



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Betty Rivera

Cabinet Secretary

Saga Petroleum  
415 W. Wall, Suite 1900  
Midland, Texas 79701

Attn: Ms. Bonnie Husband

December 17, 2002

Lori Wrotenbery

Director

Oil Conservation Division

**RE: Injection Pressure Increase  
Central Corbin Queen Unit Well No. 203  
Lea County, New Mexico**

Dear Ms. Husband:

Reference is made to your request to the New Mexico Oil Conservation Division (Division) received December 5, 2002, to increase the surface injection pressure on the subject well. This request is based on a step rate test conducted November 26, 2002. Results of the test have been reviewed and we feel an increase in injection pressure on this well is justified at this time.

You are hereby authorized to inject water at pressures up to the following maximum surface tubing pressure.

| Well and Location                                                                            | Maximum Surface Injection Pressure |
|----------------------------------------------------------------------------------------------|------------------------------------|
| Central Corbin Queen Unit No. 203 API:30-025-29364                                           | 2400 PSIG                          |
| This well is located in Section 4, Township 18 South, Range 33 East, Lea County, New Mexico. |                                    |

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely,

*Lori Wrotenbery* (wvj)

Lori Wrotenbery

Director

LW/wvj

cc: Oil Conservation Division - Hobbs

File: 2002 PSI-X;

Case File 10063

234328000

1P1

NA



SAGA PETROLEUM

WVJ

December 3, 2002

Mr. Will Jones  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, NM 87505

DEC - 5 2002

Re: CCQU Well #203  
660' FSL & 660' FWL  
Sec. 4 (M), T18S, R33E  
Lea County, NM  
API No. 30-025-29364

(30-025-29364)

AE#3

Gentlemen:

Please find enclosed statistical data – step rate tests for the referenced water injection well. Saga respectfully requests approval to increase the injection pressure to 2400 psi. The Central Corbin Queen Unit was formed under Order R9336, dated 10-19-90. Should you require any further information, please contact the undersigned or Joe Clement at 915/684-4293.

Very truly yours,

SAGA PETROLEUM LLC

Bonnie Husband  
Production Analyst

Enclosures



COMPANY: SAGA PETROLEUM CORP.  
LEASE: CENTRAL CORBIN QUEEN # 203  
FIELD (FORMATION): ()  
COUNTY:  
STATE: NM

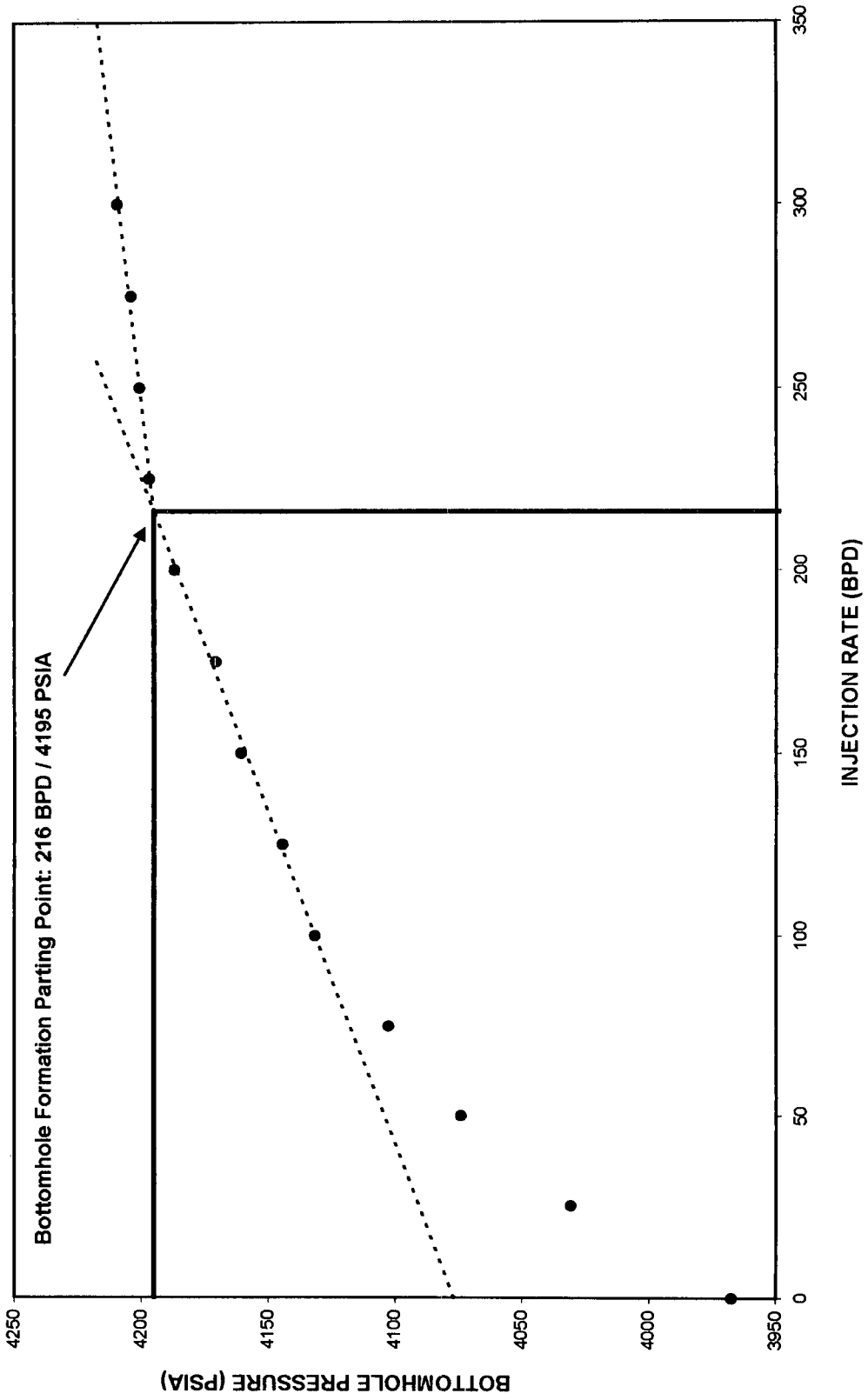
TEST DATES: 11/26/02 - 11/26/02  
RUN DEPTH: 4232  
INSTRUMENT: A-39

| REAL TIME            | DELTA<br>TIME,<br>HOURS | BOTTOMHOLE<br>PRESSURE,<br>PSIA | WELLHEAD<br>PRESSURE,<br>PSIG | INJECTION<br>RATE, BPD | JOB NUMBER: 56430 |
|----------------------|-------------------------|---------------------------------|-------------------------------|------------------------|-------------------|
| 11/26/02 10:15:40 AM | 1.3944                  | 3967.41                         | 1958.00                       | 0.00                   |                   |
| 11/26/02 10:47:00 AM | 1.9167                  | 4030.81                         | 2034.00                       | 25.00                  |                   |
| 11/26/02 11:18:10 AM | 2.4361                  | 4074.04                         | 2080.00                       | 50.00                  |                   |
| 11/26/02 11:47:10 AM | 2.9194                  | 4102.60                         | 2109.00                       | 75.00                  |                   |
| 11/26/02 12:16:40 PM | 3.4111                  | 4131.56                         | 2140.00                       | 100.00                 |                   |
| 11/26/02 12:48:10 PM | 3.9361                  | 4144.45                         | 2196.00                       | 125.00                 |                   |
| 11/26/02 01:16:40 PM | 4.4111                  | 4160.79                         | 2246.00                       | 150.00                 |                   |
| 11/26/02 01:46:10 PM | 4.9028                  | 4170.65                         | 2315.00                       | 175.00                 |                   |
| 11/26/02 02:17:30 PM | 5.4250                  | 4186.91                         | 2389.00                       | 200.00                 |                   |
| 11/26/02 02:48:00 PM | 5.9333                  | 4196.75                         | 2443.00                       | 225.00                 |                   |
| 11/26/02 03:16:00 PM | 6.4000                  | 4200.60                         | 2447.00                       | 250.00                 |                   |
| 11/26/02 03:48:40 PM | 6.9444                  | 4203.94                         | 2450.00                       | 275.00                 |                   |
| 11/26/02 04:18:40 PM | 7.4444                  | 4209.26                         | 2461.00                       | 300.00                 |                   |



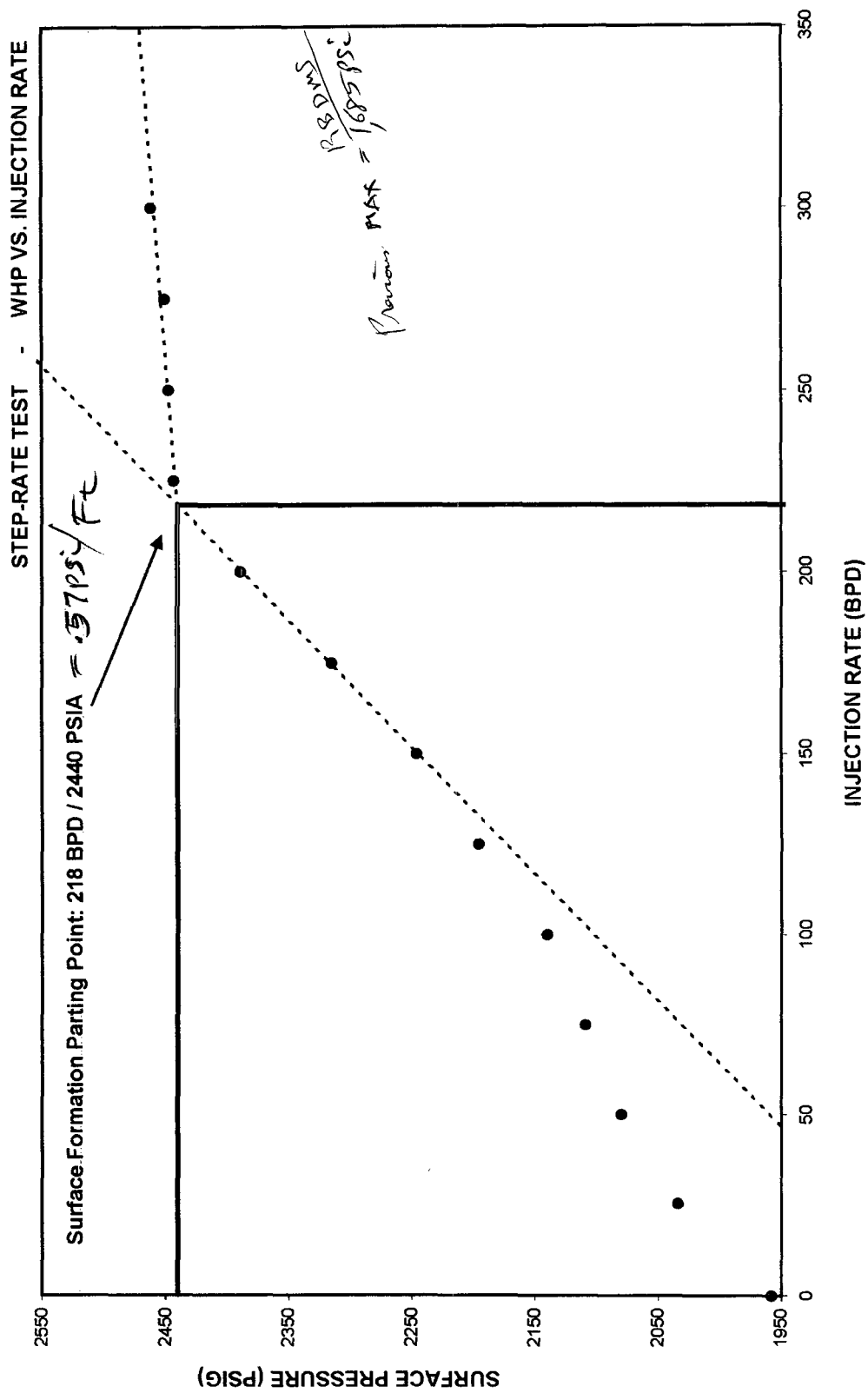
COMPANY: SAGA PETROLEUM CORP. FIELD: JOB # 56430  
LEASE: CENTRAL CORBIN QUEEN COUNTY: TEST DATE: 11/26/02  
WELL NUMBER: 203 STATE: NM

