

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]

- [A] Location - Spacing Unit - Simultaneous Dedication
 NSL NSP SD

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.

| | | | |
|--------------------|-----------|--------------------|----------|
| Toya Colvin | | Regulatory Analyst | 07/13/16 |
| Print or Type Name | Signature | Title | Date |
| | | Toya.Colvin@bp.com | |
| | | e-mail Address | |

- IPI 258-A
 - BP America Production Company 873
 2016 JUN 15 A 9:29
 RECEIVED OGD
 Well - Prichard SWD #1
 30-045-2835 Pool
 - SWD
 Entitled
 BLM
 DATA
 SWD + BHP

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. 30-045-28351 |
| 5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/> |
| 6. State Oil & Gas Lease No. Federal Lease NMNM013686 |
| 7. Lease Name or Unit Agreement Name Pritchard SWD |
| 8. Well Number 1 |
| 9. OGRID Number 000778 |
| 10. Pool name or Wildcat SWD; Morrison Bluff Entrada |

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 Gas Well Other

2. Name of Operator
BP America Production Company

3. Address of Operator
737 North Eldridge Pkwy, 12.181A
Houston, TX 77079

4. Well Location
 Unit Letter C : 615 feet from the North line and 1840 feet from the West line
 Section 34 Township 31N Range 09W NMPM County San Juan

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
6061'

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

| | | | |
|--|---|---|--|
| NOTICE OF INTENTION TO: | | SUBSEQUENT REPORT OF: | |
| PERFORM REMEDIAL WORK <input type="checkbox"/> | PLUG AND ABANDON <input type="checkbox"/> | REMEDIAL WORK <input type="checkbox"/> | ALTERING CASING <input type="checkbox"/> |
| TEMPORARILY ABANDON <input type="checkbox"/> | CHANGE PLANS <input type="checkbox"/> | COMMENCE DRILLING OPNS. <input type="checkbox"/> | P AND A <input type="checkbox"/> |
| PULL OR ALTER CASING <input type="checkbox"/> | MULTIPLE COMPL <input type="checkbox"/> | CASING/CEMENT JOB <input type="checkbox"/> | |
| DOWNHOLE COMMINGLE <input type="checkbox"/> | | | |
| CLOSED-LOOP SYSTEM <input type="checkbox"/> | | | |
| OTHER: <input type="checkbox"/> | | OTHER: Step Rate Test Results: Increase Surface Injection Pressure <input checked="" type="checkbox"/> | |

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.

BP requests to increase our max allowable surface injection pressure on the Pritchard SWD 1 to 1925 psi, based on the results of the Step Rate test performed 07/06/2016. Please see the attached documentation supporting our request.

SWD 405

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 Toya Colvin TITLE Regulatory Analyst DATE 07/13/2016

Type or print name Toya Colvin E-mail address: Toya.Colvin@bp.com PHONE: 281-892-5369

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____

Conditions of Approval (if any):

PRITCHARD 001 SWD

Entrada – Water injection

API# 30-045-28351

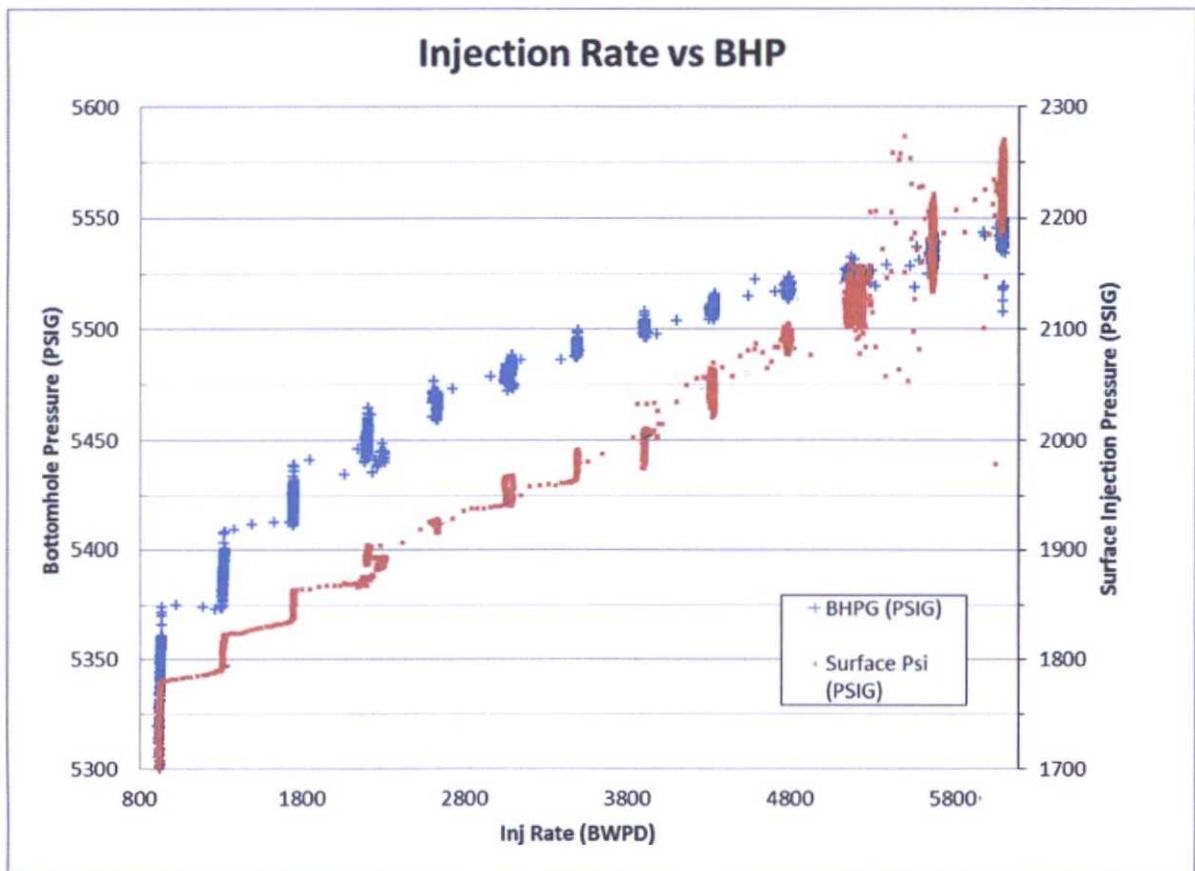
Unit C – Sec 34 – T31N – R09W

San Juan County, New Mexico

Step Rate Test Results:

On July 6, 2016, BP performed a step rate test on the Pritchard SWD 1 to evaluate well to increase maximum allowable surface injection pressure. Bottom hole gauges were set in the profile nipple at the EOT and pressure was collected throughout the test. An NMOCD representative was on site to witness the injection test. A bradenhead test was performed and showed no communication between the bradenhead, the intermediate, or the casing x tubing annulus.

