

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

Operator: License # 5135
Name: John O. Farmer, Inc.
Address P.O. Box 352

City/State/Zip Russell, KS 67665

Purchaser: Farmland Industries, Inc.

Operator Contact Person: John O. Farmer III
Phone (913) 483-3144

Contractor: Name: Sterling Drilling Company
License: 5142
Wellsite Geologist: John O. Farmer IV

Designate Type of Completion
 New Well Re-Entry Workover

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

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

Operator: _____
Well Name: _____
Comp. Date _____ Old Total Depth _____

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

3-22-97 3-30-97 4-25-97
Spud Date Date Reached TD Completion Date

API NO. 15- 151-22,149-00-00
County Pratt
- SW - SW - NW Sec. 21 Twp. 29S Rge. 13 X W

2310 Feet from S (N) (circle one) Line of Section
330 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 Novotny "B" Well # 1
Field Name Un-named
Producing Formation Mississippi

Elevation: Ground 1927' KB 1936'
Total Depth 4800' PBTD _____

Amount of Surface Pipe Set and Cemented at 293 Feet

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

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

Drilling Fluid Management Plan ALT 1 9/24 9-10-97
(Data must be collected from the Reserve Pit)

Chloride content 36,000 ppm Fluid volume 400 bbls
Dewatering method used hauled

Location of fluid disposal if hauled offsite:

Operator Name General Oil Co., Inc. & F.G. Holl Co., LLC
(General) (F.G. Holl) (F.G. Holl) 5056
Lease Name Mason Kennedy License No. (General)
(General) 14 29 13 9069
_____ Quarter Sec. 30 Twp. 29 S Rng. 12 E (W)
(F.G. Holl) D-23,697 (General)
County Pratt Docket No. D-22,132 (F.G. Holl)

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
John O. Farmer III
Title President Date 7-15-97
Subscribed and sworn to before me this 15th day of July,
19 97.

Notary Public Margaret A. Schulte
Margaret A. Schulte
Date Commission Expires _____

7-16-97
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)



ORIGINAL

SIDE TWO

Operator Name John O. Farmer, Inc. Lease Name Novotny "B" Well # 1
 Sec. 21 Twp. 29S Rge. 13 East West
 County Pratt

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	Heebner	3795'	(-1859)
Electric Log Run (Submit Copy.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Lansing	3988'	(-2052)
List All E.Logs Run:		Stark	4298'	(-2362)
Dual Compensated Porosity, Dual Induction, and Segmented Bond Log		Marmaton	4382'	(-2446)
		Mississippi	4494'	(-2558)
		Kinderhook	4524'	(-2588)
		Viola	4556'	(-2620)
		Simpson Sandstone	4672'	(-2736)
		Arbuckle	4762'	(-2826)
		L.T.D.	4799'	(-2863)

CASING RECORD							
<input type="checkbox"/> New <input checked="" 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	14-3/4"	10-3/4"	32#	293'	60-40 Pozmix	225	3% C.C., 2% gel
Production	7-7/8"	4-1/2"	10-1/2#	4607'	Lite	50-8	2% gel, 18% salt, 1/4# Floseal per sk., .75% CFR-3,
					50-50 Pozmix	150	5# Gilsonite per sk

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

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type	Acid, Fracture, Shot, Cement Squeeze Record
	Specify Footage of Each Interval Perforated	(Amount and Kind of Material Used) Depth
1 SPF	4495-99 (4') and 4500-09 (9')	750 gals. DSFE acid 4495-4509'
		33,100 gals. water + 44,500# sand 4495-4509'

TUBING RECORD	Size	Set At	Packer At	Liner Run
	2-3/8"	4463'	--	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Date of First, Resumed Production, SWD or Inj.	Producing Method
5-19-97	<input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	5	17,000	10		

Disposition of Gas: Vented Sold Used on Lease (If vented, submit ACO-18.)

METHOD OF COMPLETION: Open Hole Perf. Dually Comp. Commingled Other (Specify) _____

Production Interval: 4495-4509'

ALLIED CEMENTING CO., INC. 5637

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

COPY

SERVICE POINT: Dt Barn

ORIGINAL

DATE <u>3-22-97</u>	SEC. <u>21</u>	TWP. <u>29</u>	RANGE <u>13</u>	CALLED OUT <u>9:00AM</u>	ON LOCATION <u>12:00PM</u>	JOB START <u>1:45 PM</u>	JOB FINISH <u>2:15 PM</u>
LEASE <u>Novo Inc</u>		WELL # <u>B-1</u>		LOCATION <u>Sawyer - W To Center - 1/2 N, E/S</u>		COUNTY <u>Pratt</u>	STATE <u>Ks</u>

OLD OR NEW (Circle one)

CONTRACTOR Stedman Drilling

TYPE OF JOB Surface

HOLE SIZE 14 3/4" T.D. 295'

CASING SIZE 10 3/4" DEPTH 293'

TUBING SIZE _____ DEPTH _____

DRILL PIPE _____ DEPTH _____

TOOL _____ DEPTH _____

PRES. MAX _____ MINIMUM _____

MEAS. LINE _____ SHOE JOINT _____

CEMENT LEFT IN CSG. 15'

PERFS. Dirp = 28 Hbls,

OWNER Same

CEMENT

AMOUNT ORDERED 225 cu yds 60/40 3% CC, 270 Hbl,

COMMON	<u>135</u>	@	<u>6.10</u>	<u>823.50</u>
POZMIX	<u>90</u>	@	<u>3.15</u>	<u>283.50</u>
GEL	<u>4</u>	@	<u>9.50</u>	<u>38.00</u>
CHLORIDE	<u>7</u>	@	<u>28.00</u>	<u>196.00</u>
		@		
		@		
		@		
		@		
		@		
HANDLING	<u>225</u>	@	<u>1.05</u>	<u>236.25</u>
MILEAGE	<u>12</u>			<u>108.00</u>

EQUIPMENT

PUMP TRUCK CEMENTER Tom O

191 HELPER Bob B

BULK TRUCK DRIVER Rich W

342

BULK TRUCK DRIVER _____

TOTAL \$ 1685.00

REMARKS:

Rem 293' of 10 3/4" csg. Rapid circulation

Mixed 225 cu yds 60/40 3% CC, Pumped

plug with fresh water.

Cement did circulate

Stedman

SERVICE

DEPTH OF JOB 293'

PUMP TRUCK CHARGE _____ 445.00

EXTRA FOOTAGE _____ @ _____

MILEAGE 12 @ 2.85 34.20

PLUG 1-10 3/4" Tip @ 70.00 70.00

_____ @ _____

_____ @ _____

TOTAL 549.20

CHARGE TO John O. Farmer, Inc.

STREET P.O. Box 352

CITY Russell STATE Ks ZIP 67665

FLOAT EQUIPMENT

_____ @ _____

_____ @ _____

_____ @ _____

_____ @ _____

_____ @ _____

TOTAL _____

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 -0- 2234.45

TOTAL CHARGE \$ 2783.65

DISCOUNT \$ 475.55 IF PAID IN 30 DAYS

335.16

Net \$ 2366.10

SIGNATURE X G.L. Thompson

RECEIVED
KANSAS COMMERCE
JUL 16

CUSTOMER COPY



REMIT TO: P.O. BOX 951046 DALLAS, TX 75395-1046 Corporate FIN 73-0271280

INVOICE

COPY

HALLIBURTON ENERGY SERVICES

A Division of Halliburton Company

INVOICE NO.	DATE
104867	03/31/1997

WELL LEASE NO./PROJECT	WELL PROJECT LOCATION	STATE	OWNER		
NOVOTNY "B" 1	PRATT	KS	SAHE		
SERVICE LOCATION	CONTRACTOR	JOB PURPOSE	TICKET DATE		
PRATT	STERLING DRILLING	SHOWN BELOW	03/31/1997		
AGCT NO.	CUSTOMER/AGENT	VENDOR NO.	CUSTOMER/PO NUMBER	SHIPPED VIA	FILE NO.
284670	JOHN O FARMER			COMPANY TRUCK	22437

ORIGINAL

DIRECT CORRESPONDENCE TO:

JOHN O FARMER INC
BOX 352
RUSSELL, KS 67665

1102 E. 8TH
HAYS KS 67601
913-625-3431

REFERENCE NO.	DESCRIPTION	QUANTITY	UM	UNIT PRICE	AMOUNT
PRICING AREA - MID CONTINENT					
JOB PURPOSE - CEMENT PRODUCTION CASING					
000-117	MILEAGE CEMENTING ROUND TRIP	22	MI	2.99	65.78
		1	UNT		
001-016	CEMENTING CASING	4501	FT	1,820.00	1,820.00
		1	UNT		
80	FORM PKR SHOE FLAP VLV 4 1/2"	1	EA	2,968.00	2,968.00
855-128					
82	FILL-UP UNIT	1	EA	103.00	103.00
855-02543					
594	4 1/2" LATCH DOWN BAFFLE	1	EA	100.00	N/C
801-03734					
593	3-WIPER I-D PLUG - 4 1/2"	1	EA	159.00	N/C
801-0373					
019-241	CASING SWIVEL W/O WALL CLEANER	1	JOB	185.00	N/C
60	WIPER-ROTO WALL CLEANER	10	EA	18.30	183.00
806-71201					
66	CLAMP-LIMIT-4-1/2 HINGED	12	EA	10.00	120.00
806-72020					
40	CENTRALIZER 4-1/2 X 7-7/8	4	EA	50.00	200.00
806-60004					
320	BASKET-CMT-4 1/2 CSG X 18"OD-	2	EA	97.00	194.00
806-71415					
018-317	SUPER FLUSH	12	SK	100.00	1,200.00
504-316	CEMENT - HALL LIGHT STANDARD	50	SR	9.11	455.50
504-130	CEMENT - 50/50 POZHIX STANDARD	150	SK	7.63	1,153.50
508-291	GILSONITE BULK	750	LD	9.15	3,000.00
509-968	SALT	1400	LD	15	210.00
507-210	FLOCCEL	19	LD	1.65	31.35
507-153	CFR-3	91	LD	4.85	441.35
509-968	SALT	400	LD	1.50	60.00
500-207	BULK SERVICE CHARGE	242	CFT	1.35	326.70
500-306	MILEAGE CMTG MAT DEL OR RETURN	107.613	THI	1.05	112.99

***** CONTINUED ON NEXT PAGE *****

TERMS: 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 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.



