

8-13 9/23/86

WELL REFERENCES:  
N36°30'W, 105' TO 4" ELM  
S19°30'E, 242' TO GAS METER

LATITUDE 39° 15' 00"

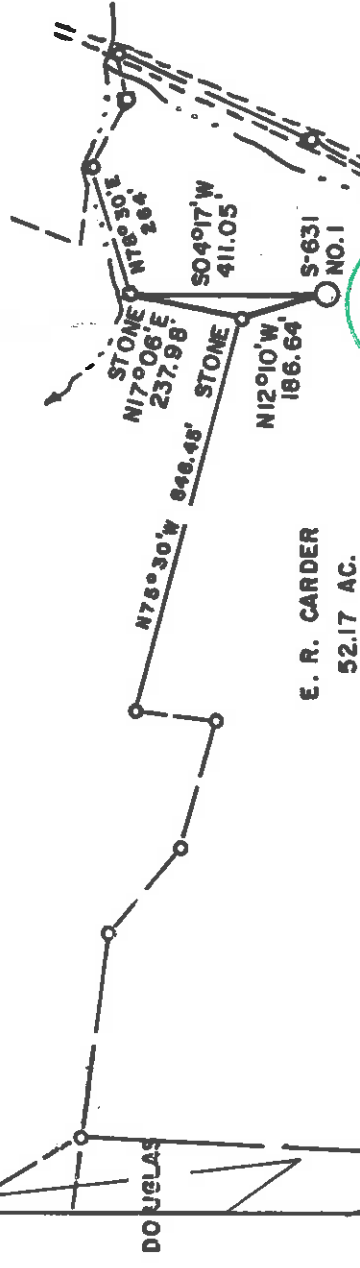
LONGITUDE 80° 35' 00"

8690

MILLS

VANNORSTRAN

95  
631  
1.1



E. R. CARDER  
52.17 AC.

HNOTKOW

ROSS

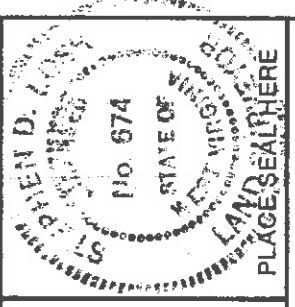
FRYE

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 675 NE 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.L.S. 674



STATE OF WEST VIRGINIA  
 DEPARTMENT OF ENERGY  
 OIL AND GAS DIVISION



DATE SEPTEMBER 17, 1986  
 OPERATOR'S WELL NO. S-631  
 API WELL NO. \_\_\_\_\_

47-017-3511

STATE COUNTY PERMIT

WELL TYPE: OIL \_\_\_\_\_ GAS  LIQUID INJECTION \_\_\_\_\_ WASTE DISPOSAL \_\_\_\_\_  
 (IF "GAS,") PRODUCTION  STORAGE \_\_\_\_\_ DEEP \_\_\_\_\_ SHALLOW

LOCATION: ELEVATION 898' WATER SHED INDIAN FORK  
 DISTRICT GREENBRIER 4 COUNTY DODDRIDGE

QUADRANGLE BIG ISAAC 7.5 min. d52 123 AC2 VADIS  
 SURFACE OWNER ERVIN R. CARDER  
 OIL & GAS ROYALTY OWNER ERVIN R. CARDER LEASE ACREAGE 54.50

PROPOSED WORK: DRILL  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 5400'  
 WELL OPERATOR SCOTT OIL COMPANY DESIGNATED AGENT DARREL WRIGHT  
 ADDRESS P. O. BOX 112 714 ADDRESS P. O. BOX 112 SALEM, WV 26426

SEP 29 1986

COUNTY NAME

PERMIT

6-6 Meathouse Fort - Bristol (146)



V-35  
Rev 8-81)

Date 10/24/86  
Operator's Well No. S-631  
Farm Rex Carder  
API No. 47-017-3511

State of West Virginia  
Department of Mines  
Oil and Gas Division

WELL OPERATOR'S REPORT  
OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

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

LOCATION: Elevation: 899 Watershed Indian Fork  
District: Greenbrier County Doddridge Quadrangle Big Isaac 7.5

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  
GENERAL RIGHTS OWNER Same  
ADDRESS \_\_\_\_\_  
OIL AND GAS INSPECTOR FOR THIS WORK Mike  
Underwood ADDRESS Rt. 2, Salem, WV  
PERMIT ISSUED September 23, 1986  
DRILLING COMMENCED September 30, 1986  
DRILLING COMPLETED October 6, 1986  
IF APPLICABLE: PLUGGING OF DRY HOLE ON  
CONTINUOUS PROGRESSION FROM DRILLING OR  
WORKING. VERBAL PERMISSION OBTAINED  
N