Below are the results of the step rate test. Based on these results, BP requests permission to increase the maximum surface injection pressure to 1925 psi.



**BP America
Pritchard SWD 1
Step Rate**

Sales Order: 903411913

Post Job Report

For: Clyde Lasster

Date: Wednesday, July 06, 2016

Treater: Brian McCann

Notice: Although the information contained in this report is based on sound engineering practices, the copyright owner(s) does (do) not accept any responsibility whatsoever, in negligence or otherwise, for any loss or damage arising from the possession or use of the report whether in terms of correctness or otherwise. The application, therefore, by the user of this report or any part thereof, is solely at the user's own risk.

HALLIBURTON

Table of Contents

1.0 Pumping Schedule3

 1.1 Designed Pumping Schedule3

2.0 Actual Stage Summary4

 2.1 Stage Summary.....4

3.0 Performance Highlights.....5

 3.1 Job Summary5

 3.2 Job Stage Log6

 3.3 Job Event Log.....6

4.0 Attachments8

 4.1 pressure test.....8

 4.2 treatment9

1.0 PUMPING SCHEDULE

1.1 Designed Pumping Schedule

| Stage Number | Description | Slurry Volume gal | Stage Time min |
|--------------|----------------|-------------------|----------------|
| 1 | Step Rate Test | 252 | 20.00 |
| 2 | Step Rate Test | 504 | 20.00 |
| 3 | Step Rate Test | 756 | 20.00 |
| 4 | Step Rate Test | 1008 | 20.00 |
| 5 | Step Rate Test | 1260 | 20.00 |
| 6 | Step Rate Test | 1512 | 20.00 |
| 7 | Step Rate Test | 1764 | 20.00 |
| 8 | Step Rate Test | 2016 | 20.00 |
| 9 | Step Rate Test | 2268 | 20.00 |
| 10 | Step Rate Test | 2520 | 20.00 |
| 11 | Step Rate Test | 2772 | 20.00 |
| 12 | Step Rate Test | 3024 | 20.00 |
| 13 | Step Rate Test | 3276 | 20.00 |
| 14 | Step Rate Test | 3528 | 20.00 |
| 15 | Shut-In | 0 | 0.00 |
| Total | | 26460 | 280.00 |

2.0 ACTUAL STAGE SUMMARY

2.1 Stage Summary

| Stage Number | Stage Time ucts | Start Time ucts | End Time ucts | Time min | Slurry Volume gal |
|--------------|--------------------|--------------------|--------------------|-------------|----------------------|
| 1 | 06-Jul-16 13:08:41 | 13:04:57 | 06-Jul-16 13:08:41 | 3.75 | 29 |
| 2 | 06-Jul-16 13:26:53 | 13:08:42 | 06-Jul-16 13:26:53 | 18.21 | 500 |
| 3 | 06-Jul-16 13:46:11 | 13:26:54 | 06-Jul-16 13:46:11 | 19.30 | 749 |
| 4 | 06-Jul-16 14:05:33 | 13:46:12 | 06-Jul-16 14:05:33 | 19.34 | 994 |
| 5 | 06-Jul-16 14:24:49 | 14:05:34 | 06-Jul-16 14:24:49 | 19.29 | 1250 |
| 6 | 06-Jul-16 14:44:16 | 14:24:50 | 06-Jul-16 14:44:16 | 19.44 | 1497 |
| 7 | 06-Jul-16 15:03:42 | 14:44:17 | 06-Jul-16 15:03:42 | 19.44 | 1750 |
| 8 | 06-Jul-16 15:23:21 | 15:03:43 | 06-Jul-16 15:23:21 | 19.65 | 2006 |
| 9 | 06-Jul-16 15:43:07 | 15:23:22 | 06-Jul-16 15:43:07 | 19.77 | 2257 |
| 10 | 06-Jul-16 16:02:57 | 15:43:08 | 06-Jul-16 16:02:57 | 19.81 | 2508 |
| 11 | 06-Jul-16 16:22:44 | 16:02:58 | 06-Jul-16 16:22:44 | 19.80 | 2769 |
| 12 | 06-Jul-16 16:42:40 | 16:22:45 | 06-Jul-16 16:42:40 | 19.94 | 3021 |
| 13 | 06-Jul-16 17:02:28 | 16:42:41 | 06-Jul-16 17:02:28 | 19.79 | 3278 |
| 14 | 06-Jul-16 17:22:21 | 17:02:29 | 06-Jul-16 17:22:21 | 19.90 | 3529 |
| 15 | 06-Jul-16 17:42:46 | 17:22:22 | 06-Jul-16 17:42:46 | 20.41 | 0 |
| Total | | | | | 26136 |

3.0 PERFORMANCE HIGHLIGHTS

3.1 Job Summary

| | | |
|-----------------------|--------------------|--------------|
| Start Time | 06-Jul-16 10:37:35 | ucts |
| End Time | 06-Jul-16 17:42:46 | ucts |
| Start Averaging Time | 06-Jul-16 13:04:57 | ucts |
| End Averaging Time | 06-Jul-16 17:42:40 | ucts |
| Clean Volume | 26136 | gal |
| Slurry Volume | 26136 | gal |
| Gel Volume | 26136 | gal |
| Load to Recover | 26136 | gal |
| Volumes Pumped | Total | Units |
| TREATED WATER | 26137 | gal |

Disclaimer: The average and maximum values (except volumes and bottom hole values) are based on the start and end averaging times.

3.2 Job Stage Log

| Time ucts | Description | Comment |
|--------------------|-------------|----------------|
| 06-Jul-16 13:04:56 | Stage 1 | Step Rate Test |
| 13:08:41 | Stage 2 | Step Rate Test |
| 13:26:54 | Stage 3 | Step Rate Test |
| 13:46:12 | Stage 4 | Step Rate Test |
| 14:05:33 | Stage 5 | Step Rate Test |
| 14:24:50 | Stage 6 | Step Rate Test |
| 14:44:16 | Stage 7 | Step Rate Test |
| 15:03:43 | Stage 8 | Step Rate Test |
| 15:23:21 | Stage 9 | Step Rate Test |
| 15:43:07 | Stage 10 | Step Rate Test |
| 16:02:57 | Stage 11 | Step Rate Test |
| 16:22:44 | Stage 12 | Step Rate Test |
| 16:42:40 | Stage 13 | Step Rate Test |
| 17:02:29 | Stage 14 | Step Rate Test |
| 17:22:22 | Stage 15 | Shut-In |

