

ORIGINAL

SIDE ONE

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

Operator: License # 04680

Name: American Exploration Company

Address 2100 NCNB Center

700 Louisiana

City/State/zip Houston, Texas 77002

Purchaser: KN Energy

Operator Contact Person: Marty B. McClanahan

Phone (713) 220-8251

Contractor: Name: Cheyenne Drilling Co.

License: 5382

Wellsite Geologist: Ron Osterbuhr

Designate Type of Completion

New Well Re-Entry Workover

Oil SWD Temp. Abd.

Gas SI Inj Delayed Comp.

Dry Other (Core, Water Supply, etc.)

If OWWO: old well info as follows:

Operator: _____

Well Name: _____

Comp. Date _____ Old Total Depth _____

Drilling Method:

Mud Rotary Air Rotary Cable

7-21-90 7-24-90 11/11/90

Spud Date Date Reached TD Completion Date

API NO. 15- 075-20,470-0000

County Hamilton

C NE/4 Sec. 34 Twp. 22 Rge. 41 XX East West

3960 Ft. North from Southeast Corner of Section

1320 Ft. West from Southeast Corner of Section
(NOTE: Locate well in section plat below.)

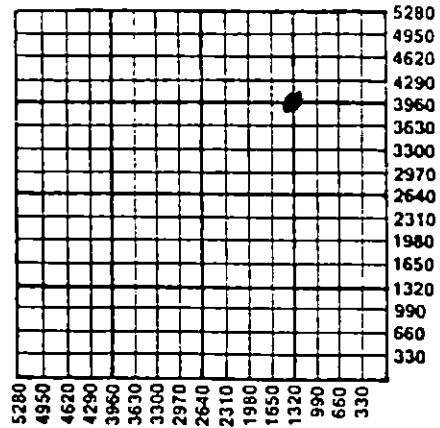
Lease Name HCU Well # 3421-B

Field Name Bradshaw Field

Producing Formation Winfield

Elevation: Ground 3516 KB _____

Total Depth 2773 PBDT 2722



12-6-90

Amount of Surface Pipe Set and Cemented at 360 Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set _____ Feet

If Alternate II completion, cement circulated from 2773

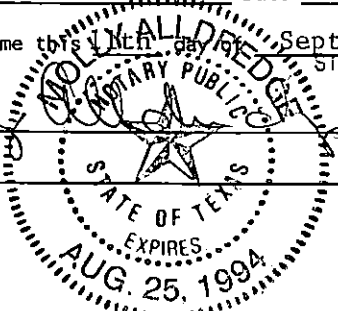
feet depth to Surface w/ 870 640 sx cmt.

INSTRUCTIONS: This form shall be completed in triplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date of any well. Rule 82-3-130, 82-3-107 and 82-3-106 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. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells. Any recompletion, workover or conversion of a well requires filing of ACO-2 within 120 days from commencement date of such work.

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 Marty B. McClanahan
Title Sr. Production Analyst Date 9/11/90

Subscribed and sworn to before me this 11th day of September 19 90.
Notary Public [Signature]
Date Commission Expires _____



K.C.C. OFFICE USE ONLY

F Letter of Confidentiality Attached

C Wireline Log Received

Drillers TimeLog Received

COMMISSION

Distribution

KCC SWD/Rep NGPA

KGS Plug Other

(Specify)

12-5-90

CONSERVATION DIVISION
Wichita, Kansas

P1

SIDE TWO

Operator Name American Exploration Company Lease Name HCU Well # 3421-B

Sec. 34 Twp. 22 Rge. 41 East West

County Hamilton

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.

