

ORIGINAL

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- 095-211-651 21,651-0300

County Kingman

50'S SE SW Sec. 31 Twp. 27S Rge. 10 East West

610 Ft. North from Southeast Corner of Section

3300 Ft. West from Southeast Corner of Section
(NOTE: Locate well in section plat below.)

Lease Name Steffen Perdue Well # 1-31

Field Name Cunningham

Producing Formation _____

Elevation: Ground 1720 KB 1729

Total Depth 4160 PBTD _____

Operator: License # 30510

Name: Sunrise Operating Company

Address 8150 N. Central Expwy

Suite 645

City/State/Zip Dallas, TX 75206

Purchaser: N/A

Operator Contact Person: Ed Bittner

Phone (214) 696-6916

Contractor: Name: Sterling Drilling

License: 542

Wellsite Geologist: Steve McClain

Designate Type of Completion

New Well Re-Entry Workover

Oil SWD Temp. Abd.

Gas Inj Delayed Comp.

Dry Other (Core, Water Supply, etc.)

If OWM: old well info as follows:

Operator: _____

Well Name: _____

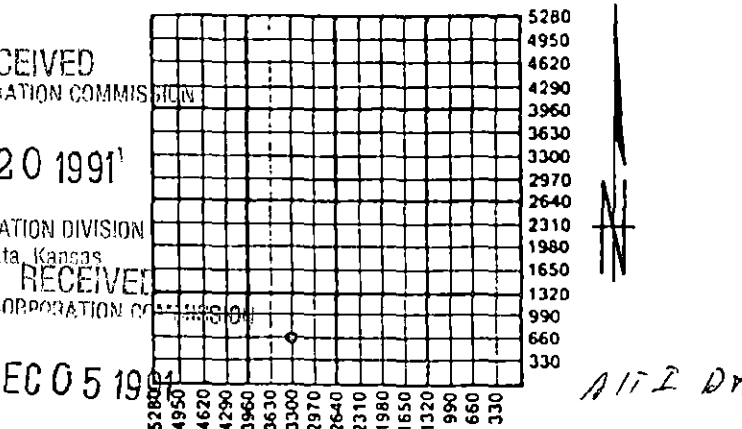
Comp. Date _____ Old Total Depth _____

Drilling Method:

Mud Rotary Air Rotary Cable

7/10/91 7/16/91 7/16/91

Spud Date Date Reached TD Completion Date



Amount of Surface Pipe Set and Cemented at 221 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.

INSTRUCTIONS: This form shall be completed in triplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date of any well. Rule 82-3-130, 82-3-107 and 82-3-106 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form. See rule 82-3-107 for confidentiality in excess of 12 months. One copy of all wireline logs and drillers time log shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells. Any recompletion, workover or conversion of a well requires filing of ACO-2 within 120 days from commencement date of such work.

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.

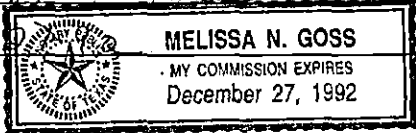
Signature Edwin H Bittner

Title President Date 11/14/91

Subscribed and sworn to before me this 14th day of November, 1991.

Notary Public Melissa N. Gooss

Date Commission Expires 12



K.C.C. OFFICE USE ONLY

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

Distribution

KCC SWD/Rep NGPA
 KGS Plug Other
(Specify)

SIDE TWO

Operator Name SUNRISE OPERATING COMPANY Lease Name STEFFEN PERDUE Well # 1-31
 Sec. 31 Twp. 275 Rge. 10 East County KINGMAN
 West

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 <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Attach Additional Sheets.) Samples Sent to Geological Survey <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Submit Copy.)	<p style="text-align: center;">Formation Description</p> <p><input checked="" type="checkbox"/> Log <input type="checkbox"/> Sample</p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Name</th> <th style="text-align: left;">Top</th> <th style="text-align: left;">Bottom</th> </tr> </thead> <tbody> <tr> <td>HEEBNER</td> <td>1643</td> <td></td> </tr> <tr> <td>LANSING</td> <td>1836</td> <td></td> </tr> <tr> <td>BKC</td> <td>3942</td> <td></td> </tr> <tr> <td>MISS CHERT</td> <td>4061</td> <td></td> </tr> <tr> <td>KINDERHOOK</td> <td>4120</td> <td></td> </tr> </tbody> </table>	Name	Top	Bottom	HEEBNER	1643		LANSING	1836		BKC	3942		MISS CHERT	4061		KINDERHOOK	4120	
Name	Top	Bottom																	
HEEBNER	1643																		
LANSING	1836																		
BKC	3942																		
MISS CHERT	4061																		
KINDERHOOK	4120																		