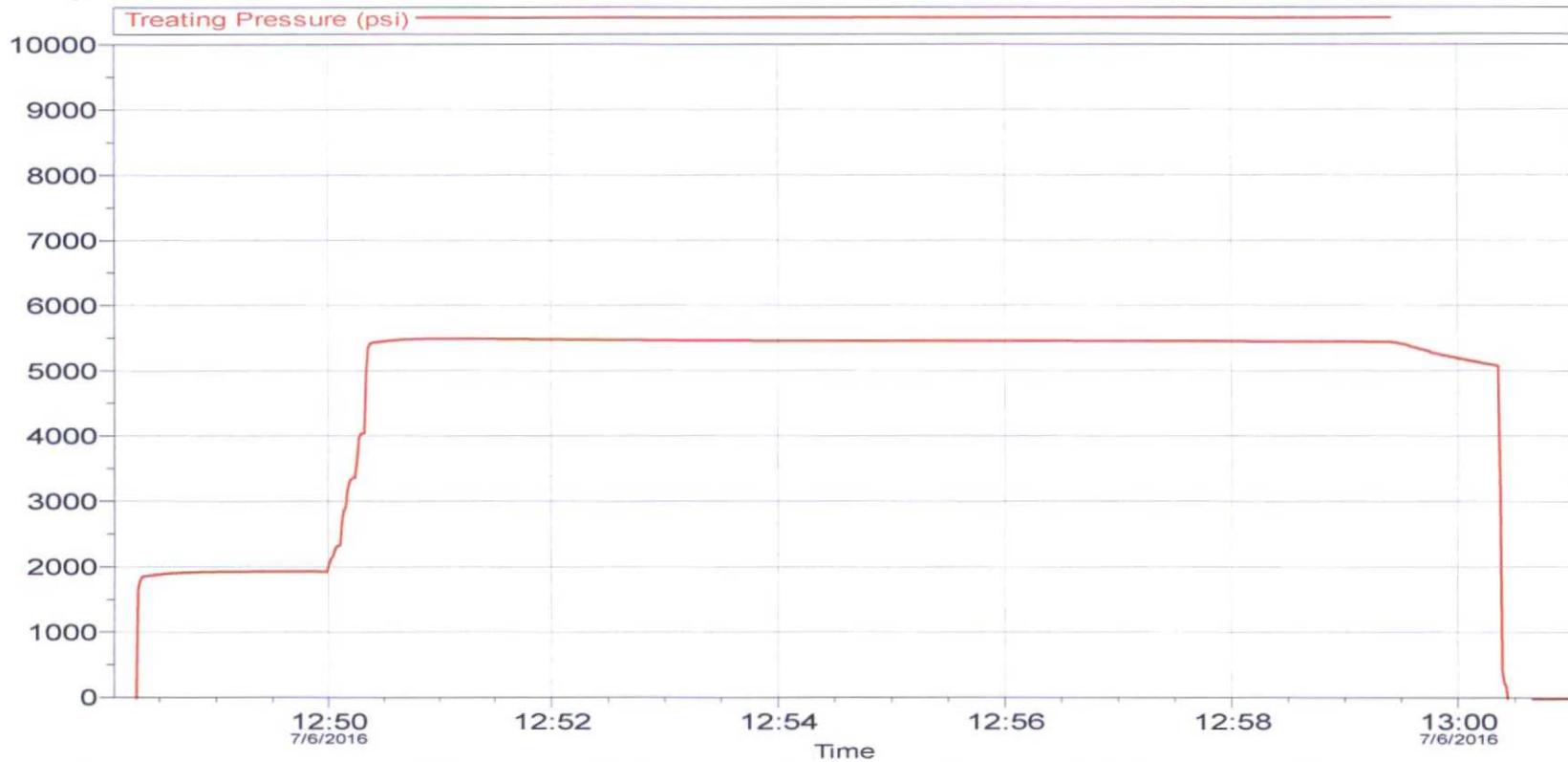
3.3 Job Event Log

| Stage Number | Event Number | Time ucts | Description | Comment |
|--------------|--------------|--------------------|-----------------|-----------------|
| | 1 | 06-Jul-16 10:37:33 | Start Job | Starting Job |
| | 2 | 11:29:33 | Pause | Suspending Job |
| | 3 | 12:48:04 | Resume | Resuming Job |
| 1 | | 13:04:56 | Stage 1 | Step Rate Test |
| | | 13:04:57 | Start Averaging | Start Avg Trt 1 |
| 2 | | 13:08:41 | Stage 2 | Step Rate Test |
| 3 | | 13:26:54 | Stage 3 | Step Rate Test |

| Stage Number | Event Number | Time ucts | Description | Comment |
|--------------|--------------|-----------|-------------------------------|----------------|
| 4 | | 13:46:12 | Stage 4 | Step Rate Test |
| 5 | | 14:05:33 | Stage 5 | Step Rate Test |
| 6 | | 14:24:50 | Stage 6 | Step Rate Test |
| 7 | | 14:44:16 | Stage 7 | Step Rate Test |
| 8 | | 15:03:43 | Stage 8 | Step Rate Test |
| 9 | | 15:23:21 | Stage 9 | Step Rate Test |
| 10 | | 15:43:07 | Stage 10 | Step Rate Test |
| 11 | | 16:02:57 | Stage 11 | Step Rate Test |
| 12 | | 16:22:44 | Stage 12 | Step Rate Test |
| 13 | | 16:42:40 | Stage 13 | Step Rate Test |
| 14 | | 17:02:29 | Stage 14 | Step Rate Test |
| | 4 | 17:22:19 | ISIP | 1615 |
| 15 | | 17:22:22 | Stage 15 | Shut-In |
| | 5 | 17:27:20 | Shut-In Pressure @ 5 Minutes | 1819 |
| | 6 | 17:32:20 | Shut-In Pressure @ 10 Minutes | 1807 |
| | 7 | 17:37:20 | Shut-In Pressure @ 15 Minutes | 1794 |
| | | 17:42:40 | End Averaging | End Avg Trt 1 |
| | 8 | 17:42:52 | End Job | Ending Job |

