

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 deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

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

5. Lease Designation and Serial No.
NM 16470

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.
Bengal "A" #1

9. API Well No.

10. Field and Pool, or Exploratory Area
Gallegos Gallup

11. County or Parish, State
San Juan, N.M.

SUBMIT IN TRIPLICATE

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

J. K. EDWARDS ASSOCIATES INC. 011307

3. Address and Telephone No. c/o Walsh Engr. & Prod. Corp.

7415 E. Main Farmington, N.M. 87402 505 327-4892

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Unit K, 1980'FSL & 1980'FWL
Section 1, T26N, R12W

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Other
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input checked="" type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> 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.)*

Attached please find Completion Prognosis for converting subject well to an injection well.

RECEIVED
MAR 19 1993
OIL CON. DIV
DIST. 3

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

Signed

Title

John C. Thompson, Agent

Date 3/7/96

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:

**COMPLETION PROGNOSIS FOR
J.K. EDWARDS ASSOCIATES, INC.
Bengal A #1**

Location: Section 1 T26N R12W
San Juan County, New Mexico

Date: February 23, 1996

Field: Mesa Verde

Elev: KB 6008'

Elev: GL 5998'

Surface: BLM

5-1/2" @ 5311'

Minerals: BLM NM 16470

PBTD @ 5270'

Procedure:

1. Level location, dig reserve pit, and install anchors.
2. MOL and RU completion rig. Hold safety meeting. Blow well down and kill with water, if necessary.
3. Pull polished rod and unseat pump. Pull 2 rods and pump hot water down tubing. Pull and lay down rods and pump. ND tubing head and NU BOP. NU 2-3/8" relief line.
4. TOH w/ 167 jts of 2-3/8" tubing. Lay down perforated sub & mud anchor.
5. TIH w/ 2-3/8" tubing and cement retainer. Set retainer at 4923' (70' above top perf.).
6. Sting out of retainer & pressure test casing to 600#. If OK, sting back into cement retainer.
7. Load backside and monitor pressure while pumping 70 sx of Class "B" cement w/ 2% CaCl₂ down tubing. Sting out of cement retainer and TOH w/ tubing leaving 1 bbl of cement on top of retainer.
8. RU wireline and run "PET" or "CET" bond log from 4200' to 2200'. Run repeat w/o pressure & run main pass w/ 500# pressure if needed.
9. If bond looks OK proceed to step 10. If not, shoot 2 holes above cement top and squeeze as necessary.
10. Perforate Point Lookout at 4 spf. Determine perforations GR/Bond log (step 8).
11. RD wireline and PU packer and TIH w/ 2-3/8" tubing and packer. Set packer no more than 100' above top perforation (approx. 3600') breakdown perforations with 2000 gal of 15% HCl acid.
12. RU wireline and run injection profile logs. See attached instructions required by NMOCD.

**COMPLETION PROGNOSIS FOR
J.K. EDWARDS ASSOCIATES, INC.
Bengal A #1 (continued)**

13. PU 7-5/8" X 2-3/8" plastic lined packer on 2-3/8" plastic lined tubing and set packer at approximately 3600' (within 100' of top perf.). Circulate corrosion inhibitor into casing annulus before setting packer.
14. Rig down and release rig. Install injection pump and facilities.
15. Run step rate injection test and casing integrity test.

WALSH ENGINEERING & PRODUCTION CORP.

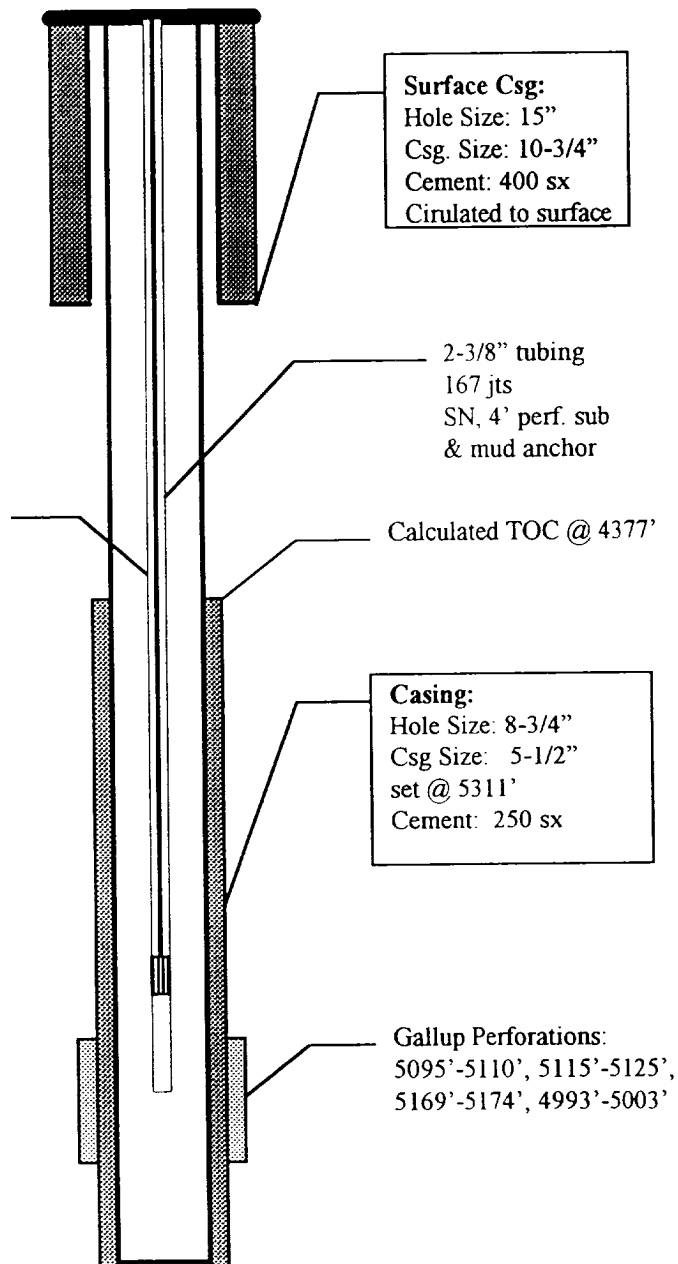
Bengal A #1 1980' FSL & 1980' FWL Sec 1 T26N R12W