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	12 1/4	8 5/8	28	221	60-40 poz	200sx	2% gel 3%cc
PERFORATION RECORD				Acid, Fracture, Shot, Cement Squeeze Record			
Shots Per Foot	Specify Footage of Each Interval Perforated			(Amount and Kind of Material Used)			Depth
TUBING RECORD				Liner Run <input type="checkbox"/> Yes <input type="checkbox"/> No			
	Size	Set At	Packer At				
Date of First Production	Producing Method <input type="checkbox"/> Flowing <input 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		

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

METHOD OF COMPLETION

Open Hole Perforation Dually Completed Commingled

Other (Specify) _____

Production Interval _____

Superior Testers Enterprises, Inc.

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

(316) 792-6902

1729 K.B.

Date 1-15-1991 Location C-5E-SW 31-27-10W Elevation 1720 G.L. County KINGMAN

Company Sunrise Operating Company Inc. Number of Copies 5

Charts Mailed to 8150 North Central Expressway Suite 645 Dallas Texas 75204

Drilling Contractor Sterling Drilling Rig #2

Length Drill Pipe 3676 I.D. Drill Pipe 3.80 Tool Joint Size 4 1/2" X.H.

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

Length Drill Collars 364 I.D. Drill Collars 2.25 Tool Joint Size 4 1/2" X.H.

Top Packer Depth 4066 Bottom Packer Depth 4086 Number of Packers 2 Packer Size 6 3/4"

TESTED FROM 4066 TO 4086 ANCHOR LENGTH 20 TOTAL DEPTH 4160 Hole Size 7 7/8"

LEASE & WELL NO STEFFEN-PERDUE #1-31 FORMATION TESTED MISSISSIPPI TEST NO. 1

Mud Weight 9.9 Viscosity 45 Water Loss 12 Chlorides - Pits 8000 D.S.T. 34000

Maximum Temp. 126 °F Initial Hydrostatic Pressure (A) 2106 P.S.I. Final Hydrostatic Pressure (H) 2063 P.S.I.

Tool Open I.F.P. from 10:30 P.m to 11:00 P.m 30 min

Tool Closed I.C.I.P. from 11:00 P.m to 11:30 P.m 30 min

Tool Open F.F.P. from 11:30 P.m to 12:00 P.m 30 min

Tool Closed F.C.I.P. from 12:00 P.m to 2:00 P.m 120 min

Initial Blow WEAK blow built to 6 1/2 inches into the water

Final Blow VERY WEAK SURFACE blow through out

Total Feet Recovered 63 Gravity of Oil Corrected

300 Feet of GAS in the PIPE % Gas % Oil % Mud % Water

35 Feet of OIL cut muddy water 0 % Gas 5 % Oil 38 % Mud 47 % Water

30 Feet of Very slightly OIL cut muddy water 0 % Gas 1 % Oil 30 % Mud 69 % 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 YES Safety Joint YES Extra Packer NONE Straddle YES Hook Wall NONE

