

STIMULATION TREATMENT REPORT

DOWELL

DATE

AUG. 16, 1973

DWL-494-J PRINTED IN U.S.A.

DOWELL DIVISION OF THE DOW CHEMICAL COMPANY

WELL NAME AND NUMBER

VONDRAN # 1

LOCATION

16-16-7

CUSTOMER REPRESENTATIVE

JOHN CECIL

TREATMENT NUMBER

3-6-5375

POOL

FORMATION

CHASE GROUP

JOB DONE DOWN

TUBING A CASING B ANNULUS C

ALLOWABLE PRESSURE

TBG: CSG:

COUNTY

FELLSWORTH

STATE

KANSAS

TYPE OF WELL

OIL A GAS B WATER C INJ. D

TYPE OF SERVICE

ACIDIZING

AGE OF WELL

NEW WELL A REWORK B

TOTAL DEPTH

1812

CIRC. BHT.

CASING SIZE

4 1/2" - 9.5

CASING DEPTH

-

TUBING SIZE

-

TUBING DEPTH

-

LINER SIZE

N

LINER DEPTH

0

PACKER TYPE

N

PACKER DEPTH

E1

OPEN HOLE

0

CSG OR ANRL VOL.

29

TBG VOLUME

-

STATIC BHT.

-

PERFORATED INTERVALS

DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES
1758					
1762					
1766					
1772					

FOR CONVERSION PURPOSES 24 BBLS EQUALS 1000 GALLONS

ARRIVED ON LOCATION 11:41 AM

TIME	INJECTION		PRESSURE		SERVICE LOG
	RATE	BBLS IN	CSG.	TBG.	
					PRES SURFACE LINES - 1000 PSI
11:43			400		ST. GASWELL ACID TO CSG. = 500 GAL.
11:49	12		450		ST. KCl WATER FLUSH
11:54	23		1700		STOP PUMP - START
11:57	24		1800		STOP PUMP
12:07	24.75		2000		PRES UP - STOP PUMP
12:25			1700		START PUMP
12:29	25.75		2400		STOP PUMP
1:52			2250		BLEED GAS OFF
2:22			150		ST. PUMP
2:26	28.5		2150		STOP PUMP
2:29			2400		STOP
2:31			2250		PRES. BACK TO 2400 PSI
3:30			2400		BLEED PRES. OFF
3:43	29		1000		REFILL HOLE ACID ON PERF.
3:45	30.5		2400		
5:05	32.5		2400		
7:00			2400		SHUT IN LEAVE TRUCK

TIME LEFT LOCATION 7:00 PM	AVG. LIQUID INJ. RATE	ADJ. INJ. RATE (SOLIDS INC.)	TOTAL FLUID PUMPED OIL WATER		PROPS AND LIQUIDS INJECTED		
MAX. PRESSURE 2400	AVG. PRESSURE	FINAL PUMP IN PRESSURE 2400	SHUT IN PRESSURE IMMEDIATE 15 MINUTES		TYPE GASWELL ACID	SIZE OR PURPOSE 9.5	AMOUNT 500
DOWELL LOCATION		DOWELL ENGINEER					
CALL BACK	DATE	CUSTOMER REP. CONTACTED	CUSTOMER CONSIDERED SERVICE	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/> UNKNOWN <input type="checkbox"/>	PROD. BEFORE TREATMENT TEST	ALLOWABLE <input type="checkbox"/>	PROD. AFTER TREATMENT TEST ALLOWABLE <input type="checkbox"/>

STIMULATION TREATMENT REPORT



DWL-294-J PRINTED IN U.S.A.

DOWELL DIVISION OF THE DOW CHEMICAL COMPANY

DATE **AUG 17 1973**

WELL NAME AND NUMBER
VONDRA #1

LOCATION
16-16-17

FORMATION

CUSTOMER REPRESENTATIVE

TREATMENT NUMBER
36-5395

ALLOWABLE PRESSURE

TUBING A CASING ANNULUS C

TBG: CSG:

COUNTY
ELLSWORTH

STATE
KANSAS

TYPE OF SERVICE
Acidizing

AGE OF WELL
NEW WELL A REWORK B

TOTAL DEPTH
1812

CIRC. BHT.

