

FORM MUST BE TYPED

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 # 4549

Name: ANADARKO PETROLEUM CORPORATION

Address P. O. BOX 351

City/State/Zip LIBERAL, KANSAS 67905-0351

Purchaser: ANADARKO ENERGY SERVICES

Operator Contact Person: DAVID W. KAPPLF

Phone (316) 624-6253

Contractor: Name: NORSEMAN DRILLING

License: 3779

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 PBTD

Commingled Docket No. _____

Dual Completion Docket No. _____

Other (SWD or Inj?) Docket No. _____

6-16-97 6-25-97 7-15-97

Spud Date Date Reached TD Completion Date

API No. 15- 189-22193 -00-00

County STEVENS

SE - SW - NW Sec. 32 Twp. 33 Rge. 38 E W

2310 Feet from X (circle one) Line of Section

990 Feet from X (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE, SE, NW or SW (circle one)

Lease Name GRRGORY "C" Well # 3

Field Name GENTZLER SW

Producing Formation L. MORROW

Elevation: Ground 3215.0 KB _____

Total Depth 6400 PBTD 6235

Amount of Surface Pipe Set and Cemented at 1732 Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set 3036 Feet

If Alternate II completion, cement circulated from _____

feet depth to _____ w/ _____ sx cmt.

Drilling Fluid Management Plan Att. 1, 4-998 U.C.

(Data must be collected from the Reserve Pit)

Chloride content 1600 ppm Fluid volume 700 bbls

Dewatering method used DRY, BACKFILL & RESTORE LOCATION.

Location of fluid disposal if hauled offsite: _____

Operator Name 10-09-97

Lease Name _____ License No. _____

_____ 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 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 10-7-97

Subscribed and sworn to before me this 7th day of October 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 GREGORY "C" Well # 3

Sec. 32 Twp. 33 Rge. 38 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 (Attach Additional Sheets.) | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input checked="" type="checkbox"/> Log Formation (Top), Depth and Datums | <input type="checkbox"/> Sample |
| Samples Sent to Geological Survey | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Name | Top Datum |
| Cores Taken | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | B/STONE CORRAL | 1734 |
| Electric Log Run (Submit Copy.) | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | CHASE | 2536 |
| List All E.Logs Run: SBT-CCL-GR, DIL, ML, CNL-LDT, SONIC, MSFL. | | COUNCIL GROVE | 2874 |
| | | ADMIRE | 3116 |
| | | WABAUNSEE | 3308 |
| | | TOPEKA | 3578 |
| | | HEEBNER | 4118 |
| | | TORONTO | 4140 |
| | | LANSING | 4248 |
| | | MARMATON | 4956 |
| | | CHEROKEE | 5206 |
| | | MORROW | 5752 |
| | | L. MORROW | 6126 |
| | | CHESTER | 6254 |

| CASING RECORD | | | | | | | |
|---|-------------------|---------------------------|-----------------|---------------|--------------------|--------------|--|
| 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 | 1732 | P+ MIDCON 2/ P+ | 335/100 | 3%CC, 1/2%SK FLC/ 2%CC, 1/2%SK FLC. |
| PRODUCTION | 7-7/8" | 5-1/2" | 15.5 | 6296 | VERSASET | 50/100 | .6% HALAD 322, 5% KCl, .9% VERSASET, 1/2%SK FLC. |
| | | | F.O. TOOL @ | 3036 | MIDCON 2 | 60 | 2%CC, 1/2%SK FLC. |

| ADDITIONAL CEMENTING/SQUEEZE RECORD | | | | |
|--|-------|--------|-------------|----------------------------|
| Purpose: ___ Perforate ___ Protect Casing ___ Plug Back TD ___ Plug Off Zone | Depth | | #Sacks Used | Type and Percent Additives |
| | Top | Bottom | | |
| | | | | |
| | | | | |

| 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 | 6192-6208, 6172-6182, 6151-6165. | | NONE. |
| | | | | |
| | | | | |

| | | | | |
|---------------|------|--------|-----------|---|
| 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. 7-22-97 | Producing Method |
| | <input checked="" type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) |

| | | | | | |
|-----------------------------------|-----------|--------------|---------------|---------------|---------|
| Estimated Production Per 24 Hours | Oil Bbls. | Gas Mcf 1997 | Water Bbls. 0 | Gas-Oil Ratio | Gravity |
|-----------------------------------|-----------|--------------|---------------|---------------|---------|

