

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

FEB 24 2009

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.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

1 Type of Well
☐ Oil Well ☒ Gas Well ☐ Other2 Name of Operator
BOPCO, L.P.3a Address
P.O. Box 2760 Midland TX 797023b Phone No (include area code)
(432)683-22774 Location of Well (Footage, Sec., T., R., M., or Survey Description)
1980' FNL, 1980' FWL Sec. 4, T20S, R31E5. Lease Serial No
NM-04557

6. If Indian, Allottee or Tribe Name

7 If Unit or CA/Agreement, Name and/or No.
Big Eddy Unit8. Well Name and No
Big Eddy Unit #1229. API Well No
30-015-2745410 Field and Pool, or Exploratory Area
Hackberry, SE. (Morrow)11 County or Parish, State
Eddy
NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☒ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ 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 recompleat 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 shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat 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.)

BOPCO, L. P. respectfully requests permission to plug and abandon the subject wellbore as follows:

1. MIRU pulling unit and plugging equipment. Set open top steel pit for plugging. ND WH & NU 3,000 psi manual BOP for 2-3/8" tubing.
2. Test 2-3/8" x 5-1/2" annulus to check tubing integrity. Circulate w/ 9.5 ppg mud and pull tbq.
3. Spot 30 sx Class H 10100' - 10310'.
4. Spot 25 sx Class C 6855' - 7025'.
5. Spot 25 sx Class C 4110' - 4290' WOC, TAG.
6. RU Wireline and freepoint 5-1/2". Cut and pull same from +/- 3000'.
7. Spot 50 sx Class C 2925' - 3055' TAG. **2822 - 3055 (Sub & DUT)**
8. PERF @ 2600 & SQZ 180 sx Class C 2380' - 2630' WOC, TAG.
9. PERF @ 1050 & SQZ 310 sx Class C 625' - 1050' WOC, TAG.
10. PERF @ 100' & SQZ 75 sx Class C 0' - 100'.
11. Set P&A marker and remediate location.
12. Use steel tank and haul all fluids.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL14 I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Valerie Truax

Title Regulatory Admin Assistant

Signature

Date 02/11/2009

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

APPROVED

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

FEB 21 2009

JAMES A. AMOS
SUPERVISOR

Title 18 USC Section 1001 and Title 43 USC 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

(Instructions on page 2)

PROPOSED PLUG AND ABANDONMENT WELLBORE DIAGRAM

Lease: **BIG EDDY UNIT**

Well No.: **122**

Field: **HACKBERRY (MORROW) SE GAS - ACT**

HACKBERRY (STRAWN) SOUTH (P/A)

Location: **1980' FNL & 1980' FWL, SEC 4, T20S, R31E**

County: **EDDY** St: **NM**

API: **30-015-27454**

Surface Csg.

Size: 11 3/4
Wt: 42
Grd: H-40
Set @: 869
Sxs cmt: 610
Circ: Y
TOC: Surf
Hole Size 14 3/4

Intermediate Csg.

Size: 8 5/8
Wt: 24/28
Grd: K55/S80
Set @: 4194
Sxs Cmt: 625
Circ: N
TOC: 2560
Hole Size 11 to 4200

Production Csg.

