

CONFIDENTIAL

15-109-20643-00-00

ORIGINAL

FORM MUST BE TYPED

SIDE ONE

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

API NO. 15- 109-20,643-00-00  
County Logan  
NE - SW - NW Sec. 14 Twp. 11S Rge. 34 X W

Operator: License # 5135  
Name: John O. Farmer, Inc.  
Address P.O. Box 352  
City/State/Zip Russell, KS 67665

1650 Feet from S(N) (circle one) Line of Section  
990 Feet from E(W) (circle one) Line of Section  
Footages Calculated from Nearest Outside Section Corner:  
NE, SE (NW) or SW (circle one)

Purchaser: N/A

Lease Name Smith Well # 1  
Field Name (wildcat)  
Producing Formation None

Operator Contact Person: Marge Schulte  
Phone ( 913 ) 483-3144

Elevation: Ground 3179' KB 3184'  
Total Depth 4790' PBTD

Contractor: Name: Abercrombie RTD, Inc.  
License: 30684

Amount of Surface Pipe Set and Cemented at 267 Feet

Wellsite Geologist: John O. Farmer IV

Multiple Stage Cementing Collar Used? Yes X No  
If yes, show depth set Feet

Designate Type of Completion  
X New Well Re-Entry Workover

If Alternate II completion, cement circulated from  
feet depth to w/ sx cmt.

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

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

Drilling Fluid Management Plan DRA JH 5-15-97  
(Data must be collected from the Reserve Pft)

Operator: KCC  
Well Name: 3-14  
Comp. Date: MAR 9:4

Chloride content 5,800 ppm Fluid Volume 1,800 bbls  
Dewatering method used evaporation

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

Location of fluid disposal if hauled offsite:  
(not hauled)

2-4-97 2-11-97  
Spud Date Date Reached TD Completion Date

Operator Name  
Lease Name License No.  
Quarter Sec. Twp. Rng. E/W  
Docket No.

RELEASED

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 John O. Farmer III  
Title President Date 3-14-97  
Subscribed and sworn to before me this 14th day of March, 19 97.

Notary Public Margaret A. Schulte  
Margaret A. Schulte

Date Commission Expires

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 John O. Farmer, Inc. Lease Name Smith Well # 1  
 Sec. 14 Twp. 11S Rge. 34  East  West  
 County Logan

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 Datums	<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	Base/Anhydrite	2670'	(+514)
Electric Log Run (Submit Copy.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Heebner	4066'	(-882)
List All E.Logs Run:		Lansing	4104'	(-920)
		Stark Shale	4334'	(-1150)
		Base/KC	4410'	(-1226)
		Pawnee	4533'	(-1349)
		Fort Scott	4589'	(-1405)
		Cherokee Shale	4618'	(-1434)
		Johnson zone	4664'	(-1480)
		Mississippi	4758'	(-1574)
		L.T.D.	4792'	(-1608)

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
Surface	12-1/4"	8-5/8"	20#	267'	60/40 Pozmix	180	3% C.C., 2% gel

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

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

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

Date of First, Resumed Production, SWD or Inj.	Producing Method
D&A	<input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)

Estimated Production Per 24 Hours	Oil $\frac{N/A}{Bbls.}$	Gas $\frac{N/A}{Mcf}$	Water $\frac{N/A}{Bbls.}$	Gas-Oil Ratio	Gravity

Disposition of Gas:	METHOD OF COMPLETION	Production Interval
<input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease (If vented, submit ACO-18.)	<input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <input type="checkbox"/> Other (Specify) _____	_____

# ALLIED CEMENTING CO., INC.

8982

Federal Tax I.D.#

REMIT TO P.O. BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:

Dakley

**COPY**

CONFIDENTIAL

DATE <u>2-4-97</u>	SEC. <u>14</u>	TWP. <u>11</u>	RANGE <u>34<sup>W</sup></u>	CALLED OUT	ON LOCATION <u>10:15<sup>PM</sup></u>	JOB START <u>11:45<sup>PM</sup></u>	JOB FINISH <u>12:00<sup>AM</sup></u>
LEASE <u>Smith</u>	WELL# <u>1</u>	LOCATION <u>Monument 3W-S.S.</u>			COUNTY <u>Logan</u>	STATE <u>Kan</u>	
OLD OR NEW (Circle one)							

**ORIGINAL**

CONTRACTOR Abercrombie RTD #8

TYPE OF JOB Surface

HOLE SIZE 12 1/4 T.D. 273'

CASING SIZE 8 5/8 DEPTH 267'

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 15'

PERFS.

DISPLACEMENT

OWNER

CEMENT

AMOUNT ORDERED 180 SKs 60% paper, 3% ACC  
286.61

COMMON	<u>108</u>	SKs	@	<u>7.20</u>	<u>777.60</u>
POZMIX	<u>72</u>	SKs	@	<u>3.15</u>	<u>226.80</u>
GEL	<u>3</u>	SKs	@	<u>9.00</u>	<u>28.50</u>
CHLORIDE	<u>6</u>	SKs	@	<u>28.00</u>	<u>168.00</u>

EQUIPMENT

PUMP TRUCK CEMENTER Walt

# 191 HELPER Walt

BULK TRUCK

# 212 DRIVER Wayne

BULK TRUCK

# DRIVER

HANDLING 180 SKs @ 1.05 189.00

MILEAGE 48 per 2 miles 96.40

TOTAL 1,476.30

REMARKS:

Cement Did Cicc.

Thanks

Another 566 Well Done

**CONFIDENTIAL**

SERVICE

DEPTH OF JOB 267

PUMP TRUCK CHARGE 445.00

EXTRA FOOTAGE @

MILEAGE 12 miles @ 2.85 34.20

PLUG 8 5/8 Surface @ 45.00

TOTAL 524.20

CHARGE TO: John O. Farmer, Inc

STREET St Peter RT P.O. Box 352 PO Box 352

CITY Russell STATE Kan ZIP 67665

FLOAT EQUIPMENT

None

@

@

@

@

@

RECEIVED  
KANSAS CORP COMM  
1997 MAR 17 P 1:37  
3-17-1997

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 is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.

TAX

TOTAL CHARGE

DISCOUNT IF PAID IN 30 DAYS

SIGNATURE Anthony M. D.

PRINTED **RELEASED**

APR 6 1998  
4-6-1998  
FROM CONFIDENTIAL

# ALLIED CEMENTING CO., INC. 8378

Federal Tax I.D.#

REMIT TO P.O. BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:  
OAKLEY, KS

**COPY**

**CONFIDENTIAL**

DATE <u>2-11-97</u>	SEC. <u>14</u>	TWP. <u>11S</u>	RANGE <u>34W</u>	CALLED OUT	ON LOCATION <u>11:00PM</u>	JOB START <u>12:15AM</u>	JOB FINISH <u>3:30AM</u>
LEASE <u>SMITH</u>	WELL # <u>1</u>	LOCATION <u>MONUMENT 3W-5 INTO</u>			COUNTY <u>LOGAN</u>	STATE <u>KS</u>	

OLD OR NEW (Circle one)

CONTRACTOR ABERCROMBIE RTO REG #8 OWNER SAME

TYPE OF JOB PTA

HOLE SIZE 7 7/8" T.D. 4790'

CASING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_

TUBING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_

DRILL PIPE 4 1/2" DEPTH 2675'

TOOL \_\_\_\_\_ DEPTH \_\_\_\_\_

PRES. MAX \_\_\_\_\_ MINIMUM \_\_\_\_\_

MEAS. LINE \_\_\_\_\_ SHOE JOINT \_\_\_\_\_

CEMENT LEFT IN CSG. \_\_\_\_\_

PERFS. \_\_\_\_\_

DISPLACEMENT \_\_\_\_\_

CEMENT

AMOUNT ORDERED 190 SKS 60/40/268 GEL

1/4" Flo-SEAL

COMMON	<u>114 SKS</u>	@	<u>7.20</u>	<u>820.80</u>
POZMIX	<u>76 SKS</u>	@	<u>3.15</u>	<u>239.40</u>
GEL	<u>10 SKS</u>	@	<u>9.50</u>	<u>95.00</u>
CHLORIDE		@		
<u>Flo-Seal</u>	<u>48#</u>	@	<u>1.15</u>	<u>55.20</u>
		@		
		@		
		@		
		@		
HANDLING	<u>190 SKS</u>	@	<u>1.05</u>	<u>199.50</u>
MILEAGE				<u>91.20</u>

**EQUIPMENT**

PUMP TRUCK CEMENTER TERRY

# 191 HELPER WAYNE

BULK TRUCK

# 212 DRIVER DEAN

BULK TRUCK

# \_\_\_\_\_ DRIVER \_\_\_\_\_

TOTAL 1,501.00

REMARKS:

25 SKS AT 2675'

100 SKS AT 1575'

40 SKS AT 320'

10 SKS AT HO'

15 SKS RAT HOLE

SERVICE

DEPTH OF JOB 2675'

PUMP TRUCK CHARGE \_\_\_\_\_ 550.00

EXTRA FOOTAGE \_\_\_\_\_ @ \_\_\_\_\_

MILEAGE 12 mile @ 2.85 342.00

PLUG 8 7/8" DRY HOLE @ \_\_\_\_\_ 23.00

CHARGE TO: J. O. FARMER INC.

