r. O. BOX 1700 Hobbs, NM 88241-1980 <u>District II</u> - (505) 748-1283 811 S. First Artesia, NM 88210 <u>District III</u> - (505) 334-6178 1000 Rio Brazos Road

Aztec, NM 87410 District IY

# Energy Minerals and Natural Resources Department Oil Conservation Division

2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131 Submit Origin Plus 2 Cop to appropri-District (1)

Originated 11/1/

APPLICATION FOR

QUALIFICATION OF WELL WORKOVER PROJECT

AND CERTIFICATION OF APPROVAL

| - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1   |  |  |  |  |
|---|--|--|--|--|
| REE COPIES OF THIS APPLICATION AND ALL ATTACHMENTS MUS<br>FICE OF THE OIL CONSERVATION DIVISION.  | T BE FILEDWITHTHE APPROPRIATE DISTRICT   |  |  |  |
| Operator: <u>Redwolf Production, Inc.</u>   | OGRID #:018973   |  |  |  |
| Address: P. O. Box 5382 Farmington, NM 87499  |  |  |  |  |
| Contact Party: <u>Dana L. Delventhal</u>  | _ Phone:(505) 326-4125   |  |  |  |
| Name of Well: <u>J. C. Davidson F No. 1R</u> Location of Well: Unit Letter <u>A , 857</u> Feet from the <u>Nort</u> Section <u>27</u> , Township <u>28N</u> , Range <u>10W</u> , NMPM,  | h line and 1187 feet from the <u>East</u> line,  |  |  |  |
| Date Workover Procedures Commenced: <u>December 17</u> Date Workover Procedures were Completed: <u>December 18</u>  | , 1998<br>, 1998   |  |  |  |
| Attach a description of the Workover Procedures undertaken to   | increase the projection from the Well.   |  |  |  |
| 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. |  |  |  |  |
| Pool(s) on which Production Projection is based: Fulcher Ku   | tz Pictured Cliffs/77200   |  |  |  |
|   |  |  |  |  |
| AFFIDAVIT:  |  |  |  |  |
| State of New Mexico ) ss.   |  |  |  |  |
| •   |  |  |  |  |
| L. <u>Delventhal</u> , being first duly sworn, upon oath states:  |  |  |  |  |
| 1. I am the Operator or authorized representative of the O  | perator of the above referenced Well.  |  |  |  |
| 2. I have made, or caused to be made, a diligent search available and contain information relevant to the produc  | of the production records which are reasonably tion history of this Well.  |  |  |  |
| <ol> <li>To the best of my knowledge, the data used to prepare<br/>and accurate and this projection was prepared using so</li> </ol>  | the Production Projection for this Well is complete bund petroleum engineering principles.   |  |  |  |
| (Name)  | a 3. Wilnesthal  |  |  |  |
|   | President  |  |  |  |
| IC  | Operator: Redwolf Production, Inc.  Address: P. O. Box 5382 Farmington, NM 87499  Contact Party: Dana L. Delventhal  Name of Well: J. C. Davidson F No. 1R  Location of Well: Unit Letter A. 857 Feet from the Nort Section 27, Township 28N, Range 10W, NMPM,  Date Workover Procedures Commenced: December 17  Date Workover Procedures were Completed: December 18  Attach a description of the Workover Procedures undertaken to Attach an estimate of the production rate of the Well (a productitable showing monthly oil and/or gas Project Production) based on which shows the future rate of production based on well perform Pool(s) on which Production Projection is based: Fulcher Ku  AFFIDAVIT:  State of New Mexico ) ss.  County of San Juan )  Delventhal, being first duly sworn, upon oath states:  1. I am the Operator or authorized representative of the O  2. I have made, or caused to be made, a diligent search available and contain information relevant to the production of the D of th |  |  |  |

| SUES  | SCRIBED AND SWORN TO before me this 18th day of March 1999.  Notary Public  |
|-------|---|
| Му С  | ommission expires: June 21, 2002  |
| FOR ( | DIL 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> </u>  |
|       | District Supervisor, District \( \frac{1}{2} \) Oil Conservation Division   |
|       | Date: 3/27/99   |
| IX.   | DATE OF NOTIFICATION TO THE SECRETARY OF THE TAXATION AND REVENUE DEPARTMENT.   |
|       | DATE:   |

