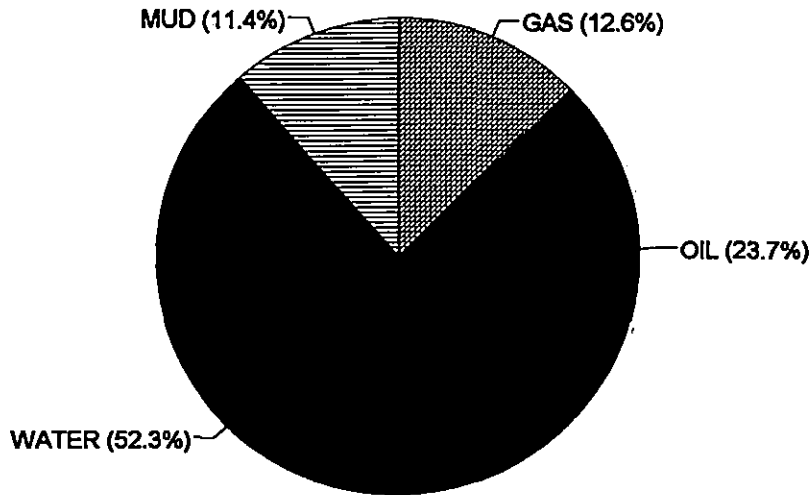
RELEASED
APR 6 1998
FROM CONFIDENTIAL

CALCULATED RECOVERY ANALYSIS

DST # 1

TICKET # 8270

SAMPLE #	TOTAL FEET	GAS		OIL		WATER		MUD	
		%	FEET	%	FEET	%	FEET	%	FEET
DRILL PIPE 1	240		0		0		0	100	240
2	560	20	112	80	448		0		0
3	120	45	54	25	30	30	36		0
4	400	25	100	5	20	70	280		0
5	533		0		0	100	533		0
6			0		0		0		0
WEIGHT PIPE 1			0		0		0		0
2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
DRL COLLAR 1	727		0		0	100	727		0
2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	2580	10.31008	266	19.30233	498	61.08527	1576	9.302326	240
			HRS OPE BBL/DAY						
BBL OIL=	7.08156	*	2.17	78.46604					
BBL WATER=	15.62781	*		173.1613					
BBL MUD=	3.4128								
BBL GAS =	3.78252								



TEST HISTORY

8270 DST#1 Abbey Michelle #1-35 Amoco Production Comp.

Flag Points

t(Min.) P(PSig)

A:	0.00	2699.19
B:	0.00	718.75
C:	8.00	496.42
D:	60.00	1475.86
E:	0.00	589.88
F:	118.00	1120.85
G:	122.00	1459.88
Q:	0.00	2631.21

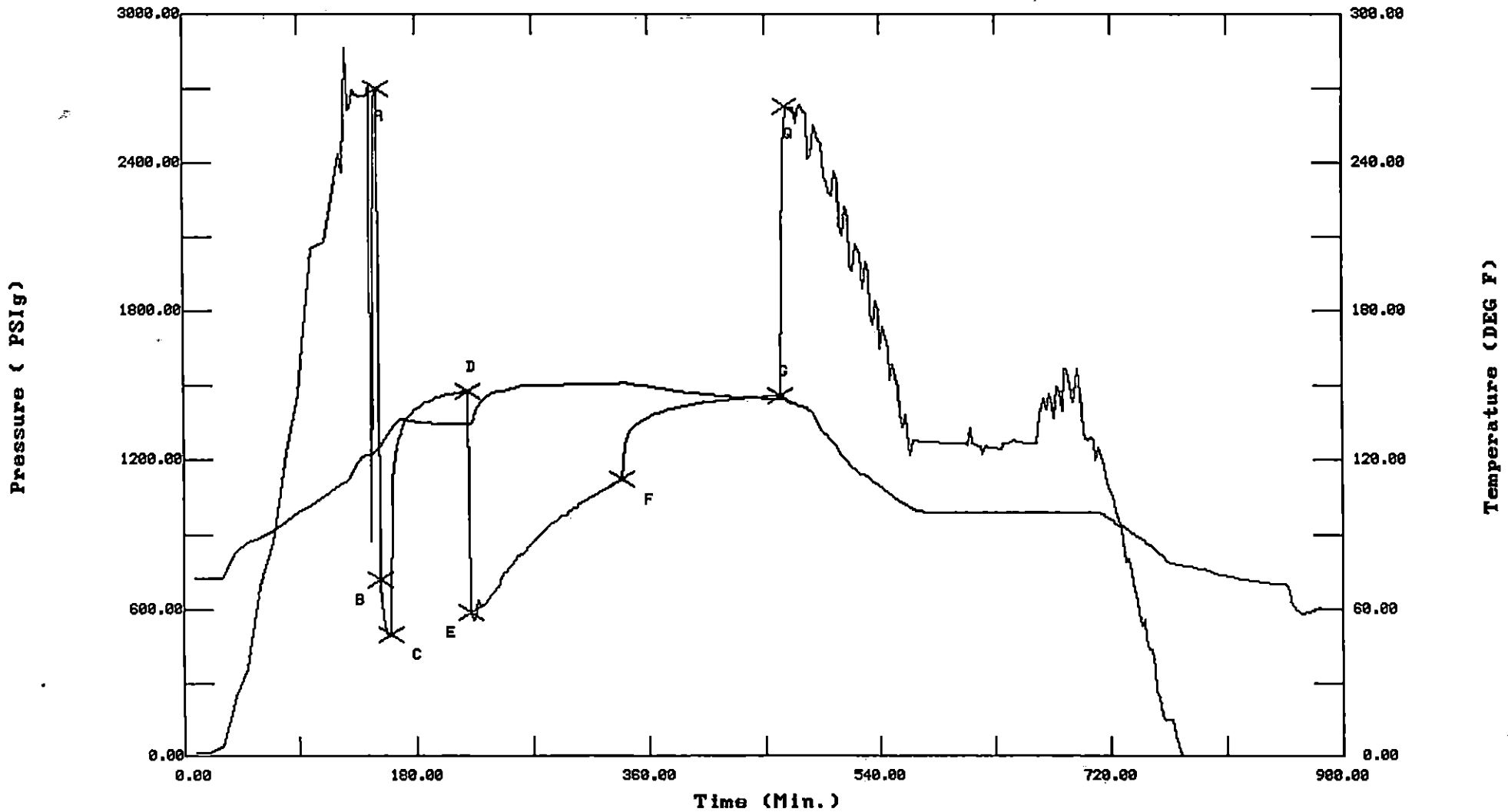
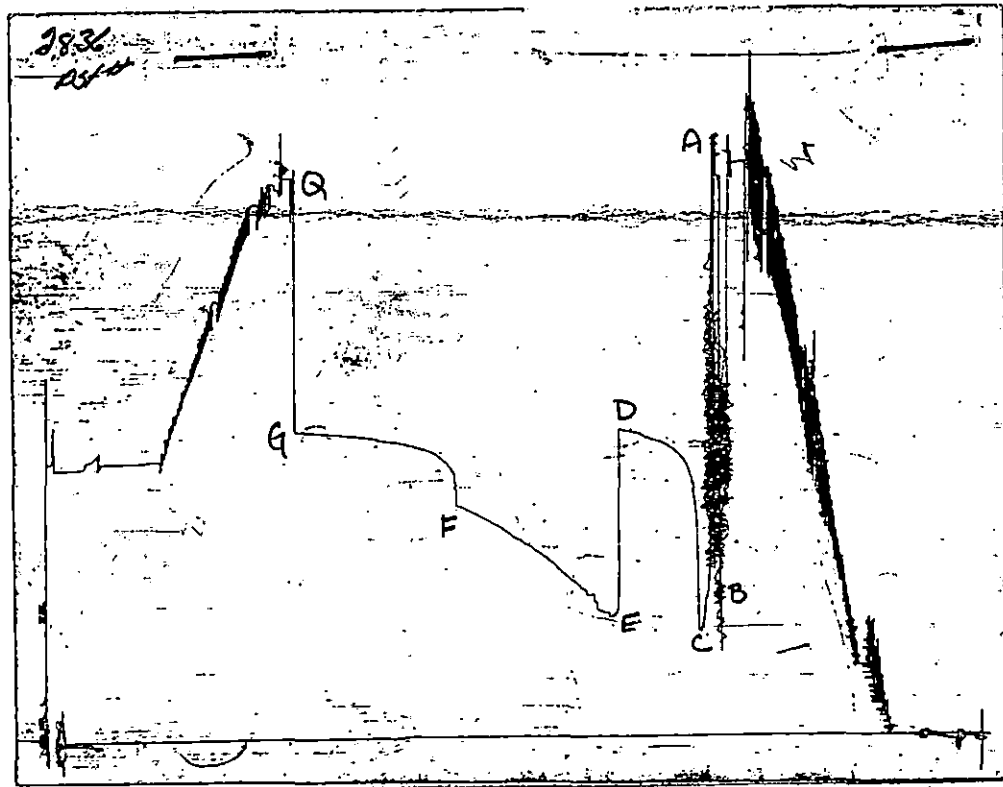


