

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

Operator: License # 4549

Name: ANADARKO PETROLEUM CORPORATION

Address P. O. BOX 351

City/State/Zip LIBERAL, KANSAS 67905-0351

Purchaser: ANADARKO TRADING COMPANY

Operator Contact Person: DAVID W. KAPPLE

Phone ( 316 ) 624-6253

Contractor: Name: CHEYENNE DRILLING COMPANY

License: 5382

Wellsite Geologist: \_\_\_\_\_

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  PBSD

Commingled  Docket No. \_\_\_\_\_

Dual Completion  Docket No. \_\_\_\_\_

Other (SWD or Inj?)  Docket No. \_\_\_\_\_

1-16-97 1-16-97 2-7-97  
Spud Date Date Reached TD Completion Date

API NO. 15- 189-22,125 D000

County STEVENS

SW - SW - NE - NW Sec. 23 Twp. 34 Rge. 39  E  W

1250 Feet from  N  X (circle one) Line of Section

1390 Feet from  W  X (circle one) Line of Section

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

Lease Name HERBEL "A" Well # 4

Field Name HUGOTON

Producing Formation CHASE

Elevation: Ground 3296.9 KB \_\_\_\_\_

Total Depth 2995 PBSD 2990

Amount of Surface Pipe Set and Cemented at 630 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 cmt.

Drilling Fluid Management Plan AH 1 U.C. 12-23-97  
(Data must be collected from the Reserve Pit)

Chloride content NA ppm Fluid volume 400 bbls

Dewatering method used DRY, BACKFILL & RESTORE LOCATION.

Location of fluid disposal if hauled offsite: \_\_\_\_\_

Operator Name \_\_\_\_\_

Lease Name \_\_\_\_\_ License No. \_\_\_\_\_

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

County \_\_\_\_\_ Docket No. \_\_\_\_\_

RECEIVED  
KANSAS OIL & GAS  
CORP  
APR 29 11:52

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, 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 L. Marc Harvey  
L. MARC HARVEY

Title DRILLING TECHNICAL ASSISTANT Date 4-24-97

Subscribed and sworn to before me this 24<sup>th</sup> day of April 19 97.

Notary Public Freda L. Hinz

Date Commission Expires \_\_\_\_\_

**FREDA L. HINZ**  
Notary Public - State of Kansas  
My Appt. Expires 5-15-99

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

SIDE TWO

Operator Name ANADARKO PETROLEUM CORPORATION Lease Name HERBEL "A" Well # 4

Sec. 23 Twp. 34 Rge. 39  East County STEVENS  
 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: CBL-CCL-GR.

Log Formation (Top), Depth and Datums  Sample  
 Name Top Datum  
 GLORIETTA 1350 - 1472  
 B/STONE CORRAL 1784  
 CHASE 2620  
 KRIDER 2640  
 WINFIELD 2720  
 TOWANDA 2784  
 FT. RILEY 2842

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"	23.0	630	P+ MIDCON 2/ P+	120/100	2%CC, 1/4#SK FLC/ 2%CC, 1/4#SK FLC.
PRODUCTION	7-7/8"	5-1/2"	15.5	2995	P+ MIDCON 2/ P+	180/120	2%CC, 1/4#SK FLC/ 2%CC, 1/4#SK FLC.

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
1	2620-2626, 2640-2704, 2734-2758, 2792-2826, 2842-2860	ACID: 900 GAL 7.5% FEHCL ACID: 3000 GAL 7.5% FEHCL	2842-2860 2620-2826 OA
	2620-2680 (CHASE) OA	FRAC: 93,000 GAL 60-70 Q FOAMED 35# LIN GEL 334,000# 12/20 SND	2620-2860 OA

TUBING RECORD	Size	Set At	Packer At	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Date of First, Resumed Production, SWD or Inj. 2-20-97 Producing Method  Flowing  Pumping  Gas Lift  Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas 950 Mcf	Water 0 Bbls.	Gas-Oil Ratio	Gravity

Disposition of Gas:  Vented  Sold  Used on Lease (If vented, submit ACO-18.) METHOD OF COMPLETION  Open Hole  Perf.  Dually Comp.  Commingled  Other (Specify) 2620-2860 OA Production Interval



HALLIBURTON

JOB SUMMARY

HALLIBURTON DIVISION

Mid Continent

HALLIBURTON LOCATION

Liberal ks

BILLED ON TICKET NO.