STREET Box 352

CITY Russell STATE Kansas ZIP 67665

FLOAT EQUIPMENT

\_\_\_\_\_ @ \_\_\_\_\_

\_\_\_\_\_ @ \_\_\_\_\_

\_\_\_\_\_ @ \_\_\_\_\_

\_\_\_\_\_ @ \_\_\_\_\_

TOTAL 607.00

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 is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.

**RELEASED**

APR 6 1998  
4-6-1998

SIGNATURE Anthony Mars

TOTAL CHARGE \_\_\_\_\_

DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS

PRINTED NAME Anthony Mars

RECEIVED  
 KANSAS CORP COMM  
 1997 MAR 17 P 11:37  
 3-17-1998

ORIGINAL

CONFIDENTIAL

RELEASED

4-6-1998  
APR 6 1998

15-109-20643-00-00

DST REPORT

FROM CONFIDENTIAL

15-109-20643

GENERAL INFORMATION

DATE : 2/9/97  
 CUSTOMER : JOHN O FARMER INC  
 WELL : #1 TEST: 1  
 ELEVATION: 3179 GR  
 SECTION : 14  
 RANGE : 34W COUNTY: LOGAN  
 GAUGE SN#: 13551 RANGE : 4150

TICKET : 21766  
 LEASE : SMITH  
 GEOLOGIST: FARMER  
 FORMATION: L KANSAS CITY  
 TOWNSHIP : 11S  
 STATE : KS  
 CLOCK : 12

REC  
3-14  
MAR 14

CONFIDENTIAL

WELL INFORMATION

PERFORATION INTERVAL FROM: 4278.00 ft TO: 4331.00 ft TVD: 4331.0 ft  
 DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL  
 DEPTH OF RECORDERS: 4283.0 ft 4286.0 ft  
 TEMPERATURE: 0.0

DRILL COLLAR LENGTH:	0.0 ft	I.D.:	0.000 in
WEIGHT PIPE LENGTH :	284.0 ft	I.D.:	3.200 in
DRILL PIPE LENGTH :	3974.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH :	53.0 ft	ANCHOR SIZE:	5.500 in
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:	0.750 in
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :	4.5XH
PACKER DEPTH:	4273.0 ft	SIZE:	6.750 in
PACKER DEPTH:	4278.0 ft	SIZE:	6.750 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON. : ABERCROMBIE RIG 8  
 MUD TYPE : CHEMICAL  
 WEIGHT : 9.300 ppg  
 CHLORIDES : 2300 ppm  
 JARS-MAKE :  
 DID WELL FLOW?: NO

VISCOSITY : 46.00 cp  
 WATER LOSS: 8.800 cc  
 SERIAL NUMBER:  
 REVERSED OUT?: NO

COMMENTS

Comment -

INITIAL FLOW PERIOD WEAK 1/4 INCH DECREASING BLOW.  
 FINAL FLOW PERIOD NO BLOW.

DST #1

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
10.0	0.0	0.0	0.0	100.0	MUD

RATE INFORMATION

OIL VOLUME:	0.0000	STB	TOTAL FLOW TIME:	60.0000	min.
GAS VOLUME:	0.0000	SCF	AVERAGE OIL RATE:	0.0000	STB/D
MUD VOLUME:	0.0995	STB	AVERAGE WATER RATE:	0.0000	STB/D
WATER VOLUME:	0.0000	STB			
TOTAL FLUID :	0.0995	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2112.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	20.00	20.00
INITIAL SHUT-IN	30.00		366.00
FINAL FLOW	30.00	20.00	20.00
FINAL SHUT-IN	30.00		230.00

FINAL HYDROSTATIC PRESSURE: 2091.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2132.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	57.89	27.41
INITIAL SHUT-IN	30.00		364.64
FINAL FLOW	30.00	43.21	25.77
FINAL SHUT-IN	30.00		215.94

FINAL HYDROSTATIC PRESSURE: 2100.00

15-109-20643-00-00

Company: JOHN O FARMER INC  
 Well: #1 SMITH  
 Field: TKT 21766 DST 1

[Sunday: Feb. 9, 1997]  
 Page 1

REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
START FLOW 1				
1	0	10:20:16	0.0000	57.89
8	0	10:21: 6	0.0140	56.12
17	0	10:22:11	0.0319	49.13
26	0	10:23:15	0.0499	43.87
35	0	10:24:20	0.0678	41.24
44	0	10:25:25	0.0858	38.60
53	0	10:26:29	0.1037	35.96
62	0	10:27:34	0.1217	35.06
71	0	10:28:39	0.1397	34.16
80	0	10:29:44	0.1577	33.26
89	0	10:30:48	0.1757	32.36
98	0	10:31:53	0.1936	32.34
107	0	10:32:58	0.2116	31.44
116	0	10:34: 3	0.2296	31.41
125	0	10:35: 7	0.2476	30.51
134	0	10:36:12	0.2656	29.62
143	0	10:37:17	0.2835	29.59
152	0	10:38:21	0.3015	28.69
161	0	10:39:26	0.3195	28.66
170	0	10:40:31	0.3375	28.64
179	0	10:41:36	0.3555	28.61
188	0	10:42:40	0.3735	27.71
197	0	10:43:45	0.3914	27.68
206	0	10:44:50	0.4094	27.66
215	0	10:45:55	0.4274	27.63
224	0	10:46:59	0.4454	27.60
233	0	10:48: 4	0.4634	27.58
242	0	10:49: 9	0.4814	27.55
251	0	10:50:14	0.4994	27.52
260	0	10:51:18	0.5173	27.49
269	0	10:52:23	0.5353	27.47
278	0	10:53:28	0.5533	27.44
287	0	10:54:33	0.5713	27.41
END FLOW 1				
START SHUTIN 1				
296	0	10:55:37	0.5893	28.26
305	0	10:56:42	0.6073	28.23
314	0	10:57:47	0.6253	29.07
323	0	10:58:52	0.6432	29.05
332	0	10:59:56	0.6612	30.76
341	0	11: 1: 1	0.6793	33.35
350	0	11: 2: 6	0.6972	34.19
359	0	11: 3:11	0.7152	35.91
368	0	11: 4:16	0.7332	39.36
377	0	11: 5:21	0.7513	43.69
386	0	11: 6:25	0.7693	48.02
395	0	11: 7:30	0.7873	55.83
404	0	11: 8:35	0.8054	64.51
413	0	11: 9:41	0.8235	86.26
422	0	11:10:46	0.8417	106.26
431	0	11:11:51	0.8598	122.79
440	0	11:12:57	0.8780	146.27
449	0	11:14: 2	0.8962	174.12
458	0	11:15: 8	0.9144	197.61

WESTERN TESTING CO., INC.

Company: JOHN O FARMER INC  
Well: #1 SMITH  
Field: TKT 21766 DST 1

[Sunday: Feb. 9, 1997]  
Page 2

REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
467	0	11:16:13	0.9326	225.45
476	0	11:17:19	0.9508	254.16
485	0	11:18:24	0.9689	276.78
494	0	11:19:30	0.9871	302.88
503	0	11:20:35	1.0053	327.24
512	0	11:21:41	1.0235	350.73
521	0	11:22:46	1.0416	364.64
		END SHUTIN 1		
		START FLOW 2		
524	0	11:24:24	1.0690	43.21
533	0	11:25:29	1.0870	43.19
542	0	11:26:34	1.1050	39.68
551	0	11:27:38	1.1229	36.16
560	0	11:28:43	1.1409	34.40
569	0	11:29:48	1.1589	32.63
578	0	11:30:53	1.1768	30.86
587	0	11:31:57	1.1948	30.83
596	0	11:33: 2	1.2128	30.80
605	0	11:34: 7	1.2308	29.03
614	0	11:35:11	1.2487	28.14
623	0	11:36:16	1.2667	28.11
632	0	11:37:21	1.2847	28.08
641	0	11:38:26	1.3027	27.18
650	0	11:39:30	1.3207	26.29
659	0	11:40:35	1.3387	26.26
668	0	11:41:40	1.3566	26.23
677	0	11:42:45	1.3746	26.20
686	0	11:43:49	1.3926	26.18
695	0	11:44:54	1.4106	26.15
704	0	11:45:59	1.4286	26.12
713	0	11:47: 4	1.4466	26.10
722	0	11:48: 8	1.4645	26.07
731	0	11:49:13	1.4825	26.04
740	0	11:50:18	1.5005	26.02
749	0	11:51:23	1.5185	25.99
758	0	11:52:27	1.5365	25.96
767	0	11:53:32	1.5545	25.93
776	0	11:54:37	1.5725	25.91
785	0	11:55:42	1.5904	25.88
794	0	11:56:46	1.6084	25.85
803	0	11:57:51	1.6264	25.83
812	0	11:58:56	1.6444	25.80
821	0	12: 0: 1	1.6624	25.77
		END FLOW 2		
		START SHUTIN 2		
825	0	12: 0:29	1.6704	26.63
830	0	12: 1: 5	1.6804	26.62
839	0	12: 2:10	1.6984	28.33
848	0	12: 3:15	1.7164	30.05
857	0	12: 4:20	1.7344	30.89
866	0	12: 5:24	1.7524	32.60
875	0	12: 6:29	1.7704	33.45
884	0	12: 7:34	1.7884	37.78
893	0	12: 8:39	1.8064	39.49
902	0	12: 9:44	1.8244	43.82

WESTERN TESTING CO., INC.