Top Recorder No. 906 Clock No. 13261 Depth 4073 Cir. Sub NONE Sampler NONE

Bottom Recorder No. 13561 Clock No. 47441 Depth 4078 Insurance NONE

Price of Job 4333 47442

Tool Operator Gene Rudy

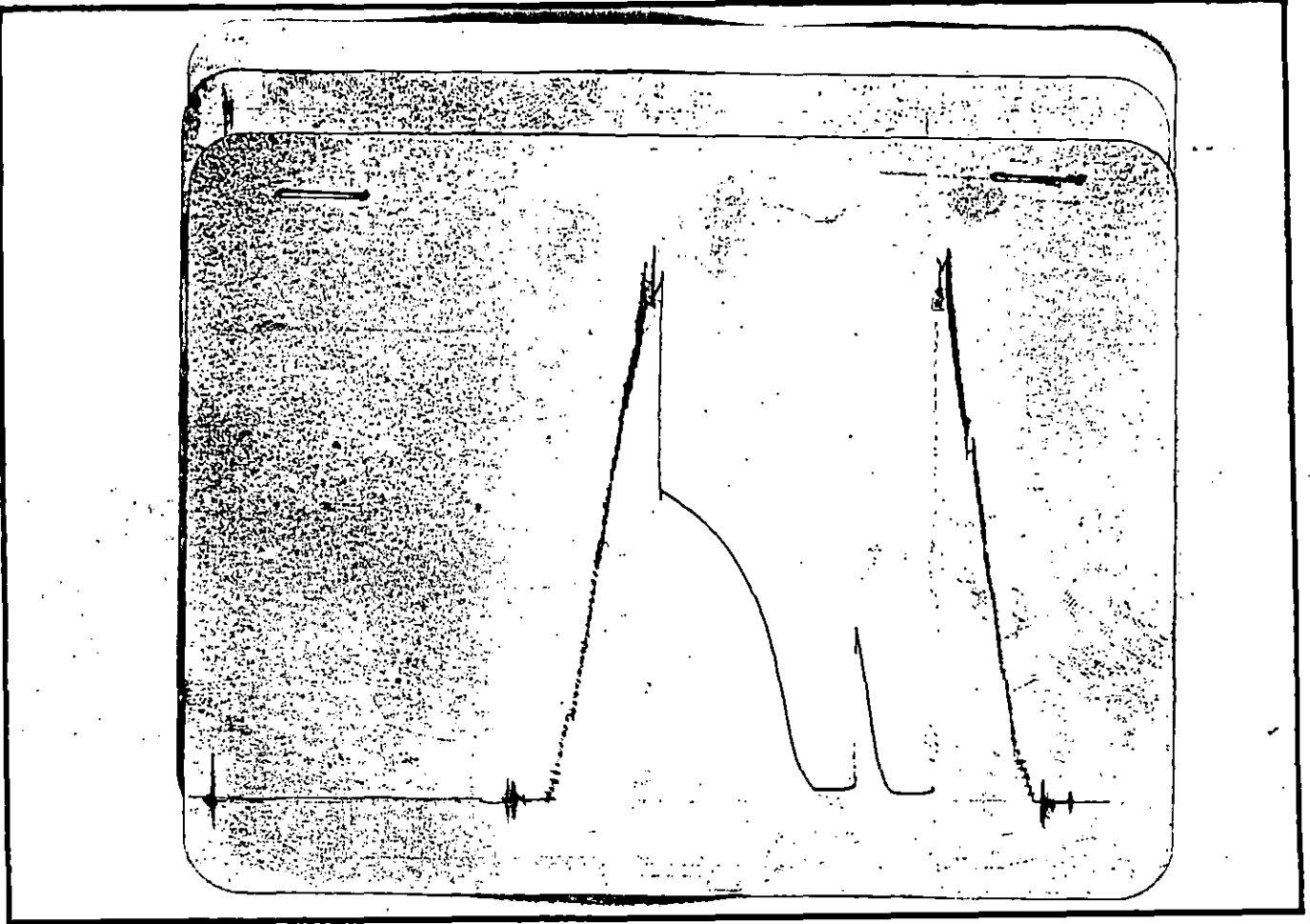
Approved By

No 10920

from [B]	43	P.S.I. to [C]	43	P.S.I.
[D]	689			P.S.I.
from [E]	65	P.S.I. to [F]	58	P.S.I.
[G]	1260			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, of 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.

ORIGINAL



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	FIELD READING	OFFICE READING	
(A) Initial Hydrostatic Mud	2106	2099	P.S.I.
(B) First Initial Flow Pressure	43	33	P.S.I.
(C) First Final Flow Pressure	43	25	P.S.I.
(D) Initial Closed-in Pressure	689	683	P.S.I.
(E) Second Initial Flow Pressure	65	47	P.S.I.
(F) Second Final Flow Pressure	58	36	P.S.I.
(G) Final Closed-in Pressure	1260	1230	P.S.I.
(H) Final Hydrostatic Mud	2063	2015	P.S.I.

COMPANY Sunrise Operating LEASE-WELL NO Steffen-Perdue#1-880 31 TWP 27S RGE. 10W TEST NO. 1 DATE _____

ORIGINAL

SUPERIOR TESTERS ENTERPRISES INC.

