

STATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION FORM
ACO-1 WELL HISTORY
DESCRIPTION OF WELL AND LEASE

Operator: License # 5269

Name: Kansas Natural Gas, Inc.

Address P.O. Box 815

City/State/Zip Sublette, KS 67877

Purchaser: Williams Natural Gas

Operator Contact Person: Mr. Steve Lehning

Phone (316) 675-8185

Contractor: Name: Cheyenne Drilling Company

License # 5382

Wellsite Geologist: Mr. Ron Osterbuhr

Designate Type of Completion

New Well Re-Entry Workover

Oil SWD SIOW Temp. Abd.
 Gas ENHR SIGW
 Dry Other (Core, WSW, Expl., Cathodic, etc)

If Workover:

Operator: _____

Well Name: _____

Comp. Date _____ Old Total Depth _____

Deepening Re-perf. Conv. to Inj/SWD
 Plug Back PBTB
 Commingled Docket No. _____
 Dual Completion Docket No. _____
 Other (SWD or Inj?) Docket No. _____

11-19-92 11-21-92 1-15-93
Spud Date Date Reached TD Completion Date

API NO. 15- 081 - 20,759 - 0000

County Haskell

App - C - NW - 1/4 Sec. 34 Twp. 29 Rge. 32 X W

3990 Feet from (S)N (circle one) Line of Section

4020 Feet from (E)W (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:
NE, (SE), NW or SW (circle one)

Lease Name Redd Well # 1-2A

Field Name Hugoton

Producing Formation Chase Series

Elevation: Ground 2900' KB 2911'

Total Depth 2780' KB PBTB 2784' KB

Amount of Surface Pipe Set and Cemented at 687 Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set _____ Feet

If Alternate II completion, cement circulated from 687'

feet depth to surface w/ 330 sx cmt.

Drilling Fluid Management Plan DLT 1 2-18-93
(Data must be collected from the Reserve Pit)

Chloride content NA ppm Fluid volume NA bbls

Dewatering method used remove & backfill

Location of fluid disposal if hauled offsite: _____

Operator Name _____

Lease Name _____ License No. _____

Quarter _____ Sec. _____ Twp. _____ S Rng. _____ E/W

County _____ Docket No. _____

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 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 geologist well report 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.

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 Steven M. Lehning

Title Superintendent Date 2-5-93

Subscribed and sworn to before me this 5 day of February, 19 93.

Notary Public Judy L. Webb

Date Commission Expires September 11, 1996

K.C.C. OFFICE USE ONLY
F Letter of Confidentiality Attached
C Wireline Log Received
C Geologist Report Received
Distribution
 KCC SWD/Rep NGA
 KGS Plug Other
(Specify)
RECEIVED
STATE CORPORATION COMMISSION

Notary Public-State of Kansas
JUDY L. WEBB
My Appt. Exp. 9-11-96

FEB 8 1993
2-8-93
CONSERVATION DIVISION
Wichita, Kansas

PI

Operator Name Kansas Natural Gas, Inc. Lease Name Redd Well # 1-2A
 East County Haskell
 Sec. 34 Twp. 29 Rge. 32 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 Yes No
 (Attach Additional Sheets.)
 Samples Sent to Geological Survey Yes No
 Cores Taken Yes No
 Electric Log Run Yes No
 (Submit Copy.)
 List All E.Logs Run:
 Gamma Ray Neutron Log
 Cement Bond Log

Log Formation (Top), Depth and Datums Sample

Name	Top	Datum
T/Cement (For 5 1/2")	80'	+2831'
T/Permian	776'	+2135'
T/Cedar Hills	1342'	+1569'
B/Stone Corral	1854'	+1057'
T/"Chase Group"	2639'	+ 272'
T/Winfield	2749'	+ 162'
Plug Back TD	2784'	+ 127'
Rotary TD	2780'	+ 131'

CASING RECORD <input checked="" type="checkbox"/> New <input 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 Casing	12 1/4"	8 5/8"	24#	690'	Class "C"	330	6% Gel
Production Casing	7 7/8"	5 1/2"	14#	2771' G.L.	Class "C"	600	2% Cal. Ch.

