

UNITED STATES  
DEPARTMENT OF INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICE AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION TO DRILL" for permit for such proposals

RECEIVED  
BLM

99 OCT -4 PM 3: 67

5. Lease Designation and Serial No.  
SF-078774

6. If Indian, Allotted or Tribe Name

SUBMIT IN TRIPLICATE

070 FARMINGTON, NM

If Unit or CA, Agreement Designation  
ROSA UNIT

1. Type of Well  
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.  
ROSA UNIT #315

2. Name of Operator  
WILLIAMS PRODUCTION COMPANY

9. API Well No.  
30-039-25219

3. Address and Telephone No.  
PO BOX 3102 MS 37-2, TULSA, OK 74101 (918) 573-6254

10. Field and Pool, or Exploratory Area  
BASIN FRUITLAND COAL

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
2548' FSL & 2066' FWL, NE/4 SW/4, SEC 30 T31N R4W

11. County or Parish, State  
RIO ARRIBA, NM

CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☒ Notice of Intent  
☐ Subsequent Report  
☐ Final Abandonment

TYPE OF ACTION

- ☐ Abandonment  
☐ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☒ Other Sidetrack and Complete

- ☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ Dispose Water  
(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Williams Production Company plans to sidetrack and complete this well as per the attached procedure. Estimated start date is October 4, 1999

14. I hereby certify that the foregoing is true and correct

Signed

Tracy Ross  
TRACY ROSS

Title Production Analyst

Date October 1, 1999

(This space for Federal or State office use)

Approved by

WAYNE TOWNSEND

Title

A.T.L.

Date

10/5/99

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes 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.

# **J. M. HUBER CORPORATION**

**ROSA UNIT #315  
SW/4 SECTION 30, T31N – R4W  
RIO ARriba COUNTY, NEW MEXICO**

**WORKOVER PROGNOSIS**

**September 15, 1999**

# J. M. HUBER CORPORATION

ROSA UNIT #315  
SW/4 SECTION 30, T31N – R4W  
RIO ARRIBA COUNTY, NEW MEXICO

## SUMMARY

### PERTINENT WELL DATA

**OBJECTIVE:** Rosa Unit #315 was originally drilled and cased in late 1992 in the Fruitland Coals. The Fruitland Coals from 3,296' – 3,384' (26' net) were fracture stimulated with 108,000 gallons 35# Borate Cross-Linked gel containing 26,450 lbs 40/70 Mesh Brady and 201,000 lbs 20/40 Arizona sand. The well is currently producing 8 mcf/d and 0 bwpd.

It is proposed to sidetrack and complete the wellbore 300 ft south of the present surface location. J.M. Huber Corporation will attempt to prevent formation damage by drilling with fresh water, cementing with a lighter cement and fracture stimulating with Halliburton's Delta SandWedge technology. The new wellbore will allow J.M. Huber to drill and complete Rosa Unit wells similar to recent wells in the Durango area of the San Juan Basin.

**NMOCC Permit No.:**

**API NO.:** 05 - 067 - 07798

**Huber AFE No.:** 4859

**Directions:**

**Location:**

Surface Location

2,548' FSL & 2,066' FWL  
Section 30, T31N – R4W  
Rio Arriba County, New Mexico

Bottom Hole Location

2,248' FSL & 2,066' FWL  
Section 30, T31N – R4W  
Rio Arriba County, New Mexico

**Elevations:**

**GL:** 6,559'  
**KB:** 6,571'

**TD:** 3,500' KB  
**PBTD:** 3,470' KB

**Casing Details:**

8-5/8", 24.0 #/Ft CSA 355' KB.  
5-1/2", 17.0 #/Ft CSA 3,499' KB.

**Tubing Details:**

None

**Perforations:**

3,296' – 3,301' KB	5'
3,350' – 3,352' KB	2'
3,356' – 3,364' KB	8'
3,370' – 3,376' KB	6'
3,379' – 3,384' KB	5'
TOTALS	26'

# **J. M. HUBER CORPORATION**

**ROSA UNIT #315  
SW/4 SECTION 30, T31N – R4W  
RIO ARriba COUNTY, NEW MEXICO**

## **GENERAL INSTRUCTIONS**

### **GENERAL:**

J.M. Huber Corporation employees and all contractors will be required to comply with the following rules. Any violation of these rules will prohibit contractor from future work on the property for J.M. Huber Corporation.