WELL IDENTIFICATION DATA

COMPANY : SUNRISE OPERATING COMPANY WELL NAME : STEFFEN-PERDUE #1-31
ADDRESS : 8150 N.CEN.EXP.WAY,DALLAS LOCATION : C-SE-SW 31-27S-10W
STATE & COUNTY : KANSAS,KINGMAN FIELD :
ELEV.(GR) : 1720 (KB) : 1729 TEST DATE : 1-15-1991

EQUIPMENT AND HOLE DATA

FORMATION TESTED : MISSISSIPPI	DRILL PIPE LENGTH(ft) : 3676
TEST INT. KB : 4066 to 4086	DRILL PIPE O.D.(in) : 3.82
ANCHOR LENGTH(ft) : 20	WEIGHT PIPE LENGTH(ft) :
TYPE OF TEST : Conventional	WEIGHT PIPE ID : 2.75
TOTAL DEPTH(ft-kb) : 4160	DRILL COLLAR LENGTH(ft) : 364
MAIN HOLE SIZE(in) : 7 7/8	DRILL COLLAR I.D.(in) : 2.259
MUD WEIGHT : 9.5	TOP PACKER DEPTH(kb) : 4066
MUD VISCOSITY : 45	BOTTOM PACKER DEPTH(kb) : 4086
MUD CHLORIDES : 8000	DUAL PACKERS :
SURFACE CHOKE : 3/4	PACKER SIZE(in) : 6 3/4
BOTTOM CHOKE(in) : 3/4	PACKER HOLD : Yes
TOOL SIZE(O.D.) : 5 1/2	TOOL PLUG : No
TOOL JOINT SIZE(F.H.) : 4 1/2	REVERSED OUT : No
RESERVOIR TEMPERATURE(F) : 126	TEST TICKET NUMBER : 11920

EXTRA EQUIPMENT : -JARS -SAFETY JOINT
-STRADDLE

ELEMENT SERIAL NO. : 906
RANGE : 0 - 2875 CLOCK RANGE : 12 HOURS
CAL. EQU. : 720.06 * Defl. + 3.83

SURFACE BLOW

1st Opening : WEAK BLOW BUILT TO 6 1/2 INCHES INTO THE WATER
2nd Opening : VERY WEAK SURFACE BLOW THROUGH OUT

RECOVERY

Recovered 300 feet of GAS IN THE PIPE
Recovered 35 feet of OIL CUT MUDDY WATER
Recovered 30 feet of VERY SLIGHTLY OIL CUT MUDDY WATER

REMARKS :

WITNESSED BY : STEVE McCLAIN TOOL OPERATOR : GENE BUDIG

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES INC.

ORIGINAL

SUPERIOR TESTERS ENTERPRISES INC.

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY : SUNRISE OPERATING COMPANY WELL NAME : STEFFEN-PERDUE #1-31
 DATE OF TEST : 1-15-1991 LOCATION : C-SE-SW 31-27S-10W
 DEPTH : 4073.0 SERIAL NO. : 906

COMMENTS	TIME min	DEFL in	PRESSURE PSIG		
			----- CALC	CORR	----- CORRECTED
TEST NO.:1					
Depth : 4073.0 ft-kb					
- 0:00	0.0	.911	659.80	1.30	661.10
-1ST HYDROSTATIC	0.0	2.911	2099.92	-.06	2099.86
-10:30 1ST FLOW	0.0	.046	36.96	-3.57	33.38
- 10:35	5.0	.037	30.47	-3.62	26.85
- 10:40	10.0	.028	23.99	-3.68	20.32
- 10:45	15.0	.028	23.99	-3.68	20.32
- 10:50	20.0	.028	23.99	-3.68	20.32
- 10:55	25.0	.028	23.99	-3.68	20.32
- 11:00	30.0	.035	29.03	-3.64	25.40
-11:00 END FLOW	0.0	.035	29.03	-3.64	25.40
- 11:03	3.0	.053	42.00	-3.53	38.46
- 11:06	6.0	.096	72.96	-3.29	69.67
- 11:09	9.0	.154	114.72	-2.97	111.76
- 11:12	12.0	.242	178.09	-2.47	175.62
- 11:15	15.0	.353	258.01	-1.84	256.17
- 11:18	18.0	.493	358.82	-1.06	357.76
- 11:21	21.0	.633	459.63	-.27	459.36
- 11:24	24.0	.759	550.36	.44	550.80
- 11:27	27.0	.874	633.16	1.09	634.25
- 11:30	30.0	.942	682.13	1.47	683.60
- 11:00	0.0	.942	682.13	1.47	683.60
- 11:00	0.0	.942	682.13	1.47	683.60
-11:30 1ST SHUT-IN	0.0	.942	682.13	1.47	683.60
-11:30 2ND FLOW	0.0	.065	50.64	-3.47	47.17
- 11:35	5.0	.056	44.16	-3.52	40.64
- 11:40	10.0	.051	40.56	-3.55	37.01
- 11:45	15.0	.050	39.84	-3.55	36.28
- 11:50	20.0	.050	39.84	-3.55	36.28
- 11:55	25.0	.050	39.84	-3.55	36.28
- 12:00	30.0	.050	39.84	-3.55	36.28
-12:00 END FLOW	0.0	.050	39.84	-3.55	36.28
- 12:03	3.0	.065	50.64	-3.47	47.17
- 12:06	6.0	.095	72.24	-3.30	68.94
- 12:09	9.0	.131	98.16	-3.09	95.07
- 12:12	12.0	.182	134.88	-2.81	132.08
- 12:15	15.0	.240	176.65	-2.48	174.17
- 12:18	18.0	.317	232.09	-2.05	230.04
- 12:21	21.0	.412	300.50	-1.51	298.98
- 12:24	24.0	.517	376.10	-.92	375.18
- 12:27	27.0	.624	453.15	-.32	452.83