CUST. NAME
GLENN N. RUPE

ADDRESS
925 O.W. GARVEY BUILDING

CASING SIZE
4 1/2" #

CASING DEPTH

TUBING SIZE

TUBING DEPTH

CITY
WICHITA KANSAS

STATE & ZIP CODE

REMARKS:
PAGE # 2

LINER SIZE
N

LINER DEPTH

PACKER TYPE

PACKER DEPTH

OPEN HOLE

CSG. OR ANRL. VOL.

TBG VOLUME

STATIC BHT.

PERFORATED INTERVALS					
DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES
1758					
1762					
1766					
1772					

FOR CONVERSION PURPOSES 24 BBLS EQUALS 1000 GALLONS

ARRIVED ON LOCATION:

TIME	INJECTION		PRESSURE		SERVICE LOG
	RATE	BBLS IN	CSG.	TBG.	
9:30 AM			800		BLEED DOWN TO 500#
9:40			2400		PRES. UP
10:30			2400		BLEED PRES. TO 0
10:35			2400		REPRESSURE
11:15			2200		PRES. UP
11:30			2400		STOP TREATMENT

TIME LEFT LOCATION 12 NOON	AVG. LIQUID INJ. RATE	ADJ. INJ. RATE (SOLIDS INC.)	TOTAL FLUID PUMPED OIL WATER	PROPS AND LIQUIDS INJECTED		
MAX. PRESSURE	AVG. PRESSURE	FINAL PUMP IN PRESSURE	SHUT IN PRESSURE IMMEDIATE 15 MINUTES	TYPE	SIZE OR PURPOSE	AMOUNT
DOWELL LOCATION	DOWELL ENGINEER					
DATE	CUSTOMER REP. CONTACTED	CUSTOMER SERVICE	<input type="checkbox"/> SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/> UNKNOWN	PROD. BEFORE TREATMENT <input type="checkbox"/> TEST	PROD. AFTER TREATMENT <input type="checkbox"/> TEST	ALLOWABLE DAYS

STIMULATION TREATMENT REPORT

DOWELL

DWL-494-J PRINTED IN U.S.A.

DOWELL DIVISION OF THE DOW CHEMICAL COMPANY

DATE **AUG 17 1973**

WELL NAME AND NUMBER
VON DRA #1

LOCATION
16-16-17

FORMATION

CUSTOMER REPRESENTATIVE

TREATMENT NUMBER
36-5395

ALLOWABLE PRESSURE

TBG: CSB:

COUNTY
ELLSWORTH

STATE
KANSAS

JOB DONE DOWN
TUBING A CASING ANNULUS C

TYPE OF WELL
OIL A GAS B WATER C INJ. D

TYPE OF SERVICE
REGULIZING

CUST. NAME
GLENN N. RUPE

AGE OF WELL
NEW WELL A REWORK B

TOTAL DEPTH
1812

CIRC. BHT.

ADDRESS
925 O.W. GARVEY BUILDING

WICHITA, KANSAS

CASING SIZE
4 1/2"

CASING DEPTH

TUBING SIZE

TUBING DEPTH

LINER SIZE
N

LINER DEPTH

PACKER TYPE
N

PACKER DEPTH

OPEN HOLE

CSG. OR ANRL. VOL.

TBG VOLUME
N

STATIC BHT.

CITY, STATE & ZIP CODE

REMARKS:
PAGE # 2

PERFORATED INTERVALS

DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES
1758					
1762					
1766					
1772					

FOR CONVERSION PURPOSES 24 BBLs EQUALS 1000 GALLONS

ARRIVED ON LOCATION: **9:00 AM**

TIME	INJECTION		PRESSURE		SERVICE LOG
	RATE	BBLs IN	CSG.	TBG.	
9:30 AM			800		BLEED DOWN TO 500'
9:40			2400		PRES. UP
10:30			2400		BLEED PRES. TO 0
10:35			2400		REPRESSURE
11:15			2200		PRES. UP
11:30			2400		STO P-TREATMENT
WILL RUN TBG. + PACKER TO TREAT					

