

This form shall be filed in duplicate with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within ten days after the completion of the well, regardless of how the well was completed.

Attach separate letter of request if the information is to be held confidential. If confidential, only file one copy. Information on side one will be of public record and side two will then be held confidential.

Gas Storage Observation Well
Circle one: Oil, Gas, Dry, SWD, OWWO, Injection. Type and complete ALL sections.
Applications must be filed for dual completion, commingling, SWD and injection, T.A.

Attach wireline logs (i.e. electrical log, sonic log, gamma ray neutron log, etc.).
KCC # (316) 263-3238. (Rules 82-2-105 & 82-2-125)

OPERATOR Northern Natural Gas Company

API NO. 15-095-21206-0000

ADDRESS P. O. Box 178
Cunningham, KS 67035

COUNTY Kingman

FIELD N/A CUNNINGHAM EXT

**CONTACT PERSON P. B. Horsch
PHONE (316) 257-5146

PROD. FORMATION Viola

LEASE Voss

PURCHASER N/A

WELL NO. 17-22

ADDRESS N/A

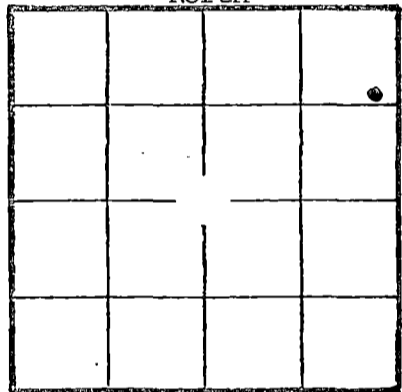
WELL LOCATION See Below

95 Ft. from East Line and
1300 Ft. from North Line of
the -- SEC. 17 TWP. 27 RGE. 10 W

DRILLING Sterling Drilling Company
CONTRACTOR
ADDRESS P. O. Box 129
Sterling, KS 67579

PLUGGING N/A
CONTRACTOR
ADDRESS N/A

WELL PLAT
North



KCC
KGS
(Office Use)

TOTAL DEPTH 4478.53' KB PBTD N/A

SPUD DATE 1/3/82 DATE COMPLETED 3/29/82

ELEV: GR 1779 DF N/A KB 1792

DRILLED WITH (CABLE) (ROTARY) (AIR) TOOLS

Amount of surface pipe set and cemented 1513.43' KB DV Tool Used? Yes

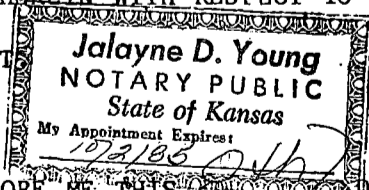
AFFIDAVIT

STATE OF Kansas, COUNTY OF Rice SS, I, Jalayne

OF LAWFUL AGE, BEING FIRST DULY SWORN UPON HIS OATH,
DEPOSES THAT HE IS Paul B. Horsch (FOR) (OF) Northern Natural Gas
OPERATOR OF THE Voss LEASE, AND IS DULY AUTHORIZED TO MAKE

THIS AFFIDAVIT FOR AND ON THE BEHALF OF SAID OPERATOR, THAT WELL NO. 17-22 ON
SAID LEASE HAS BEEN COMPLETED AS OF THE 29th DAY OF March, 1982, AND THAT
ALL INFORMATION ENTERED HEREIN WITH RESPECT TO SAID WELL IS TRUE AND CORRECT.

FURTHER AFFIANT SAITH NOT



SUBSCRIBED AND SWORN BEFORE ME THIS 29th DAY OF April

MY COMMISSION EXPIRES: 12/31/85

RECEIVED STATE CORPORATION COMMISSION
APR 29 1982
CONSERVATION DIVISION
Wichita, Kansas
NOTARY PUBLIC
04-09-82

**The person who can be reached by phone regarding any questions concerning this information. Within 45 days of completion, a witnessed initial test by the Commission is required if the well produces more than 25 BOPD or is located in a Basic Order Pool.

SIDE TWO

WELL LOG

Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

SHOW GEOLOGICAL MARKERS, LOGS RUN, OR OTHER DESCRIPTIVE INFORMATION.

FORMATION DESCRIPTION, CONTENTS, ETC.	TOP	BOTTOM	NAME	DEPTH
Hutchinson Salt	1111'	1575'	GRN	0-4470'
Chase Group	1721'	2081'	IES	0-4470'
Council Grove Group	2081'	2440'	BHCS/INT	1500'-4470'
Admire Group	2446'	2560'	SCB/SS	0-1550'
Tarkio Lime	2693'	2765'	CDL	1500'-4470'
Howard Lime	2938'	3085'		
Heebner Shale	3442'	3459'		
Lansing/Kansas City Group	3630'	3965'		
Pleaston Marmaton Group	3965'	4109'		
Osagian Chert	4109'	4160'		
Kinderhook	4161'	4309'		
Viola	4361'	4449'		
Viola cored from 4358' to 4410'				

Report of all strings set—surface, intermediate, production, etc. CASING RECORD (New) or (Used)

Purpose of string	Size hole drilled	Size casing set (In O.D.)	Weight lbs/ft.	Setting depth	Type cement	Sacks	Type and percent additives
Conductor Pipe	17½"	13-3/8"	48LB	KB Depth 221.43'	Portland-Common	200	3% Calcium chloride ¼ lb. Flocele/sack
Surface Casing	12½"	8-5/8"	24LB	KB Depth 1513.43'	50/50 Poz	750	3% Calcium chloride ¼ lb. Flocele/sack
Well Casing	7-7/8"	5-1/2"	15.5LB	KB Depth 4478.53'	Howco Lite 50/50 Poz	825	6% Gel, 10% Gilsonite 18% Salt, .9% Halad 9

LINER RECORD

PERFORATION RECORD

Top, ft.	Bottom, ft.	Sacks cement	Shots per ft.	Size & type	Depth interval
N/A	N/A	N/A	4-shots	D.P. Charges	4362' to 4382'

Size	Setting depth	Packer set at
N/A	N/A	None

(ACID) FRACTURE, SHOT, CEMENT SQUEEZE RECORD.

Amount and kind of material used	Depth interval treated
1,000 gal. 15% Hydrochloric Acid	4362' to 4382'

Date of first production	Producing method (flowing, pumping, gas lift, etc.)	Gravity
N/A	None (Observation Well)	N/A

RATE OF PRODUCTION PER 24 HOURS	Oil	Gas	Water	Gas-oil ratio
	N/A	N/A	% N/A	N/A

Disposition of gas (vented, used on lease or sold)	Perforations
N/A	N/A