15-109-20643-00-00

Company: JOHN O FARMER INC  
Well: #1 SMITH  
Field: TKT 21766 DST 1

[Sunday: Feb. 9, 1997]  
Page 3

REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
911	0	12:10:49	1.8424	49.89
920	0	12:11:54	1.8605	56.83
929	0	12:12:59	1.8785	65.51
938	0	12:14: 4	1.8966	75.07
947	0	12:15: 9	1.9146	84.62
956	0	12:16:14	1.9327	98.53
965	0	12:17:19	1.9508	115.05
974	0	12:18:24	1.9690	132.44
983	0	12:19:30	1.9871	154.19
992	0	12:20:35	2.0053	176.80
1001	0	12:21:40	2.0234	195.94
1010	0	12:22:46	2.0416	215.94

WESTERN TESTING CO., INC.



WESTERN TESTING CO., INC.

FORMATION TESTING

15-109-20643-00-00

TICKET No. 21766

P. O. BOX 1599 PHONE (316) 262-5861 WICHITA, KANSAS 67201

Elevation 3179 GR Formation L KC Eff. Pay Ft.

District Colby Date 2-9-97 Customer Order No.

COMPANY NAME John O Farmer Inc

ADDRESS PO Box 352 Russell KS 67665

LEASE AND WELL NO. #1 Smith COUNTY Logan STATE KS Sec. 14 Twp. 11s Rge. 34w

Mail Invoice To Co. Name Same Address No. Copies Requested Reg

Mail Charts To Co. Name Same Address No. Copies Requested Reg

Formation Test No. 1 Interval Tested From 4278 ft. to 4331 ft. Total Depth 4331 ft.

Packer Depth 4273 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4278 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4283 ft. Recorder Number 13551 Cap. 4150

Bottom Recorder Depth (Outside) 4286 ft. Recorder Number 13268 Cap. 4225

Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Abercrombie Rig # 8 Drill Collar Length - I. D. - in.

Mud Type Chemical Viscosity 46 Weight Pipe Length 284 I. D. 3.2 in.

Weight 9.3 Water Loss 8.8 cc. Drill Pipe Length 3974 I. D. 3.8 in.

Chlorides 2300 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.

Jars: Make No Serial Number - Anchor Length 53 ft. Size 5 1/2 OD in.

Did Well Flow? No Reversed Out DC Surface Choke Size 3 1/4 in. Bottom Choke Size 3 1/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 x 6 in.

Blow: FFP - Weak - 14" decreasing blow FFP - No blow

Recovered 10 ft. of mud

Recovered - ft. of

Recovered - ft. of

Recovered - ft. of

Recovered - ft. of

Chlorides P.P.M. Sample Jars used Remarks:

Time On Location 500 AM PM Time Pick Up Tool 240 AM PM Time Off Location AM PM

Time Set Packer(s) 10 20 AM PM Time Started Off Bottom 12 20 AM PM Maximum Temperature

Initial Hydrostatic Pressure (A) 2112 P.S.I. 2132

Initial Flow Period (B) 30 Minutes 20 P.S.I. to (C) 20 P.S.I.

Initial Closed In Period (D) 30 Minutes 366 P.S.I.

Final Flow Period (E) 30 Minutes 20 P.S.I. to (F) 20 P.S.I.

Final Closed In Period (G) 30 Minutes 230 P.S.I.

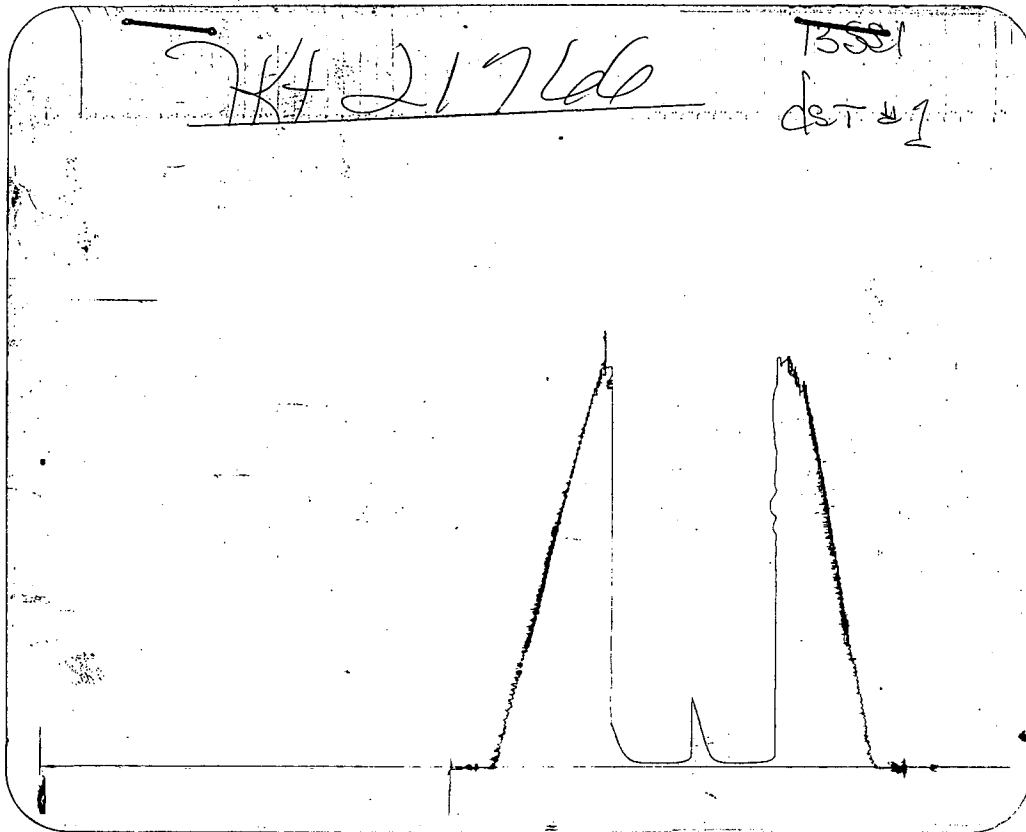
Final Hydrostatic Pressure (H) 2091 P.S.I. 2100

COMPANY TERMS Western Testing Co., Inc. shall not be liable for damages of any kind to 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, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made. All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount. Test Approved By John O Farmer Signature of Customer or his authorized representative

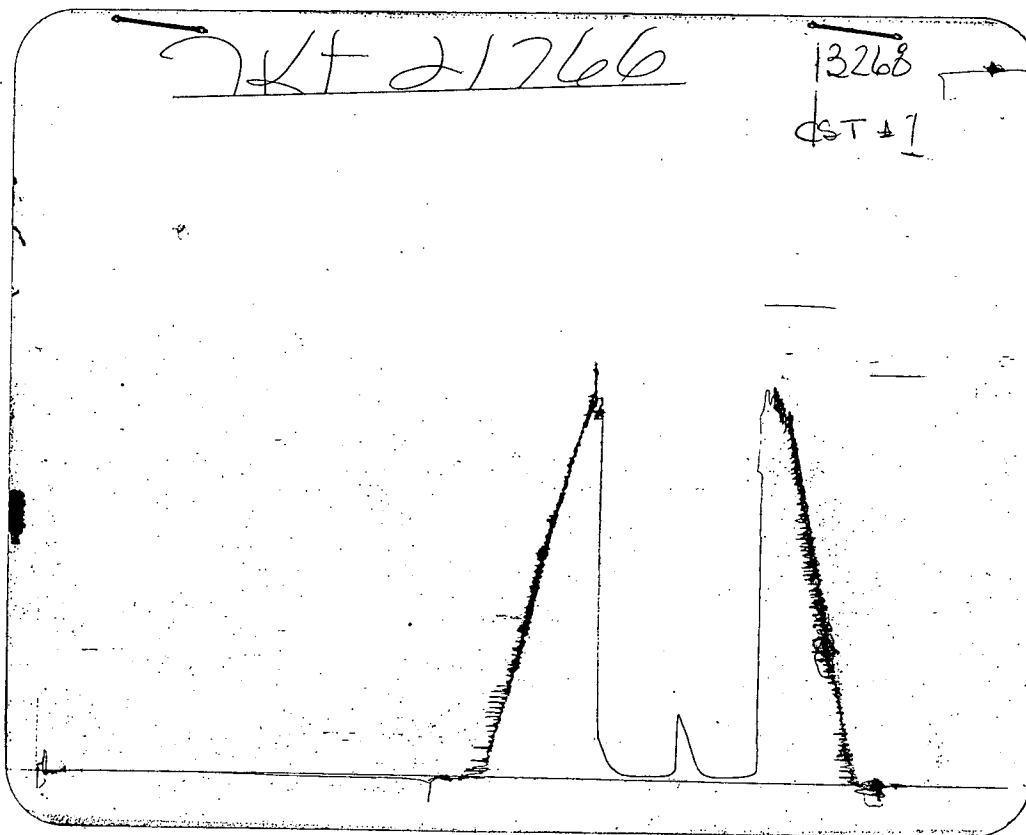
Western Representative Mike Shuler

FIELD INVOICE table with columns for item and amount. Items include Open Hole Test, Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage, Fluid Sampler, Extra Charts.