CHART PAGE



This is an actual photograph of recorder chart

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8270 DST#1 Abbey Michelle #1-35 Amoco Production Comp.

DATE: 12/18/95

TIME: 15:50:54

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	150.00	2699.2	0.0	123.98		
***** Start Flow 1	0.00	718.7	0.0	125.06		
	2.00	621.2	-97.5	126.50		
	4.00	535.0	-183.7	128.30		
	6.00	489.5	-229.3	130.10		
***** End Flow 1	8.00	496.4	-222.3	131.90		
***** Start Shutin 1	0.00	496.4	0.0	131.90	0.0000	0.246
	2.00	1113.9	617.5	133.34	5.0000	1.241
	4.00	1220.1	723.6	134.60	3.0000	1.489
	6.00	1274.9	778.4	135.50	2.3333	1.625
	8.00	1310.3	813.8	135.86	2.0000	1.717
	10.00	1336.0	839.5	135.86	1.8000	1.785
	12.00	1355.5	859.1	135.86	1.6667	1.837
	14.00	1371.0	874.6	135.68	1.5714	1.880
	16.00	1383.8	887.4	135.50	1.5000	1.915
	18.00	1394.7	898.3	135.50	1.4444	1.945
	20.00	1404.0	907.6	135.14	1.4000	1.971
	22.00	1412.2	915.7	135.14	1.3636	1.994
	24.00	1419.4	923.0	134.96	1.3333	2.015
	26.00	1425.8	929.3	134.96	1.3077	2.033
	28.00	1431.3	934.9	134.78	1.2857	2.049
	30.00	1436.2	939.8	134.78	1.2667	2.063
	32.00	1440.9	944.5	134.60	1.2500	2.076
	34.00	1445.1	948.6	134.60	1.2353	2.088
	36.00	1448.8	952.3	134.60	1.2222	2.099
	38.00	1452.1	955.7	134.60	1.2105	2.109
	40.00	1455.3	958.9	134.42	1.2000	2.118
	42.00	1458.2	961.7	134.42	1.1905	2.126
	44.00	1460.8	964.3	134.42	1.1818	2.134
	46.00	1463.2	966.8	134.42	1.1739	2.141
	48.00	1465.5	969.0	134.24	1.1667	2.148
	50.00	1467.5	971.0	134.24	1.1600	2.153
	52.00	1469.3	972.9	134.24	1.1538	2.159
	54.00	1471.2	974.8	134.24	1.1481	2.165
	56.00	1472.9	976.5	134.06	1.1429	2.170
	58.00	1474.4	977.9	134.06	1.1379	2.174
***** End Shut-in 1	60.00	1475.9	979.4	134.06	1.1333	2.178
***** Start Flow 2	0.00	589.1	0.0	134.42		
	2.00	558.8	-30.3	136.94		
	4.00	569.3	-19.8	139.46		
	6.00	636.2	47.1	141.80		
	8.00	609.5	20.4	143.24		
	10.00	618.5	29.5	144.32		
	12.00	624.4	35.3	145.22		
	14.00	642.0	52.9	145.94		
	16.00	656.7	67.6	146.66		
	18.00	669.7	80.7	147.02		
	20.00	679.6	90.6	147.38		
	22.00	690.4	101.3	147.56		
	24.00	729.8	140.7	147.74		
	26.00	751.3	162.2	147.56		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8270 DST#1 Abbey Michelle #1-35 Amoco Production Comp.