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SUPERIOR TESTERS ENTERPRISES INC.

SUBSURFACE PRESSURE MEASUREMENTS

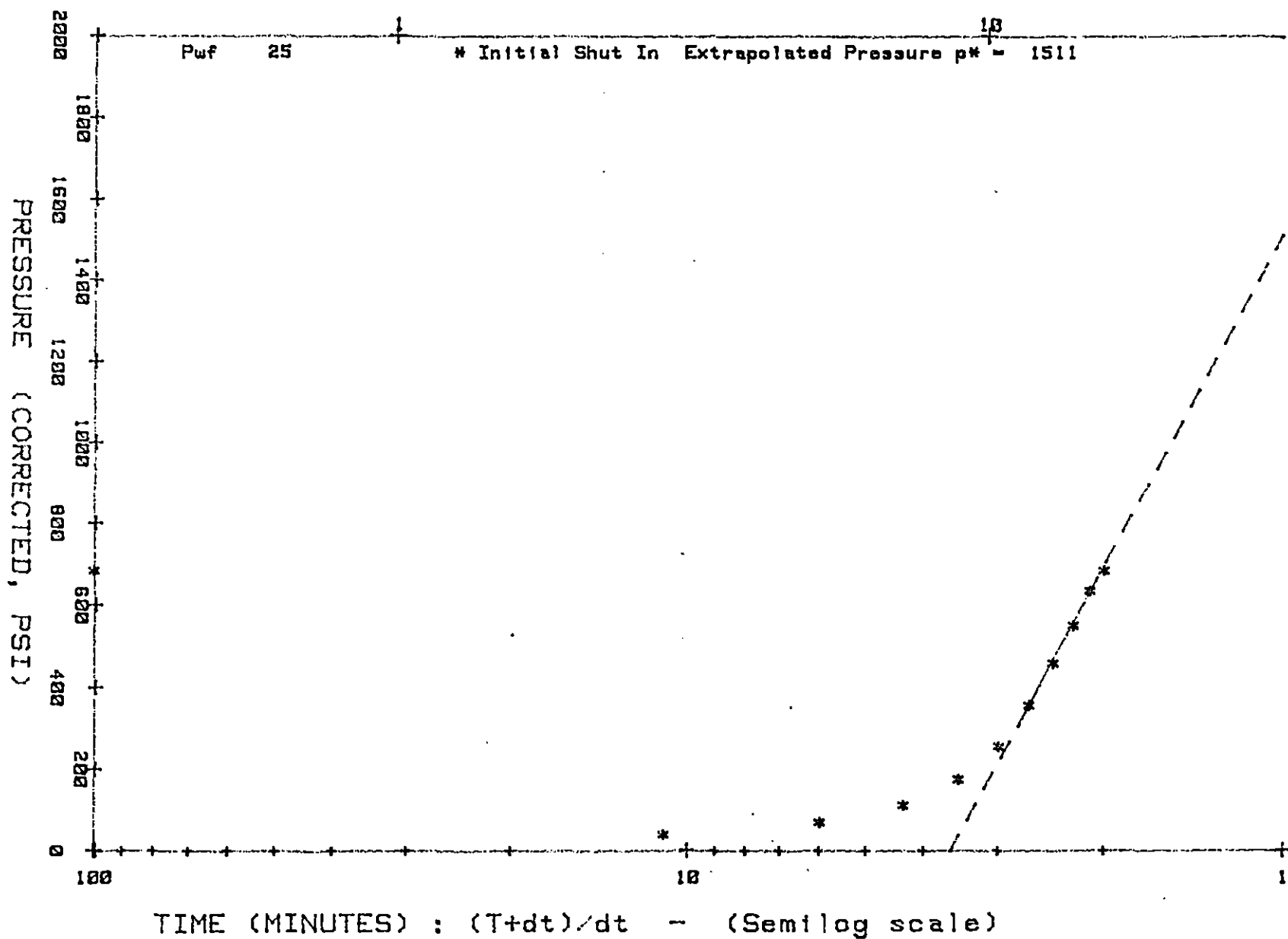
COMPANY : SUNRISE OPERATING COMPANY WELL NAME : STEFFEN-PERDUE #1-31
 DATE OF TEST : 1-15-1991 LOCATION : C-SE-SW 31-27S-10W
 DEPTH : 4073.0 SERIAL NO. : 906

