

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

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

SUBMIT IN TRIPLICATE

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other	5. Lease Designation and Serial No. NM - 862665
2. Name of Operator Conoco Inc. (915) 686-6540	6. If Indian, Allottee or Tribe Name
3. Address and Telephone No. 10 Dosta Drive West Midland, TX 79705	7. If Unit or CA, Agreement Designation
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Unit D, 330' FWL & 990' FWL Sec. 31, T21S, R36E	8. Well Name and No. Lockhart B-31 No. 1
	9. API Well No. 30-025-04850
	10. Field and Pool, or Exploratory Area Jalmar Yates 7 Run
	11. County or Parish, State Tarrant, NM

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 checked="" 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 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.)*

We propose to plug and abandon Lockhart B-31 No. 1 according to the attached procedure.

RECEIVED
AUG 23 11 26 AM '90

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

Signed Anderson Title Administrative Supervisor Date 8/22/90

(This space for Federal or State office use)

Or: Signed by Adam Salim Title PETROLEUM ENGINEER Date 8-28-90

Approved by
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.

*See instruction on Reverse Side

ARCO (1) AMOCO (1) CHEVRON (1) File (1)

LOCKHART B-31 NO. 1
PLUG AND ABANDON

Summary: The following procedure is recommended to permanently plug and abandon Lockhart B-31 No. 1. The dimensions and strengths of the casing strings utilized in this wellbore are no longer standard. The Casing/Tubing specifications listed below are approximated to today's nearest standard string for slurry volume calculations. The most critical string, listed as 6-5/8", 24# on the present wellbore sketch has had a 7" 24# packer set and tested to 500# on 3-12-84. Additionally, a May 18, 1959 AFE has this string listed as 7", therefore the 7" cement retainer to be used in step 2 of the recommended procedure can be utilized.

1. GIH w/6-1/8" bit and 7" csg. scraper to 3300'.
2. Set cement retainer @ 3290' and pump 170 sacks of cement into open hole.
3. Sting out of cement retainer and spot 25 sack cement plug on top of retainer.
4. Spot 25 sack cement plug across intermediate casing shoe.
5. Spot 25 sack cement plug across top of salt.
6. Perforate @ 310' and circulate 85 sacks of cement to set surface plug.
7. Pump cement down each casing annulus to set surface plug to 310'.

Location: 330' FNL & 990' FWL, Unit D, Sec. 31, T-21S, R-36E
Lea County, NM

Elevation: 3635' DF (10' AGL)

Completion: Jalmat Yates Seven Rivers Queen
TD: 3990'
Perfs: 3871'-89' w/60 qts
3950'-68' w/60 qts

Casing/Tubing Specifications:

O.D. (in)	Weight (lbs/ft)	Grade	Depth (ft)	Drift (in)	Collapse (psi)	Burst (psi)	Capacity (bbl/ft)	(ft ³ /ft)
20	94	H-40	260	18.936	520	1530	.3553	1.9947
16	65	H-40	535	15.062	670	1640	.2259	1.2684
13-3/8	72	N-80	1124	12.191	2670	5380	.1481	.8315
10-3/4	40.5	H-40	1854	9.894	1420	2280	.0981	.5509
8-5/8	24	J-55	2115	7.972	1370	2950	.0637	.3576
7	23	J-55	3344	6.241	3270	4360	.0394	.2210
2-7/8	6.5	N-80		2.347	11,160	10,570	.00579	.0325

Use safety factor of 70% for collapse and burst pressures.
Assume 2-7/8" workstring will be used.

- Notes:
1. Dimensions, strengths, and capacities for casing in hole could not be found. Therefore, strengths, dimensions, and cement slurries are approximate.
 2. All cement slurry used in this procedure shall be Class "C" neat mixed @ 14.8 ppg.
 3. All mud shall be 9.5 ppg with 25 lbs gel/bbl brine.
 4. Notify BLM prior to commencing any work.

Recommended Procedure:

1. Prepare well for P&A:

- A. MIRU. Bleed well pressure down. Kill well with 9.5 ppg mud if needed.
- B. POOH w/rods and pump.
- C. ND wellhead and NU BOP. TOOH w/2-3/8" production tubing.
- D. PU and TIH w/6-1/8" bit, 7" casing scraper and WS to 3300'. POOH.