DATE: 12/18/95

TIME: 15:50:54

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
28.00	750.4	161.3	147.92		
30.00	768.0	178.9	148.10		
32.00	781.5	192.4	148.46		
34.00	793.9	204.8	149.00		
36.00	806.5	217.5	149.36		
38.00	813.5	224.4	149.54		
40.00	823.7	234.6	149.72		
42.00	833.3	244.2	149.72		
44.00	846.2	257.1	149.72		
46.00	858.8	269.7	149.72		
48.00	869.4	280.3	149.90		
50.00	879.0	289.9	149.90		
52.00	889.0	300.0	149.90		
54.00	899.9	310.9	149.90		
56.00	910.4	321.4	149.90		
58.00	920.4	331.3	150.08		
60.00	927.8	338.7	150.08		
62.00	938.1	349.0	150.08		
64.00	944.9	355.9	150.08		
66.00	953.3	364.2	150.08		
68.00	961.2	372.1	150.26		
70.00	968.6	379.5	150.26		
72.00	976.5	387.4	150.26		
74.00	978.1	389.0	150.44		
76.00	988.3	399.2	150.44		
78.00	997.0	407.9	150.44		
80.00	1004.4	415.4	150.44		
82.00	1009.8	420.7	150.44		
84.00	1017.0	427.9	150.44		
86.00	1024.2	435.2	150.62		
88.00	1030.3	441.2	150.62		
90.00	1036.7	447.6	150.62		
92.00	1044.6	455.5	150.62		
94.00	1050.9	461.8	150.62		
96.00	1056.6	467.6	150.62		
98.00	1062.3	473.3	150.62		
100.00	1067.6	478.6	150.62		
102.00	1073.7	484.6	150.80		
104.00	1079.6	490.5	150.80		
106.00	1086.4	497.3	150.80		
108.00	1092.5	503.4	150.80		
110.00	1098.9	509.8	150.80		
112.00	1105.2	516.1	150.80		
114.00	1111.9	522.8	150.80		
116.00	1116.0	526.9	150.80		
118.00	1120.8	531.8	150.98		

***** End Flow 2

***** Start Shutin 2

0.00	1120.8	0.0	150.98	0.0000	1.256
2.00	1261.2	140.3	150.98	64.0000	1.591
4.00	1292.6	171.8	150.80	32.5000	1.671
6.00	1310.7	189.8	150.62	22.0000	1.718
8.00	1324.2	203.4	150.44	16.7500	1.754

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8270 DST#1 Abbey Michelle #1-35 Amoco Production Comp.

DATE: 12/18/95

TIME: 15:50:54

Time	Pressure PSI _g	delta P PSI _g	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
10.00	1334.8	213.9	150.26	13.6000	1.782
12.00	1343.4	222.6	150.08	11.5000	1.805
14.00	1351.2	230.4	150.08	10.0000	1.826
16.00	1358.1	237.3	149.72	8.8750	1.844
18.00	1364.1	243.2	149.72	8.0000	1.861
20.00	1369.2	248.3	149.54	7.3000	1.875
22.00	1374.5	253.6	149.36	6.7273	1.889
24.00	1378.8	258.0	149.18	6.2500	1.901
26.00	1383.3	262.4	149.00	5.8462	1.913
28.00	1386.9	266.1	148.82	5.5000	1.923
30.00	1391.0	270.2	148.64	5.2000	1.935
32.00	1394.3	273.4	148.46	4.9375	1.944
34.00	1397.6	276.8	148.28	4.7059	1.953
36.00	1400.6	279.7	148.10	4.5000	1.962
38.00	1403.6	282.8	147.92	4.3158	1.970
40.00	1406.3	285.4	147.74	4.1500	1.978
42.00	1409.1	288.2	147.56	4.0000	1.985
44.00	1411.5	290.6	147.56	3.8636	1.992
46.00	1413.7	292.8	147.38	3.7391	1.998
48.00	1416.1	295.3	147.20	3.6250	2.005
50.00	1418.0	297.2	147.02	3.5200	2.011
52.00	1420.2	299.4	147.02	3.4231	2.017
54.00	1422.0	301.1	146.84	3.3333	2.022
56.00	1423.8	303.0	146.66	3.2500	2.027
58.00	1425.3	304.4	146.66	3.1724	2.031
60.00	1427.4	306.6	146.48	3.1000	2.038
62.00	1429.0	308.2	146.48	3.0323	2.042
64.00	1430.5	309.7	146.30	2.9688	2.046
66.00	1432.1	311.2	146.12	2.9091	2.051
68.00	1433.6	312.7	146.12	2.8529	2.055
70.00	1434.8	314.0	146.12	2.8000	2.059
72.00	1436.3	315.5	145.94	2.7500	2.063
74.00	1437.5	316.7	145.94	2.7027	2.066
76.00	1438.5	317.7	145.76	2.6579	2.069
78.00	1440.1	319.3	145.76	2.6154	2.074
80.00	1441.1	320.3	145.58	2.5750	2.077
82.00	1442.2	321.4	145.58	2.5366	2.080
84.00	1443.3	322.5	145.40	2.5000	2.083
86.00	1444.6	323.7	145.40	2.4651	2.087
88.00	1445.6	324.8	145.40	2.4318	2.090
90.00	1446.3	325.5	145.22	2.4000	2.092
92.00	1447.4	326.6	145.22	2.3696	2.095
94.00	1448.2	327.4	145.04	2.3404	2.097
96.00	1449.3	328.4	145.04	2.3125	2.100
98.00	1450.2	329.3	145.04	2.2857	2.103
100.00	1451.1	330.3	144.86	2.2600	2.106
102.00	1451.8	330.9	144.86	2.2353	2.108
104.00	1452.4	331.5	144.86	2.2115	2.109
106.00	1453.4	332.5	144.86	2.1887	2.112
108.00	1454.1	333.3	144.68	2.1667	2.114
110.00	1455.0	334.1	144.68	2.1455	2.117

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8270 DST#1 Abbey Michelle #1-35 Amoco Production Comp.

