

ORIGINAL

DRILLERS LOG

ANADARKO PETROLEUM CORPORATION  
MORLAN A-7  
SECTION 21-T33S-R34W  
SEWARD COUNTY, KANSAS

15-175-21596-0000

COMMENCED: 02-05-97  
COMPLETED: 02-15-97

SURFACE CASING: 1664' OF 8 5/8" CMTD  
W/320 SKS PREMIUM PLUS MIDCON + 3% CC  
+ 1/4 #/SK FLOCELE. TAILED IN W/100 SKS  
PREMIUM PLUS MIDCON + 2% CC + 1/4 #/SK  
FLOCELE.

FORMATION

DEPTH

FORMATION	DEPTH
SURFACE HOLE	0 - 1664
RED BED & SHALE	1664 - 2000
SHALE	2000 - 2765
LIMESTONE & SHALE	2590 - 6400 RTD

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

CHEYENNE DRILLING, INC.

WRAY VALENTINE

STATE OF KANSAS : ss:

SUBSCRIBED AND SWORN TO BEFORE ME THIS 18TH DAY OF FEBRUARY, 1997.

RECEIVED  
KANSAS CORP COMM  
1997 APR 16 A 10:17

JOLENE K. RUSSELL

NOTARY PUBLIC





# JOB SUMMARY

HALLIBURTON  
DIVISION  
HALLIBURTON  
LOCATIONMid Continent  
LIBERAL, KSBILLED ON  
TICKET NO. 185317

## WELL DATA

FIELD \_\_\_\_\_ SEC. 21 TWP. 33S RNG. 39W COUNTY SEWARD 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 6450

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	<u>N</u>	<u>29</u>	<u>8 1/2</u>	<u>KB</u>	<u>1625</u>	
LINER						
TUBING						
OPEN HOLE						SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

# ORIGINAL

## JOB DATA

CALLER OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
<u>2-15-97</u>	<u>2-15-97</u>	<u>2-15-97</u>	<u>2-15-97</u>
DATE	DATE	DATE	DATE
TIME <u>0230</u>	TIME <u>0500</u>	TIME <u>0630</u>	TIME <u>0930</u>

### TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR		
FLOAT SHOE		
GUIDE SHOE		
CENTRALIZERS		
BOTTOM PLUG		
TOP PLUG		
HEAD		
PACKER		
OTHER		

### PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
<u>J. Woodring 62513</u>		
<u>P. Elwood</u>		
<u>S. Helms</u>		

### MATERIALS

TREAT. FLUID \_\_\_\_\_ DENSITY \_\_\_\_\_ LB/GAL. API  
 DISPL. FLUID \_\_\_\_\_ DENSITY \_\_\_\_\_ LB/GAL. API  
 PROP. TYPE \_\_\_\_\_ SIZE \_\_\_\_\_ LB.  
 PROP. TYPE \_\_\_\_\_ SIZE \_\_\_\_\_ LB.  
 ACID TYPE \_\_\_\_\_ GAL. %  
 ACID TYPE \_\_\_\_\_ GAL. %  
 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. IN.  
 PERFFAC BALLS TYPE \_\_\_\_\_ QTY. \_\_\_\_\_  
 OTHER \_\_\_\_\_  
 OTHER \_\_\_\_\_

DEPARTMENT CLMINT  
 DESCRIPTION OF JOB PLUG TO ABANDON  
 JOB DONE THRU: TUBING  CASING  ANNULUS  TBG/ANN.   
 CUSTOMER REPRESENTATIVE X [Signature]  
 HALLIBURTON OPERATOR [Signature] COPIES REQUESTED \_\_\_\_\_

## CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
	<u>225</u>	<u>ARM 40/100</u>	<u>Southwest</u>	<u>B</u>	<u>6% GA</u>	<u>1.52</u>	<u>13.2</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 \_\_\_\_\_ REASON \_\_\_\_\_

## SUMMARY

## VOLUMES

PRESLUSH: BBL. GAL. \_\_\_\_\_ TYPE \_\_\_\_\_  
 LOAD & BKDN: BBL. GAL. \_\_\_\_\_ PAD: BBL. GAL. \_\_\_\_\_  
 TREATMENT: BBL. GAL. \_\_\_\_\_ DISPL: BBL. GAL. \_\_\_\_\_  
 CEMENT SLURRY: BBL. GAL. 61  
 TOTAL VOLUME: BBL. GAL. \_\_\_\_\_

## REMARKS

FIELD OFFICE

CUSTOMER: MidContinent LEASE: 62513 WELL NO.: 1-7 JOB TYPE: PTA DATE: 2-15-97

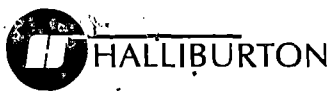


JOB LOG HAL-2013-C

CUSTOMER: ANADARKO PETROLEUM	WELL NO: A-7	LEASE: MORLAN	JOB TYPE: PTA	TICKET NO: 185317
------------------------------	--------------	---------------	---------------	-------------------