4.0 ATTACHMENTS

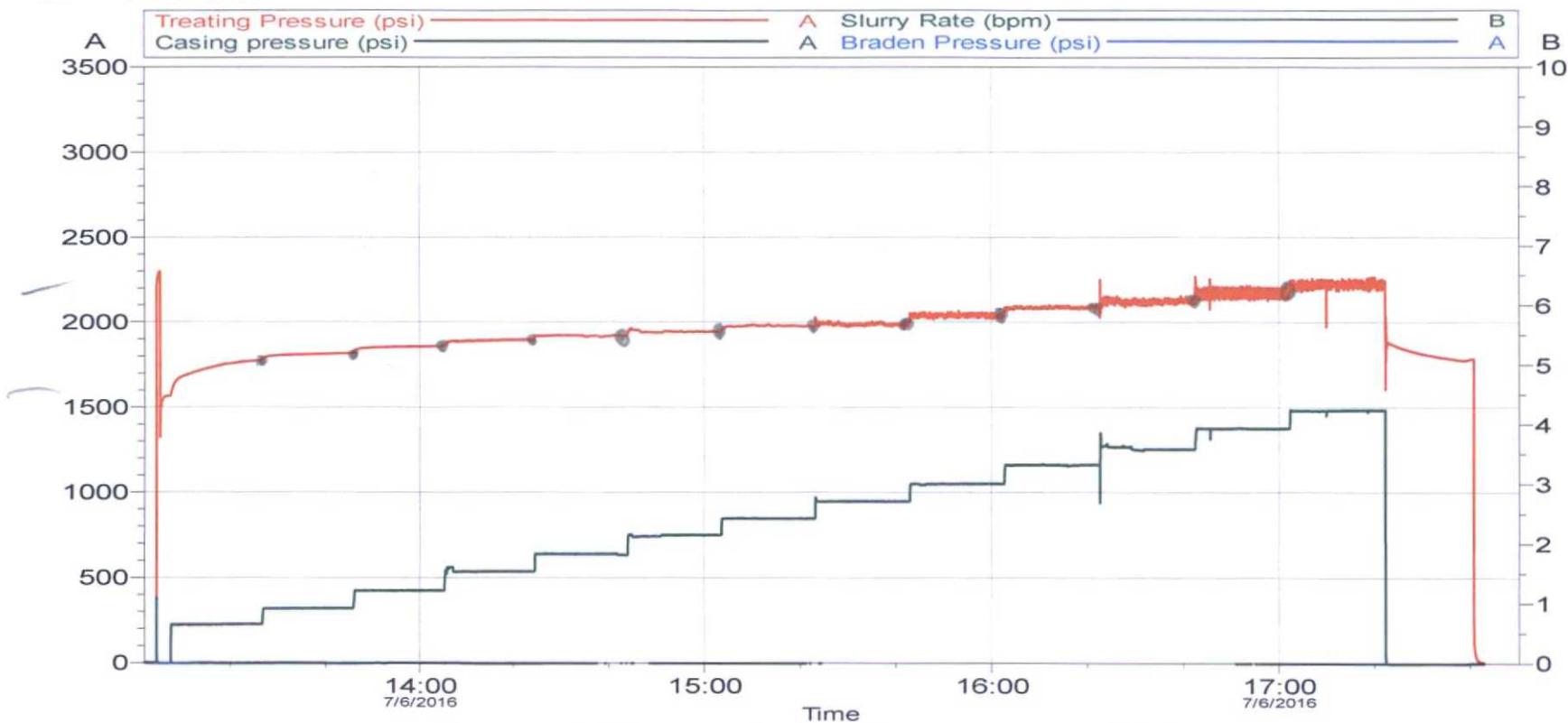
4.1 pressure test



| | | |
|--------------------------------|-------------------------------|--------------------------|
| Customer: Well Description: | Job Date: 06-Jul-2016 UWI: | Sales Order #: 903411913 |
|--------------------------------|-------------------------------|--------------------------|



4.2 treatment



| | | |
|--------------------------------|-------------------------------|--------------------------|
| Customer: Well Description: | Job Date: 06-Jul-2016 UWI: | Sales Order #: 903411913 |
|--------------------------------|-------------------------------|--------------------------|

HALLIBURTON

UNITED STATES
DEPARTMENT OF THE INTERIOR,
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.
NMNM013686

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE – Other instructions on page 2.

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
BP America Production Company

3a. Address
737 North Eldridge Parkway, 12.181A
Houston, TX 77079

3b. Phone No. (include area code)
281-892-5369

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec. 34 T31N R09W NENW 615FNL 1840FWL

7. If Unit of CA/Agreement, Name and/or No.

8. Well Name and No.
Pritchard SWD 1

9. API Well No.
30-045-28351

10. Field and Pool or Exploratory Area
SWD; Morrison Bluff Entrada

11. County or Parish, State
San Juan, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

| TYPE OF SUBMISSION | TYPE OF ACTION | | | |
|---|---|---|--|--|
| <input type="checkbox"/> Notice of Intent | <input type="checkbox"/> Acidize | <input type="checkbox"/> Deepen | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off |
| <input checked="" type="checkbox"/> Subsequent Report | <input type="checkbox"/> Alter Casing | <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Reclamation | <input type="checkbox"/> Well Integrity |
| <input type="checkbox"/> Final Abandonment Notice | <input type="checkbox"/> Casing Repair | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete | <input checked="" type="checkbox"/> Other Increase Surface Injection Pressure (Step Rate Test Results) |
| | <input type="checkbox"/> Change Plans | <input type="checkbox"/> Plug and Abandon | <input type="checkbox"/> Temporarily Abandon | |
| | <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back | <input type="checkbox"/> Water Disposal | |

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

BP requests to increase our max allowable surface injection pressure on the Pritchard SWD 1 to 1925 psi, based on the results of the Step Rate test performed 07/06/2016. Please see the attached documentation supporting our request.

NMOCD Santa Fe Notified via C-103 form.

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)
Toya Colvin

Title Regulatory Analyst

Signature 

Date 07/13/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

| SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY |
|--|---|
| <ul style="list-style-type: none"> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. | <p>A. Signature <input type="checkbox"/> Agent <input type="checkbox"/> Addressee X</p> <p>B. Received by (Printed Name) C. Date of Delivery</p> |
| <p>1. Article Addressed to:</p> <p style="font-size: 1.2em;">Bureau of Land Management 6251 College Blvd Suite A Farmington, NM 87402</p> | <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p> <p>3. Service type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p> |
| <p>2. Article Number (Transfer fee)</p> <p style="font-size: 1.2em;">7008 1140 0001 9414 9719</p> | |

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540



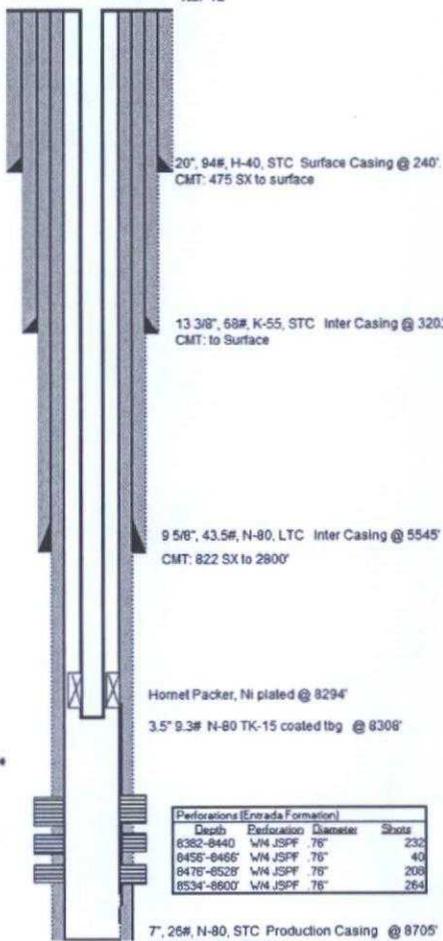
7008 1140 0001 9414 9719
 7008 1140 0001 9414 9719

| U.S. Postal Service™ CERTIFIED MAIL™ RECEIPT (Domestic Mail Only; No Insurance Coverage Provided) | |
|---|------------------|
| For delivery information, visit our website at www.usps.com | |
| OFFICIAL USE | |
| Postage \$ Certified Fee Return Receipt Fee (Endorsement Required) Restricted Delivery Fee (Endorsement Required) Total Postage & Fees \$ | Postmark Here |
| Sent To Bureau of Land Management Street, Apt. No., or PO Box No. 6251 College Blvd. Suite A City, State, ZIP+4 Farmington, NM 87402 | |
| PS Form 3800, August 2006 See Reverse for Instructions | |