Casing Tubing	Used in Drilling in Well	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.	30'		
13-10"			
9 5/8			
8 5/8		909	to surface
7			
5 1/2			
4 1/2		5260	710 sks
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Alexander/Benson/Riley Depth 5400 feet  
Depth of completed well 5260 feet Rotary x / Cable Tools \_\_\_\_\_  
Water strata depth: Fresh 464 feet; Salt \_\_\_\_\_ feet  
Coal seam depths: 55-62, 560-568 Is coal being mined in the area? no

OPEN FLOW DATA

Producing formation Alexander/Benson/Riley Pay zone depth \_\_\_\_\_ feet  
Gas: Initial open flow \_\_\_\_\_ Mcf/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow 335 Mcf/d Final open flow \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests \_\_\_\_\_ hours  
Static rock pressure 1875 psig (surface measurement) after 72 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  
Static rock pressure \_\_\_\_\_ psig (surface measurement) after \_\_\_\_\_ hours shut in

(Continue on reverse side)

NOV 03 1986

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

Riley	Perfs 4721-4727	Sand 80/100 20/40	50 sks 250 sks
Benson	Perfs 4836-4842	Sand 80/100 20/40	100 sks 400 sks
Alexander	Perfs 5159-5206	Sand 80/100 20/40	100 sks 400 sks

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fr and salt water, coal, oil and
Fill			0	10	
Sand			10	55	
Coal			55	62	
Sand			62	205	
Red Rock			205	230	
Sand			230	300	
Red Rock/Shale			300	400	
Sand			400	464	
Sand/Shale			464	560	
Coal			560	568	
Shale			568	590	
Sand			590	648	
Sand/shale			648	740	
Shale/red rock			740	1015	
Sand/shale			1015	1800	
Red shale			1800	1868	
Big Lime			1868	2029	
Sand/shale			2029	4850	
Sand			4850	4870	
Sand/shale			4870	5293 TD	
Gamma Ray			1904	2050	
Big Lime-Big Injun			2550	2562	
Gordon Stray			2626	2672	
Gordon			2766	2770	
5th Sand			4720	4742	
Riley			4836	4847	
Benson			4836	4847	
Alexander			5158	5210	

(Attach separate sheets as necessary)

Scott Oil Company  
Well Operator  
By: David Wright  
Date: October 24, 1986

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  
minerals, encountered in the drilling of a well."

1) Date: September 19 1986  
2) Operator's Well No. S-631 Rex Carder #1  
3) API Well No. 47 -017-3511



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

**RECEIVED**  
SEP 23 1986

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

- 4) WELL TYPE: A Oil  Gas  B (if "Gas", Production  Underground storage   
Elevation: 899 Watershed: Indian Fork  
District: Greenbrier County: Doddridge Quadrangle: Big Isaac 252  
6) WELL OPERATOR: Scott Oil Co. CODE: 44315 7) DESIGNATED AGENT: Darrel Wright  
Address: P.O. Box 112 P.O. Box 112  
Salem, WV 26426 Salem, WV 26426
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED  
Name: Mike Underwood  
Address: Route 2  
Salem, WV 26426
- 9) DRILLING CONTRACTOR:  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

- 10) PROPOSED WELL WORK: Drill  deeper  Redrill  Stimulate   
Plug off old formation  Perforate new formation   
Other physical change in well (specify): \_\_\_\_\_

- 11) GEOLOGICAL TARGET FORMATION: Alexander/Benson  
12) Estimated depth of completed well, 5400 feet  
13) Approximate trata depths: Fresh, 861, 1168 feet, salt  
14) Approximate coal seam depths: 552 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			
Conductor	11 3/4				
Fresh water			30'		
Coal					
Intermediate	8 5/8			850'	
Production	4 1/2			5300'	
Tubing					
Lin.					

*Casing program subject to revision at inspector's discretion. Additional casing to protect fresh water or coal may be required.*

OFFICE USE ONLY  
DRILLING PERMIT

Permit number 47-017-3511

Date September 23 19 86

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 September 23, 1988 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <input checked="" type="checkbox"/>	Agent: <i>ALB</i>	Plat: <input checked="" type="checkbox"/>	Casing	Fee	WFCP	S&E	Other
				700			
				145			

NOTE: Keep one copy of this permit posted at the drilling location.

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

*John H. Johnston*  
Director, Division of Oil and Gas