COMMENTS	TIME min	DEFL in	PRESSURE PSIG		
			----- CALC	CORR	----- CORRECTED
TEST NO.: 1					
- 12:30	30.0	.724	525.15	.25	525.40
- 12:33	33.0	.824	597.16	.81	597.97
- 12:36	36.0	.887	642.52	1.16	643.69
- 12:39	39.0	.964	697.97	1.60	699.56
- 12:42	42.0	1.014	733.97	1.88	735.85
- 12:45	45.0	1.078	780.05	2.24	782.29
- 12:48	48.0	1.118	808.86	2.47	811.32
- 12:51	51.0	1.163	841.26	2.72	843.98
- 12:54	54.0	1.208	873.66	2.97	876.63
- 12:57	57.0	1.248	902.46	3.20	905.66
- 13:00	60.0	1.284	928.38	3.40	931.79
- 13:03	63.0	1.316	951.43	3.58	955.01
- 13:06	66.0	1.351	976.63	3.78	980.41
- 13:09	69.0	1.382	998.95	3.92	1002.87
- 13:12	72.0	1.409	1018.39	3.88	1022.27
- 13:15	75.0	1.433	1035.67	3.84	1039.51
- 13:18	78.0	1.458	1053.67	3.80	1057.47
- 13:21	81.0	1.481	1070.24	3.76	1073.99
- 13:24	84.0	1.500	1083.92	3.73	1087.64
- 13:27	87.0	1.521	1099.04	3.69	1102.73
- 13:30	90.0	1.542	1114.16	3.66	1117.82
- 13:33	93.0	1.560	1127.12	3.63	1130.75
- 13:36	96.0	1.577	1139.36	3.60	1142.96
- 13:39	99.0	1.593	1150.88	3.57	1154.45
- 13:42	102.0	1.608	1161.68	3.55	1165.23
- 13:45	105.0	1.626	1174.64	3.52	1178.16
- 13:48	108.0	1.637	1182.56	3.50	1186.06
- 13:51	111.0	1.655	1195.53	3.47	1198.99
- 13:54	114.0	1.670	1206.33	3.44	1209.77
- 13:57	117.0	1.684	1216.41	3.42	1219.83
- 14:00	120.0	1.698	1226.49	3.40	1229.89
-2:00 2ND SHUT-IN	0.0	1.699	1227.21	3.40	1230.60
-2ND HYDROSTATIC	0.0	2.794	2015.67	.14	2015.80

LOCATION : C-SE-SW 31-27S-10W

DATE : 1-15-1991

GAUGE # : 906



ORIGINAL

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SUPERIOR TESTERS ENTERPRISES INC.

HORNER ANALYSIS

COMPANY : SUNRISE OPERATING COMPANY
WELL NAME : STEFFEN-FERDUE #1-31
LOCATION : C-SE-SW 31-27S-10W
STATE & COUNTY : KANSAS, KINGMAN
DATE OF TEST : 1-15-1991
TEST INT. KB : 4066 to 4086
TOTAL INTERVAL (ft) K.B. : 20.00
ELEV. (GR) : 1720 (KB) : 1729
FIELD :

ELEMENT SERIAL NO. : 906
LATEST CALIBRATION :

COMMENTS	TIME min	(T+dt)/dt min	----- PRESSURES CORR PSIG	-----
Refer. depth :	4073.0 ft-kb			
-11:00 END FLOW	0.00	0.00	25.40	
	3.00	11.00	38.46	
	6.00	6.00	69.67	
	9.00	4.33	111.76	
	12.00	3.50	175.62	
	15.00	3.00	256.17	
	18.00	2.67	357.76	
	21.00	2.43	459.36	
	24.00	2.25	550.80	
	27.00	2.11	634.25	
	30.00	2.00	683.60	
	0.00	0.00	683.60	
	0.00	0.00	683.60	
-11:30 1ST SHUT-IN	0.00	0.00	683.60	

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

ORIGINAL

SUPERIOR TESTERS ENTERPRISES INC.