Pritchard SWD #001
Coal
API # 30-045-28351
Unit C - Sec 34 - T3N - R03W
San Juan County, New Mexico

KB: 12'



| Length | Tubing Assembly (as run 1/11/2013) |
|--------|--|
| | (31 jgs) 3 1/2" EUE 8 RD N-80 TK-15 internally coated plastic tbg |
| 675 | |
| 10 | Ni plated 3 1/2" EUE BRD N-80 pup. fl. |
| 2 | Ni plated 3 1/2" EUE BRD N-80 pup. fl. |
| | (230 jgs) 3 1/2" EUE 8 RD N-80 TK-15 internally coated plastic tbg |
| 7288 | |
| 1.4 | 8X Profile nipple 3 1/2" EUE BRD 9 chrome (2.812" ID) |
| 6 | Ni plated 3 1/2" EUE BRD N-80 pup. fl. |
| 8 | #00-292 Mechanical set hornet packer ni plated |
| 4 | Ni plated 3 1/2" EUE BRD N-80 pup. fl. |
| 1.85 | 8X Profile nipple 3 1/2" EUE BRD 9 chrome (2.68" ID Ho-Go) |
| 0.5 | W/L Entry guide |

Formation Loss

| | |
|-----------------|-------|
| Ojo Alamo | 1600' |
| Fruitland | 2600' |
| Pictured Cliffs | 2912' |
| Lewis | 3060' |
| Mesaverde | 4680' |
| Mancos | 5475' |
| Gallup | 6262' |
| Dakota | 7280' |
| Montrose | 7525' |
| Bluff | 7929' |
| Enrada | 8377' |

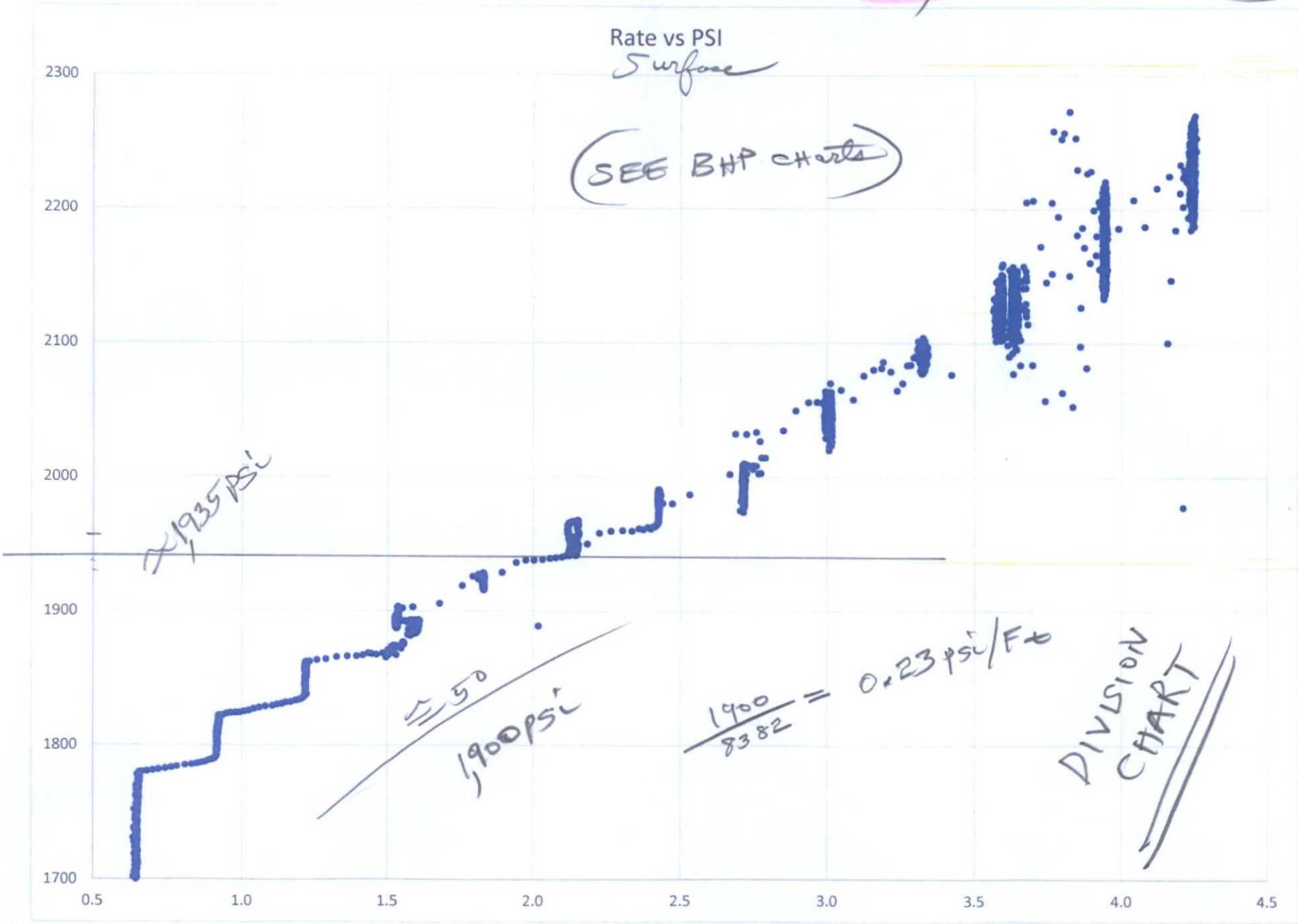
| Perforations (Enrada Formation) | | | |
|---------------------------------|-----------|----------|-------|
| Depth | Explosion | Diameter | Shots |
| 8382-8440 | W4 JSPF | 76" | 232 |
| 8455-8466 | W4 JSPF | 76" | 40 |
| 8476-8528 | W4 JSPF | 76" | 208 |
| 8534-8600 | W4 JSPF | 76" | 264 |

