

ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
 - Engineering Bureau -  
 1220 South St. Francis Drive, Santa Fe, NM 87505



**ADMINISTRATIVE APPLICATION CHECKLIST**

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

**Application Acronyms:**

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]  
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]  
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]  
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]  
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]  
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A] Operator: Chevron U.S.A. Inc  
 [A] Location - Spacing Unit - Simultaneous Dedication Well: Central Vacuum unit 161  
☐ NSL ☐ NSP ☐ SD API: 30-025-27971

Check One Only for [B] or [C]

- [B] Commingling - Storage - Measurement  
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
☐ WFX ☐ PMX ☐ SWD ☒ IPI ☐ EOR ☐ PPR

- [D] Other: Specify \_\_\_\_\_

- [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply  
 [A] ☐ Working, Royalty or Overriding Royalty Interest Owners  
 [B] ☐ Offset Operators, Leaseholders or Surface Owner  
 [C] ☐ Application is One Which Requires Published Legal Notice  
 [D] ☐ Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office  
 [E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,  
 [F] ☐ Waivers are Attached

- [3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

- [4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Denise Pinkerton Denise Pinkerton Regulatory Specialist 07/15/2015  
 Print or Type Name Signature Title Date  
Lekejd@Chevron.com  
 e-mail Address

RECEIVED OGD  
 2015 JUL 22 P 2:58

Pool: Vacuum; Grayburg  
San-Andria  
# 62180

Submit 1 Copy To Appropriate District  
Office  
District I - (575) 393-6161  
1625 N. French Dr., Hobbs, NM 88240  
District II - (575) 748-1283  
811 S. First St., Artesia, NM 88210  
District III - (505) 334-6178  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV - (505) 476-3460  
1220 S. St. Francis Dr., Santa Fe, NM  
87505

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
Revised July 18, 2013

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

|                                                                                                     |
|-----------------------------------------------------------------------------------------------------|
| WELL API NO<br>30-025-25798                                                                         |
| 5. Indicate Type of Lease<br>STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/> |
| 6. State Oil & Gas Lease No.                                                                        |
| 7. Lease Name or Unit Agreement Name<br>CENTRAL VACUUM UNIT                                         |
| 8. Well Number 113                                                                                  |
| 9. OGRID Number 4323                                                                                |
| 10. Pool name or Wildcat<br>VACUUM; GRAYBURG SAN ANDRES                                             |

SUNDRY NOTICES AND REPORTS ON WELLS  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A  
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH  
PROPOSALS.)

|                                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other INJECTOR                                    |
| 2. Name of Operator<br>CHEVRON U.S.A. INC.                                                                                                        |
| 3. Address of Operator<br>15 SMITH ROAD, MIDLAND, TEXAS 79705                                                                                     |
| 4. Well Location<br>Unit Letter: L 1620 feet from SOUTH line and 1100 feet from the WEST line<br>Section 6 Township 18S Range 35E NMPM County LEA |

|                                                    |
|----------------------------------------------------|
| 11. Elevation (Show whether DR, RKB, RT, GR, etc.) |
|----------------------------------------------------|

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

|                                                |                                           |
|------------------------------------------------|-------------------------------------------|
| PERFORM REMEDIAL WORK <input type="checkbox"/> | PLUG AND ABANDON <input type="checkbox"/> |
| TEMPORARILY ABANDON <input type="checkbox"/>   | CHANGE PLANS <input type="checkbox"/>     |
| PULL OR ALTER CASING <input type="checkbox"/>  | MULTIPLE COMPL <input type="checkbox"/>   |
| DOWNHOLE COMMINGLE <input type="checkbox"/>    |                                           |
| CLOSED-LOOP SYSTEM <input type="checkbox"/>    |                                           |
| OTHER:                                         |                                           |

SUBSEQUENT REPORT OF:

|                                                  |                                          |
|--------------------------------------------------|------------------------------------------|
| REMEDIAL WORK <input type="checkbox"/>           | ALTERING CASING <input type="checkbox"/> |
| COMMENCE DRILLING OPNS. <input type="checkbox"/> | P AND A <input type="checkbox"/>         |
| CASING/CEMENT JOB <input type="checkbox"/>       |                                          |
| OTHER: RESULTS OF STEP RATE TEST                 |                                          |

13. Describe proposed or completed operations. (Clearly state all pertinent details; and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

PLEASE FIND ATTACHED, RESULTS OF A STEP RATE TEST THAT WAS RUN ON THE SUBJECT WELL.  
PLEASE APPROVE HIGHER PRESSURE LIMITS AS THIS TEST INDICATES.

EXPECTED RATE, BWPD - 2500  
EXPECTED PRESSURE, PSI - 2200

Water only

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE

*Denise Pinkerton*

TITLE REGULATORY SPECIALIST

DATE 07/15/2015

Type or print name DENISE PINKERTON  
For State Use Only

E-mail address: [leakejd@chevron.com](mailto:leakejd@chevron.com)

PHONE: 432-687-7375

APPROVED BY:

TITLE

DATE

Conditions of Approval (if any):

# **CHEVRON**

## **CENTRAL VACUUM UNIT # 113**

June 29, 2015

## JOB INFORMATION SHEET

| Company Information                                                        |                                            |
|----------------------------------------------------------------------------|--------------------------------------------|
| Company Name:                                                              | CHEVRON                                    |
| Address:                                                                   | 1500 LOUISIANA STREET<br>HOUSTON, TX 77002 |
| Well Information                                                           |                                            |
| Well Name:                                                                 | CENTRAL VACUUM UNIT # 113                  |
| Field – Pool:                                                              | VACUUM                                     |
| Status:                                                                    | SHUT-IN                                    |
| Test Information                                                           |                                            |
| Type of Test:                                                              | STEP RATE TEST                             |
| Gauge Depth:                                                               | 4310'                                      |
| Production Interval:                                                       | 4350'-4707'                                |
| Production Through:                                                        | TUBING                                     |
| Tubing Pressure:                                                           | 2475 psi                                   |
| Casing Pressure:                                                           | 0 psi                                      |
| Shut In Time                                                               | 10:35 AM                                   |
| Status:                                                                    | SHUT-IN                                    |
| Temperature @ Run Depth                                                    | 96.96 degF                                 |
| Surface Temperature:                                                       | 83.41 degF                                 |
| Comments                                                                   |                                            |
| SOFT FRAC @ 2894 B/D<br>2275 SURFACE PRESSURE<br>3823 BOTTOM HOLE PRESSURE |                                            |

ARCHER WIRELINE

CHEVRON

## WELL INFORMATION SHEET

|               |                           |                         |              |
|---------------|---------------------------|-------------------------|--------------|
| Well:         | CENTRAL VACUUM UNIT # 113 |                         |              |
| Well License: |                           | Unique Well Identifier: | 30-025-25798 |
| Company:      | CHEVRON                   |                         |              |
| Field         | VACUUM                    |                         |              |

|            |  |          |     |
|------------|--|----------|-----|
| Location:  |  | County:  | LEA |
| Formation: |  | State:   | NM  |
| Purpose:   |  | Country: | USA |

|                                  |       |                       |        |
|----------------------------------|-------|-----------------------|--------|
| Total Depth:                     | 4310' | ID Borehole:          | N/A    |
| Packer Depth:                    | 4257' | ID Production Casing: | 4"     |
| Depth of whipstock:              | N/A   | OD Production Tubing: | 2.375" |
| Depth at which casing is landed: | 4800' | ID Production Tubing: | 2"     |
| Depth at which tubing is landed: | 4257' | ID Drill Pipe:        | N/A    |