CHARGE TO:
JOHN O FINKRICK INC
 ADDRESS
P.O. Box 352
 CITY, STATE, ZIP CODE
Russell KS 6761675

CUSTOMER COPY

TICKET

No. **104867 - 4**

PAGE 1 OF 2

SERVICE LOCATIONS 1. PRATT, KS	WELL/PROJECT NO. 2. NOUOTNY B	LEASE 3. STOCKING DEL	COUNTY/PARISH 4. PRATT	STATE 5. KS	CITY/OFFSHORE LOCATION 6. 18	DATE 7. 3-31-77	OWNER
TICKET TYPE 8. <input checked="" type="checkbox"/> SERVICE 9. <input type="checkbox"/> SALES	NITROGEN JOB? 10. <input type="checkbox"/> YES 11. <input checked="" type="checkbox"/> NO	CONTRACTOR 12. STOCKING DEL	RIG NAME/NO. 13. H4	SHIPPED VIA 14. WELL SITE	DELIVERED TO 15. WELL SITE	ORDER NO.	
WELL TYPE 16. CI OIL	WELL CATEGORY 17. OI DU	JOB PURPOSE 18. C35	WELL PERMIT NO. 19. 1515/22195000	WELL LOCATION 20. 21-295-13W	REFERRAL LOCATION	INVOICE INSTRUCTIONS	

PRICE REFERENCE	SECONDARY REFERENCE / PART NUMBER	ACCOUNTING / LOC ACCT DF	DESCRIPTION	QTY	U/M	UNIT PRICE	AMOUNT
000-117		1	MILEAGE Round Trip Tel #52509	22	HR	2.75	60.50
001-018		1	RAMP CHARGE	1	EA	1920.00	1920.00
80	855-128	1	FORMATION PICKER SHOE	1	EA	2963.00	2963.00
82	855-02549	1	FILL UP ASS	1	EA	103.00	103.00
598	801-03739	1	LATCH Down Baffle	1	EA	100.00	N/C
593	801-0373	1	3W LATCH Down Plug	1	EA	159.00	N/C
611-270		1	ROTATING HEAD	1	EA	1815.00	1815.00
60	806-71201	1	ROTATING SCRIBER HOES	10	EA	18.30	183.00
66	806-72022	1	LIFT CLAMPS	12	EA	12.00	144.00
70	806-60009	1	CENTRALIZERS	7	EA	30.00	210.00
320	806-71415	1	GAMMET BASKETS	2	EA	97.00	194.00
619-311		1	SCALPEL FILES	10	EA	12.00	120.00

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

DATE SIGNED: **John O Finkrick**
 TIME SIGNED: **10:00 A.M.**
 do not require IPC (Instrument Protection) Not offered

SUB SURFACE SAFETY VALVE WAS:
 PULLED & RETURN PULLED RUN

TYPE LOCK DEPTH

BEAN SIZE SPACERS

TYPE OF EQUALIZING SUB. CASING PRESSURE

TUBING SIZE TUBING PRESSURE WELL DEPTH

TREE CONNECTION TYPE VALVE

SURVEY AGREE UNDECIDED DISAGREE

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	6733 78
FROM CONTINUATION PAGE(S)	3091 39
SUB-TOTAL APPLICABLE TAXES WILL BE ADDED ON INVOICE	9825.10

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): **John O Finkrick** CUSTOMER OR CUSTOMER'S AGENT (SIGNATURE): **John O Finkrick** HALLIBURTON OPERATOR/ENGINEER: **Tom S...** EMP #: **61622** HALLIBURTON APPROVAL:



HALLIBURTON

HALLIBURTON ENERGY SERVICES

TICKET CONTINUATION

CUSTOMER COPY

TICKET No. _____

FORM 1911 R-10

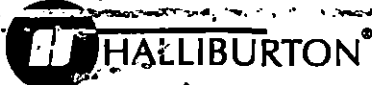
CUSTOMER JOHN O FARMER INC.	WELL NOVOTNY "B" #1	DATE 03-31-97	PAGE 2	OF 2
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PRICE REFERENCE	SECONDARY REFERENCE/PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		U/M		UNIT PRICE	AMOUNT	
		LOC	ACCT	DF								
504-316		1			HALCO LIGHT CEMENT LOADED ON TRL#7488-50736-FRONT	50	SKS			9 11	455	50
504-130		1			50/50 POZMIX W2% GEL	150	SKS			7 69	1,153	50
508-291	516.00337	1			GILSONITE BLD 5#	750	LBS			40	300	00
509-968	516.00158	1			SALT BLD 18%	1400	LBS			15	210	00
507-210	890.50071	1			FLOCELE BLD 1/8#	19	LBS			1 65	31	85
507-153	516.00161	1			CFR-3 BLD .75% LOADED ON TRL#7488-50736-BACK	91	LBS			4 85	441	85
509-968	516.00158	1			SALT ON SIDE	400	LBS			15	60	00
500-207		1			SERVICE CHARGE				CUBIC FEET	242	1 35	326 70
500-306		1			MILEAGE CHARGE	TOTAL WEIGHT	LOADED MILES	TON MILES				
					19,566	11	107.613			1 05	112	99

ORIGINAL

No. B 212761

CONTINUATION TOTAL



JOB LOG 4239-5

TICKET 104 867

TICKET DATE 3-31-97

REGION North America	COUNTRY MEXICO	CONTRINENT CENTRAL	BDA / STATE KS	COUNTY PRATT
MBLTY / EMP# 110504 G162C	EMPLOYEE NAME TODD J SOBZA	PSL DEPARTMENT SIAM		
LOCATION PRATT	COMPANY JOHN O FARMER FNC	CUSTOMER REP / PHONE JOHN O FARMER		
TICKET AMOUNT 10,094.17	WELL TYPE 01 OIL	API NUMBER 1515122189000		
WELL LOCATION S PRATT (K)	DEPARTMENT CEMENT	JOB PURPOSE CODE 635		
LEASE / WELL # NOUOTNY (B) 1	SEC / TWP / RNS 21-29S-13W	ORIGINAL		

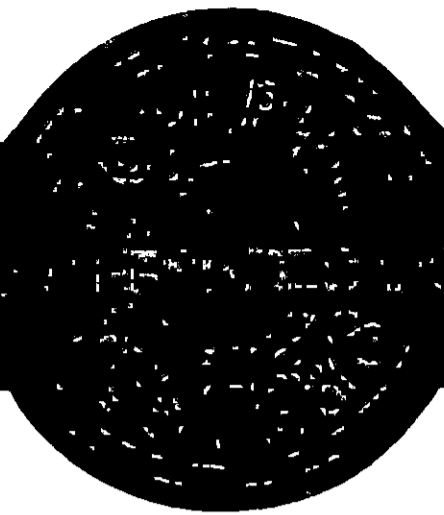
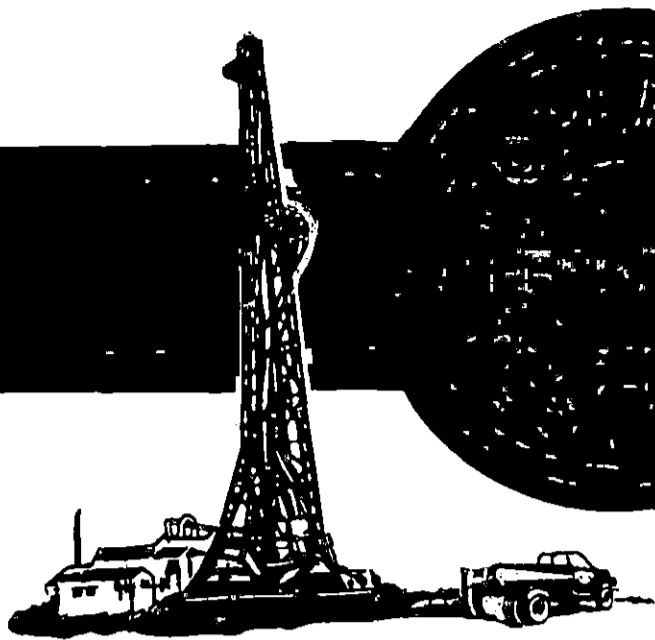
HES EMP NAME/EMP#/(EXPOSURE HOURS)	HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS)	HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS)	HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS)	HRS
TODD J SOBZA G162C	3/2	C BARKER E 9947	3/2	C MASSER H 5379	3/2		