TIME LEFT LOCATION 12 NOON	AVG. LIQUID INJ. RATE	ADJ. INJ. RATE (SOLIDS INC.)	TOTAL FLUID PUMPED OIL WATER		PROPS AND LIQUIDS INJECTED		
MAX. PRESSURE	AVG. PRESSURE	FINAL PUMP IN PRESSURE	SHUT IN PRESSURE IMMEDIATE 15 MINUTES		TYPE	SIZE OR PURPOSE	AMOUNT
DOWELL LOCATION		DOWELL ENGINEER		PROD. BEFORE TREATMENT			
DATE	CUSTOMER REP. CONTACTED	CUSTOMER <input type="checkbox"/> SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/> UNKNOWN		TEST	ALLOWABLE	DAYS	TEST ALLOWABLE

STIMULATION TREATMENT REPORT

DOWELL

DATE

DWL-494-J PRINTED IN U.S.A.

DOWELL DIVISION OF THE DOW CHEMICAL COMPANY

AUG. 18 1973

WELL NAME AND NUMBER VONDRA #1	LOCATION 16-16-7	CUSTOMER REPRESENTATIVE JOHN CECIL	TREATMENT NUMBER 3-6-5399
POOL	FORMATION TARKIO & TAWANDA	JOB DONE DOWN	ALLOWABLE PRESSURE
COUNTY ELLSWORTH	STATE KANSAS	TUBING A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/>	TBG: CSG:
TYPE OF SERVICE ACIDIZING		TYPE OF WELL OIL A <input type="checkbox"/> GAS B <input type="checkbox"/> WATER C <input type="checkbox"/> INJ. D <input type="checkbox"/>	
CUST. NAME GLENN N. RUPE		AGE OF WELL NEW WELL A <input type="checkbox"/> REWORK B <input type="checkbox"/>	TOTAL DEPTH 1812
ADDRESS 925 O.W. GARVEY BUILDING		CASING SIZE 4 1/2" 9.5 #	TUBING SIZE 2 1/2" EUE
CITY WICHITA, KANSAS		LINER SIZE NONE	TUBING DEPTH 1775
REMARKS:		OPEN HOLE	PACKER DEPTH 1745
		CSG. OR ANRL. VOL. 19	PACKER TYPE
		TBG VOLUME 7	STATIC BHT.

FOR CONVERSION PURPOSES 24 BBLs EQUALS 1000 GALLONS

ARRIVED ON LOCATION: **9:00 AM** SCHEDULE - TIME

TIME	INJECTION		PRESSURE		SERVICE LOG
	RATE	BBLs IN	CSG.	TBG.	
1:52					START WATER TO TBG.
2:00		20	0	0	START ACID TO TBG (TAWANDA) - 500 GAL
		32			START WATER KCL - SPACER
		39			START ACID TO TBG (TARKIO) - 500 GAL
2:12		46	250	300	ACID ON TARKIO & TAWANDA - SET PACKER
2:32		47	0	1500	FEEDING BREAK
2:34	.5	48		1250	
2:40	.7	52		600	SP. KCL WATER FLUSH
2:47	1	59		700	TARKIO FLUSHED
2:48				450	1 MIN. DROP
				300	5 " " "
2:54			0		SP. KCL WATER FLUSH TAWANDA
2:55			1500		BREAK
2:56			400		
2:58			350		
3:06	1	12	350		TAWANDA FLUSH COMPLETE
3:07			300		1 MIN. PRES. DROP
3:11			200		5 " " "

TIME LEFT LOCATION 4:00 PM	AVG. LIQUID INJ. RATE	ADJ. RATE (SOLIDS INC.)	TOTAL FLUID PUMPED OIL WATER		PROPS AND LIQUIDS INJECTED		
MAX. PRESSURE 1500	AVG. PRESSURE	FINAL PUMP IN PRESSURE	SHUT IN PRESSURE IMMEDIATE 15 MINUTES		TYPE	SIZE OR PURPOSE	AMOUNT
DOWELL LOCATION Wichita, Kansas	DOWELL ENGINEER Arthur Merten				GASWELL ACID		1000
CALL BACK	DATE	CUSTOMER REP. CONTACTED	CUSTOMER SERVICE	<input type="checkbox"/> SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/> UNKNOWN	PROD. BEFORE TREATMENT TEST	<input type="checkbox"/> ALLOWABLE DAYS	<input type="checkbox"/> TEST ALLOWABLE

STIMULATION TREATMENT REPORT

DOWELL

DATE

AVG. 18 1973

DWL-494-J PRINTED IN U.S.A.