107198

WELL DATA

FIELD \_\_\_\_\_ SEC 23 TWP. 34S RNG 39W COUNTY Stevens STATE KS

FORMATION NAME \_\_\_\_\_ TYPE \_\_\_\_\_
FORMATION THICKNESS \_\_\_\_\_ FROM \_\_\_\_\_ TO \_\_\_\_\_
INITIAL PROD: OIL \_\_\_\_\_ BPD. WATER \_\_\_\_\_ BPD. GAS \_\_\_\_\_ MCFD
PRESENT PROD: OIL \_\_\_\_\_ BPD. WATER \_\_\_\_\_ BPD. GAS \_\_\_\_\_ MCFD
COMPLETION DATE \_\_\_\_\_ MUD TYPE \_\_\_\_\_ MUD WT. \_\_\_\_\_
PACKER TYPE \_\_\_\_\_ SET AT \_\_\_\_\_
BOTTOM HOLE TEMP. \_\_\_\_\_ PRESSURE \_\_\_\_\_
MISC. DATA \_\_\_\_\_ TOTAL DEPTH \_\_\_\_\_

Table with columns: NEW USED, WEIGHT, SIZE, FROM, TO, MAXIMUM PSI ALLOWABLE. Includes handwritten entries: N 23 896 KB 634. Large 'ORIGINAL' stamp.

JOB DATA

TOOLS AND ACCESSORIES table with columns: TYPE AND SIZE, QTY., MAKE. Includes handwritten entries: insert, Ramco, REG, 1/2, SW, PC, wild th, Basket.

Table with columns: CALLED OUT, ON LOCATION, JOB STARTED, JOB COMPLETED. Includes handwritten dates and times: 1-14-97, 11:30, 1-14-97, 12:45, 1-14-97, 17:16, 1-14-97, 17:36.

MATERIALS table with columns: TREAT. FLUID, DENSITY, LB/GAL. A.P.I., DISPL. FLUID, DENSITY, LB/GAL. A.P.I., PROP. TYPE, SIZE, LB., ACID TYPE, GAL., %, SURFACTANT TYPE, GAL., IN, NE AGENT TYPE, GAL., IN, FLUID LOSS ADD. TYPE, GAL.-LB., IN, GELLING AGENT TYPE, GAL.-LB., IN, FRIC. RED. AGENT TYPE, GAL.-LB., IN, BREAKER TYPE, GAL.-LB., IN, BLOCKING AGENT TYPE, GAL.-LB., PERFPAC BALLS TYPE, QTY., OTHER.

PERSONNEL AND SERVICE UNITS table with columns: NAME, UNIT NO. & TYPE, LOCATION. Includes handwritten notes: RECEIVED FROM, KANSAS CORP.

DEPARTMENT: CMT
DESCRIPTION OF JOB: SET SURFACED PIPES
JOB DONE THRU: TUBING [ ] CASING [x] ANNULUS [ ] TBG./ANN. [ ]
CUSTOMER REPRESENTATIVE: X Distillo
HALLIBURTON OPERATOR: Tom Payer
COPIES REQUESTED: \_\_\_\_\_

CEMENT DATA

Table with columns: STAGE, NUMBER OF SACKS, CEMENT, BRAND, BULK SACKED, ADDITIVES, YIELD CU.FT./SK., MIXED LBS./GAL. Includes handwritten entries: 120 PT MC 223, 3% CC, 1/4 SK FL, 3.22 11.1; 100 PT, 2% CC, 1/4 SK FL, 1.32 14.8.

PRESSURES IN PSI
CIRCULATING \_\_\_\_\_ DISPLACEMENT \_\_\_\_\_
BREAKDOWN \_\_\_\_\_ MAXIMUM \_\_\_\_\_
AVERAGE \_\_\_\_\_ FRACTURE GRADIENT \_\_\_\_\_
SHUT-IN: INSTANT \_\_\_\_\_ 5-MIN \_\_\_\_\_ 15-MIN \_\_\_\_\_
HYDRAULIC HORSEPOWER \_\_\_\_\_
ORDERED \_\_\_\_\_ AVAILABLE \_\_\_\_\_ USED \_\_\_\_\_
AVERAGE RATES IN BPM \_\_\_\_\_
TREATING \_\_\_\_\_ DISPL. \_\_\_\_\_ OVERALL \_\_\_\_\_
CEMENT LEFT IN PIPE \_\_\_\_\_
FEET: 42 REASON: shoe joint

SUMMARY
PRELUSH: BBL.-GAL. \_\_\_\_\_ TYPE \_\_\_\_\_
LOAD & BKDN: BBL.-GAL. \_\_\_\_\_ PAD: BBL.-GAL. \_\_\_\_\_
TREATMENT: BBL.-GAL. \_\_\_\_\_ DISPL. BBL.-GAL. \_\_\_\_\_
CEMENT SLURRY: BBL.-GAL. 69 + 23
TOTAL VOLUME: BBL.-GAL. \_\_\_\_\_
REMARKS

CUSTOMER: ABC
LEASE: Herbal
WELL NO: A-1
JOB TYPE: O/D
DATE: 1-14-97



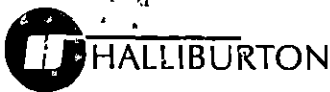
JOB LOG HAL-2013-C

DATE: 1-14-97 PAGE NO.