Disposition of Gas: SIGW METHOD OF COMPLETION Production Interval

Vented Sold Used on Lease Open Hole Perf. Dually Comp. Commingled

(If vented, submit ACO-18.) Other (Specify) _____ 6151-6208 (OA)

ORIGINAL

RECORDED
INDEXED
1977 OCT -9 A 11:41

NORSEMAN DRILLING, INC.
WICHITA, KANSAS
DRILLERS' WELL LOG

WELL NAME: Gregory C-3
SECTION 32-33S-38W
STEVENS COUNTY, KANSAS

COMMENCED: JUNE 16, 1997

15-189-22193

COMPLETED: JUNE 27, 1997

OPERATOR: ANADARKO PETROLEUM CORPORATION

| Depth | | Formation | Remarks |
|-------|------|----------------|-------------------------------------|
| From | To | | |
| 0 | 1169 | Sand & Redbed | Ran 42 jts of 23# of |
| 1170 | 1372 | Glorietta Sand | 8 5/8" csg set @ 1732' |
| 1373 | 4110 | Redbed | Cemented w/455 sx |
| 4111 | 6400 | Shale | Plug down on 6/18/97 @ 8:15 a.m. |

Ran 150 jts. of 5 1/2" 15.5# Set @ 6296'; Cemented with 155 SX; Plug down at 5:00 a.m. on 6/27/97; Rig Rel. 7:00 a.m. on 06/27/97.

STATE OF KANSAS)
)
COUNTY OF SEDGWICK) I the undersigned, being duly sworn on oath, state that the
) above Drillers' Well Log is true and correct to the best of my
) knowledge and belief and according to the records of this office.

NORSEMAN DRILLING, INC.

James P. Reilly

JAMES P. REILLY, PRESIDENT

Subscribed & sworn to before me this July 3, 1997

My Appointment Expires:

July 21, 1999

Phyllis E. Brewer

Phyllis E. Brewer, Notary Public
11817 Jamesburg
Wichita, KS 67212 (68)





JOB SUMMARY 4239-1

| | | | |
|----------------------|-----------------|-------------|---------|
| TICKET # | 184347 | TICKET DATE | 6-17-97 |
| BDA / STATE | KS | COUNTY | STEWENS |
| PSL DEPARTMENT | CEMENT | | |
| CUSTOMER REP / PHONE | | | |
| API / UWI # | | | |
| JOB PURPOSE CODE | 010-878 SURFACE | | |

| | | | |
|----------------|---------------|-----------------|---------------|
| REGION | North America | NWACOUNTRY | Mid CONTINENT |
| MBUID / EMP # | LIB 4 62573 | EMPLOYEE NAME | JOHN WOODROW |
| LOCATION | LIBERAL KS | COMPANY | ANADARKS |
| TICKET AMOUNT | | WELL TYPE | OI- |
| WELL LOCATION | FETERITA | DEPARTMENT | CEMENT |
| LEASE / WELL # | GREGORY C-3 | SEC / TWP / RNG | 32-335-38W |

| 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 |
|--|--|--|--|
| T. POYER 4817 | | | |
| G. ASHLEY | | | |
| B. BARKER 10868 | | | |

| HES UNIT NUMBERS | R/T MILES | HES UNIT NUMBERS | R/T MILES | HES UNIT NUMBERS | R/T MILES | HES UNIT NUMBERS | R/T MILES |
|------------------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|
| 420044 | 84 | | | | | | |
| 53554/7600 XTG-9 | 84 | | | | | | |
| 51284/77031 BULK | 9 | | | | | | |
| 4461/661 BULK | 9 | | | | | | |

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

TOOLS AND ACCESSORIES

| TYPE AND SIZE | QTY | MAKE |
|-------------------------|-----|------|
| Float Collar | | H |
| Float Shoe INSERT 8 7/8 | 1 | |
| Guide Shoe REG 4 1/2 | 1 | O |
| Centralizers S-4 4 1/2 | 4 | |
| Bottom Plug | | W |
| Top Plug 5' W 4 1/2 | 1 | |
| Head PIC 4 1/2 | 1 | C |
| Packer | | |
| Other BASKET 4 1/2 | 1 | O |