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL)(GAL)	PUMPS		PRESS. (psi)		JOB DESCRIPTION / REMARKS
				T	C	Tbg.	Csg.	
	20:30							Called out 3-30-97
	03:00							on loc 3-31-97
								Rig Laying down PIPE
								Formation Packoz shoe: Baffle latch down
								Centerline on JTS
								1-2-9-9
								Cement baskets on JTS
								2-9
	7:10							START CSG 9/2
	8:55							Hook up to well
	8:59							Drop Ball START CIRCULATING
								FINISH CIRCULATING
1	9:45							Drop Ball SET PACKOZ
	9:53	1				350		START FLUSH
			20					SATT FLUSH
			23					SPACE
	10:08		35			1100		S' FLUSH SET PACKOZ
			33					SPACE
	10:10							START MIXING CMT
	10:17	2	3					Plug M Hole
			7					Plug R Hole
	10:25	6	6					START CMT DOWN CSG
	10:32		75.5					FINISHED MIXING
								SHUT IN
								Release Plug
								FLUSH LINES
	10:34	7				300	300	START DISP
		5	60			600	600	
	10:57	2	73			1050	1050	Plug down
	10:59							HOLD
	11:00							RELEASE
								WASH UP
								Rock up
								Job Complete
								OFF LOG

RECEIVED
HALLIBURTON
APR 15 4 11:16

THANKS

TODD
CHECKER
CLAWCE



ORIGINAL

Formation Testing Service Report

Operator's File Report

ORIGINAL Superior Testers Enterprises, Inc.

R.R. 3, Box 295B, Great Bend, Kansas 67530
(316) 792-6902

Date 3-29-1997 Location SW-1/4-1/2 21-29-13 W Elevation 1936 RB County Leott
192761

Company John O. Farmer Inc. Number of Copies 5

Charts Mailed to P.O. Box 332 Russell Kansas 67669

Drilling Contractor Steeling Drilling Rig # 4

Length Drill Pipe 4155 I.D. Drill Pipe 3.80 Tool Joint Size 4 1/2" X 1 1/2"

Length Weight Pipe None I.D. Weight Pipe None Tool Joint Size None

Length Drill Collars 485 I.D. Drill Collars 2.25 Tool Joint Size 4 1/2" X 1 1/2"

Top Packer Depth 4654 Bottom Packer Depth 4659 Number of Packers 2 Packer Size 6 3/4"

TESTED FROM 4659 TO 4688 ANCHOR LENGTH 29 TOTAL DEPTH 4688 Hole Size 7 1/8"

LEASE & WELL NO. Adwasty 48" #1 FORMATION TESTED Simpson TEST NO. 2

Mud Weight 9.0 Viscosity 43 Water Loss 9.4 Chlorides - Pits 5000 D.S.T. 44000

Maximum Temp. 129 °F Initial Hydrostatic Pressure (A) 2269 P.S.I. Final Hydrostatic Pressure (H) 2213 P.S.I.

Tool Open I.F.P. from 9:15 P.m to 10:00 P.m 45 min

Tool Closed I.C.I.P. from 10:00 P.m to 10:45 P.m 45 min

Tool Open F.F.P. from 10:45 A.m to 11:30 P.m 45 min

Tool Closed F.C.I.P. from 11:30 P.m to 12:30 A.m 60 min

Initial Blow Fair blow built to the bottom of a 6 gal bucket in 10 minutes

Final Blow Weak building blow built to 8 inches into the water

Total Feet Recovered 775 Gravity of Oil _____ Corrected

475 Feet of SLIGHTLY MUDDY WATER % Gas _____ % Oil _____ % Mud _____ % Water _____

300 Feet of water with a trace of mud % Gas _____ % Oil _____ % Mud _____ % Water _____

_____ Feet of _____ % Gas _____ % Oil _____ % Mud _____ % Water _____

_____ Feet of _____ % Gas _____ % Oil _____ % Mud _____ % Water _____

_____ Feet of _____ % Gas _____ % Oil _____ % Mud _____ % Water _____

_____ Feet of _____ % Gas _____ % Oil _____ % Mud _____ % Water _____

_____ Feet of _____ % Gas _____ % Oil _____ % Mud _____ % Water _____

_____ Feet of _____ % Gas _____ % Oil _____ % Mud _____ % Water _____

_____ Feet of _____ % Gas _____ % Oil _____ % Mud _____ % Water _____

_____ Feet of _____ % Gas _____ % Oil _____ % Mud _____ % Water _____

Remarks _____

Extra Equipment - Jars None Safety Joint None Extra Packer None Straddle None Hook Wall None

Top Recorder No. 78225 Clock No. Electronic Depth 4681 Cir. Sub None Sampler None

Bottom Recorder No. 11088 Clock No. 47441 Depth 4685 Insurance None

Price of Job _____

Tool Operator Jane Buldy

Approved By _____

No 11636

from [B]	<u>59</u>	P.S.I. to [C]	<u>320</u>	P.S.I.
[D]	<u>643</u>			P.S.I.
from [E]	<u>354</u>	P.S.I. to [F]	<u>409</u>	P.S.I.
[G]	<u>650</u>			P.S.I.

Superior Testers Enterprises, Inc. shall not be liable for damage 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, 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.

SUPERIOR TESTERS ENTERPRISES INC.

Great Bend, Kansas

CHART DATA

(316) 792-6902

NOVONTY "B" #1 SIMPSON

State KANSAS

Test Date March 29, 1997

County

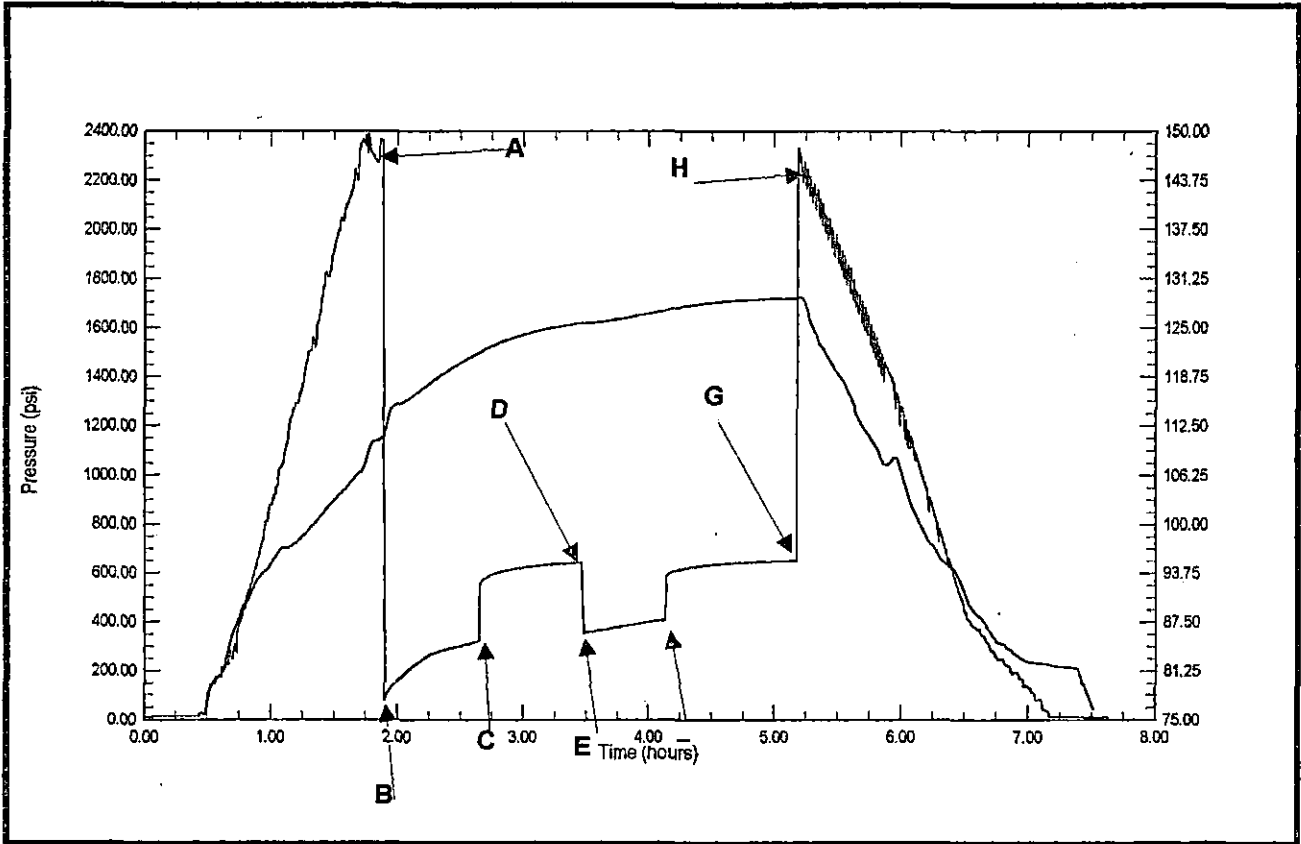
Sec Town Range S/W-S/W-N/W 21-29-1

Field

ORIGINAL

Report Number 11636

Company: JOHN O. FARMER INC. Lease & Well No. NOVONTY "B" #1 Test #: 3 Date: 3-29-1997 Sec. 21 TWP. 29S RGE. 13W



Field Reading

Office Reading

(A) ial Hydrostatic Pressure	2269	psi
(B) Initial Flow Pressure	59	psi
(C) nal Initial Flow Pressure	320	psi
(D) Initial Shut-In Pressure	643	psi
(E) itial Final Flow Pressure	354	psi
(F) Final Flow Pressure	409	psi
(G) Final Shut-In Pressure	650	psi
(H) ial Hydrostatic Pressure	2213	psi

Mechanical Recorder Depth 4685 ft, Recorder Number 11088

15-151-22149

SUPERIOR TESTERS ENTERPRISES INC.