ARCHER WIRELINE

## Gradient Data Report

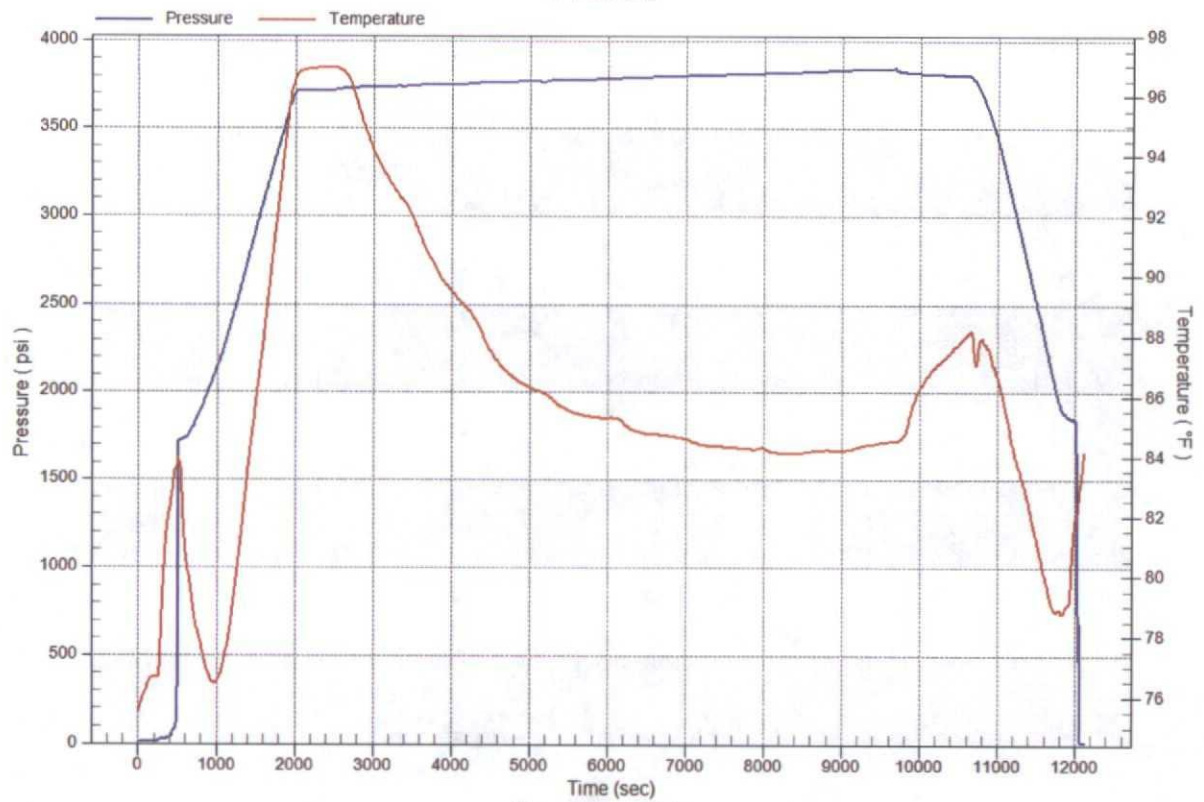
CHEVRON  
CENTRAL VACUUM UNIT # 113

Gradient Data Table

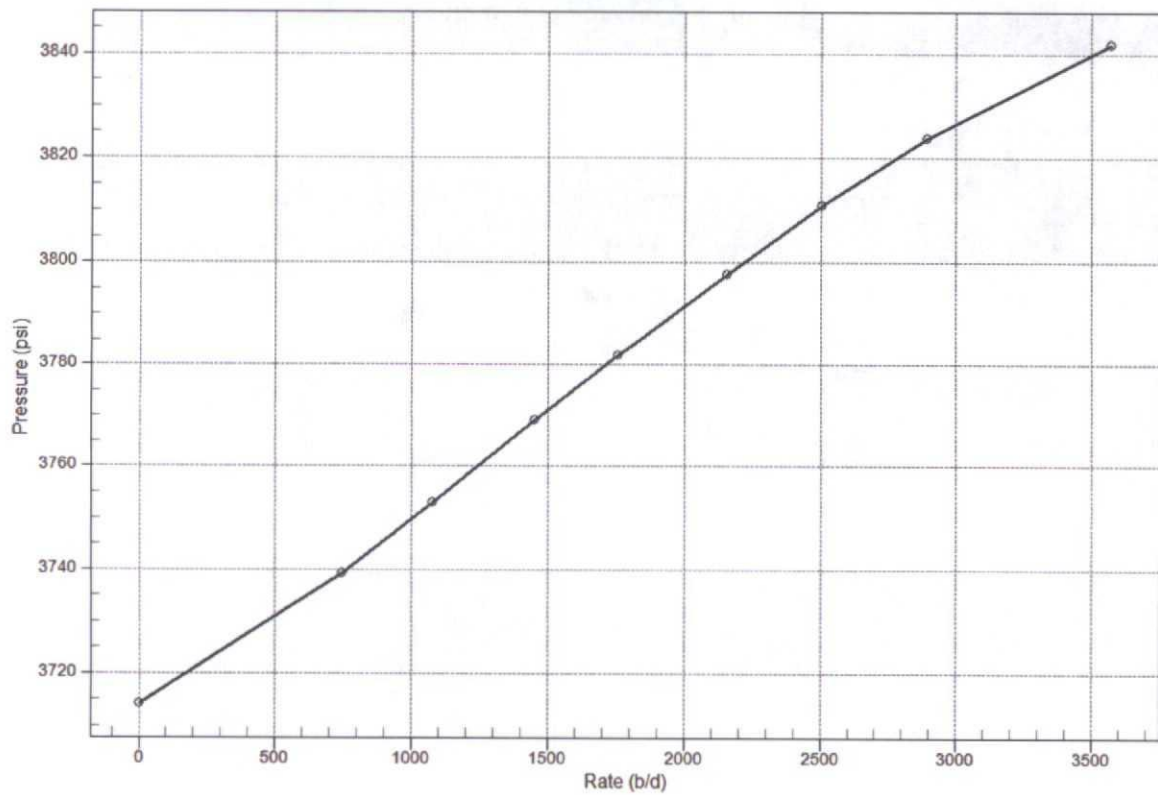
| Rate<br>b/d | Pressure<br>psi | Temperature<br>degF | Gradient<br>psi/rate |
|-------------|-----------------|---------------------|----------------------|
| 0.00        | 3714.14         | 96.94               | 0.0000               |
| 748.00      | 3739.14         | 92.59               | 0.0334               |
| 1080.00     | 3752.95         | 88.87               | 0.0416               |
| 1454.00     | 3769.17         | 86.15               | 0.0434               |
| 1756.00     | 3781.99         | 85.30               | 0.0424               |
| 2160.00     | 3797.79         | 84.64               | 0.0391               |
| 2505.00     | 3810.98         | 84.26               | 0.0382               |
| 2894.00     | 3823.66         | 84.21               | 0.0326               |
| 3571.00     | 3841.83         | 84.53               | 0.0268               |

