

ACID ENGINEERS, Inc.

TREATMENT REPORT

Invoice No. 14927 Station Great Bend, Kansas Date August 9, 19 68

Owner Glen Rupe Lease Taylor Well No. 1

Pool _____ County Edwards State Kansas

Loc. 14-26-19 Formation Mississippi

Pipe Data—

T.D. 4735 P.B. _____
Csg. Size 5½" Wt. 14#
Csg. Depth 4725 Sks. Cement _____
Tbg. Size 2" EUE Depth 4734
Packer Type _____ Annulus Vol. 90 bbl.
Csg. Vol. _____ Tbg. Vol. 18 bbl.

Perforating Data—

Shots/Ft. Sand Jet w/4 ports
From 4729 To 4734
From _____ To _____
From _____ To _____
From _____ To _____

Production—

Oil _____ Water _____
Present _____
Previous Treatments _____

Detailed Record of Treatment

Materials Used

Quan.	Type	Quan.	Type
6,500 lbs.	R-20/40 Sand		
jet tool w/4 ports			
5 gallon	C-20 Foaming Agent		

Fluids Used

Acid
Breakdown
Frac
Flush

Time	Pressure	Tbg.	Bbls. of Fluid	Out of Tanks	In Form.	Inj. Rate	Remarks
7:45PM	0	0	20				break circulation, stop pumps
8:29	0	0	40				drop ball
8:38	000	2700	40				ball seated, stop pump, repair pump
8:49	0						start pump
8:50		3100					
8:51		3100	50				start sand
8:54	1300	3100	70		5		sand at ports, begin reciprocating tubing
8:58	1300	3100	90		5		stop one pump, start flush
8:59	0	2300					
9:04		2300	108				tubing flush, stop pump
9:06	0	0					begin pumping down annulus to clean hole
9:07	1000						
9:31	600	0	220				hole clean, stop pump, shut down for night.

Arrival Date 8-9-68 Time 7:15PM Left Location: Date 8-10-68 Time 7:45PM Round Trip Miles 120
(See Reverse Side for Additional Treatment Remarks)

Equipment Used

Name	Unit No.	Name	Unit No.
G. Gray	31146-228		
Harris	125340		
Voth	117 330		
Kohart			
Aumiller	392		

(OVER)

Treatment Resume

Avg. Inj. Rate	<u>5</u>	BPM
Avg. Trt. Press.	<u>3150</u>	jet job <u>1150</u> psi
Hydraulic HP Used	<u>387</u>	
Total Fluid Pumped	<u>load 108 bbl.</u>	
Maximum Pressure	<u>3,150</u>	psi
Minimum Pressure		psi
I. S. I. P.		psi