STEP-RATE TEST - BHP VS. INJECTION RATE



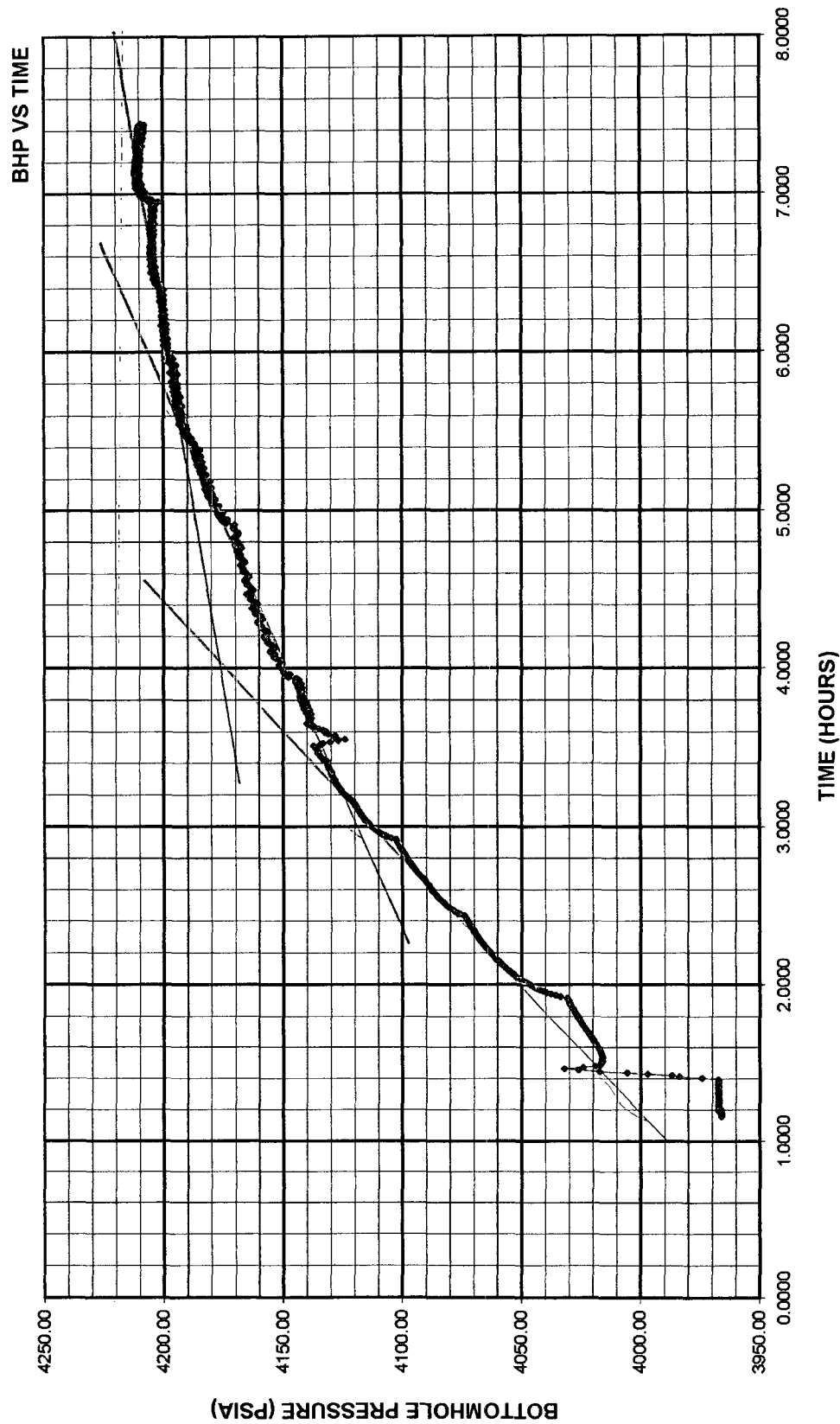


COMPANY: SAGA PETROLEUM CORP. FIELD: JOB # 56430  
LEASE: CENTRAL CORBIN QUEEN COUNTY: TEST DATE: 11/26/02  
WELL NUMBER: 203 STATE: NM



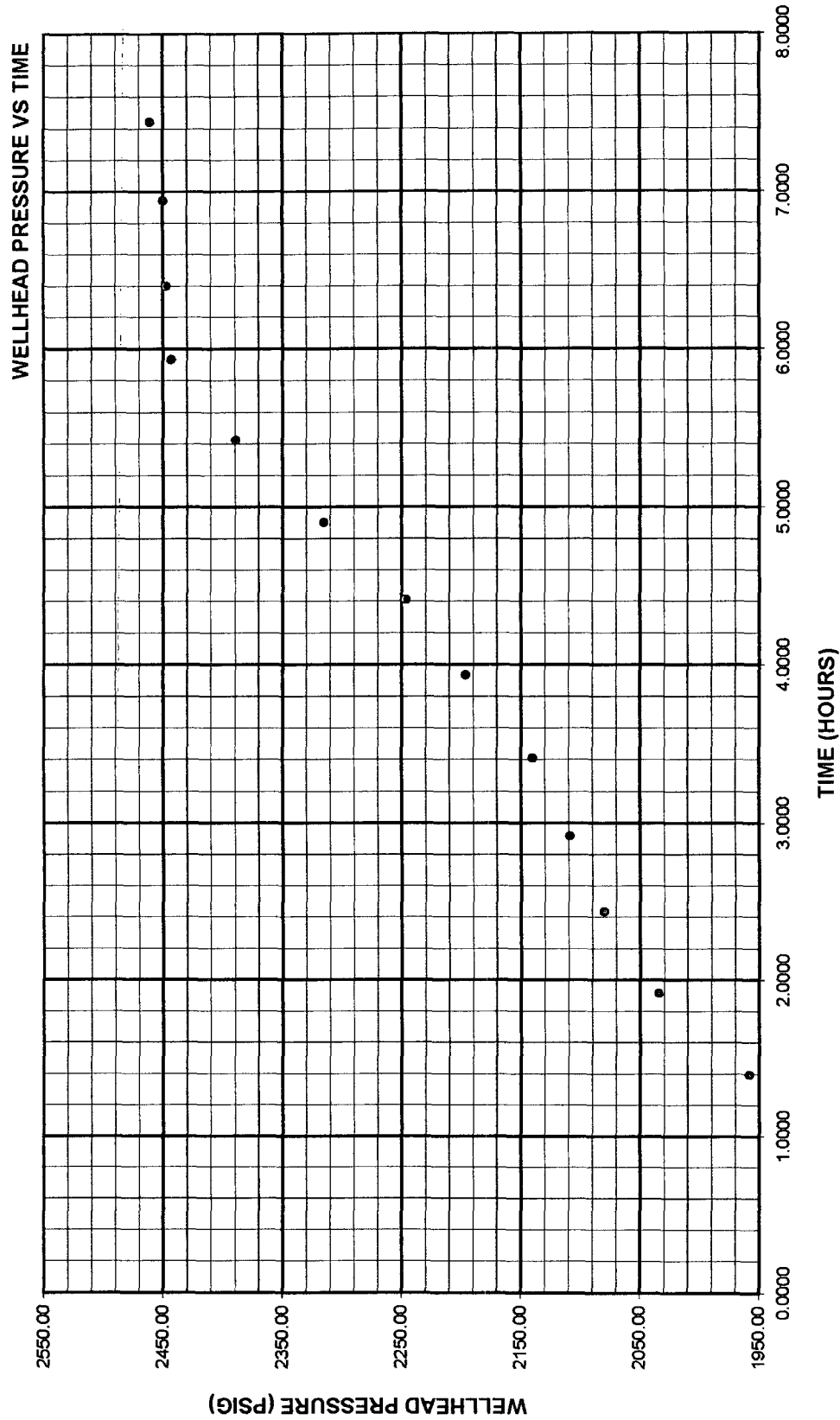


COMPANY: SAGA PETROLEUM CORP. FIELD: JOB #: 56430  
LEASE: CENTRAL CORBIN QUEEN COUNTY: TEST DATE: 11/26/02  
WELL NUMBER: 203 STATE: NM





COMPANY: SAGA PETROLEUM CORP. FIELD: JOB # 56430  
LEASE: CENTRAL CORBIN QUEEN COUNTY: TEST DATE: 11/26/02  
WELL NUMBER: 203 STATE: NM

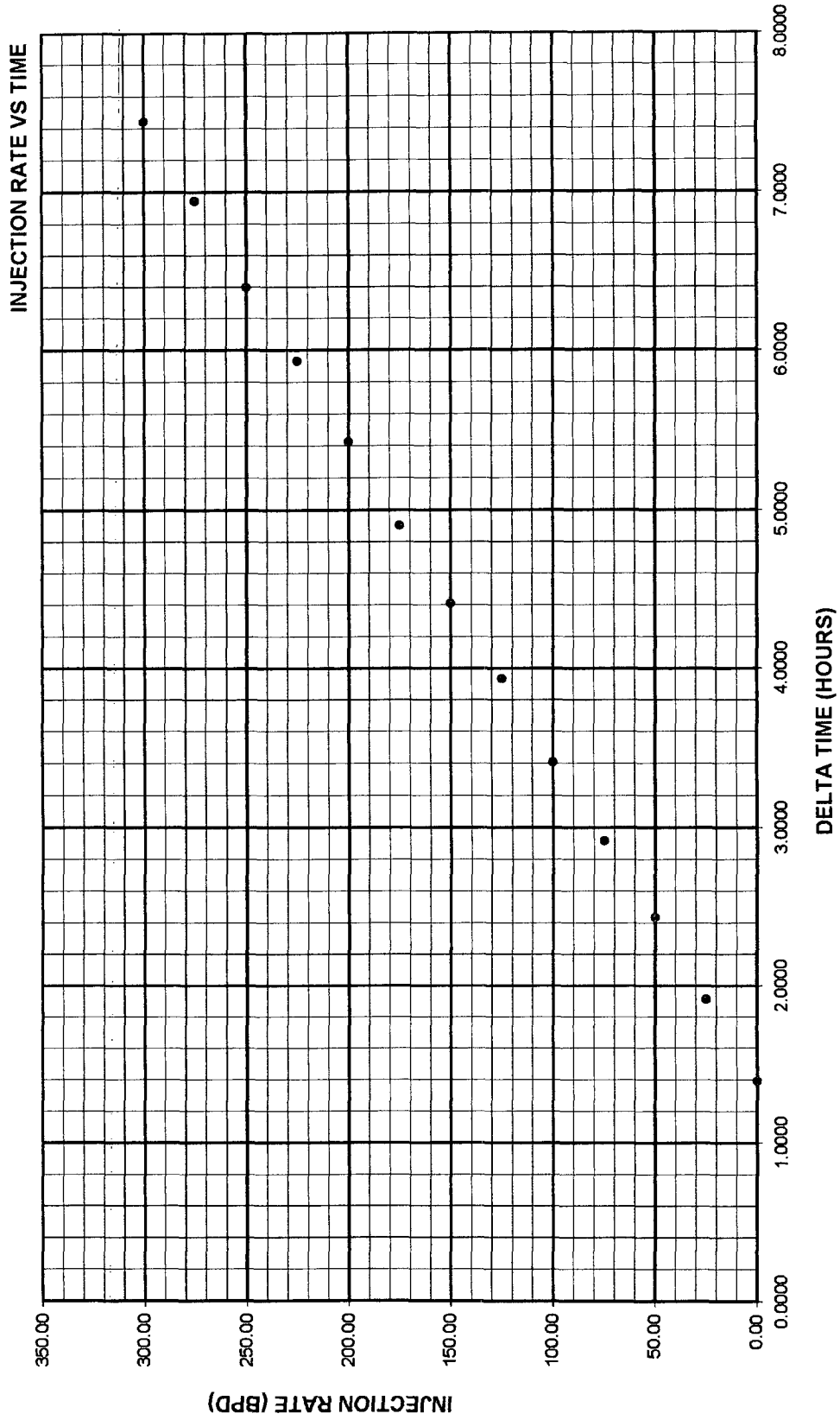




COMPANY: SAGA PETROLEUM CORP.  
LEASE: CENTRAL CORBIN QUEEN  
WELL NUMBER: 203

FIELD:  
COUNTY:  
STATE: NM

JOB # 56430  
TEST DATE: 11/26/02 - 11/26/02





COMPANY: SAGA PETROLEUM CORP.  
 LEASE: CENTRAL CORBIN QUEEN # 203  
 FIELD (FORMATION): ()  
 COUNTY:  
 STATE: NM

TEST DATES: 11/26/02 - 11/26/02  
 RUN DEPTH: 4232  
 INSTRUMENT: A-39

| REAL TIME | DELTA<br>TIME,<br>HOURS | BOTTOMHOLE<br>PRESSURE,<br>PSIA | REMARKS - JOB NUMBER: 56430 |
|-----------|-------------------------|---------------------------------|-----------------------------|
|-----------|-------------------------|---------------------------------|-----------------------------|

