

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

API NO. 15- 175-21654-00-00

County SEWARD

NE - SE - NW - NW Sec. 11 Twp. 33 Rge. 34 E X W

Operator: License # 4549

700 Feet from NX (circle one) Line of Section

Name: ANADARKO PETROLEUM CORPORATION

1060 Feet from XN (circle one) Line of Section

Address P. O. BOX 351

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

City/State/Zip LIBERAL, KANSAS 67905-0351

Lease Name HITCH UNIT Well # 3-4

Purchaser: NATIONAL COOPERATIVE REFINING ASSOCIATION

Field Name HITCH UNIT

Operator Contact Person: DAVID W. KAPPLE

Producing Formation L. CHESTER

Phone (316) 624-6253

Elevation: Ground 2871.4 KB _____

Contractor: Name: CHEYENNE DRILLING

Total Depth 6350 PBTD 6226

License: 5382

Amount of Surface Pipe Set and Cemented at 1648 Feet

Wellsite Geologist: _____

Multiple Stage Cementing Collar Used? _____ Yes X No

Designate Type of Completion

If yes, show depth set _____ Feet

X New Well _____ Re-Entry _____ Workover

If Alternate II completion, cement circulated from _____

X Oil _____ SWD _____ SLOW _____ Temp. Abd.

feet depth to _____ w/ _____ sx cmt.

_____ Gas _____ ENHR _____ SIGW

_____ Dry _____ Other (Core, WSW, Expl., Cathodic, etc)

Drilling Fluid Management Plan ALT 1 87K 3-23-98
(Data must be collected from the Reserve Pit)

If Workover:

Chloride content 1000 ppm Fluid volume 700 bbls

Operator: _____

Dewatering method used DRY, BACKFILL & RESTORE LOCATION.

Well Name: _____

Location of fluid disposal if hauled offsite: _____

Comp. Date _____ Old Total Depth _____

_____ Deepening _____ Re-perf. _____ Conv. to Inj/SWD

_____ Plug Back _____ PBTD

_____ Commingled _____ Docket No. _____

_____ Dual Completion _____ Docket No. _____

_____ Other (SWD or Inj?) _____ Docket No. _____

Operator Name _____

Lease Name _____ License No. _____

9-2-97 9-11-97 9-24-97
Spud Date Date Reached TD Completion Date

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

County _____ Docket No. _____

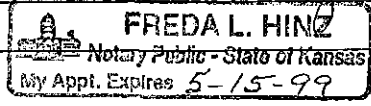
INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 207B, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information on side 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
Title DRILLING TECHNICAL ASSISTANT Date 10-31-97

Subscribed and sworn to before me this 31st day of October 19 97.

Notary Public Freda L. Hinz
Date Commission Expires _____



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: **MAILED**
 Lease Name: **HITCH UNIT**

Operator Name **ANADARKO PETROLEUM CORPORATION** Well # **3-4**

Sec. **11** Twp. **33** Rge. **34** East County **SEWARD** 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: SBT-CCL-GR, DIL, ML. CNL-LDT, LS SONIC.

Log Formation (Top), Depth and Datums Sample

Name	Top	Datum
CHASE	2566	
COUNCIL GROVE	2917	
HEEBNER	4170	
TORONTO	4207	
LANSING	4324	
MARMATON	4982	
CHEROKEE	5198	
MORROW	5586	
CHESTER	5831	
ST. LOUIS	6226	

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"	23.0	1648	P+ MIDCON 2/ P+	330/100	3%CC, 1/4#SK FLC/ 2%CC, 1/4#SK FLC.
PRODUCTION	7-7/8"	5-1/2"	15.5	6294	65/35 POZ/ 50/50 POZ	65/140	3%CC, 1/4#SK FLC/ 1%CC, .75% HALAD 322, 10% SALT, 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
4	6108-6120, 6148-6152.	NONE

TUBING RECORD	Size	Set At	Packer At	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	2 7/8"	6159		

Date of First, Resumed Production, SWD or Inj. **9-25-97** Producing Method Flowing Pumping Gas Lift Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio TSTM	Gravity
	85	0	110		

