

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

API NO. 15- 093-21649-00-00 ORIGINAL

County KEARNY COUNTY

App. C - NW - $\frac{1}{4}$ Sec. 27 Twp. 21 Rng. 35 X ^E/_W

3954 Feet from SW (circle one) Line of Section

4030 Feet from EW (circle one) Line of Section

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

Lease Name McNellis Well # #1-2

Field Name Hugoton Field

Producing Formation Chase Series

Elevation: Ground 3102.78 KB 3107.78

Total Depth 2664'KB PSTD 2663'KB

Amount of Surface Pipe Set and Cemented at 427' Feet

Multiple Stage Cementing Collar Used? Yes XX No

If yes, show depth set _____ Feet

If Alternate II completion, cement circulated from 2663

feet depth to Surface w/ 650 sx cat.

Drilling Fluid Management Plan Att. 2, 9-22-99
(Data must be collected from the Reserve Pt.) UC

Chloride content NA Fluid volume NA bbls

Devastating method used Remove and Backfill

Location of fluid disposal if hauled offsite:

Operator Name _____

Lease Name _____ License No. _____

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

County _____ Docket No. _____

Operator: License # #5269

Name: KANSAS NATURAL GAS, INC.

Address P.O. Box #815

East Highway 56

City/State/Zip Sublette, Ks. 67877

Purchaser: Williams-Amoco Pipeline Co.

Operator Contact Person: Mr. Steve Lehning

Phone (316) 675-8185

Contractor: Name: CHEYENNE DRILLING COM.

License: #5382

Wellsite Geologist: Mr. Ron Ostebuhr

Designate Type of Completion
XXX New Well Re-Entry Workover

XX Oil SVD SIOW Temp. Abd.
XX Gas ENHR SIGU
Dry Other (Core, WSM, Exp., Cathodic, etc.)

If Workover/Re-Entry: old well info as follows:

Operator: _____

Well Name: _____

Comp. Date: _____ Old Total Depth _____

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

8-9-1999 8-11-99 8-20-99
Spud Date Date Reached TD Completion Date

RECEIVED
AUG 27 1999
OIL & GAS CONSERVATION DIVISION
WICHITA, KANSAS

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.

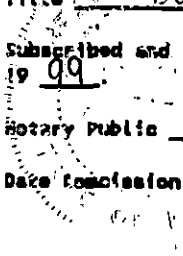
Signature Steven M. Lehning

Title Superintendent Date 8-26-99

Subscribed and sworn to before me this 26th day of August 19 99

Notary Public Jeanie S. Yung

Date Commission Expires 10-12-2002



K.C.C. OFFICE USE ONLY
F Letter of Confidentiality Attached
C Wireline Log Received
C Geologist Report Received
Distribution
KCC SVD/Rep NGPA
KGS Plug Other
(Specify)

X

Operator Name KANSAS NATURAL GAS, INC.

Lease Name McNellis

Well # #1-2

Sec. 27 Twp. 21 Rge. 35

East
 West

County Kearny County

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests given 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 sheets 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/CCL Log only.

Log	Formation (Top), Depth and Datum	Sample
Name	Top	Datum
T/Cement	GL	+2858'
T/Permian	949'	+2159'
B/Stone Corral	2151'	+957'
T/Hollenberg	2583'	+525'
T/Herrington	2617'	+491'
T/Krider	2638'	+470'
T/Winfield	NR	
Rotary Total Depth	2660'	+448'
Log Total Depth	2666'	+442'

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 Case.	12 1/2"	8 5/8"	24#	427'	Class(C)	225	6% Gel
Production Casing	7 7/8	5 1/2"	14#	2665'	Class C	650	HLCP
Circulated Cement on Surface and Production Casing.							

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 Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
(4)	2623'-2629' KB 6' zone	Acid: 1,000 gal. of 15% MCA and 72 ball sealers.	
(4)	2639-2645' KB 6' zone		
	(48 Holes total)	Frac: 13,000# of 16/30 Ottawa Sand at 8 BBl P/m. Foam frac and 150,000 scf Nitrogen.	

TUBING RECORD	Size	Set At	Packer At	Liner Run
	2 3/8" EUE	2645'	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.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
		NA		Pending Pipeline Connection	NA

Disposition of Gas:
 Vented Sold Used on Lease
(If vented, submit ACO-15.)