|                      |        |         |                             |
|----------------------|--------|---------|-----------------------------|
| 11/26/02 07:40:00 AM |        |         | ON LOCATION                 |
| 11/26/02 08:52:00 AM |        |         | START GAUGE #A-39           |
| 11/26/02 09:28:00 AM |        |         | IN LUBRICATOR W/ GAUGES     |
| 11/26/02 10:01:20 AM |        |         | ON BOTTOM W/ GAUGES @ 4232' |
| 11/26/02 10:01:20 AM | 1.1556 | 3965.95 |                             |
| 11/26/02 10:01:50 AM | 1.1639 | 3965.83 |                             |
| 11/26/02 10:02:20 AM | 1.1722 | 3966.05 |                             |
| 11/26/02 10:02:50 AM | 1.1806 | 3965.82 |                             |
| 11/26/02 10:03:20 AM | 1.1889 | 3967.13 |                             |
| 11/26/02 10:03:50 AM | 1.1972 | 3966.07 |                             |
| 11/26/02 10:04:20 AM | 1.2056 | 3966.77 |                             |
| 11/26/02 10:04:50 AM | 1.2139 | 3967.12 |                             |
| 11/26/02 10:05:20 AM | 1.2222 | 3967.04 |                             |
| 11/26/02 10:05:50 AM | 1.2306 | 3967.25 |                             |
| 11/26/02 10:06:20 AM | 1.2389 | 3966.99 |                             |
| 11/26/02 10:06:50 AM | 1.2472 | 3967.15 |                             |
| 11/26/02 10:07:20 AM | 1.2556 | 3967.35 |                             |
| 11/26/02 10:07:50 AM | 1.2639 | 3967.09 |                             |
| 11/26/02 10:08:20 AM | 1.2722 | 3967.25 |                             |
| 11/26/02 10:08:50 AM | 1.2806 | 3967.34 |                             |
| 11/26/02 10:09:20 AM | 1.2889 | 3967.50 |                             |
| 11/26/02 10:09:50 AM | 1.2972 | 3967.09 |                             |
| 11/26/02 10:10:20 AM | 1.3056 | 3967.62 |                             |
| 11/26/02 10:10:50 AM | 1.3139 | 3967.40 |                             |
| 11/26/02 10:11:20 AM | 1.3222 | 3967.29 |                             |
| 11/26/02 10:11:50 AM | 1.3306 | 3967.43 |                             |
| 11/26/02 10:12:20 AM | 1.3389 | 3967.48 |                             |
| 11/26/02 10:12:50 AM | 1.3472 | 3967.13 |                             |
| 11/26/02 10:13:20 AM | 1.3556 | 3967.45 |                             |
| 11/26/02 10:13:50 AM | 1.3639 | 3967.48 |                             |
| 11/26/02 10:14:20 AM | 1.3722 | 3967.21 |                             |
| 11/26/02 10:14:50 AM | 1.3806 | 3967.47 |                             |

| REAL TIME | DELTA<br>TIME,<br>HOURS | BOTTOMHOLE<br>PRESSURE,<br>PSIA | REMARKS - JOB NUMBER: 56430 |
|-----------|-------------------------|---------------------------------|-----------------------------|
|-----------|-------------------------|---------------------------------|-----------------------------|

|                      |        |         |                         |
|----------------------|--------|---------|-------------------------|
| 11/26/02 10:15:20 AM | 1.3889 | 3967.23 |                         |
| 11/26/02 10:15:40 AM | 1.3944 | 3967.41 |                         |
| 11/26/02 10:15:41 AM |        |         | START 1ST RATE @ 25 BPD |
| 11/26/02 10:16:10 AM | 1.4028 | 3974.25 |                         |
| 11/26/02 10:16:40 AM | 1.4111 | 3983.88 |                         |
| 11/26/02 10:17:10 AM | 1.4194 | 3986.94 |                         |
| 11/26/02 10:17:40 AM | 1.4278 | 3997.13 |                         |
| 11/26/02 10:18:10 AM | 1.4361 | 4005.78 |                         |
| 11/26/02 10:18:40 AM | 1.4444 | 4017.32 |                         |
| 11/26/02 10:19:10 AM | 1.4528 | 4026.12 |                         |
| 11/26/02 10:19:40 AM | 1.4611 | 4032.07 |                         |
| 11/26/02 10:20:10 AM | 1.4694 | 4024.10 |                         |
| 11/26/02 10:20:40 AM | 1.4778 | 4019.12 |                         |
| 11/26/02 10:21:10 AM | 1.4861 | 4017.00 |                         |
| 11/26/02 10:21:40 AM | 1.4944 | 4016.74 |                         |
| 11/26/02 10:22:10 AM | 1.5028 | 4016.41 |                         |
| 11/26/02 10:22:40 AM | 1.5111 | 4016.03 |                         |
| 11/26/02 10:23:10 AM | 1.5194 | 4016.19 |                         |
| 11/26/02 10:23:40 AM | 1.5278 | 4016.00 |                         |
| 11/26/02 10:24:10 AM | 1.5361 | 4016.03 |                         |
| 11/26/02 10:24:40 AM | 1.5444 | 4016.16 |                         |
| 11/26/02 10:25:10 AM | 1.5528 | 4016.32 |                         |
| 11/26/02 10:25:40 AM | 1.5611 | 4016.61 |                         |
| 11/26/02 10:26:10 AM | 1.5694 | 4016.82 |                         |
| 11/26/02 10:26:40 AM | 1.5778 | 4017.19 |                         |
| 11/26/02 10:27:10 AM | 1.5861 | 4017.37 |                         |
| 11/26/02 10:27:40 AM | 1.5944 | 4017.63 |                         |
| 11/26/02 10:28:10 AM | 1.6028 | 4017.96 |                         |
| 11/26/02 10:28:40 AM | 1.6111 | 4018.60 |                         |
| 11/26/02 10:29:10 AM | 1.6194 | 4018.71 |                         |
| 11/26/02 10:29:40 AM | 1.6278 | 4019.23 |                         |
| 11/26/02 10:30:00 AM |        |         | CONTINUE RATE           |
| 11/26/02 10:30:10 AM | 1.6361 | 4019.55 |                         |
| 11/26/02 10:30:40 AM | 1.6444 | 4019.64 |                         |
| 11/26/02 10:31:10 AM | 1.6528 | 4020.26 |                         |
| 11/26/02 10:31:40 AM | 1.6611 | 4020.47 |                         |
| 11/26/02 10:32:10 AM | 1.6694 | 4020.89 |                         |
| 11/26/02 10:32:40 AM | 1.6778 | 4021.39 |                         |
| 11/26/02 10:33:10 AM | 1.6861 | 4021.72 |                         |
| 11/26/02 10:33:40 AM | 1.6944 | 4021.82 |                         |
| 11/26/02 10:34:10 AM | 1.7028 | 4022.41 |                         |
| 11/26/02 10:34:40 AM | 1.7111 | 4022.97 |                         |
| 11/26/02 10:35:10 AM | 1.7194 | 4023.06 |                         |
| 11/26/02 10:35:40 AM | 1.7278 | 4023.48 |                         |
| 11/26/02 10:36:10 AM | 1.7361 | 4023.80 |                         |
| 11/26/02 10:36:40 AM | 1.7444 | 4024.32 |                         |
| 11/26/02 10:37:10 AM | 1.7528 | 4024.56 |                         |
| 11/26/02 10:37:40 AM | 1.7611 | 4024.97 |                         |

| REAL TIME            | DELTA<br>TIME,<br>HOURS | BOTTOMHOLE<br>PRESSURE,<br>PSIA | REMARKS - JOB NUMBER: 56430 |
|----------------------|-------------------------|---------------------------------|-----------------------------|
| 11/26/02 10:38:10 AM | 1.7694                  | 4025.25                         |                             |
| 11/26/02 10:38:40 AM | 1.7778                  | 4025.56                         |                             |
| 11/26/02 10:39:10 AM | 1.7861                  | 4025.84                         |                             |
| 11/26/02 10:39:40 AM | 1.7944                  | 4026.41                         |                             |
| 11/26/02 10:40:10 AM | 1.8028                  | 4026.64                         |                             |
| 11/26/02 10:40:40 AM | 1.8111                  | 4026.87                         |                             |
| 11/26/02 10:41:10 AM | 1.8194                  | 4027.35                         |                             |
| 11/26/02 10:41:40 AM | 1.8278                  | 4027.72                         |                             |
| 11/26/02 10:42:10 AM | 1.8361                  | 4027.87                         |                             |
| 11/26/02 10:42:40 AM | 1.8444                  | 4028.20                         |                             |
| 11/26/02 10:43:10 AM | 1.8528                  | 4028.55                         |                             |
| 11/26/02 10:43:40 AM | 1.8611                  | 4028.88                         |                             |
| 11/26/02 10:44:10 AM | 1.8694                  | 4029.32                         |                             |
| 11/26/02 10:44:40 AM | 1.8778                  | 4029.48                         |                             |
| 11/26/02 10:45:10 AM | 1.8861                  | 4029.97                         |                             |
| 11/26/02 10:45:40 AM | 1.8944                  | 4030.14                         |                             |
| 11/26/02 10:46:10 AM | 1.9028                  | 4030.27                         |                             |
| 11/26/02 10:46:40 AM | 1.9111                  | 4030.73                         |                             |
| 11/26/02 10:47:00 AM | 1.9167                  | 4030.81                         |                             |
| 11/26/02 10:47:01 AM |                         |                                 | START 2ND RATE @ 50 BPD     |
| 11/26/02 10:47:30 AM | 1.9250                  | 4033.79                         |                             |
| 11/26/02 10:48:00 AM | 1.9333                  | 4035.74                         |                             |
| 11/26/02 10:48:30 AM | 1.9417                  | 4037.71                         |                             |
| 11/26/02 10:49:00 AM | 1.9500                  | 4039.40                         |                             |
| 11/26/02 10:49:30 AM | 1.9583                  | 4040.84                         |                             |
| 11/26/02 10:50:00 AM | 1.9667                  | 4042.24                         |                             |
| 11/26/02 10:50:30 AM | 1.9750                  | 4043.40                         |                             |
| 11/26/02 10:51:00 AM | 1.9833                  | 4044.51                         |                             |
| 11/26/02 10:51:30 AM | 1.9917                  | 4045.31                         |                             |
| 11/26/02 10:52:00 AM | 2.0000                  | 4046.38                         |                             |
| 11/26/02 10:52:30 AM | 2.0083                  | 4047.48                         |                             |
| 11/26/02 10:53:00 AM | 2.0167                  | 4048.33                         |                             |
| 11/26/02 10:53:30 AM | 2.0250                  | 4049.37                         |                             |
| 11/26/02 10:54:00 AM | 2.0333                  | 4050.34                         |                             |
| 11/26/02 10:54:30 AM | 2.0417                  | 4051.06                         |                             |
| 11/26/02 10:55:00 AM | 2.0500                  | 4052.03                         |                             |
| 11/26/02 10:55:30 AM | 2.0583                  | 4052.82                         |                             |
| 11/26/02 10:56:00 AM | 2.0667                  | 4053.40                         |                             |
| 11/26/02 10:56:30 AM | 2.0750                  | 4054.23                         |                             |
| 11/26/02 10:57:00 AM | 2.0833                  | 4054.71                         |                             |
| 11/26/02 10:57:30 AM | 2.0917                  | 4055.56                         |                             |
| 11/26/02 10:58:00 AM | 2.1000                  | 4056.26                         |                             |
| 11/26/02 10:58:30 AM | 2.1083                  | 4056.82                         |                             |
| 11/26/02 10:59:00 AM | 2.1167                  | 4057.27                         |                             |
| 11/26/02 10:59:30 AM | 2.1250                  | 4058.07                         |                             |
| 11/26/02 11:00:00 AM | 2.1333                  | 4058.57                         |                             |
| 11/26/02 11:00:00 AM |                         |                                 | CONTINUE RATE               |
| 11/26/02 11:00:30 AM | 2.1417                  | 4059.20                         |                             |

