Submit 3 Copies To Appropriate District Office <u>District I</u> 1625 N. French Dr., Hobbs, NM 88240	State of Energy, Minerals	New Mes and Nat		Form C-103 Revised June 10, 2003 WELL API NO.			
District II 1301 W. Grand Ave., Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505	OIL CONSER` 1220 Sout Santa F		ancis Dr.	5. Indicate Type of Lease STATE FEE 6. State Oil & Gas Lease No.			
	CATION FOR PERMIT" (FOR	PEN OR PL	UG BACK TO A	7. Lease N Deck Esta 8. Well N			
2. Name of Operator ConocoPhilli	ns Company			9. OGRID	Number 217817		
3. Address of Operator 4001 Per				10. Pool name or Wildcat			
4. Well Location	17702		<u>l</u>	San Andre	es es		
Unit Letter_L :	feet from the	South	line and 99	90	feet from the West line		
Section 7	Township21		Range 37-E	NMPM	County Lea		
	11. Elevation (Show w 3490'	whether Di	R, RKB, RT, GR, etc	.)			
12. Check A NOTICE OF IN PERFORM REMEDIAL WORK □	Appropriate Box to In TENTION TO: PLUG AND ABANDON	·		SEQUENT	Other Data REPORT OF: ALTERING CASING		
TEMPORARILY ABANDON	CHANGE PLANS		COMMENCE DRIL	LING OPNS			
PULL OR ALTER CASING	MULTIPLE COMPLETION		CASING TEST AND CEMENT JOB	D	ABANDONMENT		
OTHER: Cement Squeeze Upper G	lorieta	X	OTHER:				
of starting any proposed we or recompletion. This is a notice of intent to cement	ork). SEE RULE 1103.	For Multi	ple Completions: At	d give pertir	nent dates, including estimated date re diagram of proposed completion of the date of the		
Therefore a control of the control o	 						
I hereby certify that the information	above is true and comple						
SIGNATURE Dans	- Moder	_	HSE/Regulatory Assis	stant	DATE06/24/2004		
Type or print name Stacey D. Linder (This space for State use)		E-mail a	address:		Telephone No.		
APPPROVED BY Lau C Conditions of approval, if any:	J. Winh	TITLE QC FII	O Russ		JUL 2 2 2004 DATE		
· · · · · · · · · · · · · · · · · · ·			LD REPRESENTATIV	Œ II/ST.AFF	MANAGER		



DECK ESTATE "7" #1 Upper Glorieta – Cement Squeeze Remedial Procedure

Location:

1930' FSL & 990' FWL, Sec 7, T-21-S, R-37-E, Lea Co. New Mexico

AFE #:

WA5.B47

AFE Amount:

\$626,000 Gross / Net

Spud Date:

12/17/96

P&A Date:

05/12/98

API Number:

30025 - 3367700

Proposed Zone/Pool: Drinkard / Hardy Tubb-Drinkard Pool

Battery Destination:

New Battery

TD:

7176' Driller's Depth

PBTD:

Surface

DV Tools:

7725'

KBE:

3504.6'

GLE:

3490'

KBM:

14.6' above GL

Existing Casing Program

Hole Size (in)	Csg Size (in)	Depth (ft)	Wt (lb/ft)	Grad e	Conn	ID	Burst (psi)	Coll * (psi)	Ten (Klbs)	Rated by
17-1/2	13-3/8	435	54.5	K-55	ST&C	12.615	2730	1130	547	API
12-1/4	8-5/8	3986	32	J-55	LT&C	7.921	3930	2530	417	API
7-7/8	5-1/2	0 – 646	17	L-80	LT&C	4.892	7740	6280	348	API
7-7/8	5-1/2	646 – 9243	17	K-55	LT&C	4.892	5320	4910	272	API
7-7/8	5-1/2	9243 – 10,100	17	L-80	LT&C	4.892	7740	6280	348	API

