New Mexico Oil Conservation Division, District I 1625 N. French Drive Hobbs, NM 88240

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Form 3160-5 (August 1999)	UNITED STATES DEPARTMENT OF THE IN	FORM APPROVED OMB No. 1004-0135 Expires November 30, 2000					
	BUREAU OF LAND MANAGEMENT SUNDRY NOTICES AND REPORTS ON WELLS						
SUNDR Do not use ti	LC 032096B						
abandoned v	6. If Indian, Allottee or Tribe Name						
1. Type of Well	IPLICATE - Other instruc	ctions on reverse s	side and an	7. If Unit or CA/Agreement, Name and/or No.			
Oil Well Gas Well	Other			8. Well Name and No. Lockhart B 35 #5			
2. Name of Operator ConocoPhillips				9. API Well No.			
3a. Address		3b. Phone No. (include	e area code)	30-025-24858			
4001 Penbrook Odessa	, TX 79762	(432)368-1207	·	10. Field and Pool, or Exploratory Area			
4. Location of Well (<i>Footage, Se</i> Section 35, T-21-S, R-37-I 2180' FNL & 660' FEL	ес., Т., R., M., or Survey Description Е, Н	n)		Paddock/Drinkard 11. County or Parish, State Lea County NM			
12. CHECK AI	PPROPRIATE BOX(ES) TO	INDICATE NATUR	E OF NOTICE, R	EPORT, OR OTHER DATA			
TYPE OF SUBMISSION		TYI	PE OF ACTION				
X Notice of Intent	 Acidize Alter Casing 	 Deepen Fracture Treat 	Production (StartReclamation	Resume) Water Shir Off79			
Subsequent Report	Casing Repair	New Construction	Recomplete	Other			
Final Abandonment Notice		Plug and AbandonPlug Back	 Temporarily Aba Water Disposal 	ndon			
If the proposal is to deepen dim Attach the Bond under which the following completion of the im- testing has been completed. Find determined that the site is read ConocoPhillips proposes the marginal Paddock product	ectionally or recomplete horizontally he work will be performed or provide volved operations. If the operation r nal Abandonment Notices shall be f y for final inspection.) to recomplete this well to t tion. Please see attached	y, give subsurface location de the Bond No. on file wit esults in a multiple comple iled only after all requirem he Drinkard and dow procedure. If swab	is measured and true ve h BLM/BIA. Required tion or recompletion in ents, including reclamat whhole commingle bbing the Drinkarc	y proposed work and approximate duration thereof. rtical depths of all pertinent markers and zenes. subsequent reports shall be filed within \$9 days a new interval, a Form 3160-4 shall be filed once tion, have been completed, and the operator has e the production with the current I results in non-economic production a San Andres Disposal well.			
	APPROVED FOR Ending / 2		H PERIOD	SEP 14 2004 GARY GOURLEY PETROLEUM ENGINEER			

	 I hereby certify that the foregoing is true and correct Name (<i>Printed/Typed</i>) 	Title		
	Kay Maddox		ulatory Agent	
	Signature Maddaf	Date 09/10	0/2004	
	THIS SPACE FOR FEDERA	AL OR	STATE OFFICE USE	
A	Approved by		Title	Date
W N	Conditions of approval, if any, are attached. Approval of this notice does not warr certify that the applicant holds legal or equitable title to those rights in the subject I which would entitle the applicant to conduct operations thereon.		Office	<u></u>

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



Lockhart B-35 No. 5 Drinkard Recompletion & Paddock Downhole Commingle Procedure July 28, 2004

15161770

Location: AFE #: AFE Amount: Spud Date: P&A Date: API Number: Zone/Pool: Battery Destination:	Sec 35, T-21-S, R-37-E, Lea Co. New Mexico Capital Expense 10/00/74 N/A 30025 - 24858 Paddock Existing
Original TD:	7,505'
PBTD:	6,785' (CIBP set at 6,785' in August 1992 during Paddock Recompletion operations)
Tubing:	2 7/8" (167 joints, SN set at approximately 5,344')
KBE:	3380'
GLE:	3369'
KBM:	11' above GL

Project Overview:

The Lockhart B-35 No. 5 well is a marginal producer in the Paddock that has failed and has been shut-in pending an evaluation. After reviewing the offset wells it is recommended that the No. 5 well be recompleted to the Drinkard and downhole commingled with the existing Paddock. However, the Drinkard recompletion potential is considered as marginal and if after acidizing and swab testing it doesn't make economic production the well will be temporarily abandoned and either donated to Rice Operating as a San Andres SWD well or plugged and abandoned.