ARCHER WIRELINE

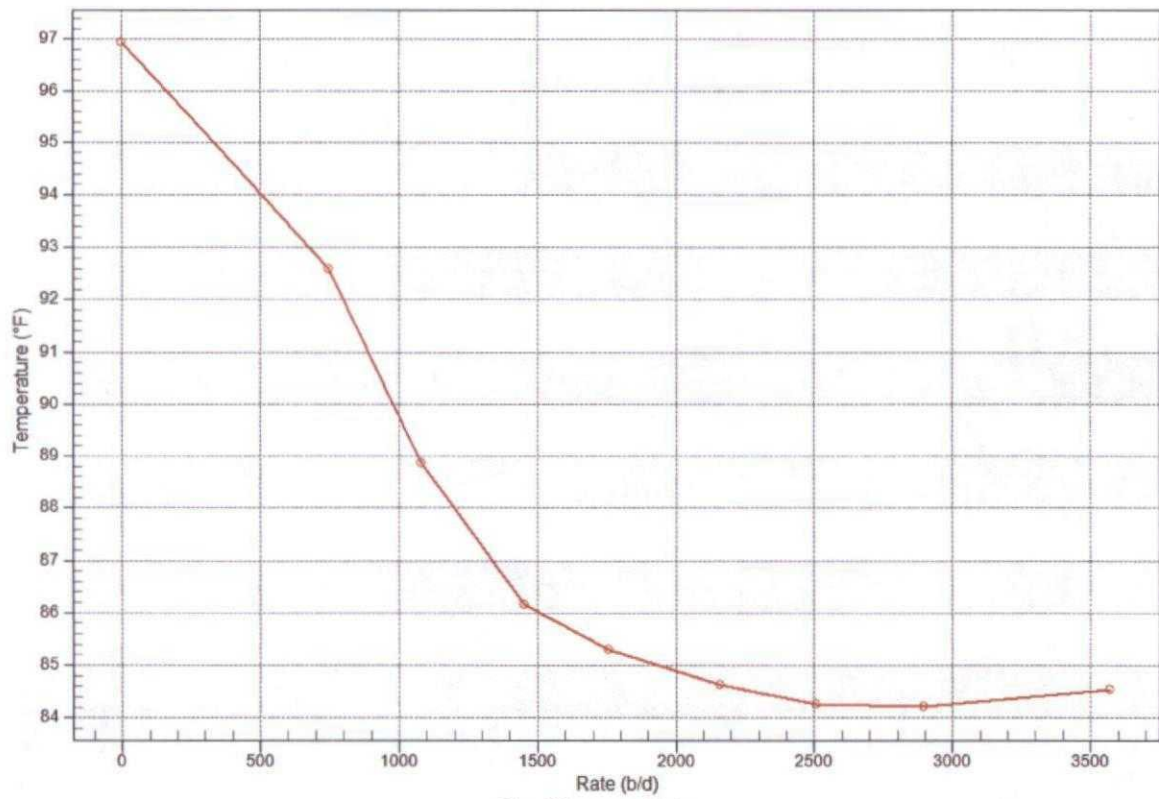
# CVU # 113



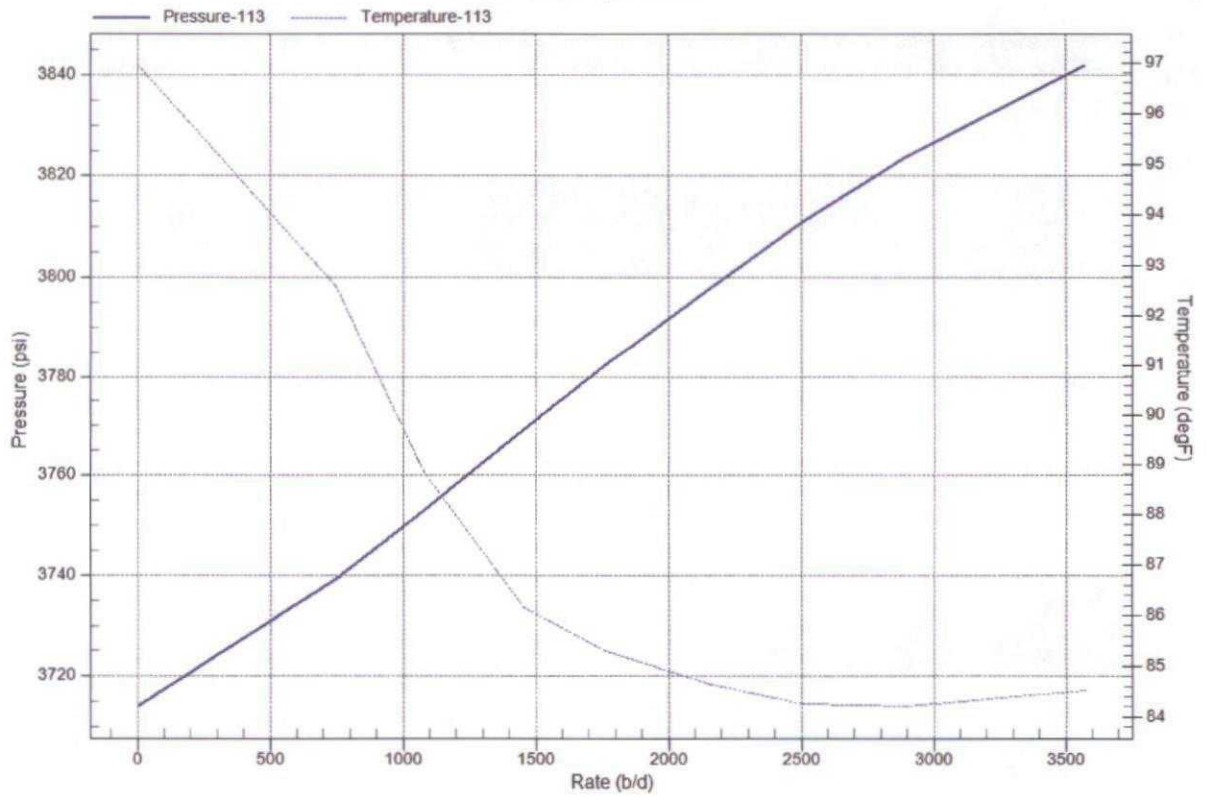
## Pressure vs. Rate



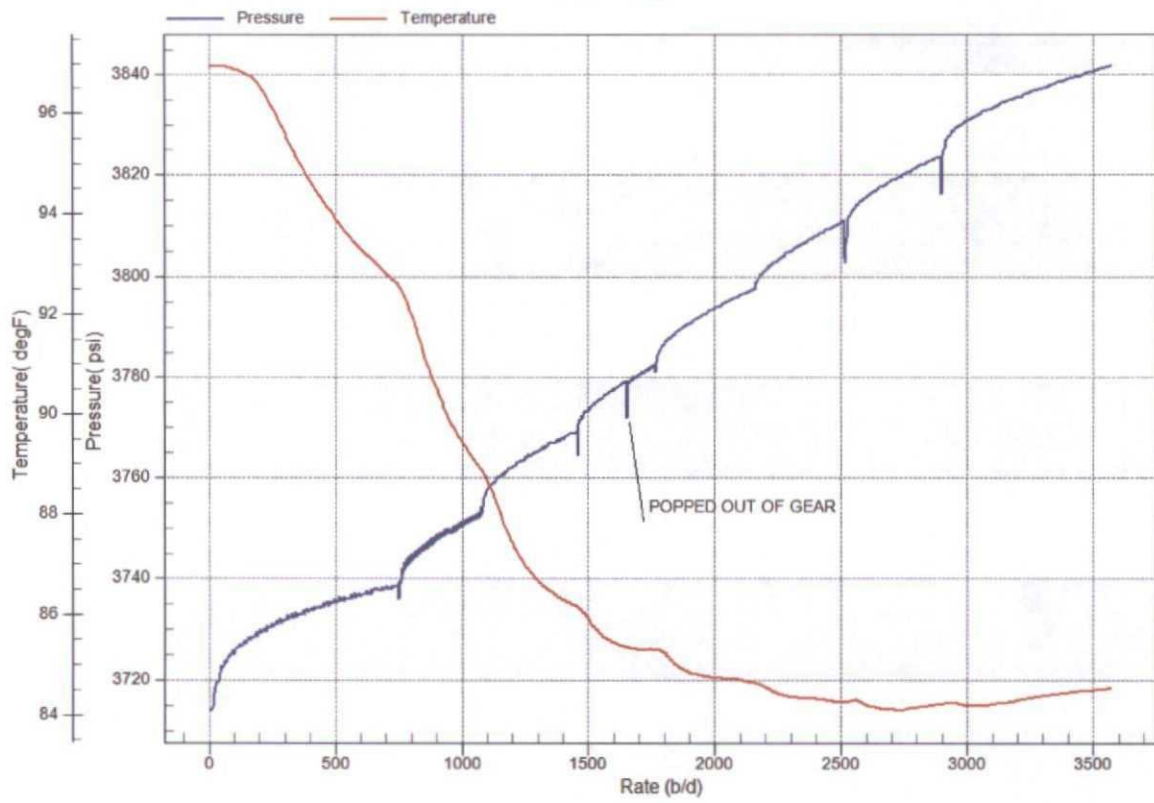
Temperature vs. Rate



Pres/Temp vs Rate



### Pressure Log

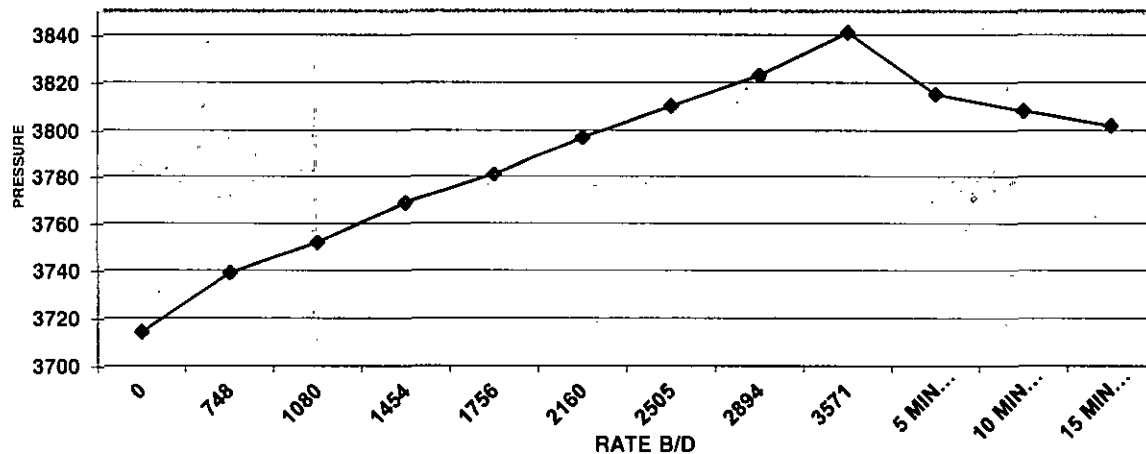


# Archer

## STEP RATE TEST

| RATE B/D            | Date                      | Time     | BH PRESS | SURF. PRESS                                                                | Comments        |
|---------------------|---------------------------|----------|----------|----------------------------------------------------------------------------|-----------------|
| 0                   | 6/29/2015                 | 8:35 AM  | 3714     | 1710                                                                       |                 |
| 748                 | 6/29/2015                 | 8:50 AM  | 3739     | 1775                                                                       |                 |
| 1080                | 6/29/2015                 | 9:05 AM  | 3752     | 1875                                                                       |                 |
| 1454                | 6/29/2015                 | 9:20 AM  | 3769     | 1950                                                                       |                 |
| 1756                | 6/29/2015                 | 9:35 AM  | 3781     | 2025                                                                       |                 |
| 2160                | 6/29/2015                 | 9:50 AM  | 3797     | 2100                                                                       |                 |
| 2505                | 6/29/2015                 | 10:05 AM | 3810     | 2175                                                                       |                 |
| 2894                | 6/29/2015                 | 10:20 AM | 3823     | 2275                                                                       | SOFT FRAC       |
| 3571                | 6/29/2015                 | 10:35 AM | 3841     | 2475                                                                       |                 |
| 5 MIN FALL OFF      | 6/29/2015                 | 10:40 AM | 3815     | 1900                                                                       |                 |
| 10 MIN FALL OFF     | 6/29/2015                 | 10:45 AM | 3808     | 1875                                                                       |                 |
| 15 MIN FALL OFF     | 6/29/2015                 | 10:50 AM | 3802     | 1860                                                                       |                 |
| Company:            | CHEVRON                   |          |          | Recorded By:                                                               | T. STANCZAK     |
| Well:               | CENTRAL VACUUM UNIT # 113 |          |          | Witnessed By:                                                              |                 |
| Field:              | VACUUM                    |          |          | Truck Number:                                                              | 104             |
| County:             | LEA                       |          |          | District:                                                                  | LEVELLAND       |
| State:              | NEW MEXICO                |          |          | Tool Number:                                                               |                 |
| Injecton            | WATER                     |          |          | Test Type:                                                                 | STEP RATE TESTS |
| Shut In Time:       | 10:35 AM                  |          |          | SOFT FRAC @ 2894 B/D<br>2275 SURFACE PRESSURE<br>3823 BOTTOM HOLE PRESSURE |                 |
| Total Shut In Time: | 15 MIN                    |          |          |                                                                            |                 |
| Tubing Size:        | 2.375"                    |          |          |                                                                            |                 |
| Open Hole:          | N/A                       |          |          |                                                                            |                 |
| Perforations:       | 4350'-4707'               |          |          |                                                                            |                 |
| Plug Back Depth     | 4750'                     |          |          |                                                                            |                 |

RATE VS. PRESSURE



Submit 1 Copy To Appropriate District  
Office  
District I - (575) 393-6161  
1625 N. French Dr., Hobbs, NM 88240  
District II - (575) 748-1283  
811 S. First St., Artesia, NM 88210  
District III - (505) 334-6178  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV - (505) 476-3460  
1220 S. St. Francis Dr., Santa Fe, NM  
87505

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
Revised July 18, 2013

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

|                                                                                                     |
|-----------------------------------------------------------------------------------------------------|
| WELL API NO<br>30-025-27971                                                                         |
| 5. Indicate Type of Lease<br>STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/> |
| 6. State Oil & Gas Lease No.                                                                        |
| 7. Lease Name or Unit Agreement Name<br>CENTRAL VACUUM UNIT                                         |
| 8. Well Number 161                                                                                  |
| 9. OGRID Number 4323                                                                                |
| 10. Pool name or Wildcat<br>VACUUM; GRAYBURG SAN ANDRES                                             |

SUNDRY NOTICES AND REPORTS ON WELLS  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A  
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH  
PROPOSALS.)

|                                                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other INJECTOR                                  |
| 2. Name of Operator<br>CHEVRON U.S.A. INC.                                                                                                      |
| 3. Address of Operator<br>15 SMITH ROAD, MIDLAND, TEXAS 79705                                                                                   |
| 4. Well Location<br>Unit Letter: M 180 feet from SOUTH line and 10 feet from the WEST line<br>Section 36 Township 17S Range 34E NMPM County LEA |

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐  
DOWNHOLE COMMINGLE ☐  
CLOSED-LOOP SYSTEM ☐  
OTHER:

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ P AND A ☐  
CASING/CEMENT JOB ☐

OTHER: RESULTS OF STEP RATE TEST

13. Describe proposed or completed operations. (Clearly state all pertinent details; and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

PLEASE FIND ATTACHED, RESULTS OF A STEP RATE TEST THAT WAS RUN ON THE SUBJECT WELL.  
PLEASE APPROVE HIGHER PRESSURE LIMITS AS THIS TEST INDICATES.

EXPECTED RATE, BWPD - 3200  
EXPECTED PRESSURE, PSI - 2500

*water only*

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE

*Denise Pinkerton*

TITLE REGULATORY SPECIALIST

DATE 07/15/2015

Type or print name DENISE PINKERTON  
For State Use Only

E-mail address: [leakejd@chevron.com](mailto:leakejd@chevron.com)

PHONE: 432-687-7375

APPROVED BY: \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

Conditions of Approval (if any):

# **CHEVRON**

## **CENTRAL VACUUM UNIT # 161**

June 18, 2015

## JOB INFORMATION SHEET

| Company Information                                                   |                                            |
|-----------------------------------------------------------------------|--------------------------------------------|
| Company Name:                                                         | CHEVRON                                    |
| Address:                                                              | 1500 LOUISIANA STREET<br>HOUSTON, TX 77002 |
| Well Information                                                      |                                            |
| Well Name:                                                            | CENTRAL VACUUM UNIT # 161                  |
| Field – Pool:                                                         | VACUUM                                     |
| Status:                                                               | SHUT-IN                                    |
| Test Information                                                      |                                            |
| Type of Test:                                                         | STEP RATE TEST                             |
| Gauge Depth:                                                          | 4360'                                      |
| Production Interval:                                                  | 4391'-4727'                                |
| Production Through:                                                   | TUBING                                     |
| Tubing Pressure:                                                      | 2625 psi                                   |
| Casing Pressure:                                                      | 0 psi                                      |
| Shut In Time                                                          | 11:15 AM                                   |
| Status:                                                               | SHUT-IN                                    |
| Temperature @ Run Depth                                               | 88.78 degF                                 |
| Surface Temperature:                                                  | 81.86 degF                                 |
| Comments                                                              |                                            |
| FRAC @ 3585 B/D<br>4300 BOTTOM HOLE PRESSURE<br>2625 SURFACE PRESSURE |                                            |

ARCHER WIRELINE

CHEVRON

## WELL INFORMATION SHEET

|               |                           |                         |              |
|---------------|---------------------------|-------------------------|--------------|
| Well:         | CENTRAL VACUUM UNIT # 161 |                         |              |
| Well License: |                           | Unique Well Identifier: | 30-025-27971 |
| Company:      | CHEVRON                   |                         |              |
| Field         | VACUUM                    |                         |              |

|            |          |     |
|------------|----------|-----|
| Location:  | County:  | LEA |
| Formation: | State:   | NM  |
| Purpose:   | Country: | USA |

|                                  |       |                       |        |
|----------------------------------|-------|-----------------------|--------|
| Total Depth:                     | 4360' | ID Borehole:          | N/A    |
| Packer Depth:                    | 4304' | ID Production Casing: | 5"     |
| Depth of whipstock:              | N/A   | OD Production Tubing: | 2.375" |
| Depth at which casing is landed: | 4800' | ID Production Tubing: | 2"     |
| Depth at which tubing is landed: | 4304' | ID Drill Pipe:        | N/A    |