DRILL STEM TEST REPORT

GREAT BEND, KANSAS (316)792-6902

General Information

Test Company Name SUPERIOR TESTERS ENTERPRISES INC.
Company Name JOHN O. FARMER INC.
Lease and Well Number NOVONTY "B" #1
Formation Tested SIMPSON
Test Number 3
State KANSAS
County PRATT
Field
Test Date 29-Mar-97
Section Town Range S/W-S/W-N/W 21-29-13W
Report Number 11636
Elevation Ground Level 1927
Elevation Kelly Bushings 1936
Company Representative JOHN O.FARMER IV
Testing Engineer GENE BUDIG

Extra Equipment

Jars No
Safety Joint No
Extra Packes No
Straddle No
Hook Wall No
Sampler No
Circulating Sub No
Electronic Recorder YES

Well Information

Drilling Contractor STERLING DRILLING RIG #4

Drill Pipe Length 4155
Drill Pipe I.D. 3.8
Tool Joint Size 4 1/2 XH

Weight Pipe Length
Weight Pipe I.D. 2.76
Tool Joint Size 4 1/2 X.H.

Drill Collar Length 485
Drill Collar I.D. 2.25
Tool Joint Size 4 1/2 X.H.

Mud Weight #/gal 9.00
Viscosity 43.00
Water Loss 9.6
Chlorides - Pits 5,000
Chlorides - DST *44000*

SUPERIOR TESTERS ENTERPRISES INC.

DRILL STEM TEST REPORT

GREAT BEND, KANSAS (316) 792-6902

Tool Setting Information

Top Packer Depth 4654
Bottom packer Depth 4659
Number of Packers 2
Packer Size 6 3/4

Test Interval (from) 4659
Test Interval (to) 4688
Anchor Length 29
Total Depth (ft) 4688
Hole Size (in) 7 7/8

Pressure Readings

	<i>Field Reading</i>	<i>Office Reading</i>
Maximum Temp	129	
Initial Hydrostatic Pressure	2269	
Initial Flow Pressure	59	
Final Initial Flow Pressure	320	
Initial Shut-In Pressure	643	
Initial Final Flow Pressure	354	
Final Flow Pressure	409	
Final Shut-In Pressure	650	
Final Hydrostatic Pressure	2213	
Mechanical Recorder Depth (ft)	4685	
Recorder Number	11088	
Electronic Recorder Depth	4681	
Recorder Number	78225	

Comments

SUPERIOR TESTERS ENTERPRISES INC.

DRILL STEM TEST REPORT

GREAT BEND, KANSAS (316)792-6902

Flow Times

Initial Open

Tool Open (from) 9:15
 Tool Open (to) 10:00
 Duration (min) 45

Initial Shut-in

Tool Closed (from) 10:00
 Tool Closed (to) 10:45
 Duration (min) 45

Final Open

Tool Open (from) 10:45
 Tool Open (to) 11:30
 Duration (min) 45

Final Shut-in

Tool Closed (from) 11:30
 Tool Closed (to) 12:30
 Duration (min) 60

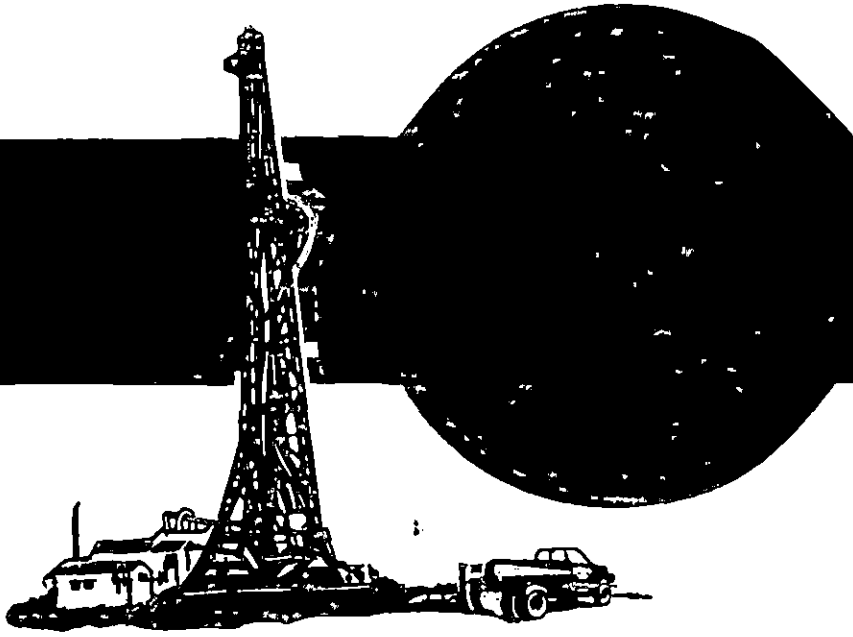
Recovery Description

Initial Blow FAIR BLOW BUILT TO THE BOTTOM OF A 6 GALLON BUCKET IN 10 MINUTES

Final Blow WEAK BUILDING BLOW BUILT TO 8 INCHES INTO THE WATER

Description	Feet of Recovery	% Gas	% Oil	% Mud	% Water
1) SLIGHTLY MUDDY WATER	475				
2) WATER WITH A TRACE OF MUD	300				
3)					
4)					
5)					
6)					
7)					
8)					
9)					
10)					
11)					
12)					
13)					
14)					
15)					
Total	775				

ORIGINAL



Formation Testing Service Report

Operator's File Report

ORIGINAL

Superior Testers Enterprises, Inc.

R.R. 3, Box 295B, Great Bend, Kansas 67530

(316) 792-6902

Date 3-29-97 Location Slw 4 1/2" 21-29-13^W Elevation 1936 K.B. 19276L County Pratt

Company John O. Farmer Inc. Number of Copies 5

Charts Mailed to P.O. Box 352 Russell Kansas 67665

Drilling Contractor Steeling Drilling Rig #4

Length Drill Pipe 4072 I.D. Drill Pipe 3.80 Tool Joint Size 4 1/2" X 4"

Length Weight Pipe NONE I.D. Weight Pipe NONE Tool Joint Size NONE

Length Drill Collars 485 I.D. Drill Collars 2.25 Tool Joint Size 4 1/2" X 4"

Top Packer Depth 4571 Bottom Packer Depth 4576 Number of Packers 402 Packer Size 6 3/4"

TESTED FROM 4576 TO 4605 ANCHOR LENGTH 29 TOTAL DEPTH 4605 Hole Size 7 7/8"

LEASE & WELL NO. Novonty 16" #1 FORMATION TESTED Viola TEST NO. 2

Mud Weight 9.9 Viscosity 48 Water Loss 8.81 Chlorides - Pits 4000 D.S.T.

Maximum Temp. 117 °F Initial Hydrostatic Pressure (A) 2238 P.S.I. Final Hydrostatic Pressure (H) 2210 P.S.I.

Tool Open I.F.P. from 11:45 Pm to 12:15 Am 30 min

Tool Closed I.C.I.P. from 12:15 Am to 12:45 Am 30 min

Tool Open F.F.P. from 12:45 Am to 1:15 Pm 30 min

Tool Closed F.C.I.P. from 1:15 Pm to 2:45 Pm 30 min

from [B]	<u>35</u>	P.S.I. to [C]	<u>37</u>	P.S.I.
[D]	<u>81</u>			P.S.I.
from [E]	<u>34</u>	P.S.I. to [F]	<u>38</u>	P.S.I.
[G]	<u>76</u>			P.S.I.

Initial Blow VERY WEAK SURFACE BLOW FOR 12 MINUTES & DIED

Final Blow No blow

Total Feet Recovered 5 Gravity of Oil _____ Corrected

<u>5</u> Feet of <u>Drilling with oil spotted mud Between</u>	% Gas	% Oil	% Mud	% Water
Feet of <u>The SHUT-IN & Hydraulic tools</u>	% Gas	% Oil	% Mud	% Water
Feet of _____	% Gas	% Oil	% Mud	% Water
Feet of _____	% Gas	% Oil	% Mud	% Water
Feet of _____	% Gas	% Oil	% Mud	% Water
Feet of _____	% Gas	% Oil	% Mud	% Water
Feet of _____	% Gas	% Oil	% Mud	% Water
Feet of _____	% Gas	% Oil	% Mud	% Water
Feet of _____	% Gas	% Oil	% Mud	% Water

Remarks _____

Extra Equipment - Jars NONE Safety Joint NONE Extra Packer NONE Straddle NONE Hook Wall NONE

Top Recorder No. 78225 Clock No. ELECTRONIC Depth 4598 Cir. Sub NONE Sampler NONE

Bottom Recorder No. 11088 Clock No. 47441 Depth 4602 Insurance NONE

Price of Job _____

Tool Operator Gene Rudy

Approved By _____

Superior Testers Enterprises, Inc. shall not be liable for damage 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, 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.