PBTD: 8620'
TD: 8705'

1900 PSI New ALLOWABLE

Rate vs PSI
Surface

(SEE BHP charts)



1935 PSI

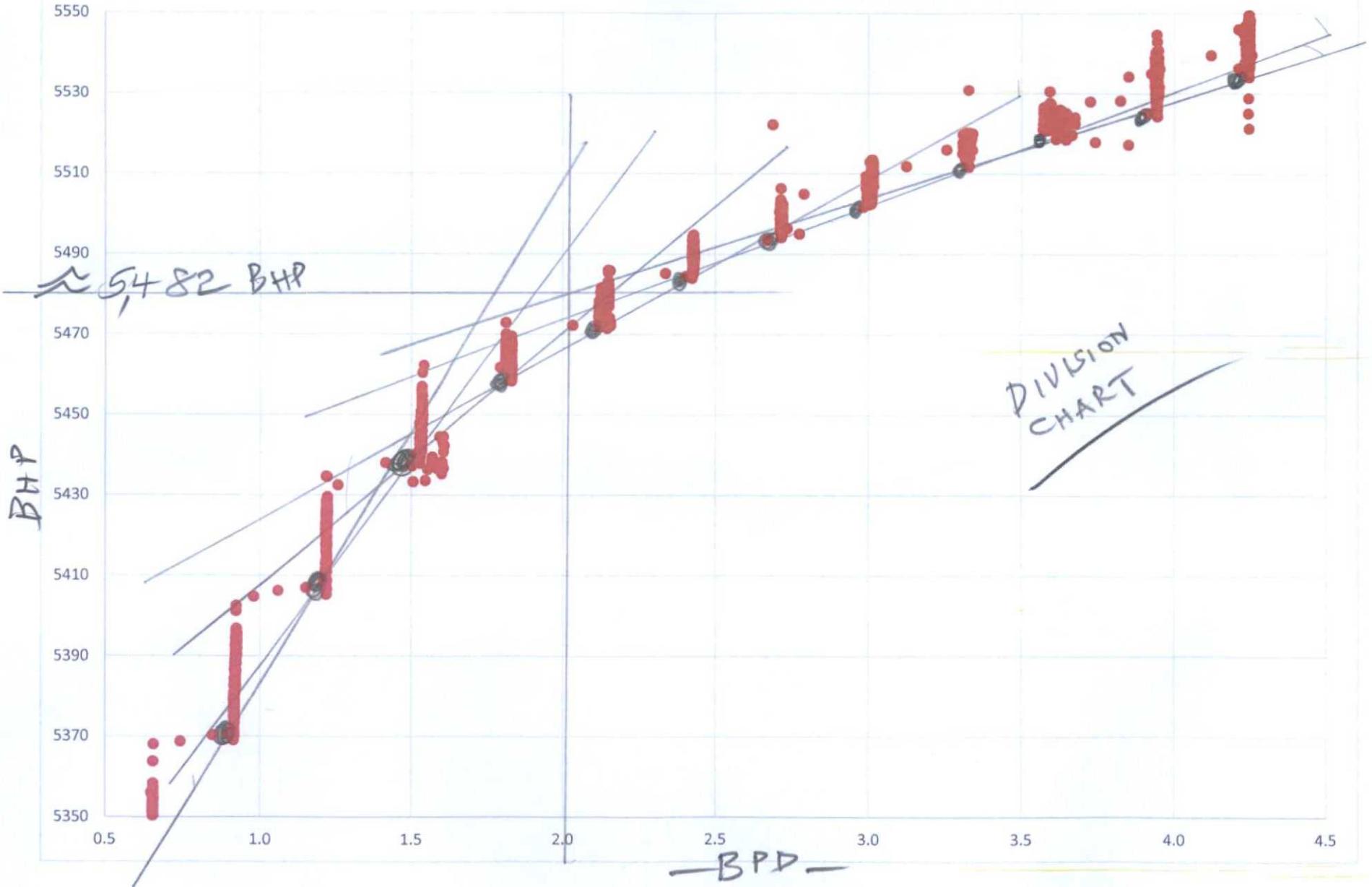
50

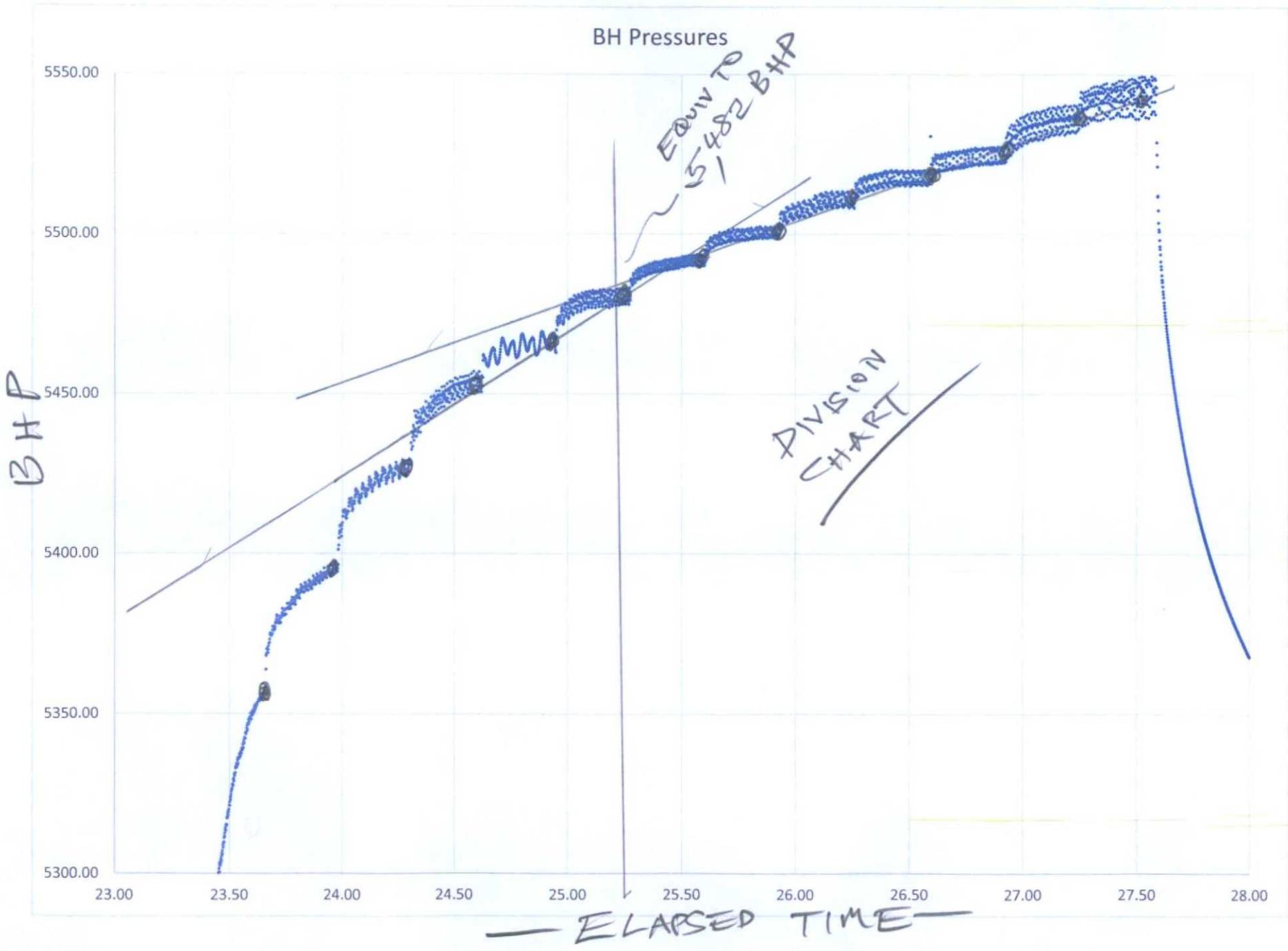
1900 PSI

$$\frac{1900}{8382} = 0.23 \text{ PSI/Ft}$$

DIVISION
CHART

Rate vs PSI
BottomHole







Pritchard SWD #001
Coal
API # 30-045-28351
Unit C - Sec 34 - T3N - R09W
San Juan County, New Mexico

KB: 12'



| Length | Tubing Assembly (as run 1/11/2013) |
|---|---|
| (31 js) 3 1/2" EUE 8 RD N-80 TK-15 internally coated plastic tbg | |
| 675 | |
| 10 | Ni plated 3 1/2" EUE BRD N-80 pup # |
| 2 | Ni plated 3 1/2" EUE BRD N-80 pup # |
| (230 js) 3 1/2" EUE 8 RD N-80 TK-15 internally coated plastic tbg | |
| 7295 | |
| 1.4 | BX Profile nipple 3 1/2" EUE BRD 9 chrome (2.812" ID) |
| 6 | Ni plated 3 1/2" EUE BRD N-80 pup # |
| 8 | 600-292 Mechanical set hornet packer ni plated |
| 4 | Ni plated 3 1/2" EUE BRD N-80 pup # |
| 1.65 | BXN Profile nipple 3 1/2" EUE BRD 9 chrome (2.66" ID No-Go) |
| 0.5 | WL Entry guide |

Formation Tops:

| | |
|-----------------|-------|
| Ojo Alamo | 1600' |
| Fulland | 2600' |
| Pictured Cliffs | 2912' |
| Levis | 3060' |
| Mesaverde | 4680' |
| Mancos | 5475' |
| Galup | 6262' |
| Dakota | 7280' |
| Horton | 7525' |
| Bluff | 7929' |
| Ennada | 8377' |

| Perforations (Ennada Formation) | | | |
|---------------------------------|-------------|----------|-------|
| Depth | Perforation | Diameter | Spots |
| 8382-8440 | W/N JSFF | .76" | 232 |
| 8456-8466 | W/N JSFF | .76" | 40 |
| 8476-8526 | W/N JSFF | .76" | 208 |
| 8534-8900 | W/N JSFF | .76" | 264 |

PBTD: 8620'
TD: 8705'

7", 26# N-80, STC Production Casing @ 8705'
CMT: 175 SX to 7100'

NORTH AMERICA - NORTH AMERICA GAS - BP

NEW MEXICO WEST NAD27
PRITCHARD SWD 1
PRITCHARD SWD 1
WORKOVER

Operation Summary Report

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1 General

1.1 Customer Information

| | |
|----------------|--|
| Company | NORTH AMERICA - NORTH AMERICA GAS - BP |
| Representative | NA GAS |
| Address | |

1.2 Well Information

| | | | |
|---------------------|--|------------|-----------------------------------|
| Well | PRITCHARD SWD 1 | | |
| Project | NEW MEXICO WEST NAD27 | Site | PRITCHARD SWD 1 |