Current Status

Formation Tops:

Fruitland:	917'
Pictured Cliffs:	1356'
Lewis:	1475'
CliffHouse:	2900'
Menefee:	2940'
Point Lookout:	3890'
Mancos:	4114'
Upper Gallup:	5068'

5/8" Sucker Rods
12' polish rod
pony rod
RWBC pump



Surface Csg:
Hole Size: 15"
Csg. Size: 10-3/4"
Cement: 400 sx
Circulated to surface

2-3/8" tubing
167 jts
SN, 4' perf. sub
& mud anchor

Calculated TOC @ 4377'

Casing:
Hole Size: 8-3/4"
Csg Size: 5-1/2"
set @ 5311'
Cement: 250 sx

Gallup Perforations:
5095'-5110', 5115'-5125',
5169'-5174', 4993'-5003'

WALSH ENGINEERING & PRODUCTION CORP.

Bengal A #1 1980' FSL & 1980' FWL Sec 1 T26N R12W

Disposal Status

Formation Tops:

Fruitland:	917'
Pictured Cliffs:	1356'
Lewis:	1475'
CliffHouse:	2900'
Menefee:	2940'
Point Lookout:	3890'
Mancos:	4114'
Upper Gallup:	5068'

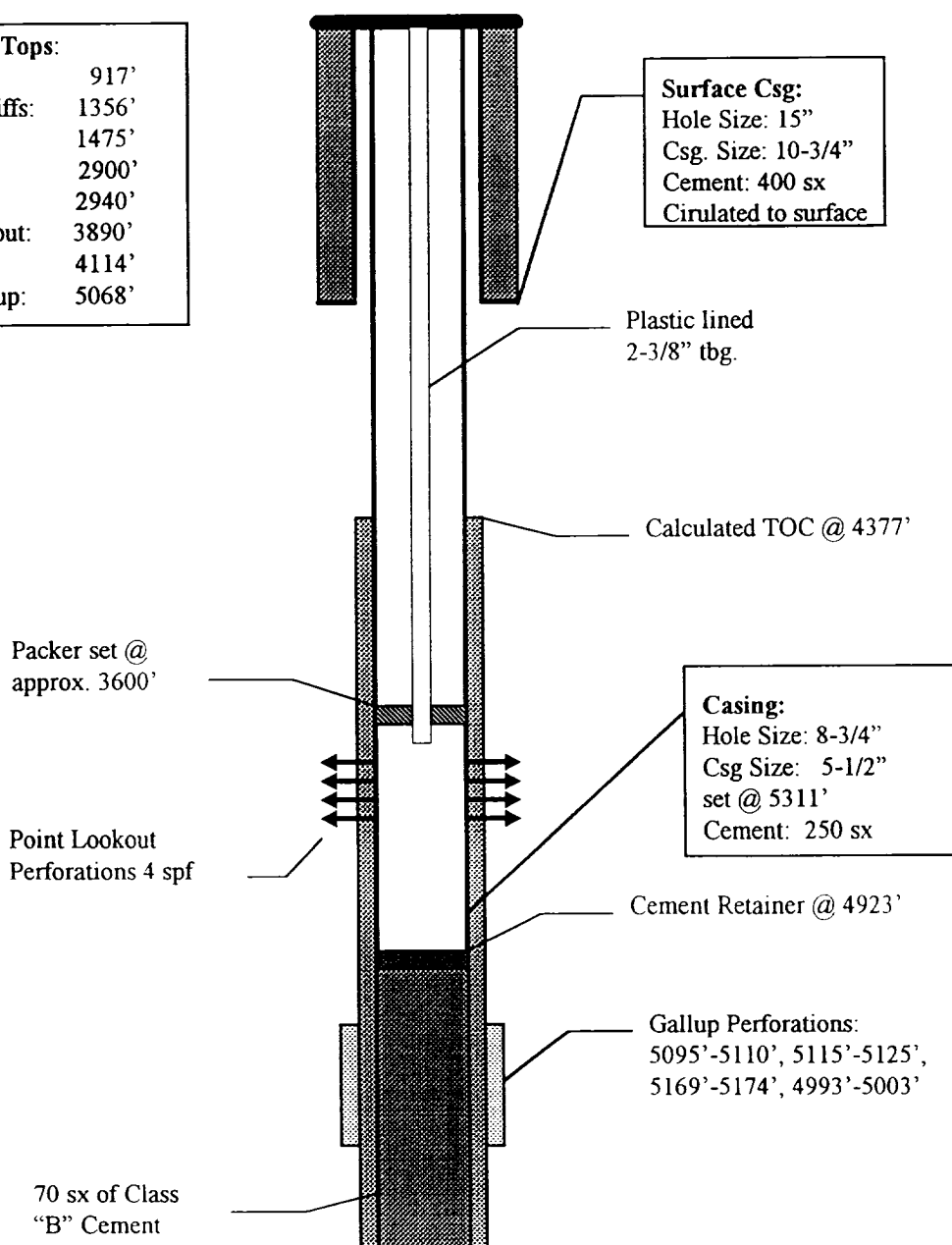


EXHIBIT "A"

INJECTION WELL MONITORING GUIDANCE

AMENDED DIVISION ORDER SWD-583

A. INJECTION MONITORING

- 1) At a time when injection into the well has been determined to be stabilized, but not to exceed six months from initial injection, the operator shall run an injection profile. This type of injection profile will be run again at the one year mark and at three year intervals thereafter. *If, after Division review of the 3rd year injection profile, no fluid migration from the intended injection interval is indicated, the Division may rescind the requirement for subsequent profiles.* The injection profiles will always be witnessed by a representative of the Division. Such profiles shall be run in accordance with the following guidelines, items 2) through 9).
- 2) All injections profiles shall be a combination of temperature and radioactive tracer logs.
- 3) All log curves shall be started (finished) at a minimum of 200 feet above the top perforation. If the well is on vacuum or goes on vacuum within 30 minutes of shutting in the well, temperature curves will be run a) while injecting, b) 30 minutes after shut-in, c) 1 hour after shut-in, and d) 2 hours after shut-in. If the well is holding surface pressure at the conclusion of the tracer studies, temperature curves will be run a) while injecting, b) 1 hour after shut-in, c) 2 hours after shut-in, and d) 4 hours after shut-in.