15-109-20643-00-00



Inside Recorder



Outside Recorder

15-109-20643-00-00

DST REPORT

GENERAL INFORMATION

DATE	: 2/9/97	TICKET	: 21767
CUSTOMER	: JOHN O FARMER INC	LEASE	: SMITH
WELL	: #1	TEST	: 2
ELEVATION	: 3179 GR	GEOLOGIST	: FARMER
SECTION	: 14	FORMATION	: L KANSAS CITY K
RANGE	: 34W	COUNTY	: LOGAN
GAUGE SN#	: 3027	RANGE	: 5000
		STATE	: KS
		CLOCK	: 12

WELL INFORMATION

PERFORATION INTERVAL FROM:	4328.00 ft	TO:	4370.00 ft	TVD:	4370.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	OIL
DEPTH OF RECORDERS:	4336.0 ft		4331.0 ft		
TEMPERATURE:	116.0				
DRILL COLLAR LENGTH:	0.0 ft	I.D.:	0.000 in		
WEIGHT PIPE LENGTH :	284.0 ft	I.D.:	3.200 in		
DRILL PIPE LENGTH :	4024.0 ft	I.D.:	3.800 in		
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :	5.500 in		
ANCHOR LENGTH :	42.0 ft	ANCHOR SIZE:	5.500 in		
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:	0.750 in		
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :	4.5XH		
PACKER DEPTH:	4323.0 ft	SIZE:	6.750 in		
PACKER DEPTH:	4328.0 ft	SIZE:	6.750 in		
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in		
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in		

MUD INFORMATION

DRILLING CON. :	ABERCROMBIE RIG 8	VISCOSITY :	46.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	8.800 cc
WEIGHT :	9.300 ppg	SERIAL NUMBER:	
CHLORIDES :	2300 ppm	REVERSED OUT?:	NO
JARS-MAKE :			
DID WELL FLOW?:	NO		

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK STEADY 1/2 INCH BLOW.  
FINAL FLOW PERIOD WEAK SURFACE BLOW.

DST #2

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
20.0	0.0	0.0	0.0	100.0	MUD

RATE INFORMATION

OIL VOLUME:	0.0000	STB		
GAS VOLUME:	0.0000	SCF		
MUD VOLUME:	0.1989	STB		
WATER VOLUME:	0.0000	STB		
TOTAL FLUID :	0.1989	STB		
			TOTAL FLOW TIME:	105.0000 min.
			AVERAGE OIL RATE:	0.0000 STB/D
			AVERAGE WATER RATE:	0.0000 STB/D

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2107.00			
Description	Duration	p1	p End
INITIAL FLOW	45.00	32.00	41.00
INITIAL SHUT-IN	45.00		1167.00
FINAL FLOW	60.00	42.00	50.00
FINAL SHUT-IN	75.00		1187.00
FINAL HYDROSTATIC PRESSURE: 2091.00			

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2128.70			
Description	Duration	p1	p End
INITIAL FLOW	45.00	32.20	40.60
INITIAL SHUT-IN	45.00		1187.20
FINAL FLOW	60.00	42.00	51.00
FINAL SHUT-IN	75.00		1189.60
FINAL HYDROSTATIC PRESSURE: 2111.70			

DST #2

15-109-20643-00-00

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: J.O.Farmer Smith #1 DST #2 Tk# 21767  
DATE: 02/09/97 TIME: 21:42:46

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P <sup>2</sup> /10 <sup>6</sup>
***** Initial Hydro.	107.50	2128.7	0.0	105.45		
***** Start Flow 1	0.00	32.2	0.0	107.67		
	0.50	32.8	0.5	107.80		
	1.00	33.0	0.8	107.92		
	1.50	33.0	0.8	108.00		
	2.00	33.0	0.7	108.06		
	2.50	33.0	0.7	108.12		
	3.00	33.4	1.2	108.16		
	3.50	33.7	1.5	108.21		
	4.00	33.9	1.6	108.25		
	4.50	33.9	1.7	108.29		
	5.00	34.0	1.8	108.32		
	5.50	34.0	1.7	108.35		
	6.00	34.0	1.8	108.38		
	6.50	34.2	1.9	108.40		
	7.00	34.1	1.8	108.42		
	7.50	34.1	1.9	108.45		
	8.00	34.3	2.1	108.46		
	8.50	34.2	2.0	108.49		
	9.00	34.2	2.0	108.50		
	9.50	34.3	2.0	108.51		
	10.00	34.6	2.4	108.52		
	10.50	34.9	2.6	108.53		
	11.00	35.0	2.7	108.55		
	11.50	35.2	2.9	108.54		
	12.00	35.1	2.9	108.56		
	12.50	35.3	3.0	108.56		
	13.00	35.5	3.3	108.56		
	13.50	35.4	3.2	108.56		
	14.00	35.5	3.3	108.57		
	14.50	35.6	3.4	108.57		
	15.00	35.7	3.4	108.58		
	15.50	35.9	3.6	108.58		
	16.00	35.9	3.6	108.58		
	16.50	36.1	3.8	108.58		
	17.00	36.1	3.8	108.59		
	17.50	36.1	3.9	108.59		
	18.00	36.3	4.1	108.59		
	18.50	36.5	4.2	108.59		
	19.00	36.6	4.3	108.60		
	19.50	36.8	4.5	108.59		
	20.00	37.0	4.8	108.59		
	20.50	37.1	4.9	108.58		
	21.00	37.3	5.0	108.60		
	21.50	37.3	5.0	108.60		
	22.00	37.3	5.1	108.60		
	22.50	37.3	5.1	108.60		
	23.00	37.3	5.1	108.61		
	23.50	37.2	5.0	108.62		
	24.00	37.2	5.0	108.62		
	24.50	37.2	5.0	108.62		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: J.O.Farmer Smith #1 DST #2 Tk# 21767  
 DATE: 02/09/97 TIME: 21:42:46

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6	
25.00	37.4	5.2	108.63			
25.50	37.8	5.6	108.63			
26.00	38.0	5.8	108.64			
26.50	38.2	6.0	108.64			
27.00	38.3	6.1	108.65			
27.50	38.3	6.1	108.64			
28.00	38.5	6.2	108.65			
28.50	38.4	6.1	108.67			
29.00	38.4	6.2	108.67			
29.50	38.4	6.2	108.68			
30.00	38.4	6.2	108.69			
30.50	38.4	6.2	108.69			
31.00	38.4	6.2	108.71			
31.50	38.3	6.1	108.72			
32.00	38.3	6.1	108.72			
32.50	38.3	6.1	108.73			
33.00	38.3	6.1	108.74			
33.50	38.4	6.2	108.75			
34.00	38.5	6.2	108.76			
34.50	38.5	6.3	108.77			
35.00	38.6	6.4	108.79			
35.50	38.7	6.4	108.80			
36.00	38.8	6.5	108.81			
36.50	38.8	6.6	108.82			
37.00	38.9	6.7	108.84			
37.50	39.0	6.8	108.85			
38.00	39.0	6.8	108.87			
38.50	39.1	6.9	108.87			
39.00	39.2	7.0	108.89			
39.50	39.3	7.0	108.91			
40.00	39.3	7.0	108.92			
40.50	39.3	7.1	108.94			
41.00	39.4	7.2	108.94			
41.50	39.5	7.3	108.97			
42.00	39.7	7.5	108.99			
42.50	39.9	7.6	109.00			
43.00	39.9	7.6	109.01			
43.50	39.9	7.7	109.02			
44.00	40.0	7.8	109.04			
44.50	40.2	8.0	109.06			
45.00	40.4	8.2	109.07			
45.50	40.5	8.3	109.09			
46.00	40.6	8.3	109.10			
***** End Flow 1						
***** Start Shutin 1	0.00	40.6	0.0	109.10	0.0000	0.002
	0.50	40.5	-0.1	109.12	93.0000	0.002
	1.00	40.4	-0.1	109.14	47.0000	0.002
	1.50	41.2	0.7	109.15	31.6667	0.002
	2.00	44.1	3.5	109.18	24.0000	0.002
	2.50	47.0	6.5	109.20	19.4000	0.002
	3.00	50.4	9.8	109.21	16.3333	0.003
	3.50	54.3	13.8	109.24	14.1429	0.003

