Approved By STEPHEN MASON

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.

# UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED OMB NO. 1004-0135 Expires: July 31, 2010 BUREAU OF LAND MANAGEMENT 5. Lease Scrial No. NMSF078905

| 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 proposal       |

| ı | LACTERN NAVAGO |  |
|---|----------------|--|
| ۱ | EASTERN NAVAJO |  |

Date 12/02/2010

| SUBMIT IN TRIPLICATE - Other instructions on reverse side.  | 7. If Unit or CA/Ag                             | rooment Name and/or N |  |  |  |  |  |
|---|---|-----------------------|--|--|--|--|--|
|   | NMNM783910                                      |                       |  |  |  |  |  |
| 1. Type of Well   | 8. Well Name and N                              | o.<br>NYON UNIT 159E  |  |  |  |  |  |
| ☐ Oil Well    Gas Well   ☐ Other  |   | INTON UNIT 159E       |  |  |  |  |  |
| Name of Operator Contact: CHERRY HLAVA     BP AMERICA PRODUCTION CO E-Mail: hlavacl@bp.com  | 9. API Well No.<br>30-045-25717-00-S1           |                       |  |  |  |  |  |
| 3a. Address       3b. Phone No. (include area code)         200 ENERGY COURT       Ph: 281.366.4081         FARMINGTON, NM 87401       Ph: 281.366.4081   | 10. Field and Pool, or Exploratory BASIN DAKOTA |                       |  |  |  |  |  |
| 4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  | 11. County or Parish                            | , and State           |  |  |  |  |  |
| Sec 31 T28N R12W NWSW 1850FSL 0980FWL<br>36.61655 N Lat, 108.15762 W Lon  | SAN JUAN COUNTY, NM                             |                       |  |  |  |  |  |
| 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA   |   |                       |  |  |  |  |  |
| TYPE OF SUBMISSION TYPE OF ACTION   |   |                       |  |  |  |  |  |
| - Notice of Intent  | ction (Start/Resume)                            | Water Shut-Of         |  |  |  |  |  |
| Notice of Intent  Alter Casing  Fracture Treat  Reclar  | mation  | ☐ Well Integrity      |  |  |  |  |  |
| Subsequent Report Casing Repair New Construction Recon  |   | Other                 |  |  |  |  |  |
|   | orarily Abandon                                 | <b>.</b>              |  |  |  |  |  |
| Convert to Injection Plug Back Water  | Disposal  |                       |  |  |  |  |  |
| Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereoff the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zone. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall 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 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.) |   |                       |  |  |  |  |  |
| August 2010 Compliance Well.  | •   |                       |  |  |  |  |  |
| Due to no further uphole potention in the above mentioned well and several cement sqz jobs BP   | ecun D  | EC 6'10               |  |  |  |  |  |
| respectfully requests permission to P&A said well.  |   | MS. DIV.              |  |  |  |  |  |
| Please see attached plugging procedure.   |   |                       |  |  |  |  |  |
|   |   |                       |  |  |  |  |  |
|   |   |                       |  |  |  |  |  |
|   |   |                       |  |  |  |  |  |
| 14. I hereby certify that the foregoing is true and correct.  Electronic Submission #98365 verified by the BLM Well Information   |   | ,                     |  |  |  |  |  |
| For BP AMERICA PRODUCTION CO, sent to the Farmington<br>Committed to AFMSS for processing by STEVE MASON on 12/02/2010 (1   |   |                       |  |  |  |  |  |
| Name (Printed/Typed) CHERRY HLAVA Title AGENT   | ,   |                       |  |  |  |  |  |
| Signature (Electronic Submission) Date 12/01/2010   |   |                       |  |  |  |  |  |
| THIS SPACE FOR FEDERAL OR STATE OFFICE U  | ISF   |                       |  |  |  |  |  |

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.