METHOD OF COMPLETION

Open Hole Perf. Dually Comp. Commingled
 Other (Specify) _____

Production Interval
2623'-2629'
2639'-2645'

ORIGINAL

DRILLING & GEOLOGICAL SUMMARY

OPERATOR: Kansas Natural Gas, Inc. KCC #: 5269
 WELL NAME: McNellis #1-2 API #: 15-093-21649
 LOCATION: 3954' FSL, 4030' FEL sec27-T21S-R35W COUNTY: Kearny
 ELEVATIONS: GL-3103', KB-3108' TOTAL DEPTH: 2660'
 SPUD DATE: 08/09/99 DRILLING COMPLETED: 08/11/99
 DRILLING CONTRACTOR: Cheyenne Drlg.-Rig#8 KCC #: 5382

SURFACE CASING SIZE: 8 5/8" WEIGHT: 24# GRADE: J-55 DEPTH: 433'
 CEMENT: 125sx class "C" lite, 100sx class "C"

CASING EQUIPMENT: "Texas" pattern shoe, baffle plate, 2 centralizers

COMMENTS: circulated 64sx cement to pit. Deviation-1/2°.

PRODUCTION CASING SIZE: 5.5" WEIGHT: 14# GRADE: J-55 DEPTH: 2659'
 1st STAGE CEMENT: 500sx class "C" lite, 150sx class "C".

2nd STAGE CEMENT:

CASING EQUIPMENT: guide shoe w/integral latch-down baffle, 8 central-izers.

COMMENTS: displaced plug with 250 gallons of 10% acetic acid and water. circulated 83 sx cement to pit. Deviation - 1°.

OPEN-HOLE LOGS: none

CASED-HOLE LOGS: G/R-CCL

SIGNIFICANT DEPTHS: (log depths measured from-KB @ 3108')

horizon	depth	datum	remarks
T/Cement	GL	+3103'	circulated 83sx
T/Permian	949'	+2159'	
B/Stone Corral	2151'	+ 957'	
T/Hollenberg	2583'	+ 525'	
T/Herington	2617'	+ 491'	perforated 2623'-2629', 4spf
T/Krider	2638'	+ 470'	perforated 2639'-2645', 4spf
T/Winfield	NR		estimated to be at 2678'
Rotary total depth	2660'	+ 448'	
Log Total depth	2666'	+ 442'	log depth
Casing total depth	2665'	+ 443'	log depth
Plugged-back depth	2664'	+ 444'	log depth

PERFORATIONS: 2623'-2629', 2639'-2645'; all w/4spf using bullet perforators.

ACID TREATMENTS: 1000 gallons 15% MCA acid at avg 7-8bpm at avg 120#, with maximum pressure of 1100#. ISIP was vacuum.

FRACTURE TREATMENTS: 13,000# 16/30 sand; 150,000scf N₂; 186 bbls treated water. treated at avg rate of 8bpm.

REMARKS: ran tubing, rods, and pump on 08/20/99. shut in, waiting on flow test.

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 STATE CORPORATION COMMISSION
 AUG 27 1999
 CONSERVATION DIVISION
 Wichita, Kansas

prepared by: *Ronald G. Osterbuhr*
 Ronald G. Osterbuhr
 COPY

Comments:

(SURFACE CEMENT)

McNellis #1-2

Fluid Systems:

Lead			
125 sks 35/65 Poz/C			
Density:	12.2 lb/gal	Thickening Time:	+6 hrs
Yield:	2.17 ft ³ /sk	Viscosity:	cp
H2O Mix:	12.3 gal/sk	Break Time:	
H2O:	1537.5 gal	Eq. Sack Weight:	88.75 lb
Dowell Code	Conc/ Amount	Total Quantity	
D029	0.25 lbs/sk	31.25	
S001	2 % BWOB	221.875	
D020	6 % BWOB	665.625	
D132	27.65 lbs/sk	3456.25	
D903	61.1 lbs/sk	7637.5	

CEMENT SURFACE Pipe.
 LEAD: 125 SACKS 35/65 Poz/c
 Tail: 100 SACKS CLASS "C".
 (CIRCULATED 64 SACKS TO PIT)

Tail			
100 sks Class C			
Density:	14.8 lb/gal	Thickening Time:	3 hrs
Yield:	1.34 ft ³ /sk	Viscosity:	cp
H2O Mix:	6.34 gal/sk	Break Time:	
H2O:	634 gal	Eq. Sack Weight:	94 lb
Dowell Code	Conc/ Amount	Total Quantity	
D029	0.25 lbs/sk	25	
S001	2 % BWOB	188	
D903	94 lbs/sk	9400	