| Rig Name/No. | RIGLESS/ | Event Type | WORKOVER |
| Start Date | 7/5/2016 | End Date | |
| Spud Date/Time | 11/1/1990 | UWI | 615' FNL; 1840' FWL, S34 T31N R9W |
| Active datum | ROTARY KELLY BUSHING @6,073.0ft (above Mean Sea Level) | | |
| Afe No./Description | 1000053256 / | | |

2 Summary

2.1 Operation Summary

| Date | Time Start-End | Hrs (hr) | Phase | Code | NPT | Task | NPT Depth (ft) | Operation |
|----------|----------------|----------|--------|--------|------|--------|----------------|--|
| 7/5/2016 | 7:00 8:00 | 1.00 | INTERV | P | | DHEQ P | | WEATHERFORD, WSI, ANTELOPE, TRAVEL FROM BASE TO PRITCHARD SWD 1 LOCATION |
| | 8:00 8:15 | 0.25 | INTERV | P | | DHEQ P | | PWA. JSA. PERMIT, JOB PLAN REVIEW |
| | 8:15 10:30 | 2.25 | INTERV | P | | DHEQ P | | RU CRANE MOVE BARRIERS, PULL SIDE DOOR OFF WELL HEAD HOUSE, & SLIDE HOSE WEST AWAY FOR WELL HEAD. |
| | 10:30 13:10 | 2.67 | INTERV | P | | DHEQ P | | RI WH STAND, RD CROSS OVER LINE, RU WH FLANGE |
| | 13:10 14:01 | 0.85 | INTERV | P | | DHEQ P | | RU SLICKLINE , RU 2.813 X PUMP THROUGH PLUG & GAUGES PLUG IN GAUGE 1162 13.46.36 PLUG IN GAUGE 2 # 1163 @ 13:47.41 , EQUALIZE WH |
| | 14:01 16:10 | 2.15 | INTERV | P | | DHEQ P | | RIH WITH X PLUG GAUGE HANGER TAG UP @ 2191, WORK THROUGH RIH TO 8297 WLM WORK TO SET GAUGE HANGER POH , OOH WITH GAUGES RESET SETTING TOOL |
| | 16:10 18:58 | 2.80 | INTERV | P | | DHEQ P | | RIH WITH GAUGE HANGER & GAUGES RESET GAUGES @ 7992 WLM LATCHING POH, SHUT IN WELL SECURE LOCATION |
| | 18:58 | | | INTERV | P | | DHEQ P | |
| 7/6/2016 | 6:00 8:00 | 2.00 | INTERV | P | | DHEQ P | | HALLIBURTON , TRAVEL FROM BASE TO PRITCHARD SWD 1 LOCATION |
| | 8:00 8:15 | 0.25 | INTERV | P | | DHEQ P | | PWA. JSA, RIG UP |
| | 8:15 9:40 | 1.42 | INTERV | P | | DHEQ P | | RIG UP PUMPING UNIT 7 WATER LINE TO DISPOSAL TANKS BRADEND HEAD TEST FOR NMOCD BH 0 PSI INTERMIDATE PSI 0 , ANNULUS PSI 0 |
| | 9:40 10:15 | 0.58 | INTERV | P | | DHEQ P | | PRIME UP PSI TEST LEAK ON TOP WH FLANGE THREADS 3 1/2 TIGHTEN CHANG OUT STILL LEAK |
| | 10:15 12:34 | 2.32 | INTERV | N | WAIT | DHEQ P | | CONTACT WH COMPANY ORDER DIFFERENT TOP FLANGE |
| | 12:34 13:05 | 0.52 | INTERV | P | | DHEQ P | | CHANGE OUT FLANGE RIG UP LINE PSI TEST PUMP & LINE (HELD) |