1. No fresh water shall be used from ponds, stock tanks, or existing water wells, except by prior agreement with landowner and surface lessee(s).
2. J.M. Huber Corporation intends to maintain good housekeeping operations. A trash dumpster will be provided at the drill site. The dumpster is intended to be used to prevent unnecessary debris, such as cans, etc. from being scattered on the premises (See "Waste Management" section below).
3. Livestock on the property are to be protected so that none are injured or killed during drilling operations.
4. No one has the right or privilege to hunt or fish on the property. Firearms or fishing tackle are strictly prohibited.
5. All well information is to be kept confidential.
6. Material Safety Data Sheets (MSDS) for all mud and cementing products should be maintained at the drill site. Forward the MSDS's to the District Office at the conclusion of drilling operations.

### **WASTE MANAGEMENT:**

1. Fluids stored in reserve pits will be limited to drilling mud, cuttings, excess cement and water.
2. Waste lube oil, oil filters, hydraulic fluid, excess pipe dope, paint, etc. will **not** be disposed of in any earthen pit. These materials will be collected and disposed of properly. Lube oil, oil filters, and hydraulic fluids will be collected and recycled with a commercial oil reclaimer by the drilling contractor, **not** disposed of in the trash dumpster. Paint cans and excess pipe dope may be disposed into the on-site dumpster.
3. Chemical / mud sacks or buckets, trash from living quarters and construction materials shall be disposed into the on-site trash dumpster.
4. Illegal dumping of tires, etc. will **not** be permitted into the trash dumpster. No personal trash will be brought to the drill site and dumped into the on-site trash dumpster or anywhere else on location.

# **J. M. HUBER CORPORATION**

**ROSA UNIT #315  
SW/4 SECTION 30, T31N – R4W  
RIO ARriba COUNTY, NEW MEXICO**

## **WORKOVER PROGNOSIS**

### **WORKOVER PROCEDURE**

1. Move pumping unit off pad and bury existing flowline below ground level.
2. MI & RU workover rig.
3. POOH laying down sucker rods and pump.
4. Nipple up 7-1/16" x 3M BOP's (pipe rams with 2-7/8" ram elements) and stripper head.
5. TOOH laying down 2-7/8" tubing on float. Send 2-7/8" tubing to FIS Farmington pipe yard for full inspection.
6. RD and release workover rig.
7. RU wireline. PU and RIH with Weatherford 5-1/2" HE2 wireline set – tubing retrievable bridge plug for 5-1/2", 17.0 #/ft casing. Set retrievable bridge plug at +/-3,270' KB. POOH with setting tools.
8. Pressure test 5-1/2", 17.0 #/ft casing to 2,500 psig. Run CBL / CCL / GR log from 3,270' KB to surface under pressure. Identify top of cement and location of casing collars across anticipated chemical casing cut at +/-1,300' KB.
9. Notify BLM and Tom Erwin with J. M. Huber Corporation 24 hours prior to moving in 24 hour cavitation rig.
10. MI & RU 24 hour drilling rig (Aztec Well Service #124). Supply rig with approved BLM Sundry Notice and Workover Prognosis.
11. NU wellhead, BOP's, choke manifold and run all flare lines to flare pit.
12. PU Weatherford retrieving tools for 5-1/2" HE2 bridge plug on 2-7/8" tubing. TIH and latch onto bridge plug. TOOH with 2-7/8 tubing and bridge plug.
13. PU 5-1/2" cement retainer. TIH with cement retainer and 2-7/8" tubing and set at 3,270' KB.
14. Sting out of cement retainer. Load hole with Navajo Lake water. Break circulation.

