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District IV

New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-1
Originated 11/

Submit Orig
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to approp
District O

H-0508

10/29

APPLICATION FOR
QUALIFICATION OF WELL WORKOVER PROJECT
AND CERTIFICATION OF APPROVAL

THREE COPIES OF THIS APPLICATION AND ALL ATTACHMENTS MUST BE FILED WITH THE APPROPRIATE DISTRICT OFFICE OF THE OIL CONSERVATION DIVISION.

- I. Operator: Enron Oil & Gas Company OGRID #: 7377
Address: P.O. Box 2267, Midland, Texas, 79702
Contact Party: Lee Roark Phone: 915/686-3608
- II. Name of Well: Half 7 Federal No. 1 API #: 3002532577
Location of Well: Unit Letter M, 990 Feet from the South line and 990 feet from the West line,
Section 7, Township 25S, Range 34E, NMPM, Lea County
- III. Date Workover Procedures Commenced: 1/09/98
Date Workover Procedures were Completed: 1/16/98
- IV. Attach a description of the Workover Procedures undertaken to increase the production from the Well.
- V. Attach an estimate of the production rate of the Well (a production decline curve or other acceptable method, and table showing monthly oil and/or gas Project Production) based on at least twelve (12) months of established production which shows the future rate of production based on well performance prior to performing Workover.
- VI. Pool(s) on which Production Projection is based:
Red Hills (Bone Spring)
- VII. AFFIDAVIT:
State of Texas)
County of Midland) ss.
Lee Roark, being first duly sworn, upon oath states:

1. I am the Operator or authorized representative of the Operator of the above referenced Well.
2. I have made, or caused to be made, a diligent search of the production records which are reasonably available and contain information relevant to the production history of this Well.
3. To the best of my knowledge, the data used to prepare the Production Projection for this Well is complete and accurate and this projection was prepared using sound petroleum engineering principles.

Lee Roark
(Name)

Engineer Tech
(Title)

SUBSCRIBED AND SWORN To before me this 9th day of October, 1998.



PEGGY C. LAVINE
Notary Public, State of Texas
My Commission Expires 11-21-98

Peggy C. Lavine

Notary Public

My Commission expires: _____

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 1-16-1998

Paul F. Kautz
District Supervisor, District 1
Oil Conservation Division

Date: 10/29/98

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

DATE: _____

HALF 7 FEDERAL NO. 1
990' FSL & 660' FWL
Sec 7, T24S, R34E
LEA Co., NM
Spud Date: 07/02/94
Facility AFE
Install pumping unit

ENRON OIL & GAS COMPANY
DEV W/O: 12,600' BONE SPRING
RED HILLS Field
EOG#: 100.0000% WI 82.5000% NRI
AFE No.: 10-1490
DHC: 0; CWC: 166,000

01/09/98 Install surface and subsurface pumping equipment to return the well to a production of 40 BOPD.

 Setting pumping unit. DWC \$38,955. CWC \$38,955.

01/13/98 Start WKO to c/o to PBTD, run production tbgs and install pumping equipment. TD 12,550', PBTD 12,408', 5-1/2" 17# csg @ 12,485'. Perforations 12,220-12,280'. 1/9/98 Hot oil casing with 75 BO, Set 456 American pump jack. 1-1/2 hrs MI&RU Yale E. Key rig #134. 2-1/2 hrs Pumped 10 BPW down csg to kill well. NDWH and NUBOP, remove thread protectors and tally tbgs. 7 hrs start in hole with 2-7/8" OD, N80, 6.5#, 8rd eue tbgs and 4-3/4" OD bit. Ran bit to 10,030' and SDON. DWC \$119,920. CWC \$158,875.

01/14/98 Preparing to put well on rod pump. 1-1/2 hrs finish running 2-7/8" OD N80 tbgs and 4-3/4" bit. 2-1/2 hrs tag fill @ 12,230'. RU reverse rig and swivel. C/O from 12,230' to 12,404', recovering sand. 1 hr circ hole clean. LD swivel to prepare to TOOH with tbgs and bit. 4 hrs TOOH with tbgs and bit. 2 hrs start in hole with tbgs, TAC, SN, PN and BPMA. 11 hr SDON. DWC \$2,640. CWC \$162,275.