MATERIALS

| | | |
|----------------------|---------------|--------------|
| Treat Fluid _____ | Density _____ | Lb/Gal _____ |
| Disp. Fluid _____ | Density _____ | Lb/Gal _____ |
| Prop. Type _____ | Size _____ | Lb. _____ |
| 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 _____ | In _____ |
| Perpac Balls _____ | Qty. _____ | |
| Other _____ | | |
| Other _____ | | |
| Other _____ | | |

| DATE | CALLLED OUT | ON LOCATION | JOB STARTED | JOB COMPLETED |
|------|-------------|-------------|-------------|---------------|
| | | 6-17-97 | 6-17-97 | 6-18-97 |
| TIME | 0830 | 1130 | 0727 | 0815 |

WELL DATA

| | NEW/USED | WEIGHT | SIZE | FROM | TO | MAX ALLOW |
|--------------|----------|--------|-------|------|------|-----------|
| Casing | N | 23 | 8 7/8 | KB | 1747 | |
| Liner | | | | | | |
| Liner | | | | | | |
| Tbg/D.P. | | | | | | |
| Tbg/D.P. | | | | | | |
| Open Hole | | | | | | SHOTS/FT. |
| Perforations | | | | | | |
| Perforations | | | | | | |
| Perforations | | | | | | |

| HOURS ON LOCATION | | OPERATING HOURS | | DESCRIPTION OF JOB |
|-------------------|-------|-----------------|-------|--------------------|
| DATE | HOURS | DATE | HOURS | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| TOTAL | | TOTAL | | |

HYDRAULIC HORSEPOWER

| | | |
|---------------|--------------|------------|
| ORDERED _____ | Avail. _____ | Used _____ |
|---------------|--------------|------------|

AVERAGE RATES IN BPM

| | | |
|---------------|-------------|---------------|
| TREATED _____ | Disp. _____ | Overall _____ |
|---------------|-------------|---------------|

CEMENT LEFT IN PIPE

| | |
|---------|-------------------|
| FEET 41 | Reason SPOK JOINT |
|---------|-------------------|

| STAGE | SACKS | CEMENT | BULK/SKS | ADDITIVES | YIELD | LBS/GAL |
|-------|-------|-----------|----------|------------------|-------|---------|
| | 335 | pp midcon | B | 28 CC 1/4 HOGGER | 3.22 | 11.1 |
| | 160 | PP | B | 28 CC 1/4 HOGGER | 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 1085 |
| Shut In: Instant _____ | 5 Min _____ 15 Min _____ | Cement Slurr Gal - BBI 188 16 33.5 TG | |
| | | Total Volume Gal - BBI 211.5 | |

| | | | |
|--------------------|--------------------|--------------------|--------------------|
| Frac Ring #1 _____ | Frac Ring #2 _____ | Frac Ring #3 _____ | Frac Ring #4 _____ |
|--------------------|--------------------|--------------------|--------------------|

THE INFORMATION STATED HEREIN IS CORRECT
 CUSTOMER'S REPRESENTATIVE SIGNATURE: [Signature]

| | | | |
|----------------|---------------|----------------------|---------------|
| TICKET # | 124347 | TICKET DATE | 6-17-97 |
| REGION | North America | NWA/COUNTRY | |
| MBU ID / EMP # | LE104 (2573) | EMPLOYEE NAME | JOHN WOODRUFF |
| LOCATION | L. BEAL, KS | COMPANY | AVADARKO PET |
| TICKET AMOUNT | | WELL TYPE | 01 |
| WELL LOCATION | FETERITA | DEPARTMENT | CEMENT |
| LEASE / WELL # | GREGORY G-1 | SEC / TWP / RING | 32-33S-38-6J |
| BDA / STATE | KS | PSL DEPARTMENT | CEMENT |
| COUNTY | SELYERS | CUSTOMER REP / PHONE | |
| API / UWI # | | JOB PURPOSE CODE | 010-8% SURFAC |

| 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 |
|--|--|--|--|
| T. J. ... | | | |
| S. A. ... | | | |
| S. ... | | | |