DATE: 12/18/95

TIME: 15:50:54

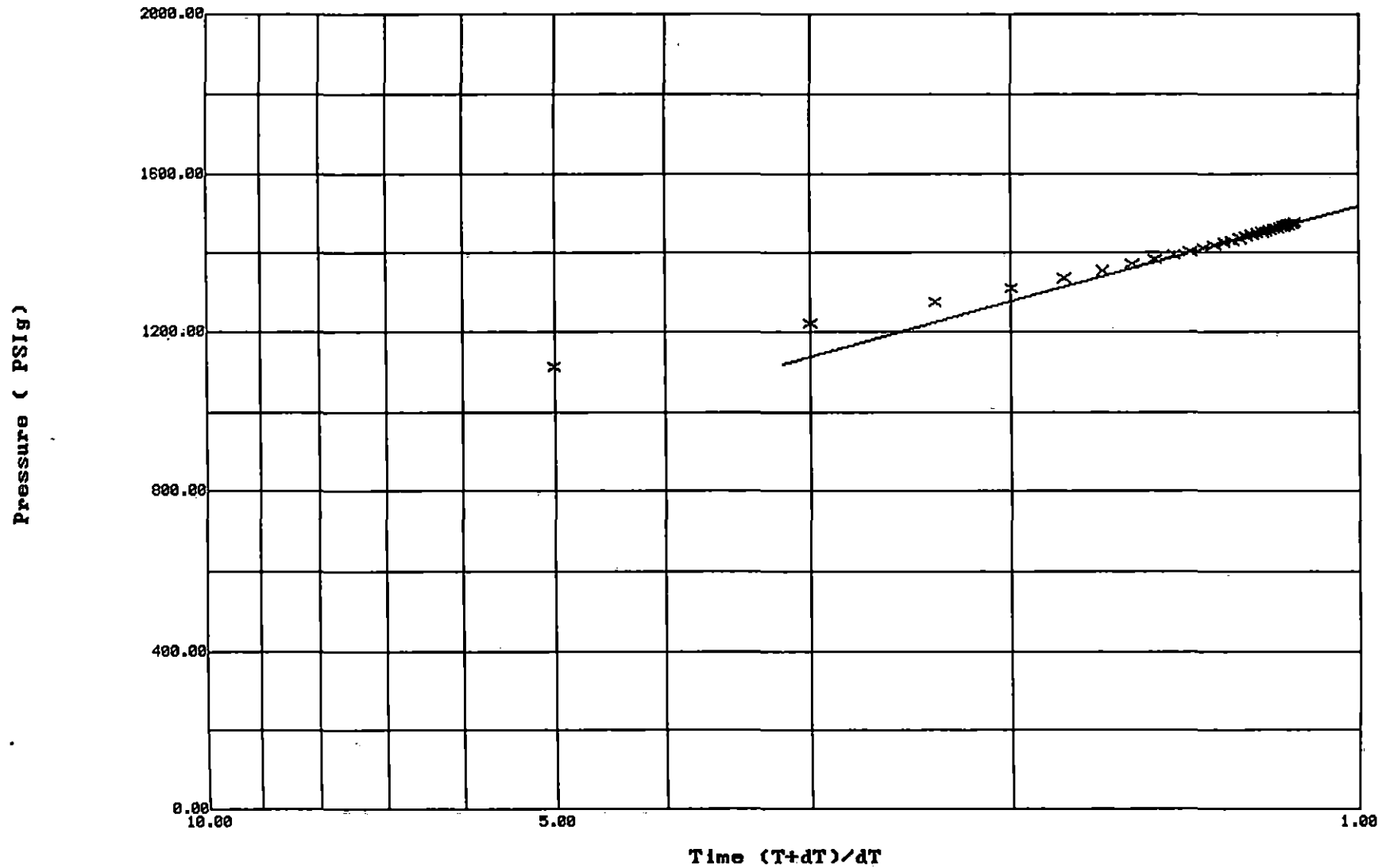
	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	112.00	1455.5	334.6	144.68	2.1250	2.118
	114.00	1456.5	335.6	144.68	2.1053	2.121
	116.00	1457.1	336.3	144.50	2.0862	2.123
	118.00	1457.7	336.9	144.50	2.0678	2.125
	120.00	1458.4	337.6	144.50	2.0500	2.127
***** End Shut-in 2	122.00	1459.1	338.2	144.50	2.0328	2.129
***** Final Hydro.	466.00	2631.2	0.0	143.78		

