

District I - (505) 393-6161  
P. O. Box 1980  
Hobbs, NM 88241-1980  
District II - (505) 748-1283  
811 S. First  
Artesia, NM 88210  
District III - (505) 334-6178  
1000 Rio Brazos Road  
Aztec, NM 87410  
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 11/1

Submit Original  
Plus 2 Copies  
to appropriate  
District Office

4-0902

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 Raork Phone: 915/686-3608

II. Name of Well: Hallwood 1 Federal No. 7 API #: 3002533214  
Location of Well: Unit Letter F, 2130 Feet from the North line and 1980 feet from the West line,  
Section 1, Township 25S, Range 33E, NMPM, Lea County

III. Date Workover Procedures Commenced: 03/07/98  
Date Workover Procedures were Completed: 03/11/98

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 Raork, 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 Raork  
(Name)

Engineer Tech  
(Title)

mp

SUBSCRIBED AND SWORN TO before me this 4<sup>th</sup> day of October, 19 98.



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 3-11, 19 98.

Paul E. Kuntz  
District Supervisor, District 1  
Oil Conservation Division

Date: 10/15/98

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

DATE: \_\_\_\_\_

HALLWOOD 1 FEDERAL NO. 7  
2,130' FNL & 1,980' FWL  
Sec. 1-25S-33E  
LEA Co., NM  
Spud Date: 01/21/96

ENRON OIL & GAS COMPANY  
DEV D&C: 12,600' BONE SPRING  
RED HILLS Field  
EOG%: 71.8125% WI 58.5271% NRI  
AFE No.: 10-1515  
DHC: 0; CWC: 166,000

02/20/98      Install surface and subsurface pumping equipment to return the well to production.  
  
                Setting pumping unit. DWC \$49,338. CWC \$49,338.

03/03/98      Move tanks from Hallwood 12 Fed #8 and spot. Set pipe racks. Offload 2-7/8" 6.50# N80 tbg. Load one tank with Bone Springs PW. DWC \$3,400. CWC \$52,738.

03/07/98      6 hrs FCP 30-50 psi. MIRU Yale E. Key. Remove thread protectors and strap 392 jts 2-7/8" 6.50# N80 tbg. Run flowline to tank. NU spool to BOP's. Back out hanger tie down pins. Remove 8 tree bolts. Prep to PU tbg in a.m. DWC \$1,610. CWC \$54,348.

03/08/98      2-1/2 hrs FCP 40-60 psi. Slug 5-1/2" csg with 22 bbls, PW on vac. Began ND tree and started flowing. Slug with additional 28 bbls PW. Total of 50 bbls PW. On initial vac then flowed. Blew gas off. ND 2-9/16" 5,000# tree. Pull solid hanger. NU 7-1/16" BOP's and stripper. 3-1/2 hrs flow annulus to battery. PU and RIH with notched collar, tbg disc and 2-7/8" tbg to 6,115'. 3-1/2 hrs pump 100 bbls, lease oil @ 250 deg down tbg. Pumped out tbg disc with 3000 psi. Circ out with 128 bbls PW. Overdisplace w/20 bbl. PW to hot oil flowline to battery. 1-1/2 hrs PU and RIH to 10,200'. SWI. SDON. DWC \$3,910. CWC \$58,258.

03/09/98      SITP and SICP static/1-1/2 hrs. PU and RIH with 2-7/8" tbg. Tagged fill @ 12,235'. Bone Springs perfs 12,278-12,301'. 3-1/2 hrs RU and est reutrns. Wash fill from 12,235' to 12,413' with sporadic hard bridges. Circ hole clean. Lost 70 bbls PW to form. TLTR 327 bbls (hole cap + 70 bbls). 4 hrs POOH. LD 7 jts. TOOH. SWI. SDON. Shut down to repair elevators. DWC \$48,300. CWC \$106,558.

