

STATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION

WELL COMPLETION OR RECOMPLETION FORM
ACO-1 WELL HISTORY

DESCRIPTION OF WELL AND LEASE

Operator: License # 5269
Name KANSAS NATURAL GAS, INC.
Address P.O. Box #818
Hays, Kansas 67601
City/State/Zip

Purchaser K. N. Energy

Operator Contact Person Mr. Joe Ward or Steve Lehning
Phone 316-275-7279 or 675-8175

Contractor: License # 5382
Name Cheyenne Drilling Company

Wellsite Geologist Mr. Ron Osteerbuhr
Phone 316-276-8145

Designate Type of Completion
 New Well Re-Entry Workover
 Oil SWD Temp Abd
 Gas Inj Delayed Comp.
 Dry Other (Core, Water Supply etc.)

If OWN: old well info as follows:
 Operator
 Well Name
 Comp. Date Old Total Depth

WELL HISTORY

Drilling Method:
 Mud Rotary Air Rotary Cable

6-7-89	6-9-89	7-11-89
Spud Date	Date Reached TD	Completion Date
2690'KB	2688'KB	
Total Depth	PBTD	

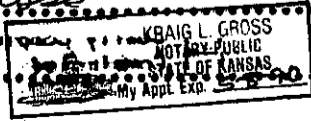
Amount of Surface Pipe Set and Cemented at 587 feet
 Multiple Stage Cementing Collar Used? Yes No
 If yes, show depth set... feet
 If alternate 2 completion, cement circulated 500
 from 587' 2688' feet depth to surface / 285 SX cut
 12-11-89

INSTRUCTIONS: This form shall be completed in duplicate and filed with the Kansas Corporation Commission 200 Colorado Derby Building, Wichita, Kansas 67202, within 90 days after completion or recompletion of an well. Rule 82-3-130 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 drillers time log shall be attached with this form. Submit CP-4 form w/ 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 Steve Lehning
 Title Assistant Field Superintendent Date 7-24-89

Subscribed and sworn to before me this 29th day of November 1989.
 Notary Public Craig L. Gross
 Date Commission Expires 5-8-90



APR 1989 15-055-208105-0090
 County Finney County

East
 West
 NW 1/4 Sec. 20 Twp. 25 Rge. 33

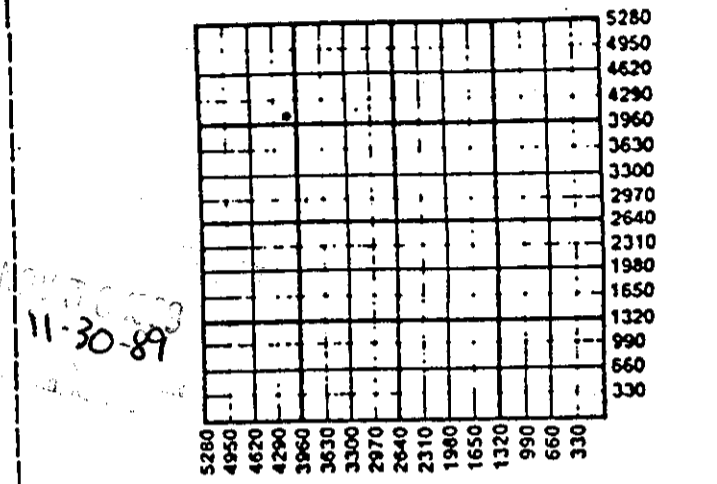
4030' Ft North from Southeast Corner of Section
 4030' Ft West from Southeast Corner of Section
 (Note: Locate well in section plat below)

Lease Name Spratt #10-2 Well # 10-2

Field Name Hugoton Infill

Producing Formation Chase Series

Elevation: Ground 2924' KB 2933'
 Section Plat



WATER SUPPLY INFORMATION
 Disposition of Produced Water: Disposal Repressuring
 Docket # C-16812 (96 930-C)

Questions on this portion of the ACO-1 call:
 Water Resources Board (913) 296-3717

Source of Water:
 Division of Water Resources Permit #

Groundwater.....Ft North from Southeast Corner (Well)Ft West from Southeast Corner of Sec Twp Rge East West

Surface Water.....Ft North from Southeast Corner (Stream, pond etc).....Ft West from Southeast Corner Sec Twp Rge East West

Other (explain).....
 (purchased from city, R.W.D. #)

K.C.C. OFFICE USE ONLY

Letter of Confidentiality Attached
 Wireline Log Received
 Drillers Time Log Received

Distribution

<input checked="" type="checkbox"/> KCC	<input type="checkbox"/> SWD/Rep	<input type="checkbox"/> NGPA
<input checked="" type="checkbox"/> KGS	<input type="checkbox"/> Plug	<input type="checkbox"/> Other (Specify)

Operator Name KANSAS NATURAL GAS, INC. Lease Name..... SPRATT Well #, 10-12..

Sec..... 20 Twp..... 25S Rge..... 33W East West County..... Finney County.....