<p>Drill Stem Tests Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Attach Additional Sheets.)</p> <p>Samples Sent to Geological Survey <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Submit Copy.)</p>	<p style="text-align: center;">Formation Description</p> <p style="text-align: center;"><input checked="" type="checkbox"/> Log <input type="checkbox"/> Sample</p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Name</th> <th style="text-align: left;">Top</th> <th style="text-align: left;">Bottom</th> </tr> </thead> <tbody> <tr> <td>Stone Corral Anhy.</td> <td>----</td> <td>2151 (+1376)</td> </tr> <tr> <td>Winfield</td> <td>2596 (+931)</td> <td></td> </tr> <tr> <td>Ft. Riley</td> <td>2695 (+832)</td> <td></td> </tr> </tbody> </table>	Name	Top	Bottom	Stone Corral Anhy.	----	2151 (+1376)	Winfield	2596 (+931)		Ft. Riley	2695 (+832)	
Name	Top	Bottom											
Stone Corral Anhy.	----	2151 (+1376)											
Winfield	2596 (+931)												
Ft. Riley	2695 (+832)												

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	20#	360	Class H	130	65/35 POZ 6% gel
						100	3% CC 1/4# sx flake
Production	7-7/8	4-1/2	9.5#	2773	DSLW	440	35/65 POZ 6% gel
					Class H	200	3% D-60 1/4# flake

PERFORATION RECORD		Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	
Shots Per Foot	Specify Footage of Each Interval Perforated	Depth	
1 SPF	2598-2603	2480 gals.	15% MCA
	2606-19'		
	2641-51'		
	2653-57'		
	2663-73'		
	2680-87'		

TUBING RECORD	Size <u>2-3/8</u>	Set At <u>2716</u>	Packer At <u>2570</u>	Liner Run <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First Production SI WOPL Producing Method Flowing Pumping Gas Lift Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
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Disposition of Gas: Vented Sold Used on Lease (If vented, submit ACO-18.)

METHOD OF COMPLETION

Open Hole Perforation Dually Completed Commingled

Other (Specify) _____

Production Interval _____

ORIGINAL CASING & CEMENTING REPORT

Well Name H.C.U. 34-21-B Location N.E. 1/4 Sec. 34 T22-S 41-W
 Casing 8 5/8 Date 7-21-90

Jts. On	m On	Size	Wt.					Jts. Depth	m Run
Locat.	Locat.	mm	kg/m	Cr.	Rge.	THD	T&C	Make	In Well
8		8 5/8	20.4		3	10	5		348.67
									m
									m
									m

Shoe Make Weather Type Texas Length 1.00 m
 Collar Make Weather Type ZNSERT Length _____ m

Landing Jt. (When Used) Length _____ m
 Overall Length of Casing String _____ m
 m Up From K.B. (subtract) _____ m

Setting Depth By Driller 360 m By Tally 360.67 m

CENTRALIZERS

SCRATCHERS

Make & No. Weather Ford 2 Make & No. N.A.
 Position 10' 30' Position _____
 Remarks (Thread Lock, Weld, Mill) Thread Lock 130 x 70m 3
Collars

Hole Size 12 1/4 mm Casing In Hole Size N.A. mm
 Depth 363 m Setting Depth _____ m
 Mud Type FR-34 Gel Wt. 28 kg/m Visc. 40 S/LWL cm
 BOP's N.A.
 Power Tong Co Dig Torque Max. _____ Min. _____
 Casing String Wt. 7300 daN Remarks _____

Cementing Co. Dowell Operator Doug HARNED

TYPES & QUANTITIES OF CEMENT

Date 7-21-90

Filler Volume Amount 130 S-X m³ Type 65/35-102 Wt. 12.5 kg/m³
 Additives 6% Gel 3% C.C. 44# 1316K2
 Tail In Volume Amount 100 S-X m³ Type H Wt. 15.5 kg/m³
 Additives 3% C.C. with Floke
 HT. Cemented Surface Water Ahead 10 BBL m³ Start Mix 7:30 A.M. m³
 Finish Mix 2.45 m³ Pumping Press 800 kPa Bump Press 500 kPa
 Float Held YES Cement Returns 10 BBL TO PIT m³
 Plug Down 7:55 A.M. Date 7-21-90
 Wt. Landed in Slips _____ daN Make of Bowl _____
 Size _____ mm Series _____ Slip & Seal Esembly _____
 Remarks (Wellhead - Make, Type, Size)

