CONDITIONS OF APPROVAL, IP ANY:

# State of New Mexico

to Appropriate District Office	En	ergy, Minerals and Nati +51810%	ıral Resources Department	Revised 1-1-89
DISTRICT I P.O. Box 1980, Hobbs, NM	88240 O		TION DIVISION	WELL API NO.
DISTRICT II P.O. Drawer DD, Artesia, NA	1.188210 1 A		exico 87504-2088	5. Indicate Type of Lease STATE X FEE
DISTRICT III 1000 Rio Brazos Rd., Aztec,	NM 87410			6. State Oil & Gas Lease No. L-6654
( DO NOT USE THIS FOR	RM FOR PROPOS RENT RESERVOI	S AND REPORTS ON SALS TO DRILL OR TO DI R. USE "APPLICATION R FOR SUCH PROPOSALS	EEPEN OR PLUG BACK TO A OR PERMIT CEIVED	7. Lease Name or Unit Agreement Name
1. Type of Well:	GAS			State "19" Com.
WELL	WELL X	OTHER	MAY 29 '90-	
2. Name of Operator	Company			8. Well No.
Southland Royalty  3. Address of Operator	y company			9. Pool name or Wildcat
21 Desta Dr., Mic	dland, TX 79	705	ARTESIA, OFFICE	
4. Well Location			<del></del>	South Millman (Morrow)
Unit Letter N	. 860	Feet From The South	Line and	2057 Feet From The West Line
Section 19		Township 19 South	Range 28 East	NMPM Eddy County
		10. Elevation (Show) 3493'GR.	whether DF, RKB, RT, GR, etc.)	
11.	Check Apr	propriate Box to Indi	icate Nature of Notice, R	Report, or Other Data
NOTIC	E OF INTER	-		SSEQUENT REPORT OF:
PERFORM REMEDIAL WO	як 🗀	PLUG AND ABANDON	REMEDIAL WORK	ALTERING CASING
TEMPORARILY ABANDON	ı 🔲	CHANGE PLANS	COMMENCE DRILLIN	IG OPNS. PLUG AND ABANDONMENT
PULL OR ALTER CASING			CASING TEST AND C	
OTHER: Add Perforation	ons in the Up	per Morrow	X OTHER:	
12. Describe Proposed or Co work) SEE RULE 1103.		(Clearly state all pertinent d	etails, and give pertinent dates, incli	uding estimated date of starting any proposed
Set CIBP @10,720' 8 procedure.	k bail 35' of c	ement on top. Add	perforations in upper N	Morrow according to the attached
<b>,</b>				
				•
I hereby certify that the informa	tion above is true and	complete to the best of my know	ledge and belief.	
SIGNATURE   Aleas	L. Bros	ahow	TITLE Sr. Staff Env./	Reg. Specialist DATE 24 May 1990
TYPE OR PRINT NAME RODG	ert L. Bradsh	aw		<u>телерноме мо. 915–686–5</u> 67
(This space for State Use)	. /	.,	,	
APPROVED BY	Le hell	Thama	SUPERVISOR.	DISTRICT II 91AY 3 1 1990