DOWELL DIVISION OF THE DOW CHEMICAL COMPANY

WELL NAME AND NUMBER VONDRA #1	LOCATION 16-16-7	CUSTOMER REPRESENTATIVE JOHN CECIL	TREATMENT NUMBER 3-6-5399
POOL	FORMATION TARKIO & TAWANDIA	JOB DONE DOWN TUBING <input type="checkbox"/> CASING <input type="checkbox"/> ANNULUS <input type="checkbox"/>	ALLOWABLE PRESSURE
COUNTY ELLSWORTH	STATE KANSAS	TYPE OF WELL OIL <input type="checkbox"/> GAS <input type="checkbox"/> WATER <input type="checkbox"/> INJ. <input type="checkbox"/>	TBG: CSG:
TYPE OF SERVICE ACIDIZING	AGE OF WELL NEW WELL <input type="checkbox"/> REWORK <input type="checkbox"/>	TOTAL DEPTH 1812	CIRC. BHT.
CUST. NAME GLENN N. RUPE	CASING SIZE 4 1/2" #5	CASING DEPTH 21'VE	TUBING DEPTH 1775
ADDRESS 925 O.W. GARVEY BUILDING	LINER SIZE N 0	LINER DEPTH NE	PACKER TYPE 1745
CITY, STATE & ZIP CODE WICHITA, KANSAS	OPEN HOLE 19	CSG. OR ANRL. VOL. 7	PACKER DEPTH 1745
REMARKS:	PERFORATED INTERVALS		
	DEPTH	NO. OF HOLES	DEPTH
	1758		1083
	1762		1072
	1766		
	1772		

FOR CONVERSION PURPOSES 24 BBLs EQUALS 1000 GALLONS

ARRIVED ON LOCATION: **7:30 AM** SCHEDULE TIME

TIME	INJECTION		PRESSURE		SERVICE LOG
	RATE	BBLs IN	CSG.	TBG.	
1:52					START WATER TO TBG.
2:00		20	0	0	START ACID TO TBG (TAWANDIA) - 500 GAL
		32			START WATER KCL-SPACER
		39			START ACID TO TBG (TARKIO) - 500 GAL
2:12		46	300		ACID ON TARKIO & TAWANDIA - SET PACKER
2:32		47	1500		FEEDING BREAK
2:34	.5	48		1250	
2:40	.7	52		600	ST. KCL WATER FLUSH
2:47	1	59		700	TARKIO FLUSHED
2:48				450	1 MIN. DROP
				300	5 " "
2:54			0		ST. KCL WATER FLUSH TAWANDIA
2:55			1500		BREAK
2:56			400		
2:58			350		
3:06	1		350		TAWANDIA FLUSH COMPLETE
3:07			300		1 MIN. PRES. DROP
3:11			200		5 " " "

TIME LEFT LOCATION 4:30 PM	AVG. LIQUID INJ. RATE	ADJ. INJ. RATE (SOLIDS INC.)	TOTAL FLUID PUMPED OIL WATER		PROPS AND LIQUIDS INJECTED		
MAX. PRESSURE 1500	AVG. PRESSURE	FINAL PUMP IN PRESSURE	SHUT IN PRESSURE IMMEDIATE 15 MINUTES		TYPE	SIZE OR PURPOSE	AMOUNT
DOWELL LOCATION Wichita, Kansas	DOWELL ENGINEER Arthur Merten		PROD. BEFORE TREATMENT		GASWELL ACID		1000
CALL BACK	DATE	CUSTOMER REP. CONTACTED	CUSTOMER SERVICE	<input type="checkbox"/> SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/> UNKNOWN	<input type="checkbox"/> TEST <input type="checkbox"/> ALLOWABLE	<input type="checkbox"/> PROD. AFTER TREATMENT <input type="checkbox"/> TEST <input type="checkbox"/> ALLOWABLE	1000

STIMULATION TREATMENT REPORT

DOWELL

DATE Aug 30 1973

DWL-494-J PRINTED IN U.S.A.