ARCHER WIRELINE

## Gradient Data Report

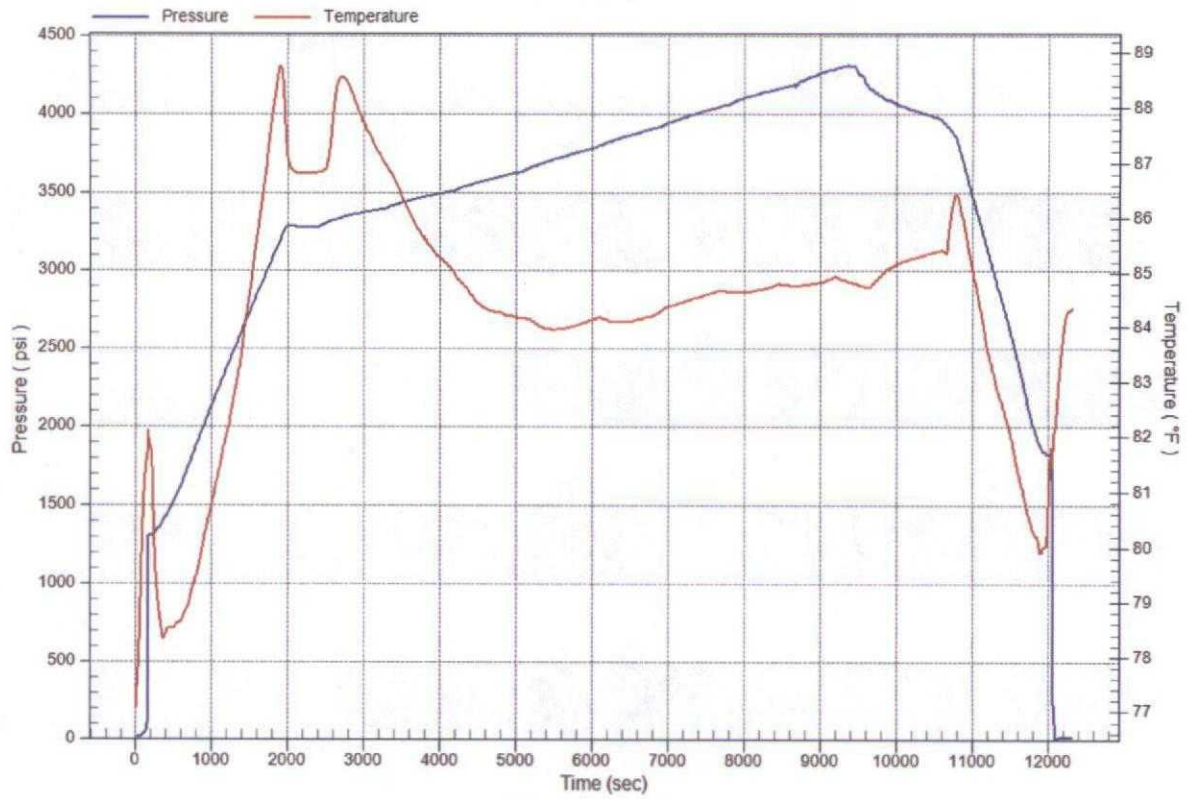
CHEVRON  
CENTRAL VACUUM UNIT # 161

Gradient Data Table

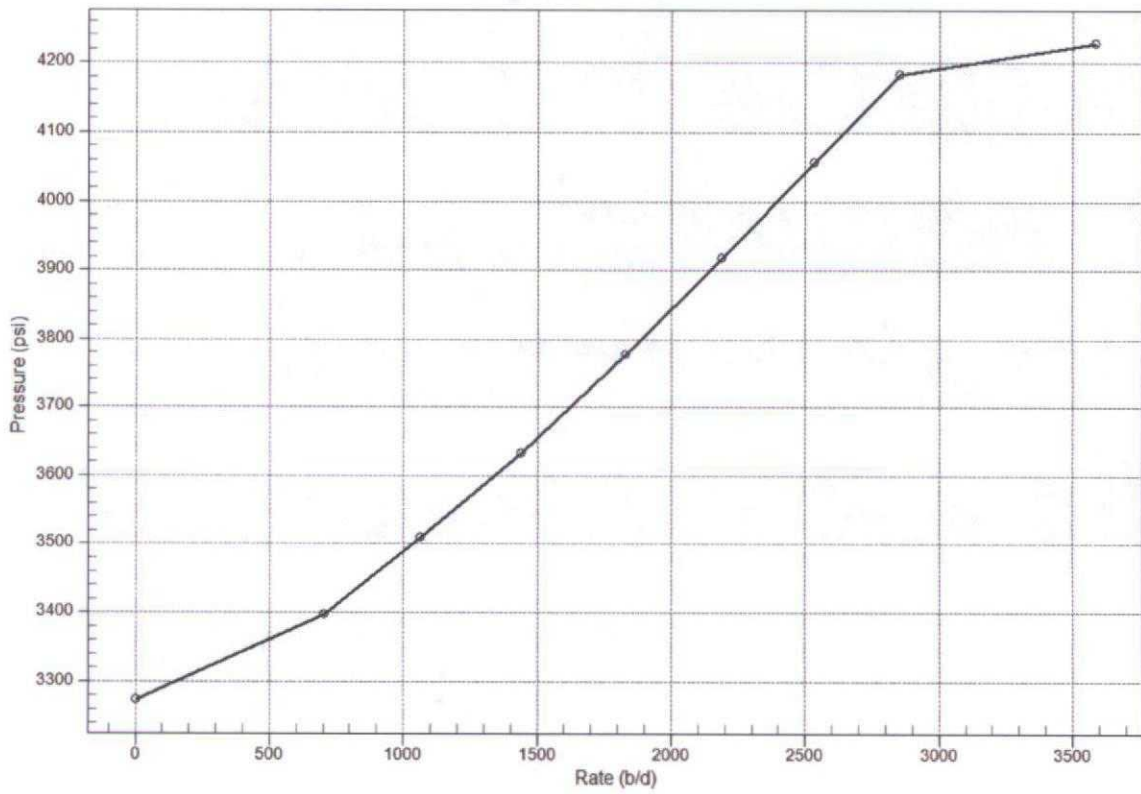
| Rate<br>b/d | Pressure<br>psi | Temperature<br>degF | Gradient<br>psi/rate |
|-------------|-----------------|---------------------|----------------------|
| 0.00        | 3273.35         | 86.82               | 0.0000               |
| 705.00      | 3396.33         | 87.00               | 0.1744               |
| 1065.00     | 3509.35         | 85.03               | 0.3140               |
| 1440.00     | 3632.51         | 84.16               | 0.3284               |
| 1828.00     | 3777.74         | 84.14               | 0.3743               |
| 2188.00     | 3918.09         | 84.29               | 0.3899               |
| 2534.00     | 4056.84         | 84.65               | 0.4010               |
| 2851.00     | 4183.89         | 84.76               | 0.4008               |
| 3585.00     | 4228.33         | 84.76               | 0.0606               |