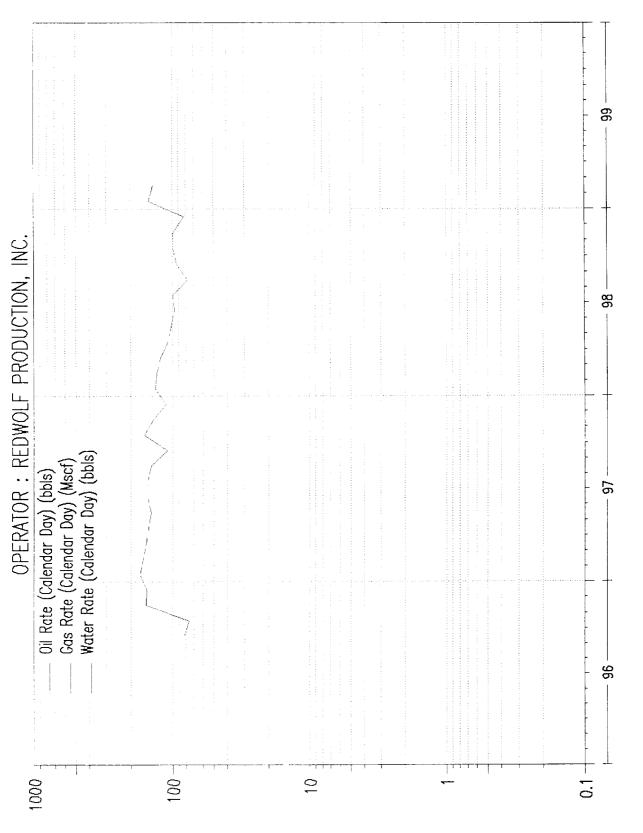
#### J. C. Davidson F No. 1R

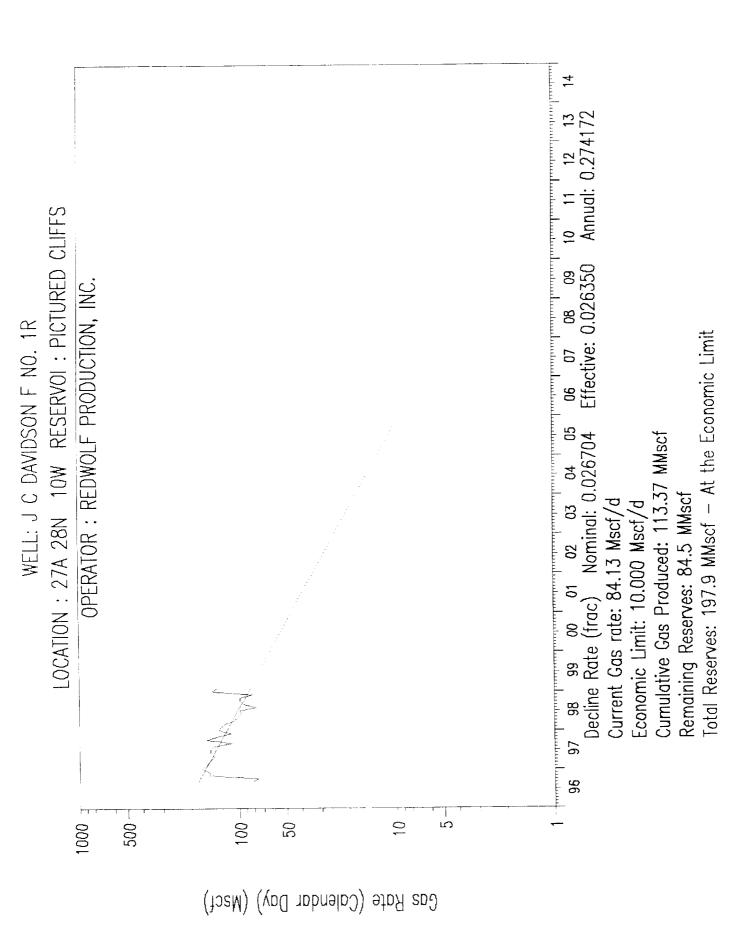
#### WORKOVER DESCRIPTION

On December 17, 1998, Redwolf Production, Inc. began the installation of a downhole pump, rods, and a pumping unit to lift produced water from the wellbore of the J. C. Davidson F No. 1R well. Fluid level measurements had indicated a static fluid level of 500°. The well was placed on beam lift on December 18, 1998 in order to increase inflow performance.