ORIGINAL

| CHART NO. | TIME | RATE (BPM) | VOLUME (BBL)(GAL) | PUMPS | | PRESS. (psi) | | JOB DESCRIPTION / REMARKS |
|-----------------------------------|------|------------|-------------------|-------|---|--------------|-----|--|
| | | | | T | C | Tbg | Csg | |
| | 1230 | | | | | | | JOB READY |
| | 0838 | | | | | | | called out for job |
| | 1130 | | | | | | | pump truck + bulk cmt on location |
| | 1445 | | | | | | | Rig still drilling / wait on cat to spot equip |
| | 1515 | | | | | | | Rig through drilling / on bottom circulating |
| | 1645 | | | | | | | SET UP PUMP TRUCK |
| | 1730 | | | | | | | TRIP OUT DRILL PIPE |
| | 1730 | | | | | | | START RUNNING 8 7/8 CSG + FIT EQUIP |
| | 1730 | | | | | | | CANT GET TO BOTTOM |
| | 1730 | | | | | | | HOOK UP 8 7/8 SPACER + CIRCULATING IRON |
| | 1730 | | | | | | | TRY TO WASH DOWN / CANT GET CSG DOWN |
| | 1730 | | | | | | | LAY DOWN CSG TO TRIP BACK IN HOLE |
| | 1730 | | | | | | | WITH D.P. |
| | 2030 | | | | | | | RELEASE CREW |
| | 0400 | | 6-18-97 | | | | | called back out to BE. PLACE ON LOCATION |
| | 0530 | | | | | | | ON LOCATION / |
| | 0545 | | | | | | | START RUNNING 8 7/8 CSG + FIT EQUIP |
| | 0700 | | | | | | | GASING ON BOTTOM 1732' |
| | 0710 | | | | | | | HOOK UP 8 7/8 P/L + CIRCULATING IRON |
| | 0710 | | | | | | | START CIRCULATING WITH RIG PUMP |
| | 0715 | | | | | | | Hold SLEEDY MERTING |
| | 0727 | 4.0 | | | | | | THROUGH CIRCULATING / HOOK UP TO PUMP TRUCK |
| | 0731 | 8.5 | 195 | | | | | JOB PROCEEDURE |
| | 0756 | 5.0 | 235 | | | | | 1100 pump 5 BBL FRESH WATER SPACER |
| | 0802 | | | | | | | START MIXING 335 SKS LEAD CMT AT 1161' TALL |
| | 0802 | 6-7 | 212 | | | | | 100/150 mix 100 SKS TAIL CMT AT 148' TALL |
| | 0815 | | 110 | | | | | THROUGH MIXING CMT / SHUT DOWN |
| | | | | | | | | RELEASE PLUG / START DISPLACING |
| | | | | | | | | HAVE 80 BBL OUT / HAVE GOOD CMT |
| | | | | | | | | RETURNS TO SURFACE |
| | | | | | | | | PLUG DOWN / RELEASE FIT |
| | | | | | | | | Float HOLE |
| (CIRCULATED 30 BBL 52 SKS TO PIT) | | | | | | | | |
| THANK YOU FOR CALLING HALLIBURTON | | | | | | | | |
| WOODY + CREW | | | | | | | | |



JOB SUMMARY 4239-1

| | |
|------------------------------------|---|
| TICKET # 196316-X | TICKET DATE 6-27-97 |
| BDA / STATE KS. | COUNTY Stevens |
| PSL DEPARTMENT Cementing | CUSTOMER REP / PHONE Steve Kidenour |
| API / UWI # | JOB PURPOSE CODE 035 |

| | |
|---|--|
| REGION North America | NWA/COUNTRY Mid-Continent |
| MBU ID / EMP # HA0502 / 47558 | EMPLOYEE NAME Eldon Reynolds |
| LOCATION Hays, KS. | COMPANY Anadarko Petroleum Corp. |
| TICKET AMOUNT 4518.98 | WELL TYPE OR |
| WELL LOCATION 23-33S-38W | DEPARTMENT Cementing |
| LEASE / WELL # Gregory C-3 | SEC / TWP / RNG 23/33^S/38^W |

| 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 |
|--|--|--|--|
| E. Reynolds / 47558 | N Korbel | B. Miller / 2049 | |