RECEIVED
 STATE COMMISSION

AUG 27 1959

CONSERVATION DIVISION
 Wichita, Kansas

Schlumberger
Dowell

Cementing Service Report

Customer CHEYENNE DRILLING				Job Number 20119258				
Well McNellis 1-2			Location (legal) Sec. 27-21S-35W			Dowell Location Ulysses, KS		Job Start 8/9/99
Field Hugoton		Formation Name/Type Surface		Deviation 0	Bit Size 12.3 in	Well MD 435 ft	Well TVD 435 ft	
County Kearney		State/Province Kansas		BHP 0 psi	BHST 75 °F	BHCT 70 °F	Pore Press. Gradient 0 psi/ft	
Rig Name Cheyenne Drilling Rig	Drilled For Gas	Service Via Land		Casing/Liner				
Offshore Zone	Well Class New	Well Type Development		Depth, ft 434	Size, in 8.63	Weight, lb/ft 24	Grade 	Thread
Drilling Fluid Type Bentonite	Max. Density 9.5 lb/gal	Plastic Viscosity 30 cp		Tubing/Drill Pipe				
Service Line Cementing	Job Type Cem Surface Casing		Depth, ft 0	Size, in 0	Weight, lb/ft 0	Grade 0	Thread 0	
Max. Allowed Tubing Pressure 1000 psi	Max. Allowed Ann. Pressure 0 psi	Wellhead Connection Single cement head		Perforations/Open Hole				
Service Instructions Safely deliver & perform Surface Cement job with materials & equipment listed on the Service Receipt. Per clients instructions. Mileage:53				Top, ft 0	Bottom, ft 0	spf 0	No. of Shots 0	Total Interval 0 ft
				Diameter 0 in	Treat Down Casing	Displacement 25 bbl	Packer Type None	Packer Depth 0 ft
				Tubing Vol. 0 bbl	Casing Vol. 28 bbl	Annular Vol. 32 bbl	Open Hole Vol. 0 bbl	
				Casing/Tubing Secured <input checked="" type="checkbox"/>	1 Hole Volume Circulated prior to Cementing <input type="checkbox"/>	Casing Tools		Squeeze Job
Lift Pressure: 178 psi	Pipe Rotated <input type="checkbox"/>	Pipe Reelocated <input type="checkbox"/>		Shoe Type: Other	Squeeze Type			
No. Centralizers: 2	Top Plugs: 1	Bottom Plugs: 0		Shoe Depth: 434 ft	Tool Type:			
Cement Head Type:	Job Scheduled For: 8/9/99 16:00	Arrived on Location: 8/9/99 17:00		Leave Location: 8/9/99 20:30		Stage Tool Type 0 ft	Tail Depth: 0 ft	
Cement Head Type:	Collar Type: Other	Collar Depth: 391 ft	Sqz Total Vol: 0 bbl	Message				
Time	CumVol	Density	Pressure	TotFlowrate	TotVol	Message		
24 hr clock	bbl	ppg	psi	bpm	bbl			
18:58	0	0	0	0	0	START ACQUISITION		
18:58	0.	-6.25	-3658	0.	0.	0		
18:58	0.	-6.25	-3658	0.	0.	0		
18:58	3.63	8.3	146.5	5.73	3.63	0		
18:59	7.93	8.32	178.6	5.7	7.93	0		
19:00	12.24	8.44	151.1	5.73	12.24	0		
19:00	12.24	8.44	151.1	5.73	12.24	0		
19:00	12.24	8.44	151.1	5.73	12.24	0		
19:00	12.24	8.44	151.1	5.73	12.24	0		
19:00	12.24	8.44	151.1	5.73	12.24	0		
19:01	3.92	10.79	192.3	5.7	16.55	0		
19:01	8.23	12.39	201.5	5.7	20.86	0		
19:02	12.54	12.55	192.3	5.7	25.16	0		
19:03	16.85	12.23	169.4	5.7	29.47	0		
19:04	21.15	12.16	141.9	5.7	33.78	0		
19:04	25.46	12.36	141.9	5.7	38.09	0		
19:05	29.77	12.23	141.9	5.73	42.39	0		
19:06	34.08	12.15	141.9	5.7	46.7	0		
19:07	38.39	12.42	141.9	5.73	51.01	0		
19:08	42.69	12.39	141.9	5.7	55.32	0		
19:08	47.	12.62	155.7	5.7	59.62	0		
19:09	47.	12.62	155.7	5.7	59.62	0		
						End Lead Slurry		

