

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 # 5952
Name: Amoco Production Company
Address P.O. Box 800, Rm. 1833
City/State/Zip Denver, CO 80201

Purchaser: _____
Operator Contact Person: J. A. Victor
Phone (303) 830-4009

Contractor: Name: Cheyenne Drilling
License: 5382
Wellsite Geologist: _____

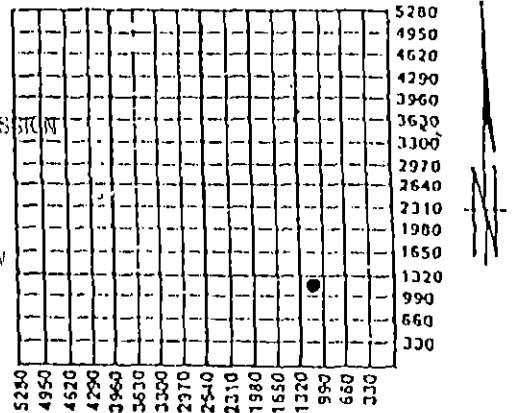
Designate Type of Completion
 New Well _____ Re-Entry _____ Workover _____
 Oil _____ SWD _____ Temp. Abd. _____
 Gas _____ Inj _____ Delayed Comp. _____
 Dry _____ Other (Core, Water Supply, etc.) _____

If OMO: old well info as follows:
Operator: N/A
Well Name: _____
Comp. Date _____ Old Total Depth _____

Drilling Method:
 Mud Rotary _____ Air Rotary _____ Cable _____
12/20/89 12/23/89
Spud Date Date Reached TD Completion Date

API NO. 15- 093-21043-0000
County Kearny
NW SE SE Sec. 2 Twp. 24 Rge. 37 East West
1250 Ft. North from Southeast Corner of Section
1250 Ft. West from Southeast Corner of Section
(NOTE: Locate well in section plat below.)
Lease Name Underwood G.U. Well # 3HI
Field Name Hugoton
Producing Formation Chase
Elevation: Ground 3250' KB 3262'
Total Depth 2730' PBID 2725'

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CONSERVATION DIVISION
Wichita, Kansas



Amount of Surface Pipe Set and Cemented at 798 Feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set _____ Feet
If Alternate II completion, cement circulated from _____
feet depth to _____ w/ _____ sx cnt.

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 J. L. Hampton
Title Sr. Staff Admin. Supv. Date 7/2/90
Subscribed and sworn to before me this 2nd day of July
19 90.
Notary Public Julie A. Victor
Date Commission Expires 1/7/94

K.C.C. OFFICE USE ONLY
F _____ Letter of Confidentiality Attached
C Wireline Log Received
C _____ Drillers Timelog Received
Distribution
_____ KCC _____ SWD/Rep _____ NGPA
_____ KGS _____ Plug _____ Other
(Specify)

SIDE TWO

Operator Name Amoco Production Company Lease Name Underwood G.U. Well # 3HI

Sec. 2 Twp. 24 Rge. 37 East County Kearny
 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 (Attach Additional Sheets.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Formation Description <input checked="" type="checkbox"/> Log <input type="checkbox"/> Sample Name Top Bottom Chase 2502' Herrington 2525' Krider 2564' Winfield 2584' Towanda 2646' Ft. Riley 2690'
Samples Sent to Geological Survey	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Electric Log Run (Submit Copy.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

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	12-1/4"	8-5/8"	24#	798'	Lite C	250	2% CACL
Production	7-7/8"	5-1/2"	15.5#	2730'	Premium C	150	2% CACL
					POZ Lite	750	Flocele
					Premium C	100	
PERFORATION RECORD				Acid, Fracture, Shot, Cement Squeeze Record			
Shots Per Foot	Specify Footage of Each Interval Perforated			Amount and Kind of Material Used			Depth
				Frac with 731,540# 8/16 sand and 178,820 gal. gelled water			2473-2725'
TUBING RECORD				Liner Run			
Size		Set At	Packer At	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
None							
Date of First Production	Producing Method <input checked="" type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)						
Waiting on pipeline							
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Hcf	Water	Bbls.	Gas-Oil Ratio Gravity

Disposition of Gas: Vented Sold Used on Lease (If vented, submit ACO-18.)