DOWELL DIVISION OF THE DOW CHEMICAL COMPANY

WELL NAME AND NUMBER

VONDRA #1

LOCATION
16-16-17

CUSTOMER REPRESENTATIVE
JOHN CECIL

TREATMENT NUMBER
3-6-5404

POOL

FORMATION
TARKIO & TAWANDA

JOB DONE DOWN
TUBING A CASING B ANNULUS C
TBE: CSB:

COUNTY

ELLSWORTH

STATE
KANSAS

TYPE OF WELL
OIL A GAS B WATER C INJ. D

TYPE OF SERVICE

ACID + CO₂ FRAC + CO₂

AGE OF WELL
NEW WELL A REWORK B
TOTAL DEPTH 1812 CIRC. BHT.

CUST. NAME GLEN N RUPE

CASING SIZE 4 1/2-9.5 CASING DEPTH
TUBING SIZE 2" EUE TUBING DEPTH 1745

ADDRESS 925 OW GARVEY BLDG

LINER SIZE NONE LINER DEPTH
PACKER TYPE Howco PACKER DEPTH 1715

CITY, STATE & ZIP CODE

REMARKS:

WICHITA, KANSAS

OPEN HOLE 19 CSG. OR ANRL. VOL. 7 TBE VOLUME 7 STATIC BHT.

PERFORATED INTERVALS

DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES

FOR CONVERSION PURPOSES 24 BBLs EQUALS 1000 GALLONS

ARRIVED ON LOCATION:

TIME	INJECTION		PRESSURE		SERVICE LOG
	RATE	BBLs IN	CSG.	TBG.	
10:50			300		TEST SURFACE LINES 2250 P.S.I.
10:53			300		START ACID + CO ₂ TO ANNULUS
10:55			800		ACID + CO ₂ ON CSG. PERF TAWANDA
11:07	5.2	72	850		START KCl WATER FLUSH
11:09	8.2	90	900		ST. 50/2 L-42 TO TBG. TO FRAC - 500 GAL.
11:11	1.2	90	900		ST. 50/2 FA-20 PAD + CO ₂
11:13	2.4	1350			ST. R/20/40 SAND
11:14	3.2	1400			SAND ON TARKIO PERF.
11:25	8.4	1600			ST. FLUSH
11:27	5.1	99	1550		FLUSH COMPLETE
1			1000		IMMEDIATE TO 1000 #
					RATES ARE ACID + FRAC + CO ₂

TIME LEFT LOCATION	AVG. LIQUID INJ. RATE	ADJ. RATE (SOLIDS INC.)	TOTAL FLUID PUMPED OIL WATER	PROPS AND LIQUIDS INJECTED		
MAX. PRESSURE <u>FRAC</u> <u>1600</u>	AVG. PRESSURE <u>1500</u>	FINAL PUMP IN PRESSURE <u>1550</u>	SHUT IN PRESSURE IMMEDIATE 15 MINUTES <u>1000</u>	TYPE	SIZE OR PURPOSE	AMOUNT
DOWELL LOCATION <u>Wichita, Kas.</u>	DOWELL ENGINEER <u>Arthur Merton</u>			<u>50/2 FA-20</u>		<u>3000</u>
				<u>GASWELL ACID</u>		<u>3000</u>
				<u>50/2 XL-42</u>		<u>500</u>
				<u>SAND</u>	<u>R/20/40</u>	<u>2500 #</u>
CALL BACK	DATE	CUSTOMER REP. CONTACTED	CUSTOMER CONSIDERED SERVICE	<input type="checkbox"/> SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/> UNKNOWN	PROD. BEFORE TREATMENT <input type="checkbox"/> TEST	PROD. AFTER TREATMENT <input type="checkbox"/> ALLOWABLE DAYS + <input type="checkbox"/> TEST ALLOWABLE

STIMULATION TREATMENT REPORT

DOWELL

DATE AUG 20 1973

DWL-494-J PRINTED IN U.S.A.