RECEIVED
 STATE CORPORATION COMMISSION

DEC 5 1990 Co. Rep. H.A.W.A

CONSERVATION DIVISION
 Wichita, Kansas

DOWELL SCHLUMBERGER INCORPORATED

P.O. BOX 4378 HOUSTON, TEXAS 77210

CUSTOMER

15-075-20470-0000

ORIGINAL

OILFIELD SERVICES
INDUSTRIAL SERVICES

DSI SERVICE ORDER RECEIPT AND INVOICE NO. 03-12-858

DSI SERVICE LOCATION NAME AND NUMBER

Ulysses, Kansas 03-12

CUSTOMER NUMBER CUSTOMER P.O. NUMBER TYPE SERVICE CODE BUSINESS CODES

271

CUSTOMER'S NAME American Exploration

ADDRESS

CITY, STATE AND ZIP CODE

WORKOVER NEW WELL OTHER API OR IC NUMBER

ARRIVE LOCATION MO. DAY YR. TIME 7 21 90 0100

SERVICE ORDER RECEIPT I certify that the materials and services listed were authorized and received and all services performed in a workmanlike manner and that I have the authority to accept and execute this document.

JOB COMPLETION MO. DAY YR. TIME 7 21 90 0800

SIGNATURE OF CUSTOMER OR AUTHORIZED REPRESENTATIVE

DSI will furnish and Customer shall purchase materials and services required in the performance of the following SERVICE INSTRUCTIONS or DSI INDUSTRIAL SERVICE CONTRACT NO. in accordance with the terms and conditions as printed on the reverse side of this form.

Provide Equipment & Materials Necessary to Safety Cement 858" casing

STATE CODE COUNTY / PARISH CODE CITY Kansas 015 Hamilton 075

WELL NAME AND NUMBER / JOB SITE LOCATION AND POOL / PLANT ADDRESS SHIPPED VIA HCU 3421-B Sec 34 T22S, R41W Dowell Schlumberger

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
048209-000	Pump Truck Charge 0-1500 ft	ea	1	433.00	433.00
049122-000	Delivery Charge	TM	1096	0.05	55.68
049100-000	Service Charge	cuft	254	1.08	274.32
054647-000	PACB Charge	ea	1	110.00	110.00
054200-002	Mileage Charge	mi	603	2.40	151.20
048209-001	Additional Franchise Below 300 ft	ft	64	0.41	26.24
045008-000	D35 1 1/2" port 3"	cuft	45	2.30	103.50
040003-000	Class G Cement	cuft	185	7.00	595.00
040015-000	Class H Cement	cuft	106	6.85	685.00
045014-050	D22 Bentonite Extender	lb	679	0.13	88.27
067005-100	S1 Calcium Chloride	lb	622	0.32	199.04
044003-025	D29 Cellulose Thickener	lb	58	1.37	79.46
050001-085	Texas Patrol School	ea	1	200.00	200.00
053003-085	Car Line Travel	ea	1	300.00	300.00
056011-085	Cast Iron Pipe	ea	2	68.00	136.00
048501-085	Top Watchdog Plug	ea	1	86.00	86.00
056019-085	Slip Box	ea	1	21.00	21.00
057499-001	Thread Lock	ea	1	20.00	20.00

RECEIVED STATE CORPORATION COMMISSION DIVISION DEC 5 1990

Field Estimate = #4026183 SUB TOTAL

LICENSE/REIMBURSEMENT FEE

REMARKS: Thanks for being so fast! STATE % TAX ON \$ COUNTY % TAX ON \$ CITY % TAX ON \$ SIGNATURE OF DSI REPRESENTATIVE TOTAL \$

ORIGINAL



DOWELL SCHLUMBERGER INCORPORATED

15-075-20470-0000
 TREATMENT NUMBER 03-12-2857 DATE 7-21-90
 STAGE OS DISTRICT Ulysses, KS

DS-496 PRINTED IN U.S.A.