ARCHER WIRELINE

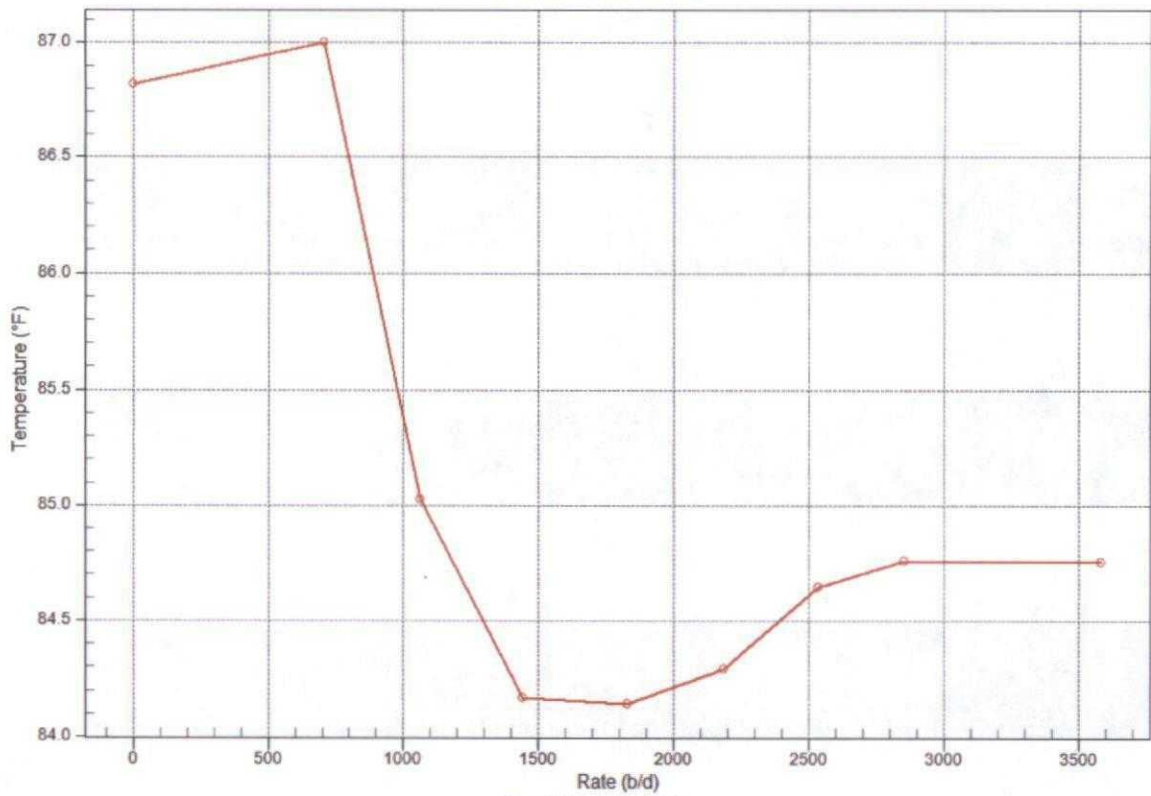
# CVU # 161



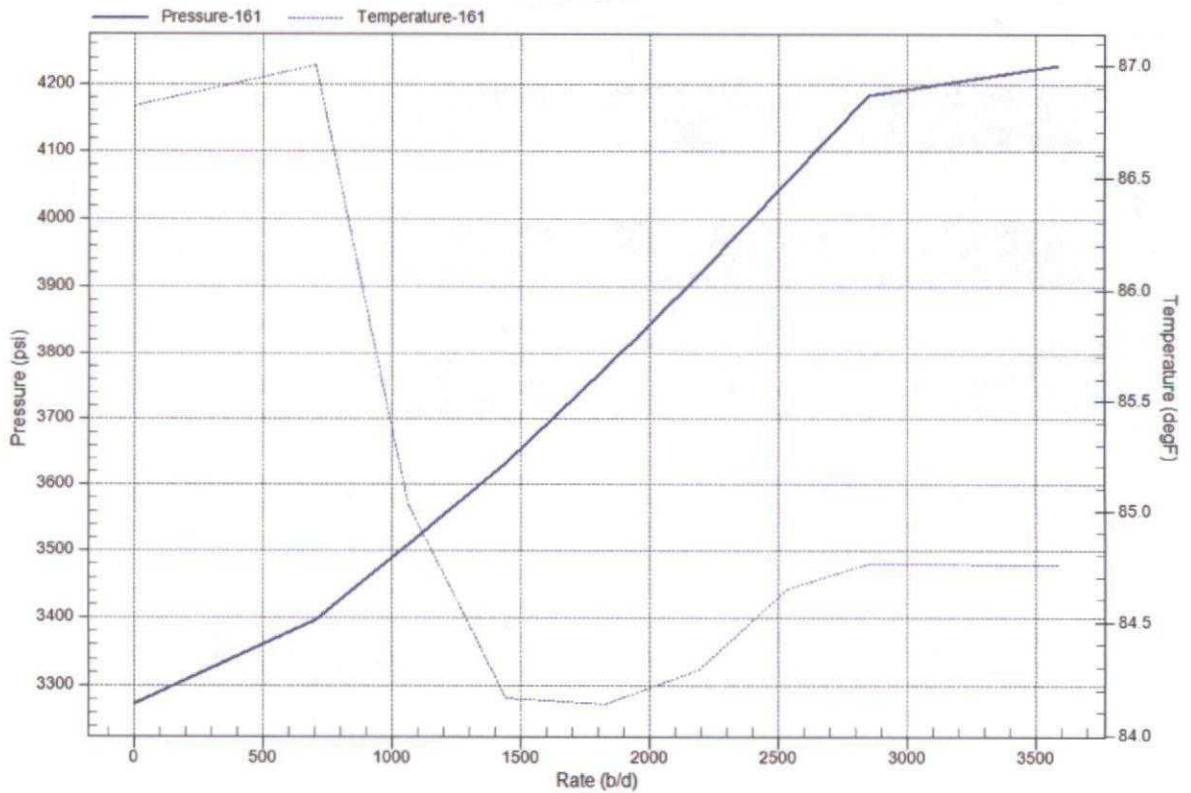
## Pressure vs. Rate



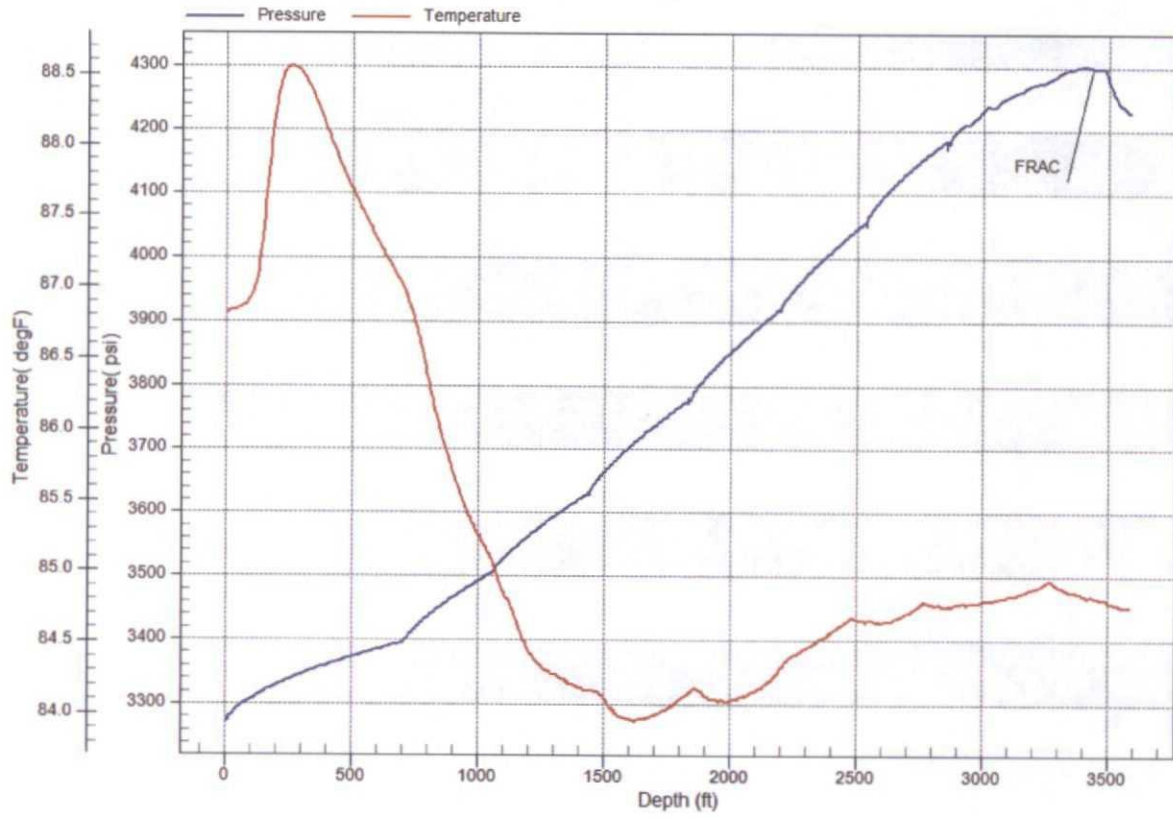
Temperature vs. Rate



Pres/Temp vs Rate



# Pressure Log

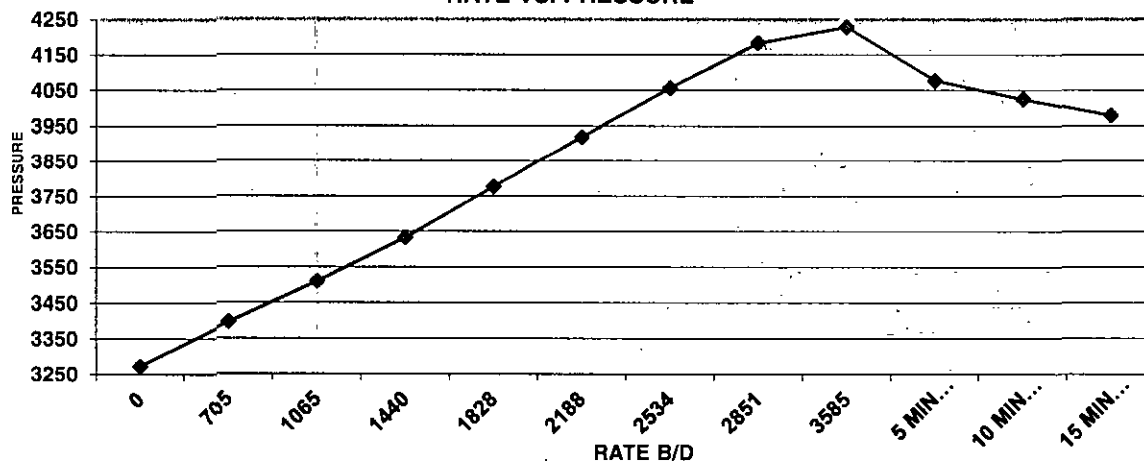


# Archer

## STEP RATE TEST

| RATE B/D            | Date                      | Time     | BH PRESS | SURF. PRESS               | Comments        |
|---------------------|---------------------------|----------|----------|---------------------------|-----------------|
| 0                   | 6/18/2015                 | 9:15 AM  | 3273     | 1275                      |                 |
| 705                 | 6/18/2015                 | 9:30 AM  | 3396     | 1400                      |                 |
| 1065                | 6/18/2015                 | 9:45 AM  | 3509     | 1525                      |                 |
| 1440                | 6/18/2015                 | 10:00 AM | 3632     | 1700                      |                 |
| 1828                | 6/18/2015                 | 10:15 AM | 3777     | 1900                      |                 |
| 2188                | 6/18/2015                 | 10:30 AM | 3918     | 2075                      |                 |
| 2534                | 6/18/2015                 | 10:45 AM | 4056     | 2275                      |                 |
| 2851                | 6/18/2015                 | 11:00 AM | 4183     | 2450                      |                 |
| 3585                | 6/18/2015                 | 11:15 AM | 4228     | 2625                      | FRAC            |
| 5 MIN FALL OFF      | 6/18/2015                 | 11:20 AM | 4077     | 2100                      |                 |
| 10 MIN FALL OFF     | 6/18/2015                 | 11:25 AM | 4025     | 2050                      |                 |
| 15 MIN FALL OFF     | 6/18/2015                 | 11:30 AM | 3979     | 2025                      |                 |
| Company:            | CHEVRON                   |          |          | Recorded By:              | T. STANCZAK     |
| Well:               | CENTRAL VACUUM UNIT # 161 |          |          | Witnessed By:             |                 |
| Field:              | VACUUM                    |          |          | Truck Number:             | 104             |
| County:             | LEA                       |          |          | District:                 | LEVELLAND       |
| State:              | NEW MEXICO                |          |          | Tool Number:              |                 |
| Injecton            | WATER                     |          |          | Test Type:                | STEP RATE TESTS |
| Shut In Time:       | 11:15 AM                  |          |          | FRAC @ 3585 B/D           |                 |
| Total Shut In Time: | 15 MIN                    |          |          | 4300 BOTTOM HOLE PRESSURE |                 |
| Tubing Size:        | 2.375"                    |          |          | 2625 SURFACE PRESSURE     |                 |
| Open Hole:          | N/A                       |          |          |                           |                 |
| Perforations:       | 4391'-4727'               |          |          |                           |                 |
| Plug Back Depth     | 4730'                     |          |          |                           |                 |

RATE VS. PRESSURE



Submit 1 Copy To Appropriate District Office  
District I - (575) 393-6161  
1625 N. French Dr., Hobbs, NM 88240  
District II - (575) 748-1283  
811 S. First St., Artesia, NM 88210  
District III - (505) 334-6178  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV - (505) 476-3460  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
Revised July 18, 2013

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

|                                                                                                                                                                                                               |  |                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------|
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b><br>(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.) |  | WELL API NO.<br>30-025-38849                                                                        |
| 1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other INJECTOR                                                                                                           |  | 5. Indicate Type of Lease<br>STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/> |
| 2. Name of Operator<br>CHEVRON U.S.A. INC.                                                                                                                                                                    |  | 6. State Oil & Gas Lease No.                                                                        |
| 3. Address of Operator<br>15 SMITH ROAD, MIDLAND, TEXAS 79705                                                                                                                                                 |  | 7. Lease Name or Unit Agreement Name<br>CENTRAL VACUUM UNIT                                         |
| 4. Well Location<br>Unit Letter: P 10 feet from SOUTH line and 420 feet from the EAST line<br>Section 36 Township 17S Range 34E NMPM County LEA                                                               |  | 8. Well Number 238                                                                                  |
| 11. Elevation (Show whether DR, RKB, RT, GR, etc.)                                                                                                                                                            |  | 9. OGRID Number 4323                                                                                |
|                                                                                                                                                                                                               |  | 10. Pool name or Wildcat<br>VACUUM; GRAYBURG SAN ANDRES                                             |

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

|                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>NOTICE OF INTENTION TO:</b><br>PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/><br>TEMPORARILY ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/><br>PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPL <input type="checkbox"/><br>DOWNHOLE COMMINGLE <input type="checkbox"/><br>CLOSED-LOOP SYSTEM <input type="checkbox"/><br>OTHER: | <b>SUBSEQUENT REPORT OF:</b><br>REMEDIAL WORK <input type="checkbox"/> ALTERING CASING <input type="checkbox"/><br>COMMENCE DRILLING OPNS. <input type="checkbox"/> P AND A <input type="checkbox"/><br>CASING/CEMENT JOB <input type="checkbox"/><br>OTHER: RESULTS OF STEP RATE TEST |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

PLEASE FIND ATTACHED, RESULTS OF A STEP RATE TEST THAT WAS RUN ON THE SUBJECT WELL.  
PLEASE APPROVE HIGHER PRESSURE LIMITS AS THIS TEST INDICATES.