Horner Plot: shut-in #1

8270 DST#1 Abbey Michelle #1-35 Amoco Production Comp.

Slope: 804.5088 PSig/cycle

Ext. Pressure: 1519.5566 PSig

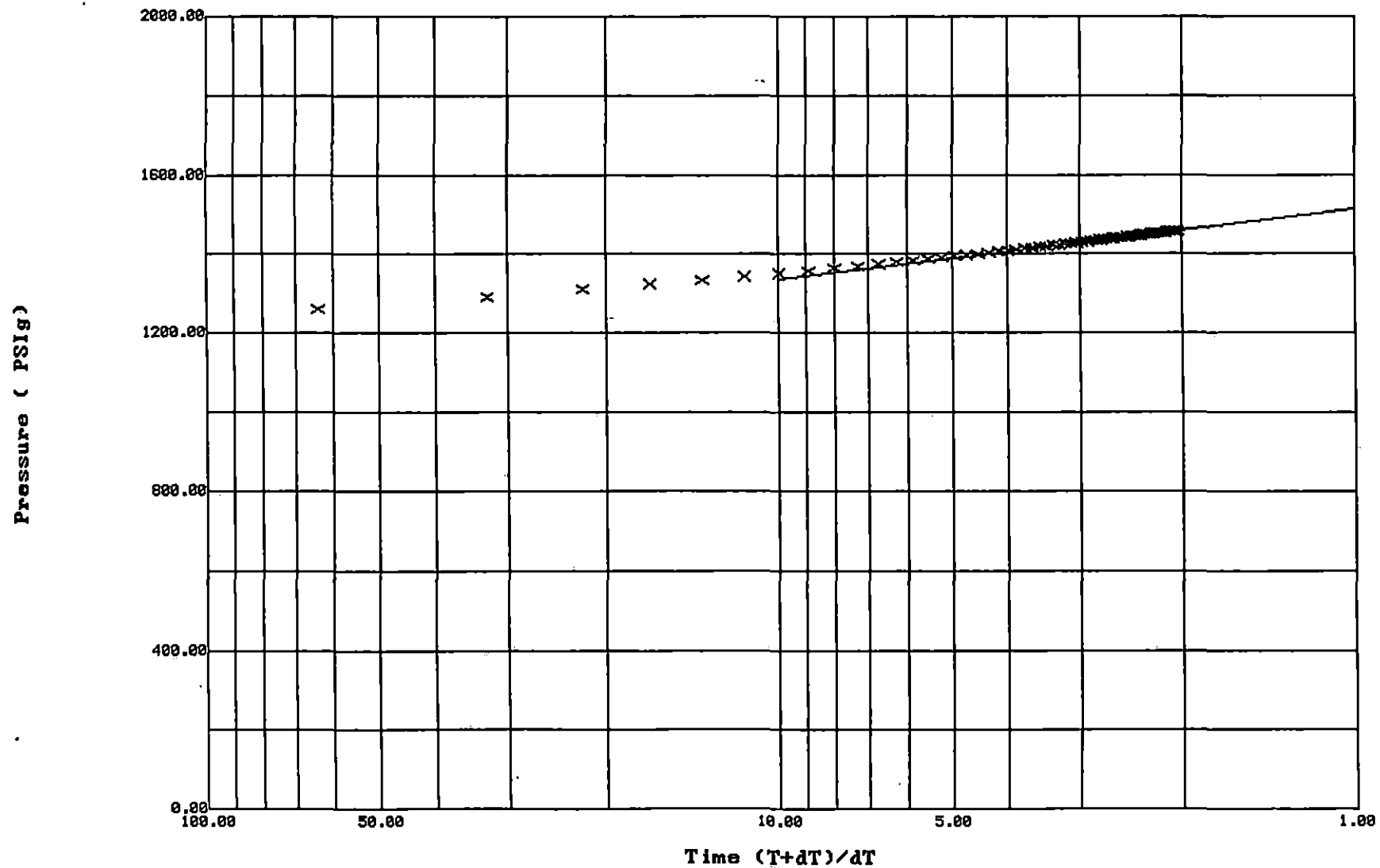


Horner Plot: shut-in #2

8270 DST#1 Abbey Michelle #1-35 Amoco Production Comp.

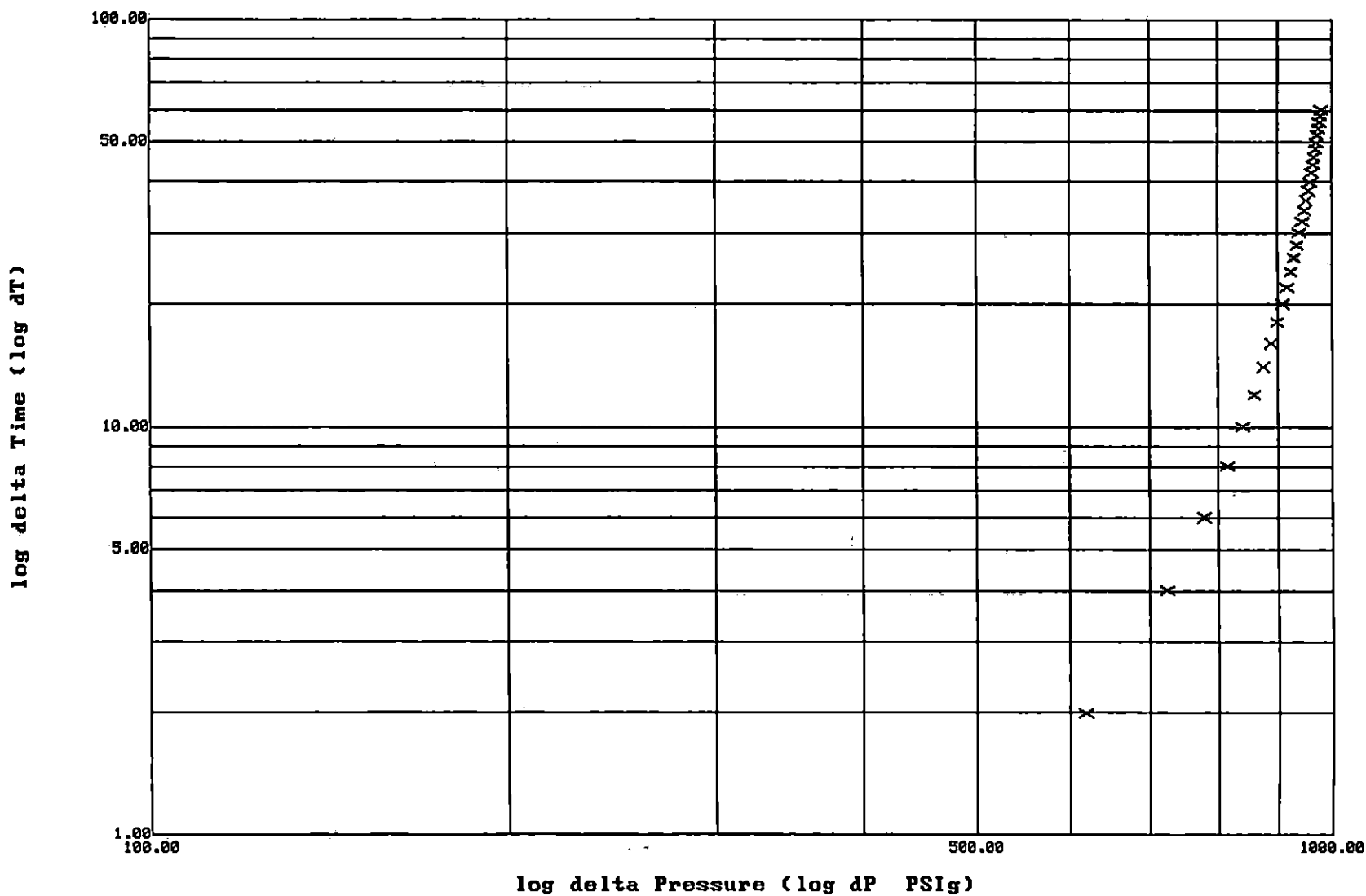
Slope: 180.9201 PSig/cycle

Ext. Pressure: 1514.8484 PSig



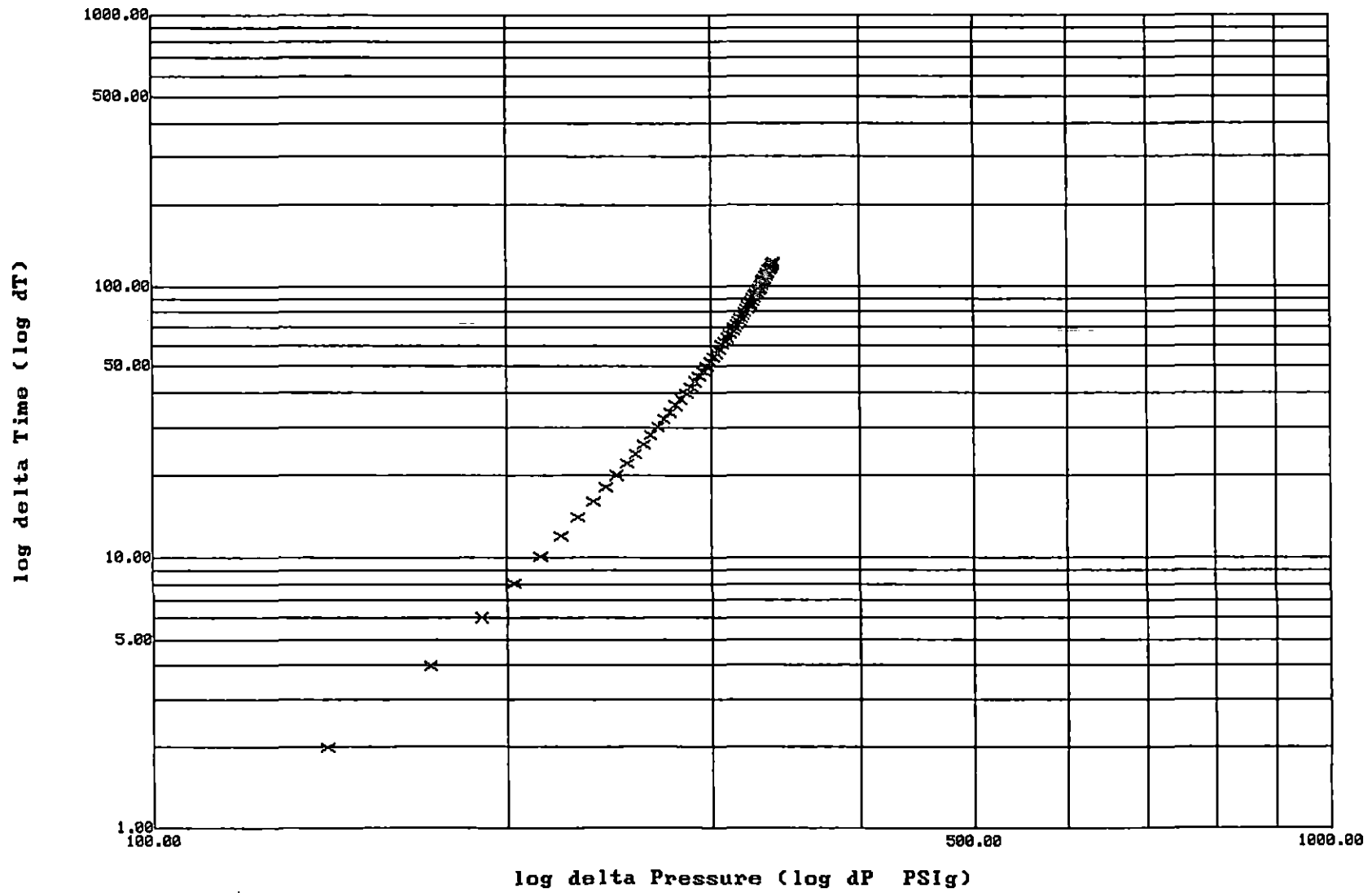
McKinley Plot: shut-in #1

8270 DST#1 Abbey Michelle #1-35 Amoco Production Comp.



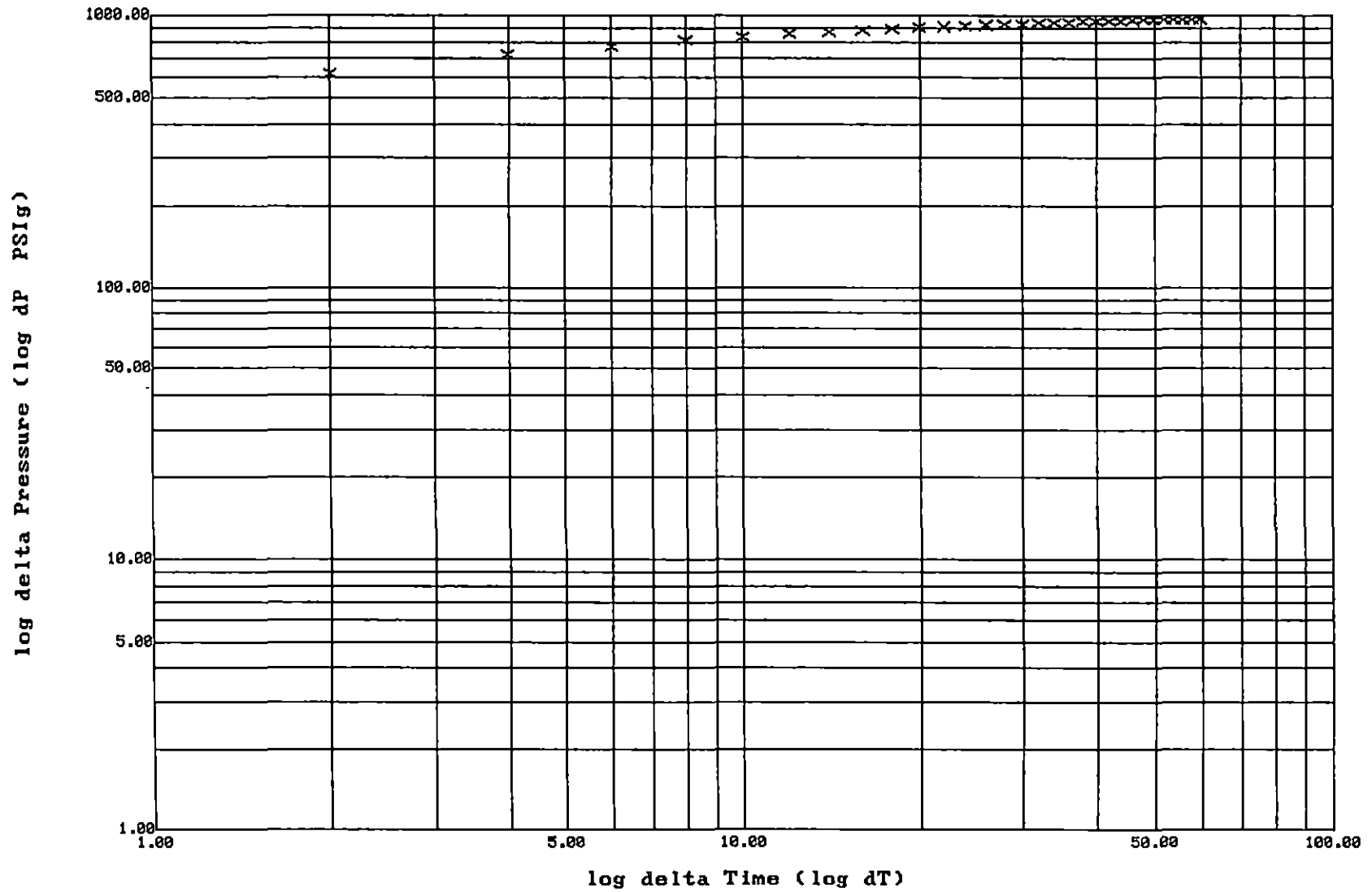
McKinley Plot: shut-in #2