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ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: J.O.Farmer Smith #1 DST #2 Tk# 21767  
DATE: 02/09/97 TIME: 21:42:46

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P <sup>2</sup> /10 <sup>6</sup>
4.00	59.0	18.5	109.25	12.5000	0.003
4.50	64.8	24.2	109.27	11.2222	0.004
5.00	71.9	31.3	109.29	10.2000	0.005
5.50	81.0	40.4	109.31	9.3636	0.007
6.00	92.6	52.0	109.33	8.6667	0.009
6.50	108.0	67.4	109.34	8.0769	0.012
7.00	128.2	87.7	109.37	7.5714	0.016
7.50	156.5	115.9	109.39	7.1333	0.024
8.00	194.8	154.2	109.40	6.7500	0.038
8.50	243.9	203.4	109.42	6.4118	0.060
9.00	302.7	262.2	109.45	6.1111	0.092
9.50	366.5	326.0	109.48	5.8421	0.134
10.00	430.8	390.2	109.50	5.6000	0.186
10.50	492.5	452.0	109.53	5.3810	0.243
11.00	549.9	509.3	109.54	5.1818	0.302
11.50	602.1	561.6	109.57	5.0000	0.363
12.00	649.4	608.9	109.59	4.8333	0.422
12.50	692.0	651.5	109.63	4.6800	0.479
13.00	729.7	689.2	109.64	4.5385	0.533
13.50	763.7	723.1	109.68	4.4074	0.583
14.00	794.2	753.6	109.71	4.2857	0.631
14.50	821.5	781.0	109.74	4.1724	0.675
15.00	846.2	805.6	109.77	4.0667	0.716
15.50	868.4	827.9	109.81	3.9677	0.754
16.00	888.6	848.0	109.85	3.8750	0.790
16.50	906.9	866.4	109.87	3.7879	0.823
17.00	923.7	883.2	109.90	3.7059	0.853
17.50	939.1	898.6	109.93	3.6286	0.882
18.00	953.3	912.8	109.97	3.5556	0.909
18.50	966.3	925.7	109.99	3.4865	0.934
19.00	978.4	937.8	110.02	3.4211	0.957
19.50	989.6	949.1	110.05	3.3590	0.979
20.00	1000.1	959.5	110.08	3.3000	1.000
20.50	1009.9	969.3	110.11	3.2439	1.020
21.00	1019.0	978.4	110.14	3.1905	1.038
21.50	1027.6	987.0	110.17	3.1395	1.056
22.00	1035.6	995.0	110.19	3.0909	1.072
22.50	1043.1	1002.5	110.22	3.0444	1.088
23.00	1050.2	1009.6	110.24	3.0000	1.103
23.50	1056.9	1016.3	110.29	2.9574	1.117
24.00	1063.2	1022.6	110.31	2.9167	1.130
24.50	1069.2	1028.6	110.33	2.8776	1.143
25.00	1074.8	1034.3	110.35	2.8400	1.155
25.50	1080.3	1039.7	110.38	2.8039	1.167
26.00	1085.4	1044.9	110.41	2.7692	1.178
26.50	1090.3	1049.8	110.43	2.7358	1.189
27.00	1095.0	1054.5	110.46	2.7037	1.199
27.50	1099.4	1058.9	110.49	2.6727	1.209
28.00	1103.7	1063.1	110.51	2.6429	1.218
28.50	1107.8	1067.2	110.53	2.6140	1.227
29.00	1111.7	1071.1	110.56	2.5862	1.236



ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: J.O.Farmer Smith #1 DST #2 Tk# 21767  
 DATE: 02/09/97 TIME: 21:42:46

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
29.50	1115.4	1074.9	110.59	2.5593	1.244
30.00	1119.0	1078.5	110.61	2.5333	1.252
30.50	1122.5	1081.9	110.63	2.5082	1.260
31.00	1125.8	1085.2	110.67	2.4839	1.267
31.50	1129.0	1088.4	110.68	2.4603	1.275
32.00	1132.0	1091.5	110.71	2.4375	1.281
32.50	1135.0	1094.4	110.73	2.4154	1.288
33.00	1137.9	1097.3	110.75	2.3939	1.295
33.50	1140.6	1100.1	110.79	2.3731	1.301
34.00	1143.3	1102.7	110.81	2.3529	1.307
34.50	1145.9	1105.3	110.83	2.3333	1.313
35.00	1148.4	1107.8	110.87	2.3143	1.319
35.50	1150.8	1110.3	110.88	2.2958	1.324
36.00	1153.2	1112.7	110.91	2.2778	1.330
36.50	1155.4	1114.9	110.93	2.2603	1.335
37.00	1157.6	1117.1	110.95	2.2432	1.340
37.50	1160.0	1119.5	110.98	2.2267	1.346
38.00	1162.2	1121.6	111.00	2.2105	1.351
38.50	1164.2	1123.6	111.03	2.1948	1.355
39.00	1166.1	1125.5	111.04	2.1795	1.360
39.50	1168.0	1127.4	111.07	2.1646	1.364
40.00	1169.8	1129.2	111.09	2.1500	1.368
40.50	1171.5	1131.0	111.11	2.1358	1.372
41.00	1173.3	1132.7	111.14	2.1220	1.377
41.50	1175.0	1134.4	111.15	2.1084	1.381
42.00	1176.6	1136.1	111.18	2.0952	1.384
42.50	1178.3	1137.7	111.21	2.0824	1.388
43.00	1179.8	1139.3	111.23	2.0698	1.392
43.50	1181.4	1140.8	111.25	2.0575	1.396
44.00	1182.9	1142.3	111.27	2.0455	1.399
44.50	1184.4	1143.8	111.30	2.0337	1.403
45.00	1185.8	1145.3	111.33	2.0222	1.406
45.50	1187.2	1146.6	111.34	2.0110	1.409
***** End Shut-in 1					
***** Start Flow 2					
0.00	42.0	0.0	111.40		
0.50	42.2	0.2	111.42		
1.00	42.4	0.4	111.43		
1.50	42.5	0.5	111.44		
2.00	42.6	0.6	111.42		
2.50	42.7	0.7	111.43		
3.00	42.9	0.9	111.43		
3.50	43.1	1.1	111.43		
4.00	43.2	1.2	111.42		
4.50	43.3	1.3	111.43		
5.00	43.4	1.4	111.43		
5.50	43.5	1.4	111.44		
6.00	43.5	1.5	111.44		
6.50	43.6	1.6	111.45		
7.00	43.7	1.6	111.46		
7.50	43.7	1.7	111.47		
8.00	43.8	1.8	111.49		
8.50	43.8	1.8	111.49		

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ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: J.O.Farmer Smith #1 DST #2 Tk# 21767  
DATE: 02/09/97 TIME: 21:42:46

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P <sup>2</sup> /10 <sup>6</sup>
9.00	43.9	1.8	111.51		
9.50	44.0	1.9	111.52		
10.00	44.1	2.0	111.54		
10.50	44.2	2.1	111.55		
11.00	44.2	2.2	111.57		
11.50	44.2	2.2	111.58		
12.00	44.2	2.2	111.60		
12.50	44.3	2.2	111.60		
13.00	44.3	2.3	111.62		
13.50	44.3	2.2	111.64		
14.00	44.3	2.3	111.66		
14.50	44.5	2.4	111.68		
15.00	44.6	2.6	111.69		
15.50	44.7	2.7	111.71		
16.00	44.9	2.9	111.73		
16.50	45.0	2.9	111.74		
17.00	45.0	3.0	111.77		
17.50	45.1	3.0	111.78		
18.00	45.1	3.1	111.81		
18.50	45.1	3.1	111.81		
19.00	45.1	3.1	111.84		
19.50	45.2	3.2	111.86		
20.00	45.2	3.2	111.88		
20.50	45.2	3.2	111.90		
21.00	45.3	3.3	111.92		
21.50	45.3	3.3	111.94		
22.00	45.3	3.3	111.96		
22.50	45.3	3.3	111.98		
23.00	45.3	3.3	112.00		
23.50	45.4	3.4	112.02		
24.00	45.4	3.4	112.05		
24.50	45.5	3.5	112.07		
25.00	45.5	3.5	112.08		
25.50	45.5	3.5	112.10		
26.00	45.6	3.6	112.13		
26.50	45.6	3.6	112.15		
27.00	45.6	3.6	112.18		
27.50	45.7	3.7	112.20		
28.00	45.7	3.7	112.22		
28.50	45.8	3.8	112.24		
29.00	45.8	3.8	112.26		
29.50	45.9	3.9	112.29		
30.00	46.0	4.0	112.31		
30.50	46.1	4.1	112.33		
31.00	46.1	4.1	112.35		
31.50	46.2	4.2	112.38		
32.00	46.3	4.3	112.39		
32.50	46.4	4.4	112.41		
33.00	46.4	4.4	112.44		
33.50	46.5	4.4	112.46		
34.00	46.5	4.5	112.49		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: J.O.Farmer Smith #1 DST #2 Tk# 21767  
 DATE: 02/09/97 TIME: 21:42:46