Mr. Rupe
Owner's Representative

J. D. Strunk
Station Manager

Don Aumiller
Service Engineer

DON YAMATTER

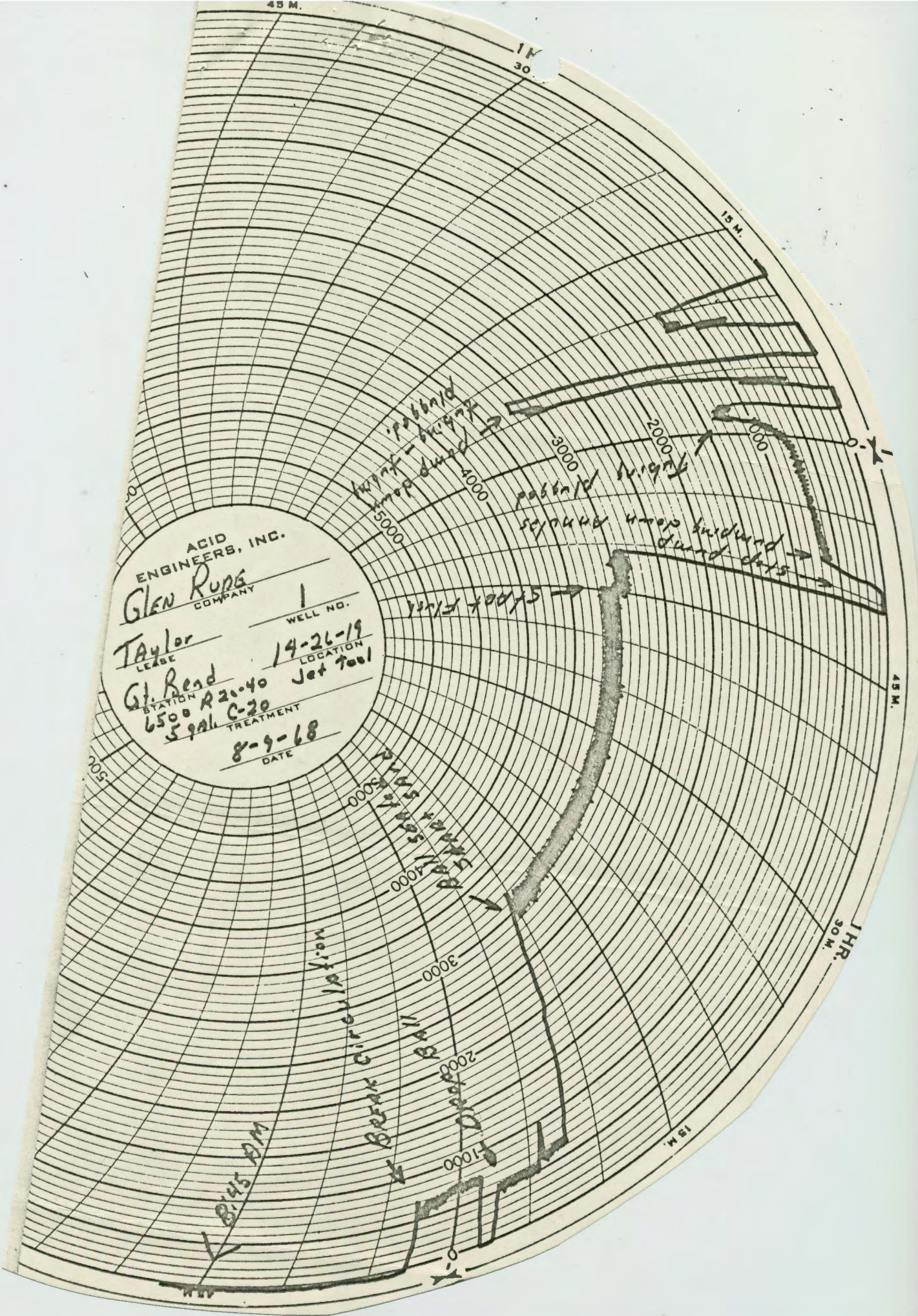
(Treatment Schedule)

Time	Pressure		Out of Tanks	Bbls. of Fluid		Inj. Rate	Remarks
	Csg.	Tbg.		In Form.			
8-10-68			220				break circulation
9:02AM			240				drop ball
9:09		3150	260				start sand
9:13		3150	280		5		sand at ports, begin moving tubing
9:45		3150	440		5		stop sand
9:49		2900	460				tubing flushed, stop pump
9:51	0	0					start pumping down annulus to clean hole
9:52	700						
10:00	800						
10:02	1400	0	515				stop pump, tubing plugged
10:04	0						start pump down tubing
10:05		3200					stop pump
10:06		3200					bleed pressure
10:07	0	0					start pump down annulus
10:08	1300				2		stop pump
10:10	1300		520		2		bleed pressure, round trip tubing
5:49PM	0	0					start pumping down annulus, are 5 joints of bottom
7:05	900		720				hole clean to T.D., C-20 on formation
7:15	0	0					start pump, tubing closed in
7:16	1100						stop pump
7:19	1150						formation not broke down, complete.
							total load to recover - 108 bbls.

			Ejnar
g d'etion C-30 Eosmru ydery			Liac
ler root w/4 boxes			Bredkdown
e'300 yrs. K-30/40 gaud			Vcid
Glan	Jabe	Odan	Jabe

ACID ENGINEERS, INC.