| REAL TIME            | DELTA<br>TIME,<br>HOURS | BOTTOMHOLE<br>PRESSURE,<br>PSIA | REMARKS - JOB NUMBER: 56430 |
|----------------------|-------------------------|---------------------------------|-----------------------------|
| 11/26/02 11:01:00 AM | 2.1500                  | 4059.51                         |                             |
| 11/26/02 11:01:30 AM | 2.1583                  | 4060.44                         |                             |
| 11/26/02 11:02:00 AM | 2.1667                  | 4060.89                         |                             |
| 11/26/02 11:02:30 AM | 2.1750                  | 4061.16                         |                             |
| 11/26/02 11:03:00 AM | 2.1833                  | 4061.79                         |                             |
| 11/26/02 11:03:30 AM | 2.1917                  | 4062.24                         |                             |
| 11/26/02 11:04:00 AM | 2.2000                  | 4062.84                         |                             |
| 11/26/02 11:04:30 AM | 2.2083                  | 4063.22                         |                             |
| 11/26/02 11:05:00 AM | 2.2167                  | 4063.82                         |                             |
| 11/26/02 11:05:30 AM | 2.2250                  | 4064.26                         |                             |
| 11/26/02 11:06:00 AM | 2.2333                  | 4064.84                         |                             |
| 11/26/02 11:06:30 AM | 2.2417                  | 4065.28                         |                             |
| 11/26/02 11:07:00 AM | 2.2500                  | 4065.87                         |                             |
| 11/26/02 11:07:30 AM | 2.2583                  | 4066.00                         |                             |
| 11/26/02 11:08:00 AM | 2.2667                  | 4066.69                         |                             |
| 11/26/02 11:08:30 AM | 2.2750                  | 4066.93                         |                             |
| 11/26/02 11:09:00 AM | 2.2833                  | 4067.53                         |                             |
| 11/26/02 11:09:30 AM | 2.2917                  | 4067.74                         |                             |
| 11/26/02 11:10:00 AM | 2.3000                  | 4068.16                         |                             |
| 11/26/02 11:10:30 AM | 2.3083                  | 4068.56                         |                             |
| 11/26/02 11:11:00 AM | 2.3167                  | 4068.99                         |                             |
| 11/26/02 11:11:30 AM | 2.3250                  | 4069.45                         |                             |
| 11/26/02 11:12:00 AM | 2.3333                  | 4069.72                         |                             |
| 11/26/02 11:12:30 AM | 2.3417                  | 4070.04                         |                             |
| 11/26/02 11:13:00 AM | 2.3500                  | 4070.43                         |                             |
| 11/26/02 11:13:30 AM | 2.3583                  | 4070.87                         |                             |
| 11/26/02 11:14:00 AM | 2.3667                  | 4071.08                         |                             |
| 11/26/02 11:14:30 AM | 2.3750                  | 4071.49                         |                             |
| 11/26/02 11:15:00 AM | 2.3833                  | 4071.87                         |                             |
| 11/26/02 11:15:30 AM | 2.3917                  | 4072.25                         |                             |
| 11/26/02 11:16:00 AM | 2.4000                  | 4072.52                         |                             |
| 11/26/02 11:16:30 AM | 2.4083                  | 4073.06                         |                             |
| 11/26/02 11:17:00 AM | 2.4167                  | 4073.19                         |                             |
| 11/26/02 11:17:30 AM | 2.4250                  | 4073.60                         |                             |
| 11/26/02 11:18:00 AM | 2.4333                  | 4073.89                         |                             |
| 11/26/02 11:18:10 AM | 2.4361                  | 4074.04                         |                             |
| 11/26/02 11:18:11 AM |                         |                                 | START 3RD RATE @ 75 BPD     |
| 11/26/02 11:18:40 AM | 2.4444                  | 4075.76                         |                             |
| 11/26/02 11:19:10 AM | 2.4528                  | 4076.91                         |                             |
| 11/26/02 11:19:40 AM | 2.4611                  | 4078.11                         |                             |
| 11/26/02 11:20:10 AM | 2.4694                  | 4078.61                         |                             |
| 11/26/02 11:20:40 AM | 2.4778                  | 4079.50                         |                             |
| 11/26/02 11:21:10 AM | 2.4861                  | 4080.22                         |                             |
| 11/26/02 11:21:40 AM | 2.4944                  | 4081.09                         |                             |
| 11/26/02 11:22:10 AM | 2.5028                  | 4081.67                         |                             |
| 11/26/02 11:22:40 AM | 2.5111                  | 4082.34                         |                             |
| 11/26/02 11:23:10 AM | 2.5194                  | 4082.55                         |                             |
| 11/26/02 11:23:40 AM | 2.5278                  | 4083.26                         |                             |

| REAL TIME | DELTA<br>TIME,<br>HOURS | BOTTOMHOLE<br>PRESSURE,<br>PSIA | REMARKS - JOB NUMBER: 56430 |
|-----------|-------------------------|---------------------------------|-----------------------------|
|-----------|-------------------------|---------------------------------|-----------------------------|

|                      |        |         |
|----------------------|--------|---------|
| 11/26/02 11:24:10 AM | 2.5361 | 4083.99 |
| 11/26/02 11:24:40 AM | 2.5444 | 4084.72 |
| 11/26/02 11:25:10 AM | 2.5528 | 4085.09 |
| 11/26/02 11:25:40 AM | 2.5611 | 4085.54 |
| 11/26/02 11:26:10 AM | 2.5694 | 4085.82 |
| 11/26/02 11:26:40 AM | 2.5778 | 4086.44 |
| 11/26/02 11:27:10 AM | 2.5861 | 4086.90 |
| 11/26/02 11:27:40 AM | 2.5944 | 4087.51 |
| 11/26/02 11:28:10 AM | 2.6028 | 4087.65 |
| 11/26/02 11:28:40 AM | 2.6111 | 4088.29 |
| 11/26/02 11:29:10 AM | 2.6194 | 4088.64 |
| 11/26/02 11:29:40 AM | 2.6278 | 4088.76 |

CONTINUE RATE

|                      |        |         |
|----------------------|--------|---------|
| 11/26/02 11:30:10 AM | 2.6361 | 4089.41 |
| 11/26/02 11:30:40 AM | 2.6444 | 4089.84 |
| 11/26/02 11:31:10 AM | 2.6528 | 4090.29 |
| 11/26/02 11:31:40 AM | 2.6611 | 4090.56 |
| 11/26/02 11:32:10 AM | 2.6694 | 4090.86 |
| 11/26/02 11:32:40 AM | 2.6778 | 4091.61 |
| 11/26/02 11:33:10 AM | 2.6861 | 4092.33 |
| 11/26/02 11:33:40 AM | 2.6944 | 4092.70 |
| 11/26/02 11:34:10 AM | 2.7028 | 4093.33 |
| 11/26/02 11:34:40 AM | 2.7111 | 4093.76 |
| 11/26/02 11:35:10 AM | 2.7194 | 4094.30 |
| 11/26/02 11:35:40 AM | 2.7278 | 4094.57 |
| 11/26/02 11:36:10 AM | 2.7361 | 4095.02 |
| 11/26/02 11:36:40 AM | 2.7444 | 4095.52 |
| 11/26/02 11:37:10 AM | 2.7528 | 4095.89 |
| 11/26/02 11:37:40 AM | 2.7611 | 4096.10 |
| 11/26/02 11:38:10 AM | 2.7694 | 4096.52 |
| 11/26/02 11:38:40 AM | 2.7778 | 4096.99 |
| 11/26/02 11:39:10 AM | 2.7861 | 4097.44 |
| 11/26/02 11:39:40 AM | 2.7944 | 4097.77 |
| 11/26/02 11:40:10 AM | 2.8028 | 4098.00 |
| 11/26/02 11:40:40 AM | 2.8111 | 4098.35 |
| 11/26/02 11:41:10 AM | 2.8194 | 4098.74 |
| 11/26/02 11:41:40 AM | 2.8278 | 4098.97 |
| 11/26/02 11:42:10 AM | 2.8361 | 4099.46 |
| 11/26/02 11:42:40 AM | 2.8444 | 4099.85 |
| 11/26/02 11:43:10 AM | 2.8528 | 4100.07 |
| 11/26/02 11:43:40 AM | 2.8611 | 4100.51 |
| 11/26/02 11:44:10 AM | 2.8694 | 4100.82 |
| 11/26/02 11:44:40 AM | 2.8778 | 4100.93 |
| 11/26/02 11:45:10 AM | 2.8861 | 4101.37 |
| 11/26/02 11:45:40 AM | 2.8944 | 4101.60 |
| 11/26/02 11:46:10 AM | 2.9028 | 4102.01 |
| 11/26/02 11:46:40 AM | 2.9111 | 4102.27 |
| 11/26/02 11:47:10 AM | 2.9194 | 4102.60 |

| REAL TIME | DELTA<br>TIME,<br>HOURS | BOTTOMHOLE<br>PRESSURE,<br>PSIA | REMARKS - JOB NUMBER: 56430 |
|-----------|-------------------------|---------------------------------|-----------------------------|
|-----------|-------------------------|---------------------------------|-----------------------------|

11/26/02 11:47:11 AM START 4TH RATE @ 100 BPD

|                      |        |         |
|----------------------|--------|---------|
| 11/26/02 11:47:40 AM | 2.9278 | 4104.61 |
| 11/26/02 11:48:10 AM | 2.9361 | 4106.16 |
| 11/26/02 11:48:40 AM | 2.9444 | 4107.24 |
| 11/26/02 11:49:10 AM | 2.9528 | 4108.55 |
| 11/26/02 11:49:40 AM | 2.9611 | 4109.34 |
| 11/26/02 11:50:10 AM | 2.9694 | 4110.17 |
| 11/26/02 11:50:40 AM | 2.9778 | 4111.07 |
| 11/26/02 11:51:10 AM | 2.9861 | 4111.81 |
| 11/26/02 11:51:40 AM | 2.9944 | 4112.48 |
| 11/26/02 11:52:10 AM | 3.0028 | 4113.14 |
| 11/26/02 11:52:40 AM | 3.0111 | 4113.68 |
| 11/26/02 11:53:10 AM | 3.0194 | 4114.08 |
| 11/26/02 11:53:40 AM | 3.0278 | 4114.66 |
| 11/26/02 11:54:10 AM | 3.0361 | 4115.38 |
| 11/26/02 11:54:40 AM | 3.0444 | 4115.86 |
| 11/26/02 11:55:10 AM | 3.0528 | 4116.28 |
| 11/26/02 11:55:40 AM | 3.0611 | 4116.58 |
| 11/26/02 11:56:10 AM | 3.0694 | 4117.09 |
| 11/26/02 11:56:40 AM | 3.0778 | 4117.30 |
| 11/26/02 11:57:10 AM | 3.0861 | 4117.64 |
| 11/26/02 11:57:40 AM | 3.0944 | 4118.07 |
| 11/26/02 11:58:10 AM | 3.1028 | 4118.33 |
| 11/26/02 11:58:40 AM | 3.1111 | 4118.93 |
| 11/26/02 11:59:10 AM | 3.1194 | 4119.06 |
| 11/26/02 11:59:40 AM | 3.1278 | 4119.64 |