WELL NAME AND NO. HCU 3421-B	LOCATION (LEGAL) Sec 34, T22S, R41W	RIG NAME:
FIELD-POOL	FORMATION	WELL DATA: BIT SIZE 12 X 4 CSG/Liner Size 8 5/8
COUNTY/PARISH Hamilton	STATE Kansas	API. NO.
NAME American Exploration	AND	TOTAL DEPTH 364
ADDRESS	ZIP CODE	WEIGHT 20
SPECIAL INSTRUCTIONS		FOOTAGE 363.83
		MUD TYPE GRADE
		MUD DENSITY LESS FOOTAGE SHOE JOINT(S) 43.8
		MUD VISC. Disp. Capacity 320.02

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

TYPE Surface Insert	DEPTH 320.20	TYPE Texas Pattern	DEPTH 364.00
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Head & Plugs	<input type="checkbox"/> TBG <input type="checkbox"/> D.P.	SQUEEZE JOB
<input type="checkbox"/> Double	SIZE	TOOL TYPE
<input checked="" type="checkbox"/> Single	WEIGHT	DEPTH
<input type="checkbox"/> Swage	GRADE	TAIL PIPE: SIZE DEPTH
<input type="checkbox"/> Knockoff	THREAD	TUBING VOLUME Bbls
TOP <input checked="" type="checkbox"/> R <input type="checkbox"/> W	<input type="checkbox"/> NEW <input type="checkbox"/> USED	CASING VOL. BELOW TOOL Bbls
BOT <input type="checkbox"/> R <input type="checkbox"/> W	DEPTH	TOTAL Bbls
		ANNUAL VOLUME Bbls

IS CASING/TUBING SECURED? YES NO

LIFT PRESSURE PSI CASING WEIGHT + SURFACE AREA (3.14 x R²)

PRESSURE LIMIT PSI BUMP PLUG TO (5000 PSI) PSI

ROTATE RPM RECIPROCATE FT No. of Centralizers 2

TIME	PRESSURE		VOLUME PUMPED BBL		JOB SCHEDULED FOR			ARRIVE ON LOCATION		LEFT LOCATION		
	TBG OR O.P.	CASING	INCREMENT	CUM	TIME	DATE	FLUID TYPE	FLUID DENSITY	TIME	DATE		
0001 to 2400	NA					7/21			0100	7/21	0830	7/21
0730		2000	-	-			H ₂ O 8.34	8.34				
0732		260	10	-	7.6		H ₂ O 8.34	8.34				
0739		300	47	14	7.0		cmf 12.4					
0744		190	28	42	5.3		cmf 15.6					
0745		0	18	75	0							
0751		700	15.0	15	5.0		H ₂ O 8.34	8.34				
0753		120	6	15			H ₂ O 8.34	8.34				
0754		800	-	21	0							
0755		0	-	21	0							

REMARKS

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS			SLURRY MIXED		
			1	2	3	BBLs	DENSITY	
1.	130	2.01	35% F02	+6% D20	+3% S1	+ 1/4 10SK D29	34.015	12.4
2.								
3.	100	1.18	Class H	+3% S1	+ 1/4 10SK D29		21	15.6
4.								
5.								
6.								

BREAKDOWN FLUID TYPE VOLUME DENSITY PRESSURE

HESITATION SO. RUNNING SO. CIRCULATION LOST YES NO Cement Circulated To Surf. YES NO

BREAKDOWN PSI FINAL PSI DISPLACEMENT VOL. 20.8 Bbls TYPE OF WELL OIL GAS STORAGE INJECTION BRINE WATER WILDCAT

Washed Thru Perfs YES NO TO FT. MEASURED DISPLACEMENT WIRELINE

PERFORATIONS CUSTOMER REPRESENTATIVE Hawk Demoss DS SUPERVISOR Jerry E. Hamel

ORIGINAL CASING & CEMENTING REPORT

15-075.20470-0000

Well Name 34-21-B
 Casing 4.5-8.95-9.500 MW.