ACID
 ENGINEERS, INC.
 GLEN RUGG
 COMPANY
 WELL NO. 1
 LEASE Taylor
 LOCATION 14-26-19
 STATION 6500 R20-40 Jet Tool
 TREATMENT 5 gal. C-20
 DATE 8-9-68



TREATMENT REPORT
Great Bend, Kansas

68

Loc. 14-26-19 Formation Mississippi

Production.—

T.D. 4735	P.B. _____	Shots/Ft. _____	Oil _____	Water _____
Csg. Size 5½"	Wt. 14#	From _____ To _____	Present _____	
Csg. Depth 4725	Sks. Cement _____	From _____ To _____	Previous Treatments	
Tbg. Size 2" EUE	Depth 4733	From _____ To _____	Squeezed & notched.	
Packer Type _____	Annulus Vol. 90 bbl.	From _____ To _____		
Csg. Vol. _____	Tbg. Vol. 18 bbl.	From _____ To _____		

Open Hole slotted from 4729-4734

Materials Used

Quan.	Type	Quan.	Type
250 gallon SME	15% Acid		

Fluids Used

Acid	6 bbls.
Breakdown	
Frac	
Flush	6 bbls.

Time	Pressure		Bbls. of Fluid			Remarks
	Csg.	Tbg.	Out of Tanks	In Form.	Inj. Rate	
7:05	0	0	108			load hole with water
7:07			114			hole loaded, start acid down tubing
7:17			132			acid in, start tubing flush
7:19	0	0				acid in annulus, stop pump
7:21	250	250				start flush down annulus
7:21½	100	100				stop pump
7:22	400	400				start pump
7:23	0	0				stop pump
7:23½	500	500				start pump
7:24	300	300				stop pump
7:27	475	475				start pump
7:30	550	550	133	1	8 gal.	formation feeding
7:35	575	575	135	2	8 gal.	
7:45	550	550	136	3	8 gal.	speed pump slightly.

Arrival Date 8-12-68 Time 6:00 PM Left Location: Date 8-12-68 Time 8:30 PM Round Trip Miles 125

(See Reverse Side for Additional Treatment Remarks)

8:00 0 5 (OVER) Pressing glob

5:20	\$20	Equipment Used	Typhoon 650000 and	Treatment Resume
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Equipment Used

Treatment Resume

Name	Unit No.	Name	Unit No.
Kohart	144		
Aumiller	392		

Avg. Inj. Rate	2 gal. per min	BPM
Avg. Trt. Press.	600	psi
Hydraulic HP Used		
Total Fluid Pumped	139 bbls.	
Maximum Pressure	700	psi
Minimum Pressure	250	psi
I. S. I. P.	700	psi

Mr. Rupe

J. D. Strunk

Don Aumiller

Owner's Representative

Station Manager

Service Engineer

(Treatment Schedule)

Time	Pressure		Bbls. of Fluid		Inj. Rate	Remarks
	Csg.	Tbg.	Out of Tanks	In Form.		
7:47	650	650				1215 300 bbl
7:50	650	650	325			Remarks 320 bbl
7:55	700	700	144			Maximum Pressure 300 bbl
7:58	700	700	139	6	9 gal.	Total Fluid Pumped 139 bbls
7:59	250					Hydraulic HB Used
8:00	0					Valve in Press 900 bbl
8:01	vac					1 minute pressure drop
						2 minute pressure drop
						3 minute pressure drop.
Annular Date 8-13-68 Time 8:00 PM Well Location: Date 8-13-68 Time 8:30 PM Bottom Hole Miles 132						
1:42	220	220	138	3	8 gal.	8 gal. 8000 bbls attached
1:32	232	232	132	3	8 gal.	
1:30	220	220	133	1	8 gal.	
1:21	232	232				formation feeding
1:24	300	300				start bmb
1:23	200	200				start bmb
1:23	0	0				start bmb
1:25	400	400				start bmb
1:27	100	100				start bmb
1:27	320	320				start bmb
1:12	0	0				start filter down annulus
1:11			135			start to annulus, start bmb
1:01			114			start to, start during filter
1:02	0	0	108			note loaded, start start down during
						load note with water
						Remarks
						Filter 6 bbls.
						Flow
						Breakdown
						Acid 6 bbls.
						Fluids Used