DATA SUMMARY

COMPANY : SUNRISE OPERATING COMPANY WELL NAME : STEFFEN-PERDUE #1-31
DATE OF TEST : 1-15-1991 LOCATION : C-SE-SW 31-27S-10W
DST. NO : 1 SHUT-IN PERIOD : 1

INTERPRETIVE DATA (OIL)

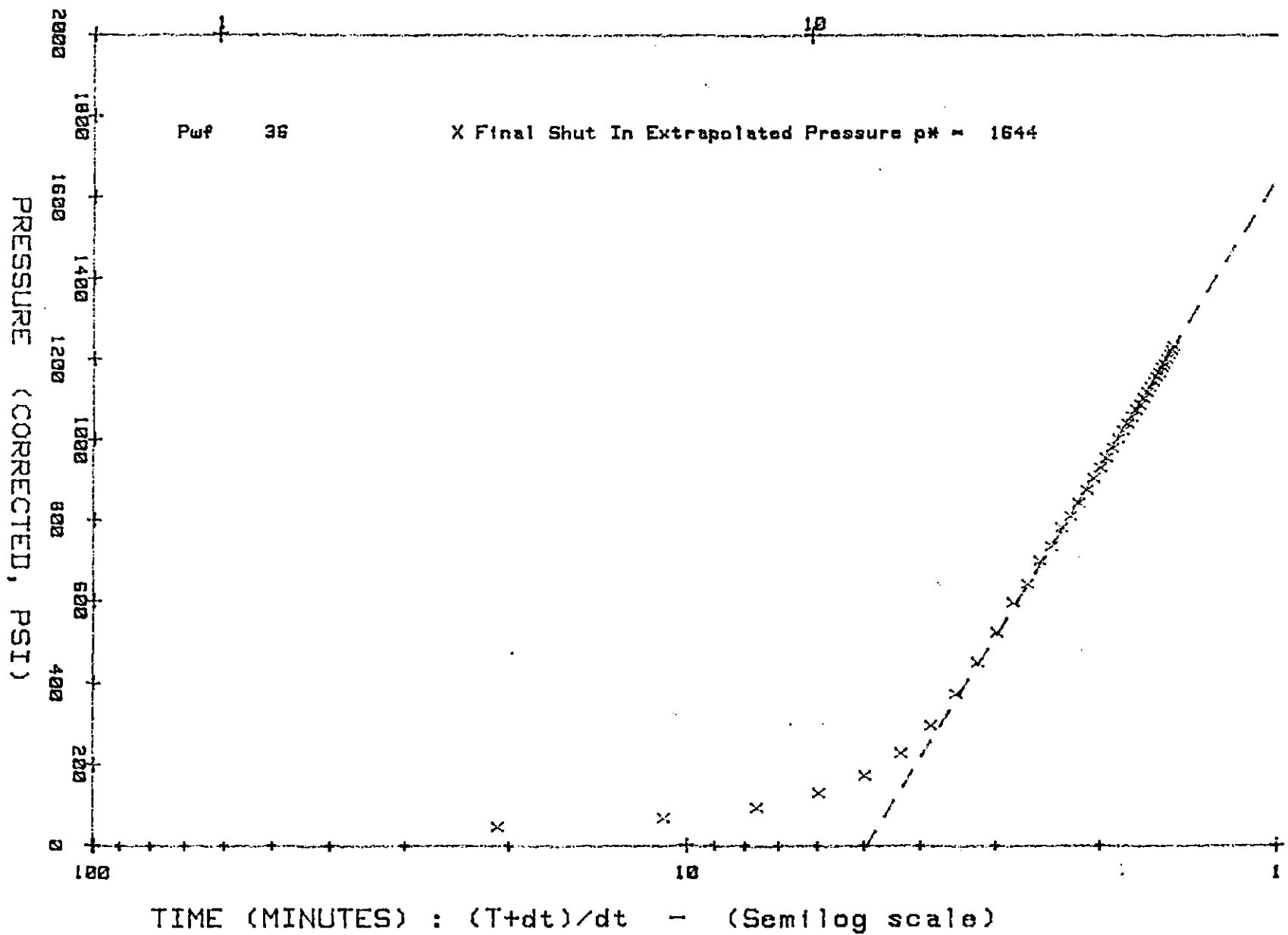
EXTRAPOLATED RESERVOIR PRESSURE (psi):	1511.00
Slope of Build-up Curve (psi/log cycle):	2718.68
Effective Producing Time (min):	30.00