METHOD OF COMPLETION: Open Hole Perforation Dually Completed Confinigled Other (Specify) slotted casing

Production Interval: 2473-2725'



HALLIBURTON SERVICES

ORIGINAL

INVOICE

A Halliburton Company

15-093-21043-0000

INVOICE NO.	DATE
876700	12/20/19

WELL LEASE NO./PLANT NAME		WELL/PLANT LOCATION		STATE	WELL/PLANT OWNER
UNDERWOOD 3-HI		KEARNY		KS	AMOCO PRODUCTION CO
SERVICE LOCATION	CONTRACTOR	JOB PURPOSE		TICKET DATE	
LIBERAL	EXETER DRIG #2	CEMENT SURFACE CASING		12/20/198	
ACCT. NO.	CUSTOMER AGENT	VENDOR NO.	CUSTOMER P.O. NUMBER	SHIPPED VIA	FILE NO.
279360	R E BREWER			COMPANY TRUCK	8799

EXETER DRILLING CO
P O BOX 17349 T A
DENVER, CO 80217

DIRECT CORRESPONDENCE TO:
SUITE 600
COLORADO DERBY BUILDING
WICHITA, KS 67202-0000

PRICE REF. NO.	DESCRIPTION	QUANTITY	U/M	UNIT PRICE	AMOUNT
000-117	PRICING AREA - MID CONTINENT MILEAGE	35	MI	2.20	77.00
001-016	CEMENTING CASING	802	FT	595.80	595.80
030-018	CEMENTING PLUG 5W, PLASTIC TOP	1	UNT		
16A	CASING SHOE - 8 5/8" 8RD THD.	8 5/8	IN	98.00	98.00
830.2171		1	EA	161.00	161.00
24A	INSERT FLOAT VALVE - 8 5/8" 8RD	1	EA	171.00	171.00
815.1950		1	EA	29.00	29.00
27	FILL-UP UNIT 7"- 8 5/8"	1	EA	29.00	29.00
815.1941		1	EA	29.00	29.00
40	CENTRALIZER 8-5/8" MODEL S-4	3	EA	53.00	159.00
807.9305		3	EA	53.00	159.00
350	HALLIBURTON WELD-A	1	LB	11.00	11.00
890.1080		1	LB	11.00	11.00
504-050	PREMIUM PLUS CEMENT	150	SK	7.08	1,062.00
504-120	HALL. LIGHT -PREMIUM PLUS	225	SK	6.29	1,415.25
507-210	FLOCELE	94	LB	1.21	113.74
509-406	ANHYDROUS CALCIUM CHLORIDE	7	SK	25.75	180.25
500-207	BULK SERVICE CHARGE	369	CFT	.95	369.55
500-306	MILEAGE CMTG MAT DEL OR RETURN	621.320	TMI	.70	434.92
INVOICE SUBTOTAL					4,877.51
DISCOUNT-(BID)					1,219.36-
INVOICE BID AMOUNT					3,658.15
*-KANSAS STATE SALES TAX					134.02
*-SEWARD COUNTY SALES TAX					31.53
INVOICE TOTAL - PLEASE PAY THIS AMOUNT					\$3,823.70

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CONSERVATION DIVISION
Wichita, Kansas

TERMS INVOICES PAYABLE NET BY THE 20TH OF THE FOLLOWING MONTH AFTER DATE OF INVOICE UPON CUSTOMER'S DEFAULT IN PAYMENT OF CUSTOMER'S ACCOUNT BY THE LAST DAY OF THE MONTH FOLLOWING THE MONTH IN WHICH THE INVOICE IS DATED. CUSTOMER AGREES TO PAY INTEREST THEREON AFTER DEFAULT AT THE HIGHEST LAWFUL CONTRACT RATE APPLICABLE BUT NEVER TO EXCEED 18% PER ANNUM. IN THE EVENT IT BECOMES NECESSARY TO EMPLOY AN ATTORNEY TO ENFORCE COLLECTION OF SAID ACCOUNT, CUSTOMER AGREES TO PAY ALL COLLECTION COSTS AND ATTORNEY FEES IN THE AMOUNT OF 20% OF THE AMOUNT OF THE UNPAID ACCOUNT.