01/15/98 3-1/2 hrs finish running 2-7/8" OD N80, 6.5#, 8rd, EUE tbgs with BHA, ran and set as follows:

KB		17.00
385 jts 2-7/8" OD N80 tbgs	(11983.14)	12000.14
1 2-7/8" x 5-1/2" TAC	(2.90)	12003.04
5 jts 2-7/8" OD N80 tbgs	(151.06)	12154.10
1 2-7/8" x 2-1/4 API SN	(1.10)	12155.20
1 2-7/8" Perf nipple J55	(4.10)	12159.30
1 2-7/8" OD tbgs with Bull plug	(27.78)	12187.08

Set TAC @ 12,000' with 15 pts tension, SN @ 12,154-155'. PN @ 12,155-159', BPMA @ 12,159-187'. 1/2 hr ND BOP and NU WH. 1/2 hr RU to run downhole pump and rods. 6-1/2 hrs start in hole with 2-1/2 x 1-1/4 x 26' x 28' x 30' pump and rods. SDON. DWC \$3,460. CWC \$165,735.

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ENRON OIL & GAS COMPANY
DEV W/O: 12,600' BONT SPRING
RED HILLS Field
EOG#: 100.0000% WI 82.5000% NRI
AFE No.: 10-1490
DHC: 0; CWC: 166,000

01/16/98 3 hrs finish TIH with rods and pump. Set as follows:
1 -1-1/2 x 26' polish rod w/a 1-1/2" x 1-3/4" x 14' polish rod
liner.
3-1" pony rods, 2-6' x 1-4' subs; CEMSCO HS with spray metal
couplings
101 - 1" x 25' steel rods, CEMSCO HS rods with spray metal
couplings
120-7/8" x 25' steel rods, CEMSCO HS rods w/spray metal couplings
250-3/4" x 25' steel rods, " "
10-1" x 25' steel rods " "
1 1" x 1' 26K shear pin
1-1" x 2' steel pony rod CEMSCO HS with spray metal couplings
1-2-1/2" x 1-1/4" x 26' x 28' x 30' RHBC double valve pump with 6'
plugs, Hollow valve rod and 270" stroke. Seat pump and set @
12,154'. Space 18" off btm.
1/2 hr load and test tbg and pump to 500# held OK.
1 hr hang well on. RD rig and release rig. Tie in well head to
flowline. Start well producing to production facilities @ 3:00
p.m., 1/15/98. Now pumping SPM 100" stroke.
DWC \$2,475. CWC \$168,210.

01/17/98 24 hrs pump, 27 MCF, 17 BO, 9 x 100" SPM, 210 TP, 300 CP, 163 BW,
52 LP DWC \$160. CWC \$168,370.

01/18/98 24 hrs pump, 115 MCF, 156 BO, 9 x 100" SPM, 580 TP, 280 CP, 114
BW, 54 LP. CWC \$168,370.

01/19/98 24 hrs pump, 111 MCF, 128 BO, 9 x 100" SPM, 440 TP, 170 CP, 55 BW,
50 LP. CWC \$168,370.

01/20/98 24 hrs pump, 130 MCF, 137 BO, 9 x 100" SPM, 200 TP, 180 CP, 61 BW,
50 LP. CWC \$168,370.

01/21/98 24 hrs pump, 118 MCF, 137 BO, 9 x 100" SPM, 170 TP, 210 CP, 44 BW,
50 LP. CWC \$168,370.

01/22/98 24 hrs pump, 129 MCF, 114 BO, 9 x 100" SPM, 170 TP, 200 CP, 47 BW,
55 LP. CWC \$168,370.

01/23/98 24 hrs pump, 132 MCF, 91 BO, 9 x 100" SPM, 70 TP, 200 CP, 26 BW,
52 LP. PU down 3 hrs due to generator down. CWC \$168,370.