ORIGINAL

| HES UNIT NUMBERS | R/T MILES | HES UNIT NUMBERS | R/T MILES | HES UNIT NUMBERS | R/T MILES | HES UNIT NUMBERS | R/T MILES |
|------------------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|
| 41226 | | 51145 | | 7649 | 30 | | |

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

| DATE | CALLED OUT | ON LOCATION | JOB STARTED | JOB COMPLETED |
|------|----------------|----------------|----------------|----------------|
| | 6-26-97 | 6-26-97 | 6-26-97 | 6-27-97 |
| TIME | 1015 | 1815 | 2145 | |

TOOLS AND ACCESSORIES

| TYPE AND SIZE | QTY | MAKE |
|--------------------------|-------|-------|
| Floor Collar Auto-Fillup | 1ea. | Halco |
| Floor Shoe-Inset Flocat | 1ea. | Halco |
| Guide Shoe 5 1/2" | 1ea. | Halco |
| Centralizers 5 1/2" | 12ea. | Halco |
| Bottom Plug | | |
| Top Plug 5 1/2" | 1ea. | Halco |
| Head | | |
| Packer Baker Port Collar | 1ea. | Baker |
| Other Cement Bond 5 1/2" | 1ea. | Halco |

WELL DATA

| | NEW/USED | WEIGHT | SIZE | FROM | TO | MAX ALLOW |
|--------------|----------|-------------|---------------|-----------|--------------------|------------------------|
| Casing | N | 15.5 | 5 1/2" | KB | 6304.38 | 6296' |
| Liner | | | | | | |
| Liner | | | | | | |
| Tbg/D.P. | | | | | | |
| Tbg/D.P. | | | | | 6296' | |
| Open Hole | | | | | 6304.38 | 6400' SHOTS/FT. |
| Perforations | | | | | | |
| Perforations | | | | | | |
| Perforations | | | | | | |

MATERIALS

| Treat Fluid | Density | Lb/Gal |
|---------------------------------|--------------------|--------|
| Disp. Fluid Water | Density 8.2 | Lb/Gal |
| Prop. Type | Size | Lb. |
| 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 10 Sks. Superflush | | |
| Other | | |
| Other | | |
| Other | | |

| HOURS ON LOCATION | | OPERATING HOURS | | DESCRIPTION OF JOB |
|-------------------|-------|-----------------|-------|-------------------------|
| DATE | HOURS | DATE | HOURS | |
| 6-26-97 | | 6-26-97 | | Crnt. Prod. Csg. |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| TOTAL | | TOTAL | | |

ORDERED _____ **HYDRAULIC HORSEPOWER** Avail. _____ Used _____
 TREATED _____ **AVERAGE RATES IN BPM** Disp. _____ Overall _____
 FEET **45.43** **CEMENT LEFT IN PIPE** Reason **Shoe Joint**

CEMENT DATA

| STAGE | SACKS | CEMENT | BULK/SKS | ADDITIVES | YIELD | LBS/GAL |
|-------|------------|---------------------|----------|--|-------------|-------------|
| | 25 | Prem. Plus | | | 1.32 | 14.8 |
| | 50 | Prem Veraset | | .9% Veraset - 5% KCL - .6% Halod-322 - 1/4" Flocate | 2.9 | 11.5 |
| | 100 | Prem Veraset | | .9% Veraset - 5% KCL - .6% Halod-322 - 1/4" Flocate | 1.41 | 14.5 |

Circulating _____ Displacement _____ Preflush: Gal - **BBI 26.0** Type **Superflush-water**
 Breakdown _____ Maximum _____ Load & Bkdn: Gal - BBI Pad: BBI Gal
 Average _____ Frac Gradient _____ Treatment Gal - BBI Disp: **BBI Gal 149.0**
 Shut In: Instant _____ 5 Min _____ 15 Min _____ Cement Slurr Gal - **BBI 5.9-25.8-25.1**
 Total Volume Gal - BBI