8270 DST#1 Abbey Michelle #1-35 Amoco Production Comp.



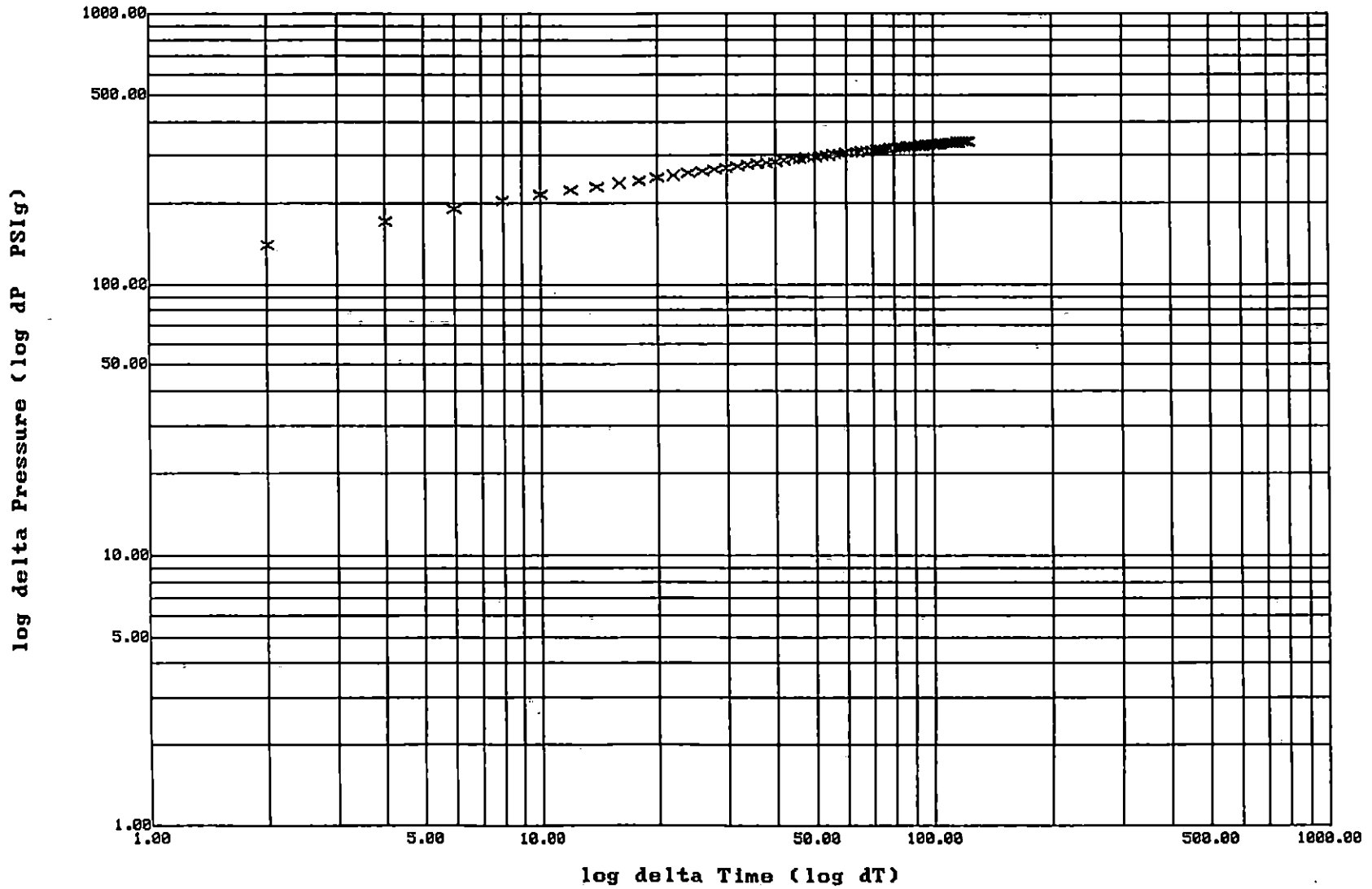
Ramey Plot: shut-in #1

8270 DST#1 Abbey Michelle #1-35 Amoco Production Comp.



Ramey Plot: shut-in #2

8270 DST#1 Abbey Michelle #1-35 Amoco Production Comp.



*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Abbey Michelle #1-35

LOCATION : 35-29S-40W Stanton Cty KS

TICKET No. 8270 D.S.T. No. 1 DATE 12/18/95

TOTAL TOOL TO BOTTOM OF TOP PACKERS 31

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 31

TOTAL TOOL 62

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 62

D.C. ABOVE TOOLS.Stands Single Total 727

D.P. ABOVE TOOLS.Stands Single Total 4880

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5669

TOTAL DEPTH 5648

TOTAL DRILL PIPE ABOVE K.B. 21

REMARKS:

FLUID SAMPLER DATA

SAMPLER RECOVERY -

Gas 2.4 cu ft, Oil 2000 ml, Water 300 ml,
Pressure 525 PSI, Total 4000 ml

PIT MUD ANALYSIS -

Chlorides 1100 ppm; Viscosity 60, Mud Wt 8.9
Filtrate 6

PIPE RECOVERY -

T - Resist .4 ohms @ 68.5 F; Chlor 17500 ppm
B - Resist .252 ohms @ 61.4 F;
Chlorides 29000 ppm