Disposition of Gas: Vented Sold Used on Lease (If vented, submit ACO-18.) METHOD OF COMPLETION Open Hole Perf. Dually Comp. Commingled Other (Specify) _____ Production Interval **6108-6152 (OA)**

TICKET #	234885	TICKET DATE	9-3-97
BDA / STATE	KS	COUNTY	SEWARD
PSL DEPARTMENT	500		
CUSTOMER REP / PHONE	02 Stuck		
JOB PURPOSE CODE	010		ORIGINAL

REGION	North America	NWA/COUNTRY	Mid Continent
MBU ID / EMP #	66101 / 148120	EMPLOYEE NAME	Tom Payne
LOCATION	Liberal KS	COMPANY	ARC
WELL LOCATION	5-27-19	DEPARTMENT	CEMENT
FEASIBILITY	Hitch 3-4	SECURITY / RING	11-335-34W

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
M FOX E0423							
S FROST 69795							
S OWENS 52258							

HES UNIT NUMBERS	R/T MILES	HES UNIT NUMBERS	R/T MILES	HES UNIT NUMBERS	R/T MILES	HES UNIT NUMBERS	R/T MILES
52947	42	75496	42				
50404		6610					
4461		6612					
425042							

Form Name _____ Type: _____
 Form Thickness _____ From _____ To _____
 Packer Type _____ Set At _____
 Bottom Hole Temp. _____ Pressure _____
 Misc. Data _____ Total Depth _____

DATE TIME	CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
9-3-97 0515		9-3-97 0730	9-3-97 1126	9-3-97 1251

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY	MAKE
Float Collar INSERT	1	Howo
Float Shoe		
Guide Shoe	1	
Centralizers 8ea 12 1/4	4	
Bottom Plug		
Top Plug SW	1	
Head RC	1	
Packer Basket	1	
Other weld		

WELL DATA

	NEW/USED	WEIGHT	SIZE	FROM	TO	MAX ALLOW
Casing	N	23	8 5/8	KB	1662	
Liner						
Liner						
Tbg/D.P.						
Tbg/D.P.						
Open Hole						SHOTS/FT.
Perforations						
Perforations						
Perforations						

MATERIALS

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

HOURS ON LOCATION	OPERATING HOURS		DESCRIPTION OF JOB
	DATE	HOURS	
TOTAL			

CEMENT DATA

ORDERED	HYDRAULIC HORSEPOWER	Used
TREATED	AVERAGE RATES IN BPM	Overall
FEET 114	CEMENT LEFT IN PIPE	Reason
		Free Joint

STAGE	SACKS	CEMENT	BULK/SKS	ADDITIVES	YIELD	LBS/GAL
	330	PT H/C 223	B	3% CC, 1/4% Flocc	3.22	11.1
	100	PT	B	2% CC, 1/4% Flocc	1.32	14.8

Circulating	Displacement	Preflush:	Gal - BBI	Type
Breakdown	Maximum	Load & Bkdn:	Gal - BBI	Pad: BBI - Gal
Average	Frac Gradient	Treatment	Gal - BBI	Disp: BBI Gal
Shut In: Instant	5 Min	15 Min	Cement Slurr	Gal - BBI
			Total Volume	Gal - BBI 189.2 + 250

Frac Ring #1	Frac Ring #2	Frac Ring #3	Frac Ring #4
THE INFORMATION STATED HEREIN IS CORRECT		CUSTOMER'S REPRESENTATIVE SIGNATURE	



JOB SUMMARY 4239-1

TICKET # 234841 TICKET DATE 9-11-97

REGIO North America NWA/COUNTRY Mid Continent BDA / STATE KS COUNTY Seward
MBUID / EMP # L70101 G3601 EMPLOYEE NAME D. McHane PSL DEPARTMENT Cement
LOCATION Liberal COMPANY Anadarko Petroleum CUSTOMER REP / PHONE
TICKET AMOUNT WELL TYPE 01 API / UWI #
WELL LOCATION Land DEPARTMENT Cement JOB PURPOSE CODE 035
LEASE / WELL # Hitch 3-4 SEC / TWP / RNG 11 33S 34W

ORIGINAL

Table with 4 columns: HES EMP NAME/EMP#/(EXPOSURE HOURS) | HRS. Rows include E. McDonald H9285 and L. Peterson H8760.