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



JOB LOG 4239-5

| | | | |
|----------------------|----------------|-------------|---------|
| TICKET # | 196 316 - X | TICKET DATE | 6-27-97 |
| BDA / STATE | KS. | COUNTY | STEVENS |
| PSL DEPARTMENT | Cementing | | |
| CUSTOMER REP / PHONE | Steve Ridenour | | |
| API / UWI # | 035 | | |
| JOB PURPOSE CODE | 035 | | |

| | | | |
|----------------|----------------|-----------------|------------------------|
| REGION | North America | NWA/COUNTRY | Mid-Continent |
| MBU ID / EMP # | EA0502 / 47558 | EMPLOYEE NAME | Eldon Reynolds |
| LOCATION | Hays, KS. | COMPANY | Aurora Petroleum Corp. |
| TICKET AMOUNT | 9518.98 | WELL TYPE | 01 |
| WELL LOCATION | 23-33S-38 W | DEPARTMENT | Cementing |
| LEASE / WELL # | Gregory C-3 | SEC / TWP / RNG | 23/33S/38 W |

| 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 |
|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| E Reynolds / 47558 | N Korbe / | B.M. Zdyre | ORIGINAL |

| CHART NO. | TIME | RATE (BPM) | VOLUME (BBL)(GAL) | PUMPS | | PRESS. (psi) | | JOB DESCRIPTION / REMARKS |
|-----------|------|------------|-------------------|-------|---|--------------|-----|---|
| | | | | T | C | Tbg | Csg | |
| 6-26-97 | 1015 | | | | | | | Called out - Job ready now |
| | 1815 | | | | | | | on loc. - Reg. @ 1900 hrs - Rig Crew Repair Chain - lay down DP |
| | 2050 | | | | | | | Ric-Job meeting - Setup Equip - |
| | 2145 | | | | | | | DP out - lay down Kelly - Rig up Csg. Crew |
| | | | | | | | | Start 5 1/2" Csg. - Float Equip - Reg. Guide shoe & Insert Float |
| | | | | | | | | Valve w/ Auto Fill on bit. Th. 5/4 Center on # 1-2-3-4-5 |
| | | | | | | | | 7-10-13-17-19 - 20 - 21 - (Cut Bsk on both Jt # 72 - |
| | | | | | | | | Baker Port Collar on Collar # 72 |
| 6-27-97 | 0157 | | | | | | | Csg @ 6296' - Hook up Plug Container & manifold - drop Ball |
| | 0218 | | | | | | | Rig Start Circ. Ball thru Insert - Recip. Csg. - (Loosing Returns) |
| | 0305 | | | | | | | Start mixing Superflush |
| | 0340 | | | | | | | Hook up to Pump truck |
| | 0344 | 5.0 | 8.0 | | | 150 | | Start 8 bbl. Fresh water spacer |
| | 0346 | 5.0 | 10.0 | | | 150 | | Start 10 bbl. Super flush |
| | 0348 | 5.0 | 8.0 | | | 150 | | Start 8 bbl. Fresh water spacer |
| | 0350 | | | | | 0 | | Shut down - Close in Csg. |
| | 0351 | | 5.9 | | | 0 | | Start mixing 25 SKS. from Plus - Plug Rat & mouse hole |
| | 0405 | | | | | | | Finish plugging - Re-open manifold |
| | 0406 | 6.0 | 25.8 | | | | | Start mixing 50 SKS (Scabenger) - 98 Veraset - 5% KCL - 1.6% H ₂ O ₂ - 1/4" Floate |
| | 0410 | 6.0 | 25.1 | | | 125 | | Start mixing 100 SKS - 1/4" gal (Tail) 98 Veraset - 5% KCL - 1.6% H ₂ O ₂ - 1/4" Floate |
| | 0423 | 5.0 | | | | 100 | | Finish mixing Cement - Stop Recip. Csg. |
| | | | | | | | | Close in Csg. - Wash up Pump & Lines - Release 5 1/2" 5-W Top Plug |
| | 0426 | 6.0 | 148.7 | | | 100 | | Start disp. (Loosing Returns occasionally) |
| | 0447 | 600 | | | | 275 | | St. Press. Increase |
| | 0452 | 3.0 | | | | 475 | | Final Circ. w/ 145 bbl. in. |
| | 0454 | | | | | 1200 | | Plug down - Holding |
| | | | | | | | | Release Press. - Insert Holding |
| | | | | | | | | wash up & Rack up |
| | | | | | | | | Complete TRTs |
| | | | | | | | | Job Completed |