NO 11635

SUPERIOR TESTERS ENTERPRISES INC.

Great Bend, Kansas

CHART DATA

(316) 792-6902

NOVONTY "B" #1 VIOLA

State KANSAS

Test Date 2-29-1997

County

Sec Town Range SW-SW-N/W 21-29S-

Field

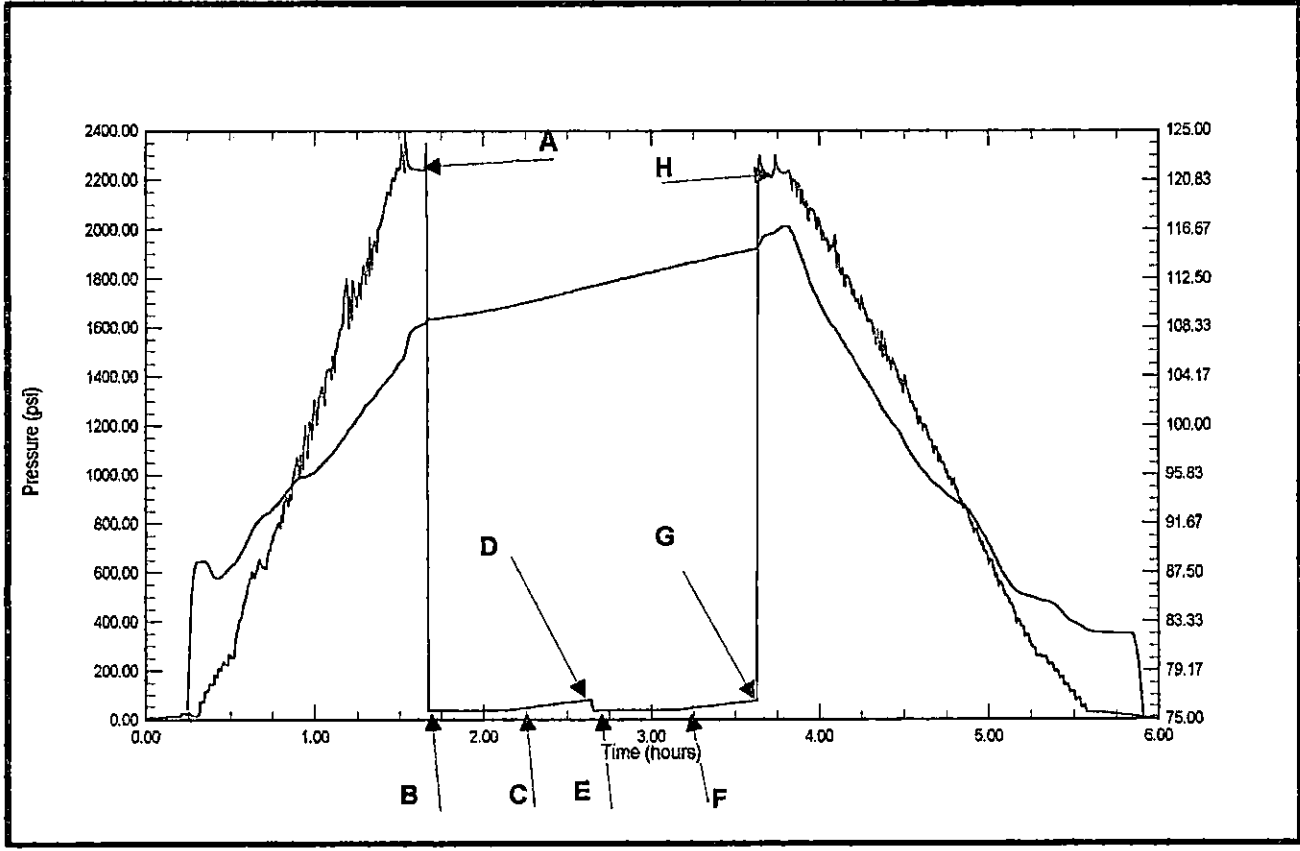
ORIGINAL

Report Number 11635

Company: JOHN O FARMER INC. Lease & Well No. NOVONTY "B" #1
21 TWP. 29S RGE. 13W

15-151-22149
Test #: 2 Date: 3-29-1997

Sec.



Field Reading Office Reading

(A) ial Hydrostatic Pressure	2238	psi
(B) Initial Flow Pressure	35	psi
(C) nal Initial Flow Pressure	37	psi
(D) Initial Shut-In Pressure	81	psi
(E) itial Final Flow Pressure	34	psi
(F) Final Flow Pressure	38	psi
(G) Final Shut-In Pressure	76	psi
(H) ial Hydrostatic Pressure	2210	psi

Mechanical Recorder Depth 4598 ft, Recorder Number 11088

SUPERIOR TESTERS ENTERPRISES INC.

DRILL STEM TEST REPORT

GREAT BEND, KANSAS (316)792-6902

General Information

Test Company Name SUPERIOR TESTERS ENTERPRISES INC.
Company Name JOHN O. FARMER INC.
Lease and Well Number NOVONTY "B"#1
Formation Tested VIOLA
Test Number 2
State KANSAS
County PRATT
Field
Test Date 2-29-1997
Section Town Range S/W-S/W-NW 21-29S-13W
Report Number 11635
Elevation Ground Level 1927
Elevation Kelly Bushings 1936
Company Representative JOHN O. FARMER IV
Testing Engineer GENE BUDIG

Extra Equipment

Jars No
Safety Joint No
Extra Packers No
Straddle No
Hook Wall No
Sampler No
Circulating Sub No
Electronic Recorder YES

Well Information

Drilling Contractor STERLING DRILLING RIG #4

Drill Pipe Length 4072
Drill Pipe I.D. 3.8
Tool Joint Size 4 1/2 XH

Weight Pipe Length
Weight Pipe I.D. 2.76
Tool Joint Size 4 1/2 X.H.

Drill Collar Length 485
Drill Collar I.D. 2.25
Tool Joint Size 4 1/2 X.H.

Mud Weight #/gal 9.00
Viscosity 48.00
Water Loss 8.8
Chlorides - Pits 4,000
Chlorides - DST

SUPERIOR TESTERS ENTERPRISES INC.
DRILL STEM TEST REPORT

GREAT BEND, KANSAS (316)792-6902

Tool Setting Information

Top Packer Depth 4571
Bottom packer Depth 4576
Number of Packers 2
Packer Size 6 3/4

Test Interval (from) 4576
Test Interval (to) 4605.00
Anchor Length 29
Total Depth (ft) 4605
Hole Size (in) 7 7/8

Pressure Readings

	<i>Field Reading</i>	<i>Office Reading</i>
Maximum Temp	117	
Initial Hydrostatic Pressure	2238	
Initial Flow Pressure	35	
Final Initial Flow Pressure	37	
Initial Shut-In Pressure	81	
Initial Final Flow Pressure	34	
Final Flow Pressure	38	
Final Shut-In Pressure	76	
Final Hydrostatic Pressure	2210	
Mechanical Recorder Depth (ft)	4598	
Recorder Number	11088	
Electronic Recorder Depth	4602	
Recorder Number	78225	

Comments

[Empty box for comments]

SUPERIOR TESTERS ENTERPRISES INC. DRILL STEM TEST REPORT

GREAT BEND, KANSAS (316) 792-6902

Flow Times

Initial Open
 Tool Open (from) 11:45
 Tool Open (to) 12:15
 Duration (min) 30

Initial Shut-in
 Tool Closed (from) 12:15
 Tool Closed (to) 12:45
 Duration (min) 30

Final Open
 Tool Open (from) 12:45
 Tool Open (to) 1:15
 Duration (min) 30

Final Shut-in
 Tool Closed (from) 1:15
 Tool Closed (to) 1:45
 Duration (min) 30

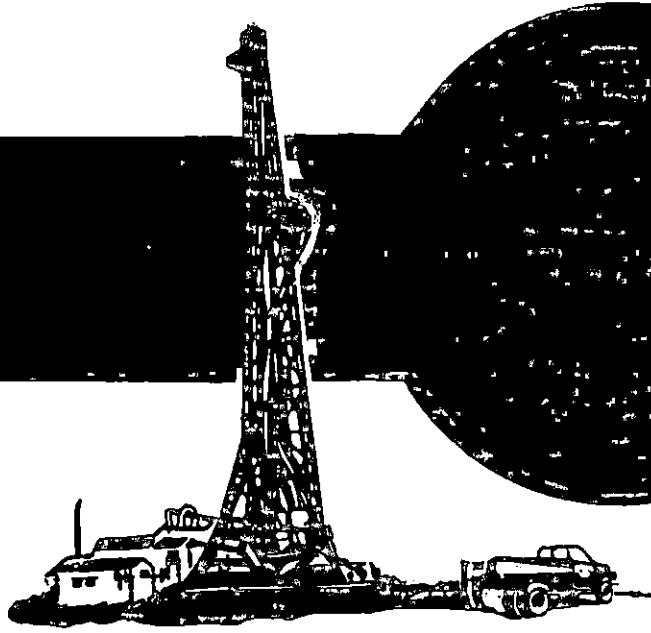
Recovery Description

Initial Blow VERY WEAK SURFACE BLOW FOR 12 MINUTES AND DIED

Final Blow NO BLOW

Description	Feet of Recovery	% Gas	% Oil	% Mud	% Water
1) DRILLING MUD-THERE WAS SPOTTED MUD	5				
2) BETWEEN THE SHUT-IN AND HYDROLIC TOOLS					
3)					
4)					
5)					
6)					
7)					
8)					
9)					
10)					
11)					
12)					
13)					
14)					
15)					
Total	5				

ORIGINAL



Formation Testing Service Report

Operator's File Report

ORIGINAL

Superior Testers Enterprises, Inc.