EXPECTED RATE, BWPD - 2500  
EXPECTED PRESSURE, PSI - 2300

*water only*

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE

*Denise Pinkerton*

TITLE REGULATORY SPECIALIST

DATE 07/15/2015

Type or print name DENISE PINKERTON

E-mail address: [leakejd@chevron.com](mailto:leakejd@chevron.com)

PHONE: 432-687-7375

For State Use Only

APPROVED BY:

TITLE

DATE

Conditions of Approval (if any):

# **CHEVRON**

## **CENTRAL VACUUM UNIT # 238**

June 30, 2015

## JOB INFORMATION SHEET

| Company Information                                                                            |                                            |
|------------------------------------------------------------------------------------------------|--------------------------------------------|
| Company Name:                                                                                  | CHEVRON                                    |
| Address:                                                                                       | 1500 LOUISIANA STREET<br>HOUSTON, TX 77002 |
| Well Information                                                                               |                                            |
| Well Name:                                                                                     | CENTRAL VACUUM UNIT # 238                  |
| Field – Pool:                                                                                  | VACUUM                                     |
| Status:                                                                                        | SHUT-IN                                    |
| Test Information                                                                               |                                            |
| Type of Test:                                                                                  | STEP RATE TEST                             |
| Gauge Depth:                                                                                   | 4305'                                      |
| Production Interval:                                                                           | 4325'-4856'                                |
| Production Through:                                                                            | TUBING                                     |
| Tubing Pressure:                                                                               | 2750 PSI                                   |
| Casing Pressure:                                                                               | 0 psi                                      |
| Shut In Time                                                                                   | 11:27 AM                                   |
| Status:                                                                                        | SHUT-IN                                    |
| Temperature @ Run Depth                                                                        | 92.26 degF                                 |
| Surface Temperature:                                                                           | 77.67 degF                                 |
| Comments                                                                                       |                                            |
| NO FRAC WAS ACHIEVED<br>PUMP WAS SHUT DOWN @ 2.5 B/M DUE TO SURFACE PRESSURE BEING @ 2750 PSI. |                                            |

ARCHER WIRELINE

CHEVRON

## WELL INFORMATION SHEET

|               |                           |                         |              |
|---------------|---------------------------|-------------------------|--------------|
| Well:         | CENTRAL VACUUM UNIT # 238 |                         |              |
| Well License: |                           | Unique Well Identifier: | 30-025-38849 |
| Company:      | CHEVRON                   |                         |              |
| Field         | VACUUM                    |                         |              |

|            |          |     |
|------------|----------|-----|
| Location:  | County:  | LEA |
| Formation: | State:   | NM  |
| Purpose:   | Country: | USA |

|                                  |       |                       |        |
|----------------------------------|-------|-----------------------|--------|
| Total Depth:                     | 4305' | ID Borehole:          | N/A    |
| Packer Depth:                    | 4268' | ID Production Casing: | 5"     |
| Depth of whipstock:              | N/A   | OD Production Tubing: | 2.375" |
| Depth at which casing is landed: | 5204' | ID Production Tubing: | 2"     |
| Depth at which tubing is landed: | 4268' | ID Drill Pipe:        | N/A    |

ARCHER WIRELINE

## Gradient Data Report

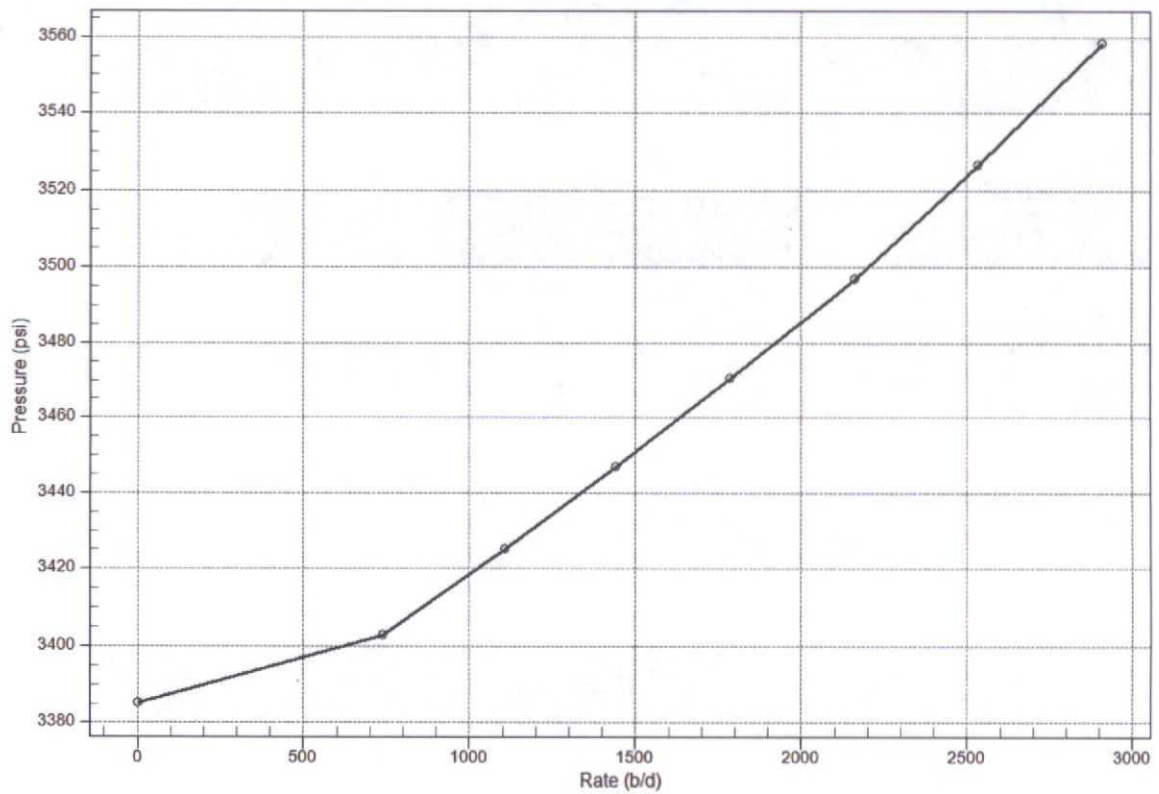
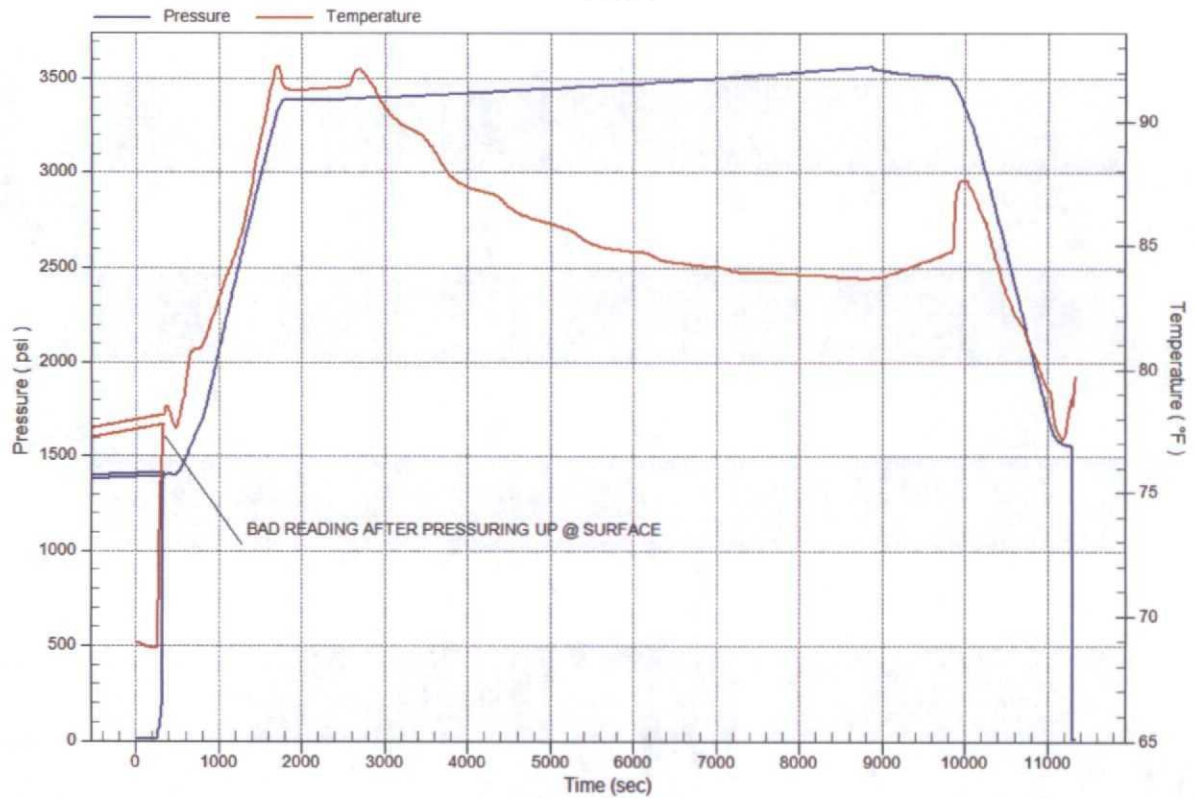
CHEVRON  
CENTRAL VACUUM UNIT # 238