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

LOCATION : C-SE-SW 31-275-10W

DATE : 1-15-1991

GAUGE # : 906



ORIGINAL

HORNER ANALYSIS

COMPANY : SUNRISE OPERATING COMPANY
 WELL NAME : STEFFEN-PERDUE #1-31
 LOCATION : C-SE-SW 31-27S-10W
 STATE & COUNTY : KANSAS, KINGMAN
 DATE OF TEST : 1-15-1991
 TEST INT. KB : 4066 to 4086
 TOTAL INTERVAL (ft) K.B. : 20.00
 ELEV.(GR) : 1720 (KB) : 1729
 FIELD :

ELEMENT SERIAL NO. : 906
 LATEST CALIBRATION :

COMMENTS	TIME min	(T+dt)/dt min	----- PRESSURES CORR PSIG -----
Refer. depth :	4073.0 ft-kb		
-12:00 END FLOW	0.00	0.00	36.28
	3.00	21.00	47.17
	6.00	11.00	68.94
	9.00	7.67	95.07
	12.00	6.00	132.08
	15.00	5.00	174.17
	18.00	4.33	230.04
	21.00	3.86	298.98
	24.00	3.50	375.18
	27.00	3.22	452.83
	30.00	3.00	525.40
	33.00	2.82	597.97
	36.00	2.67	643.69
	39.00	2.54	699.56
	42.00	2.43	735.85
	45.00	2.33	782.29
	48.00	2.25	811.32
	51.00	2.18	843.98
	54.00	2.11	876.63
	57.00	2.05	905.66
	60.00	2.00	931.79
	63.00	1.95	955.01
	66.00	1.91	980.41
	69.00	1.87	1002.90
	72.00	1.83	1022.50
	75.00	1.80	1039.91
	78.00	1.77	1058.06
	81.00	1.74	1074.75
	84.00	1.71	1088.53
	87.00	1.69	1103.77

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

ORIGINAL

SUPERIOR TESTERS ENTERPRISES INC.

HORNER ANALYSIS

COMPANY : SUNRISE OPERATING COMPANY WELL NAME : STEFFEN-PERDUE #1-31
DATE OF TEST : 1-15-1991 LOCATION : C-SE-SW 31-27S-10W
REFERENCE DEPTH : 4073.0 SERIAL NO. : 906

COMMENTS	TIME min	(T+dt)/dt min	----- PRESSURES CORR PSIG	-----
	90.00	1.67	1119.01	
	93.00	1.65	1132.08	
	96.00	1.63	1144.41	
	99.00	1.61	1156.02	
	102.00	1.59	1166.91	
	105.00	1.57	1179.97	
	108.00	1.56	1187.95	
	111.00	1.54	1201.02	
	114.00	1.53	1211.90	
	117.00	1.51	1222.06	
	120.00	1.50	1232.22	
-2:00 2ND SHUT-IN	0.00	0.00	1232.95	

ORIGINAL

SUPERIOR TESTERS ENTERPRISES INC.

DATA SUMMARY

COMPANY : SUNRISE OPERATING COMPANY WELL NAME : STEFFEN-PERDUE #1-31
DATE OF TEST : 1-15-1991 LOCATION : C-SE-SW 31-27S-10W
DST. NO : 1 SHUT-IN PERIOD : 2

INTERPRETIVE DATA (OIL)

TRANSMISSIBILITY

Oil (md.ft/cp):02
Gas (md.ft/cp): 0.00

EFFECTIVE PERMEABILITY

Oil (md): 0.00
Gas (md): 0.00

TOTAL MOBILITY (md/cp): 0.00

TOTAL COMPRESSIBILITY (psi⁻¹): 7.09E-06

ESTIMATED DAMAGE RATIO:15

CALCULATED DAMAGE RATIO:79

Reservoir Temperature (F): 126.00

Formation Porosity :18

Formation Thickness (ft): 10.00

Wellbore Radius (in): 3.94

Reservoir Compressibility (psi⁻¹): 4.80E-07

Calculated Skin Factor : -.21

PRODUCTION WITH DAMAGE REMOVED (bbl/D):25

PRODUCTIVITY INDEX (bbl/psi): 0.00

Final Flow Pressure (psi): 36.00

APPROXIMATE RADIUS OF INVESTIGATION (ft): 1.18

Total Flowing Time (min): 60.00

EXTRAPOLATED RESERVOIR PRESSURE (psi): 1644.00

Slope of Build-up Curve (psi/log cycle): 2368.36

Effective Producing Time (min): 60.00

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.