The Lockhart B-35 No. 5 well was originally completed as a Granite Wash producer in Oct. 1974. It was later recompleted to the Abo in Sept. 1977 and finally downhole commingled in March 1978. In Oct 1981 a casing leak was repaired across the interval 4150' to 5213' via a cement squeeze job. In Oct. 1990 the well was temporarily abandoned. In August 1992 the well was re-activated via a recompletion to the Paddock interval from 5146' to 5257'. The last well test prior to failure was 1 BOPD and 8 MCFGPD.

The No. 3 well (twin well located 200' due north of the No. 5 location) has produced and depleted the Tubb and Blinebry 1 through the Blinebry 5 zones. It was also completed in the Drinkard however there are a couple of intervals in the Drinkard that were not tested or produced. These intervals are the proposed intervals in the No. 5 well which will be perforated, acidized and swab tested. The swab results from the Drinkard will determine if the well will be placed back on pump or will be temporarily abandoned.

If successful, the Drinkard recompletion is expected to produce 5 to 10 BOPD and 10 to 50 MCFGPD. If during the swab testing the Drinkard interval makes less than 3 BOPD, the well will be T&A'd.

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Casing Program

Csg Size (in)	Depth (ft)	Wt (lb/ft)	Grade	Drift ID	Burst (psi)	Coll (psi)
9 5/8	0 – 2,600	36	K-55	8.765	3520	2020
5 1/2	0 – 7,505	15.5	K-55	4.825	4810	4040

Current Perforated Paddock Interval

Formation	Top Perf.	Bottom Perf.	Perforated Interval
Paddock	5146	5257	111

Proposed Drinkard Perforation Interval

Formation	Top Perf.	Bottom Perf.	Perforated Interval
Drinkard	6452	6458	6
Drinkard	6490	6495	5
Drinkard	6722	6730	8

Drinkard / Paddock Artificial Lift Specs:

(See attached beam pump design for additional information)

PU Specs:Existing Lufkin C320 - 256 - 120Electrical:Existing 20 HPPU Controller:Unknown

Tubing:Existing 167 joints of 2 7/8"Rod String:Existing 7/6 rod string. Class not known. (60 7/8" rods and 145 ¾" rods, with 3 Kbars)Rod Pump:Existing 25-150-RHBC 18-0-00 Type "A" (Corrosive environment with gas interference)Stroke Length:Existing 102"PU Speed:Existing 5 SPM

Well Control Requirements: (0000 ppm H2S)

Well Control: Well Control equipment and procedures will be in accordance with the ConocoPhillips Well Control Manual, Second Edition, Revision Two, dated August 1994.

Well Category: Since 9.5 ppg kill fluid will be used throughout the procedure the well is not anticipated to flow at any time during the operation. A dynamic head procedure will be used to maintain control of the well during tripping operations since the Drinkard zone is beneath an open depleted Paddock zone. This well is to be considered a **Category 1** well. **Category 1** wells require one untested barrier, which will be the hydrostatic head of the kill fluid.

BOPE Class 1: For operations the MPSP for this well is estimated to be between 1000 to 2000 PSIG. A **Class 1 BOP** stack is required. The actual stack will consist of a hydraulic operated 5M PSIG BOP stack with a hydril on top of tubing rams with a set of blind rams on bottom. NU shop tested BOP stack on top of companion flange. Test as per SOP

Drinkard Recompletion Paddock Downhole Commingle Procedure 10

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Drinkard Recompletion & Paddock Downhole Commingle Procedure:

Note: All depths referenced to 11' RKB.

- 1. MI and RU pulling unit. Kill the Paddock by pumping 100 bbls of 9.5 ppg treated brine water via the casing.
- 2. Remove the pumping tee and unseat the pump. If the rods are coated with paraffin, RU hotoiler and pump 70 bbls of 200 degree water down the tubing to remove the paraffin from the rods and tubing. TOOH with 000, 0/0" Class 00 rods. Inspect rods and couplings for pitting and wear. Lay any worn rods down and discard worn couplings.
- 3. NU 5 M PSIG WP hydraulic operated BOPE consisting of a Hydril top, a set of 2 7/8" tubing rams below and a set of blind rams on bottom and test to 250/5000 PSIG as per SOP.
- 4. RU wellhead scan unit. Release the TAC at 0000' and TOOH scanning tubing. Laying down all red and green band tubing.
- 5. PU additional 2 7/8" J-55 tubing with bit and casing scraper for 5 ½", 15.5 ppf casing to tag the PBTD at approximately 6785' (Not certain if there is a cement cap on top of the plug). Attempt to circulate the rat hole with packer fluid containing a biocide. PU to 6730' and spot 1,000 gals of 15% HCL across the proposed Drinkard interval. (Acid will have to be displaced with a minimum of 8 bbls of 8.5 to 9.0 ppg treated brine water). TOOH with bit and casing scraper.
- 6. RU Schlumberger electric line services. Install lubricator and pressure test to 2,000 PSIG against the blind rams. RIH with GR/CCL and 4" OD HEGS non-ported casing guns loaded 4 SPF in 120 degree phasing to perforate the following Drinkard intervals. <u>Note: Correlate the perforating gun using the GR and the open hole logs dated Oct 1974.</u> The gun charge is a 22.7-gram charge to provide 0.42" perforation ID hole with 21" of penetration.