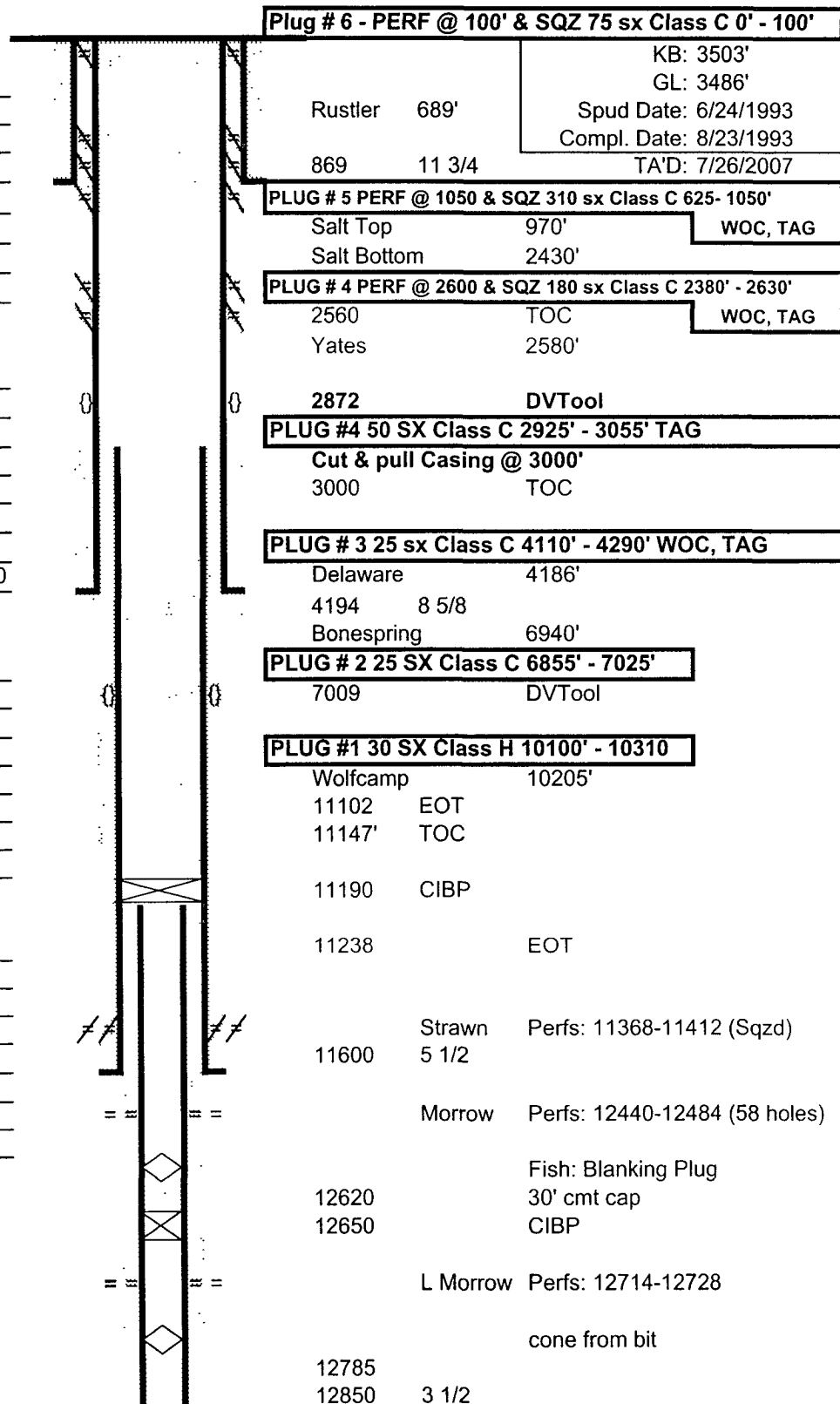
Size: 5 1/2
Wt: 17
Grd: K55/N80/S95
Set @: 11600
Sxs Cmt: 1550
Circ: N
TOC: 3000
Hole Size 7 7/8

Production Csg.

Size: 3 1/2
Wt: 9.3
Grd: L-80
Set @: 11229-12850
Sxs Cmt: 150
Circ: Y
TOC: 11229 TOL
Hole Size 4 3/4

Tubing

355 jts 2 3/8" 4.7# N-80



PBTD: 12785

TD: 11600

LOGGERS TD: 12850

Updated: 2/5/2009

Author: CCC/arc

Engr: CCC

CURRENT WELLBORE DIAGRAM

Lease: **BIG EDDY UNIT** Well No.: **122**
 Field: **HACKBERRY (MORROW) SE GAS - ACT** **HACKBERRY (STRAWN) SOUTH (P/A)**
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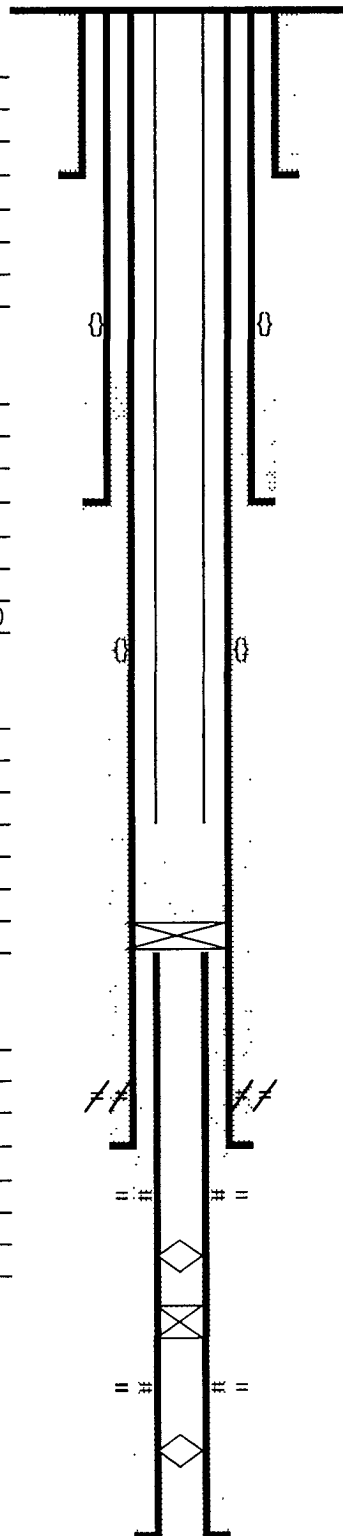
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 Grd: L-80
 Set @: 11229-12850
 Sxs Cmt: 150
 Circ: Y
 TOC: 11229 TOL
 Hole Size 4 3/4