Materials Used

Open Hole Stopped from 4132-4134

Csg. Vol. 18 bbl. From 10

Backer Type Annular Vol. 20 bbl. From 10

Top Size 2" ENE Depth 4133 From 10

Csg. Depth 4132 Csg. Cement From 10

Csg. Size 2 1/2" Wt. 14# From 10

LD 4132 PB Spuds/ft. 2000/ft.

Performance Data

Production

Oil

Water

ACID ENGINEERS, Inc.

TREATMENT REPORT

Invoice No. 14932 Station Great Bend, Kansas Date August 14, 19 68

Owner Glen Rupe Lease Taylor Well No. 1

Pool WC County Edwards State Kansas

Loc. 14-26-19W Formation Mississippi

Pipe Data—

T.D. 4735 P.B. _____
Csg. Size 5½" Wt. 14#
Csg. Depth 4725 Sks. Cement _____
Tbg. Size 2" EUE Depth 4727
Packer Type _____ Annulus Vol. 90 bbl.
Csg. Vol. _____ Tbg. Vol. 18 bbl.

Perforating Data—

Shots/Ft. _____
From _____ To _____
From _____ To _____
From _____ To _____
From _____ To _____

Production—

Oil _____ Water _____

Present _____

Previous Treatments

250 gallon SME 15%

Acid.

Open Hole slotted from 4729-4734

Detailed Record of Treatment

Materials Used

Quan.	Type	Quan.	Type
500 gallon	S-7½% Acid		
3 gallon	D-10		

Fluids Used

Acid	12 bbl.
Breakdown	
Frac	
Flush water	116 bbl.

Time	Pressure Csg.	Pressure Tbg.	Bbls. of Fluid Out of Tanks	Bbls. of Fluid In Form.	Inj. Rate	Remarks
5:02PM	300	0	0	0		start acid down annulus
5:20	700	2000				
5:28	1100	2000	102	0		stop pump, all acid in tubing
5:30	700	1800				start flush down tubing
5:35	675	1850				
5:41	1200	2000	108			acid on formation
5:45	1400	2000	110	2		
5:50	1400	1800	115	7	1	speed pump, pressure break
5:52	1450	1850				
5:55	1550	1550				
5:57	1550	1600	128	20	1.86	flush in, treatment complete immediate shut in pressure
6:00	400	400				
6:05	0	0				

Arrival Date 8-14-68 Time 3:45PM Left Location: Date 8-14-68 Time 6:45PM Round Trip Miles 120

(See Reverse Side for Additional Treatment Remarks)

6:07 vac vac

Equipment Used

Name	Unit No.	Name	Unit No.
Kohart	141		
Aumiller	392		

Treatment Resume

Avg. Inj. Rate	<u>1½</u>	BPM
Avg. Trt. Press.	<u>1,400</u>	psi
Hydraulic HP Used		
Total Fluid Pumped	<u>128 bbl.</u>	
Maximum Pressure	<u>2,000</u>	psi
Minimum Pressure	<u>300</u>	psi
I. S. I. P.	<u>1,100</u>	psi