- 4) Radioactive tracer runs shall start at a minimum of 150 feet above the top perforation and consist primarily of an "intensity" type survey. The initial recorded runs through the radioactive material should have a minimum of 6 inches chart deflection immediately above any anticipated loss interval. The tracer intensity shall be recorded until the R/A residual falls below 1 chart division deflection over background.
- 5) The "velocity" type and "drop shot" type surveys are not required but may be run at the discretion of the operator of the well.
- 6) A "no flow" interval should be established immediately below the bottom perforation or, a percentage or rate of movement below the perforated interval should be calculated.
- 7) Channel (leak) checks should be made first at the bottom perforation and finally

Exhibit "A" - Amended Order SWD-583
Injection Well Monitoring Guidance
Page 2

at the top perforation. The R/A "burst" or "slug" should be of very high intensity and recorded on time-drive for a minimum of 5 minutes. At the conclusion of the time-drive survey, the logger shall drop below the remaining R/A material and make a number of depth-drive (log through) runs until the existence or severity of any channeling or leak is determined. Every effort should be made to establish the top or bottom of the channel(s) if one exists. If there is a severe channel, this might include "unloading" the R/A ejector tool at the top or bottom perforation in an attempt to saturate the fluid moving in the channel. The logging unit operator should be able to allocate the usage of R/A material so as to leave no doubt about the existence and severity of channels or leaks at these two positions.

8) If any channeling exists, the Division representative on location shall make the determination, based on their judgement as to the severity of the channel or leak, to immediately shut the well in or not.

9) Copies of all logs shall be forwarded to the District office and the Division office of the Oil Conservation Division. After reviewing the results in the Division office, a final determination shall be made as to the future status of the well.

B. MECHANICAL INTEGRITY TESTING

Prior to commencing injection operations into said well and every 5 years thereafter, the casing shall be pressure tested to 500 psi and monitored for 30 minutes. A successful test will be that which has lost no more than 10 percent (50 psi) for the duration of the test.