ORIGINAL

Well		Field				Service Date		Customer		Job Number
McNellis #1-2		Hugoton						CHEYENNE DRILLING		20119258
Time	CumVol	Density	Pressure	TotFlowrate	TotVol			Message		
24 hr clock	bbbl	ppg	psi	bpm	bbbl					
19:09	47.	12.62	155.7	5.7	59.62	0	0	[CumVol]=49.1 bbl		
19:09	47.	12.62	155.7	5.7	59.62	0	0	Reset Volume		
19:09	47.	12.62	155.7	5.7	59.62	0	0	Start Mixing Tail Slurry		
19:09	2.11	14.29	201.5	5.73	63.93	0	0			
19:10	6.41	15.35	242.7	5.7	68.23	0	0			
19:11	10.72	14.72	201.5	5.7	72.54	0	0			
19:11	15.02	14.74	192.3	5.73	76.85	0	0			
19:12	19.33	15.2	270.1	5.7	81.15	0	0			
19:13	23.25	12.79	27.47	0.	85.07	0	0			
19:13	23.25	12.79	27.47	0.	85.07	0	0	End Tail Slurry		
19:13	23.25	12.79	27.47	0.	85.07	0	0	[CumVol]=23.25 bbl		
19:13	23.25	12.79	27.47	0.	85.07	0	0	Reset Volume		
19:13	23.25	12.79	27.47	0.	85.07	0	0	Shutdown		
19:13	23.25	12.79	27.47	0.	85.07	0	0	Drop Top Plug		
19:13	23.25	12.79	27.47	0.	85.07	0	0	Start Displacement		
19:14	0.	12.48	0.	0.	85.07	0	0			
19:14	0.	12.55	0.	0.	85.07	0	0			
19:15	2.05	11.34	155.7	5.7	87.12	0	0	Returns at Surface 25 BBLS/64sx		
19:15	2.05	11.34	155.7	5.7	87.12	0	0			
19:16	6.36	8.88	151.1	5.7	91.43	0	0			
19:17	10.66	8.13	178.6	5.7	95.73	0	0			
19:17	14.97	8.13	224.4	5.73	100.	0	0			
19:18	19.04	8.01	164.8	2.66	104.1	0	0			
19:18	19.04	8.01	164.8	2.66	104.1	0	0	Lower Pump Rate		
19:19	20.58	7.91	160.3	1.96	105.6	0	0			
19:20	22.05	7.91	183.2	1.96	107.1	0	0			
19:20	23.52	7.9	174.	1.93	108.6	0	0			
19:21	25.	7.83	178.6	1.93	110.1	0	0			
19:22	26.47	7.9	192.3	1.96	111.5	0	0			
19:22	26.47	7.9	192.3	1.96	111.5	0	0	Bump Top Plug		
19:23	27.06	7.84	984.4	0.	112.1	0	0			
19:23	27.06	7.91	732.6	0.	112.1	0	0			
19:24	27.06	7.91	732.6	0.	112.1	0	0	End Job		
19:24	27.06	8.01	732.6	0.	112.1	0	0			

Post Job Summary									
Average Pump Rates, bpm					Volume of Fluid Injected, bbl				
Slurry	N2	Mud	Maximum Rate		Total Slurry	Mud	Spacer	N2	
6	0	0	6		72	0	12	0	
Treating Pressure Summary, psi					Breakdown Fluid				
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density		
969	969	150	800	0		0 bbl	0 lb/gal		
Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp	<input checked="" type="checkbox"/> Cement Circulated to Surface?	Volume	25 bbl			
0 %	72 bbl	24.5 bbl	70 °F	<input type="checkbox"/> Washed Thru Perfs	To	0 ft			
Customer or Authorized Representative			Dowell Supervisor			<input type="checkbox"/> Circulation Lost <input type="checkbox"/> Job Completed			
Domaso Castillo			Jeffrey Dutton						