2.1 Operation Summary (Continued)

| Date | Time Start-End | Hrs (hr) | Phase | Code | NPT | Task | NPT Depth (ft) | Operation |
|----------|----------------|----------|--------|------|-----|-----------|----------------|---|
| | 13:05 17:20 | 4.25 | INTERV | P | | DHEQ P | | START STEP RATE TEST STEP 1&2 RATE .6 BPM BEGIN PSI 1625 ENDING PSI 1770 STEP 3 RATE .9 BPM BEGIN PSI 1725 ENDING PSI 1780 STEP 4 RATE 1.2 BPM BEGIN PSI 1791 ENDING PSI 1795 STEP 5 RATE 1.5 BPM BEGIN PSI 1806 ENDING PSI 1830 STEP 6 RATE 1.8 BPM BEGIN PSI 1843 ENDING PSI 1860 STEP 7 RATE 2.1 BPM BEGIN PSI 1889 ENDING PSI 1905 STEP 8 RATE 2.4 BPM BEGIN PSI 1920 ENDING PSI 1955 STEP 9 RATE 2.7 BPM BEGIN PSI 1955 ENDING PSI 1972 STEP 10 RATE 3.0 BPM BEGIN PSI 2003 ENDING PSI 2030 STEP 11 RATE 3.3 BPM BEGIN PSI 2047 ENDING PSI 2050 STEP 12 RATE 3.6 BPM BEGIN PSI 2072 ENDING PSI 2072 STEP 13 RATE 3.9 BPM BEGIN PSI 2138 ENDING PSI 2180 STEP 14 RATE 4.2 BPM BEGIN PSI 2197 ENDING PSI 2205 SHUT DOWN 1615 ISIP LOW 5MINUTE 1819 10 MINUTE 1817 15MINUTE 1794 |
| | 17:20 19:02 | 1.70 | INTERV | P | | DHEQ P | | SHUT IN WELL START RIG DOWN SECURE LOCATION |
| | 19:02 20:20 | 1.30 | INTERV | P | | DHEQ P | | HALLIBURTON , TRAVEL FROM PRITCHARD SWD 1 LOCATION TO BASE |
| 7/7/2016 | 6:00 7:00 | 1.00 | INTERV | P | | DHEQ P | | EXPERT DH, WEATHERFORD, CROSSFIRE TRAVEL FROM BASE TO PRITCHARD SWD 1 LOCATION |
| | 7:00 7:30 | 0.50 | INTERV | P | | DHEQ P | | PWA,JSA, PERMIT, JOB PLAN |
| | 7:30 8:10 | 0.67 | INTERV | P | | DHEQ P | | RU CRANE & SLICKLINE |
| | 8:10 9:35 | 1.42 | INTERV | P | | DHEQ P | | RIH WITH GS PT, TAG @ 8292 PU & RI & TAG POH OOH NO GAUGES GS TOOL HAD SHEARED |
| | 9:35 12:16 | 2.68 | INTERV | P | | DHEQ P | | REDRESS GS PT, RIH TAG @ 8292 WLM LATCH POH OOH WAS NOT ABLE TO RETRIVE GAUGE HANGER CHECK GS TOOL RIH AGAI TAG @ 8292 WLM WORK DOWN TO GET A BETTER LATCH POH OOH GAUGE HANGER |
| | 12:16 12:35 | 0.32 | INTERV | P | | DHEQ P | | RD SLICKLINE & LUBRICATOR, UNPLUG GAUGE 1161 12:32 UNPLUG GAUGE 1163 12:33 |
| | 12:35 14:00 | 1.42 | INTERV | P | | DHEQ P | | WASH WH OFF , RD WH STAND FINISH WASH WH OFF , RU PUSH WH HOUSE BACK IN TO PLACE OVER WELL HEAD INSTALL SIDE WALL RIG UP INSIDE OF WH HOUSE SHUT IN WELL PREP FOR HANDBACK |
| | 14:00 15:00 | 1.00 | INTERV | P | | DHEQ P | | WEATHERFORD , WSI, CROSSFIRE TRAVEL FROM PRITCHARD SWD 1 LOCATION TO BASE |

Table of Contents

| | | |
|-----|---------------------------|---|
| 1 | General..... | 1 |
| 1.1 | Customer Information..... | 1 |
| 1.2 | Well Information..... | 1 |
| 2 | Summary..... | 1 |
| 2.1 | Operation Summary..... | 1 |



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

October 11, 2005

Division Order No. IPI-258

BP America Production Company
501 Westlake Park Blvd.
Houston, Texas 77079

Attention: Mr. David Reese

**RE: Injection Pressure Increase
Pritchard SWD Well No. 1
San Juan County, New Mexico**

Dear Mr. Reese:

Reference is made to your request received by the Division on September 14, 2005, to increase the surface injection pressure on the Pritchard SWD Well No. 1. This request is based on a step rate test conducted on the well on December 12, 2003. The results of the step rate test show that an increase in the surface injection pressure for this well is justified and will not result in the fracturing of the injection formation and confining strata.

You are therefore authorized to increase the surface injection pressure on the following well:

| <i>WELL NAME & NUMBER</i> | <i>MAXIMUM SURFACE INJECTION PRESSURE</i> |
|--|---|
| Pritchard SWD Well No. 1 API No. 30-045-28351 Unit C, Section 34, T-31 North, R-9 West, NMPM, San Juan County, New Mexico | 1843 PSIG |

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

Injection Pressure Increase
BP America Production Company
October 11, 2005
Page 2

Sincerely,

A handwritten signature in black ink, appearing to read "Mark E. Fesmire". The signature is fluid and cursive, with a long horizontal stroke at the end.

Mark E. Fesmire, P.E.
Division Director

cc: Oil Conservation Division - Aztec
File: SWD-405