Geologic Summary

Formation	Тор	Base	Lithology		Poro	Perm	Sw	Press	Temp	O/G
Blinebury	5542	6290	Dolomite		8	0.1-10	25	2055	120	O&G
Drinkard	6475	6900	Dolomite Limestone	1	12	0.1-10	22	2350	135	O&G
Drinkard Perfs	6776	6888	Dolomite Limestone	/	12	0.1-10	22	2350	135	O&G
Remarks	CIBP a	t 7200.			<u></u>	1	I		<u>-L </u>	.1

Project Overview:

The intent of this work will be to re-squeeze the Lower Glorieta perforations from 5573' to 5594'. During the reentry three sets of perforations were squeezed prior to completing the well to the Drinkard from 6776' to 6888'. The upper and the lower set of perforations were successfully cement squeezed but the perforations across the interval from 5208' to 5298' (Glorieta) leaked off after drilling out the cement. Prior to completing the Drinkard swab tests indicated some water inflow via these Glorieta perforations but was not believed to be significant enough to warrant a re-squeeze. Since completing the Drinkard the well has maintained 1,000' of pump submergence and has had calcium sulfate plugging problems.

This procedure will consist of pulling the pumping equipment, retesting each set of squeeze perforations, setting a cement retainer above the zone and re-squeezing. After drilling out the cement the perforations will be pressure tested to insure the zone has been isolated. The production equipment will then be rerun and the well placed back on production.

Existing Perforations & Completion History:

San Andres: 4018, 25, 32, 34, 70, 74, 90, 4124, 27, 31, 36, 40, 46, 50, 57 (15 Holes Total)

Squeezed and tested to 2,000 PSIG.

U. Glorieta: 5208, 14, 24, 31, 33, 53, 54, 56, 72, 74, 76, 80, 92, 95, 98 (16 Holes Total)

Squeezed and tested to 2,000 PSIG....leaked off but could not pump into perforations. This

interval is believed to be the source of water inflow.

L. Glorieta: 5573, 75, 78, 80, 92 94 (6 Holes Total)

Squeezed and tested to 2,000 PSIG.

Drinkard: 6784' to 6800' & 6828' to 6834'. Current productive interval.

Well Control Requirements:

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: All zones encountered in the well are normally pressured. 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. This well is to be considered a Category 2 well due to expected flow rates exceeding 300 MCFGPD from the Drinkard completion after it is stimulated and unloaded. Category 2 wells normally require two untested barriers, however the Hobbs area has been granted an exception, allowing the use of one untested barrier. Approval has been granted for use of a dynamic fluid column as that barrier.

BOPE Class 2: The MPSP for this well is estimated to be in the range of 1000 PSIG to 2000 PSIG. A **Class 2 BOP** stack is required. The stack will consist of a hydraulic operated 5M PSIG BOP stack with tubing rams on top and a blind ram on bottom. NU shop tested BOP stack on top of companion flange. Test as per SOP.

Workover Fluid: Use treated 9.5 – 10.0 ppg brine water for duration of operations. Use dynamic head kill procedure if required to maintain control of the well during tripping and installation / removal of BOP's.

Wellhead Program:

Casing Head: 8-5/8" SOW x 11" 3M

Tubing Head: 11' 3M WP X 7 1/16" 5M WP

Tubing Head Adaptor: B-1 Adapter Flange

Type 3 Beam Pump Wellhead: See Attached Sketch (Contains Choke on Casing)

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Drinkard Artificial Lift Specs:

(See attached beam pump design for additional information)

PU Specs:

Existing Lufkin C320 –213 – 120

Tubing:

Existing 2 7/8" L-80 (New Tubing)

Rod String:

Tapered 7/6 Norris 97 (2250" of 7/8" Rods + 4450' of 3/4" Rods)

Rod Pump:

Replacement Pump: 25-150-RHBC 20-6-00 2 Stage HVR Type "A" (Corrosive environment with

gas interference)

Stroke Length: 85" PU Speed:

10 SPM

Squeeze Procedure:

Note: All depths referenced to 14.6' RKB.