Office Farmington

TitlePETROLEUM ENGINEER

# SJ Basin Well Work Procedure

| Well Name: Date: Repair Type: Location: County: State:                       | P&A<br>Unit L-T | oer 14, 2010<br>F28N-R12W-<br>L & 980 FW<br>n | Sec31                           | : 30-0               | 45-25717                                     |              | J. |
|--|-----------------|---|---------------------------------|----------------------|--|--------------|----|
| Engr: David Wages Ph:  |                 |   | 281-366-7929 Cell: 406-231-4679 |                      |  |              |    |
| 6  |                 |   | Ph:                             |                      | -366-6207                                    |              |    |
| Prod. TL   | Anderson        | Ph:   |                                 | -326-9495            |  |              |    |
| APIN   |                 | ormation:<br>30-045-25                        | 717                             |                      | <u>Prod</u><br>Tubing Pressure               | uction Data: |    |
|  |                 | 52.45%  |                                 |                      | Casing Pressure                              |              |    |
|  | Run #:          | 02.4070                                       |                                 | <del>-</del>         | Line Pressure                                |              |    |
| Surface Lo   |                 | Unit L-Sec<br>R12W                            | 31-T28                          | N-                   | Pre-rig Gas Rate                             |              |    |
| Meter N  | lumber:         | 94910   |                                 |                      | Anticipated Uplift                           | : 83         |    |
| Wel  | I FLAC:         |   |                                 |                      | Water Rate                                   |              |    |
| Cost   | Center:         |   |                                 |                      | CO2 (%)                                      | : 1.0369     |    |
| Lease  | FLAC:           |   |                                 |                      | H2S (PPM)                                    | : 0          |    |
| Restr  | ictions:        | Aug Compl                                     | iance                           |                      | Gas BTU                                      | : 1183       |    |
| Regulatory Agency:   |                 | BLM & OCD                                     |                                 | Artificial Lift Type | Plunger                                      |              |    |
| Compressed (Y/N):  |                 | N · ·   |                                 | ,                    |  |              |    |
| _  | Budget:         | Budg  | et and                          | Work                 | Order Information Total AFE Amou             |              |    |
| P&C I  | Budget:         |   |                                 |                      | <u>.                                    </u> | #:           |    |
|  | -               |   |                                 |                      |  |              |    |
|  |                 |   |                                 |                      |  |              |    |
| Objective: P&  | A for well      | bore.   |                                 |                      |  |              |    |
|  |                 | is clear of o                                 |                                 |                      | 1.   |              |    |
| <b>Well History:</b><br>Spud date 12/4<br>Well Repair 1/2<br>Well Repair 8/2 | 24/1992 -       |   |                                 |                      |  |              |    |

Note: Will use Class G neat cement to P&A this well.

#### Procedure:

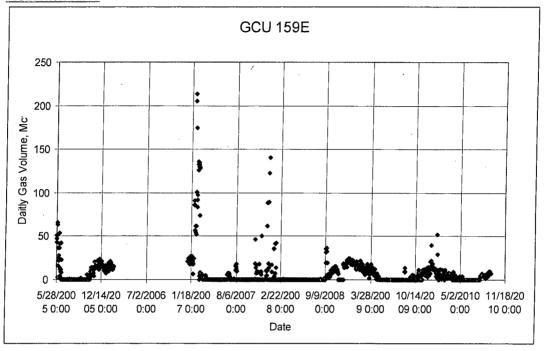
1. Notify BLM and NMOCD 24 hours prior to beginning operations P&A process to ensure scheduling of personnel to witness CBL results and cement placement. (Note: This is a **BLM** regulated well)

NMOCD: (505) 334-6178 (Kelly Roberts) BLM: (505) 599-8907 (Kevin Schneider)

- 2. Move in and rig up service rig and equipment.
- 3. Blow down and kill well. Capacity of wellbore is approximately 100 bbls to PBTD. Check all casing strings to ensure no pressure exists on any annulus.
- **4.** RU e-line. Run gauge ring for 4-1/2" casing (ID=4.052") down to top of perfs to ensure wellbore is clear and CIBP will set. RIH w/ CIBP and set +/-50' above perforations +/- **5869'**.
- 5. Load well with fluid and pressure test casing to 500 psig. This will confirm the integrity of the casing and CIBP.
- 6. Run CBL to determine cement top behind 4-1/2". Based on cement top it will be determined where perforations and cement placement behind casing will be required to properly P&A well. Contact Engineer to discuss steps forward. Top of cement is estimated at surface based on well history. Report CBL results to regulatory agencies and engineer. The order and detail of the next steps could change based on the CBL results but assumes cement does not cover the Ojo Alamo zone.
- 7. Nipple down wellhead. NU and pressure test BOPs. Monitor flowing casing pressure with gauge (with casing flowing to blow tank) throughout workover. This is a P&A so the well should be kept dead throughout the procedure.
- 8. RIH w/ workstring and spot 1069' (~17.1 bbls, 717 cu ft) plug on top of CIBP (+/- 5869'). This should P&A the Dakota and Gallup formations from 5869'-4940'. POOH.
- 9. Based on CBL results, RU wireline w/ perforated gun. RIH to +/- 2912' and perforate 4-1/2" casing and POOH with guns. RD wireline.
- 10. If circulation to surface can be established, pump 789' cement plug inside and outside production casing (12.6 bbls, 530 cu ft inside, 64 bbls, 2649 cu ft outside includes 100% excess).