Note: If 7" casing scraper run is tight, contact engineer immediately.

2. Set cement retainer and abandon open hole:

- A. GIH w/7" cement retainer and WS and set retainer at 3290'.
- B. MIRU cement services. Pump 170 sacks cement through retainer (50% excess). Maximum surface pressure is 1000 psi.
- C. Sting out of cement retainer and spot 25 sacks cement from 3290'-3140' and displace with 18 bbls mud.
- D. PU to 3135' and circulate hole with 100 bbls mud.
- E. POOH laying down WS to 2190'.

3. Spot cement plug across intermediate casing shoe:

- A. Load hole with 2 bbls mud.
- B. Spot 25 sacks cement from 2190'-2040' and displace with 12 bbls mud.
- C. POOH laying down WS to 1860'.

4. Spot cement plug across top of salt:

- A. Load hole with 1 bbl mud.
- B. Spot 25 sack cement plug from 1860'-1710' and displace with 10 bbls mud.
- C. POOH laying down WS.

5. Circulate cement up intermediate casing and set surface plug:

- A. MIRU wireline services.
- B. RIH with a 4" casing gun loaded 4 JSPF (120° phase, .4" EHD, centralized) and CCL.
- C. Perforate 7" production casing @ 310'. POOH.
- D. GIH w/1 joint 2-7/8" tubing. Close BOP. Pump 10 bbls mud to load hole and establish circulation up 8-5/8" x 7" annulus.
- E. Pump 85 sx cement (12 sx excess) to fill up 8-5/8" x 7" annulus and set surface plug in 7" casing.

Note: If cement does not circulate to surface, pump 25 sx down 8-5/8" X 7" annulus.

- F. POOH with tubing.
- G. RD wireline services.

6. Set surface plugs in each casing annulus to 310':

- A. Pump 34 sx cement down 8-1/4" x 10" (or 8-5/8" x 10-3/4") annulus.
- B. Pump 47 sx cement down 10" x 12-1/2" (or 10-3/4" x 13-3/8") annulus.
- C. Pump 69 sx cement down 12-1/2" x 15-1/2" (or 13-3/8" x 16") annulus.
- D. Pump 141 sx cement down 15-1/2" x 20" (or 16" x 20") annulus.
- E. RD cement services.

7. Prepare surface location for abandonment:

- A. ND BOP and cut off all casing strings at the base of the cellar or 3' below the final restored ground level (whichever is deeper). RDMO pulling unit.
- B. Fill the casing strings (if necessary) from the cement plug to surface with cement.
- C. Cover the wellbore with a metal plate at least 1/4" thick, welded in place, or a cement cap extending radially at least 12" beyond the 20" casing and at least 4" thick.
- D. Erect an abandonment marker according to the following specifications:
 - 1. Marker must be at least 4" diameter pipe, 10' long with 4' above restored ground level, and embedded in cement.
 - 2. Marker must be capped and inscribed with the following well information:

Lockhart B-31 No. 1
Unit D, Sec. 31, T-21S, R-36E
Lea County, NM
Date

Note: 1/4" metal plate can be welded to marker and then to the casing after the marker is set in cement.

- E. Cut off dead-man anchors below ground level and remove markers. Fill in cellar and workover pit.
- F. Remove all equipment, concrete bases, and pipe not in use.
- G. Clean and restore location to its natural state. Reseed according to BLM requirements.

8. Send a copy of the well service report to the Division Office so the proper forms can be filed.

Lockhart B-31 No. 1
Plug and Abandon
Page 4

Approved:

Jim Buchanan JCA
Production Specialist

5-23-90 8-8-90
Date

Joe Miller
Engineer

5-25-90
Date

J. Mccliff (for JEPOT)
Supervising Production Engineer

7/5/90
Date

for Joe L. Conder
Division Engineering Manager

8-2-90
Date

M. A. Phillips
Production Superintendent

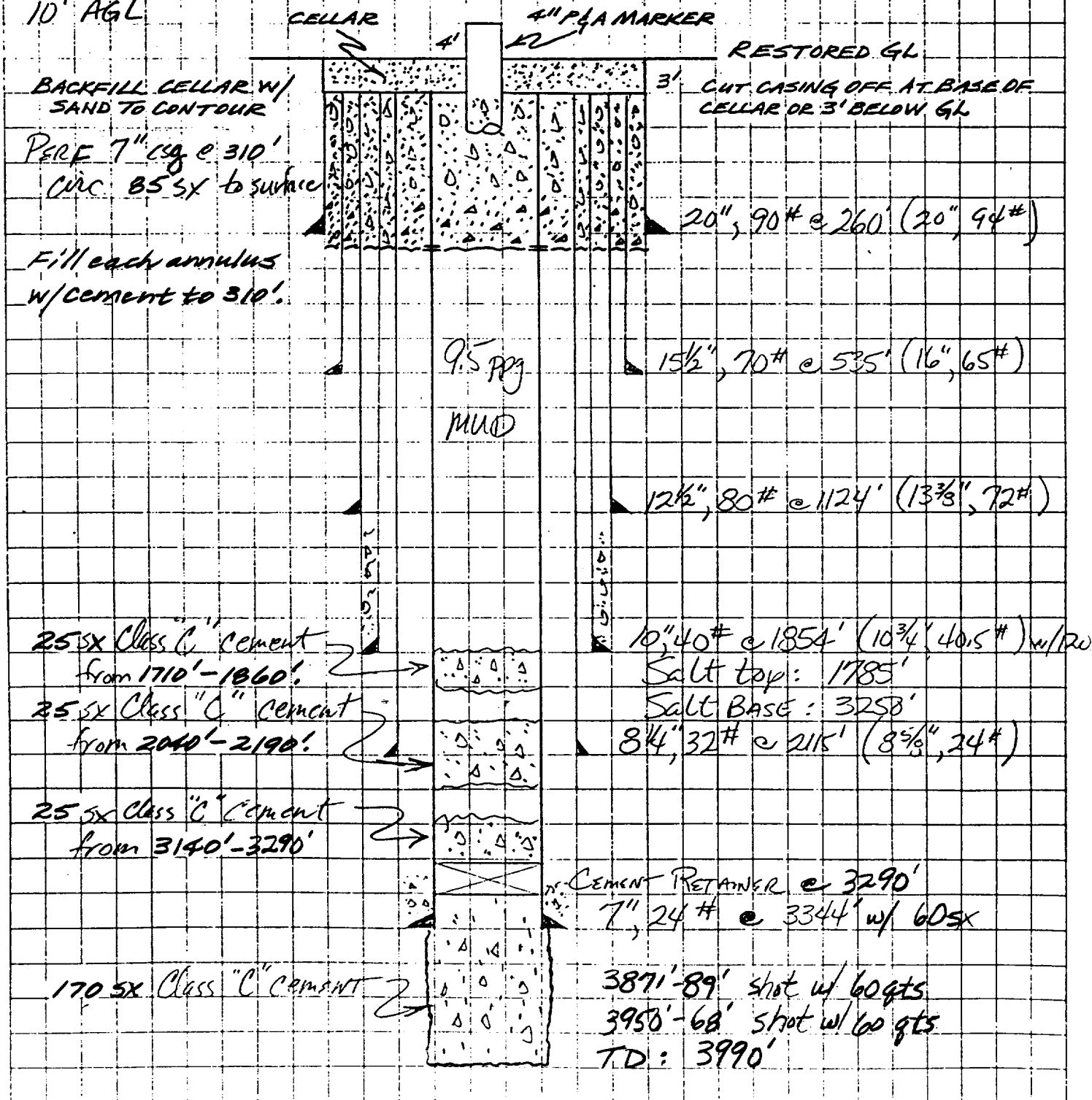
8-8-90
Date

STB:mjm
LHB-31#1.PRO

Lockhart B-31 No. 1

* Proposed P&A *

330' FNL : 990' FNL
Unit D, Sec. 31, T-21S, R-36E
Elevation 3625' GL
10' AGL



Conoco Inc.
Calculation Sheet

Made By
Checked By

Date

Page

Title

Job No.

Field

State