Location AMERICAN EXPLORATION
 Date JULY 23-1990

Jts. On	m On	Size	Wt.		Jts	Depth	m Run
Locat.	Locat.	mm	kg/m	Cr. Rge.	THD	T&C	Make
63	2777.10	4 1/2	9.5	3	15NC	8AD	MW.

Shoe Make WEATHERFORD Type REGULAR Length 1.8 m
 Collar Make 21 Type ARTE FILL. Length .9 m
 Landing Jt. (When Used) Length N/A. m
 Overall Length of Casing String 2777.10 m
 m Up From K.B. (subtract) 4.50 m
 Setting Depth By Driller 2773 m By Tally 2772 m

CENTRALIZERS

SCRATCHERS

Make & No. WEATHERFORD Make & No. MADE
 Position 2755-2601 (4) 1896-1280 (8) Position
 Remarks (Thread Lock, Weld, Mill) THRD LOCK SNGR, MET COLLAR 1 X 3 COLLARS.
(4) BAND CENTRALIZERS 2555-2601, TURBOCENTRALIZERS - 1896-1280 (8)

Hole Size 7 3/8 mm Casing In Hole Size 4 1/2 mm
 Depth 2773 m Setting Depth 2773 m
 Mud Type STARCH Wt. 9.1 kg/m Visc. 49 S/LWL 8 cm
 BOP's ANNULAR
 Power Tong Co _____ Torque Max. 1460 Min. 1000
 Casing String Wt. 26,000 daN Remarks _____

Cementing Co. DOWELL SCHUMERLER Operator JAMES WILSON

TYPES & QUANTITIES OF CEMENT Date 7-23-90

Filler Volume Amount 440 SK. m³ Type 385 P12 Wt. 12.4 kg/m³
 Additives 610 GEL, 38. CC., 100 SALT, 1/2 # FLAKE
 Tail In Volume Amount 200 SK. m³ Type CPH Wt. 15.6 kg/m³
 Additives 385 D-61, 1/2 # FLAKE
 HT. Cemented SURFACE Water Ahead 10/10 GEL m³ Start Mix 360 m³
 Finish Mix 360 m³ Pumping Press 710 kPa Bump Press 1440 kPa
 Float Held YES Cement Returns 4 BAR m³
 Plug Down 23'10 HRS. Date 7-23-90
 Wt. Landed in Slips 26,000 daN Make of Bowl _____
 Size _____ mm Series _____ Slip & Seal Esembly _____
 Remarks (Wellhead - Make, Type, Size)

RECEIVED
 STATE CORPORATION COMMISSION

DEC 5 1990 Co. Rep. James Wilson

CONSERVATION DIVISION
 Wichita, Kansas

DOWELL SCHLUMBERGER INCORPORATED

P.O. BOX 4378 HOUSTON, TEXAS 77210

CUSTOMER

15-075-20470-0000

ORIGINAL

OILFIELD SERVICES
INDUSTRIAL SERVICES

DSI SERVICE ORDER
RECEIPT AND INVOICE NO.
03-12-2861

DSI SERVICE LOCATION NAME AND NUMBER
Wisses KS 03-12

CUSTOMER NUMBER

CUSTOMER P.O. NUMBER

TYPE SERVICE CODE

BUSINESS CODES

CUSTOMER'S NAME

American Exploration

ADDRESS

CITY, STATE AND ZIP CODE

WORKOVER
NEW WELL
OTHER

API OR IC NUMBER

SEE OTHER SIDE FOR TERMS & CONDITIONS

ARRIVE LOCATION MO. DAY YR. TIME
7 03 90 17:15

SERVICE ORDER RECEIPT
I certify that the materials and services listed were authorized and received and all services performed in a workmanlike manner and that I have the authority to accept and execute this document.