Production prior to the installation of the pumping unit averaged 80 MCFD and 0 BWPD. The well is currently producing 140 MCFD and 1 BWPD.

WELL: J C DAVIDSON F NO. 1R LOCATION: 27A 28N 10W RESERVOI: PICTURED CLIFFS





## Exponential Decline Analysis

### J C DAVIDSON F NO. 1R

Equation: Qoi \* exp( -Di \* t) t= Elapsed Months from 9609

Qoi= 182.51 Di= 0.026704

Decline Rate (frac) Nominal: 0.026704 Effective: 0.026350 Annual: 0.27417

Current Gas rate: 84.13 Mscf/d Economic Limit: 10.000 Mscf/d

Cumulative Gas Produced: 113.37 MMscf

Remaining Reserves: 84.5 MMscf

Total Reserves: 197.9 MMscf - At the Economic Limit

| Date   | Gas<br>Mscf/d   | Remaining<br>Reserves<br>MMscf   | Cumulative<br>Production<br>MMscf  |
|--|---|--|--|
| 7/2000<br>1/2000<br>1/2001<br>1/2001<br>1/2001<br>1/2001<br>1/2001<br>1/2001<br>1/2001<br>1/2001<br>1/2001 | 83.02<br>80.83<br>78.70<br>76.63<br>74.61<br>72.64<br>70.73<br>68.86<br>67.05<br>65.28<br>63.56<br>61.89<br>60.26<br>58.67<br>57.12<br>55.62<br>54.15<br>52.73<br>51.34<br>49.98<br>48.67<br>47.38<br>44.92<br>43.74<br>42.58<br>41.46<br>40.37<br>39.31<br>38.27<br>37.26<br>36.28<br>35.32<br>34.39 | 81.988<br>79.529<br>77.135<br>74.805<br>72.535<br>70.326<br>68.174<br>66.080<br>64.040<br>62.055<br>60.121<br>58.239<br>56.406<br>54.622<br>52.884<br>51.192<br>49.545<br>47.942<br>46.380<br>44.860<br>63.380<br>41.938<br>40.535<br>39.169<br>37.838<br>36.543<br>35.282<br>34.054<br>22.859<br>31.695<br>30.561<br>29.458<br>28.383<br>27.337 | 115.893<br>118.352<br>120.746<br>123.076<br>125.346<br>127.555<br>129.706<br>131.801<br>133.840<br>135.826<br>137.759<br>139.642<br>141.475<br>143.259<br>144.997<br>146.688<br>148.335<br>149.939<br>151.501<br>153.021<br>154.501<br>155.942<br>157.346<br>158.712<br>160.042<br>161.338<br>162.599<br>163.827<br>165.022<br>166.186<br>167.320<br>168.423<br>169.497<br>170.544 |
| 2/2002   | 33.49<br>32.60  | 26.319<br>25.327   | 171.562<br>172.554   |

| Date   | Gas<br>Mscf/d                    | Remaining<br>Reserves<br>MMscf    | Cumulative<br>Production<br>MMncf        |
|--|----------------------------------|-----------------------------------|--|
| 3/2002<br>4/2002<br>5/2002<br>5/2002<br>7/2002<br>8/2002<br>10/2002<br>11/2002<br>11/2003<br>2/2003<br>3/2003<br>4/2003<br>5/2003<br>6/2003<br>7/2003<br>8/2003<br>10/2003<br>11/2003<br>11/2004<br>2/2004<br>4/2004<br>5/2004<br>6/2004<br>6/2004<br>6/2004<br>1/2004<br>1/2004<br>1/2004<br>1/2004<br>1/2004<br>1/2004<br>1/2005<br>5/2005<br>5/2005<br>6/2005<br>6/2005 |                                  |                                   |  |
| 7/2005<br>8/2005<br>9/2005<br>10/2005  | 10.91<br>10.62<br>10.34<br>10.07 | 0.944<br>0.621<br>0.306<br>-0.000 | 196.937<br>197.260<br>197.575<br>197.881 |