11/26/02 12:00:00 PM CONTINUE RATE

|                      |        |         |
|----------------------|--------|---------|
| 11/26/02 12:00:10 PM | 3.1361 | 4119.60 |
| 11/26/02 12:00:40 PM | 3.1444 | 4120.06 |
| 11/26/02 12:01:10 PM | 3.1528 | 4120.58 |
| 11/26/02 12:01:40 PM | 3.1611 | 4120.77 |
| 11/26/02 12:02:10 PM | 3.1694 | 4121.55 |
| 11/26/02 12:02:40 PM | 3.1778 | 4122.27 |
| 11/26/02 12:03:10 PM | 3.1861 | 4122.94 |
| 11/26/02 12:03:40 PM | 3.1944 | 4123.39 |
| 11/26/02 12:04:10 PM | 3.2028 | 4124.09 |
| 11/26/02 12:04:40 PM | 3.2111 | 4124.68 |
| 11/26/02 12:05:10 PM | 3.2194 | 4125.33 |
| 11/26/02 12:05:40 PM | 3.2278 | 4125.66 |
| 11/26/02 12:06:10 PM | 3.2361 | 4125.99 |
| 11/26/02 12:06:40 PM | 3.2444 | 4126.42 |
| 11/26/02 12:07:10 PM | 3.2528 | 4126.76 |
| 11/26/02 12:07:40 PM | 3.2611 | 4127.08 |
| 11/26/02 12:08:10 PM | 3.2694 | 4127.28 |
| 11/26/02 12:08:40 PM | 3.2778 | 4127.92 |
| 11/26/02 12:09:10 PM | 3.2861 | 4128.22 |
| 11/26/02 12:09:40 PM | 3.2944 | 4128.17 |
| 11/26/02 12:10:10 PM | 3.3028 | 4128.67 |

| REAL TIME            | DELTA<br>TIME,<br>HOURS | BOTTOMHOLE<br>PRESSURE,<br>PSIA | REMARKS - JOB NUMBER: 56430 |
|----------------------|-------------------------|---------------------------------|-----------------------------|
| 11/26/02 12:10:40 PM | 3.3111                  | 4128.99                         |                             |
| 11/26/02 12:11:10 PM | 3.3194                  | 4129.32                         |                             |
| 11/26/02 12:11:40 PM | 3.3278                  | 4129.58                         |                             |
| 11/26/02 12:12:10 PM | 3.3361                  | 4129.81                         |                             |
| 11/26/02 12:12:40 PM | 3.3444                  | 4129.57                         |                             |
| 11/26/02 12:13:10 PM | 3.3528                  | 4130.05                         |                             |
| 11/26/02 12:13:40 PM | 3.3611                  | 4130.36                         |                             |
| 11/26/02 12:14:10 PM | 3.3694                  | 4130.76                         |                             |
| 11/26/02 12:14:40 PM | 3.3778                  | 4130.85                         |                             |
| 11/26/02 12:15:10 PM | 3.3861                  | 4131.04                         |                             |
| 11/26/02 12:15:40 PM | 3.3944                  | 4131.30                         |                             |
| 11/26/02 12:16:10 PM | 3.4028                  | 4131.46                         |                             |
| 11/26/02 12:16:40 PM | 3.4111                  | 4131.56                         |                             |
| 11/26/02 12:16:41 PM |                         |                                 | START 5TH RATE @ 125 BPD    |
| 11/26/02 12:17:10 PM | 3.4194                  | 4132.75                         |                             |
| 11/26/02 12:17:40 PM | 3.4278                  | 4133.41                         |                             |
| 11/26/02 12:18:10 PM | 3.4361                  | 4133.86                         |                             |
| 11/26/02 12:18:40 PM | 3.4444                  | 4134.46                         |                             |
| 11/26/02 12:19:10 PM | 3.4528                  | 4134.86                         |                             |
| 11/26/02 12:19:40 PM | 3.4611                  | 4135.32                         |                             |
| 11/26/02 12:20:10 PM | 3.4694                  | 4135.55                         |                             |
| 11/26/02 12:20:40 PM | 3.4778                  | 4135.26                         |                             |
| 11/26/02 12:21:10 PM | 3.4861                  | 4135.81                         |                             |
| 11/26/02 12:21:40 PM | 3.4944                  | 4136.37                         |                             |
| 11/26/02 12:22:10 PM | 3.5028                  | 4136.70                         |                             |
| 11/26/02 12:22:40 PM | 3.5111                  | 4137.25                         |                             |
| 11/26/02 12:23:10 PM | 3.5194                  | 4134.46                         |                             |
| 11/26/02 12:23:40 PM | 3.5278                  | 4133.26                         |                             |
| 11/26/02 12:24:10 PM | 3.5361                  | 4130.33                         |                             |
| 11/26/02 12:24:40 PM | 3.5444                  | 4126.96                         |                             |
| 11/26/02 12:25:10 PM | 3.5528                  | 4124.12                         |                             |
| 11/26/02 12:25:40 PM | 3.5611                  | 4127.83                         |                             |
| 11/26/02 12:26:10 PM | 3.5694                  | 4128.73                         |                             |
| 11/26/02 12:26:40 PM | 3.5778                  | 4128.19                         |                             |
| 11/26/02 12:27:10 PM | 3.5861                  | 4131.06                         |                             |
| 11/26/02 12:27:40 PM | 3.5944                  | 4132.52                         |                             |
| 11/26/02 12:28:10 PM | 3.6028                  | 4132.10                         |                             |
| 11/26/02 12:28:40 PM | 3.6111                  | 4133.29                         |                             |
| 11/26/02 12:29:10 PM | 3.6194                  | 4134.97                         |                             |
| 11/26/02 12:29:40 PM | 3.6278                  | 4137.40                         |                             |
| 11/26/02 12:30:00 PM |                         |                                 | CONTINUE RATE               |
| 11/26/02 12:30:10 PM | 3.6361                  | 4137.13                         |                             |
| 11/26/02 12:30:40 PM | 3.6444                  | 4138.88                         |                             |
| 11/26/02 12:31:10 PM | 3.6528                  | 4140.00                         |                             |
| 11/26/02 12:31:40 PM | 3.6611                  | 4138.67                         |                             |
| 11/26/02 12:32:10 PM | 3.6694                  | 4139.22                         |                             |
| 11/26/02 12:32:40 PM | 3.6778                  | 4139.22                         |                             |
| 11/26/02 12:33:10 PM | 3.6861                  | 4138.10                         |                             |

| REAL TIME            | DELTA<br>TIME,<br>HOURS | BOTTOMHOLE<br>PRESSURE,<br>PSIA | REMARKS - JOB NUMBER: 56430 |
|----------------------|-------------------------|---------------------------------|-----------------------------|
| 11/26/02 12:33:40 PM | 3.6944                  | 4139.26                         |                             |
| 11/26/02 12:34:10 PM | 3.7028                  | 4139.05                         |                             |
| 11/26/02 12:34:40 PM | 3.7111                  | 4138.35                         |                             |
| 11/26/02 12:35:10 PM | 3.7194                  | 4140.33                         |                             |
| 11/26/02 12:35:40 PM | 3.7278                  | 4140.16                         |                             |
| 11/26/02 12:36:10 PM | 3.7361                  | 4138.62                         |                             |
| 11/26/02 12:36:40 PM | 3.7444                  | 4141.29                         |                             |
| 11/26/02 12:37:10 PM | 3.7528                  | 4140.88                         |                             |
| 11/26/02 12:37:40 PM | 3.7611                  | 4139.48                         |                             |
| 11/26/02 12:38:10 PM | 3.7694                  | 4141.71                         |                             |
| 11/26/02 12:38:40 PM | 3.7778                  | 4141.59                         |                             |
| 11/26/02 12:39:10 PM | 3.7861                  | 4140.13                         |                             |
| 11/26/02 12:39:40 PM | 3.7944                  | 4142.45                         |                             |
| 11/26/02 12:40:10 PM | 3.8028                  | 4141.87                         |                             |
| 11/26/02 12:40:40 PM | 3.8111                  | 4141.07                         |                             |
| 11/26/02 12:41:10 PM | 3.8194                  | 4142.93                         |                             |
| 11/26/02 12:41:40 PM | 3.8278                  | 4141.96                         |                             |
| 11/26/02 12:42:10 PM | 3.8361                  | 4142.14                         |                             |
| 11/26/02 12:42:40 PM | 3.8444                  | 4142.82                         |                             |
| 11/26/02 12:43:10 PM | 3.8528                  | 4141.81                         |                             |
| 11/26/02 12:43:40 PM | 3.8611                  | 4142.95                         |                             |
| 11/26/02 12:44:10 PM | 3.8694                  | 4142.79                         |                             |
| 11/26/02 12:44:40 PM | 3.8778                  | 4141.83                         |                             |
| 11/26/02 12:45:10 PM | 3.8861                  | 4143.41                         |                             |
| 11/26/02 12:45:40 PM | 3.8944                  | 4143.29                         |                             |
| 11/26/02 12:46:10 PM | 3.9028                  | 4142.25                         |                             |
| 11/26/02 12:46:40 PM | 3.9111                  | 4144.41                         |                             |
| 11/26/02 12:47:10 PM | 3.9194                  | 4144.39                         |                             |
| 11/26/02 12:47:40 PM | 3.9278                  | 4143.12                         |                             |
| 11/26/02 12:48:10 PM | 3.9361                  | 4144.45                         |                             |
| 11/26/02 12:48:11 PM |                         |                                 | START 6TH RATE @ 150 BPD    |
| 11/26/02 12:48:40 PM | 3.9444                  | 4147.55                         |                             |
| 11/26/02 12:49:10 PM | 3.9528                  | 4149.13                         |                             |
| 11/26/02 12:49:40 PM | 3.9611                  | 4147.06                         |                             |
| 11/26/02 12:50:10 PM | 3.9694                  | 4149.34                         |                             |
| 11/26/02 12:50:40 PM | 3.9778                  | 4149.91                         |                             |
| 11/26/02 12:51:10 PM | 3.9861                  | 4149.96                         |                             |
| 11/26/02 12:51:40 PM | 3.9944                  | 4150.14                         |                             |
| 11/26/02 12:52:10 PM | 4.0028                  | 4151.09                         |                             |
| 11/26/02 12:52:40 PM | 4.0111                  | 4151.73                         |                             |
| 11/26/02 12:53:10 PM | 4.0194                  | 4151.72                         |                             |
| 11/26/02 12:53:40 PM | 4.0278                  | 4151.26                         |                             |
| 11/26/02 12:54:10 PM | 4.0361                  | 4150.51                         |                             |
| 11/26/02 12:54:40 PM | 4.0444                  | 4150.97                         |                             |
| 11/26/02 12:55:10 PM | 4.0528                  | 4151.37                         |                             |
| 11/26/02 12:55:40 PM | 4.0611                  | 4152.74                         |                             |
| 11/26/02 12:56:10 PM | 4.0694                  | 4153.86                         |                             |
| 11/26/02 12:56:40 PM | 4.0778                  | 4153.88                         |                             |

| REAL TIME | DELTA<br>TIME,<br>HOURS | BOTTOMHOLE<br>PRESSURE,<br>PSIA | REMARKS - JOB NUMBER: 56430 |
|-----------|-------------------------|---------------------------------|-----------------------------|
|-----------|-------------------------|---------------------------------|-----------------------------|

|                      |        |         |                          |
|----------------------|--------|---------|--------------------------|
| 11/26/02 12:57:10 PM | 4.0861 | 4153.26 |                          |
| 11/26/02 12:57:40 PM | 4.0944 | 4154.72 |                          |
| 11/26/02 12:58:10 PM | 4.1028 | 4155.47 |                          |
| 11/26/02 12:58:40 PM | 4.1111 | 4155.11 |                          |
| 11/26/02 12:59:10 PM | 4.1194 | 4154.22 |                          |
| 11/26/02 12:59:40 PM | 4.1278 | 4153.50 |                          |
| 11/26/02 01:00:00 PM |        |         | CONTINUE RATE            |
| 11/26/02 01:00:10 PM | 4.1361 | 4153.72 |                          |
| 11/26/02 01:00:40 PM | 4.1444 | 4154.22 |                          |
| 11/26/02 01:01:10 PM | 4.1528 | 4155.41 |                          |
| 11/26/02 01:01:40 PM | 4.1611 | 4156.45 |                          |
| 11/26/02 01:02:10 PM | 4.1694 | 4156.49 |                          |
| 11/26/02 01:02:40 PM | 4.1778 | 4156.51 |                          |
| 11/26/02 01:03:10 PM | 4.1861 | 4157.19 |                          |
| 11/26/02 01:03:40 PM | 4.1944 | 4157.94 |                          |
| 11/26/02 01:04:10 PM | 4.2028 | 4157.79 |                          |
| 11/26/02 01:04:40 PM | 4.2111 | 4156.95 |                          |
| 11/26/02 01:05:10 PM | 4.2194 | 4156.28 |                          |
| 11/26/02 01:05:40 PM | 4.2278 | 4156.39 |                          |
| 11/26/02 01:06:10 PM | 4.2361 | 4156.83 |                          |
| 11/26/02 01:06:40 PM | 4.2444 | 4157.83 |                          |
| 11/26/02 01:07:10 PM | 4.2528 | 4159.10 |                          |
| 11/26/02 01:07:40 PM | 4.2611 | 4158.97 |                          |
| 11/26/02 01:08:10 PM | 4.2694 | 4159.00 |                          |
| 11/26/02 01:08:40 PM | 4.2778 | 4159.64 |                          |
| 11/26/02 01:09:10 PM | 4.2861 | 4160.61 |                          |
| 11/26/02 01:09:40 PM | 4.2944 | 4160.35 |                          |
| 11/26/02 01:10:10 PM | 4.3028 | 4159.42 |                          |
| 11/26/02 01:10:40 PM | 4.3111 | 4158.66 |                          |
| 11/26/02 01:11:10 PM | 4.3194 | 4159.17 |                          |
| 11/26/02 01:11:40 PM | 4.3278 | 4159.25 |                          |
| 11/26/02 01:12:10 PM | 4.3361 | 4160.51 |                          |
| 11/26/02 01:12:40 PM | 4.3444 | 4161.55 |                          |
| 11/26/02 01:13:10 PM | 4.3528 | 4161.21 |                          |
| 11/26/02 01:13:40 PM | 4.3611 | 4160.82 |                          |
| 11/26/02 01:14:10 PM | 4.3694 | 4162.23 |                          |
| 11/26/02 01:14:40 PM | 4.3778 | 4162.83 |                          |
| 11/26/02 01:15:10 PM | 4.3861 | 4162.38 |                          |
| 11/26/02 01:15:40 PM | 4.3944 | 4161.28 |                          |
| 11/26/02 01:16:10 PM | 4.4028 | 4160.64 |                          |
| 11/26/02 01:16:40 PM | 4.4111 | 4160.79 |                          |
| 11/26/02 01:16:41 PM |        |         | START 7TH RATE @ 175 BPD |
| 11/26/02 01:17:10 PM | 4.4194 | 4161.67 |                          |
| 11/26/02 01:17:40 PM | 4.4278 | 4162.79 |                          |
| 11/26/02 01:18:10 PM | 4.4361 | 4163.55 |                          |
| 11/26/02 01:18:40 PM | 4.4444 | 4163.38 |                          |
| 11/26/02 01:19:10 PM | 4.4528 | 4163.21 |                          |
| 11/26/02 01:19:40 PM | 4.4611 | 4164.14 |                          |