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0600							JOB READY
	0630							called out for job
	0650							pump truck on location
	0700							Rigging down drill pipe
								SET UP PUMP TRUCK
								D.P. AT 3000' - Hook up Kelly & Circulate Hole
								THROUGH CIRCULATING Hook up to pump truck
								JOB Procedure 100 SK PLUG AT 3000'
	0630	5.0	10.0	✓		9/225		pump 10 BBLS FRESH WATER AHEAD
	0639		27.0	✓		13/200		Mix 100 SKS CMT AT 13.2 %CAL
	0639							pump 3.5 BBLS WATER BEHIND
	0642		32.0					pump 32 BBLS mud BEHIND
	0650							SHUT DOWN - Knock loose
								Lay Down D.P TO 1670'
								JOB Procedure 50 SK PLUG AT 1670'
	0730	5.0	10.0	✓		9/150		pump 10 BBLS FRESH WATER AHEAD
	0734		13.5	✓		150/100		Mix 50 SKS CMT AT 13.1 %CAL
	0738		3.5	✓		100		pump 3.5 BBLS BEHIND
	0740		17.0	✓		100		pump 17 BBLS mud Disp
	0745							SHUT DOWN - PLUG SPOTTED
								Lay Down D.P TO 690'
								JOB Procedure 40 SK PLUG AT 690'
	0810	5.0	30.0	✓		9/100		pump 30 BBLS FRESH WATER
	0820	5.0	12.5					Mix 40 SKS CMT
	0825		6.5					pump 6.5 Disp FRESH WATER
								SHUT DOWN - PLUG SPOTTED
								Lay Down Rest of D.P
								Lay Down R-11 + M-M
								Run 40' of D.P. BACK IN
	0915		2	✓		0		Mix 10 SKS TOP 40' TOP PLUG
	0920		2	✓		0		Mix 10 SKS FOR P-H
	0930		3	✓		0		Mix 15 SKS TOP P-H
								THANK YOU FOR CALLING HALLIBURTON
								Woody & Robert

ORIGINAL



# JOB SUMMARY

HALLIBURTON DIVISION  
HALLIBURTON LOCATION

MOJO CONTINENT  
LIBERAL KS

BILLED ON TICKET NO. 185427

FIELD SHUCK SEC. 21 TWP. 33S RNG. 34W COUNTY SEWARD 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 \_\_\_\_\_

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	N	23	8 5/8	GL.	1665	CSG 1675
LINER						
TUBING						
OPEN HOLE			12 1/4	GL.	1664	SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

### JOB DATA

CALLER OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <u>2-6-97</u> TIME <u>0330</u>	DATE <u>2-6-97</u> TIME <u>0530</u>	DATE <u>2-6-97</u> TIME <u>0935</u>	DATE <u>2-6-97</u> TIME <u>1045</u>

### TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
INSERT <u>8 5/8</u>	<u>1</u>	<u>H</u>
FILLUP	<u>1</u>	<u>O</u>
REGULAR <u>S-4</u>	<u>4</u>	<u>W</u>
5w	<u>1</u>	<u>C</u>
NONWELD A 1LB	<u>1</u>	<u>O</u>
CMT BASKET	<u>1</u>	

### PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
T. BROADFOOT	420044	LIBERAL KS.
S. GRANT	53554	NUGOTON KS
A. CORPENING	4037	"
L. PATTERSON	4115	"
H8760	75237	"

### 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. \_\_\_\_\_ IN  
PERFPAC BALLS TYPE \_\_\_\_\_ QTY. \_\_\_\_\_  
OTHER \_\_\_\_\_

DEPARTMENT CEMENT  
DESCRIPTION OF JOB CEMENT 8 5/8 SURFACE CSG.  
JOB DONE THRU: TUBING  CASING  ANNULUS  TBG./ANN.   
CUSTOMER REPRESENTATIVE X for Shoo  
HALLIBURTON OPERATOR Jim Broadfoot COPIES REQUESTED \_\_\_\_\_

### CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
1	320	PREM PLUS	B	3% C.C. - 1/4 #/SK FLOCELE	3.22	11.1
1	100	PREM PLUS	B	2% C.C. - 1/4 #/SK FLOCELE	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 45 REASON SHOE ST.

### SUMMARY

PRESLUSH: BBL.-GAL. \_\_\_\_\_ TYPE \_\_\_\_\_  
LOAD & BKDN: BBL.-GAL. \_\_\_\_\_ PAD: BBL.-GAL. \_\_\_\_\_  
TREATMENT: BBL.-GAL. \_\_\_\_\_ DISPL. BBL.-GAL. 104.3  
CEMENT SLURRY BBL.-GAL. 183.5 - 23.5  
TOTAL VOLUME: BBL.-GAL. \_\_\_\_\_  
REMARKS MSAS ON LOCT  
BBL CMT PIT - SKS

CUSTOMER ANADARKO PET. CORP. LEASE MORLAN WELL NO. A-7 JOB TYPE 8 5/8 SURFACE CSG DATE 2-6-97

RECEIVED  
KANSAS CORP COMM  
APR 16 AM 11:17

JOB LOG HAL-2713-C

CUSTOMER **ANADARKO PET. CORP.** WELL NO. **A-7** LEASE **MORLAN** JOB TYPE **8 5/8 SURFACE CSG** TICKET NO. **185427**

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0330							CALLED OUT - READY NOW ON LOCT. STILL DRUG. START CSG IN HOLE
	0530							
	0815							
								ORIGINAL
	0915							Hook up to CIRCULATE CMT HEAD
	0920							CIRCULATION TO PIT - SAFETY MEETING
	0935							Hook up to CMT LINE
	0938					1260		PRESSURE TEST
	0942	6.3	183.5				180	START LEAD CMT 11.1 #/GAL
	1011	4	23.5				200	START TAIL CMT 14.8 #/GAL
	1017	0	0				160	SHUT OFF DROP PLUG
	1020	4.7	94.3				90	PUMP DISPLACEMENT 1/20
	1040	2	10				250	SLOW RATE 10% B TOTAL BBL
	1045	-	-				700	PLUG LANDED - FLOAT HELD
								Job OVER
								RECEIVED S/S CORP COMM FEB 6 A 10:17
								THANKS FOR CALLING HALLIBURTON ENERGY SERVICES LIBERAL KS.
								"HAVE A SNOWY DAY"
								BROADFOOT - GRANT - CORPENING - PATTERSON
								MSS ON LOCT 35 BBL CMT PIT - 61 SKS