01/24/98 24 hrs pump, 108 MCF, 89 BO, 9 x 100" SPM, 220 FTP, 200 CP, 17 BW,
53 LP. CWC \$168,370.

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ENRON OIL & GAS COMPANY
DEV W/O: 12,600' BONF SPRING
RED HILLS Field
EOG%: 100.0000% WI 82.5000% NRI
AFE No.: 10-1490
DHC: 0; CWC: 166,000

01/25/98 24 hrs pump, 156 MCF, 112 BO, 9 x 100" SPM, 150 TP, 160 CP, 37 BW,
51 LP. CWC \$168,370.

	BOPD	BWPD	MCFD
Production before PU:	0	0	0
Production after BU:	130	40	120

FINAL REPORT

02/14/98 9 hrs MI Rapid Transport Pump truck. 4 hrs wait on W.S (rig had mechanical trouble). MIRU Sierra W.S.. Loaded tbg with 1/2 bbl P.W.. Pressured tbg to 500 psi. Held O.K.. Long stroked pump with rig. No pump action. Tbg started flowing oil. Flowed tbg for 10 minutes. Reloaded tbg with 3 bbl P.W.. Pick up on rods, pump still on rods. Unseated pump. TOH with three way tapered rod string (dragging out heavy paraffin) and 2-1/2" X 1-1/4" X30' RHBC - HVR Pump with B.D.V.. Found plunger parted from valve rod. Secured well. Continental Emsco will R & R pump Monday SDFS @ 5:30 p.m.. DWC \$1,552. CWC \$169,922.. CWC \$172,692.

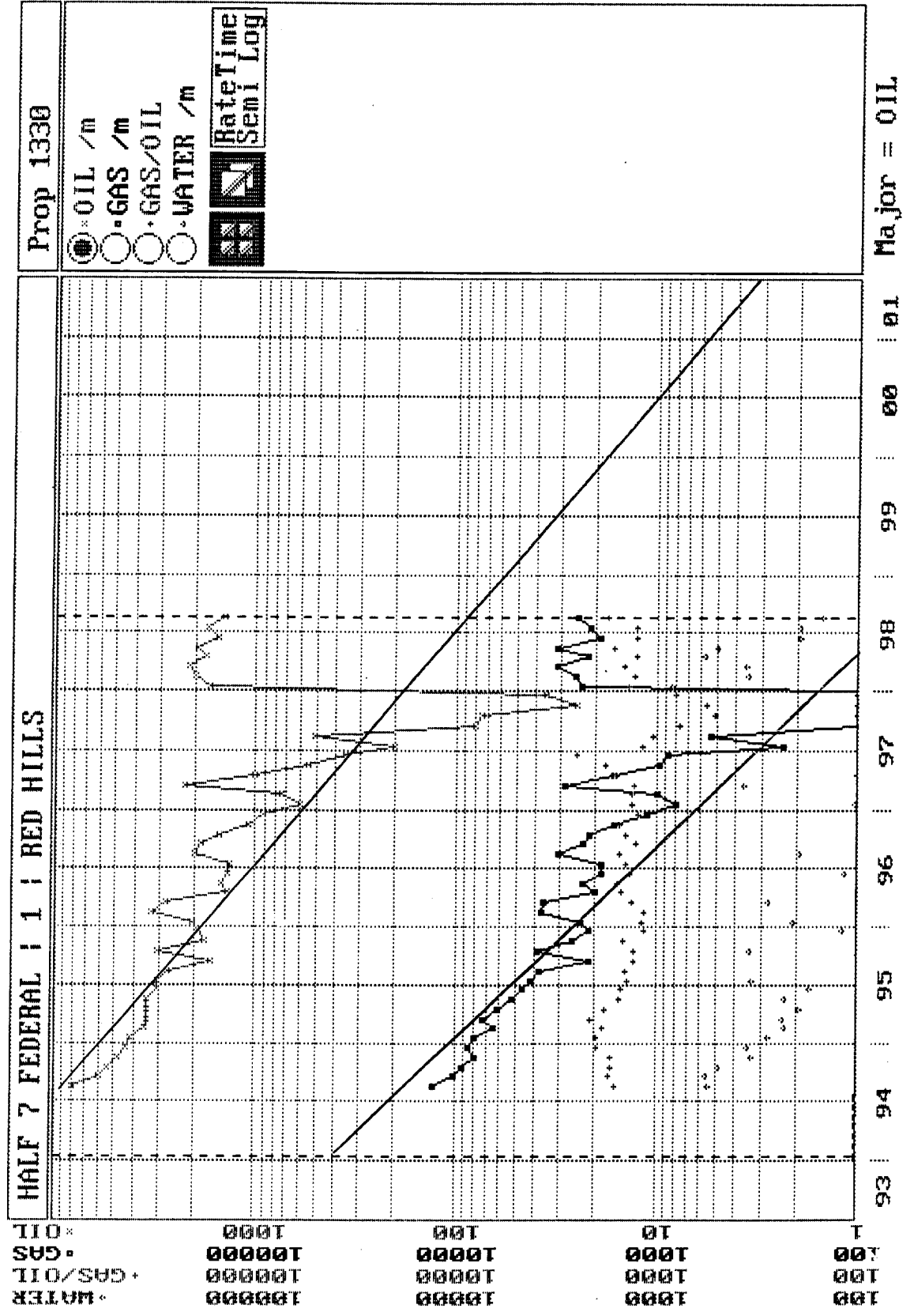
02/16/98 1-1/2 hrs Wait on Hot Oil Unit. 10 hrs hot oiled tbg with 65 bbls oil from skim oil tank. Hole loaded with 35 bbls. Circulated up annulus. Shut pump down. Tbg went on vacuum. TIH with 2-1/2" X 1-1/4" X30' RHBC-HVR BDV Pump with 1" X 12' G.A.