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P <sup>2</sup> /10 <sup>6</sup>
34.50	46.6	4.6	112.50		
35.00	46.7	4.7	112.53		
35.50	46.8	4.7	112.55		
36.00	46.8	4.8	112.57		
36.50	46.9	4.9	112.61		
37.00	46.9	4.9	112.62		
37.50	46.9	4.9	112.63		
38.00	47.0	5.0	112.67		
38.50	47.1	5.1	112.69		
39.00	47.2	5.2	112.73		
39.50	47.3	5.2	112.74		
40.00	47.3	5.3	112.77		
40.50	47.4	5.4	112.79		
41.00	47.4	5.4	112.82		
41.50	47.5	5.5	112.84		
42.00	47.5	5.5	112.86		
42.50	47.6	5.6	112.88		
43.00	47.6	5.6	112.92		
43.50	47.6	5.6	112.92		
44.00	47.6	5.6	112.94		
44.50	47.6	5.6	112.98		
45.00	47.7	5.6	113.00		
45.50	48.7	6.7	113.02		
46.00	48.8	6.7	113.05		
46.50	48.9	6.8	113.07		
47.00	49.0	6.9	113.10		
47.50	49.2	7.1	113.12		
48.00	49.2	7.1	113.14		
48.50	49.2	7.2	113.16		
49.00	49.3	7.2	113.20		
49.50	49.3	7.2	113.21		
50.00	49.3	7.3	113.23		
50.50	49.4	7.3	113.26		
51.00	49.4	7.4	113.28		
51.50	49.5	7.5	113.31		
52.00	49.5	7.5	113.33		
52.50	49.6	7.5	113.36		
53.00	49.6	7.6	113.38		
53.50	49.6	7.6	113.41		
54.00	49.7	7.7	113.43		
54.50	49.7	7.7	113.45		
55.00	49.8	7.8	113.48		
55.50	49.8	7.8	113.51		
56.00	49.9	7.8	113.53		
56.50	49.9	7.9	113.56		
57.00	50.0	7.9	113.58		
57.50	50.0	8.0	113.60		
58.00	50.0	8.0	113.62		
58.50	50.1	8.1	113.65		
59.00	50.1	8.1	113.67		
59.50	50.2	8.2	113.70		

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ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: J.O.Farmer Smith #1 DST #2 Tk# 21767  
 DATE: 02/09/97 TIME: 21:42:46

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	60.00	50.2	8.2	113.73		
	60.50	50.3	8.3	113.74		
	61.00	50.3	8.3	113.78		
***** End Flow 2	61.50	51.0	9.0	113.80		
***** Start Shutin 2	0.00	51.0	0.0	113.80	0.0000	0.003
	0.50	54.0	3.0	113.82	216.0000	0.003
	1.00	56.9	5.9	113.84	108.5000	0.003
	1.50	60.0	9.1	113.87	72.6667	0.004
	2.00	63.6	12.6	113.89	54.7500	0.004
	2.50	67.7	16.7	113.92	44.0000	0.005
	3.00	72.4	21.4	113.94	36.8333	0.005
	3.50	77.9	27.0	113.97	31.7143	0.006
	4.00	84.4	33.4	113.98	27.8750	0.007
	4.50	92.1	41.1	114.00	24.8889	0.008
	5.00	101.3	50.3	114.03	22.5000	0.010
	5.50	112.5	61.6	114.05	20.5455	0.013
	6.00	126.2	75.2	114.08	18.9167	0.016
	6.50	143.0	92.0	114.09	17.5385	0.020
	7.00	163.7	112.7	114.12	16.3571	0.027
	7.50	189.3	138.3	114.15	15.3333	0.036
	8.00	220.8	169.8	114.18	14.4375	0.049
	8.50	258.2	207.2	114.19	13.6471	0.067
	9.00	301.0	250.0	114.23	12.9444	0.091
	9.50	347.7	296.8	114.26	12.3158	0.121
	10.00	396.5	345.5	114.29	11.7500	0.157
	10.50	445.3	394.3	114.31	11.2381	0.198
	11.00	492.7	441.8	114.33	10.7727	0.243
	11.50	537.8	486.8	114.36	10.3478	0.289
	12.00	579.9	528.9	114.39	9.9583	0.336
	12.50	619.0	568.0	114.41	9.6000	0.383
	13.00	654.9	603.9	114.45	9.2692	0.429
	13.50	687.7	636.7	114.48	8.9630	0.473
	14.00	717.5	666.6	114.51	8.6786	0.515
	14.50	744.8	693.8	114.54	8.4138	0.555
	15.00	769.6	718.6	114.57	8.1667	0.592
	15.50	792.2	741.2	114.60	7.9355	0.628
	16.00	812.9	762.0	114.63	7.7188	0.661
	16.50	832.0	781.0	114.66	7.5152	0.692
	17.00	849.4	798.5	114.70	7.3235	0.722
	17.50	865.5	814.5	114.73	7.1429	0.749
	18.00	880.4	829.4	114.75	6.9722	0.775
	18.50	894.0	843.0	114.79	6.8108	0.799
	19.00	906.7	855.7	114.83	6.6579	0.822
	19.50	918.5	867.5	114.85	6.5128	0.844
	20.00	929.5	878.6	114.88	6.3750	0.864
	20.50	939.8	888.8	114.90	6.2439	0.883
	21.00	949.4	898.4	114.94	6.1190	0.901
	21.50	958.4	907.4	114.97	6.0000	0.919
	22.00	966.8	915.9	114.99	5.8864	0.935
	22.50	974.7	923.8	115.02	5.7778	0.950
	23.00	982.2	931.2	115.05	5.6739	0.965

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: J.O.Farmer Smith #1 DST #2 Tk# 21767  
 DATE: 02/09/97 TIME: 21:42:46

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P <sup>2</sup> /10 <sup>6</sup>
23.50	989.3	938.3	115.07	5.5745	0.979
24.00	996.0	945.0	115.10	5.4792	0.992
24.50	1002.4	951.4	115.12	5.3878	1.005
25.00	1008.4	957.4	115.15	5.3000	1.017
25.50	1014.1	963.2	115.18	5.2157	1.028
26.00	1019.6	968.6	115.20	5.1346	1.040
26.50	1024.8	973.8	115.22	5.0566	1.050
27.00	1029.8	978.8	115.24	4.9815	1.060
27.50	1034.5	983.5	115.28	4.9091	1.070
28.00	1039.0	988.0	115.30	4.8393	1.080
28.50	1043.3	992.3	115.32	4.7719	1.089
29.00	1047.5	996.5	115.34	4.7069	1.097
29.50	1051.5	1000.5	115.36	4.6441	1.106
30.00	1055.3	1004.3	115.38	4.5833	1.114
30.50	1059.0	1008.0	115.41	4.5246	1.121
31.00	1062.6	1011.6	115.43	4.4677	1.129
31.50	1066.0	1015.0	115.44	4.4127	1.136
32.00	1069.4	1018.4	115.48	4.3594	1.144
32.50	1072.6	1021.6	115.50	4.3077	1.150
33.00	1075.7	1024.7	115.53	4.2576	1.157
33.50	1078.7	1027.7	115.54	4.2090	1.164
34.00	1081.6	1030.6	115.57	4.1618	1.170
34.50	1084.4	1033.4	115.58	4.1159	1.176
35.00	1087.1	1036.1	115.60	4.0714	1.182
35.50	1089.7	1038.8	115.61	4.0282	1.188
36.00	1092.3	1041.3	115.64	3.9861	1.193
36.50	1094.8	1043.8	115.66	3.9452	1.199
37.00	1097.2	1046.2	115.68	3.9054	1.204
37.50	1099.5	1048.6	115.70	3.8667	1.209
38.00	1101.8	1050.8	115.72	3.8289	1.214
38.50	1104.1	1053.1	115.74	3.7922	1.219
39.00	1106.2	1055.3	115.75	3.7564	1.224
39.50	1108.4	1057.4	115.78	3.7215	1.228
40.00	1110.4	1059.5	115.79	3.6875	1.233
40.50	1112.5	1061.5	115.81	3.6543	1.238
41.00	1114.4	1063.4	115.84	3.6220	1.242
41.50	1116.3	1065.3	115.85	3.5904	1.246
42.00	1118.2	1067.2	115.88	3.5595	1.250
42.50	1120.0	1069.1	115.89	3.5294	1.254
43.00	1121.8	1070.8	115.90	3.5000	1.258
43.50	1123.6	1072.6	115.92	3.4713	1.262
44.00	1125.3	1074.3	115.94	3.4432	1.266
44.50	1126.9	1075.9	115.96	3.4157	1.270
45.00	1128.6	1077.6	115.97	3.3889	1.274
45.50	1130.2	1079.2	115.99	3.3626	1.277
46.00	1131.7	1080.7	116.01	3.3370	1.281
46.50	1133.3	1082.3	116.02	3.3118	1.284
47.00	1134.8	1083.8	116.05	3.2872	1.288
47.50	1136.2	1085.3	116.06	3.2632	1.291
48.00	1137.7	1086.7	116.07	3.2396	1.294
48.50	1139.1	1088.1	116.09	3.2165	1.297