Gradient Data Table

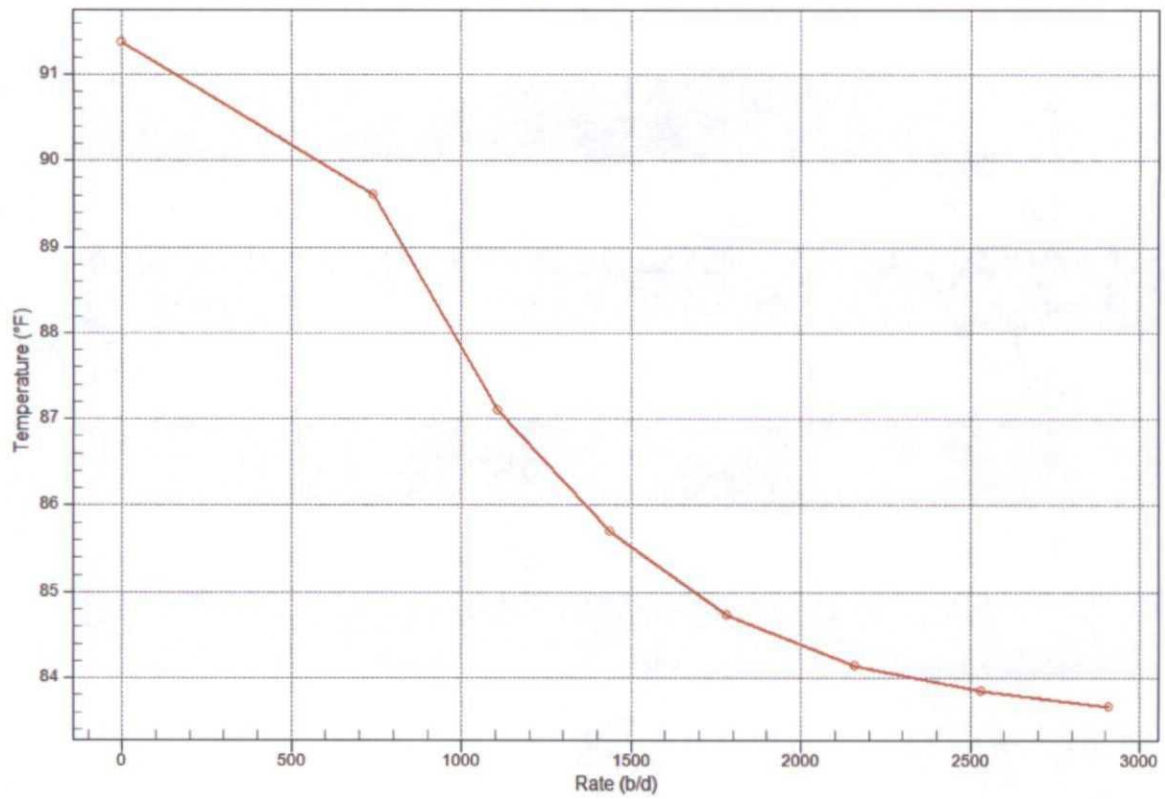
| Rate<br>b/d | Pressure<br>psi | Temperature<br>degF | Gradient<br>psi/rate |
|-------------|-----------------|---------------------|----------------------|
| 0.00        | 3385.16         | 91.38               | 0.0000               |
| 740.00      | 3402.78         | 89.61               | 0.0238               |
| 1108.00     | 3425.09         | 87.10               | 0.0606               |
| 1440.00     | 3446.96         | 85.69               | 0.0659               |
| 1785.00     | 3470.41         | 84.73               | 0.0680               |
| 2160.00     | 3496.99         | 84.13               | 0.0709               |
| 2534.00     | 3526.61         | 83.85               | 0.0792               |
| 2908.00     | 3558.34         | 83.66               | 0.0848               |