CUSTOMER: APC WELL NO.: A-4 LEASE: HERBAL JOB TYPE: 010 TICKET NO.: 107198

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1130							Called out - Requested 1500
	1445							On Loc. - L.P.D.P
	1520							Safety Meeting - Rig up
	1708							Run Csg
	1712							ON BOTTOM ORIGINAL
	1716							Hook-up to circ
	1717	0-7	68		✓		0/100	Pump lead
	1727	7	23		✓		100	Pump tail
	1730	7-0					10%	Shut down - Drop dug
	1731	0-6	38		✓		0/150	Pump Displ. - wash up trk.
	1734	6-2			✓		15%/30	Reduce RATE @ 32 b
	1736	2-0			✓		150	Shut down @ 38 bbls out
					✓		15%	Release press. - float held
								Release from loc
								Cement to Surface; ✓
								Approx: 18 bbls or 31 SKS.
								Thank you!
								Tom & Tyne & CREW

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 JAN 25 AM 11:52



# JOB SUMMARY

HALLIBURTON DIVISION

HALLIBURTON LOCATION

Mid Cont.  
Liberal, Ks

BILLED ON TICKET NO. 185114

WELL DATA  
FIELD \_\_\_\_\_ SEC. 23 TWP. 34S RNG. 39W COUNTY Stevens STATE KsFORMATION NAME \_\_\_\_\_ TYPE \_\_\_\_\_  
FORMATION THICKNESS \_\_\_\_\_ FROM \_\_\_\_\_ TO \_\_\_\_\_  
INITIAL PROD: OIL \_\_\_\_\_ BPD. WATER \_\_\_\_\_ BPD. GAS \_\_\_\_\_ MCFD  
PRESENT PROD: OIL \_\_\_\_\_ BPD. WATER \_\_\_\_\_ BPD. GAS \_\_\_\_\_ MCFD  
COMPLETION DATE \_\_\_\_\_ MUD TYPE \_\_\_\_\_ MUD WT. \_\_\_\_\_  
PACKER TYPE \_\_\_\_\_ SET AT \_\_\_\_\_  
BOTTOM HOLE TEMP. \_\_\_\_\_ PRESSURE \_\_\_\_\_  
MISC. DATA \_\_\_\_\_ TOTAL DEPTH \_\_\_\_\_

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING		14.0	5 1/2	KB	3000	
LINER						
TUBING						
OPEN HOLE					3000	SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

### JOB DATA

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <u>1-16</u>	DATE <u>1-16</u>	DATE <u>1-16</u>	DATE <u>1-16</u>
TIME <u>1400</u>	TIME <u>1730</u>	TIME <u>2130</u>	TIME <u>2300</u>

### TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
5/8" <u>Tapered Float</u>	<u>1</u>	<u>Hercos</u>
<u>Fillup</u>	<u>1</u>	
GUIDE SHOE	<u>1</u>	
CENTRALIZERS		
BOTTOM PLUG	<u>1</u>	
TOP PLUG	<u>1</u>	
HEAD		
PACKER		
OTHER		

### PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
<u>Oloere</u>	<u>59179</u>	<u>420041</u> <u>Liberal Ks</u>
<u>Choy</u>	<u>09259</u>	<u>52938/75081</u> <u>"</u>
<u>C Aslay</u>	<u>44061</u>	<u>51984/77031</u> <u>Hogtown Ks</u>