15. Pressure test BOP blind rams, pipe rams, surface equipment, 5-1/2" casing and cement retainer to 2,000 psig for 15 minutes.
  16. Sting into cement retainer with 2-7/8" tubing. Establish rate into perforations of 2.0 – 3.0 BPM.
  17. Bullhead 50 sacks Class "H" Neat cement into perforations at 2.0 – 3.0 BPM. Do not breakdown the formation. Flush with 15 bbls Navajo Lake water. Sting out of cement retainer and drop 50 sacks of cement on top of cement retainer.
  18. TOOH with 2-7/8" tubing and stand back in derrick.
  19. Pressure test BOP blind rams, choke manifold and kill line valve, pipe rams, surface equipment, 5-1/2" casing and cement plug to 4,500 psig.
  20. RU Wireline Specialties. Run free point and locate free point on 5-1/2" casing. Free point expected to be identified below casing collar at 1,272' KB.
  21. Run string shot and backoff 5-1/2" casing just above free point identified in step above. Expect to backoff 5-1/2" casing at 1,272' KB.
  22. Spear into 5-1/2" casing and TOOH with 5-1/2" casing. LD 5-1/2" casing on TOOH.
  23. TIH with 2-7/8" tubing. Land tubing 50 ft below 5-1/2" casing backoff point at approximately 1,325' KB.
  24. Break circulation with Navajo Lake water. Prepare to place cement plug over 5-1/2" casing stub for kickoff point.
  25. Spot cement from 1,050' – 1,325' KB. Cement with 50 sacks Class "H" neat cement.
  26. TOOH with 2-7/8" tubing and stand back in the derrick.
  27. W.O.C. for 24 hours.
  28. TIH with 7-7/8" bit, bit sub, DC's and DP's. Tag down on cement at approximately 1,050' KB.
  29. Dress off cement plug for directional tools. Drill on cement down to approximately 1,150' KB or until cement is hard (less than 2"/min with WOB of 6,000 lbs).
  30. TOOH with DP, DP's, bit sub and 7-7/8" bit.
  31. Call out for 5-1/2", 17.0 #/ft casing and cementing tools. Unload casing with forklift, strap and arrange on pipe racks in order to be run in hole. Casing not to be used will be removed from pipe rack prior to arrival of casing crew. Remove thread protectors, clean and inspect pins and collars.
  32. Rig up mud loggers at 1,500' KB with chromatagraph to monitor gas shows only. No drill cuttings samples are required.
  33. Directionally drill 7-7/8" to a total depth of approximately 150' below the top of the Picture Cliffs sandstone with fresh water. The wellbore's "S" profile was selected to place any future downhole tools in the vertical position. The total vertical depth (TVD) is prognosed as 3,550' TVD and the measured depth is 3,577' MD with a displacement of 300' due South.
- Kick off deviated wellbore at approximately 1,150' KB with 7-7/8" bit, 6-1/2" steering motor, 6-1/2" Monel DC with MWD instrumentation, crossover, 5" DC's and 3-1/2" DP. Baker-Inteq to provide consultant during the drilling of the deviated wellbore

Drill 7-7/8" hole under balanced with fresh water. Do not weight up mud without first talking to Tom Erwin with J.M. Huber. Drill 7-7/8" hole to casing strap.

34. Drill approximately 150 ft into the top of the Pictured Cliffs. Total depth estimated to be 3,550' TVD (3,577' MD). Drill 7-7/8" hole to 5-1/2" casing strap.
35. At total depth, circulate and condition hole with fresh water for 30 minutes. Make short trip of 10 stands, TIH and check for fill. Clean out to total depth if necessary.
36. TOOH with DP, DC's and BHA. Strap pipe on TOOH to confirm total depth.
37. Rig up open hole loggers. Run the following suite of logs:

<u>Log Description</u>	<u>Depth Interval Logged</u>	<u>Logging Speed</u>
LDT*/CNL*/AIT/GR/Caliper	Kick Off Point – Total Depth	1,800 ft/hr
GPIT	Kick Off Point – Total Depth	1,800 ft/hr

- Notes:
1. High resolution processing in the coal seams (\*).
  2. Request logging tapes be provided on an 8mm tape in LIS format and on 3.5" floppy disk.
  3. Tool protection insurance required on all tools.
  4. Request 10 copies of each final log.
  5. Log presentation is as follows from top to bottom of log:

	<u>Scale</u>	<u>Log</u>
Top	2"	GR - FDC/CNL
	2"	GR - Bulk Density
	5"	GR - High Resolution Bulk Density
	10"	GR - High Resolution Bulk Density
Btm.	5"	GR - FDC/CNL

Should any hole problems be encountered while going into hole or during any portion of the logging operation, POOH immediately and call Tom Erwin for further instructions. If logging tool becomes stuck, **DO NOT** attempt to pull out of rope socket or to break wireline. Immediately contact Tom Erwin for further instructions.