	<u>Interval</u>	<u>NEP</u>	<u>Shots</u>	2,34 15 15 17 18 79 20 2,34 1 20 2,3 1 20 2,3 1 20 2,3 1 20 2,3 1 20 2,3 1 20 2,3 1 20 2,0 20 2,0 2,0 20 2,0 20 2,0 2,0 2,0 2,0 2,0 2,0 2,0 2,0 2,0 2		
Drinkard	6722' to 6728'	6'	25 Holes			
Drinkard	6490' to 6495'	5'	21 Holes	Hobbs		
Drinkard	6451' to 6457'	6'	25 Holes			

Caution: The Drinkard is expected to have a pore pressure of 2,700 PSIG while the Paddock zone which will be open to the wellbore has an estimated 500 PSIG. RU transport and utilize the dynamic head procedure to maintain control of the Drinkard. If there is no pressure after perforating connect the pump truck to the wellhead and maintain rate of 1/4 bpm while tripping in the hole.

- 7. TIH with 6750' of 2 7/8" J-55 tubing with a 5 ½" RBP with a ball catcher and a CS1 10 M treating packer, or equivalent. Hydro-test each stand to 6,000 PSIG while tripping. TIH and space out to set the RBP at 6750' and the packer at an approximate depth of 6650' (minimum of 2 joints above the top perforation).
- 8. RU Schlumberger treating services. Install 10 M PSIG WP frac valve on the tubing. Install treating line with nitrogen actuated relief valve. Test the treating line to 6000 PSIG and set the relief valve at 4000 PSIG. Lay a staked relief line from the casing to an open frac tank. Leave the casing relief line open throughout the treatment. Pump the acid breakdown as per the attached Schlumberger recommendation. Pump the treatment as follows at design rate of 3 5 BPM dropping 50, 1.3 SG, 7/8" ball sealers throughout the spearhead breakdown treatment. Do not exceed 4200 PSIG.

TREATING LINE TEST PRESSURE:	A minimum 1000 psig o	ver cooo	2010
MATP		6000	PSIG

Lockhart B-35 No. 5

Drinkard Recompletion and Paddock Downhole Commingle Procedure Page 4

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MAXIMUM ALLOWABLE WORKING PRESSURE: Based on weakest component in system. Burst pressure of 5 1/2" casing.	4500	PSIG.	14
NITROGEN POP OFF SET PRESSURE: Relief pressure set at the lesser of : 300 psig less than 90% MAWP or, 300 psig over MATP	4300	PSIG	30
MAXIMUM ALLOWABLE TREATING PRESSURE: If reached, human action required.	4200	PSIG	
MAXIMUM ANTICIPATED TREATING PRESSURE:	4000	PSIG	

Treatment Schedule:

- Load tubing and initialize breakdown with 50 bbls of 2% KCL slick water
- Pump 1,500 gals of 15% NEFE HCL acid at 3 5 BPM containing 50 1.3 SG, 7/8" RCN ball sealers.
- Displace breakdown with 40 bbls of 2% KCL slick water.
- Surge balls off perforatons.
- Bleed the pressure off the tubing, release the packer and drop down to pick up the RBP.
- Pull up to locate the RBP at approximately 6550', set the RBP then set the packer and pressure test the RBP to 1,000 PSIG.
- Pull the packer up to 6475' and set the packer.
- Load tubing and initialize breakdown with 50 bbls of 2% KCL slick water
- Pump 1,500 gals of 15% NEFE HCL acid at 3 5 BPM containing 50 1.3 SG, 7/8" RCN ball sealers.
- Displace breakdown with 40 bbls of 2% KCL slick water.
- Surge balls off perforatons.
- Bleed the pressure off the tubing, release the packer and drop down to pick up the RBP.
- Pull up to locate the RBP at approximately 6470', set the RBP then set the packer and pressure test the RBP to 1,000 PSIG.
- Pull the packer up to 6400' and set the packer.
- Pump 1,500 gals of 15% NEFE HCL acid at 3 5 BPM containing 50 1.3 SG, 7/8" RCN ball sealers.
- Displace breakdown with 40 bbls of 2% KCL slick water.
- Surge balls off perforatons.
- Bleed the pressure off the tubing, release the packer and drop down to pick up the RBP.
- TIH to set the RBP at approximately 6750' (below the bottom Drinkard perforation at 6728')
- PU with the packer to set at approximately 6400' (50' above the top Drinkard perforation) and swab test the Drinkard interval.
- 9. Release the packer and TIH to retrieve the RBP. TOOH laying down the RBP and packer. Load the casing as necessary using the dynamic head method to keep the well dead.
- 10. If the swab test indicates the Drinkard to be productive continue with step 11 to place the well back on production as a downhole commingled Drinkard / Paddock producer. If it is determined that the Drinkard is non-economic skip to step 15 to temporarily abandon the wellbore with the intent of either permanently abandoning the well later this year or transferring ownership to Rice operating to be used as a SWD well.
- 11. TIH with 6,750' of 2 7/8", J-55 production tubing with the open ended SN on bottom of the tubing and a 5 ¹/₂" TAC. The bottom section below the TAC to be 2 7/8" polylinned tubing. Space the tubing out to set the seating nipple at approximately 6,750' or 22' below the bottom Drinkard perforation with the TAC at approximately 5,500' (above the top Paddock perforation).
- 12. ND the BOP stack and install the B-1 adapter flange. Pump corrosion inhibitor down the tubing to coat the rods and pump as they are run in the hole. PU standard strainer nipple on the bottom of the 1.25" RHBC