DIVISION OF THE DOW CHEMICAL COMPANY

WELL NAME AND NUMBER
VONDRA #1

LOCATION
16-16-17

FORMATION
TARKIO & TAWANDA

COUNTY
ELLSWORTH

STATE
KANSAS

TYPE OF SERVICE
ACID & CO₂ FRAC & CO₂

CUST. NAME
GLEN N RUPE

ADDRESS
925 OW GARVEY BLDG

CITY
WICHITA, KANSAS

STATE & ZIP CODE

REMARKS:

CUSTOMER REPRESENTATIVE
JOHN CECIL

TREATMENT NUMBER
3-6-5004

JOB DONE DOWN
ALLOWABLE PRESSURE

TBG: _____ CSG: _____

TYPE OF WELL
OIL GAS WATER INJ.
ANNULUS B C

AGE OF WELL
NEW WELL REWORK

TOTAL DEPTH **1812** CIRC. BHT. _____

CASING SIZE **4 1/2 - 9.5** CASING DEPTH _____ TUBING SIZE _____ TUBING DEPTH _____

LINER SIZE _____ LINER DEPTH _____ PACKER TYPE _____ PACKER DEPTH _____

OPEN HOLE **NONE** CSG. OR ANRL. VOL. _____ TBG VOLUME **Howco 1715** STATIC BHT. _____

PERFORATED INTERVALS

DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES

REC'D AUG 28 1973

FOR CONVERSION PURPOSES 24 BBLs EQUALS 1000 GALLONS

ARRIVED ON LOCATION: 9:00 AM

TIME	INJECTION		PRESSURE		SERVICE LOG
	RATE	BBLs IN	CSG.	TBG.	
10:50			300		TEST SURFACE LINES 2250 PST.
10:53			300		START ACID & CO ₂ TO ANNULUS
10:55			800		ACID & CO ₂ ON CSG. PERM TAWANDA
11:07	5.2	72	850		START FCI WATER FLUSH
11:09		82	900		ST. 50/20-42 TO 700. TO FRAC - 500 GAL
11:11		12	900		ST. 50/20 FA-20 PADYCO ₂
11:13		24	1350		ST. R/20/40 SAND
11:14		32	1400		SAND ON TARKIO PERF
11:25		84	1600		ST. FLUSH
11:27	5.1	99	1550		FLUSH COMPLETE
			1000		IMMEDIATE TO 1000#
					RATES ARE ACID & FRAC + CO ₂ NOT INCLUDED

TIME LEFT LOCATION 12:30 PM	AVG. LIQUID INJ. RATE	ADJ. INJ. RATE (SOLIDS INC.)	TOTAL FLUID PUMPED OIL _____ WATER _____		PROPS AND LIQUIDS INJECTED		
MAX. PRESSURE 1600	AVG. PRESSURE 1450	FINAL PUMP IN PRESSURE 1550	SHUT IN PRESSURE IMMEDIATE _____ 15 MINUTES _____		TYPE	SIZE OR PURPOSE	AMOUNT
DOWELL LOCATION 925 OW Garvey Bldg			DOWELL ENGINEER Robert M. ...		50/20		3000
					GASWELL ACID		3000
					50/20-42		500
					SAND	R/20/40	2500#
CALL BACK	DATE	CUSTOMER REP. CONTACTED	CUSTOMER CONSIDERED SERVICE	<input type="checkbox"/> SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/> UNKNOWN	PROD. BEFORE TREATMENT	<input type="checkbox"/> ALLOWABLE	PROD. AFTER TREATMENT
					TEST	ALLOWABLE	DAYS TEST ALLOWABLE

STIMULATION TREATMENT REPORT

DOWELL

DATE

AUG 20 1973

DWL-494-J PRINTED IN U.S.A.