Tubing

355 jts 2 3/8" 4.7# N-80



KB: 3503'
 GL: 3486'
 Spud Date: 6/24/1993
 Compl. Date: 8/23/1993
 TA'D: 7/26/2007

869	11 3/4	
Yates		2580'
2560		TOC
2872		DVTool
3000		TOC
4194	8 5/8	
Delaware		4186'
Bonespring		6940'
7009		DVTool
Wolfcamp		10205'
11102	EOT	
11147'	TOC	
11190	CIBP	
11238		EOT
11600	Strawn 5 1/2	Perfs: 11368-11412 (Sqzd)
	Morrow	Perfs: 12440-12484 (58 holes)
12620		Fish: Blanking Plug
12650		30' cmt cap
		CIBP
	L Morrow	Perfs: 12714-12728
		cone from bit
12785		
12850	3 1/2	

12785
 11600
 12850

Updated: 12/19/2008
 Author: CCC/arc
 Engr: CCC

WELL HISTORY

WELL NAME: BIG EDDY UNIT # 122

API: 30-015-27454

FIELD NAME: HACKBERRY (MORROW) SE GAS - ACT
HACKBERRY (STRAWN) SOUTH - P/A

LOCATION: 1980' FNL & 1980' FWL, SEC 4, T20S, R31E
Eddy Co., NM

TD: 11600 (Orig.); 12850 (Deepen)
PBTD: 12785

3503' KB
3486' GL

SPUD DATE: 06/24/1993

COMP DATE: 08/23/1993

CASING:	Size	Wt	Grd	Set Depth	Sxs	Class	TOC	Hole	Hole Depth
	11 3/4	42	H-40	869	610	C	Surf	14 3/4	869
	8 5/8	24 28	K-55 S-80	4194	625	C	2560 est	11	4200
	5 1/2	17	S-95 N-80 K-55	11600	1550	Lite Neat	3000 est	7 7/8	11600
LINER:	3 1/2	9.3	L-80	11229- 12850	150	H	11229 TOL	4 3/4	12850
OPEN HOLE:									
TUBING:	355 jts 2 3/8" 4.7# N-80								

DST:

CORES & LOGS:

DATE	LOG	COMPANY	TOP	BOTTOM
08/05/1993	PERFO. LOG SURVEYS		6000	11490
07/26/1993	SIMULT C. NEUT - LITHO DENSITY		200	11587
07/26/1993	SIMULT DUAL LAT MICRO		4188	11587
07/02/1993	4-ARM CALIPER		866	2996
	DUAL LAT. W/ MSFL		10180	11600
	LDT CNL GR		9894	11600
	LOG NET - LDT CNL GR		9900	11600
07/26/1993	MEAN SQUARE DIP		9500	11600
03/11/1997	CALIPER - CASING PROFILE		0	11495
03/10/1997	DUAL LAT W/ MSFL GR		11586	12597
04/04/1997	GR NEUTRON		11150	12775
03/10/1997	LITHO-DEN GR		11586	12597
03/13/1997	LITHO-DEN/ C NEUT/ GR		11586	12588

ARC 2/5/2009

BIG EDDY UNIT # 122

Well History

FORMATION TOPS:	Rustler	687
	Yates	2580
	Delaware	4186
	Bone Spring	6940
	Wolfcamp	10205
	Strawn	11145

PRESSURE SURVEY:

08/16/1993: Kuykendall: Gradient Survey

DRILLING:

Cmt 11 3/4" csg w/410 sxs Cls "C", Tailed w/200 sxs Cls "C". CIRC.
07/03/1993: Cmt 8 5/8" csg w/175 sxs Cls "C", Tailed w/250 sxs Cls "C". No circ. Open DV tool @ 2880'. Cmt w/100 sxs Cls "C".
07/04/1993: Cmt w/100 sx Class C, displaced w/182 bbls FW, pressure to 800 psi, closed tool, tool held. TOC est 2560.
Found csg parted 7' below wellhead. Weld on 8-5/8" lift sub; pull slips and 7' of 8-5/8" csg w/collar on. Csg in hole is pin-end looking up (appears that factory-torqued collar pulled off).
Cmt 5 1/2" csg: 1st stage w/350 sxs Halco prem lite, tailed w/525 sxs Halco prem. Est **TOC** 7009'. Cmt 2nd stage w/625 sxs Halco prem+ lite, tailed w/50 sxs Halco prem+ neat. DV tool @ 7900'. Est **TOC** 3000'.
Cmt 3 1/2" Lnr W/ 150 sxs Cls "H". TOC @ TOL 11229'. CIRC thru TOL.

INITIAL COMPLETION:

08/04/1993 Tag PBTD @ 11501'. Test 5-1/2" csg to 2000 psi for 15 mins, ok. Drop 2" SV. RU Acid Engineering. Test 2-3/8" N-80 tbg to 8000 psi for 15 mins, ok. RIH and fish SV. Pump 250 gals 15% HCL + additives and displace /45 bbls FW @ 1 BPM. Reverse acid out of tbg w/50 bbls FW. Circ 215 bbls 2% KCl FW via tbg and spot 250 gals 15% HCl and additives across interval 11501-11243' and displace w/43 bbls 2% KCl FW.

08/05/1993 PERFS: 11368-11412' (2 JSPF). Set MH-2 pkr @ 11154. Swab.

08/12/1993 RU Acid Engineering. Acidize Strawn perms w/5000 gals 15% HCl acid + additives and drop 135 1.1 SG RCNBS evenly spaced throughout treatment. SD. Well on vacuum in 15 seconds. RD Acid Engineering. RIH w/swab. IFL @ 3500'. Swab well 9 hrs and made 14 swab runs. Had trouble getting past floating ball sealers. Was able to count 86 balls recovered.

08/16/1993 Kuykendall. RIH w/ dual Amerada gauges making gradient stops @ 2000, 4000, 6000, 8000, 10000, 11000 & stop for 1 hr @ 11152. Release pkr @ 11154. RIH w/ tbg - tapered string 2.875 x 2.375. Set TAC @ 11246 & SN @ 11407.

08/29/1993 Potential test: pumped 8 BO + 80 BW + 135 MCF in 24 hrs from Strawn interval 11368-11412' perms. TP 30 psi, CP 30 psi, GOR 16875.

BIG EDDY UNIT # 122

Well History

WORKOVERS:

12/03/1993 Pump Change: Depth of failure: 11407', cause: rod pump. Last pump change 9-17-93. Last rod part None.

08/11/1994 Tubing Part: Depth of failure: 9179', failure: 2-3/8" tbg parted external wear. Last pump change 12-3-93. Last rod part None.

08/11/1994 Pump Change: Depth of failure: 11401', cause: looseness. Last pump change 8-11-94. Last rod part None.

DEEPEN TO 12500' & COMPLETE TO MORROW

02/01/1997 POH w/ rod & tbg installation. Set cmt ret @ 11297'. Pump 350 sxs Cls "H" cmt. Sqz perfs @ 11368' to 11412' w/ est 20 bbls into formation. Drill retainer & cmt to 11488'. Test sqz perfs to 500 psi, ok.

02/24/1997 Drill 4 3/4" hole to 12850'. Ran logs. Ran 3 1/2" liner, set @ 11229'-12850'. Rig Released 3/17/97.

04/02/1997 Drilled cmt from 10781' to 12785'. Clean out to PBTD 12785'. Discovered 1 cone from bit had remained in wellbore.

04/05/1997 Ran GR-CCL Neutron log. Set TIW #SS-BB perm pkr @ 11229'.

04/08/1997 Perf 12714'-12718', 12720'-12724, 12726'-12728' w/ 2 JSPF @ 0° phased. Acidize w/2500 gals 15% HCl gas well acid + 39 BS. ISDP - 4870 psi, 5 mins - 4220 psi, 10 mins - 3970 psi, 15 mins 3800 psi. Swab dry - abandon zone. Set 3 1/2" CIPB @ 12650' w/30' cmt.