| REAL TIME | DELTA<br>TIME,<br>HOURS | BOTTOMHOLE<br>PRESSURE,<br>PSIA | REMARKS - JOB NUMBER: 56430 |
|-----------|-------------------------|---------------------------------|-----------------------------|
|-----------|-------------------------|---------------------------------|-----------------------------|

|                      |        |         |
|----------------------|--------|---------|
| 11/26/02 01:20:10 PM | 4.4694 | 4165.02 |
| 11/26/02 01:20:40 PM | 4.4778 | 4163.76 |
| 11/26/02 01:21:10 PM | 4.4861 | 4162.97 |
| 11/26/02 01:21:40 PM | 4.4944 | 4162.39 |
| 11/26/02 01:22:10 PM | 4.5028 | 4162.87 |
| 11/26/02 01:22:40 PM | 4.5111 | 4163.59 |
| 11/26/02 01:23:10 PM | 4.5194 | 4164.44 |
| 11/26/02 01:23:40 PM | 4.5278 | 4165.08 |
| 11/26/02 01:24:10 PM | 4.5361 | 4164.97 |
| 11/26/02 01:24:40 PM | 4.5444 | 4165.25 |
| 11/26/02 01:25:10 PM | 4.5528 | 4165.89 |
| 11/26/02 01:25:40 PM | 4.5611 | 4166.10 |
| 11/26/02 01:26:10 PM | 4.5694 | 4165.41 |
| 11/26/02 01:26:40 PM | 4.5778 | 4164.33 |
| 11/26/02 01:27:10 PM | 4.5861 | 4164.36 |
| 11/26/02 01:27:40 PM | 4.5944 | 4164.85 |
| 11/26/02 01:28:10 PM | 4.6028 | 4165.50 |
| 11/26/02 01:28:40 PM | 4.6111 | 4166.68 |
| 11/26/02 01:29:10 PM | 4.6194 | 4166.69 |
| 11/26/02 01:29:40 PM | 4.6278 | 4166.56 |
| 11/26/02 01:30:00 PM |        |         |
| 11/26/02 01:30:10 PM | 4.6361 | 4166.95 |
| 11/26/02 01:30:40 PM | 4.6444 | 4167.39 |
| 11/26/02 01:31:10 PM | 4.6528 | 4167.77 |
| 11/26/02 01:31:40 PM | 4.6611 | 4166.92 |
| 11/26/02 01:32:10 PM | 4.6694 | 4165.89 |
| 11/26/02 01:32:40 PM | 4.6778 | 4166.01 |
| 11/26/02 01:33:10 PM | 4.6861 | 4166.69 |
| 11/26/02 01:33:40 PM | 4.6944 | 4167.41 |
| 11/26/02 01:34:10 PM | 4.7028 | 4168.19 |
| 11/26/02 01:34:40 PM | 4.7111 | 4167.87 |
| 11/26/02 01:35:10 PM | 4.7194 | 4167.72 |
| 11/26/02 01:35:40 PM | 4.7278 | 4168.72 |
| 11/26/02 01:36:10 PM | 4.7361 | 4169.31 |
| 11/26/02 01:36:40 PM | 4.7444 | 4168.92 |
| 11/26/02 01:37:10 PM | 4.7528 | 4168.17 |
| 11/26/02 01:37:40 PM | 4.7611 | 4167.30 |
| 11/26/02 01:38:10 PM | 4.7694 | 4167.63 |
| 11/26/02 01:38:40 PM | 4.7778 | 4167.88 |
| 11/26/02 01:39:10 PM | 4.7861 | 4168.71 |
| 11/26/02 01:39:40 PM | 4.7944 | 4169.67 |
| 11/26/02 01:40:10 PM | 4.8028 | 4169.13 |
| 11/26/02 01:40:40 PM | 4.8111 | 4169.63 |
| 11/26/02 01:41:10 PM | 4.8194 | 4170.28 |
| 11/26/02 01:41:40 PM | 4.8278 | 4170.49 |
| 11/26/02 01:42:10 PM | 4.8361 | 4169.93 |
| 11/26/02 01:42:40 PM | 4.8444 | 4168.91 |
| 11/26/02 01:43:10 PM | 4.8528 | 4168.63 |

CONTINUE RATE

| REAL TIME | DELTA<br>TIME,<br>HOURS | BOTTOMHOLE<br>PRESSURE,<br>PSIA | REMARKS - JOB NUMBER: 56430 |
|-----------|-------------------------|---------------------------------|-----------------------------|
|-----------|-------------------------|---------------------------------|-----------------------------|

|                      |        |         |                          |
|----------------------|--------|---------|--------------------------|
| 11/26/02 01:43:40 PM | 4.8611 | 4168.75 |                          |
| 11/26/02 01:44:10 PM | 4.8694 | 4169.66 |                          |
| 11/26/02 01:44:40 PM | 4.8778 | 4170.24 |                          |
| 11/26/02 01:45:10 PM | 4.8861 | 4170.78 |                          |
| 11/26/02 01:45:40 PM | 4.8944 | 4170.51 |                          |
| 11/26/02 01:46:10 PM | 4.9028 | 4170.65 |                          |
| 11/26/02 01:46:11 PM |        |         | START 8TH RATE @ 200 BPD |
| 11/26/02 01:46:40 PM | 4.9111 | 4170.04 |                          |
| 11/26/02 01:47:10 PM | 4.9194 | 4173.53 |                          |
| 11/26/02 01:47:40 PM | 4.9278 | 4173.25 |                          |
| 11/26/02 01:48:10 PM | 4.9361 | 4175.39 |                          |
| 11/26/02 01:48:40 PM | 4.9444 | 4173.11 |                          |
| 11/26/02 01:49:10 PM | 4.9528 | 4174.68 |                          |
| 11/26/02 01:49:40 PM | 4.9611 | 4176.68 |                          |
| 11/26/02 01:50:10 PM | 4.9694 | 4176.23 |                          |
| 11/26/02 01:50:40 PM | 4.9778 | 4177.19 |                          |
| 11/26/02 01:51:10 PM | 4.9861 | 4175.04 |                          |
| 11/26/02 01:51:40 PM | 4.9944 | 4177.23 |                          |
| 11/26/02 01:52:10 PM | 5.0028 | 4177.99 |                          |
| 11/26/02 01:52:40 PM | 5.0111 | 4177.97 |                          |
| 11/26/02 01:53:10 PM | 5.0194 | 4178.61 |                          |
| 11/26/02 01:53:40 PM | 5.0278 | 4176.64 |                          |
| 11/26/02 01:54:10 PM | 5.0361 | 4179.47 |                          |
| 11/26/02 01:54:40 PM | 5.0444 | 4178.69 |                          |
| 11/26/02 01:55:10 PM | 5.0528 | 4180.04 |                          |
| 11/26/02 01:55:40 PM | 5.0611 | 4178.90 |                          |
| 11/26/02 01:56:10 PM | 5.0694 | 4178.32 |                          |
| 11/26/02 01:56:40 PM | 5.0778 | 4180.97 |                          |
| 11/26/02 01:57:10 PM | 5.0861 | 4179.90 |                          |
| 11/26/02 01:57:40 PM | 5.0944 | 4181.62 |                          |
| 11/26/02 01:58:10 PM | 5.1028 | 4179.57 |                          |
| 11/26/02 01:58:40 PM | 5.1111 | 4179.87 |                          |
| 11/26/02 01:59:10 PM | 5.1194 | 4182.03 |                          |
| 11/26/02 01:59:40 PM | 5.1278 | 4181.13 |                          |
| 11/26/02 02:00:00 PM |        |         | CONTINUE RATE            |
| 11/26/02 02:00:10 PM | 5.1361 | 4182.66 |                          |
| 11/26/02 02:00:40 PM | 5.1444 | 4179.95 |                          |
| 11/26/02 02:01:10 PM | 5.1528 | 4181.71 |                          |
| 11/26/02 02:01:40 PM | 5.1611 | 4182.62 |                          |
| 11/26/02 02:02:10 PM | 5.1694 | 4182.21 |                          |
| 11/26/02 02:02:40 PM | 5.1778 | 4183.14 |                          |
| 11/26/02 02:03:10 PM | 5.1861 | 4180.50 |                          |
| 11/26/02 02:03:40 PM | 5.1944 | 4183.36 |                          |
| 11/26/02 02:04:10 PM | 5.2028 | 4183.58 |                          |
| 11/26/02 02:04:40 PM | 5.2111 | 4183.32 |                          |
| 11/26/02 02:05:10 PM | 5.2194 | 4183.26 |                          |
| 11/26/02 02:05:40 PM | 5.2278 | 4182.11 |                          |
| 11/26/02 02:06:10 PM | 5.2361 | 4184.48 |                          |

| REAL TIME | DELTA<br>TIME,<br>HOURS | BOTTOMHOLE<br>PRESSURE,<br>PSIA | REMARKS - JOB NUMBER: 56430 |
|-----------|-------------------------|---------------------------------|-----------------------------|
|-----------|-------------------------|---------------------------------|-----------------------------|

|                      |        |         |                          |
|----------------------|--------|---------|--------------------------|
| 11/26/02 02:06:40 PM | 5.2444 | 4183.84 |                          |
| 11/26/02 02:07:10 PM | 5.2528 | 4184.82 |                          |
| 11/26/02 02:07:40 PM | 5.2611 | 4183.64 |                          |
| 11/26/02 02:08:10 PM | 5.2694 | 4182.97 |                          |
| 11/26/02 02:08:40 PM | 5.2778 | 4185.44 |                          |
| 11/26/02 02:09:10 PM | 5.2861 | 4184.43 |                          |
| 11/26/02 02:09:40 PM | 5.2944 | 4185.98 |                          |
| 11/26/02 02:10:10 PM | 5.3028 | 4183.90 |                          |
| 11/26/02 02:10:40 PM | 5.3111 | 4183.73 |                          |
| 11/26/02 02:11:10 PM | 5.3194 | 4186.20 |                          |
| 11/26/02 02:11:40 PM | 5.3278 | 4185.35 |                          |
| 11/26/02 02:12:10 PM | 5.3361 | 4186.80 |                          |
| 11/26/02 02:12:40 PM | 5.3444 | 4184.31 |                          |
| 11/26/02 02:13:10 PM | 5.3528 | 4185.08 |                          |
| 11/26/02 02:13:40 PM | 5.3611 | 4186.81 |                          |
| 11/26/02 02:14:10 PM | 5.3694 | 4185.95 |                          |
| 11/26/02 02:14:40 PM | 5.3778 | 4187.09 |                          |
| 11/26/02 02:15:10 PM | 5.3861 | 4184.77 |                          |
| 11/26/02 02:15:40 PM | 5.3944 | 4186.28 |                          |
| 11/26/02 02:16:10 PM | 5.4028 | 4187.03 |                          |
| 11/26/02 02:16:40 PM | 5.4111 | 4186.76 |                          |
| 11/26/02 02:17:10 PM | 5.4194 | 4187.13 |                          |
| 11/26/02 02:17:30 PM | 5.4250 | 4186.91 |                          |
| 11/26/02 02:17:31 PM |        |         | START 9TH RATE @ 225 BPD |
| 11/26/02 02:18:00 PM | 5.4333 | 4188.58 |                          |
| 11/26/02 02:18:30 PM | 5.4417 | 4188.90 |                          |
| 11/26/02 02:19:00 PM | 5.4500 | 4189.20 |                          |
| 11/26/02 02:19:30 PM | 5.4583 | 4188.16 |                          |
| 11/26/02 02:20:00 PM | 5.4667 | 4190.44 |                          |
| 11/26/02 02:20:30 PM | 5.4750 | 4190.21 |                          |
| 11/26/02 02:21:00 PM | 5.4833 | 4189.42 |                          |
| 11/26/02 02:21:30 PM | 5.4917 | 4191.44 |                          |
| 11/26/02 02:22:00 PM | 5.5000 | 4190.61 |                          |
| 11/26/02 02:22:30 PM | 5.5083 | 4191.25 |                          |
| 11/26/02 02:23:00 PM | 5.5167 | 4189.98 |                          |
| 11/26/02 02:23:30 PM | 5.5250 | 4191.99 |                          |
| 11/26/02 02:24:00 PM | 5.5333 | 4192.06 |                          |
| 11/26/02 02:24:30 PM | 5.5417 | 4190.48 |                          |
| 11/26/02 02:25:00 PM | 5.5500 | 4193.45 |                          |
| 11/26/02 02:25:30 PM | 5.5583 | 4191.75 |                          |
| 11/26/02 02:26:00 PM | 5.5667 | 4192.17 |                          |
| 11/26/02 02:26:30 PM | 5.5750 | 4191.90 |                          |
| 11/26/02 02:27:00 PM | 5.5833 | 4193.03 |                          |
| 11/26/02 02:27:30 PM | 5.5917 | 4193.29 |                          |
| 11/26/02 02:28:00 PM | 5.6000 | 4191.50 |                          |
| 11/26/02 02:28:30 PM | 5.6083 | 4194.36 |                          |
| 11/26/02 02:29:00 PM | 5.6167 | 4193.04 |                          |
| 11/26/02 02:29:30 PM | 5.6250 | 4192.71 |                          |