Mr. Rupe

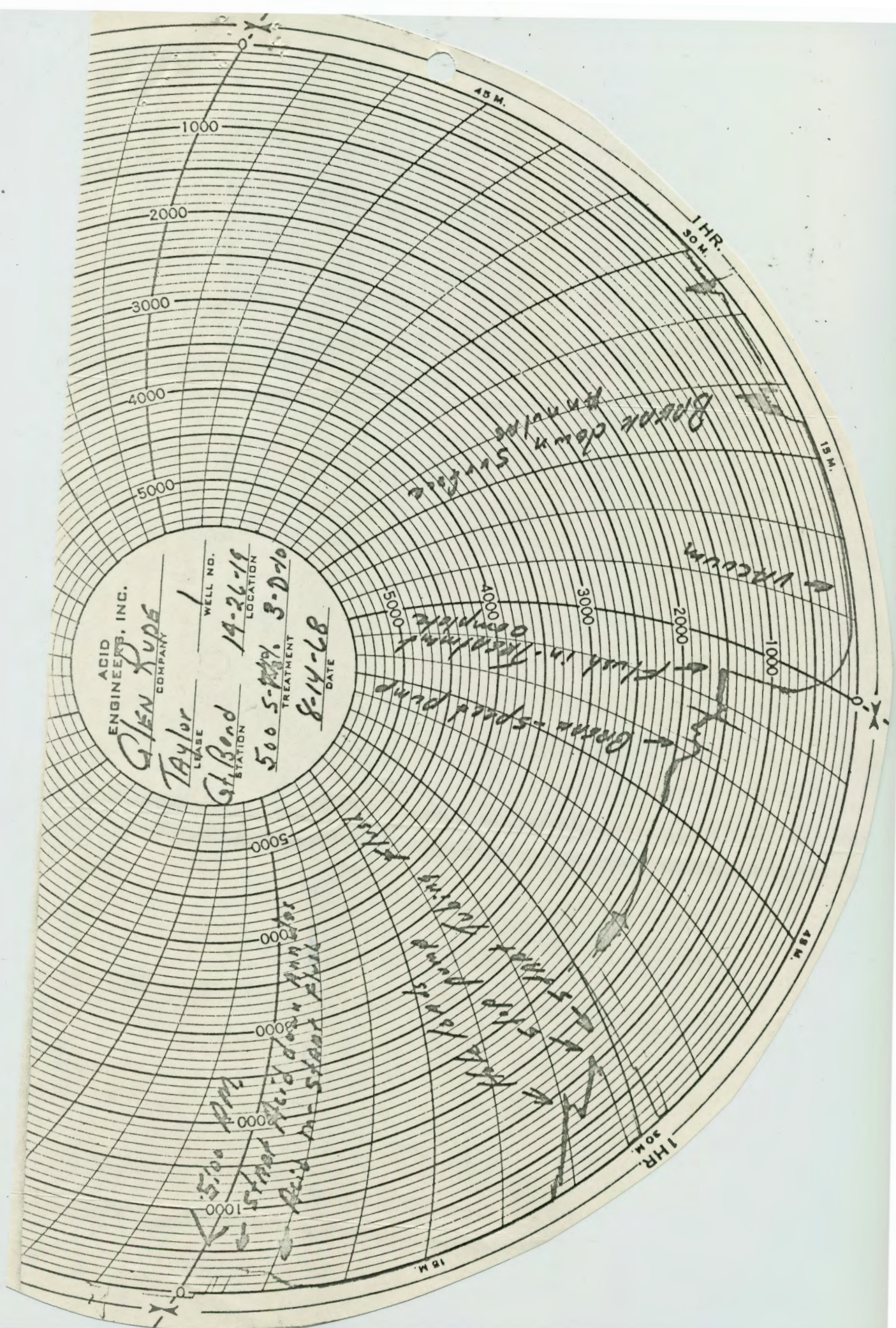
Owner's Representative

J. D. Strunk

Station Manager

Don Aumiller.

Service Engineer



STATE OF KANSAS - CORPORATION COMMISSION
ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