ADDITIONAL CEMENTING/SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type		Acid, Fracture, Shot, Cement Squeeze Record	
	Specify Footage of Each Interval Perforated		Amount and Kind of Material Used	Depth
(3) Shots Per Foot	2677' - 2687'	10' Zone	Acid - 2500 gals 15% HCL, 2 gals A-260	
	2700' - 2708'	8' Zone	130 Ball Sealers	
	2721' - 2727'	6' Zone	Fracture - 20,000# Diverta Frac. Cross-Link Gel.	
			40 bbls per minute, 1 gal W11 Surfactant per 1000 gals	

TUBING RECORD	Size	Set At	Packer At	Liner Run
	2 3/8" EUE	2731'	None	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Date of First, Resumed Production, SWD or Inj. Pending pipeline connection _____ Producing Method Flowing Pumping Gas Lift Other (Explain) _____

Estimated Production Per 24 Hours	Oil Bbls. Estimated Production	Gas Mcf Open Flow	Water Bbls. 33.0 BPD	Gas-Oil Ratio Est. Deliv.: 146	Gravity Est.: .674
		175			

Disposition of Gas: Vented Sold Used on Lease (If vented, submit ACO-18.) METHOD OF COMPLETION Open Hole Perf. Other (Specify) _____ Production Interval Daily Comp. Commingled Other (Specify) _____

2677' - 2687'
2700' - 2708'
2721' - 2727'

RECEIVED
FEB 8 1953
CONSERVATION DIVISION
Wichita, Kansas

ORIGINAL

DRILLERS LOG

KANSAS NATURAL GAS, INC.
REDD #1-2A
SECTION 34-T29S-R32W
HASKELL COUNTY, KANSAS

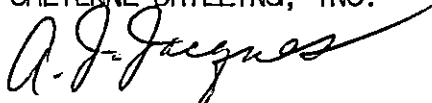
COMMENCED: 11-19-92
COMPLETED: 11-22-92

SURFACE CASING: 683' OF 8 5/8"
OMTD W/180 SX 65/35/C/POZ, 6% GEL,
2% C.C., 1/4#/SX CELLO-FLAKE; TAILED
IN W/150 SX "C", 2% C.C., 1/4#/SX CELLO-FLAKE

FORMATION	DEPTH
SURFACE HOLE	0- 700
SAND & SHALE	700-1235
ANHYDRITE & SAND	1235-1681
SHALE & SAND	1681-2045
LIME & SHALE	2045-2487
LIME & DOLOMITE	2487-2780 RTD

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

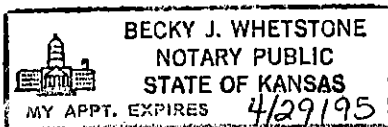
CHEYENNE DRILLING, INC.



A. J. JACQUES

STATE OF KANSAS :ss:

SUBSCRIBED AND SWORN TO BEFORE ME THIS 23RD DAY OF NOVEMBER, 1992.



BECKY J. WHETSTONE, NOTARY PUBLIC

CEMENTING SERVICE REPORT

ORIGINAL **DS**
DOWELL SCHLUMBERGER INCORPORATED

TREATMENT NUMBER **03-12-4892** DATE **11-22-92**
STAGE **DS** DISTRICT **U1433E3 KS**

DS-496 PRINTED IN U.S.A.

WELL NAME AND NO. **Red #1-2A** LOCATION (LEGAL) **SEC 34-29S-32W**
FIELD-POOL **HUGOTON** FORMATION
COUNTY/PARISH **HASKELL** STATE **KS.** API. NO.