R.R. 3, Box 295B, Great Bend, Kansas 67530

(316) 792-6902

Date 3-28-97 Location 9W-9W-14W 2E-29S-13W Elevation 1936 RB County Pratt
1927.61

Company John O Farmer Inc. Number of Copies 5

Charts Mailed to P.O. Box 252, Russell, Kansas 67665

Drilling Contractor Steeling Drilling Rig #4

Length Drill Pipe 3979 I.D. Drill Pipe 3.80 Tool Joint Size 4 1/2" X 11

Length Weight Pipe None I.D. Weight Pipe None Tool Joint Size None

Length Drill Collars 454 I.D. Drill Collars 2.25 Tool Joint Size 4 1/2" X 11

Top Packer Depth 4447 Bottom Packer Depth 4452 Number of Packers 2 Packer Size 6 3/4

TESTED FROM 4452 TO 4515 ANCHOR LENGTH 63 TOTAL DEPTH 4515 Hole Size 7 7/8"

LEASE & WELL NO. Nodotwy "B" #1 FORMATION TESTED Mississippi TEST NO. 1

Mud Weight 9.9 Viscosity 40 Water Loss 12 Chlorides - Pits 5000 D.S.T. _____

Maximum Temp. 120 °F Initial Hydrostatic Pressure (A) 2169 P.S.I. Final Hydrostatic Pressure (H) 2156 P.S.I.

Tool Open I.F.P. from 4:45 a.m. to 5:30 a.m. 45 min

Tool Closed I.C.I.P. from 5:30 a.m. to 6:15 a.m. 45 min

Tool Open F.F.P. from 6:15 a.m. to 7:00 a.m. 45 min

Tool Closed F.C.I.P. from 7:00 a.m. to 8:00 a.m. 80 min

from [B]	<u>113</u>	P.S.I. to [C]	<u>116</u>	P.S.I.
[D]	<u>1404</u>			P.S.I.
from [E]	<u>111</u>	P.S.I. to [F]	<u>113</u>	P.S.I.
[G]	<u>1251</u>			P.S.I.

Initial Blow STEAM BLOW - GAS TO SURFACE IN 6 MINUTES

Final Blow STEAM BLOW - SEE GAS FLOW REPORT

Total Feet Recovered 185 Gravity of Oil _____ Corrected _____

<u>185</u> Feet of	<u>GASSY DRILLING MUD NO SHOW OF OIL</u>	<u>12%</u> Gas	<u>1%</u> Oil	<u>87%</u> Mud	_____ % Water
_____ Feet of	_____	_____ % Gas	_____ % Oil	_____ % Mud	_____ % Water
_____ Feet of	_____	_____ % Gas	_____ % Oil	_____ % Mud	_____ % Water
_____ Feet of	_____	_____ % Gas	_____ % Oil	_____ % Mud	_____ % Water
_____ Feet of	_____	_____ % Gas	_____ % Oil	_____ % Mud	_____ % Water
_____ Feet of	_____	_____ % Gas	_____ % Oil	_____ % Mud	_____ % Water
_____ Feet of	_____	_____ % Gas	_____ % Oil	_____ % Mud	_____ % Water
_____ Feet of	_____	_____ % Gas	_____ % Oil	_____ % Mud	_____ % Water
_____ Feet of	_____	_____ % Gas	_____ % Oil	_____ % Mud	_____ % Water
_____ Feet of	_____	_____ % Gas	_____ % Oil	_____ % Mud	_____ % Water

Remarks _____

Extra Equipment - Jars NONE Safety Joint NONE Extra Packer NONE Straddle NONE Hook Wall NONE

Top Recorder No. 78225 Clock No. Electric Depth 4508 Cir. Sub NONE Sampler NONE

Bottom Recorder No. 11088 Clock No. 47441 Depth 4512 Insurance NONE

Price of Job _____

Tool Operator Gene Busby

Approved By _____

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NO 11634

SUPERIOR TESTERS ENTERPRISES INC.

Great Bend, Kansas

CHART DATA

(316) 792-6902

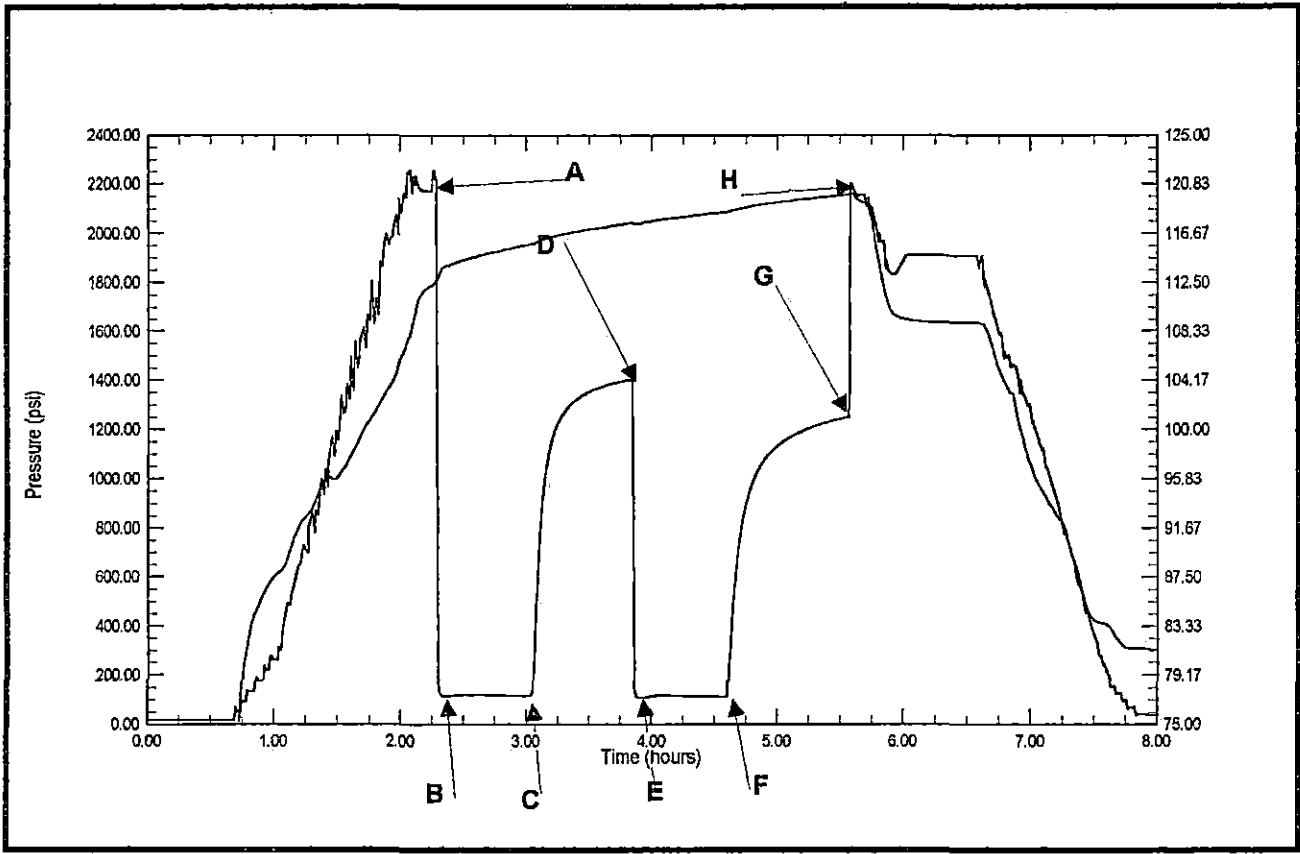
NOVONTY "B" #1 MISSISSPPI

State KANSAS
 County
 Field

Test Date March 28, 1997
 Sec Town Range S/W-S/W-N/W 21-29S-
 Report Number 11634

ORIGINAL

Company: J.O. FARMER INC. Lease & Well No. NOVONTY "B" #1 Test #: 1 Date: 3-28-1997
 21 TWP. 29S RGE. 13W
 15-151-2 2149
 Sec.



Field Reading Office Reading

(A) ial Hydrostatic Pressure	2169	psi
(B) Initial Flow Pressure	113	psi
(C) nal Initial Flow Pressure	116	psi
(D) Initial Shut-In Pressure	1404	psi
(E) itial Final Flow Pressure	111	psi
(F) Final Flow Pressure	113	psi
(G) Final Shut-In Pressure	1251	psi
(H) ial Hydrostatic Pressure	2156	psi

Mechanical Recorder Depth 4512 ft, Recorder Number 11087

SUPERIOR TESTERS ENTERPRISES INC.