P.O. SUB	
C.O. SUB	5586
S.I. TOOL 5'	5592
Sampler	5595
HMV 5'	5600
JARS 5'	5605
SAFETY JOINT 3'	5608
PACKER Top	5612
PACKER Bottom	5617
DEPTH 5617	
STUBB 1'	5618
ANCHOR	
5' perf	5623
Alpine recorder	5623
22' perf	5645
T.C. DEPTH	
AK-1 recorder	5645
BULLNOSE 3' bull plug	
T.D.	5648

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 8270

Well Name & No. <u>Abbey Michelle #1-35</u>		Test No. <u>1</u>	Date <u>12-18-95</u>
Company <u>Amoco Pro Company</u>		Zone Tested <u>St. Louis</u>	
Address <u>P.O. Box 800 Denver Colo. 80201</u>		Elevation <u>3259/213</u>	
Co. Rep./Geo. <u>Chuck Schmalitz</u>		Cont. <u>Cheape Rig #3</u>	Est. Ft. of Pay <u>17</u>
Location: Sec. <u>35</u>	Twp. <u>29S</u>	Rge. <u>90W</u>	Co. <u>Stanton</u> State <u>Kansas</u>
No. of Copies <u>6</u>	Distribution Sheet <u>X</u> Yes <u> </u> No <u> </u>	Turnkey <u> </u> Yes <u>X</u> No <u> </u>	Evaluation <u> </u>

Interval Tested <u>5617-5648</u>	Drill Pipe Size <u>1 1/2" R-Hole</u>
Anchor Length <u>31'</u>	Top Choke — 1" <u> </u> Bottom Choke — 1/4" <u> </u>
Top Packer Depth <u>5612</u>	Hole Size — 7 7/8" <u> </u> Rubber Size — 6 3/4" <u> </u>
Bottom Packer Depth <u>5617</u>	Wt. Pipe I.D. — 2.7 Ft. Run <u> </u>
Total Depth <u>5648</u>	Drill Collar — 2.25 Ft. Run <u>727'</u>
Mud Wt. <u>8.9</u> lb/gal.	Viscosity <u>60%</u> Filtrate <u>6.0</u>
Tool Open @ <u>6:22 pm</u> Initial Blow <u>String blow B.O.P. in 30 sec. G.I.S. in 10 min.</u>	
<u>I-S-I Bottom bucket blow back.</u>	
Final Blow <u>String blow B.O.P. as soon as open Tub</u>	
<u>F.S.I 2in would not bleed off</u>	
Recovery — Total Feet <u>2580</u>	Feet of Gas In Pipe <u> </u> Flush Tool? <u>NO</u>
Rec. <u>240</u> Feet Of <u>Mud</u>	%gas <u> </u> %oil <u> </u> %water <u>100</u> %mud <u> </u>
Rec. <u>560</u> Feet Of <u>Gassy cut oil</u>	<u>20</u> %gas <u>80</u> %oil <u> </u> %water <u> </u> %mud <u> </u>
Rec. <u>120</u> Feet Of <u>Gassy Water & oil</u>	<u>45</u> %gas <u>25</u> %oil <u>30</u> %water <u> </u> %mud <u> </u>
Rec. <u>400</u> Feet Of <u>50% Gassy Water</u>	<u>25</u> %gas <u>5</u> %oil <u>70</u> %water <u> </u> %mud <u> </u>
Rec. <u>1260</u> Feet Of <u>Salt Water</u>	<u> </u> %gas <u> </u> %oil <u>100</u> %water <u> </u> %mud <u> </u>
BHT <u>126</u> °F Gravity <u>44</u>	°API @ <u>74</u> °F Corrected Gravity <u>42.9</u> °API
RW <u>.400</u> @ <u>68.5</u> °F Chlorides <u>17,500</u> ppm Recovery Chlorides <u>1,100</u> ppm System	
(A) Initial Hydrostatic Mud <u>2860</u> <u>2099</u> PSI	AK1 Recorder No. <u>2351</u> Range <u>4995</u>
(B) First Initial Flow Pressure <u>621</u> <u>719</u> PSI	@ (depth) <u>5623</u> w/Clock No. <u>Electronic</u>
(C) First Final Flow Pressure <u>496</u> PSI	AK1 Recorder No. <u>2836</u> Range <u>3,500</u>
(D) Initial Shut-in Pressure <u>1475</u> PSI	@ (depth) <u>5645</u> w/Clock No. <u>23935</u>
(E) Second Initial Flow Pressure <u>538</u> <u>589</u> PSI	AK1 Recorder No. <u> </u> Range <u> </u>
(F) Second Final Flow Pressure <u>1120</u> PSI	@ (depth) <u> </u> w/Clock No. <u> </u>
(G) Final Shut-in Pressure <u>1459</u> PSI	Initial Opening <u>10 min</u> Test <u>Conventional</u>
(H) Final Hydrostatic Mud <u>2623</u> PSI	Initial Shut-in <u>60 min</u> Jars <u> </u>

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Final Flow <u>120 min</u>	Safety Joint <u> </u>
Final Shut-in <u>120 min</u>	Straddle <u> </u>
	Circ. Sub <u>Drop BAR</u>
	Sampler <u> </u>

Approved By _____

Our Representative Mike Clinton

Extra Packer _____

Other Electronic Rec.

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 8270 Date 12-18-95
Company Name Amoco Prod. Company
Lease Abbey Michelle #1-35 Test No. DST #1
County Stanton Sec. 35 Twp. 29S Rng. 90W

SAMPLER RECOVERY

Gas 2.4 cubic Ft. ML
Oil 2,000 ML
Mud _____ ML
Water 300 ML
Other _____ ML
Pressure 525 PSI
Total 4,000 ML

PIT MUD ANALYSIS

Chlorides 1,100 ppm.
Resistivity _____ ohms @ _____ F
Viscosity 60
Mud Weight 8.9
Filtrate 6.0
Other _____

SAMPLER ANALYSIS

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

PIPE RECOVERY

TOP
Resistivity .400 ohms @ 68.5 F
Chlorides 17,500 ppm.
MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
BOTTOM
Resistivity .252 ohms @ 61.4 F
Chlorides 29,000 ppm.