WELL LOG

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 rate if gas to surface during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken Yes No
 Samples Sent to Geological Survey Yes No
 Cores Taken Yes No

Formation Description
 Log Sample

Name	Top	Bottom
T/ Permian	845'	
T/ Glorietta	1460'	
B/ Stone Corral		1925'
T/ Chase Group	2505'	
T/ Krider	2530'	
T/ Winfield	2590'	
T/ Towanda	2650'	
Total Depth	2690'	

CASING RECORD New 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"	24#	587'	w/ 185 sk DSLW3G and 2%SI #dps		Tail w/100sxClass C and 2%SI
Production	7 7/8"	5 1/2"	14#	2688'	w/300sxDSLW3G + 1/2#d29 flakes.		

Shots Per Foot	PERFORATION RECORD Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
2 shots	2527'-2537'	Frac with 10,000 gallons of WF140 pad.	
2 shots	2551'-2561'	25,000 gall. of WF140 and 1#PG of 10-20	
2 shots	2587'-2593'	25,000 gall. of WF140 and 2#PG 10-20 sa	
2 shots	2597'-2603'	25,000 gall. of WF140 and 3#PG 10-20 sa	
2 shots	2652'-2659'	12,500 gall. of WF140 and 4#PG 10-20 sa	

TUBING RECORD	Size	Set At	Packer at	Liner Run
	2 3/8" EUE	2652.68'	GL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Date of First Production: Pending on Pipeline Connection.
 Producing Method: Flowing Pumping Gas Lift Other (explain).....

Estimated Production Per 24 Hours	Oil Bbls	Gas Rate of Flow MCFD	Water (0) Bbls	Gas-Oil Ratio CFPB	Gravity
		554.1 MCFD			0.720
		Open Flow 1,970.1 MCFD			

METHOD OF COMPLETION

Disposition of gas: Vented Sold Used on Lease
 Open Hole Perforation Other (Specify)

Production Interval
2527'-2537'
2551'-2561'
2587'-2593'
2597'-2603'
2652'-2659'

Dually Completed Completed

ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

TYPE TEST: Initial: Annual: Special:XX TEST DATE: 07/17/89

Company: KANSAS NATURAL Lease: SPRATT Well No: 10-2
 County: FINNEY Location: Sec: 20 Twn: 25 Rng: 33
 Field :HUGOTON INFILL Reservoir Pipeline connection
 Completion date: Plug back total depth Packer set at
 Casing size: Wt. Set at Perfs.
 Tubing size: Wt. I.D. Set at
 Type completion: Type fluid prod.
 Producing through Reservoir temp. F Bar. Press. - Pa 14.4 Psia
 Gas Gravity: 0.72 % CO 2 % N 2 API Grav. of liquid
 Vertical Depth Type meter connection (prover) size 2"

Remarks

OBSERVED DATA										Duration of shut in	8 hrs.
Rate no.	Orifice size	(Prover) (Meter) Press.	Diff.	Flow. Temp. F.	Well-head Temp.	Casing psig	Press. psia	Tubing psig	Press. psia	Dur- ation Hours	Liquid Prod. Bbls.
shut in						137.6	152			8	
flow	0.4375	119.6		70		119.6	134				

RATE OF FLOW CALCULATIONS

Coef. (Fb)(Fp)	(Meter) (Prover)	Ext.	Grav. Fact. Fg	Flow. Temp. Ft	Dev. Fact. Fpv	Rate of Flow @ in Mcfd	GOR	Gm
3.495	134		1.179	0.991	1.0135	554.1		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

Pc²= 23.1 Pw²= 18.0 Pa²= 0.207

Pc ² - Pa ²	Pc ² - Pw ²	(Pc ² - Pa ²) / (Pc ² - Pw ²)	LOG	"n"	n x LOG	ANTILOG	OPEN FLOW
122.89700	5.148000	4.448	0.648	0.85	0.55092	3.55565	1970.1

OPEN FLOW = 1970.1 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 18TH DAY OF JULY, 1989.

Witness: _____ For KN Energy, Inc.:

(if any)

For Commission: _____ Checked by: _____

RECEIVED STATE OF KANSAS CONSERVATION DIVISION

OCT 24 1989

CONSERVATION DIVISION
Wichita, Kansas

DRILLERS LOG

KANSAS NATURAL GAS, INC.
SPRATT #10-2
SECTION 20-T25S-R33W
FINNEY COUNTY, KANSAS

COMMENCED: 06-07-89
COMPLETED: 06-10-89

SURFACE CASING: 587' OF 8 5/8"
CMTD. W/185 SX LITE, 2% C.C.
TAILED IN W/100 SX "C", 2% C.C.

FORMATION	DEPTH
SURFACE HOLE	0- 598
SAND & CLAY	598- 869
SHALE	869-1492
GLORIETTA SAND	1492-1639
SHALE	1639-2100
SHALE & LIME	2100-2690 RTD

I DO HEREBY CERTIFY THAT THE FOREGOING STATEMENTS ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

CHEYENNE DRILLING, INC.

A. J. Jacques
A. J. JACQUES

STATE OF KANSAS :ss:

SUBSCRIBED AND SWORN TO BEFORE ME THIS 12TH DAY OF JUNE, 1989.



Pam Kaiser
PAM KAISER, NOTARY PUBLIC

RECEIVED
STATE CORPORATION COMMISSION
JUN 14 1989
CONSERVATION DIVISION
Wichita, Kansas