DRILL STEM TEST REPORT

GREAT BEND, KANSAS (316)792-6902

General Information

Test Company Name SUPERIOR TESTERS ENTERPRISES INC.
Company Name JOHN O. FARMER INC.
Lease and Well Number NOVONTY "B" #1
Formation Tested MISSISSPPI
Test Number 1
State KANSAS
County PRATT
Field
Test Date 28-Mar-97
Section Town Range S/W-S/W-N/W 21-29S-13W
Report Number 11634
Elevation Ground Level 1927
Elevation Kelly Bushings 1936
Company Representative JOHN O.FARMER IV
Testing Engineer GENE BUDIG

Extra Equipment

Jars No
Safety Joint No
Extra Packes No
Straddle No
Hook Wall No
Sampler No
Circulating Sub No
Electronic Recorder YES

Well Information

Drilling Contractor STERLING DRILLING RIG #4

Drill Pipe Length 3979
Drill Pipe I.D. 3.8
Tool Joint Size 4 1/2 XH

Weight Pipe Length
Weight Pipe I.D. 2.76
Tool Joint Size 4 1/2 X.H.

Drill Collar Length 454
Drill Collar I.D. 2.25
Tool Joint Size 4 1/2 X.H.

Mud Weight #/gal 9.00
Viscosity 40.00
Water Loss 12
Chlorides - Pits 5,000
Chlorides - DST

SUPERIOR TESTERS ENTERPRISES INC.

DRILL STEM TEST REPORT

GREAT BEND, KANSAS (316)792-6902

Tool Setting Information

Top Packer Depth 4447
Bottom packer Depth 4452
Number of Packers 2
Packer Size 6 3/4

Test Interval (from) 4452
Test Interval (to) 4515.00
Anchor Length 63
Total Depth (ft) 4515
Hole Size (in) 7 7/8

Pressure Readings

	<i>Field Reading</i>	<i>Office Reading</i>
Maximum Temp	120	
Initial Hydrostatic Pressure	2169	
Initial Flow Pressure	113	
Final Initial Flow Pressure	116	
Initial Shut-In Pressure	1404	
Initial Final Flow Pressure	111	
Final Flow Pressure	113	
Final Shut-In Pressure	1251	
Final Hydrostatic Pressure	2156	
Mechanical Recorder Depth (ft)	4512	
Recorder Number	11087	
Electronic Recorder Depth	4508	
Recorder Number	78225	

Comments

SUPERIOR TESTERS ENTERPRISES INC.

DRILL STEM TEST REPORT

GREAT BEND, KANSAS (316)792-6902

Flow Times

Initial Open

Tool Open (from) 4:45
 Tool Open (to) 5:30
 Duration (min) 45

Initial Shut-in

Tool Closed (from) 5:30
 Tool Closed (to) 6:15
 Duration (min) 45

Final Open

Tool Open (from) 6:15
 Tool Open (to) 7:00
 Duration (min) 45

Final Shut-in

Tool Closed (from) 7:00
 Tool Closed (to) 8:00
 Duration (min) 60

Recovery Description

Initial Blow STRONG BLOW-GAS TO SURFACE IN 6 MINUTES

Final Blow STRONG BLOW-SEE GAS FLOW REPORT

Description	Feet of Recovery	% Gas	% Oil	% Mud	% Water
1) GASSY DRILLING MUD NO SHOWS OF OIL	185	12	1	87	
2)					
3)					
4)					
5)					
6)					
7)					
8)					
9)					
10)					
11)					
12)					
13)					
14)					
15)					
Total	185				

SUPERIOR TESTERS ENTERPRISES INC.

GREAT BEND, KANSAS

GAS FLOW RATE

(316) 792-6902

NOVONTY "B" #1 MISSISSPPI

State KANSAS

Test Date March 28, 1997

County PRATT

Sec Town Range S/M-S/W-N/W 21-29S-13W

Field

Report Number 11634

Initial Flow

Comments	Time (hh:mm:ss)	Period dt (min)	Inches H2O Office Tester	PSI on Office Tester	PSI on Pitot Tube	Choke Size (in)	Gas Rate (MCF/Day)
TOOL OPENED	4:55	10	3.500			1.00	45.350
AT 4:45	5:05	20	3.00			1.00	44.700
WITH GAS TO	5:15	30	32.00			1.00	146.000
SURFACE IN	5:25	40	29.00			1.00	139.000
6 MINUTES	5:30	45	27.00			1.00	134.500

Final Flow

Comments	Time (hh:mm:ss)	Period dt (min)	Inches H2O Office Tester	PSI on Office Tester	PSI on Pitot Tube	Choke Size (in)	Gas Rate (MCF/Day)
TOOL OPENED	6:25	10	34.50			1.00	153.000
AT 6:15	6:35	20	28.00			1.00	137.000
	6:45	30	19.00			1.00	113.000
	6:55	40	15.00			1.00	101.000
	7:00	45	13.00			1.00	93.600

PVT Detail

INPUT DATA

1	Pr (psia)	569.00
2	Temperature of Interest (psia)	120.00
3	Yield (bb/mmscf).....	250.00
4	Water Cut (%)	0.00%
5	Standard Pressure (psia)	14.7000
6	Standard Temperature (F)	60.0000
7	API Gravity Liq Hydrocarbon	0.000E+00
8	Water Salinity (ppm)	0.000E+00
9	Liq. Hydro. SOL GOR AND PB Correlation ...	STANDING
10	Liq. Hydro. FVF Correlation.	STANDING
11	Dead Oil Correlation	BEGGS-ROBINSON
12	Dead Water Correlation	MEEHAN
13	Reservoir Fluid Type	GAS
14	Reservoir Oil Saturation (%)	65.00%
15	Reservoir H2O Saturation (%)	35.00%
16	Reservoir Gas Saturation (%)	0.00%
17	Reservoir Rock Type	LIMESTONE
18	Reservoir Rock Porosity (%)	18.00%
19	True Vertical Depth (ft)	4515
20	CO2 (Mole %)	0.000E+00
21	H2S (Mole %)	0.000E+00
22	N2 (Mole %)	0.000E+00
23	Specific Gravity Gas (dim)	0.6500
24	Pseudo Critical Temp (R)	370.0000
25	Pseudo Critical Press (psia)	671.0000
CALCULATED VALUES		
26	Ct Reservoir (1/psi)	1.954E-04
27	Cf Wellbore (1/psi)	0.0628
28	Total Fluid Visc (cp)	0.0139
29	Total FVF (bbl/stb)	0.0139
30	Total Fluid Bubble Point Press (psi)	0.4838
31	Fluid Density (lbs/r-ft3)	8.9845
32	Total Fluid SG (dim)	1.6409
33	FVF Oil (Rbl/Stb)	N/A
34	FVF H2O (Rbl/Stb)	N/A
35	FVF GAS (Scf/FT3)	N/A
36	Mu Oil (cp)	N/A
37	Mu H2O (cp)	N/A
38	Mu Gas (cp)	N/A
39	Density Oil (lb/rft3)	N/A
40	Density H2O (lb/rft3)	N/A
41	Density Gas (lb/rft3)	N/A
42	Compress. Oil (1/psi)	2.795E-04
43	Compress. H2O (1/psi)	3.551E-05
44	Compress. Gas (1/psi)	1.886E-03
45	Compress. Rock (1/psi)	1.235E-06
46	Critical Temp (R)	674.8260
47	Critical Press (psia)	613.2509
48	Oil Vol Frac of Total Fluid (frac)	0.000E+00
49	Water Vol Frac of Total Fluid (frac)	0.000E+00
50	Gas Vol Frac of Total Fluid (frac)	N/A
51	Dissolved Gas/Oil Ratio (Scf/Stb oil)	N/A
52	Dissolved Gas/H2O Ratio (Scf/Stb H2O)	N/A
53	Free Gas/Liquid Ratio (Scf/STB Tot Liq)	N/A
54	Gas Gravity of Free Gas (dim)	N/A
55	Gas Gravity of Gas in Oil (dim)	N/A
56	Gas Gravity of Gas in H2O (dim)	N/A

SUPERIOR TESTERS ENTERPRISES INC.

