STATE OF NEW MEXICO - TAXATION AND REVENUE DEPARTMENT

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WELL WORKOVER PROJECT / APPLICATION AND REPORTING INSTRUCTIONS (FORM RPD-41171)

Name of Ir	ndividual, Firm or Organization		materia	OGRID N	Fed Con		1604
	Enror Oil & Gas Com	sang	<u> </u>		377 e Number		
Contact	Richard King				<u>823-2</u>	041	(
Mailing Ad							
City	Houston		State	τχ	· - · · - · · - · · - · · · · · · · · ·	Zip Cod	e 5 - 436
Check one	e: Vz Well Operator 🔤 Working I	Interest Owner	<u> </u>	Purchase	r		
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	PUN	10471	$\langle \neg \gamma \rangle$				
	POOL NAME	Morrow					
N.S.	APINUMBER	30 025		_			
	PRODUCT KIND (PLEASE CHECK ALL THAT APPLY)		GAS		OIL		
, PLE		T AND CERTIFICA DEPARTMENT USE (ONLY	PROVAL.			WELL
	CERTIFICATION OF APPROVAL	TO USE WELL WO	ORKOVER I	NCENTIV	E TAX RAT	E	
completio	Mexico Taxation and Revenue Department is a n based on the information that you have provid s of the Natural Gas and Crude Oil Production I	ded. This Departm	f the reduced ent reserves	the right to	e tax rate fo determine	r the abor complian	ve well ce with the
	for use of the reduced severance tax rate begins $\int dt$	ns with sales month m(s) OGT-2 as it a	·	- 		n and Pr	oduction U
Please us Number li	se Special Tax Rate Code \underline{OT} on your For isted above.	m(s) UG1-2 as it a	ippiles to the	apound we			
Approved	by O O	<u></u>	Date				
,	- Athing			7-28	,97		

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Frict (505) 35 Box 1980 bbs. NM 85241- trict II - (505) 7 S. First csi2. NM 88210 trict III - (505) 00 Rio Brazos Ro cc. NM 87410 trict IV	Energy Minerals and Inatulal Oil Conservation 2040 South Pache 334-6178 Oad 03/15/99-AMENDED PRODUCTION FORECAS	Resources Departm Division co Street cico 87505 131 T H-1	Form C-14(Originated 11/1/9: Submit Origina Plus 2 Copie to appropriat District Offic.
	<u>OUALIFICATION OF WELL W</u> <u>AND CERTIFICATION</u>	UP ATTIONS	THE APPROPRIATE DISTRICT
THREE CO OFFICE OF	PIES OFTHIS APPLICATION AND ALL ATTACHMEN FTHE OIL CONSERVATION DIVISION.	TS MUST BE FILED WITH	0GBID #: 7377
I. Op	FTHE OIL CONSERVATION Division		
	- 2267 Midland Texa	s 79702	
		Phone: 91-	/686-3714
II. Na Lo Si	ame of Well: <u>Madera 33 Federal Com.</u> Docation of Well: Unit Letter <u>E</u> , <u>2310</u> Feet from the ection <u>33</u> , Township <u>24S</u> , Range <u>34E</u> , N	API#: he <u>north</u> line and <u>6</u> MPM, <u>Lea</u>	60 feet from the west line, County
111. D	ate Workover Procedures Commenced:6-3-90	96	
IV. A V.) A t	Attach a description of the Workover Procedures unde Installed Com Attach an estimate of the production rate of the Well (able showing monthly oil and/or gas Project Production) which shows the future rate of production based on w	ertaken to increase the p pressor a production decline cun based on at least twelve (ell performance prior to p	erforming Workover.
VI. 1	Pool(s) on which Production Projection is based: P	itchfork Ranch Mor	10w
N.			
	AFFIDAVIT:		
VII.	State of <u>Texas</u>) State of <u>Midland</u>)		
	netty. Cildopheing first duly sworn, upon oath s	tates:	
		ive of the Operator of the	above referenced Well.
	2. I have made, or caused to be made, a dil	igent search of the proc the production history c	f this Well.
	 available and contain information relevance To the best of my knowledge, the data use and accurate and this projection was prepared 		
		latine)	
111 N	-	Betty Gildon, Reg	ulatory_Analyst