| REAL TIME            | DELTA<br>TIME,<br>HOURS | BOTTOMHOLE<br>PRESSURE,<br>PSIA | REMARKS - JOB NUMBER: 56430 |
|----------------------|-------------------------|---------------------------------|-----------------------------|
| 11/26/02 02:30:00 PM | 5.6333                  | 4193.61                         |                             |
| 11/26/02 02:30:00 PM |                         |                                 | CONTINUE RATE               |
| 11/26/02 02:30:30 PM | 5.6417                  | 4194.15                         |                             |
| 11/26/02 02:31:00 PM | 5.6500                  | 4194.01                         |                             |
| 11/26/02 02:31:30 PM | 5.6583                  | 4192.21                         |                             |
| 11/26/02 02:32:00 PM | 5.6667                  | 4195.18                         |                             |
| 11/26/02 02:32:30 PM | 5.6750                  | 4193.98                         |                             |
| 11/26/02 02:33:00 PM | 5.6833                  | 4193.31                         |                             |
| 11/26/02 02:33:30 PM | 5.6917                  | 4195.22                         |                             |
| 11/26/02 02:34:00 PM | 5.7000                  | 4194.58                         |                             |
| 11/26/02 02:34:30 PM | 5.7083                  | 4194.70                         |                             |
| 11/26/02 02:35:00 PM | 5.7167                  | 4192.95                         |                             |
| 11/26/02 02:35:30 PM | 5.7250                  | 4195.40                         |                             |
| 11/26/02 02:36:00 PM | 5.7333                  | 4194.86                         |                             |
| 11/26/02 02:36:30 PM | 5.7417                  | 4193.78                         |                             |
| 11/26/02 02:37:00 PM | 5.7500                  | 4195.88                         |                             |
| 11/26/02 02:37:30 PM | 5.7583                  | 4194.74                         |                             |
| 11/26/02 02:38:00 PM | 5.7667                  | 4195.15                         |                             |
| 11/26/02 02:38:30 PM | 5.7750                  | 4194.07                         |                             |
| 11/26/02 02:39:00 PM | 5.7833                  | 4196.14                         |                             |
| 11/26/02 02:39:30 PM | 5.7917                  | 4195.60                         |                             |
| 11/26/02 02:40:00 PM | 5.8000                  | 4194.14                         |                             |
| 11/26/02 02:40:30 PM | 5.8083                  | 4196.69                         |                             |
| 11/26/02 02:41:00 PM | 5.8167                  | 4195.20                         |                             |
| 11/26/02 02:41:30 PM | 5.8250                  | 4195.41                         |                             |
| 11/26/02 02:42:00 PM | 5.8333                  | 4195.08                         |                             |
| 11/26/02 02:42:30 PM | 5.8417                  | 4195.79                         |                             |
| 11/26/02 02:43:00 PM | 5.8500                  | 4195.95                         |                             |
| 11/26/02 02:43:30 PM | 5.8583                  | 4194.12                         |                             |
| 11/26/02 02:44:00 PM | 5.8667                  | 4197.29                         |                             |
| 11/26/02 02:44:30 PM | 5.8750                  | 4195.46                         |                             |
| 11/26/02 02:45:00 PM | 5.8833                  | 4195.12                         |                             |
| 11/26/02 02:45:30 PM | 5.8917                  | 4196.01                         |                             |
| 11/26/02 02:46:00 PM | 5.9000                  | 4196.10                         |                             |
| 11/26/02 02:46:30 PM | 5.9083                  | 4196.20                         |                             |
| 11/26/02 02:47:00 PM | 5.9167                  | 4194.55                         |                             |
| 11/26/02 02:47:30 PM | 5.9250                  | 4197.21                         |                             |
| 11/26/02 02:48:00 PM | 5.9333                  | 4196.75                         |                             |
| 11/26/02 02:48:01 PM |                         |                                 | START 10TH RATE @ 250 BPD   |
| 11/26/02 02:48:30 PM | 5.9417                  | 4198.53                         |                             |
| 11/26/02 02:49:00 PM | 5.9500                  | 4197.33                         |                             |
| 11/26/02 02:49:30 PM | 5.9583                  | 4195.84                         |                             |
| 11/26/02 02:50:00 PM | 5.9667                  | 4196.89                         |                             |
| 11/26/02 02:50:30 PM | 5.9750                  | 4197.84                         |                             |
| 11/26/02 02:51:00 PM | 5.9833                  | 4198.74                         |                             |
| 11/26/02 02:51:30 PM | 5.9917                  | 4197.09                         |                             |
| 11/26/02 02:52:00 PM | 6.0000                  | 4198.23                         |                             |
| 11/26/02 02:52:30 PM | 6.0083                  | 4198.75                         |                             |

| REAL TIME | DELTA<br>TIME,<br>HOURS | BOTTOMHOLE<br>PRESSURE,<br>PSIA | REMARKS - JOB NUMBER: 56430 |
|-----------|-------------------------|---------------------------------|-----------------------------|
|-----------|-------------------------|---------------------------------|-----------------------------|

|                      |        |         |
|----------------------|--------|---------|
| 11/26/02 02:53:00 PM | 6.0167 | 4199.19 |
| 11/26/02 02:53:30 PM | 6.0250 | 4198.07 |
| 11/26/02 02:54:00 PM | 6.0333 | 4198.92 |
| 11/26/02 02:54:30 PM | 6.0417 | 4199.79 |
| 11/26/02 02:55:00 PM | 6.0500 | 4198.03 |
| 11/26/02 02:55:30 PM | 6.0583 | 4198.62 |
| 11/26/02 02:56:00 PM | 6.0667 | 4199.45 |
| 11/26/02 02:56:30 PM | 6.0750 | 4199.88 |
| 11/26/02 02:57:00 PM | 6.0833 | 4198.08 |
| 11/26/02 02:57:30 PM | 6.0917 | 4199.17 |
| 11/26/02 02:58:00 PM | 6.1000 | 4199.88 |
| 11/26/02 02:58:30 PM | 6.1083 | 4199.66 |
| 11/26/02 02:59:00 PM | 6.1167 | 4198.84 |
| 11/26/02 02:59:30 PM | 6.1250 | 4199.51 |
| 11/26/02 03:00:00 PM | 6.1333 | 4200.47 |

CONTINUE RATE

|                      |        |         |
|----------------------|--------|---------|
| 11/26/02 03:00:00 PM |        |         |
| 11/26/02 03:00:30 PM | 6.1417 | 4198.79 |
| 11/26/02 03:01:00 PM | 6.1500 | 4199.41 |
| 11/26/02 03:01:30 PM | 6.1583 | 4199.97 |
| 11/26/02 03:02:00 PM | 6.1667 | 4201.01 |
| 11/26/02 03:02:30 PM | 6.1750 | 4198.84 |
| 11/26/02 03:03:00 PM | 6.1833 | 4199.86 |
| 11/26/02 03:03:30 PM | 6.1917 | 4200.31 |
| 11/26/02 03:04:00 PM | 6.2000 | 4200.30 |
| 11/26/02 03:04:30 PM | 6.2083 | 4199.36 |
| 11/26/02 03:05:00 PM | 6.2167 | 4199.88 |
| 11/26/02 03:05:30 PM | 6.2250 | 4200.88 |
| 11/26/02 03:06:00 PM | 6.2333 | 4199.29 |
| 11/26/02 03:06:30 PM | 6.2417 | 4199.93 |
| 11/26/02 03:07:00 PM | 6.2500 | 4200.33 |
| 11/26/02 03:07:30 PM | 6.2583 | 4200.64 |
| 11/26/02 03:08:00 PM | 6.2667 | 4199.41 |
| 11/26/02 03:08:30 PM | 6.2750 | 4200.23 |
| 11/26/02 03:09:00 PM | 6.2833 | 4200.90 |
| 11/26/02 03:09:30 PM | 6.2917 | 4200.37 |
| 11/26/02 03:10:00 PM | 6.3000 | 4199.75 |
| 11/26/02 03:10:30 PM | 6.3083 | 4200.53 |
| 11/26/02 03:11:00 PM | 6.3167 | 4201.55 |
| 11/26/02 03:11:30 PM | 6.3250 | 4199.65 |
| 11/26/02 03:12:00 PM | 6.3333 | 4200.07 |
| 11/26/02 03:12:30 PM | 6.3417 | 4200.83 |
| 11/26/02 03:13:00 PM | 6.3500 | 4201.37 |
| 11/26/02 03:13:30 PM | 6.3583 | 4199.83 |
| 11/26/02 03:14:00 PM | 6.3667 | 4200.24 |
| 11/26/02 03:14:30 PM | 6.3750 | 4201.46 |
| 11/26/02 03:15:00 PM | 6.3833 | 4200.38 |
| 11/26/02 03:15:30 PM | 6.3917 | 4199.77 |
| 11/26/02 03:16:00 PM | 6.4000 | 4200.60 |

| REAL TIME | DELTA<br>TIME,<br>HOURS | BOTTOMHOLE<br>PRESSURE,<br>PSIA | REMARKS - JOB NUMBER: 56430 |
|-----------|-------------------------|---------------------------------|-----------------------------|
|-----------|-------------------------|---------------------------------|-----------------------------|

11/26/02 03:16:01 PM START 11TH RATE @ 275 BPD

|                      |        |         |
|----------------------|--------|---------|
| 11/26/02 03:16:30 PM | 6.4083 | 4201.98 |
| 11/26/02 03:17:00 PM | 6.4167 | 4202.29 |
| 11/26/02 03:17:30 PM | 6.4250 | 4201.30 |
| 11/26/02 03:18:00 PM | 6.4333 | 4203.50 |
| 11/26/02 03:18:30 PM | 6.4417 | 4202.47 |
| 11/26/02 03:19:00 PM | 6.4500 | 4202.60 |
| 11/26/02 03:19:30 PM | 6.4583 | 4204.13 |
| 11/26/02 03:20:00 PM | 6.4667 | 4202.66 |
| 11/26/02 03:20:30 PM | 6.4750 | 4203.81 |
| 11/26/02 03:21:00 PM | 6.4833 | 4203.79 |
| 11/26/02 03:21:30 PM | 6.4917 | 4202.91 |
| 11/26/02 03:22:00 PM | 6.5000 | 4205.03 |
| 11/26/02 03:22:30 PM | 6.5083 | 4203.42 |
| 11/26/02 03:23:00 PM | 6.5167 | 4204.52 |
| 11/26/02 03:23:30 PM | 6.5250 | 4204.53 |
| 11/26/02 03:24:00 PM | 6.5333 | 4203.13 |
| 11/26/02 03:24:30 PM | 6.5417 | 4205.08 |
| 11/26/02 03:25:00 PM | 6.5500 | 4203.85 |
| 11/26/02 03:25:30 PM | 6.5583 | 4204.24 |
| 11/26/02 03:26:00 PM | 6.5667 | 4204.83 |
| 11/26/02 03:26:30 PM | 6.5750 | 4203.71 |
| 11/26/02 03:27:00 PM | 6.5833 | 4205.30 |
| 11/26/02 03:27:30 PM | 6.5917 | 4203.85 |
| 11/26/02 03:28:00 PM | 6.6000 | 4204.24 |
| 11/26/02 03:28:30 PM | 6.6083 | 4205.15 |
| 11/26/02 03:29:00 PM | 6.6167 | 4203.96 |
| 11/26/02 03:29:30 PM | 6.6250 | 4205.49 |
| 11/26/02 03:30:00 PM | 6.6333 | 4204.61 |