HALLWOOD 1 FEDERAL NO. 7  
2,130' FNL & 1,980' FWL  
Sec. 1-25S-33E  
LEA Co., NM  
Spud Date: 01/21/96

ENRON OIL & GAS COMPANY  
D&C: 12,600' BONE SPRING  
RED HILLS Field  
EOG%: 71.8125% WI 58.5271% NRI  
AFE No.: 10-1515  
DHC: 0; CWC: 166,000

03/10/98

SICP TSTM. 5 hrs blew csg down. RIH with purge valve, MA, perf sub, 2-3/8" SN, 7 jts 2-7/8" tbg, TAC and 377 jts 2-7/8" tbg. TAC @ 11,952.72', SN @ 12,177.18'. Perf sub @ 12,178.28'. EOT @ 12,214.79'. ND BOP's. NU tbg. Slip type flange. Set TAC with 15,000# tension. Install wellhead. 1 hr remove gate valves on csg head and tbg head. Pull up plug. Build risers. 5 hrs PU and RIH with GA, pump 1" x 2' steel pony rod, 26K shear tool, 10-1" steel rods, 250-3/4" steel rods, 120-7/8" steel rods and 15-1" steel rods, SWI. SDON.

Detail:

1 purge valve	.75	
1 jt MA, 2-7/8", 6.50#, N80, EUE	31.66	
1 perf sub, 2-7/8"	4.10	12178.28
1 SN 2-3/8	1.10	12177.18
7 jts, 2-7/8", 6.50#, N80, EUE	221.66	11955.52
1 jt TAC, 2-7/8" x 5-1/2"	2.80	11952.72
377 jts, 2-7/8" 6.50# N80 EUE	11938.42	
Total ftg picked up	12200.49	
Plus KB to GL	14.30	
Setting depth @ RKB	12214.79	
Bone Springs 12,278-12,301'		
Washed to 12,413' (3/8/98)		
Tbg hanger to Cooper 3/19/98		
2-9/16" 5000# tree to Vaca 13 Fed #2 3/9/98		
DWC \$31,280. CWC \$137,838.		

03/11/98

5 hrs SITP and SICP TSTM. Blew down. FIH with 1" steel rods. Seated pump. PU and space out. Install PR and liner. Hung well on. Load tbg with 8 bbls PW. Test to 500 psi. TLTR 335 bbls. Adjust and bolt on belt guard (guard laying on top of belt). RD Yale E. Key. WO Fulfer and repair electric box at unit. Start unit. Good pump action. Plumb in well head. On pump @ 2:00 PM 3/10/98. TLTR 335 bbls.

Rod detail:

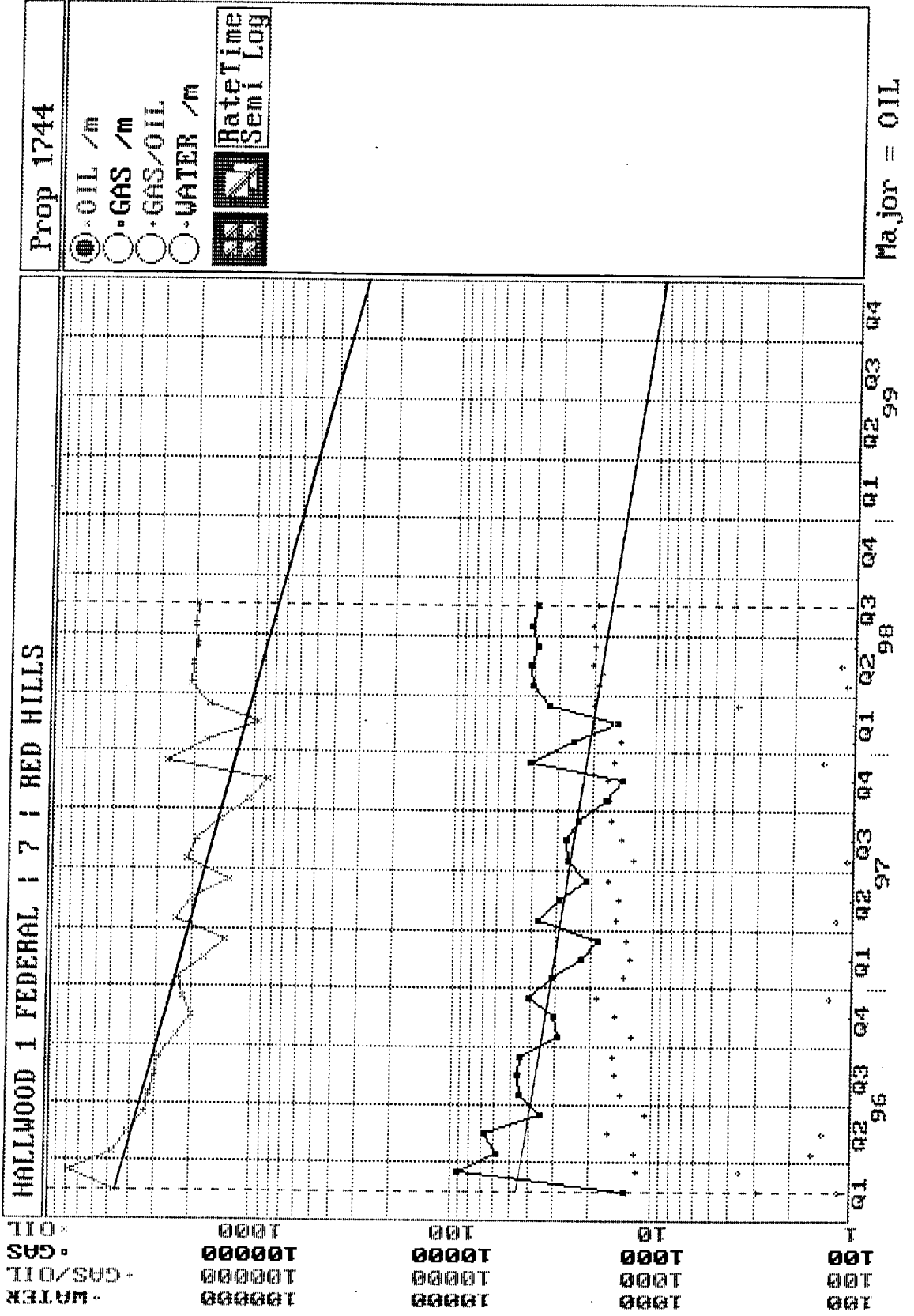
1-1" x 12' gas anchor  
1-2" x 1-1/4" x 20' x 22' x 26' pump (harbison - fischer EOG003)  
1-1" x 2' steel pony rod  
1-26K Shear tool  
10-1" steel rods  
250-3/4" steel rods  
120-7/8" steel rods  
103-1" steel rods  
1-1" x 8' steel pony rod  
1-1" x 6' steel pony rod  
1-1" x 4' steel pony rod  
1" x 26' PR  
1-1/2" x 1-3/4" x 14' liner

DWC \$1,360. CWC \$139,198.

HALLWOOD 1 FEDERAL NO. 7  
2,130' FNL & 1,980' FWL  
Sec. 1-25S-33E  
LEA Co., NM  
Spud Date: 01/21/96

ENRON OIL & GAS COMPANY  
DEV D&C: 12,600' BON SPRING  
RED HILLS Field  
EOG%: 71.8125% WI 58.5271% NRI  
AFE No.: 10-1515  
DHC: 0; CWC: 166,000

03/12/98	18 hrs pump, 34 BO, 8.6 x 100" SPM, 50 TP, 103 BLW, 103 cum BLW, 232 BLWTR. CWC \$139,198.
03/13/98	24 hrs pump, 60 MCF, 20 BO, 8.6 x 100" SPM, 110 TP, 200 CP, 96 BLW, 199 cum BLW, 136 BLWTR. CWC \$139,198.
03/14/98	24 hrs pump 154 MCF, 85 BO, 8.6 x 100" SPM, 130 TP, 160 CP, 18 BLW, 252 cum BLW, 83 BLWTR. CWC \$139,198.
03/15/98	24 hrs pump, 138 MCF, 75 BO, 8.6 x 100" SPM, 120 TP, 150 CP, 13 BLW, 265 cum BLW, 70 BLWTR. CWC \$139,198.
03/16/98	24 hrs pump 143 MCF, 83 BO, 8.6 x 100" SPM, 170 TP, 150 CP, 13 BLW, 278 cum BLW, 57 BLWTR. CWC \$139,198.
03/17/98	24 hrs pump, 64 MCF, 101 BO, 8.6 x 100" SPM, 180 TP, 101 CP, 18 BLW, 296 cum BLW, 39 BLWTR. CWC \$139,198.
03/18/98	24 hrs pump, 164 MCF, 73 BO, 8.6 x 100" SPM, 110 TP, 170 CP, 9 BLW, 305 cum BLW, 30 BLWTR. CWC \$139,198.
03/19/98	24 hrs pump 161 MCF, 75 BO, 8.6 x 100" SPM, 100 TP, 80 CP, 9 BLW, 314 cum BLW, 21 BLWTR. CWC \$139,198.



