

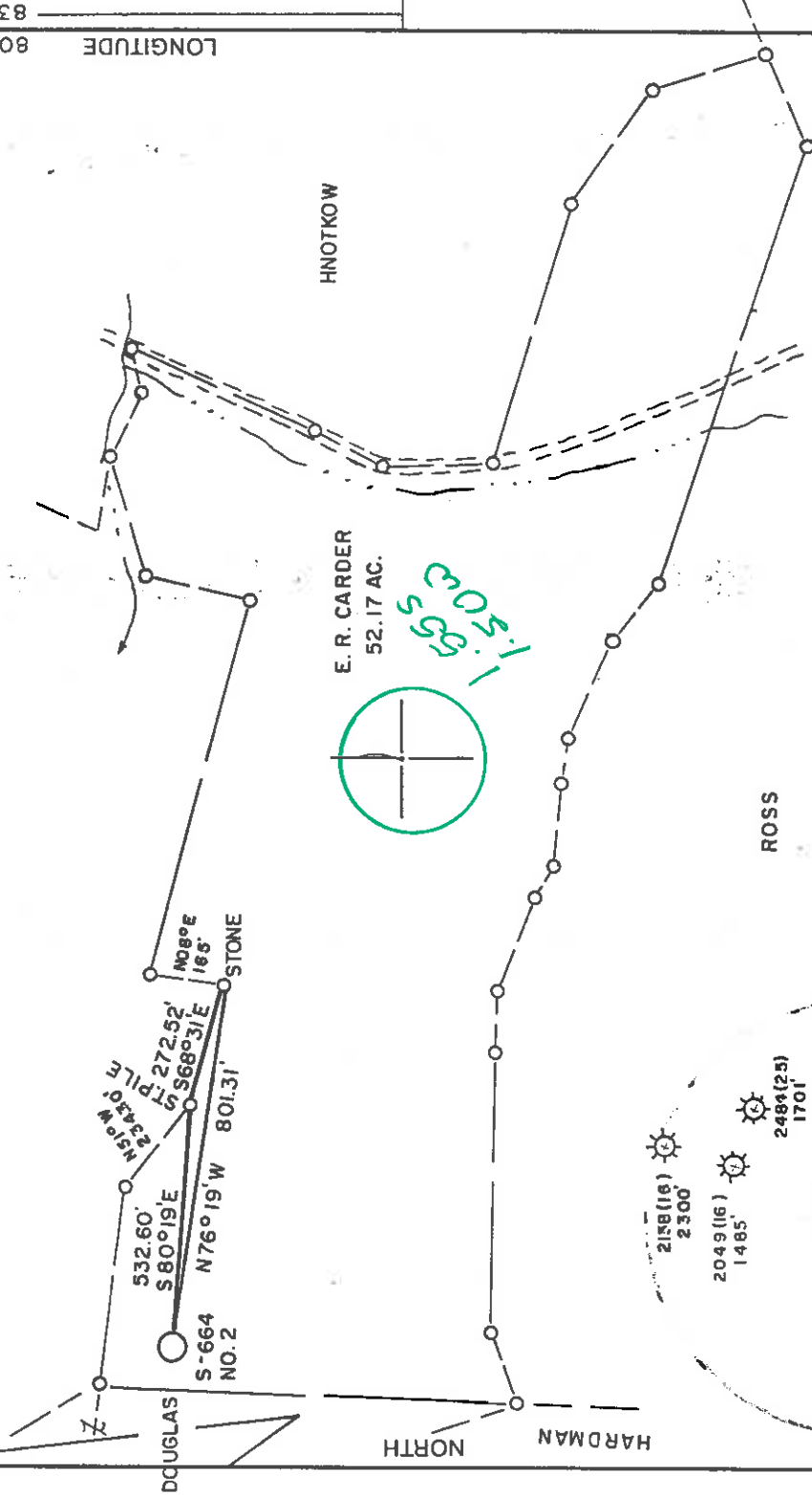
5/21/07

WELL REFERENCES:  
S72°15'W, 111' TO 4" W. OAK  
N43°15'E, 157' TO 10" HICK.

7980' LATITUDE 39°15'00"  
8380' LONGITUDE 80°35'00"

MILLS

VANNORSTRAN

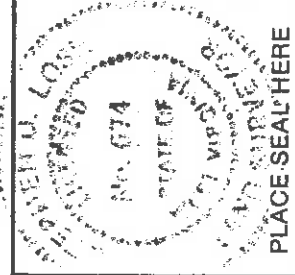


LAND SURVEYING SERVICES  
21 CEDAR LANE  
BRIDGEPORT, WV 26330  
PHONE: 304-842-2018

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. \_\_\_\_\_  
DRAWING NO. \_\_\_\_\_  
SCALE 1" = 400'  
MINIMUM DEGREE OF ACCURACY 1 in 200  
PROVEN SOURCE OF ELEVATION BM 2200' EAST OF LOCATION ELEV. - 898'