ARCHER WIRELINE

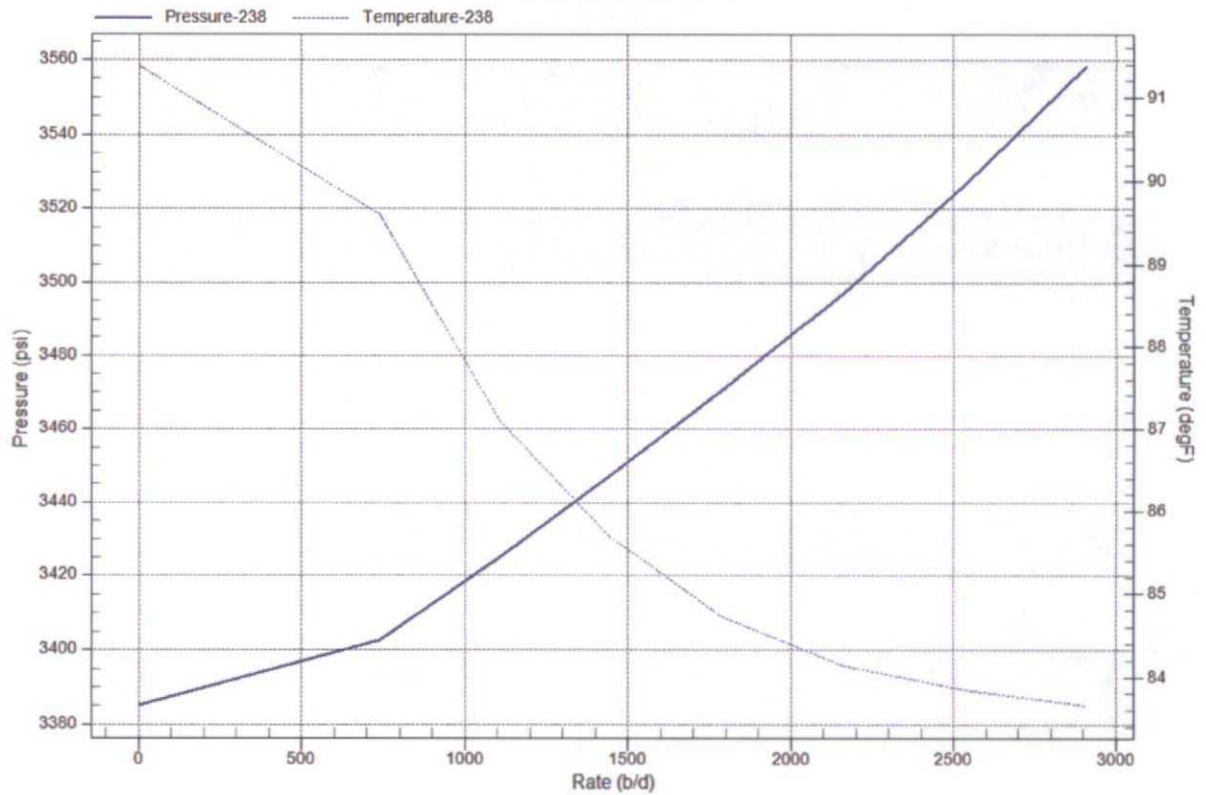
# CVU # 238



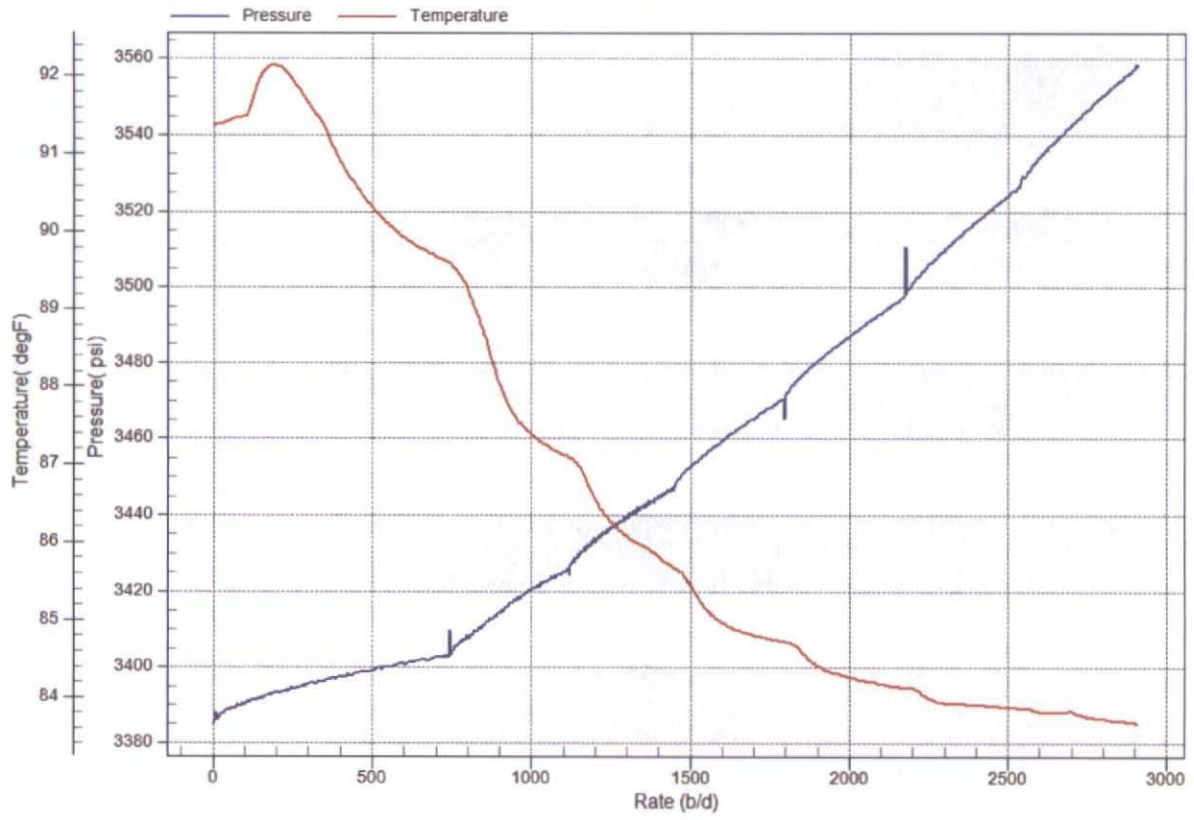
Temperature vs. Rate



Pres/Temp vs Rate



# Pressure Log

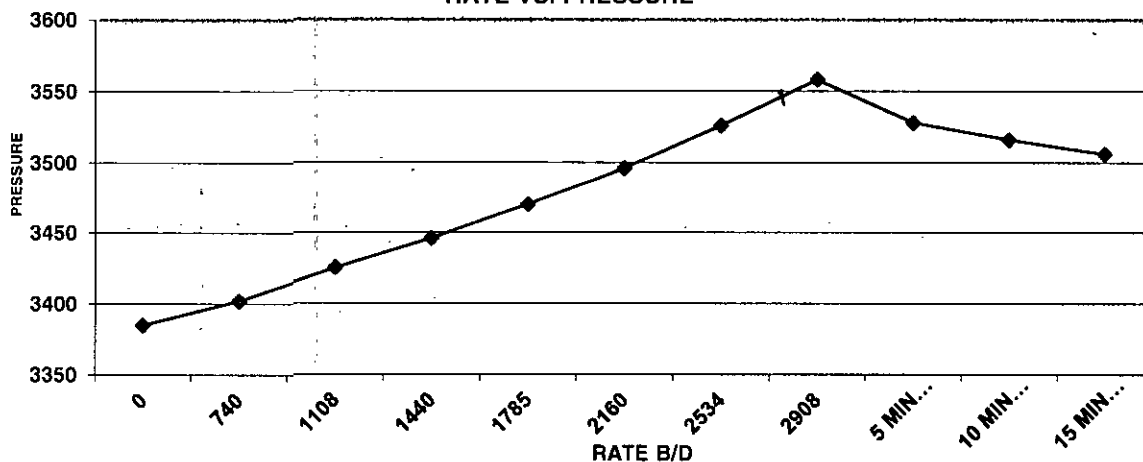


# Archer

## STEP RATE TEST

| RATE B/D                        | Date      | Time     | BH PRESS                   | SURF. PRESS | Comments |
|---------------------------------|-----------|----------|----------------------------|-------------|----------|
| 0                               | 6/30/2015 | 9:40 AM  | 3385                       | 1400        |          |
| 740                             | 6/30/2015 | 9:55 AM  | 3402                       | 1525        |          |
| 1108                            | 6/30/2015 | 10:10 AM | 3425                       | 1650        |          |
| 1440                            | 6/30/2015 | 10:25 AM | 3446                       | 1750        |          |
| 1785                            | 6/30/2015 | 10:40 AM | 3470                       | 1875        |          |
| 2160                            | 6/30/2015 | 10:55 AM | 3496                       | 2010        |          |
| 2534                            | 6/30/2015 | 11:10 AM | 3526                       | 2175        |          |
| 2908                            | 6/30/2015 | 11:25 AM | 3558                       | 2325        | 2275     |
| 5 MIN FALL OFF                  | 6/30/2015 | 11:32 AM | 3528                       | 1625        |          |
| 10 MIN FALL OFF                 | 6/30/2015 | 11:37 AM | 3516                       | 1610        |          |
| 15 MIN FALL OFF                 | 6/30/2015 | 11:42 AM | 3506                       | 1600        |          |
| Company: CHEVRON                |           |          | Recorded By: T. STANCZAK   |             |          |
| Well: CENTRAL VACUUM UNIT # 238 |           |          | Witnessed By:              |             |          |
| Field: VACUUM                   |           |          | Truck Number: 104          |             |          |
| County: LEA                     |           |          | District: LEVELLAND        |             |          |
| State: NEW MEXICO               |           |          | Tool Number:               |             |          |
| Injecton: WATER                 |           |          | Test Type: STEP RATE TESTS |             |          |
| Shut In Time: 11:27 AM          |           |          | NO FRAC WAS ACHIEVED       |             |          |
| Total Shut In Time: 15 MIN      |           |          |                            |             |          |
| Tubing Size: 2.375"             |           |          |                            |             |          |
| Open Hole: N/A                  |           |          |                            |             |          |
| Perforations: 4325'-4856'       |           |          |                            |             |          |
| Plug Back Depth: 5001'          |           |          |                            |             |          |

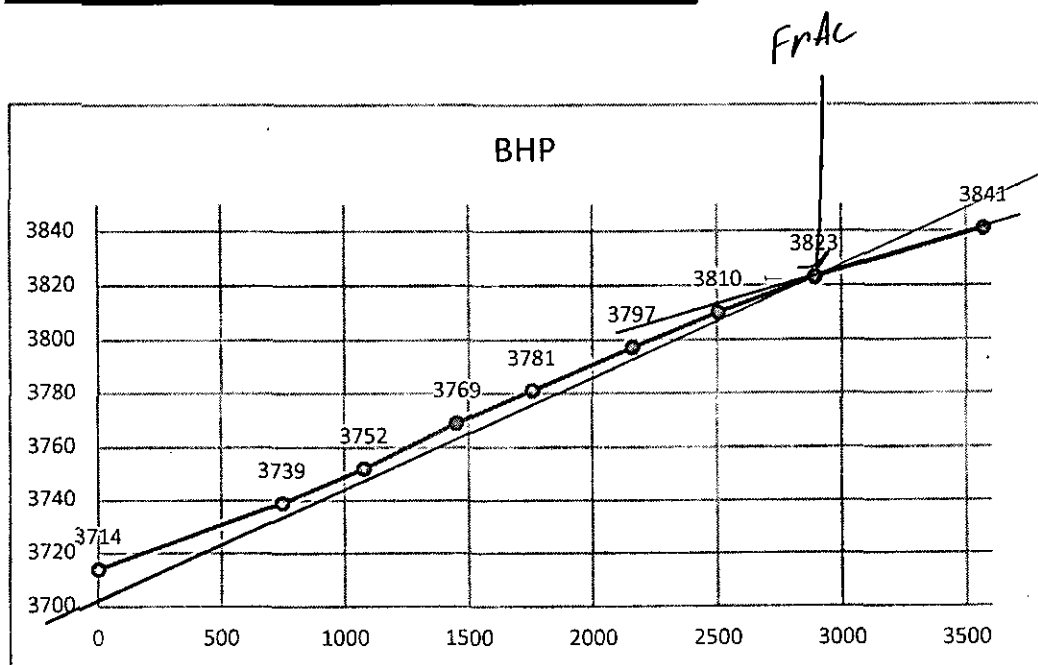
RATE VS. PRESSURE



*No Frac*

# CVU#113 STR

| RATE | BHP  | SURFACE | STEP |      |
|------|------|---------|------|------|
| 0    | 3714 | 1710    | 15   |      |
| 748  | 3739 | 1775    | 15   |      |
| 1080 | 3752 | 1875    | 15   |      |
| 1454 | 3769 | 1950    | 15   |      |
| 1756 | 3781 | 2025    | 15   |      |
| 2160 | 3797 | 2100    | 15   |      |
| 2505 | 3810 | 2175    | 15   |      |
| 2894 | 3823 | 2275    | 15   | FRAC |
| 3571 | 3841 | 2475    | 15   |      |



CVU#113 STR expected pressure is 2200 PSI

CVU#161 STR expected pressure is 2500 PSI

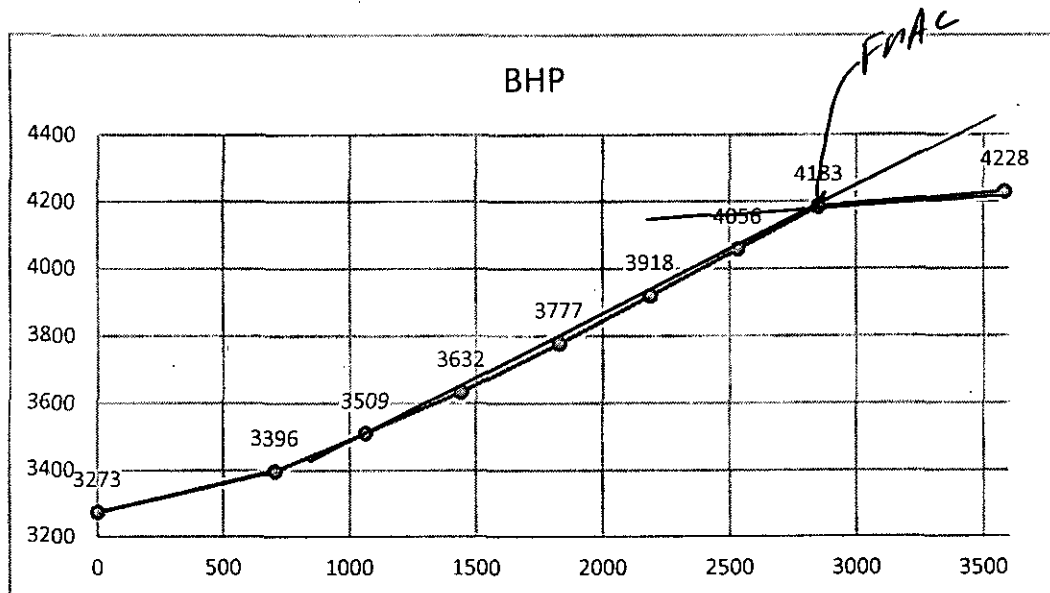
CVU#238 STR expected pressure is 2300 PSI

recommend

2400

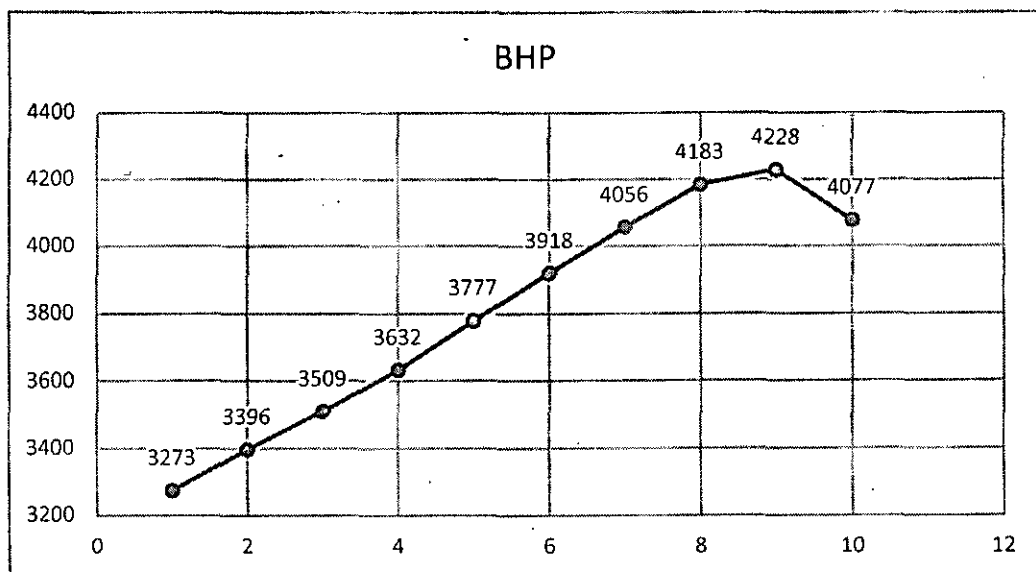
CVU#161 STR

| RATE          | BHP  | SURFACE | STEP |           |
|---------------|------|---------|------|-----------|
| 0             | 3273 | 1275    | 15   |           |
| 705           | 3396 | 1400    | 15   |           |
| 1065          | 3509 | 1525    | 15   |           |
| 1440          | 3632 | 1700    | 15   |           |
| 1828          | 3777 | 1900    | 15   |           |
| 2188          | 3918 | 2075    | 15   |           |
| 2534          | 4056 | 2275    | 15   |           |
| 2851          | 4183 | 2450    | 15   | FRAC/data |
| 3585          | 4228 | 2625    | 15   | FRAC      |
| 5 min falloff | 4077 | 2100    |      |           |



No falloff plotted

| RATE        | BHP  | SURFACE | STEP |           |
|-------------|------|---------|------|-----------|
| 0           | 3273 | 1275    | 15   |           |
| 705         | 3396 | 1400    | 15   |           |
| 1065        | 3509 | 1525    | 15   |           |
| 1440        | 3632 | 1700    | 15   |           |
| 1828        | 3777 | 1900    | 15   |           |
| 2188        | 3918 | 2075    | 15   |           |
| 2534        | 4056 | 2275    | 15   |           |
| 2851        | 4183 | 2450    | 15   | FRAC/data |
| 3585        | 4228 | 2625    | 15   | FRAC      |
| 5 min fallo | 4077 | 2100    |      |           |



falloff plotted