LOG

WELL NO. _____ CUSTOMER Exeter Doby PAGE NO. 1
JOB TYPE 8 5/8 SUREX DATE 12-20-89

13 R-2 15-093-21043-0000

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1230							Time Collected ORIGINAL
	1400							Time Ready
	1600							Time on loc. Rig Drilling Surex Hole
	2230							Hookup START Running Casing
	2320	2340						Hookup & Circ Casing Down
	2355							Casing in Hole
	2356							Hookup To Circ Casing
	0007							Circulate Casing w/ Dig Pump
	0010							Circulate Mud To Ground Level
	0025							Hookup To Pump Truck
	0028		1173			200		Start Mixing Cement
	0049					250		Finish Mixing Cement
	0050					2500		Shut Down Deep Plug
	0051		48.34			100		Start Displacement
	0100					250/100		Wash Pumps & Lines Plug Down
								Flare Hold
								Circulate Cement To PT
								THANKS FOR CALLING
								Hollisue Tom Services
								Over & Crew

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JUL 30 1990

CONSERVATION DIVISION Wichita, Kansas

FIELD OFFICE



REMIT TO: P O BOX 890788
DALLAS TX 75389-0788

INVOICE

0312

15-093-21043-0000

INVOICE DATE

05/17/98

918166
AMOCO PRODUCTION CO 385198 00 7
ULYSSES OPERATION CENTER
RT 3 BOX 7A
ULYSSES KS 67800

PAGE

1

INVOICE NUMBER

03-12-2594

TYPE SERVICE

FRACTURING SVC
WIDE FRACS (YFIX)

WELL NAME / JOB SITE	STATE	COUNTY / CITY	SERVICE FROM LOCATION	SHIPPED VIA	CUSTOMER P.O. NO./REF.
UNDERWOOD G.U. 3HI	KS	KEARNY	ULYSSES KS	DS	
LOCATION / PLANT ADDRESS	DATE OF SERVICE ORDER	CUSTOMER OR AUTHORIZED REPRESENTATIVE			
SEC 2-24S-37W	05/16/98	EARL LEITH			

ITEM CODE	DESCRIPTION	UOM	QTY	UNIT PRICE	AMOUNT
028021001	PUMPER RATED BTWN 651-1000HP	4HR	4	2,280.0000	9,120.00
028022001	PUMPER RTD BTWN 651-1000 HP	HR	4	570.0000	2,280.00
028500051	POD BLENDR, 51-60BPM 1ST 4HR	4HR	1	1,850.0000	1,850.00
028505000	POD BLENDER 0-10BPM ADD'L HR	HR	4	350.0000	1,400.00
028374000	PROP TRANSFER BELT, 1ST 2 DA	DAY	1	1,000.0000	1,000.00
101534000	PUMP FRAC ADDITIVES 1ST 4 HR	EA	1	600.0000	600.00
028373000	SAND CHIEF, FIRST 2 DAYS	DAY	3	1,300.0000	3,900.00
059200002	MILEAGE, ALL OTHER EQUIPMENT	MI	468	2.4000	1,123.20
059200004	MILEAGE, TCV, THV OR FRAC BUS	MI	36	1.6000	57.60
059200021	MILEAGE SAND SILO, EACH	MI	108	3.2000	345.60
029100000	TRANSPORTATION FRAC MATERIAL	MI	12960	.8000	10,368.00
029110003	PROP AGT PUMP CHG 8-16 SAND	CWT	7315	2.0000	14,630.00
102496051	PCH PROCESS UNIT 1ST 4 HRS	4HR	1	4,960.0000	4,960.00
029112009	SLURRY CONC SERV, 9-12 LB/GAL	GAL	19000	.1200	2,280.00
029112006	SLURRY CONC SERV, 6-9 LB/GAL	GAL	45000	.6000	3,600.00
029112004	SLURRY CONC SERV, 4-6 LB/GAL	GAL	10000	.4000	400.00
101850000	CONTINUOUS MIX SLURRY	GAL	178820	.0300	5,364.60
059680001	THS INCLUDING HOLTE-SMITH	EA	1	1,285.0000	1,285.00
028377000	PROP HOPPER, 4 UNITS, 1ST 2 DA	DAY	1	600.0000	600.00
028458000	PRESSURE RELIEF VALVE	JOB	2	225.0000	450.00
028480005	MANIFOLD, 0-5000 PSI/PUMP/HR	HR	4	200.0000	800.00
058041009	TRANSPORT, ACID 4HR MIN	HR	4	65.0000	260.00
000281000	J861, WIDEFAC 100	GAL	199500	.0200	3,990.00
102320000	J877, PSE POLYMER SLURRY	GAL	1170	20.2800	23,727.60
027006005	M76, BACTERICIDE	GAL	50	33.0000	1,650.00
024069011	J218, BREAKER	LBS	539	3.4000	1,832.60
024121055	J318, LIQUID BREAKER AID	GAL	176	18.0500	3,176.80