<u>Bettv</u> (Title)

PEGGY C. LAVINE Notary Public, State of Texas My Commission Expires 11-21-988 Commission expires:	
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FOR OIL CONSERVATION DIVISION USE ONLY:

VIII. CERTIFICATION OF APPROVAL:

This Application for Qualification of Well Workover Project is hereby approved and the above referenced Well is designated as a Well Workover Project pursuant to the "Natural Gas and Crude Oil Production Incentive Act" (Laws 1995, Chapter 15, Sections 1 through 8). The Oil Conservation Division hereby verifies the Production Projection for the Well Workover Project attached to this application. By copy of this Application and Certification of Approval, the Division notifies the Secretary of the Taxation and Revenue Department of this Approval and certifies that this Well Workover Project has been completed as of <u>6-3-10</u>, 19___.

District Supervisor, Distric Oil Conservation Division

Date:

DATE OF NOTIFICATION TO THE SECRETARY OF THE TAXATION AND REVENUE DEPARTMENT.

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DATE:

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REVISED 03/15/99

Madera 33 F.C. No. 1 Production Projection Before Workover Decline(exp) Base Rate at WO on 05/96 81 %/yr 43 BOPM Oil 70 %/yr 10400 mcf/mo Gas

43.0

40.2

37.6

35.1

32.8

30.7

28.7

26.8

25.1

23.4

21.9

20.5

19.1

17.9

16.7

15.6

14.6

13.6

12.8

11.9

11.1

10.4

9.7

9.1

8.5 8.0

7.4

6.9

6.5

6.1

5.7

5.3

5.0

4.6

4.3

2.9

2.7

2.5

1008.5

951.4

897.5

Oil BOPM

Date

May-96

Jun-96

Jul-96

Aug-96

Sep-96

Oct-96

Nov-96

Dec-96

Jan-97

Feb-97

Mar-97

Apr-97

May-97

Jun-97

Jul-97

Aug-97

Sep-97

Oct-97

Nov-97

Dec-97

Jan-98

Feb-98

Mar-98

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May-98

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Jul-98

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Feb-99

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Aug-99

Sep-99

Oct-99

Nov-99

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Gas				Oil		Sas		
	CF/Mo	Da		BOPM		<u>ICF</u>	/Mo	
_	10400.0		Dec-99		2.4		846.6	
2	9810.7		Jan-00		2.2		798.6	
5	9254.8		Feb-00		2.1		753.4	
-	8730.4		Mar-00		1.9		710.7	
3	8235.7		Apr-00		1.8		670.4	
7	7769.0		May-00		1.7		632.4	
7	7328.8		Jun-00		1.6		596.6	
в	6913.5		Jul-00		1.5		562.8	
1	6521.7		Aug-00		1.4		530.9	
4	6152.2		Sep-00		1.3		500.8	
9	5803.6		Oct-00	·	1.2		472.4	
5	5474.7		Nov-00		1.1		445.7	
1	5164.5		Dec-00)	1.0		420.4	
9	4871.8	Γ	Jan-01		1.0		396.6	
7	4595.8	Γ	Feb-01		0.0		374.1	
6	4335.4	Γ	Mar-01	ī [0.0		352.9	
.6	4089.7		Apr-0	1	0.0		332.9	
.6	3858.0		May-0	1	0.0		314.1	
.8	3639.4		Jun-0		0.0		296.3	
.9	3433.1	Γ	Jul-0		0.0	_	279.5	
.1	3238.6	Γ	Aug-0	1	0.0		263.6	
.4	3055.1	Γ	Sep-0		0.0	_	248.7	
7	2882.0	Γ	Oct-0	1	0.0		234.6	
0.1	2718.7	Γ	Nov-0		0.0	_	221.3	
3.5	2564.6		Dec-0	1	0.0		208.8	
3.0	2419.3		Jan-0	2	0.0		196.9	
7.4	2282.2	Γ	Feb-C	2	0.0		185.8	
3.9	2152.9		Mar-0)2	0.0		175.3	
3.5	2030.9	ľ	Apr-0)2	0.0		165.3	
6.1	1915.8	Ī	May-0)2	0.0		156.0	-
5.7	1807.2	Ī	Jun-(02	0.0	_	147.1	_
5.3	1704.8	ľ	Jul-(0.	_	138.8	_
5.0	1608.2	Ī	Aug-	02	0.		130.9	
4.6	1517.1		Sep-	02	0.	_	123.5	_
4.3			Oct-		0.		116.5	_
4.0			Nov-		0.	_	109.9	_
3.8			Dec-		0.	_	103.7	_
3.5			Jan-		0.	_	97.8	_
3.3			Feb-			0	92.3	_
3.1			Mar-	03		0	87.	_
_			1	001	n –	111	~ ~ /	