Thank You
Eldon, Nicky Bryan



JOB SUMMARY 4239-1

| | | | |
|--------------------------------------|--------------------------------------|---|--|
| REGION North America | NWA/COUNTRY Mid CONTINENT | TICKET # 235835 | TICKET DATE 7-10-97 |
| MBU ID / EMP # LT 104 | EMPLOYEE NAME JOHN WOODROW | BDA / STATE KS | COUNTY STEVENS |
| LOGATION Liberal, KS | COMPANY ANADARKO | PSL DEPARTMENT CEMENT | CUSTOMER REP / PHONE J. R. STUCK |
| TICKET AMOUNT | WELL TYPE C2-GAS | API / UWI # | |
| WELL LOCATION | DEPARTMENT CEMENT | JOB PURPOSE CODE 205 RECRMENT | |
| LEASE / WELL # GREGORY C-3 | SEC / TWP / RNG 23-33S-38W | | |

| 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 |
|--|--|--|--|
| S RAINES H3377 | | | |
| P CRIST | | | |
| B MC TOTTRE H2008 | | | |

| HES UNIT NUMBERS | R/T MILES | HES UNIT NUMBERS | R/T MILES | HES UNIT NUMBERS | R/T MILES | HES UNIT NUMBERS | R/T MILES |
|------------------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

ORIGINAL

Form Name _____ Type: _____

Form Thickness _____ From _____ To _____

Packer Type _____ Set At _____

Bottom Hole Temp. _____ Pressure _____

Misc. Data _____ Total Depth _____

| TOOLS AND ACCESSORIES | | |
|-----------------------|-----|------|
| TYPE AND SIZE | QTY | MAKE |
| Float Collar | | |
| Float Shoe | | |
| Guide Shoe | | |
| Centralizers | | |
| Bottom Plug | | |
| Top Plug | | |
| Head | | |
| Packer | | |
| Other | | |

| 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 | In |
| Perfpac Balls | Qty. | |
| Other | | |
| Other | | |
| Other | | |
| Other | | |

| DATE | CALLED OUT | ON LOCATION | JOB STARTED | JOB COMPLETED |
|------|----------------|----------------|----------------|----------------|
| | 7-10-97 | 7-10-97 | 7-10-97 | 7-10-97 |
| TIME | 0500 | 0800 | 1110 | 1452 |

| WELL DATA | | | | | | |
|--------------|----------|--------|-------|------|------|-----------|
| | NEW/USED | WEIGHT | SIZE | FROM | TO | MAX ALLOW |
| Casing | N | 15.5 | 5/2 | 13 | 6210 | |
| Liner | | | | | | |
| Liner | | | | | | |
| Tbg/D.P. | N | 4.7 | 2 3/4 | 1.0 | 2994 | |
| Tbg/D.P. | | | | | | |
| Open Hole | | | | | | SHOTS/FT. |
| Perforations | | | | | | |
| Perforations | | | | | | |
| Perforations | | | | | | |

| HOURS ON LOCATION | | OPERATING HOURS | | DESCRIPTION OF JOB |
|-------------------|-------|-----------------|-------|--------------------|
| DATE | HOURS | DATE | HOURS | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| TOTAL | | TOTAL | | |

| | | |
|---------|-----------------------------|---------|
| ORDERED | HYDRAULIC HORSEPOWER | Used |
| | Avail. | |
| TREATED | AVERAGE RATES IN BPM | Overall |
| | Disp. | |
| FEET | CEMENT LEFT IN PIPE | |
| | Reason | |

| STAGE | SACKS | CEMENT | BULK/SKS | ADDITIVES | YIELD | LBS/GAL. |
|-------|-----------|-------------------|----------|-------------------------|-------------|-------------|
| | 60 | P. M. DEAN | B | 28 CC, 1/4 ACELE | 3.22 | 11.1 |
| | | | | | | |
| | | | | | | |