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENERGY.  
(SIGNED) *Stephen D. Losh*  
R.P.E. L.I.S. 674 STEPHEN D. LOSH  
PLACE SEAL HERE



STATE OF WEST VIRGINIA  
DEPARTMENT OF ENERGY  
OIL AND GAS DIVISION



DATE MAY 05, 19 87  
OPERATOR'S WELL NO. S-664  
API WELL NO. 47-017  
STATE COUNTY PERMIT 3540

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL  
(IF "GAS,") PRODUCTION X STORAGE DEEP SHALLOW X  
LOCATION: ELEVATION 1200' WATER SHED INDIAN FORK  
DISTRICT GREENBRIER 4 COUNTY DODD RIDGE  
QUADRANGLE BIG ISAAC 7.5 min. 252 123 VC2 VADIS  
SURFACE OWNER ERVIN R. CARDER LEASE ACREAGE 54.50  
OIL & GAS ROYALTY OWNER ERVIN R. CARDER LEASE NO. 1950

PROPOSED WORK: DRILL X CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY)

PLUG AND ABANDON CLEAN OUT AND REPLUG  
TARGET FORMATION ALEXANDER / BENSON ESTIMATED DEPTH 5700'  
WELL OPERATOR SCOTT OIL COMPANY DESIGNATED AGENT DARREL WRIGHT  
ADDRESS P. O. BOX 112 774 ADDRESS P. O. BOX 112

SALEM, WV 26426  
SALEM, WV 26426 MAY 26 1987  
6-6 Zinnia (145)



**RECEIVED**  
OCT 14 1987

Date September 15, 1987  
Operator's Well No. S-664  
DEPARTMENT OF ENERGY  
Oil and Gas Division  
Farm Rex Carder #2  
API No. 47 - 017 - 3540

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

State of West Virginia

WELL OPERATOR'S REPORT

OF  
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil      / Gas x / Liquid Injection / Waste Disposal /  
(If "Gas," Production / Underground Storage / Deep / Shallow    /)

LOCATION: Elevation: 1200 Watershed Indian Fork  
District: Greenbrier County Doddridge Quadrangle Big Isaac

COMPANY Scott Oil Company  
ADDRESS P. O. Box 112, Salem, WV 26426  
DESIGNATED AGENT Darrel Wright  
ADDRESS P. O. Box 112, Salem, WV 26426  
SURFACE OWNER Rex Carder  
ADDRESS 208 Milford Street, Clarksburg, WV  
MINERAL RIGHTS OWNER same as above  
ADDRESS       
OIL AND GAS INSPECTOR FOR THIS WORK Mike  
Underwood ADDRESS Salem, WV  
PERMIT ISSUED May 22, 1987  
DRILLING COMMENCED 8/15/87  
DRILLING COMPLETED 8/23/87  
IF APPLICABLE: PLUGGING OF DRY HOLE ON  
CONTINUOUS PROGRESSION FROM DRILLING OR  
REWORKING. VERBAL PERMISSION OBTAINED  
CN

| Casing Tubing Size | Used in Drilling | Left in Well | Cement fill up Cu. ft. |
|--------------------|------------------|--------------|------------------------|
| 20-16 Cond.        |                  |              |                        |
| 13-10"             | 30'              |              |                        |
| 9 5/8              |                  |              |                        |
| 8 5/8              |                  | 1235         | to surface             |
| 7                  |                  |              |                        |
| 5 1/2              |                  |              |                        |
| 4 1/2              |                  | 5585         | 250 sks                |
| 3                  |                  |              |                        |
| 2                  |                  |              |                        |
| Liners used        |                  |              |                        |

GEOLOGICAL TARGET FORMATION

Depth of completed well 5700 feet Rotary      / Cable Tools       
Water strata depth: Fresh 896 feet; Salt 1692 feet  
Coal seam depths: 295-305 Is coal being mined in the area? no

OPEN FLOW DATA

Producing formation Benson, Alexander Pay zone depth      feet  
Gas: Initial open flow      Mcf/d Oil: Initial open flow      Bbl/d  
Final open flow 302 Mcf/d Final open flow      Bbl/d  
Time of open flow between initial and final tests      hours  
Static rock pressure 1475 psig (surface measurement) after      hours shut in  
(If applicable due to multiple completion--)  
Second producing formation      Pay zone depth      feet  
Gas: Initial open flow      Mcf/d Oil: Initial open flow      Bbl/d  
Final open flow      Mcf/d Oil: Final open flow      Bbl/d  
Time of open flow between initial and final tests      hours **OCT 26 1987**  
Static rock pressure      psig (surface measurement) after      hours shut in

(Continue on reverse side)

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGES, ETC.