Apr-03

May-03

Jun-03

		Oil		Ga	s
Dai		ворм		MC	F/Mo
	Jul-03		0.0		68.9
	Aug-03		0.0		65.0
	Sep-03		0.0		61.3
	Oct-03		0.0		57.9
	Nov-03		0.0		54.6
	Dec-03		0.0		51.5
	Jan-04		0.0		48.6
	Feb-04		0.0		45.8
	Mar-04		0.0		43.2
	Apr-04		0.0		40.8
	May-04		0.0	_	38.5
	Jun-04		0.0		36.3
	Jul-04		0.0	-	34.2
	Aug-04		0.0	_	32.3
	Sep-04		0.0	-	30.5
	Oct-04		0.0	_	28.7
	Nov-04		0.0	_	27.1
	Dec-04		0.0	_	25.6
	Jan-05		0.0	_	24.1
	Feb-0		0.0	_	22.7
	Mar-0		0.0	_	21.5
L	Apr-0		0.0	_	20.2
L	May-0		0.		19.1
	Jun-0	_	0.		18.0
	Jul-0		0.		17.0
	Aug-0	_	0.	_	16.0
	Sep-0		0.		15.1 14.3
	Oct-0		0.		
	Nov-0		0.	_	13.5
	Dec-0			0	12.7
	Jan-C		_	0	12.0 11.3
Ļ	Feb-C			0	10.7
	Mar-0			<u>.0</u>	10.7
	Apr-0)6		0.	
ļ	May-0			.0	9.5 8.9
Ļ	Jun-(_	.0	8.4
ļ	Jul-(0.0	8.0
ļ	Aug-			0.0	7.5
	Sep-) <u>.0</u>	7.1
	Oct-).0	6.7
	Nov-).0	6.3
	Dec-		_	0.0	5.9
	Jan-	07	(0.0	5.9

0.0

0.0

0.0

82.1

77.4

73.1

	Oil		Gas	
Date	BOPM		MCF/N	
Feb-07		0.0		5.6
Mar-07		0.0		5.3
Apr-07		0.0		5.0
May-07		0.0		4.7
Jun-07		0.0		4.4
Jul-07		0.0		4.2
Aug-07		0.0		4.0
Sep-07		0.0		3.7
Oct-07		0.0		3.5
Nov-07		0.0		3.3
Dec-07		0.0		3.1
Jan-08		0.0		3.0
Feb-08		0.0		2.8
Mar-08		0.0		2.6
Apr-08	3	0.0		2.5
May-08	3	0.0	<u>v</u>	2.3
Jun-08	3	0.0		2.2
Jul-08	3	0.0		2.1
Aug-08	3	0.0		2.0
Sep-08	3	0.0		1.9
Oct-0	3	0.0	2	1.7
Nov-0	3	0.0		1.6
Dec-0		0.0		1.6
Jan-0	9	0.0		1.5
Feb-0	9	0.0		1.4 1.3 1.2 1.2
Mar-0	9	0.0		1.3
Apr-0	9	0.	0	1.2
May-0	9	0.	0	1.2
Jun-0		0.	0	1.1 1.0
Jul-0		0.	0	1.0
Aug-0	9	0.		1.0
Sep-0	9	0.	0	0.0