04/14/1997 Perf 12440'-12456' (34 holes), 12473'-12484' (24 holes), 2 JSPF - 0° phased. Acidize w/ 2500 gals 15% HCl gas well acid + 75 BS. Swab well in. SI-816 hr, TP 3350 psi.

07/10/1997 Frac down 5 1/2" tbg. Spearhead with 500 gals 15% acid and frac with 70 quality foamed CO₂/methanol with 20/40 intermediate strength prop down 3-1/2" tbg at 17.3 BPM avg rate (CO₂ and liquid). Well screened out w/ 27000# sand in fm.

07/12/1997 Ran after frac log, tagged sand @ 12500'. Set 1.87" blanking plug in nipple @ 11232'. Ran 2 3/8" tbg. Attempt to rupture plug, plug not in place, nipple appears to be washed out and blanking plug fell to 12470'. AWO: 9/28/97 0 BO & 2 BW & 63 MCF on 16/64".

09/29/1997 Perfs 12440-12484' (Morrow) On 24 hr test: (F) 0 BO + 2 BW + 68 MCFG. 16/64" choke. 30 psi FTP.

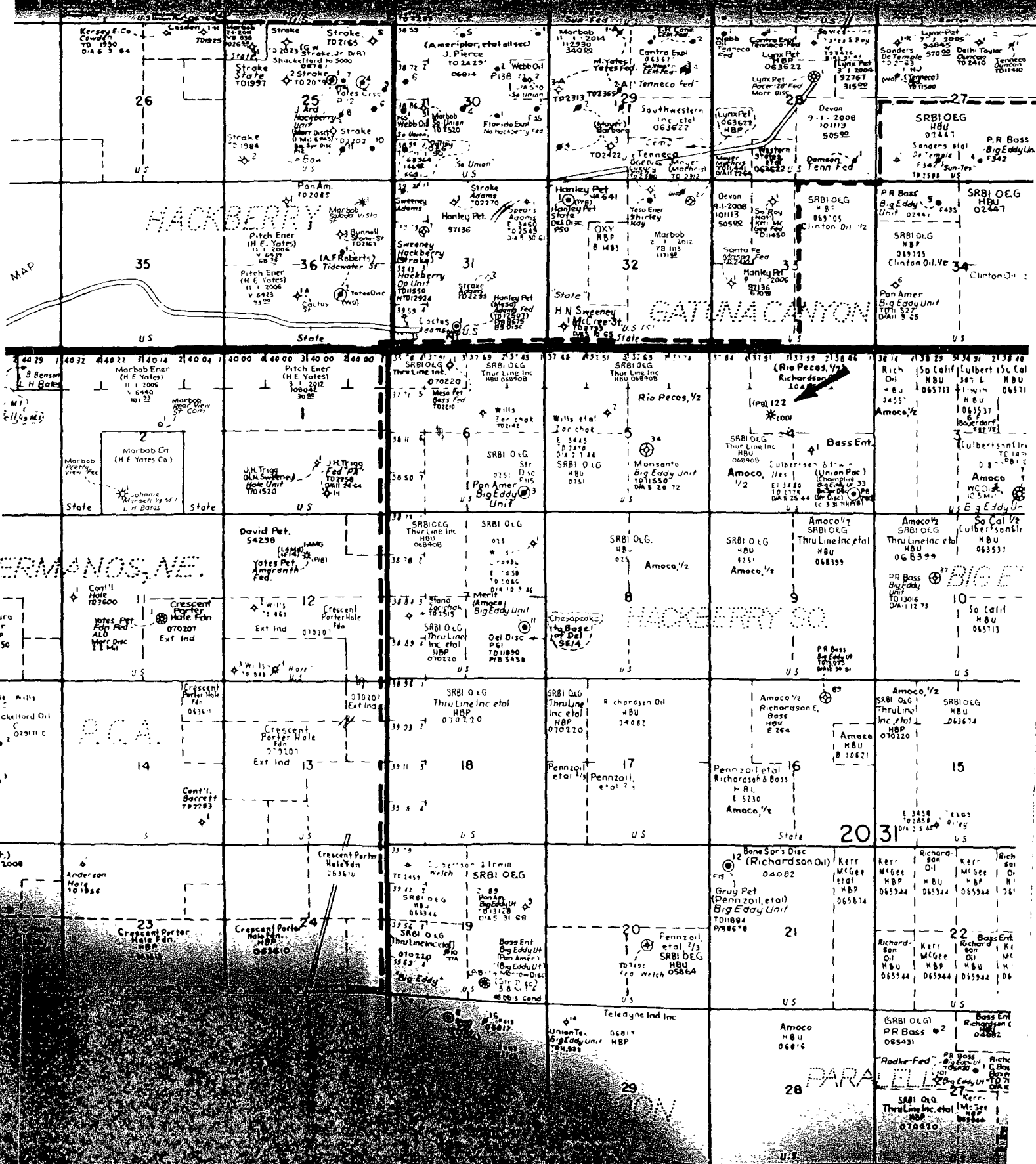
09/30/1997 Perfs 12,440-84' (Morrow) On 24 hr test: (F) 0 BO + 3 BW + 36 MCFG. 20/64" choke.