RIG NAME: **Cheyenne #1**
WELL DATA: BOTTOM TOP
BIT SIZE **7 7/8** CSG/Liner Size **5 1/2**
TOTAL DEPTH **2774** WEIGHT **15.5 4"**
 ROT CABLE FOOTAGE **2770.52**
MUD TYPE GRADE
 BHST BHCT THREAD **8 1/2**
MUD DENSITY LESS FOOTAGE SHOE JOINT(S) TOTAL
MUD VISC. Disp. Capacity **270.52** **67.6**

NAME **Cheyenne Drilling**
AND
ADDRESS
ZIP CODE

NOTE: Include Footage From Ground Level To Head In Disp. Capacity
Float: TYPE **LONG DOUBT** TYPE
DEPTH **2770.52** DEPTH
SHOE- TYPE **SWIRL GUIDE** TYPE
DEPTH **2770.52** DEPTH

SPECIAL INSTRUCTIONS

Head & Plugs TBG D.P. SQUEEZE JOB
 Double SIZE TOOL TYPE
 Single WEIGHT DEPTH
 Swage GRADE TAIL PIPE: SIZE DEPTH
 Knockoff THREAD TUBING VOLUME Bbls
TOP OR NEW USED CASING VOL. BELOW TOOL Bbls
BOT OR DEPTH TOTAL Bbls
ANNUAL VOLUME Bbls

IS CASING/TUBING SECURED? YES NO
LIFT PRESSURE **1634** PSI CASING WEIGHT + SURFACE AREA (3.14 x R²)
PRESSURE LIMIT PSI BUMP PLUG TO **1750** PSI
ROTATE RPM RECIPROCATATE FT No. of Centralizers **5**

JOB SCHEDULED FOR TIME **0200** DATE: **11-22** ARRIVE ON LOCATION TIME **0115** DATE: **11-22-92** LEFT LOCATION TIME: **1030** DATE: **11-22-92**

TIME	PRESSURE		VOLUME PUMPED BBL		INJECT RATE	FLUID TYPE	FLUID DENSITY	SERVICE LOG DETAIL
	TBG OR D.P.	CASING	INCREMENT	CUM				
0001 to 2400								PRE-JOB SAFETY MEETING
0823		290	20		7	F1120	8.34	START WATER HEAD
0826		330	20	20	7	C2000		START CW100
0829		330	187	40	7	Cut	12.2	START LEAD CEMENT
0856		310	25	227	7	Cut	14.5	START TAIL CEMENT
0859		-		252				TAIL CEMENT PUMPED SHUT D.O.
0900		-		252				Wash Pump + Lines
0904		-		252				Drop Plug
0905		-	67.9	252	5	H2O	8.34	START DISPLACEMENT 60% ACETIC
0906		150		6	5	H2O	8.48	START WATER 2% KCL
0911		170		36	4			Slow Rate
0913		400		36	4			CEMENT TO SURFACE
0918		710		57	2			Slow Rate 2BPM.
0923		810		67.6	2			Bump top Plug
0924		1750		67.6				check floor - floor holding

REMARKS

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS				SLURRY MIXED BBLs DENSITY		
			1	2	3	4	BBLs	DENSITY	
1.	500	2.1	65/35 + 6%	D20 + 2%	S1 + 1/4" / 3C	B29	187	12.2	
2.	100	1.45	C + 1%	S1 + 1%	Z10 + 2%	D46 + 1/4" / 3C	B29	25	14.5
3.									
4.									
5.									
6.									

BREAKDOWN FLUID TYPE VOLUME
 HESITATION SQ. RUNNING SQ. CIRCULATION LOST
PRESSURE MAX. **1750** MIN:
STATE CORPORATION COMMISSION Cement Circulated To Surf. YES NO **37.6** Bbls
BREAKDOWN PSI FINAL PSI DISPLACEMENT VOL. **67.6** Bbls
Washed Thru Perfs YES NO TO FT. MEASURED DISPLACEMENT WIRELINE TYPE OF WELL GAS STORAGE INJECTION BRINE WATER WILDCAT
PERFORATIONS TO TO CUSTOMER REPRESENTATIVE **Rick** DS SUPERVISOR **CONSERVATION DIVISION Wichita, Kansas**

CEMENTING SERVICE REPORT

ORIGINAL
DOWELL SCHLUMBERGER INCORPORATED

TREATMENT NUMBER: 03-12-48860 DATE: 11-19-92
STAGE: DS DISTRICT: 2115555, KS

DS-486 PRINTED IN U.S.A.