38. TIH with 7-7/8" bit, bit sub, 5" DC's and 3-1/2" DP. Tag total depth, circulate and condition hole for 2 hours. Make short trip of 10 stands, TIH and check for fill. Clean out to total depth if necessary. **Notify casing crew and cementers 6 hours prior to running casing.**
39. TOOH laying down DP's, DC's, and BHA.
40. Rig up casing crew. Run 5-1/2", 17 #/ft, K-55, ST&C casing as follows:
  - a. 5-1/2" Cement Float Shoe,
  - b. 1 Joint 5-1/2" Casing,
  - c. Float Collar (with Auto Fill),
  - d. 5-1/2" Casing,
  - e. DV Tool (approximately 200 ft above the Fruitland Coal),
  - f. Remainder 5-1/2" Casing, and
  - g. 5-1/2" Landing Joint.

Run free floating turbolizers every other joint of casing and a cement basket 1 joint above and below the DV Tool. Threadlock the float shoe and float collar. Utilize a torque indicator to make-up torque as follows:

5-1/2", 17.0 #/Ft, K-55, ST & C Casing

Minimum Torque	- 1,890 ft - lbs
Optimum Torque	- 2,520 ft - lbs
Maximum Torque	- 3,150 ft - lbs

41. Rig up cementers. Tag bottom, pick up weight of casing. Circulate hole with 2 annular volumes minimum through cement head at maximum rate. Circulation should continue until as long as the shale shaker screen shows return of mudcake and cuttings. **Reciprocate casing 20' while cementing.**
42. Cement 4-1/2" production casing with single stage (30% excess) as follows:

First Stage

- a. Pump 20 bbls of Mud Clean II (mud wash),
  - b. Pump 100 sacks Class "H" cement with 1% BA-10 (bonding agent and gas migration), 0.2% CD-32 (cement dispersant – fluid loss), 3% KCl and 6¼ lb/sx Gilsonite (lost circulation),
  - b. Drop shut-off plug. Displace cement with approximately 81.9 bbls fresh water (3,530 ft x 0.0232 bbls/ft),
  - c. Bump plug to 500 psig over pump pressure. Accurately record volume displaced after the top plug is released. **DO NOT OVER DISPLACE (Be prepared to drop opening bomb if shut-off plug fails).** Maximum pump pressure not to exceed 4,250 psig (80% of API internal yield pressure). Record time plug bumped, and
  - d. Release surface pressure and check operation of float equipment.
43. Pressure up to 2,200 psig and open DV tool. Circulate and condition hole for 4 hours with fresh water. Record volume of cement circulated to surface from first stage.
44. Cement second stage 5-1/2" production casing to surface (30% excess) as follows:

Second Stage

- a. Pump 20 bbls of Mud Clean II (mud wash),
  - b. Pump 280 sacks Class "H" cement with 2% CaCl<sub>2</sub>, ¼ #/sack Cello Flake and 6% bentonite,
  - c. Tail-in with 50 sacks Class "H" with 2% CaCl<sub>2</sub> and ¼ #/sack Cello Flake, and
  - d. Drop closing plug. Displace cement with approximately 71.9 bbls fresh water (3,100' x 0.0232 bbls/ft). **DO NOT OVER DISPLACE.** Maximum pump pressure not to exceed 4,250 psig (80% of API internal yield pressure). Record time plug bumped and volume of cement circulated to surface.
45. WOC for 4 hours minimum before releasing tension on casing and lay down landing joint.
46. Set casing slips and land with approx. 60,000 lbs tension (string weight).
47. Nipple down BOP's. Lay down landing joint and install Huber 2000 psi WP (5-1/2" x 2-7/8") threaded wellhead.
48. Collect IADC forms and geolograph strips.



49. Rig down rig. Release rig and prepare to move rig to next location.

**Prepared By:** \_\_\_\_\_  
**Thomas M. Erwin P.E.**  
**Sr Staff Petroleum Engineer**

**Approved By:** \_\_\_\_\_  
**J. Scott Zimmerman**  
**Manager – Coalbed Methane**

**Date:** \_\_\_\_\_

**Date:** \_\_\_\_\_