GREAT BEND, KANSAS

SEMI-LOG ANALYSIS

(316) 792-6902

1ST SHUT-IN

State KANSAS

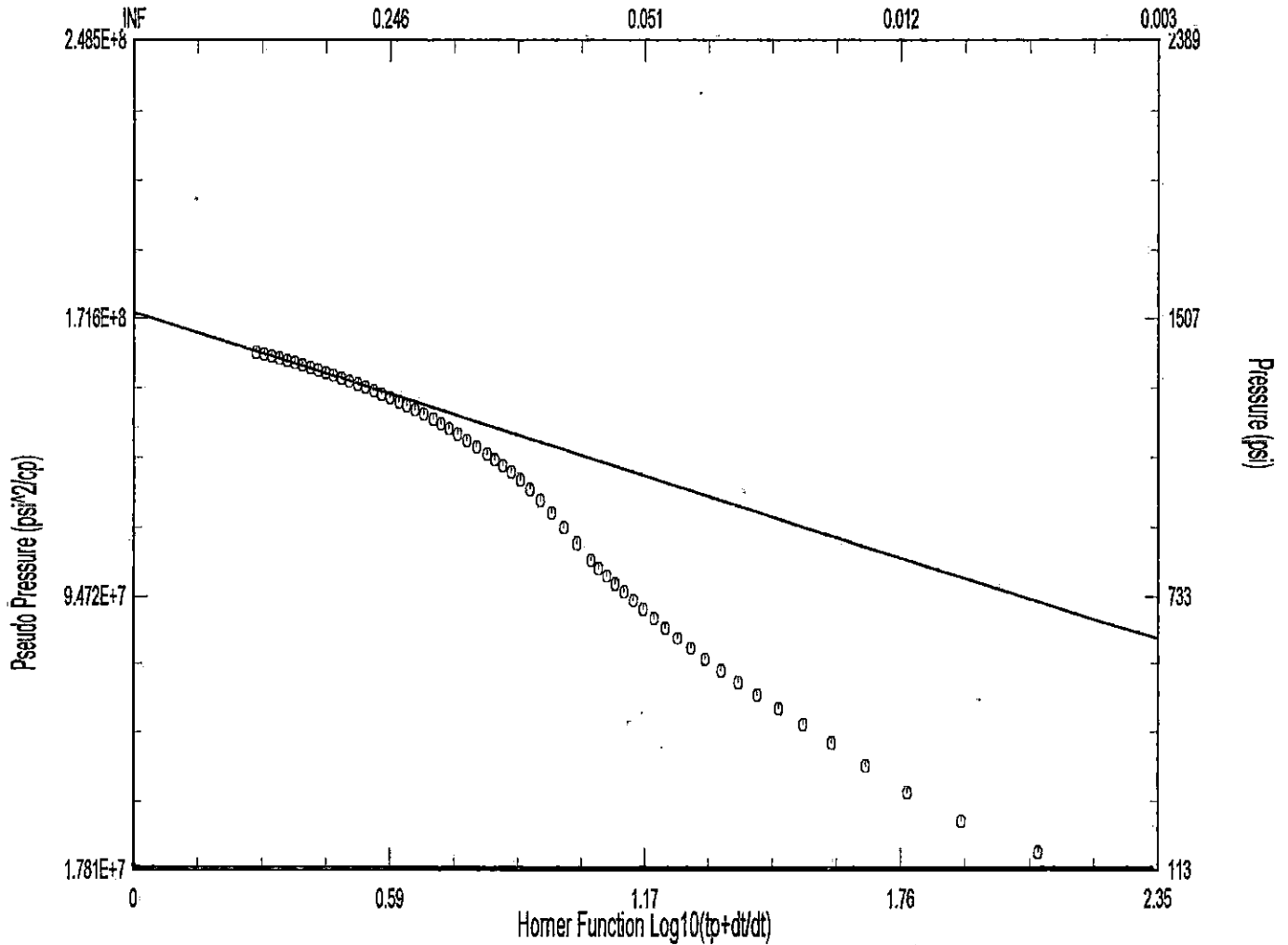
Test Date March 28, 1997

County PRATT

Sec Town Range S/W-S/W-N/W 21-29S-13W

Field

Report Number 11634



Constant Storage	Skin Model	Homogeneous $e = 0.70$ hrs	No Boundaries
C1 : 1.000 bbl/psi	Skin : 1.00E-6	k : 0.080 md	h : 12 ft
			μ : 0.018 cp
			ϕ : 0.18 %
			ct : 1.954E-04 1/psi
			rw : 3.208 ft

Field :
County or Parish :
State :

Date : 01-Apr-97 10:19:01
Analysis Period : END FLOW - 1ST SHUT-IN
Identifier : Line #

Superposition Slope -> m' N/A
Horner Slope -> m -3.857568E+7
Intercept 1.733E+8
P(dt=1 hr) 1.644E+8
Pwf 1.840E+7
R Sqr 0.9962

Intercept (psi) 1526.171
k (md) 0.27587
kh (md-ft) 3.31044
k/u (md/cp) 15.07485
kh/uB (md-ft/cp) 180.89821
Skin 2.7539
DP Skin 770.1357
Total DP 1410.1124
Percent DP 54.62%

Radius Invest (ft) 19
Radius Time (hrs) 0.79

Delta Q = 135
h (ft)= 12
mu (cp) = 0.0183
B (stb/scf) = 0.0017

First Point # 95
Second Point # 265
Start Real Time 0.282
End Real Time 0.792
Start SF Time 0.543

SUPERIOR TESTERS ENTERPRISES II

GREAT BEND, KANSAS

SEMI-LOG ANALYSIS

(316) 792-6902

2ND SHUT-IN

State KANSAS

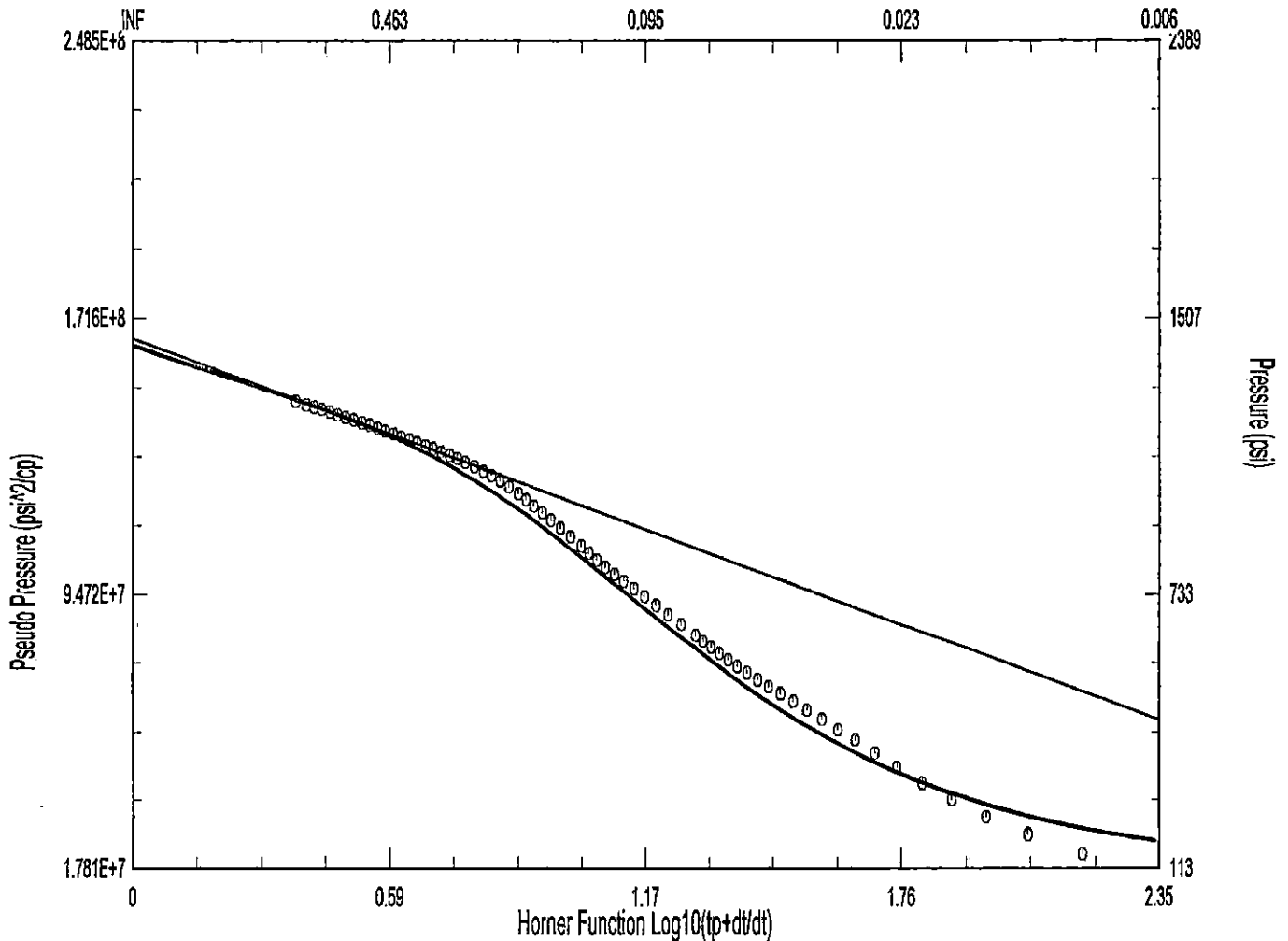
Test Date March 28, 1997

County PRATT

Sec Town Range S/W-S/W-N/W 21-29S-13W

Field

Report Number 11634



Constant Storage	Skin Model	$T_{FWL} = 1.33$ hrs	No Boundaries
C1 : 0.002 bbl/psi	Skin : 2.25	k : 0.274 md	h : 12 ft
			mu : 0.018 cp
			phi : 0.18 %
			ct : 1.954E-04 1/psi
			nw : 3.208 ft

Field :
County or Parish :
State :

Date : 01-Apr-97 10:07:46
Analysis Period : END FLOW - 2ND SHUT-IN
Identifier : Line #

Superposition Slope -> m' N/A
Horner Slope -> m -4.532176E+7
Intercept 1.661E+8
P(dt=1 hr) 1.495E+8
Pwf 1.781E+7
R Sqr 0.9952

Intercept (psi) 1445.281
k (md) 0.26710
kh (md-ft) 3.20525
k/u (md/cp) 14.59584
kh/uB (md-ft/cp) 175.15002
Skin 1.7571
DP Skin 539.0726
Total DP 1332.4725
Percent DP 40.46%

Radius Invest (ft) 21
Radius Time (hrs) 0.98

Delta Q = 153
h (ft)= 12
mu (cp) = 0.0183
B (stb/scf) = 0.0017

First Point # 72
Second Point # 300
Start Real Time 0.219
End Real Time 0.978
Start SF Time 0.848