Madera 33 F.C. No. 1 Production Projection Before Workover Continued

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MADERA 33 FEDERAL COM NO. 1 SW/4,NW/4,Sec.33,T-24-S,R-34-E 2,310' FNL & 660' FWL LEA Co., NM Start Date: 09/11/94 ENRON OIL & GAS COMPANY DEV W/O: 0' EOG%: 51.1450% WI 0.4248% NRI AFE No.: 10-1027

DHC: 0; CWC: 57,700

05/19/96

SITP 1800 psi. 22 hrs MI&RU HES WL unit. RU up grease head & RIH with tbg punch & perf 2-3/8" tbg @ 12,498' with .30" hole & .40 hole @ 12,492'. SITP remained stable @ 1800 psi after perforating tbg & 7" x 2-3/8" annulus on slight vacuum. POOH with guns & RD HES. Bled off tbg pressure to 700 psi. MI&RU CU CUDD 1-1/4" CT unit. RIH with tbg to 12,000' pumping 400 SCFM N2. Found fluid level @ 8,700', jet well for 30 min @ 10,000', 11,000' & 12,000' & recovered 20 BW. POOH to 11,000' & jet well for 15 min @ 400 SCFPM, POOH to 10,000' & jet for 1 hr. CT press decreased from 1250 psi to 1150 psi. Start injection 400 SCFPM N2 down annulus. Decrease N2 on CT to 200 SCF & POOH to 4,000' with CT & jet well for 2-1/2 hrs. Csg press increased to 850 psi with good show of gas from tbg. Well would not flow. POOH with CT. Increase N2 to 600 SCFPM on annulus & press increased to 1250 psi & well did not flow. Shut down & shut annulus in and displace wtr out of tbg with N2. Resume pumping N2 down annulus & flow down tbg & recover 15 BW. Inject for 2 hrs on annulus & well did not flow. Shut in annulus & displace wtr out of tbg with N2 by press tbg to 1300 psi. Resume pumping on annulus & flow down tbg. Annulus press dropped from 1250 psi to 950 psi. Start injecting gas with compressor & cut off N2. Currently displacing N2 with gas to start well on sales. Pumping 900 MCFPD CP 950 psi & FTP 100 psi on open chk. Will put to sales a.m. DWC \$46,945. CWC \$46,945.

05/20/96 2 hrs finish displacing N2 with gas. CP 950 psi & FTP increase from 100 to 125 psi on open chk. 6 hrs put well on sales. Injecting 950 MCFPD down annulus with 950 psi inj pressure & tbg on sales @ 1125 MCFPD. Recovering approx 4 BW/hr FTP 190 psi. 2 hrs compressor down and well off line. Shut well in. Will displace tbg with gas this a.m. & start injecting foamer. DWC \$1,075. CWC \$48,020.

Page: : 2 MADERA 33 FEDERAL COM NO. 1 SW/4,NW/4,Sec.33,T-24-S,R-34-E 2,310' FNL & 660' FWL LEA CO., NM Start Date: 09/11/94

ENRON OIL & GAS COMP "Y DEV W/O: 0'

> EOG%: 51.1450% WI 0.4248% NRI AFE No.: 10-1027 DHC: 0; CWC: 57,700

8 hrs Well was open to tank with no flow, SICP 750 psi. 6 hrs Well open to tank. RU foam injector pump & lines & set supply tank. Repair fan motor & prep compressor. 10 hrs MI&RU HES N2 equipment & kill truck. Pump 15 gals foamer down 7" x 2-3/8" annulus & flush with 10 BTW & pump 5 gals foamer down 2-3/8" tbg & flush with 3 BTW. Inject N2 down tbg @ 450 SCFPM & SITP inc from 0 psi to 1000 psi/30 min. Cont pump with N2 @ 400 SCFPM/20 min down tbg to void tbg of water. SITP inc to 1050 psi. Stopped injecting down tbg and left it SI. Inject N2 down annulus @ 1000 SCFPM & pump 10 gal foam with N2 for 1 hr. Csg increase from 950 psi to 1250 psi. Opened tbg on 3/4" chk. FTP decreased from 1050 to 800 psi in 30 min, csg decreased from 11,250 to 1050 psi. Shut down N2 & inject gas down annulus @ 975 MCFD, csg pressure decrease from 1025 psi to 950 psi/3 hrs & rec 40 BW. Csg pressure inc from 950 psi to 1100 psi/2 hrs & rec 15 BW. Shut down compressor @ 1100 psi. Had good gas blow from tbg, but no water. Kept csg shut in & displace tbg with N2 @ 700 SCFPM/30 min. SITP inc from 100 psi to 1100 psi. SI tbg & pump N2 down annulus @ 700 SCFPM for 30 min & csg press increased from 1100 psi to 1250 psi. Open tbg on 3/4" chk tbg from 1100 psi to 200 psi/30 min. Flow well to open tank. Have rec 115 bbls brine water of 425 bbls of annulus volume when tbg was perforated. TLTR 310 BLW. DWC \$4,940. CWC \$52,960.