- 1. RU pulling. Hook up water transport to the casing and kill well with 160 bbls of 9.5 – 10 ppg treated brine water. Use dynamic head kill procedure during installation / removal of BOP stack and tripping, if necessary.
- 2. Unseat the pump and TOOH with Norris 97 rod string consisting of 2250' of 7/8" rods, 4450' of 3/4" rods and 150' of 1 1/2" K bars. Visually inspect rods for pitting and wear. Discard any worn couplings and pitted rods.
- 3. NU 5,000 PSIG WP hydraulic operated BOPE and test to 250/5000 PSIG. TOOH laying down the 2 7/8" L-80 production tubing. TAC set at 6677' with SN at 6900'.
- PU 2 7/8" J-55 workstring with 5 1/2" RBP and packer. TIH to set the plug at 5620'. PU to 10' set the 4. packer and pressure test the plug to 2,000 PSIG. Release the packer and PU to approximately 5550' and pressure test the Lower Glorieta perforations to 2,000 PSIG for 15 minutes. If the pressure bleeds off, attempt to pump into the squeeze perforations at 1 BPM, 2 BPM and 3 BPM at a pressure not to exceed 4,000 PSIG. Release the packer, TIH and retrieve the RBP.
- 5. PU and repeat the testing procedure across the remaining two intervals (be sure to establish injection rates into the interval to be squeezed):

	Top Perf	Bottom Perf			
Glorieta	5208'	5298'			
San Andres	4018'	4157'			

- After determining which set of perforations are leaking TOOH with packer and plug. PU redressed RBP 6. and TIH to set appoximately 20' below the bottom perforation of the set to be squeezed spot 1 sk of sand on top of the plug. TOOH with tubing.
- 7. PU 5 ½" treating packer and TIH and set the packer just above the RBP and pressure test the plug to 3.000 PSIG. Release the packer and TOOH.
- 8. PU 5 ½" cement retainer and TIH to set the retainer at 50' above the top perforation in the squeeze interval (approximately 1 bbl casing capacity between the retainer and the top squeeze perforation). Sting out of the retainer and establish circulation. Sting back into the retainer and establish injection into the Glorieta.

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- 9. RU Schlumberger Cementing Services equipment. Install treating line and cement manifold. Test the surface equipment to 5,000 PSIG. Establish injection into the Glorieta and perform cement squeeze as per the attached Schlumberger recommendation. Attempt to perform hesitation squeeze during the last stage of the job. The maximum squeeze pressure will be 1,000 PSIG over the injection pressure prior to hesitation ...not to exceed 2,000 PSIG. PU and reverse out excess cement. TOOH with tubing.
- 10. WOC 24 hours.
- 11. RU reverse unit and power swivel. PU 4 ¾" bit with drill collars and TIH to drill out the retainer and cement. TOOH with bit and collars. PU casing scraper for 5 1/2" casing and TIH to run across the squeeze interval. TOOH.
- 12. PU 5 ½" packer and TIH to set above the squeezed perforations. Load the tubing and pressure test the squeeze perforations to 2,000 PSIG. If the squeeze pressure bleeds off, perform swab test to determine water entry rate. Release the packer and TOOH.
- 13. PU retrieving head for the 5 ½" RBP and TIH to retrieve the RBP. TOOH laying down the workstring.
- 14. PU the 2 7/8" production tubing with standard 2 7/8" SN, one joint of polylinned 3 ½" tubing and TAC. Space the TAC out to locate the SN at approximately 6870' (36' below the bottom Drinkard perforation) with the TAC at approximately 6700'.
- 15. 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.
- 16. PU a 25-150-RHBC 20-6-00 HVR Type "A" pump with a 1'X 1 ¼" strainer nipple on bottom and TIH on the the existing 7/6 Norris 97 rod string. RD and move off.
- 15. 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.
- 16. Report daily well tests and fluid levels via the "Morning Reports Folder" for 30 days or until it pumps off and the production rate has stabilized.