Circulating _____ Displacement _____ Preflush: Gal - BBI _____ Type _____

Breakdown _____ Maximum _____ Load & Bkdn: Gal - BBI _____ Pad: BBI - Gal _____

Average _____ Frac Gradient _____ Treatment Gal - BBI _____ Disp: BBI - Gal _____

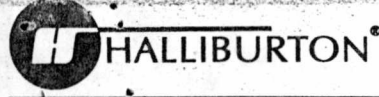
Shut In: Instant _____ 5 Min _____ 15 Min _____ Cement Slurr Gal - BBI **34**

Total Volume Gal - BBI _____

| | | | |
|--------------|--------------|--------------|--------------|
| Frac Ring #1 | Frac Ring #2 | Frac Ring #3 | Frac Ring #4 |
|--------------|--------------|--------------|--------------|

THE INFORMATION STATED HEREIN IS CORRECT

CUSTOMER'S REPRESENTATIVE SIGNATURE _____



JOB LOG 4239-5

| | | | |
|----------------------|------------------------|-------------|---------|
| TICKET # | 235835 | TICKET DATE | 7-10-97 |
| BDA / STATE | KS | COUNTY | STEVENS |
| PSL DEPARTMENT | CEMENT | | |
| CUSTOMER REP / PHONE | J. R. STUCK | | |
| API / UWI # | | | |
| JOB PURPOSE CODE | 205 RECREMENT ORIGINAL | | |

| | | | |
|----------------|---------------|-----------------|---------------|
| REGION | North America | NWA/COUNTRY | MID CONTINENT |
| MBU ID / EMP # | 17104 | EMPLOYEE NAME | JOHN WOODROW |
| LOCATION | LARNA, KS | COMPANY | ANADARKO |
| TICKET AMOUNT | | WELL TYPE | 22" GAS |
| WELL LOCATION | | DEPARTMENT | CEMENT |
| LEASE / WELL # | GREGORY C-3 | SEC / TWP / RNG | 23-335-386 |

| 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 |
|------------------------------------|-----|------------------------------------|-----|------------------------------------|-----|------------------------------------|-----|
| S. RAINES H3377 | | S. FREDRICK J112 | | | | | |
| L. CRIST | | | | | | | |
| K. M. SUTHERLAND H200 | | | | | | | |

| CHART NO. | TIME | RATE (BPM) | VOLUME (BBL)(GAL) | PUMPS | | PRESS. (psi) | | JOB DESCRIPTION / REMARKS |
|-----------|------|------------|-------------------|-------|---|--------------|------|---|
| | | | | T | C | Tbg | Csg | |
| | 0700 | | | | | | | JOB READY |
| | 0800 | | | | | | | CALLER OUT FOR JOB |
| | 0845 | | | | | | | PUMP TRUCK ON LOCATION / WAIT ON TBG. TBG ON LOCATION. |
| | 0930 | | | | | | | SET UP PUMP TRUCK START RUNNING 2 3/8 TBG IN HOLE LOCATE PORT COLLAR 30 LOOK UP TO 2 3/8 TBG |
| | 1112 | | | ✓ | | 1500 | 1500 | PRESSURE TEST |
| | 1120 | 3 | 25 | ✓ | | 1500 | 0 | OPEN PORT COLLAR TAKE INJECTION RATE / ESTABLISH CIRCULATION |
| | 1125 | | 37 | | | | | MIX 60 SKS CMT AT THE WELL |
| | 11 | | | | | | | DISPLACE WITH 11.0 BBLS WATER CLOSE PORT COLLAR / PRESSURE TEST RUN 2 JTS / TBG |
| | 1155 | | 20 | | | | | REVERSE OUT |
| | 1330 | | | | | | | FINISH RUNNING TBG TO BOTTOM LOOK UP TO 2 3/8 TBG |
| | 1355 | | 6.0 | | | | | PUMP 6 BBLS ACID + 17 BBLS FRESH WATER TO PICK UP TBG LOOK UP TO ANNULUS |
| | 1400 | | 25 | | | | | REVERSE ACID BACK OUT TBG JOB COMPLETE |

THANK YOU FOR CALLING HALLIBURTON
WOODY + STEPHANIE

RECEIVED
KANSAS OILFIELD
MPT OCT -97 A 11:12

0.7 x 2.1