- 1 hr circ N2 @ 600 SCFPM down annulus CP from 1250 to 1000 psi. FTP 200 psi on 3/4" chk Rec 10 BW. 5-1/2 hrs shut down N2 & circ 05/22/96 with 900 MCFPD gas down annulus CP increased from 1000 to 1100 psi. FTP 100 psi rec 40 BW. 1 hr Put well thru production equipment. CP increased from 1100 to 1120 psi & FTP from 100 to 150 psi on full open choke. Compressor injecting 875 MCFPD & selling 1700 MCFPD & rec 2 BW. Compressor temp inc. from 320 to 820 deg shut compressor down & shut csg in. 1 hr HES pump N2 down tbg @ 1000 SCFPM for 30 min, tbg pressure increased from 150 psi to 1250 psi. Shut tbg in. Pump N2 down annulus @ 1000 SCFPM for 30 min, CP increased from 1150 psi to 1450 psi. 14-1/2 hrs open to tank on 3/4" chk, FTP from 1250 psi to 100 psi/30 min, continue to pump N2 down annulus @ 600 SCFPM & CP decreased from 1450 to 1000 psi & rec 10 BW. RD & MO HES N2 equipment. Inject 700 MCFPD with compressor down annulus. CP from 1000 psi to 1020 psi, FTP 100 psi to 140 psi. Rec 180 BW. Currently injecting 610 MCFPD compressor temp 260 deg, FTP 140 psi, recovering 15-20 BWPH. Est 12,00 MCFD rate. Recovered 240 BW/24 hrs. Have rec 355 BW from annulus volume of 425 BW when tbg was perforated. TLTR 70 BW. DWC \$6,831. CWC \$59,791.
- 24 hrs flowing to tnak on a 64/64" chk with 100 psi FTP, recovered 260 BW, and estimte 1,000 MCFD. 24 hrs injecting 606 MCFD down 05/23/96 annulus with 1075 psi injection pressure. CWC \$59,791.

05/21/96

05/24/96 24 hrs flow to sales 968 MCFG on a 64/64" chk with 175 psi FTP. Injected 608 MCFG at 1150 psi down the annulus. Had net sales 360 MCFG and recovered 232 BW. CWC \$59,791.

05/28/96	Date	Flow Hrs	Sa] Net	les, Inj	MCFG Total	BC	BW	СНК	FTP	Inj Press
	5/24 5/25 5/26 5/27 5/28 5/29 5/30	24 24 24 24	360 475 538 747 822 811 1057	608 495 486 503 612 611 616	968 970 1024 1250 1434 1422 1673	0 0 0 0 0 0	232 321 314 411 522 295 526	1" 1" 1" 1" 1" 1"	175 180 180 200 190 200	1100 1120 1000 1075 1075 1075

06/04/96 This Morrow well was flowing 1,100 MCFD and 400 BWPD in February, but then loaded up and died. Single point gas injection was implemented to return this well to producing status. The 2-3/8" production tubing was peforated above the packer and a compressor was installed to inject gas down the 2-3/8" x 7" annulus. The well is now producing 1050 MCFD and 400 BWPD. The estimated cost of this workover is \$61,000 compared to the AFE amount of \$57,700.

FINAL REPORT