JOB COMPLETION MO. DAY YR. TIME
7 24 90

SIGNATURE OF CUSTOMER OR AUTHORIZED REPRESENTATIVE

STATE CODE COUNTY / PARISH CODE CITY

KS

HAMILTON

WELL NAME AND NUMBER / JOB SITE

HCU 3421-B

LOCATION AND POOL / PLANT ADDRESS

Bradshaw

SHIPPED VIA

OS

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
048215-000	pump truck chrg	EA	1	1026.00	1026.00
048600-000	Casings Swivel	EA	1	203.00	203.00
049102-000	Deliberly Charge	35 T/m	1980	.80	1584.00
049100-000	Service Charge	F3	765	1.08	826.20
059197-000	PACR	EA	1	110.00	110.00
059200-002	Milage	mi	70	2.10	147.00
040003-000	0903, Class C Cmt	PS	280	7.20	2016.00
040015-000	0909, Class H Cmt	CS	200	6.85	1370.00
045008-000	035, 2" taper 3	PS	154	2.30	354.20
045014-050	020 Self	lbs	2297	.13	298.61
047005-100	51 CaCl2	lbs	1148	.32	367.36
045004-050	044 salt	lbs	4500	.10	450.00
044003-025	089 Cellaphane Flake	lbs	160	1.37	219.20
044002-050	060 fluid loss additive	lbs	57	6.70	381.90
050101-044	4 1/2 Gilder Shok	EA	1	105.00	105.00
052004-044	4 1/2 A. Ball Collar	EA	1	385.00	385.00
056204-044	4 1/2 Top Rubber Plug	EA	1	70.00	70.00
056014-044	4 1/2 Stop Ring	EA	1	16.00	16.00
056011-044	4 1/2 Centralizers	EA	4	48.00	192.00
056011-044	4 1/2 Torque	EA	8	50.00	400.00
057499-001	Thread Lock Kit	EA	1	22.00	22.00
101094-000	J-433 Seal	EA	1	176.11	176.11

RECEIVED - STATE COMMISSION

SUB TOTAL

RECEIVED - STATE COMMISSION

LICENSE/REIMBURSEMENT FEE

LICENSE/REIMBURSEMENT FEE

REMARKS:

Thank you
for using
D.S.

STATE % TAX ON \$

COUNTY % TAX ON \$

CITY % TAX ON \$

SIGNATURE OF DSI REPRESENTATIVE

Dale Black

CONCESSION DIVISION

Wichita, Kansas

TOTAL \$

DS-496 PRINTED IN U.S.A.

DOWELL SCHLUMBERGER INCORPORATED

WELL NAME AND NO. HCU 3421-B
 LOCATION (LEGAL) Chase
 FIELD POOL Bradshaw
 COUNTY/PARISH Hamilton STATE KANSAS
 NAME American Exploration
 ADDRESS
 ZIP CODE

RIG NAME: CHEYENE #5
 WELL DATA: BIT SIZE 7 7/8 CSG/Liner Size 4 1/2
 TOTAL DEPTH 2777 WEIGHT 9.5
 MUD TYPE GRADE 8" MUD DENSITY 10 LESS FOOTAGE SHOE JOINT(S) 44
 MUD VISC. 25 Disp. Capacity 44.3

SPECIAL INSTRUCTIONS
 To cement 4 1/2" production casing to a depth of 2777' Run 10 Bbls of H₂O and 10 Bbls of Gelled water ALCOA
 Supply All Fluid Equipment
 IS CASING/TUBING SECURED? YES NO
 LIFT PRESSURE 1660 PSI CASING WEIGHT - SURFACE AREA (3.14 x R²)
 PRESSURE LIMIT 2000 PSI BUMP PLUG TO 500 over PSI
 ROTATE - RPM RECIPROCATATE - FT No of Centralizers