FORM G-2
8-7-58

TYPE TEST: ☐ Deliverability ☒ Open Flow TEST DATE: 9-12-68

COMPANY Waco Oil Co. LEASE Taylor WELL NO. _____

COUNTY Lincoln LOCATION _____ SECTION 14 TWP 26 RNG 19 ACRES _____

FIELD Wildcat RESERVOIR Mississippi PIPELINE CONNECTION _____

COMPLETION DATE _____ PLUG BACK TOTAL DEPTH _____ PACKER SET AT _____

CASING SIZE 5 1/2 WT. _____ I.D. _____ SET AT _____ PERF. _____ TO _____

TUBING SIZE 2 3/8 WT. _____ I.D. _____ SET AT _____ PERF. _____ TO _____

TYPE COMPLETION (Describe) _____ TYPE FLUID PRODUCTION _____

PRODUCING THRU _____ RESERVOIR TEMPERATURE F _____ BAR. PRESS - P_a 14.4 Psia

GAS GRAVITY - G_g 0.613 % CARBON DIOXIDE _____ % NITROGEN _____ API GRAVITY OF LIQUID _____

VERTICAL DEPTH (H) _____ TYPE METER CONN. _____ (METER-RUN) (PROVER) SIZE 2"

SHUT-IN PRESSURE: SHUT IN _____ 19____ AT _____ (AM)(PM) TAKEN _____ 19____ AT _____ (AM)(PM)

FLOW TEST: STARTED 9-11 1968 AT 10:35 (AM)(PM) TAKEN 9-12 1968 AT 10:35 (AM)(PM)

OBSERVED DATA

DURATION OF SHUT-IN _____ HR.

SHUT-IN OR FLOW	ORIFICE SIZE in.	(METER) (PROVER) PRESSURE psig	DIFF. In. (h _w)(h _d)	FLOWING TEMP. t	WELL-HEAD TEMP. t	CASING WELLHEAD PRESS.		TUBING WELLHEAD PRESS.		DURATION HOURS	LIQUID PROD. Bbls.
						psig	(P _w)(P _d)(P _c) psia	psig	(P _w)(P _d)(P _c) psia		
SHUT-IN						1225	1239.4	1204			
FLOW	<u>1/4</u>	<u>136</u>		<u>77</u>		<u>470</u>	<u>484.4</u>			<u>24</u>	

RATE OF FLOW CALCULATIONS

COEFFICIENT (F _b)(F _p) Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION $\sqrt{P_m \times h_w}$	GRAVITY FACTOR F _g	FLOWING TEMP. FACTOR F _t	DEVIATION FACTOR F _{pv}	RATE OF FLOW R Mcfd	GOR	G _m
<u>1.115</u>	<u>150.4</u>		<u>1.277</u>	<u>.9840</u>	<u>1.012</u>	<u>213</u>		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = 1536.1; (P_w)² = 234.6; P_d = _____ % (P_c - 14.4) + 14.4 = _____; (P_w)² = 0.207 (P_d)² = _____

$\frac{(P_c)^2 - (P_a)^2}{(P_c)^2 - (P_d)^2}$	$(P_c)^2 - (P_w)^2$	$\frac{P_c^2 - P_a^2}{P_c^2 - P_d^2}$	LOG []	"n"	n x LOG []	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
<u>1535.9</u>	<u>1301.5</u>	<u>1.180</u>	<u>.0719</u>	<u>.850</u>	<u>.0611</u>	<u>1.151</u>	<u>245</u>

OPEN FLOW 245 Mcfd @ 14.65 psia DELIVERABILITY Mcfd @ 14.65 psia

The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct.

Executed this the 16 day of Sept., 1968

Wilbur Sipe
For Company

Witness (if any)

For Commission

Checked by

Rec'd 10/9/68

4 Point Test

KANSAS-NEBRASKA NATURAL GAS COMPANY, INC.
Back Pressure Field Data Sheet.

Date of Test 9-11-68 19

Lease Taylor Well No. Company Kupe Oil Co
Field County Edwards State Kr Location 14-26-19
Production Casing 5 1/2 Wt. Set at 4700 Perf. open hole to
Tubing Size 2 3/8 Set at Perf. to
Motor run Conn. Shut-in Pressure psig. Well shut in hrs.
Gravity .613 (Before or After)
Test Run on: Casing, Tubing, ~~Perforations~~ (Cross out those not applicable.)
Other remarks about test set-up: Test on Separator Tubing 1204
Casing 1225

 H_2S Neg

OBSERVATIONS

TOTAL Depth 4713

[illegible]

Tested By

Witness

KNNG 21