### MATERIALS

TREAT. FLUID \_\_\_\_\_ DENSITY \_\_\_\_\_ LB/GAL. API  
DISPL. FLUID \_\_\_\_\_ DENSITY \_\_\_\_\_ LB/GAL. API  
PROP. TYPE \_\_\_\_\_ SIZE \_\_\_\_\_ LB.  
ACID TYPE \_\_\_\_\_ GAL. \_\_\_\_\_ %  
SURFACTANT TYPE \_\_\_\_\_ GAL. \_\_\_\_\_ IN  
NE AGENT TYPE \_\_\_\_\_ GAL. \_\_\_\_\_ IN  
FLUID LOSS ADD. TYPE \_\_\_\_\_ GAL.-LB. \_\_\_\_\_ IN  
GELLING AGENT TYPE \_\_\_\_\_ GAL.-LB. \_\_\_\_\_ IN  
FRIC. RED. AGENT TYPE \_\_\_\_\_ GAL.-LB. \_\_\_\_\_ IN  
BREAKER TYPE \_\_\_\_\_ GAL.-LB. \_\_\_\_\_ IN  
BLOCKING AGENT TYPE \_\_\_\_\_ GAL.-LB. \_\_\_\_\_  
PERFPAC BALLS TYPE \_\_\_\_\_ QTY. \_\_\_\_\_  
OTHER \_\_\_\_\_  
OTHER \_\_\_\_\_

DEPARTMENT Cement  
DESCRIPTION OF JOB 5 1/2 Prod. String  
JOB DONE THRU: TUBING  CASING  ANNULUS  TBG./ANN.   
CUSTOMER REPRESENTATIVE D Castillo  
HALLIBURTON OPERATOR Dennis Corie  
COPIES REQUESTED \_\_\_\_\_

### CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
	<u>180</u>	<u>MidCont</u>	<u>Prem 7</u>	<u>2% CL</u>	<u>1/4# Flocele</u>	<u>3.22</u>	<u>11.1</u>
	<u>120</u>	<u>MidCont</u>	<u>Prem 7</u>	<u>2% CC</u>	<u>1/4# Flocele</u>	<u>2.0</u>	<u>12.8</u>

### PRESSURES IN PSI

CIRCULATING \_\_\_\_\_ DISPLACEMENT \_\_\_\_\_  
BREAKDOWN \_\_\_\_\_ MAXIMUM \_\_\_\_\_  
AVERAGE \_\_\_\_\_ FRACTURE GRADIENT \_\_\_\_\_  
SHUT-IN: INSTANT \_\_\_\_\_ 5-MIN \_\_\_\_\_ 15-MIN \_\_\_\_\_  
HYDRAULIC HORSEPOWER \_\_\_\_\_  
ORDERED \_\_\_\_\_ AVAILABLE \_\_\_\_\_ USED \_\_\_\_\_  
AVERAGE RATES IN BPM \_\_\_\_\_  
TREATING \_\_\_\_\_ DISPL. \_\_\_\_\_ OVERALL \_\_\_\_\_  
CEMENT LEFT IN PIPE \_\_\_\_\_  
FEET 5 FT REASON Shoe joint

### SUMMARY

PRESLUSH: BBL-GAL. 8 BBL / H2O VOLUME 10 / SF  
LOAD & BKDN: BBL-GAL. \_\_\_\_\_ PAD: BBL-GAL. \_\_\_\_\_  
TREATMENT: BBL-GAL. \_\_\_\_\_ DISPL: BBL-GAL. 73.01  
CEMENT SLURRY: BBL-GAL. 145.96  
TOTAL VOLUME: BBL-GAL. \_\_\_\_\_

### REMARKS

CUSTOMER Amstar  
LEASE Amstar  
WELL NO. 185114  
JOB TYPE 5 1/2 Prod. String  
DATE 1-16-91

**JOB LOG** HAL-2013-C

CUSTOMER Amherst Petro.	WELL NO. A 4	LEASE Harrah	JOB TYPE 5 1/2 Prod. String	TICKET NO. 185114
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CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1400							Time Called
	1830							Time Ready
	1730							Time on hole. Plug down Outer Collars
	1930							Start Pumping Casing <span style="float: right; font-size: 2em;">ORIGINAL</span>
	2130							Casing in Hole
	2130							Hook up to Cretaceous Case
	2140							Cretaceous Casing w/ Reg. Pump
	2142							Cretaceous Mud to Ground Level
	2200							Hook up to Pump Truck
	2205	5	8			500		Start Water Alcohol
	2207	/	10			500		Start Spore Flush
	2209	/	8			1900		Start Water Behind
	2211	6	1			350		Start Mixing Cement
	2230	/	103.22			200		Start Tail Cement
	2234	/	42.74			175		Finish Mixing Cement
	2235	/	145.96			175		Shut Down
	2238	5						Start Displacement <span style="float: right;">Deep Plug</span>
		3.3 Acc	73.07					Wash Pump's 4 Lines
	2300					550 / 1100		Plug Down <span style="float: right;">Float Held</span>
								Cretaceous Fluid throughout jobs
								Did not Cure Cement

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KANSAS CITY  
1997 APR 25 AM 11:52

Thanks For Calling  
 Halliburton  
 Dennis Corie Energy  
 & Co.