DOWELL DIVISION OF THE DOW CHEMICAL COMPANY

WELL NAME AND NUMBER

LOCATION

CUSTOMER REPRESENTATIVE

TREATMENT NUMBER

KANAK #1

15-16-17

JOHN CECIL

3-6-5405

POOL

FORMATION

JOB DONE DOWN

ALLOWABLE PRESSURE

TARKIO & TAWANDA

TUBING A CASING B ANNULUS C

TBG: CSG:

COUNTY

STATE

TYPE OF WELL

ELLSWORTH

KANSAS

OIL A GAS B WATER C INJ. D

TYPE OF SERVICE

AGE OF WELL

TOTAL DEPTH

CIRC. BHT.

50% FA. 20% CO₂

NEW WELL A REWORK B

1814

CUST. NAME

GREEN N. RUPE

CASING SIZE

CASING DEPTH

TUBING SIZE

TUBING DEPTH

ADDRESS

925 O.W. GARVEY BLVD

4 1/2" 4.5"

1844

2" EVE

1770

CITY, STATE & ZIP CODE

WICHITA, KANSAS

LINER SIZE

LINER DEPTH

PACKER TYPE

PACKER DEPTH

REMARKS:

OPEN HOLE

CSG. OR ANNULUS VOL.

TBG VOLUME

STATIC BHT.

12

7

PERFORATED INTERVALS

DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES
1767		1084			
1771		1099			
1775					
1786					

FOR CONVERSION PURPOSES 24 BBLs EQUALS 1000 GALLONS

ARRIVED ON LOCATION 9:30 AM

TIME	INJECTION		PRESSURE		SERVICE LOG
	RATE	BBLs IN	CSG.	TBG.	
2:30					TEST SURFACE LINES PRES. UP - 2500#
2:34			0	500	START 50% L-42 & CO ₂ TO TBG
2:36		12		1600	ST. 50% FA. 20% PAD
2:38		24		1350	ST. R/20/40 SAND
2:40		31		1300	SAND & PERF.
2:49		84		1700	SE. WATER & CO ₂ FLUSH - KCL WATER
2:51	6.3	94		1850	COMPLETE
				650	IMMEDIATE
8/21	9:00 AM				3000 GASWELL ACID TO TAWANDA
					PRIME PUMP TEST LINES 2500 PSI
10:35			500	0	START & RUN 4 BBL WATER TO ANNULUS
10:36		4	800		START ACID & CO ₂ - PACKER SET 1740'
10:38			1000		ACID ON PERF.
10:40			1150		
10:42			1050		
10:48		76	1025		ST. KCl WATER CO ₂ FLUSH
10:50	5.3	88	1000		FLUSH COMPLETE
			650		IMMEDIATE
					RATE ACID & FLUSH

TIME LEFT LOCATION 11:30 AM	AVG. LIQUID INJ. RATE	ADJ. RATE (SOLIDS INC.)	TOTAL FLUID PUMPED OIL WATER		PROPS AND LIQUIDS INJECTED		
MAX. PRESSURE 1850	AVG. PRESSURE 1600	FINAL PUMP IN PRESSURE 1850	SHUT IN PRESSURE IMMEDIATE 15 MINUTES		TYPE	SIZE OR PURPOSE	AMOUNT
DOWELL LOCATION		DOWELL ENGINEER		50% L-42 500 50% FA. 20% 3000 SAND R/20/40 2500#			
CALL BACK	DATE	CUSTOMER REP. CONTACTED	CUSTOMER SERVICE	<input type="checkbox"/> SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/> UNKNOWN	PROD. BEFORE TREATMENT <input type="checkbox"/> TEST	PROD. AFTER TREATMENT <input type="checkbox"/> ALLOWABLE	DAYS <input type="checkbox"/> TEST <input type="checkbox"/> ALLOWABLE

STIMULATION TREATMENT REPORT

DOWELL

DATE AUG 16, 1973

DWL-494-J PRINTED IN U.S.A.