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STATE COMMISSION

AUG 27 1989

CONSERVATION DIVISION
Wichita, Kansas

JURTON

JOB SUMMARY 4239-1

TICKET # 12362 ORIGINAL TICKET DATE 8-11-99

North America

NWA/COUNTRY Mexico

BDA / STATE KS

COUNTY Keosauqua

WBU ID / EMP # MCL101 106322

EMPLOYEE NAME D. McLane

PSL DEPARTMENT ZI

LOCATION Liberal

COMPANY Kansas Natural

CUSTOMER REP / PHONE

TICKET AMOUNT

WELL TYPE 01

API / UWI #

WELL LOCATION W Deer Field

DEPARTMENT ZI

JOB PURPOSE CODE 035

LEASE / WELL # McNeill 1-2

SEC / TWP / RNG 27 21W 35W

HES EMP NAME/EMP#/(EXPOSURE HOURS)	HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS)	HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS)	HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS)	HRS
<u>D. McLane 106322</u>							
<u>B. McIntyre 106009</u>							
<u>G. Humphreys 106085</u>							
<u>R. Ferguson 106154</u>							

HES UNIT NUMBERS	R/T MILES	HES UNIT NUMBERS	R/T MILES	HES UNIT NUMBERS	R/T MILES	HES UNIT NUMBERS	R/T MILES
<u>420995</u>	<u>45</u>						
<u>54043-76900</u>	<u>45</u>						
<u>54225-75821</u>	<u>45</u>						
<u>54029-6610</u>	<u>45</u>						

Form Name _____ Type: _____

Form Thickness _____ From _____ To _____

Packer Type _____ Set At _____

Bottom Hole Temp. _____ Pressure _____

Misc. Data _____ Total Depth _____

DATE	CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
	<u>8-11-99</u>	<u>8-11-99</u>	<u>8-11-99</u>	<u>8-11-99</u>
TIME	<u>0600</u>	<u>0930</u>	<u>1330</u>	<u>1411</u>

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY	MAKE
<u>Float Collar 3.5" 5 1/2"</u>	<u>1</u>	<u>H</u>
<u>Float Shoe</u>		
<u>Guide Shoe 5 1/2"</u>	<u>1</u>	<u>0</u>
<u>Centralizers 5 1/2"</u>	<u>8</u>	
<u>Bottom Plug</u>		<u>W</u>
<u>Top Plug 4D 5 1/2"</u>	<u>1</u>	
<u>Head P/C 5 1/2"</u>	<u>1</u>	<u>C</u>
<u>Packer</u>		
<u>Other Weld-A 5 1/2"</u>	<u>1</u>	<u>0</u>

WELL DATA

	NEW/USED	WEIGHT	SIZE	FROM	TO	MAX ALLOW
<u>Casing</u>	<u>W</u>	<u>15.5</u>	<u>5 1/2"</u>	<u>2689</u>	<u>RTB</u>	
<u>Liner</u>						
<u>Liner</u>						
<u>Tbg/D.P.</u>						
<u>Tbg/D.P.</u>						
<u>Open Hole</u>						<u>SHOTS/FT.</u>
<u>Perforations</u>						
<u>Perforations</u>						
<u>Perforations</u>						

MATERIALS

<u>Treat Fluid</u>	<u>Density</u>	<u>Lb/Gal</u>
<u>Disp. Fluid</u>	<u>Density</u>	<u>Lb/Gal</u>
<u>Prop. Type</u>	<u>Size</u>	<u>Lb.</u>
<u>Prop. Type</u>	<u>Size</u>	<u>Lb.</u>
<u>Acid Type</u>	<u>Gal.</u>	<u>%</u>
<u>Acid Type</u>	<u>Gal.</u>	<u>%</u>
<u>Surfactant</u>	<u>Gal.</u>	<u>In</u>
<u>NE Agent</u>	<u>Gal.</u>	<u>In</u>
<u>Fluid Loss</u>	<u>Gal/Lb</u>	<u>In</u>
<u>Gelling Agent</u>	<u>Gal/Lb</u>	<u>In</u>
<u>Fric. Red.</u>	<u>Gal/Lb</u>	<u>In</u>
<u>Breaker</u>	<u>Gal/Lb</u>	<u>In</u>
<u>Blocking Agent</u>	<u>Gal/Lb</u>	
<u>Perpac Balls</u>	<u>Qty.</u>	
<u>Other</u>		
<u>Other</u>		
<u>Other</u>		
<u>Other</u>		