15-109-20643-00-00

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: J.O.Farmer Smith #1 DST #2 Tk# 21767  
DATE: 02/09/97 TIME: 21:42:46

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P <sup>2</sup> /10 <sup>6</sup>
49.00	1140.5	1089.5	116.11	3.1939	1.301
49.50	1141.8	1090.8	116.12	3.1717	1.304
50.00	1143.2	1092.2	116.14	3.1500	1.307
50.50	1144.5	1093.5	116.16	3.1287	1.310
51.00	1145.8	1094.8	116.17	3.1078	1.313
51.50	1147.0	1096.1	116.19	3.0874	1.316
52.00	1148.3	1097.3	116.20	3.0673	1.319
52.50	1149.5	1098.5	116.22	3.0476	1.321
53.00	1150.7	1099.7	116.24	3.0283	1.324
53.50	1151.9	1100.9	116.25	3.0093	1.327
54.00	1153.0	1102.0	116.27	2.9907	1.329
54.50	1154.1	1103.2	116.28	2.9725	1.332
55.00	1155.3	1104.3	116.29	2.9545	1.335
55.50	1156.4	1105.4	116.31	2.9369	1.337
56.00	1157.4	1106.5	116.32	2.9196	1.340
56.50	1158.5	1107.5	116.33	2.9027	1.342
57.00	1159.6	1108.6	116.36	2.8860	1.345
57.50	1160.6	1109.6	116.37	2.8696	1.347
58.00	1161.6	1110.7	116.38	2.8534	1.349
58.50	1162.6	1111.7	116.40	2.8376	1.352
59.00	1163.6	1112.7	116.41	2.8220	1.354
59.50	1164.6	1113.6	116.43	2.8067	1.356
60.00	1165.5	1114.6	116.44	2.7917	1.359
60.50	1166.5	1115.5	116.46	2.7769	1.361
61.00	1167.4	1116.4	116.47	2.7623	1.363
61.50	1168.3	1117.4	116.48	2.7480	1.365
62.00	1169.2	1118.2	116.50	2.7339	1.367
62.50	1170.2	1119.2	116.51	2.7200	1.369
63.00	1171.0	1120.0	116.52	2.7063	1.371
63.50	1171.9	1120.9	116.54	2.6929	1.373
64.00	1172.7	1121.7	116.55	2.6797	1.375
64.50	1173.6	1122.6	116.57	2.6667	1.377
65.00	1174.4	1123.4	116.59	2.6538	1.379
65.50	1175.2	1124.2	116.60	2.6412	1.381
66.00	1176.0	1125.0	116.60	2.6288	1.383
66.50	1176.8	1125.9	116.62	2.6165	1.385
67.00	1177.6	1126.6	116.62	2.6045	1.387
67.50	1178.4	1127.4	116.64	2.5926	1.389
68.00	1179.1	1128.2	116.65	2.5809	1.390
68.50	1179.9	1128.9	116.67	2.5693	1.392
69.00	1180.6	1129.7	116.67	2.5580	1.394
69.50	1181.4	1130.4	116.69	2.5468	1.396
70.00	1182.1	1131.2	116.71	2.5357	1.397
70.50	1182.9	1131.9	116.72	2.5248	1.399
71.00	1183.6	1132.6	116.74	2.5141	1.401
71.50	1184.3	1133.3	116.75	2.5035	1.402
72.00	1184.9	1134.0	116.76	2.4931	1.404
72.50	1185.6	1134.7	116.78	2.4828	1.406
73.00	1186.3	1135.3	116.78	2.4726	1.407
73.50	1187.0	1136.0	116.80	2.4626	1.409
74.00	1187.6	1136.7	116.81	2.4527	1.410

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 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: J.O.Farmer Smith #1 DST #2 Tk# 21767  
 DATE: 02/09/97 TIME: 21:42:46  
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	Time	Pressure PSig	delta P PSig	P	Temp. DEG F	(T+dT)/dT	P <sup>2</sup> /10 <sup>6</sup>
	74.50	1188.3	1137.3		116.82	2.4430	1.412
	75.00	1189.0	1138.0		116.83	2.4333	1.414
***** End Shut-in 2	75.50	1189.6	1138.6		116.84	2.4238	1.415
***** Final Hydro.	347.00	2111.7	0.0		116.86		

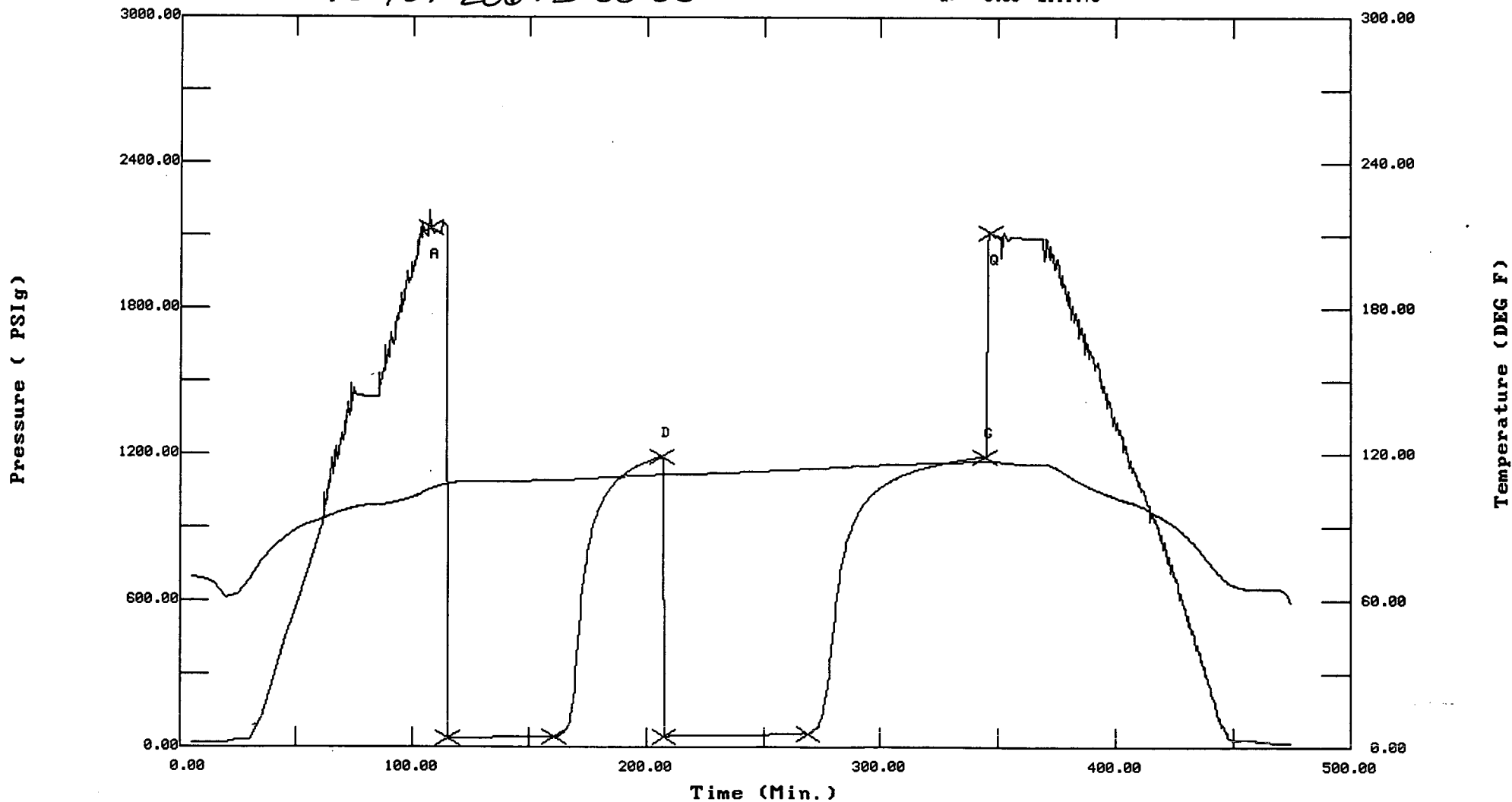
# TEST HISTORY

J.O.Farmer Smith #1 DST #2 Tk# 21767

## Flag Points

	t(Min.)	P(PSIg)
A:	0.00	2128.68
B:	0.00	32.23
C:	46.00	40.56
D:	45.50	1187.18
E:	0.00	42.02
F:	61.50	50.97
G:	75.50	1189.58
Q:	0.00	2111.70

15-109-20643-00-00







P. O. BOX 1599 PHONE (316) 262-5861  
WICHITA, KANSAS 67201

WESTERN TESTING CO., INC.  
FORMATION TESTING  
15-109-20643-00-00  
TICKET No 21767

Elevation 3179 Gr Formation L KC - 'K' Eff. Pay Ft.