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Type "A" pump on 7/6 Class "Existing" rod string and RIH to place on beam pump. (See attached **Drinkard Beam Pump Design.** The stoke length and speed will be determined based on the swab results. RD and move off.

13. Notify Champion prior to placing the well on production. As soon as the well is started have it placed on scheduled CI truck treatments. Schedule a backside scale squeeze as soon as the fluid level is pumped off.

S. S. Same

14. Operator to submit a change of status form for new production. Report daily well tests and fluid levels to the Midland office for 30 days or until it pumps off and the production rate has stabilized. Use the attached prepull spreadsheet for test reporting.

Temporary Abandonment Procedure (If Swab Results Indicate Non-Economic Well)

- 15. TIH with 6,750' of 2 7/8", J-55 production tubing with 5 ½ " treating packer and set at 6,750'. Contact the OCD and set up pressure test to confirm integrity of the CIBP at 6784'. Pressure test as per OCD guidelines. TOOH with packer.
- 16. RU Schlumberger electric line services. Install lubricator and RIH with cement dump bailer to dump 35' of cement on top of the CIBP at 6784'.
- 17. PU electric line set CIBP and RIH to set at 6420' (31' above the top Drinkard perforation at 6451'). RIH with cement bailer and dump 35' of cement on top of the CIBP at 6420'.
- 18. TIH with treating packer on 6300' of 2 7/8" tubing. Set the packer. Contact the OCD and set up pressure test to confirm integrity of the CIBP at 6420'. Pressure test as per OCD guidelines. TOOH with packer.
- 19. PU 5 ½" CIBP on 5100' of 2 7/8" tubing and TIH to set at 5100' (46' above the top Paddock perforation). Circulate the hole with packer fluid and pressure test the plug to 1,000 PSIG.
- 20. RU electric company and RIH with dump bailer to dump 35' of cement on top of the CIBP at 5100'. RD electric company.
- 21. Notify the OCD of temporary abandonment and arrange for pressure testing the casing to 500 PSIG or as per OCD guidelines.



District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV

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1220 S. St. Francis Dr., Santa Fe, NM 87505

ADI Mushes

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

01314157672
12, 13, 14, 15, 16, 77, 78, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10
Revised June 10, 2003
Submit to Appropriate Pistrict Office
StateoLease - 4 Copies
Fee Lease - 3 Copies
AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

30-025-24858		19190	Drinkard	me
* Property Code 003501	Lockhar		perty Name	' Well Number #5
' OGRID No. 217817	Conoco	•	erator Name	'Elevation 3369'
		¹⁰ Sur	face Location	

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Н	35	21S	37E		2180	North	660	East	Lea
			¹¹ B	ottom H	ole Location	If Different Fr	om Surface		
UL or lot no.	Section	Township	o Range		Feet from the		Feet from the	East/West line	County
" Dedicated Acres	" Joint or	Infill	" Consolidation	Code "Or	rder No.				
40									

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16				
16				¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is
				true and complete to the best of my knowledge and
				belief.
				Lun Madder
	· · · · · · · · · · · · · · · · · · ·		-++++ <u>-</u> +++++	Signature
			20111	Kay Maddox
			- 2	Printed Name
		-		Regulatory Agent
		1		Title and E-mail Address
		1]		- 09/10/2004
		-	- GGO'	Date
			- 	
			mmm	¹⁸ SURVEYOR CERTIFICATION
				I hereby certify that the well location shown on this plat
				was plotted from field notes of actual surveys made by
				me or under my supervision, and that the same is true
				and correct to the best of my belief.
				, , , , , , , , , , , , , , , , , , , ,
				Date of Survey
				Signature and Seal of Professional Surveyor:
				Signature and Sear of Professional Surveyor.
				Certificate Number
				Certificate Indition