- 11. If circulation cannot be established, RIH w/ workstring. Pump a 789' plug inside casing (12.6 bbl, 530 cu ft inside) from 2123'- 2912'. This should put cement across the MesaVerde and Chacra formations. POOH with workstring.
- 12. Based on CBL results, RU wireline w/ perforated gun. RIH to +/- 1385' and perforate 4-1/2" casing and POOH with guns. RD wireline.
- 13. If circulation to surface can be established, pump 485' cement plug inside and outside production casing (7.8 bbls, 325 cu ft inside, 39.4 bbls, 1653 cu ft outside includes 100% excess) from 900'-1385'.
- 14. If circulation cannot be established, RIH w/ workstring. Pump a 485' plug inside casing (7.8bbl, 325 cu ft inside) from 900' to 1385. This should put cement across the PC and FC formations. POOH with workstring.
- 15. RU wireline w/ perforating gun. RIH to +/- 550' and perforate 4-1/2" casing. POOH with guns and RD wireline.
- 16. Establish circulation behind easing to surface. Pump a cement plug behind and inside 4-1/2" casing from 550' to surface (~ 54 bbls). Pump excess cement as necessary.
- 17. Perform underground disturbance and hot work permits. Cut off tree.
- 18. If cement cannot be seen on all annulus and casing strings remedial cementing will be required from surface. Watch for cement fall back or seepage. All annulus and casings must be full of cement with no fall back prior to installing abandonment marker.
- 19. Install well marker and identification plate per BLM requirements.
- 20. RD and release all equipment.
- 21. Ensure all reports are loaded into DIMS. Print out summary of work and place in well file. Notify Sherri Bradshaw of completed P&A.

### Production curve



# **Current Wellbore**

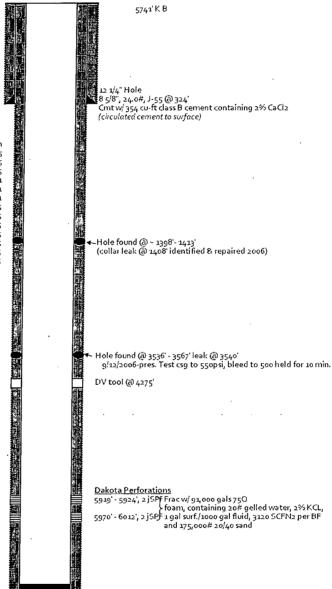


Gallegos Canyon Unit 159E Dakota API # 30-045-25717 T-28N, R-12-W, Sec. 31 San Juan County, New Mexico

G.L. K.B. 5741

<u>Well History</u> Spud date 12/4/1983 Well Repair 1/24/1992 - Bradenhead repair Well Repair 8/23/2006 - Repair casing leak

| Formatio  | n Tone | <u>Deviation Report</u> |           |  |  |
|-----------|--------|-------------------------|-----------|--|--|
| Formation | Depth  | Depth                   | Deviation |  |  |
| OJAM      |        | 330                     | 0.75      |  |  |
| KTLD      |        | 881                     | 1.25      |  |  |
| FTLD      | 1000   | 1395                    | 0.5       |  |  |
| CAHN      |        | 2174                    | 1         |  |  |
| PCCF      |        | 2712                    | 3         |  |  |
| LWIS      |        | 3229                    | 1         |  |  |
| CHCR      | 2223   | 3775                    | 1.25      |  |  |
| CLFH      |        | 3992                    | 0.25      |  |  |
| MENF      |        | 4497                    | 0.5       |  |  |
| PNLK      |        | 4980'                   | 0.75      |  |  |
| MNC5      |        | 5489'                   | 0.75      |  |  |
| GLLP      |        | 5763'                   | , 1.25    |  |  |
| SNST      |        | 6091,                   | 0.75      |  |  |
| GRNR      | 5789   |                         |           |  |  |
| GRRS      | 5851   |                         |           |  |  |
| TWLS      | 5914   |                         |           |  |  |
| PGTE      | 5968   |                         |           |  |  |
| CBRO      | 6017   |                         |           |  |  |
| ENCN      | 6058   |                         |           |  |  |
| BRCN      | 6085   |                         |           |  |  |



PBTD: 6050 TD: 6092'

. 77/8" Hole 4 1/2", 10.5#, K-55 @ 6091' Stage 1: 524 cu-ft 50:50 POZ class B cement. Tailed w/ 118 cu ft. class B neat cement. Stage 2: 1,773 cu ft. class B 65:35 Pozzolanic cement. Tailed w/ 118 cu I class B neat cement. Cmt circ. to surface

# Proposed P&A plug Set Program