Rod Detail:

1 - 1" X 2' Pony Rod
1 - 1" X 26K Shear Tool
10 - 1" Rods
250 - 3/4" Rods
119 - 7/8" Rods
102 - 1" Rods
1 - 1" X 6' Pony Rod
2 - 1" X 4' Pony Rods
1-1/2" X 26' Polished Rod with 14' liner

Seated pump. Hung on unit. Loaded tbg with 5 bbls. Pressured to 500 psi, O.K.. Had good pump action. Cleaned location. RDMO. Well on pump 9 X 100" SPM @ 2:30 p.m.. CWC \$172,692.. CWC \$172,692.

02/20/98 Dixie electric finished electric line construction. DWC \$20,294.
CWC \$192,986.



Half 7 Federal No. 1

Future Production Before Workover

IP Rate at WO on 10/97

Oil 80 BOPM

Gas 60 mcf/mo

Decline(exp)

69 %/yr

74 %/yr

Date	Oil BOPM	Gas MCF/Mo
2/15/98	80.0	60.0
3/15/98	75.5	56.4
4/15/98	71.3	53.0
5/15/98	67.3	49.9
6/15/98	63.6	46.9
7/15/98	60.0	44.1
8/15/98	56.7	41.4
9/15/98	53.5	39.0
10/15/98	50.5	36.6
11/15/98	47.7	34.4
12/15/98	45.0	32.4
1/15/99	42.5	30.4
2/15/99	40.1	28.6
3/15/99	37.9	0.0
4/15/99	35.8	0.0
5/15/99	33.8	0.0
6/15/99	31.9	0.0
7/15/99	30.1	0.0
8/15/99	28.4	0.0
9/15/99	26.8	0.0
10/15/99	25.3	0.0
11/15/99	23.9	0.0
12/15/99	22.6	0.0
1/15/00	21.3	0.0
2/15/00	20.1	0.0
3/15/00	19.0	0.0
4/15/00	17.9	0.0
5/15/00	16.9	0.0
6/15/00	16.0	0.0
7/15/00	15.1	0.0
8/15/00	0.0	0.0