WELL NAME AND NO. **Redd #1-2A** LOCATION (LEGAL) **Sec 34-29s-32w** RIG NAME: **Cheyenne #1**
FIELD-POOL **Redd #1-2A** FORMATION **SSS** WELL DATA: BIT SIZE **2 1/4** CSG/Liner Size **8 7/8** BOTTOM TOP
COUNTY/PARISH **Haskell** STATE **KS.** API. NO. **2115555** TOTAL WEIGHT **24**
NAME **Cheyenne Drilling** MUD TYPE **SSS** GRADE **SSS** FOOTAGE **700**
AND **Cheyenne Drilling** MUD DENSITY **4.3** LESS FOOTAGE SHOE JOINT(S) **43** TOTAL
ADDRESS **Cheyenne Drilling** MUD VISC. **41.8** Disp. Capacity **41.8**

SPECIAL INSTRUCTIONS **NOTE: Include Footage From Ground Level To Head In Disp. Capacity**

Float	TYPE Haffle plate	DEPTH 657	Stage Tool	TYPE	DEPTH
SHOE	TYPE T. Pattern	DEPTH 700	Stage Tool	TYPE	DEPTH

IS CASING/TUBING SECURED? YES NO
LIFT PRESSURE **288** PSI CASING WEIGHT SURFACE AREA (3.14 x R²)
PRESSURE LIMIT **150** PSI BUMP PLUG TO **150** PSI
ROTATE RPM RECIPROCATE FT No. of Centralizers **7**

Head & Plugs TBG D.P. SQUEEZE JOB
 Double SIZE WEIGHT TUBE TYPE DEPTH
 Single GRADE TAIL PIPE: SIZE DEPTH
 Swage THREAD TUBING VOLUME Bbls
 Knockoff NEW USED CASING VOL. BELOW TOOL Bbls
TOP OR DEPTH TOTAL Bbls
BOT OR ANNUAL VOLUME Bbls

JOB SCHEDULED FOR TIME **2230** DATE **11-19-92** ARRIVE ON LOCATION TIME **2230** DATE **11-19-92** LEFT LOCATION TIME **0600** DATE **11-20-92**

TIME	PRESSURE		VOLUME PUMPED BBL		INJECT RATE	FLUID TYPE	FLUID DENSITY	SERVICE LOG DETAIL
	TBG OR D.P.	CASING	INCREMENT	CUM				
0001 to 2400								PRE-JOB SAFETY MEETING
0407		60	12		5.8	H2O		start H2O ahead
0409		190	67		5.8	cmf.	12.2	start lead cmf.
0415		200	36		5.9	cmf.	12.2	psi check
0421		210	35		5.5	cmf.	14.8	start tail cmf.
0424		250	17		5.8	cmf.	14.8	psi check
0428		20						shut down drop top plug
0429		20	41.8		5.1	H2O		start displacement
0431		100	11		5.1			psi check
0433		210	20		5.5			cement to surface
0435		310	31		2			lower rate
0437		230	37		2			psi check
0440		750	42		2			bump top plug
0441								blood psi of to 270 psi shut head + manifold 14 paid job

REMARKS

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS	SLURRY MIXED	
				BBLs	DENSITY
1.	180	2.10	3502 + 6% o.gel + 2% o.c.l. + 1/4% O29	67.3	12.2
2.					
3.	150	1.32	class C + 2% o.c.l. + 1/4% O29	35.2	14.8
4.					
5.					
6.					

CONSERVATION DIVISION
WRENCH, Kansas
Cement Circulated To Surf. **21** Bbls
DENSITY **41.8** Bbls
TYPE OF WELL OIL STORAGE BRINE WATER
 GAS INJECTION WILDCAT
PERFORATIONS TO TO CUSTOMER REPRESENTATIVE **Rick Barriquer** DS SUPERVISOR **James Esquivel**