## State 19 Com. #2 Millman Morrow, South Eddy County, New Mexico

Project Engineer: K. L. Midkiff

Office: (915) 686-5714

Residence: (915) 686-8650

### Procedure

- MIRU PU on Empire 16 St. Com. #1. Release Guiberson UNI-VI packer and POOH. Lay down 315 joints of Hydril 563 tubing. Transport tubing to State 19 Com. #2. Send packer in for re-dressing. Redress packer as 10000 psi rated packer and use in State 19 Com. #2. Also transport sufficient Hydril 563 tubing from Artesia yard to State 19 #2 to finish string.
- 2. RU wireline on Empire 16. Set CIBP at  $\pm 10050'$ . Load hole with packer fluid (fresh water with 10 gal/1000 gal Tretolite KW-170). NU wellhead with pressure gauge. RD wireline and PU.
- 3. MIRU PU on State 19 Com. #2. Kill well. ND wellhead, NU BOP. Have water on hand to kill well if it starts gassing (bad H2S). Pull standing valve (fishing neck is 1" rod). Release Guiberson UNI-VI packer and POOH. Redress packer, and keep it in the shop.
- 4. RIH with casing scraper to 10750'. POOH.
- 5. MIRU wireline company. Set CIBP at 10720'. Bail 35' of cement on top of CIBP. Pressure test casing to 2350 psi. If casing holds continue, otherwise hunt for leaks with packer. Squeeze under a retainer if necessary, then drill out cement and re-test.
- 6. Run cement evaluation tool from PBTD to 8900'. Fax log to engineer for evaluation. RIH with tubing open ended and circulate with packer fluid (2% KCl with 5 ga/1000gal Tretolite KW-170), POOH. Lay down tubing, send in for inspection.
- 7. RIH with tubing conveyed perforating assembly (see attached diagram), 10000 psi rated Guiberson UNI-VI packer with top cut for Hydril 563 (from Empire 16), 1.781" SN cut for hydril 563 threads, and hydril 563 tubing to PBTD. Hydrotest tubing in hole to 9500 psi. Run packer to ±10540' and set it (be sure guns are located correctly). Guns should be set to perforate 10585'-10597' (4 JSPF). Run GR logs to correlate gun location. Test backside to 2500 psi.
- 8. Obtain new tubing hanger cut for Hydril 563 thread. ND BOP, NU wellhead. Test wellhead to 5000 psi. Load 1000' of tubing (4 bbl).
- 9. Detonate guns. Put well on test.

State 19 Com. #2 Procedure Page 2

10. If gas entry is limited then MIRU stimulation company. Drop off guns. NU surface lines and test to 9200 psi. NU 10000 psi tree saver. Beak down Morrow with 2000 gal 7 1/2% MS acid with 1000 scf N2/bbl. Drop 36 7/8" RCNBS (sp gr = 1.3). Hold 2000 psi on backside. Pump 10000 scf N2 as a pad.

```
Injection Rate = 4 bpm (total)

Anticipated Pressure = 8000 psi

Maximum Pressure @ 0 bpm = 8500 psi (85% rated) (includes mud backup)

Maximum Pressure @ 4 bpm = 9500 psi

Maximum Pressure @ 2 bpm = 9300 psi
```

Flush with N2. Surge balls off formation and ND service company. Flow back immediately.

11. Put well on line and RDPU. Report rates and pressures to Midland office.

State 19 Com. #2 Millman Morrow, South Eddy County, New Mexico

# MECHANICAL DATA

Iype Tubular:	00 (in)	ID (in)	Weight (#/ft)	Grade	Conn.	Depth (ft)	Collapse (psi)	Burst (psi)	Capacity (BPF)	70C (ft)
Surface Casing	13 3/8	12.715	48	Н-40	}	447	770	1730	0.1570	Surf
Intermediate Casing	8 2/8	8.097	24	K55	!	2448	1370	2950	0.0636	Surf
Production Casing	5 1/2 5 1/2 5 1/2 5 1/2	4.892 4.892 4.892 4.778	17 17 20	MN-80 K-55 N-80 N-80	Butt. LTC . LTC . LTC	0-2466 2466-6804 6804-10377 10377-11150	6280 4910 6280 8830	7740 5320 7740 9190	0.0232 0.0232 0.0232 0.0231	8990' (temp)
Old Tubing	2 3/8	1.995	4.7	N-80	8rd	10646	11780	11200	0.00387	
New Tubing	2 3/8	1.995	4.7	N-80	563	10500	11780	11200	0.00387	

KLM 5/10/90

5 1/2" 17#&20# N80 & K55

@ 11150', TOC=8990' (TEMP)

# MERIDIAN OIL STATE 19 COM. NO. 2 MILLMAN SOUTH, MORROW EDDY COUNTY, NEW MEXICO CURRENT CONDITION KB≕3508' GL = 3493'447' SURFACE CASING 13 3/8" 48# H-40 @ 447', TOC=SURF INTERMEDIATE CASING 8 5/8" 24# K-55 2448' @ 2448'. TOC=SURF LOST CIRCULATION @ 8926' BLACK SULFUR WATER FLOW TOC @ 8990' (TEMP) - 2 3/8" N-80 8rd TBG SN AND STANDING VALVE AT 10600' GUIB. UNI-VI @ 10646' MORROW PERFORATIONS O 10748'-50' 10836'-47' 0 10769'-74' 10902'-20' O 10789'-91' 10948'-52' 0110798'-808' 11014'-18' 10814'-23' 11058'-62'

PBTD=11110'

TD=11325'