BIG EDDY UNIT # 122
Well History

10/01/1997 Perfs 12,440-84' (Morrow) On 24 hr test: (F) 2 BO + 2 BW + 4 MCFG. 20/64" choke. 25 psi FTP.

6/14/2007 Perfs 12,440-84' (Morrow) RU kill truck and pumped down tubing. Initially, we achieved 0.83 bpm at 2,500 psi but at the end of the operation the rate dropped to 0.09 bpm at 3,000 psi. Tubing/casing annulus held 1,000 psi.

07/11-26/2007 **TEMPORARILY ABANDON**
Tag PBTD @ 12477'. Pump 5 bbls of FW w/ FRW -14 for spacer. Batch mix 60 sks of Lehigh Class "H" cement mixed @ 15.6 ppg & 1.18 ft³/sx yield (1.0% FL-63 , 0.50% CD-32 , & 0.05% ASA-301). Circ ~1.5 bbls of cmt out of surf lines to flowback tank. Tag TOC @ 11,264'. PUH to 11,260' and circ annulus w/ 20 bbls packer fluid. POOH w/ 88 stands of 2-3/8" N-80 tubing. Set CIBP @ 11190'. PU dump bailer loaded w/ class "H" cement. RIH w/ dump bailer. Dumped ~17.5' of cement. Dumped an additional 17.5' of cement on CIBP. Total of 35' of cement on CIBP. Tagged TOC on CIBP @ 11147'. LD 4 joints of 2-3/8" N-80 tubing. PU 2-3/8" seating nipple w/ collar. RIH w/ 351 joints of tubing to leave EOT @ 11102'. **Well is now TA'd.**



BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220
575-234-5972

Permanent Abandonment of Federal Wells
Conditions of Approval

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plugging operations shall commence within ninety (90) days from the approval date of this Notice of Intent to Abandon.

If you are unable to plug the well by the 90th day provide this office, prior to the 90th day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged. Failure to do so will result in enforcement action.

2. **Notification:** Contact the appropriate BLM office at least 24 hours prior to the commencing of any plugging operations. For wells in Chaves and Roosevelt County, call 575-627-0272; Eddy County, call 575-361-2822; Lea County, call 575-393-3612.

3. **Blowout Preventers:** A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.

4. **Mud Requirement:** Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of water. Minimum nine (9) pounds per gallon.

5. **Cement Requirement:** Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. In lieu of a cement plug in a cased hole, a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient.

Unless otherwise specified in the approved procedure, the cement plug shall consist of either Neat Class "C", for up to 7,500 feet of depth or Neat Class "H", for deeper than 7,500 feet plugs.

6. **Dry Hole Marker:** All casing shall be cut-off at the base of the cellar or 3 feet below final restored ground level (whichever is deeper). The well bore shall then be capped with a 4-inch pipe, 10-feet in length, 4 feet above ground and embedded in cement. The following information shall be permanently inscribed on the dry hole marker: well name and number, name of the operator, lease serial number, surveyed location (quarter-quarter section, section, township and range or other authorized survey designation acceptable to the authorized officer such as metes and bounds).

7. **Subsequent Plugging Reporting:** Within 30 days after plugging work is completed, file one original and five copies of the Subsequent Report of Abandonment, Form 3160-5 to BLM. The report should give in detail the manner in which the plugging work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. **Show date well was plugged.**

8. **Trash:** All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

Following the submission and approval of the Subsequent Report of Abandonment, surface restoration conditions of approval will be developed and furnished to you.