CONTINUE RATE

|                      |        |         |
|----------------------|--------|---------|
| 11/26/02 03:30:00 PM |        |         |
| 11/26/02 03:30:30 PM | 6.6417 | 4203.96 |
| 11/26/02 03:31:00 PM | 6.6500 | 4205.14 |
| 11/26/02 03:31:30 PM | 6.6583 | 4203.95 |
| 11/26/02 03:32:00 PM | 6.6667 | 4205.57 |
| 11/26/02 03:32:30 PM | 6.6750 | 4204.72 |
| 11/26/02 03:33:00 PM | 6.6833 | 4204.16 |
| 11/26/02 03:33:30 PM | 6.6917 | 4205.15 |
| 11/26/02 03:34:00 PM | 6.7000 | 4204.36 |
| 11/26/02 03:34:30 PM | 6.7083 | 4205.07 |
| 11/26/02 03:35:00 PM | 6.7167 | 4204.75 |
| 11/26/02 03:35:30 PM | 6.7250 | 4204.15 |
| 11/26/02 03:36:00 PM | 6.7333 | 4205.26 |
| 11/26/02 03:36:30 PM | 6.7417 | 4203.94 |
| 11/26/02 03:37:00 PM | 6.7500 | 4205.56 |
| 11/26/02 03:37:30 PM | 6.7583 | 4204.67 |
| 11/26/02 03:38:00 PM | 6.7667 | 4203.79 |
| 11/26/02 03:38:30 PM | 6.7750 | 4205.67 |
| 11/26/02 03:39:00 PM | 6.7833 | 4204.36 |

| REAL TIME | DELTA<br>TIME,<br>HOURS | BOTTOMHOLE<br>PRESSURE,<br>PSIA | REMARKS - JOB NUMBER: 56430 |
|-----------|-------------------------|---------------------------------|-----------------------------|
|-----------|-------------------------|---------------------------------|-----------------------------|

|                      |        |         |
|----------------------|--------|---------|
| 11/26/02 03:39:30 PM | 6.7917 | 4205.45 |
| 11/26/02 03:40:00 PM | 6.8000 | 4204.79 |
| 11/26/02 03:40:30 PM | 6.8083 | 4203.48 |
| 11/26/02 03:41:00 PM | 6.8167 | 4205.44 |
| 11/26/02 03:41:30 PM | 6.8250 | 4204.01 |
| 11/26/02 03:42:00 PM | 6.8333 | 4204.81 |
| 11/26/02 03:42:30 PM | 6.8417 | 4204.40 |
| 11/26/02 03:43:00 PM | 6.8500 | 4203.63 |
| 11/26/02 03:43:30 PM | 6.8583 | 4205.07 |
| 11/26/02 03:44:00 PM | 6.8667 | 4203.82 |
| 11/26/02 03:44:30 PM | 6.8750 | 4204.56 |
| 11/26/02 03:45:00 PM | 6.8833 | 4204.72 |
| 11/26/02 03:45:30 PM | 6.8917 | 4203.36 |
| 11/26/02 03:46:00 PM | 6.9000 | 4205.04 |
| 11/26/02 03:46:30 PM | 6.9083 | 4203.63 |
| 11/26/02 03:47:00 PM | 6.9167 | 4204.43 |
| 11/26/02 03:47:30 PM | 6.9250 | 4204.82 |
| 11/26/02 03:48:00 PM | 6.9333 | 4203.11 |
| 11/26/02 03:48:30 PM | 6.9417 | 4204.61 |
| 11/26/02 03:48:40 PM | 6.9444 | 4203.94 |
| 11/26/02 03:48:41 PM |        |         |
| 11/26/02 03:49:00 PM | 6.9500 | 4201.88 |
| 11/26/02 03:49:20 PM | 6.9556 | 4206.23 |
| 11/26/02 03:49:40 PM | 6.9611 | 4204.34 |
| 11/26/02 03:50:00 PM | 6.9667 | 4206.73 |
| 11/26/02 03:50:20 PM | 6.9722 | 4208.54 |
| 11/26/02 03:50:40 PM | 6.9778 | 4206.05 |
| 11/26/02 03:51:00 PM | 6.9833 | 4208.02 |
| 11/26/02 03:51:20 PM | 6.9889 | 4209.53 |
| 11/26/02 03:51:40 PM | 6.9944 | 4206.93 |
| 11/26/02 03:52:00 PM | 7.0000 | 4209.05 |
| 11/26/02 03:52:20 PM | 7.0056 | 4210.02 |
| 11/26/02 03:52:40 PM | 7.0111 | 4207.42 |
| 11/26/02 03:53:00 PM | 7.0167 | 4209.77 |
| 11/26/02 03:53:20 PM | 7.0222 | 4210.48 |
| 11/26/02 03:53:40 PM | 7.0278 | 4208.24 |
| 11/26/02 03:54:00 PM | 7.0333 | 4210.26 |
| 11/26/02 03:54:20 PM | 7.0389 | 4211.26 |
| 11/26/02 03:54:40 PM | 7.0444 | 4209.06 |
| 11/26/02 03:55:00 PM | 7.0500 | 4210.27 |
| 11/26/02 03:55:20 PM | 7.0556 | 4211.20 |
| 11/26/02 03:55:40 PM | 7.0611 | 4208.82 |
| 11/26/02 03:56:00 PM | 7.0667 | 4210.73 |
| 11/26/02 03:56:20 PM | 7.0722 | 4211.49 |
| 11/26/02 03:56:40 PM | 7.0778 | 4209.42 |
| 11/26/02 03:57:00 PM | 7.0833 | 4211.27 |
| 11/26/02 03:57:20 PM | 7.0889 | 4211.26 |
| 11/26/02 03:57:40 PM | 7.0944 | 4209.81 |

START 12TH RATE @ 300 BPD

| REAL TIME | DELTA<br>TIME,<br>HOURS | BOTTOMHOLE<br>PRESSURE,<br>PSIA | REMARKS - JOB NUMBER: 56430 |
|-----------|-------------------------|---------------------------------|-----------------------------|
|-----------|-------------------------|---------------------------------|-----------------------------|

|                      |        |         |
|----------------------|--------|---------|
| 11/26/02 03:58:00 PM | 7.1000 | 4211.24 |
| 11/26/02 03:58:20 PM | 7.1056 | 4211.01 |
| 11/26/02 03:58:40 PM | 7.1111 | 4209.61 |
| 11/26/02 03:59:00 PM | 7.1167 | 4211.21 |
| 11/26/02 03:59:20 PM | 7.1222 | 4211.77 |
| 11/26/02 03:59:40 PM | 7.1278 | 4209.39 |
| 11/26/02 04:00:00 PM | 7.1333 | 4211.77 |

CONTINUE RATE

|                      |        |         |
|----------------------|--------|---------|
| 11/26/02 04:00:00 PM | 7.1389 | 4211.22 |
| 11/26/02 04:00:20 PM | 7.1444 | 4209.85 |
| 11/26/02 04:00:40 PM | 7.1500 | 4211.65 |
| 11/26/02 04:01:00 PM | 7.1556 | 4210.82 |
| 11/26/02 04:01:20 PM | 7.1611 | 4209.63 |
| 11/26/02 04:01:40 PM | 7.1667 | 4211.54 |
| 11/26/02 04:02:00 PM | 7.1722 | 4211.03 |
| 11/26/02 04:02:20 PM | 7.1778 | 4209.46 |
| 11/26/02 04:02:40 PM | 7.1833 | 4211.51 |
| 11/26/02 04:03:00 PM | 7.1889 | 4210.56 |
| 11/26/02 04:03:20 PM | 7.1944 | 4209.70 |
| 11/26/02 04:03:40 PM | 7.2000 | 4211.42 |
| 11/26/02 04:04:00 PM | 7.2056 | 4210.42 |
| 11/26/02 04:04:20 PM | 7.2111 | 4209.23 |
| 11/26/02 04:04:40 PM | 7.2167 | 4211.52 |
| 11/26/02 04:05:00 PM | 7.2222 | 4210.04 |
| 11/26/02 04:05:20 PM | 7.2278 | 4209.52 |
| 11/26/02 04:05:40 PM | 7.2333 | 4211.26 |
| 11/26/02 04:06:00 PM | 7.2389 | 4209.74 |
| 11/26/02 04:06:20 PM | 7.2444 | 4209.61 |
| 11/26/02 04:06:40 PM | 7.2500 | 4211.16 |
| 11/26/02 04:07:00 PM | 7.2556 | 4209.47 |
| 11/26/02 04:07:20 PM | 7.2611 | 4209.71 |
| 11/26/02 04:07:40 PM | 7.2667 | 4211.33 |
| 11/26/02 04:08:00 PM | 7.2722 | 4209.87 |
| 11/26/02 04:08:20 PM | 7.2778 | 4209.47 |
| 11/26/02 04:08:40 PM | 7.2833 | 4211.34 |
| 11/26/02 04:09:00 PM | 7.2889 | 4209.34 |
| 11/26/02 04:09:20 PM | 7.2944 | 4209.62 |
| 11/26/02 04:09:40 PM | 7.3000 | 4211.60 |
| 11/26/02 04:10:00 PM | 7.3056 | 4208.80 |
| 11/26/02 04:10:20 PM | 7.3111 | 4209.62 |
| 11/26/02 04:10:40 PM | 7.3167 | 4211.30 |
| 11/26/02 04:11:00 PM | 7.3222 | 4209.35 |
| 11/26/02 04:11:20 PM | 7.3278 | 4209.54 |
| 11/26/02 04:11:40 PM | 7.3333 | 4211.02 |
| 11/26/02 04:12:00 PM | 7.3389 | 4208.71 |
| 11/26/02 04:12:20 PM | 7.3444 | 4209.27 |
| 11/26/02 04:12:40 PM | 7.3500 | 4210.84 |
| 11/26/02 04:13:00 PM | 7.3556 | 4208.39 |

| REAL TIME | DELTA<br>TIME,<br>HOURS | BOTTOMHOLE<br>PRESSURE,<br>PSIA | REMARKS - JOB NUMBER: 56430 |
|-----------|-------------------------|---------------------------------|-----------------------------|
|-----------|-------------------------|---------------------------------|-----------------------------|

|                      |        |         |
|----------------------|--------|---------|
| 11/26/02 04:13:40 PM | 7.3611 | 4209.31 |
| 11/26/02 04:14:00 PM | 7.3667 | 4210.70 |
| 11/26/02 04:14:20 PM | 7.3722 | 4208.60 |
| 11/26/02 04:14:40 PM | 7.3778 | 4209.50 |
| 11/26/02 04:15:00 PM | 7.3833 | 4210.57 |
| 11/26/02 04:15:20 PM | 7.3889 | 4208.08 |
| 11/26/02 04:15:40 PM | 7.3944 | 4209.46 |
| 11/26/02 04:16:00 PM | 7.4000 | 4210.50 |
| 11/26/02 04:16:20 PM | 7.4056 | 4208.20 |
| 11/26/02 04:16:40 PM | 7.4111 | 4209.59 |
| 11/26/02 04:17:00 PM | 7.4167 | 4210.48 |
| 11/26/02 04:17:20 PM | 7.4222 | 4208.00 |
| 11/26/02 04:17:40 PM | 7.4278 | 4209.46 |
| 11/26/02 04:18:00 PM | 7.4333 | 4210.09 |
| 11/26/02 04:18:20 PM | 7.4389 | 4207.89 |
| 11/26/02 04:18:40 PM | 7.4444 | 4209.26 |
| 11/26/02 04:18:41 PM |        |         |

END 12TH RATE