NOTE: Include Footage From Ground Level To Head In Disp. Capacity
 Head & Plugs TBG D.P. SQUEEZE JOB
 Double SIZE WEIGHT
 Single GRADE TAIL PIPE: SIZE DEPTH
 Swage THREAD TUBING VOLUME Bbls
 Knockoff NEW USED CASING VOL. BELOW TOOL Bbls
 TOP R W DEPTH TOTAL Bbls
 BOT R W DEPTH ANNUAL VOLUME Bbls

TIME	PRESSURE	VOLUME PUMPED bbl	JOB SCHEDULED FOR			ARRIVE ON LOCATION	LEFT LOCATION
0001 to 2400	TBG OR D.P. CASING	INCREMENT CUM	TIME	DATE	TIME	DATE	DATE

TIME	TBG OR D.P.	CASING	INCREMENT	CUM	INJECT RATE	FLUID TYPE	FLUID DENSITY	SERVICE LOG DETAIL	
								PRE-JOB SAFETY MEETING	
22:05								PRE-JOB SAFETY MEETING	
22:13	-	2090	0	0	-	11.20	8.34	Pressure Test	
22:14	-	150	10	0	0.30	11.20	8.34	Water Pump	
22:15	-	550	10	10	7.89	Gel	8.34	Begin Pump Gelled water	
22:17	-	400	20	20	7.92	CHT	9.7	Begin Pump, Seal in Slurry	
22:21	-	360	190	40	7.66	CHT	12.9	Begin Pump, Lead Slurry	
22:46	-	360	54	230	5.9	CHT	15.6	Begin Pumping Tail Slurry	
22:56	-	0	0	284	-	-	-	Shut down Wash	
23:01	-	220	40	284	6.01	11.20	8.34	Start Pumping Displacement	
23:08	-	710	-	-	3.2	11.20	8.34	Water pump Rate	
23:10	-	1440	-	-	-	11.20	8.34	Bump plug	
23:11	-	320	-	-	-	-	-	Release PSI	
23:12	-	0	-	-	-	-	-	Job Done	

REMARKS

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS				SLURRY MIXED	
			BLS	DENSITY				
1.	440	2.21	(35/65) 10% water + 6% 120 F	189	12.9			
2.								
3.	200	1.18	Class II + 0.3% OGO	42	15.0			
4.								
5.								
6.								

BREAKDOWN FLUID TYPE
 HESITATION SO RUNNING SO
 CIRCULATION LOST YES NO
 BREAKDOWN PSI FINAL PSI DISPLACEMENT VOL 44.3 Bbls
 WASHED THRU PERLS YES NO TO FT MEASURED DISPLACEMENT WIRELINE
 TYPE OF WELL OIL STORAGE BRINE WATER GAS INJECTION WILDCAT
 PERFORMANCES TO TO CUSTOMER REPRESENTATIVE DS SUPERVISOR
 James Wilkins

K C C

DRILLERS LOG

AMERICAN EXPLORATION COMPANY
HCU #3421-B
SECTION 34-T22S-R41W
HAMILTON COUNTY, KANSAS

COMMENCED: 07-21-90
COMPLETED: 07-24-90

SURFACE CASING: 349' OF 8 5/8"
CMTD W/110 SX 65/35 POZ, 6% D-20,
1/4#/SX D-29, TAILED IN W/100 SX "H"
3% C.C. 1/4#/SX D-29

FORMATION	DEPTH
SURFACE HOLE	0- 364
SAND & CLAY	364-1095
SHALE	1095-1455
SHALE & LIME	1455-1994
LIME & SHALE	1994-2548
SHALE	2548-2710
SHALE & LIME	2710-2773 RTD

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

CHEYENNE DRILLING, INC.

Claude E. Norwood
CLAUDE E. NORWOOD

STATE OF KANSAS :ss:

SUBSCRIBED AND SWORN TO BEFORE ME THIS 24TH DAY OF JULY, 1990.

BECKY J. WHETSTONE
NOTARY PUBLIC
STATE OF KANSAS
APPL. EXPIRES 4/29/91

Becky J. Whetstone

BECKY J. WHETSTONE, NOTARY PUBLIC

JUL 24 1990