Table with 8 columns: HES UNIT NUMBERS | R/T MILES. Rows include 420045 (40), 52947-75496 (40), and 50866-75237.

Form Name Type:
Form Thickness From To
Packer Type Set At
Bottom Hole Temp. Pressure
Misc. Data Total Depth

TOOLS AND ACCESSORIES table with columns: TYPE AND SIZE, QTY, MAKE. Includes items like Float Collar, Guide Shoe, Centralizers, etc.

MATERIALS table with columns: Name, Density, Size, Lb./Gal. Includes Treat Fluid, Prop. Type, Acid Type, etc.

Table with 5 columns: DATE, CALLED OUT, ON LOCATION, JOB STARTED, JOB COMPLETED. Includes TIME values like 0700, 0910, 1452, 1550.

WELL DATA table with columns: NEW/USED, WEIGHT, SIZE, FROM, TO, MAX ALLOW. Includes Casing, Liner, Tbg/D.P., etc.

Table with 3 main sections: HOURS ON LOCATION, OPERATING HOURS, DESCRIPTION OF JOB. Includes TOTAL rows and 'Sec Job Log' description.

Table with 3 columns: ORDERED, TREATED, FEET. Includes values like 42 and 'Shoe Joint'.

CEMENT DATA table with columns: STAGE, SACKS, CEMENT, BULK/SKS, ADDITIVES, YIELD, LBS/GAL. Includes 3% CC, 1/4 #/sk Floccle, etc.

Form with multiple fields: Circulating, Breakdown, Average, Shut In: Instant, Displacement, Maximum, Frac Gradient, Preflush, Load & Bkdn, Treatment, Cement Slurr, Total Volume.

Frac Ring #1, #2, #3, #4. THE INFORMATION STATED HEREIN IS CORRECT. CUSTOMER'S REPRESENTATIVE SIGNATURE.



HALLIBURTON

JOB LOG 4239-5

REGION North America	NWA/COUNTRY	TICKET #	TICKET DATE
MBUID / EMP #	EMPLOYEE NAME	BDA / STATE	COUNTY
LOCATION	COMPANY	PSL DEPARTMENT	
TICKET AMOUNT	WELL TYPE	CUSTOMER REP / PHONE	
WELL LOCATION	DEPARTMENT	API / UWI #	
LEASE / WELL #	SEC / TWP / RNG	JOB PURPOSE CODE	

ORIGINAL

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

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL)(GAL)	PUMPS		PRESS. (psi)		JOB DESCRIPTION / REMARKS
				T	C	Tbg	Csg	
	0930							Job Ready
	0700							Called for Job
	0910							on location Rig laying down Drill Collars
	0920							Casing on location
	0925							O.P out of hole
	0950							Lay Down RH & MH
	1130							Casing Crew Rigging up
	1355							Start Running Csg of Float Equip
	1359							Csg on Bottom
	1419							Hook up P/C of Circulating Iron
	1450							Start Circulating
	1451							through Circulating
								Hook up to pump truck
								Job Procedure 5 1/2 Long String
	1452	6	8			0/200		Start Fresh water
	1454	6	10			250		Start Super Flush
	1456	6	8			250		Start Fresh water
	1500	6	23.8			250		Start Lead Cement @ 12.3 #/gal
	1505	6	32.			250		Start Tail Cement @ 14.4 #/gal
	1512							through mixing Cement
	1514					0		Shut Down & Release Plug
	1515							Wash up pumps & lines
	1517	6	149			0/250		Start Displacement
	1540					250/1000		Max Pressure before plug lands
	1545					500/1500		Plug landed / Release plug
	1546							Float Held
	1550		9			0		Plug RH & MH

Thank You For Calling Halliburton

Danny & Crew

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 NOV 10 1993
 HALLIBURTON