String Cement

HOURS ON LOCATION		OPERATING HOURS		DESCRIPTION OF JOB
DATE	HOURS	DATE	HOURS	
				<u>5 1/2 L.S</u>
TOTAL		TOTAL		

HYDRAULIC HORSEPOWER

ORDERED Avail. Used

TREATED AVERAGE RATES IN BPM Disp. Overall

FEET CEMENT LEFT IN PIPE Reason

CEMENT DATA

STAGE	SACKS	CEMENT	BULK/SKS	ADDITIVES (D)	YIELD	LBS/GAL
	<u>500</u>	<u>HLC P+</u>	<u>B</u>	<u>1/4 # Stocle</u>	<u>202</u>	<u>12.3</u>
	<u>180</u>	<u>Premix</u>	<u>B</u>	<u>1/4 # Stocle</u>	<u>118</u>	<u>15.6</u>

Aug 27 1999

<u>Circulating</u>	<u>Displacement</u>	<u>W. Preflush: 150</u>	<u>Gal - BBI 240</u>	<u>Type M.S</u>
<u>Breakdown</u>	<u>Maximum</u>	<u>Load & Bkdn:</u>	<u>Gal - BBI</u>	<u>Pad: BBI - Gal 5.4</u>
<u>Average</u>	<u>Frac Gradient</u>	<u>Treatment</u>	<u>Gal - BBI</u>	<u>Disp: BBI - Gal 59.9</u>
<u>Shut In: Instant</u>	<u>5 Min</u>	<u>Cement Slurr</u>	<u>Gal - BBI 179.8</u>	<u>T.C. 31.5</u>
	<u>15 Min</u>	<u>Total Volume</u>	<u>Gal - BBI</u>	



JOB LOG 4230-5

TICKET # 12362 ORIGINAL TICKET DATE 8-11-99

REGION North America	NW/COUNTRY Mid Continent	BDA / STATE KS	COUNTY Nowata
MBU ID / EMP # MKT010 106322	EMPLOYEE NAME D. McLane	PSL DEPARTMENT ZI	
LOCATION Liberal	COMPANY Kansas Natural	CUSTOMER REP / PHONE	
TICKET AMOUNT	WELL TYPE 01	API / UWI #	
WELL LOCATION W. Deer Field	DEPARTMENT ZI	JOB PURPOSE CODE 035	
LEASE / WELL # McNellis 1-2	SEC / TWP / RNG 27 21W 35W		

HES EMP NAME/EMP#(EXPOSURE HOURS) (HRS)	HES EMP NAME/EMP#(EXPOSURE HOURS) (HRS)	HES EMP NAME/EMP#(EXPOSURE HOURS) (HRS)	HES EMP NAME/EMP#(EXPOSURE HOURS) (HRS)
D. McLane 106322			
B. McIntyre 106009			
G. Humphreys 106085			
R. Ferguson 106151			

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL)(GAL)	PUMPS		PRESS. (psf)		JOB DESCRIPTION / REMARKS
				T	C	T _{bg}	C _{bg}	
	0930							on location rig laying down O.P
	1015							Set up pump truck hold safety meeting
	1104							P.P. out of hole
	1240							Rig up to run Crg & float
	1250							Crg on bottom
	1300							Hook up P/C of Circulating Iron
	1320							Start Circulating
	1321							then Circulating
	1321							Hook up to pump truck
	1330							Job Procedure 542 L.S.
	1331	5.5	5			9/2800		Pressure test lines
	1332	6.5	20			0/1150		Start Surk water
	1337	6.5	5			110/20		Start Mud Flush
	1338	6.5	179.8			280		Start Surk water
	1408	6.5	31.5			280/170		Start lead Cement @ 12.3 #
	1415					180		Start Tail Cement @ 15.6 #
	1417							then mixing Cement
	1418							Shut down & Release plug
	1422	6	5.9			0/70		Wash up pumps & lines
	1423	6	59.9			0/120		Start MSA @ 10
	1430					120/20		Start Kch Displacement
	1435					120/20		Displacement Caught Cement
	1440					120/20		slow down rate
	1441					280/170		Plug kneel
						1700/6		Release float
								Circulated 30 Bbls to pit ✓
								83 stcs to pit
								Thank You For Calling Halliburton
								Danny & Brian & Crew

~~Start Cement~~

STATE OF KANSAS
AUG 27 1999