DOWELL DIVISION OF THE DOW CHEMICAL COMPANY

WELL NAME AND NUMBER <u>VONDRA # 1</u>	LOCATION <u>16-16-7</u>	CUSTOMER REPRESENTATIVE <u>JOHN CECIL</u>	TREATMENT NUMBER <u>3-6-5395</u>
POOL	FORMATION <u>CHASE GROUP</u>	JOB DONE DOWN	ALLOWABLE PRESSURE
COUNTY <u>ELLSWORTH</u>	STATE <u>KANSAS</u>	TUBING A <input type="checkbox"/> CASING <input checked="" type="checkbox"/> ANNULUS <input type="checkbox"/>	TBG: CSG:

TYPE OF SERVICE <u>ACIDIZING</u>	AGE OF WELL NEW WELL <input checked="" type="checkbox"/> REWORK <input type="checkbox"/>	TOTAL DEPTH <u>1812</u>	CIRC. BHT.
CUST. NAME <u>GLENN N RUPE</u>	CASING SIZE <u>4 1/2 - 9.5</u>	TUBING SIZE	TUBING DEPTH
ADDRESS <u>925 OW GARVEY BUILDING</u>	LINER SIZE <u>N</u>	LINER DEPTH	PACKER TYPE
CITY <u>WICHITA, KANSAS</u>	OPEN HOLE <u>29</u>	CSG OR ANRL VOL.	TBG VOLUME
STATE & ZIP CODE			STATIC BHT.

REMARKS:	PERFORATED INTERVALS
	DEPTH NO. OF HOLES DEPTH NO. OF HOLES DEPTH NO. OF HOLES
	<u>1758</u>
	<u>1762</u>
	<u>1766</u>
	<u>1772</u>

FOR CONVERSION PURPOSES 24 BBLs EQUALS 1000 GALLONS

ARRIVED ON LOCATION:

TIME	INJECTION		PRESSURE		SERVICE LOG
	RATE	BBLs IN	CSG.	TBG.	
					PRES. SURFACE LINES - 1000 PSI
<u>11:43</u>			<u>400</u>		ST. GASWELL ACID TO CSG. = 500 GALL
<u>11:49</u>	<u>12</u>		<u>450</u>		ST. KCl WATER FLUSH
<u>11:54</u>	<u>23</u>		<u>1700</u>		STOP PUMP - START
<u>11:57</u>	<u>24</u>		<u>1800</u>		STOP PUMP
<u>12:07</u>	<u>24.75</u>		<u>2000</u>		PRES. UP - STOP PUMP
<u>12:25</u>			<u>1900</u>		START PUMP
<u>12:29</u>	<u>25.75</u>		<u>2400</u>		STOP PUMP
<u>1:52</u>			<u>2250</u>		BLEED GAS OFF
<u>2:22</u>			<u>150</u>		ST. PUMP
<u>2:26</u>	<u>28.5</u>		<u>2150</u>		STOP PUMP
<u>2:29</u>			<u>2400</u>		STOP
<u>2:31</u>			<u>2250</u>		PRES. BACK TO 2400 PSI
<u>3:30</u>			<u>2400</u>		BLEED PRES. OFF
<u>3:43</u>	<u>29</u>		<u>1000</u>		REFILL HOLE ACID ON PERF.
<u>3:45</u>	<u>30.5</u>		<u>2400</u>		
<u>5:05</u>	<u>32.5</u>		<u>2400</u>		
<u>7:00</u>			<u>2400</u>		SHUT IN LEAVE TRUCK

TIME LEFT LOCATION	AVG. LIQUID INJ. RATE	ADJ. RATE (SOLIDS INC.)	TOTAL FLUID PUMPED OIL WATER	PROPS AND LIQUIDS INJECTED		
MAX. PRESSURE	AVG. PRESSURE	FINAL PUMP IN PRESSURE	SHUT IN PRESSURE IMMEDIATE 15 MINUTES	TYPE	SIZE OR PURPOSE	AMOUNT
				<u>GASWELL ACID</u>		<u>500</u>

DOWELL LOCATION <u>Wichita, Kansas</u>	DOWELL ENGINEER <u>Arthur Norton</u>	CUSTOMER REP. CONTACTED	CUSTOMER SERVICE	PROD. BEFORE TREATMENT	PROD. AFTER TREATMENT
DATE			<input type="checkbox"/> SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/> UNKNOWN	<input type="checkbox"/> TEST <input type="checkbox"/> ALLOWABLE	<input type="checkbox"/> TEST <input type="checkbox"/> ALLOWABLE