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CONTINUED

JUL 30 1998

CONSERVATION DIVISION
Wichita, Kansas



REMIT TO: P O BOX 899788
DALLAS TX 75389-0788

INVOICE

0312

15-093-21043-0000

INVOICE DATE

05/17/90

INVOICE NUMBER

03-12-2594

918166
AMCO PRODUCTION CO 385198 00 7
ULYSSES OPERATION CENTER
RT 3 BOX 7A
ULYSSES KS 67800

2

TYPE SERVICE

FRACTURING SVC
WIDE FRACS (YFIX)

WELL NAME / JOB SITE	STATE	COUNTY / CITY	SERVICE FROM LOCATION	SHIPPED VIA	CUSTOMER P.O. NO / REF
UNDERWOOD G.U. 3HI	KS	KEARNY	ULYSSES KS	DS	
LOCATION / PLANT ADDRESS			DATE OF SERVICE ORDER	CUSTOMER OR AUTHORIZED REPRESENTATIVE	
SEC 2-24S-37W			05/16/90	EARL LEITH	

ITEM CODE	DESCRIPTION	UOM	QTY	UNIT PRICE	AMOUNT
025004000	S36, SAND 8-16 MESH	CWT	7315	7.5500	55,228.25
057990000	HYDRAULIC TRAILER	JOB	1	1,000.0000	1,000.00
	DISCOUNT - MATERIAL				34,429.98-
	DISCOUNT - SERVICE				25,336.13-
				SUB TOTAL --	97,513.14
				AMOUNT DUE --	97,513.14

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JUL 30 1990

CONSERVATION DIVISION
Wichita, Kansas

WITH QUESTIONS CALL 316-356-1272
FEDERAL TAX ID # 38-239-7173
TERMS -- NET 30 DAYS DUE ON OR BEFORE JUN 16, 1990

THANK YOU. WE APPRECIATE YOUR BUSINESS.

Larry A. Kolstad
G A KOLSTAD



WELL TREATMENT REPORT

DOWELL SCHLUMBERGER INCORPORATED

DATE 5-17-90

DS-294-A PRINTED IN U.S.A.

WELL NAME AND NUMBER <i>Underwood G.U #3HE</i>	LOCATION (LEGAL) <i>Sec 2-245-37W</i>	DS LOCATION <i>Ulysses</i>	TREATMENT NUMBER <i>03-12-2594</i>
FOOTFIELD <i>Hugoton</i>	FORMATION <i>Chase</i>	BOTTOM HOLE TEMPERATURE	AGE OF WELL NEW <input checked="" type="checkbox"/> REWORK <input type="checkbox"/>
COUNTY/PARISH <i>KEARNEY</i>	STATE <i>KANSAS</i>	ALLOWABLE PRESSURE CSG: <i>3500</i>	
TYPE OF SERVICE <input type="checkbox"/> MATRIX TREATMENT <input type="checkbox"/> SAND CONTROL <input type="checkbox"/> FRACTURING <input type="checkbox"/> OTHER	PRIMARY TREATING FLUID <i>VF 130</i>	PERFORATED INTERVALS	
OPERATOR NAME <i>Amoco Production</i>		CASING SIZE <i>5 1/2</i>	TOP TO BOTTOM NO. OF HOLES <i>2473 TO 725 56</i>
SERVICE INSTRUCTIONS		TUBING SIZE	TO
		PACKER TYPE	TO
		TUBING VOLUME	TO
		ANNULAR VOL	TO
		OPEN HOLE	TO
		CASING VOL <i>590</i>	PERF. DIAMETER- IN.
FOR CONVERSION PURPOSES 24 BBLs EQUALS 1000 GALLONS		DISPLACEMENT	PERFORATED INTERVAL TOTAL- FT.
ARRIVED ON LOCATION:	LEFT LOCATION:	C. TBG. <input type="checkbox"/>	TUBING <input type="checkbox"/>
		JOB DONE DOWN	CASING <input checked="" type="checkbox"/> ANNULUS <input type="checkbox"/> BOTH <input type="checkbox"/>