District Colby Date 2-9-97 Customer Order No.

COMPANY NAME John O Farmer Inc.

ADDRESS PO Box 352 Russell KS 67165

LEASE AND WELL NO. #1 Smith COUNTY Logan STATE KS Sec 14 Twp 11s Rge 34w

Mail Invoice To Same Co. Name Address No. Copies Requested Reg

Mail Charts To Same Address No. Copies Requested Reg

Formation Test No. 2 Interval Tested From 4328 ft. to 4370 ft. Total Depth 4370 ft.

Packer Depth 4323 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4328 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4331 ft. Recorder Number 13551 Cap 4150

Bottom Recorder Depth (Outside) 4334 ft. Recorder Number 13268 Cap 4225

Below Straddle Recorder Depth Alpine 4336 ft. Recorder Number - Cap -

Drilling Contractor Abercrombie Rig #8 Drill Collar Length - I. D. - in.

Mud Type Chemical Viscosity 46 Weight Pipe Length 284 I. D. 3.2 in.

Weight 9.3 Water Loss 8.8 cc. Drill Pipe Length 4024 I. D. 3.8 in.

Chlorides 2300 P.P.M. Test Tool Length 20 ft. Tool Size 5/8 OD in.

Jars: Make No Serial Number - Anchor Length 42 ft. Size 5/8 OD in.

Did Well Flow? No Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7/8 in. Tool Joint Size 4/2 OD in.

Blow: 9FP - Weak steady 1/2" blow

FFD - Weak surface blow

Recovered 20 ft. of muf

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Chlorides P.P.M. Sample Jars used Remarks:

Time On Location 8:30 A.M. P.M. Time Pick Up Tool 10:00 A.M. P.M. Time Off Location A.M. P.M.

Time Set Packer(s) 11:40 A.M. P.M. Time Started Off Bottom 3:25 A.M. P.M. Maximum Temperature 116°

Initial Hydrostatic Pressure (A) 2109 P.S.I.

Initial Flow Period Minutes 43 (B) 32 P.S.I. to (C) 41 P.S.I.

Initial Closed In Period Minutes 45 (D) 1167 P.S.I.

Final Flow Period Minutes 60 (E) 42 P.S.I. to (F) 50 P.S.I.

Final Closed In Period Minutes 73 (G) 1187 P.S.I.

Final Hydrostatic Pressure (H) 2091 P.S.I.

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to 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, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

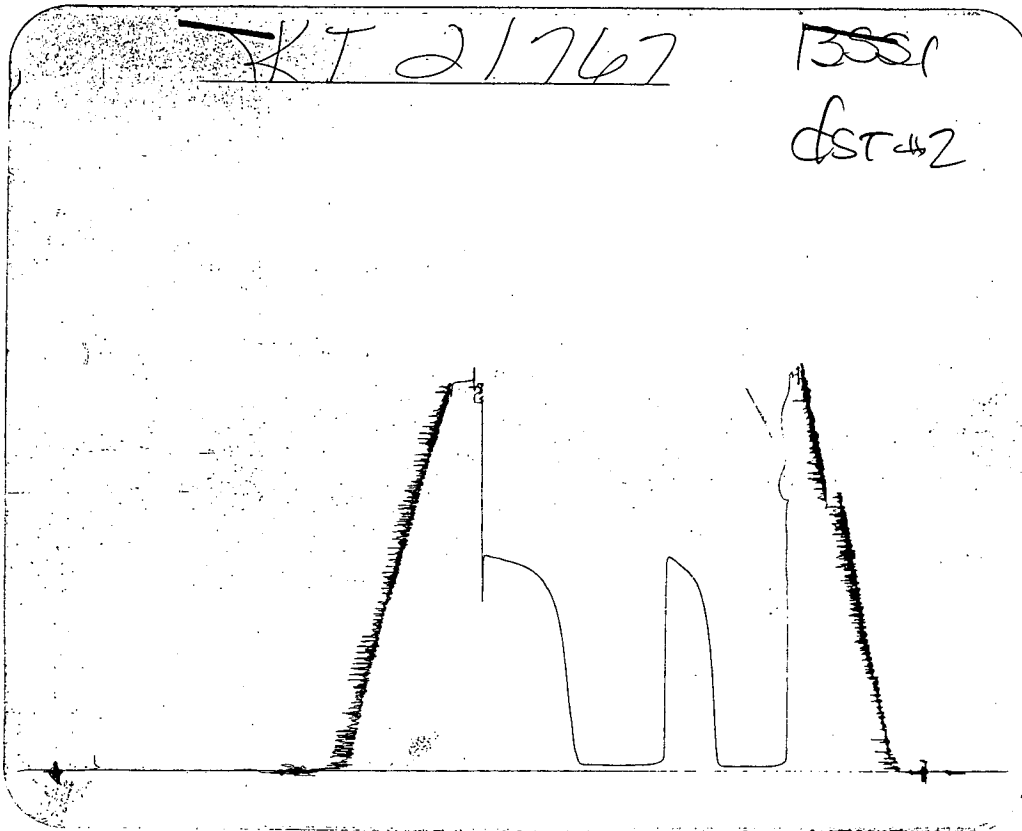
All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By John O Farmer IV  
Signature of Customer or his authorized representative

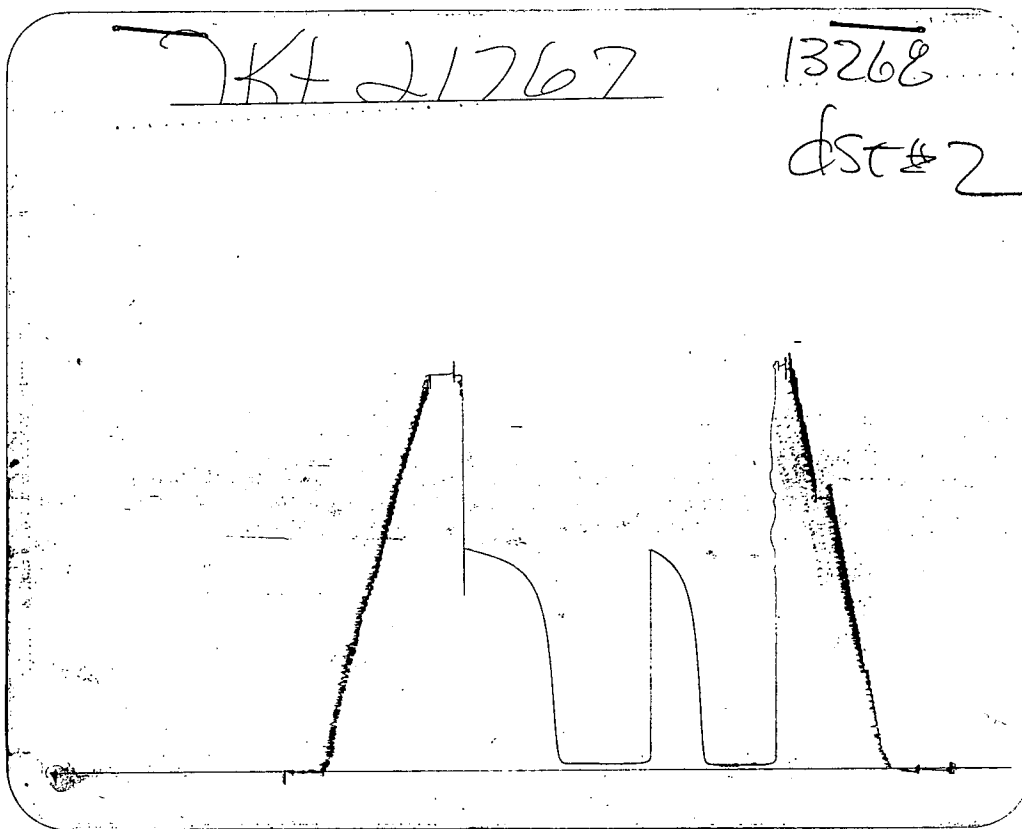
Western Representative Mike Schubert

FIELD INVOICE

Open Hole Test	\$
Misrun	\$
Straddle Test	\$
Jars	\$
Selective Zone	\$
Safety Joint	\$
Standby	\$
Evaluation	\$
Extra Packer	\$
Circ. Sub.	\$
Mileage	\$
Fluid Sampler	\$
Extra Charts	\$
Insurance	\$



Inside Recorder



Outside Recorder