Hallwood 1 Federal No. 7  
Future Production Before Workover

IP Rate at WO on 02/98      Decline(exp)  
Oil                      1600 BOPM                      49 %/yr  
Gas                      1000 mcf/mo                      32 %/yr

Date	Oil BOPM	Gas MCF/Mo
3/15/98	1600.0	1000.0
4/15/98	1536.0	973.7
5/15/98	1474.5	948.1
6/15/98	1415.5	923.1
7/15/98	1358.9	898.8
8/15/98	1304.5	875.2
9/15/98	1252.3	852.1
10/15/98	1202.2	829.7
11/15/98	1154.1	807.9
12/15/98	1107.9	786.6
1/15/99	1063.6	765.9
2/15/99	1021.1	745.8
3/15/99	980.2	726.1
4/15/99	941.0	707.0
5/15/99	903.3	688.4
6/15/99	867.2	670.3
7/15/99	832.5	652.7
8/15/99	799.2	635.5
9/15/99	767.2	618.8
10/15/99	736.5	602.5
11/15/99	707.0	586.6
12/15/99	678.8	571.2
1/15/00	651.6	556.2
2/15/00	625.5	541.5
3/15/00	600.5	527.3
4/15/00	576.5	513.4
5/15/00	553.4	499.9
6/15/00	531.3	486.8
7/15/00	510.0	473.9
8/15/00	489.6	461.5
9/15/00	470.0	449.3
10/15/00	451.2	437.5
11/15/00	433.2	426.0
12/15/00	415.8	414.8
1/15/01	399.2	403.9
2/15/01	383.2	393.2
3/15/01	367.9	382.9
4/15/01	353.2	372.8
5/15/01	339.0	363.0
6/15/01	325.5	353.5
7/15/01	312.4	344.2
8/15/01	299.9	335.1
9/15/01	287.9	326.3

Date	Oil BOPM	Gas MCF/Mo
10/15/01	276.4	317.7
11/15/01	265.4	309.3
12/15/01	254.7	301.2
1/15/02	244.6	293.3
2/15/02	234.8	285.6
3/15/02	225.4	278.0
4/15/02	216.4	270.7
5/15/02	207.7	263.6
6/15/02	199.4	256.7
7/15/02	191.4	249.9
8/15/02	183.8	243.3
9/15/02	176.4	236.9
10/15/02	169.3	0.0
11/15/02	162.6	0.0
12/15/02	156.1	0.0
1/15/03	149.8	0.0
2/15/03	143.8	0.0
3/15/03	138.1	0.0
4/15/03	132.5	0.0
5/15/03	127.2	0.0
6/15/03	122.2	0.0
7/15/03	117.3	0.0
8/15/03	112.6	0.0
9/15/03	108.1	0.0
10/15/03	103.7	0.0
11/15/03	99.6	0.0
12/15/03	95.6	0.0
1/15/04	91.8	0.0
2/15/04	88.1	0.0
3/15/04	84.6	0.0
4/15/04	81.2	0.0
5/15/04	78.0	0.0
6/15/04	74.8	0.0
7/15/04	71.8	0.0
8/15/04	69.0	0.0
9/15/04	66.2	0.0
10/15/04	63.6	0.0
11/15/04	61.0	0.0
12/15/04	58.6	0.0
1/15/05	56.2	0.0
2/15/05	54.0	0.0
3/15/05	51.8	0.0
4/15/05	49.7	0.0

Date	Oil BOPM	Gas MCF/Mo
5/15/05	47.8	0.0
6/15/05	45.8	0.0
7/15/05	44.0	0.0
8/15/05	42.2	0.0
9/15/05	0.0	0.0