TIME <small>(0001 to 2400)</small>	TYPE OF FLUID	RATE BPM	INJECTION RECORD				PRESSURE		NOTATIONS
			CO ₂ - N ₂ RATE	INCREMENT VOL. BBLs	CUM. VOL. BBLs	PROP TYPE	PROP #GAL	CSG.	
1100									Pre-Job Safety Meeting
10:40									Pressure Test To <i>3234</i> psi
1:01	V 3.2	30		1786			0		5 1/2 - 200
1:11		30			413		402		Hole Clean
1:22		60			60		526		7 1/2 - 1000
1:33		10			300		475		25 - 1100
1:45		60			1000		521		25 - 1100
1:52		10		12.2	1786	9 1/16	7# 507		5 1/2 - 7 1/2 7 1/2
1:51		10			1016		361		7 1/2 - 200
1:53		60		233	1419	9 1/16	4# 379		5 1/2 - 11 1/4 9 1/2
1:51		10			2629		324		11 1/2 - 200
1:52		10		272	2221	8 1/16	5# 306		5 1/2 - 3 1/4 9 1/2
1:54		10			2251		260		5 1/2 - 200
1:47		10		333	2513	9 1/16	6# 251		5 1/2 - 10 1/2 9 1/2
1:413		10			2573		214		6 1/2 - 200
1:42		10		4107	2816	9 1/16	7# 178		5 1/2 - 7 1/4 9 1/2
1:49		10			2906		236		7 1/2 - 200
1:55		10		436	3253	9 1/16	8# 123		5 1/2 - 8 1/4 9 1/2
1:56		10			3313		86		8 1/2 - 200
1:53		10		568	3739	8 1/16	9# 219		5 1/2 - 9 1/4 9 1/2
1:54		10			3799		255		9 1/2 - 200

FLUID <i>SD</i>	NITROGEN	BPM AVERAGE INJECTION RATES CARBON DIOXIDE	TOTAL W/PROP <i>60</i>	WATER/ACID <i>2153</i> BBLs	OIL	VOLUME FLUID INJECTED NITROGEN	CARBON DIOXIDE
MAXIMUM	FINAL <i>1.0</i>	TREATING PRESSURE SUMMARY AVERAGE	IMMED. S.D.P. <i>1024</i>	15 MIN S.I.P. <i>1024</i>	TOTAL INJECTED <i>7.31</i>	QUANTITY PROPPANT PLACED TOTAL ORDERED/DESIGNED <i>2000#</i> LBS	CCF <i>916</i> TONS

PRODUCTION PRIOR TO THIS TREATMENT

Test Stabilized *JU* PAD VOLUME *30,000* GALS % PAD *43*

CUSTOMER REPRESENTATIVE _____ DS SERVICE SUPERVISOR _____ FRACTURE GRADIENT _____

PAGE *1* OF *2* PAGES

ORIGINAL

WELL TREATMENT REPORT SUPPLEMENTAL LOG

DS-284-1 PRINTED IN U.S.A.

DOWELL SCHLUMBERGER, INCORPORATED

DATE	5-17-90
TREATMENT NUMBER	2594
PAGE	2 OF 2 PAGES

CUSTOMER WELL NAME AND NUMBER: *Amanda (Wells) 12 3015* LOCATION (LEGAL): *Trl 2 - 2045-3714* LOCATION: *1/1*

INJECTION RECORD

TIME	PSY'S & PSIS	TYPE OF FLUID	DENSITY	WATERMETER VOL. READ	OR. CUM. VOL. VOL. READ	W. PROP. DIS.	INJECT. RATE	NOTATIONS
------	--------------	---------------	---------	----------------------	-------------------------	---------------	--------------	-----------

1613	60	VF130	-	657	438	2/16	108	214	Start 10' 5/16
1618	60				438			197	Down Pipe
1621	60	VF130		45	500			352	Start flush
1624	20				5015			35	Flush stop
1625	20				5115			164	Flush in stop
								104	15TP

JUL 7 1990