Alexander 5493-5510 Sand 50,000#

Benson 5110-5114 Sand 45,000#

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OCT 14 1987

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

WELL LOG

| FORMATION COLOR HARD OR SOFT | TOP FEET | BOTTOM FEET | REMARKS<br>Including indication of all fr<br>and salt water, coal, oil and |
|------------------------------|----------|-------------|--|
| Red Rock & Shale             | 0        | 87          |  |
| Sand & Shale                 | 87       | 295         |  |
| Coal                         | 295      | 305         |  |
| Sand & Shale                 | 305      | 2212        |  |
| Big Lime                     | 2212     | 2270        |  |
| Sand                         | 2270     | 2360        |  |
| Sand & Shale                 | 2360     | 2800        |  |
| Sand                         | 2800     | 2985        |  |
| Sand & Shale                 | 2985     | 5150        |  |
| Sand                         | 5150     | 5166        |  |
| Sand & Shale                 | 5166     | 5480        |  |
| Sand                         | 5480     | 5530        |  |
| Sand & Shale                 | 5530     | 5700TD      |  |
| Gamma Ray ✓                  |          |             |  |
| Big Lime                     | 2270     | 2270        |  |
| Big Injun                    | 2270     | 2356        |  |
| Gordon                       | 2860     | 2985        |  |
| Benson                       | 5158     | 5166        |  |
| Alexander ✓                  | 5484     | 5530        |  |

(Attach separate sheets as necessary)

Scott Oil Company  
Well Operator

By: Sam Q. Wise

Date: 9/15/87

Note: Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including all, encountered in the drilling of a well."

RECEIVED  
MAY 13 1987



- 1) Date: May 8, 19 87  
 2) Operator's Well No. S-664 Rex Carder#2  
 3) API Well No. 47 017 3540  
 State County Permit

STATE OF WEST VIRGINIA  
 DEPARTMENT OF ENERGY, OIL AND GAS DIVISION  
 APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil  Gas  B (If "Gas", Production  Underground storage  Deep  Shallow   
 Elevation: 1200 Watershed: Indian Fork  
 District: Greenbrier 4 County: Doddridge 017 Quadrangle: Big Isaac 252  
 6) WELL OPERATOR Scott Oil Co. CODE: 44315 7 DESIGNATED AGENT Darrel Wright  
 Address P.O. Box 112 Address P.O. Box 112  
Salem, WV 26426 Salem, WV 26462  
 8) OIL & GAS INSPECTOR TO BE NOTIFIED  
 Name Mike Underwood 9) DRILLING CONTRACTOR:  
 Address Route 2 Name \_\_\_\_\_  
Salem, WV 26426 Address \_\_\_\_\_

10) PROPOSED WELL WORK: Drill  deeper  Redrill  Stimulate   
 Plug off old formation  Perforate new formation

11) GEOLOGICAL TARGET FORMATION: Alexander/Benson  
 Other physical change in well (specify) \_\_\_\_\_  
 12) Estimated depth of completed well, \_\_\_\_\_ feet  
 13) Approximate trata depths: Fresh, \_\_\_\_\_ feet; salt, \_\_\_\_\_ feet.  
 14) Approximate coal seam depths: \_\_\_\_\_ Is coal being mined in the area? Yes  No

15) CASING AND TUBING PROGRAM

| CASING OR TUBING TYPE | SPECIFICATIONS |       |                | FOOTAGE INTERVALS |      | CEMENT FILL-UP OR SACKS (Cubic feet) |              | PACKERS                    |
|-----------------------|----------------|-------|----------------|-------------------|------|--------------------------------------|--------------|----------------------------|
|                       | Size           | Grade | Weight per ft. | New               | Used | For drilling                         | Left in well |                            |
| Conductor             | 11 3/4         |       |                |                   |      | 30'                                  |              |                            |
| Fresh water           |                |       |                |                   |      |                                      |              |                            |
| Coal                  |                |       |                |                   |      |                                      |              |                            |
| Intermediate          | 8 5/8          |       |                |                   |      | 1200                                 | to surface   | Size <u>REV RALE 15.05</u> |
| Production            | 4 1/2          |       |                |                   |      | 5600                                 | 500 sks      | Depths set                 |
| Tubing                |                |       |                |                   |      |                                      |              | Perforations:              |
| Liners                |                |       |                |                   |      |                                      |              | Top _____<br>Bottom _____  |

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-017-3540 Date May 22 19 87

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector. (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.  
 Permit expires May 22, 1989 unless well work is commenced prior to that date and prosecuted with due diligence.

10130

|   |  |                 |                         |                       |
|---|--|-----------------|-------------------------|-----------------------|
| Bond: <input checked="" type="checkbox"/> | Agent: <input checked="" type="checkbox"/> | Plat: <u>18</u> | Casing Fee: <u>1018</u> | Other Fee: <u>204</u> |
|   |  |                 |                         |                       |

NOTE: Keep one copy of this permit posted at the drilling location.  
 Director, Division of Oil and Gas

See the reverse side of the APPLICANT'S COPY for instructions to the well operator. File

