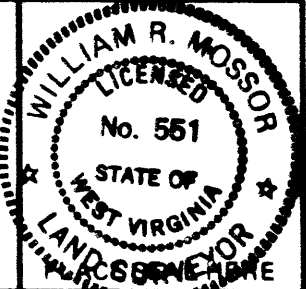


FILE NO. MB 6-6  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1:200  
 PROVEN SOURCE OF ELEVATION R.R. TRESSEL  
ELEV. 635'

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 MINES.  
 (SIGNED) William R. Mossor  
 R.P.E. \_\_\_\_\_ L.L.S. 551



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM IV-6 (8-78)



DATE 25 NOVEMBER 19 85  
 OPERATOR'S WELL NO. HORNER 2  
 API WELL NO. 47-103-1384  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

WELL TYPE: OIL  GAS  LIQUID INJECTION \_\_\_\_\_ WASTE DISPOSAL \_\_\_\_\_  
 (IF "GAS,") PRODUCTION  STORAGE \_\_\_\_\_ DEEP \_\_\_\_\_ SHALLOW   
 LOCATION: ELEVATION 1221' WATER SHED PROCTOR CREEK  
 DISTRICT PROCTOR 7 COUNTY WETZEL  
 QUADRANGLE NEW MARTINSVILLE 509 091 DE 3  
 SURFACE OWNER W.A. HORNER - MARY HORNER ACREAGE 148.85  
 OIL & GAS ROYALTY OWNER WILMA M. SITZER - MARY BUZZARD LEASE ACREAGE 148.85  
 LEASE NO. \_\_\_\_\_  
 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 GORDON ESTIMATED DEPTH 3200'  
 WELL OPERATOR CLAY RESOURCES DESIGNATED AGENT ANDY BROWN FEB 18 1986  
 ADDRESS 204 UNION SQUARE ADDRESS BOX 32  
MARIETTA, OHIO 45750 READER, W.VA. 26167

RECEIVED  
AUG 21 1986



IV-35  
(Rev 8-81)

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY  
State of West Virginia  
Department of Mines  
Oil and Gas Division

Date August 20, 1986  
Operator's  
Well No. Horner #2  
Farm Woodrow Horner  
API No. 47 - 103 - 1384

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: 1221 Watershed Proctor Creek  
District: Proctor County Wetzel Quadrangle New Martinsville

COMPANY Clay Resources, Inc.  
ADDRESS 286 Front St., Marietta, OH 45750  
DESIGNATED AGENT Andy Brown  
ADDRESS Box 32, Reader, WV 26167  
SURFACE OWNER Woodrow Horner  
ADDRESS P.O. Box 3, Proctor, WV 26055  
MINERAL RIGHTS OWNER SAME  
ADDRESS \_\_\_\_\_  
OIL AND GAS INSPECTOR FOR THIS WORK Don Ellis  
ADDRESS 2604 Crab Apple Lane Fairmont, WV 26554  
PERMIT ISSUED February 10, 1986  
DRILLING COMMENCED February 16, 1986  
DRILLING COMPLETED February 27, 1986  
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON \_\_\_\_\_

Casing Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cord.			
13-10"			
9 5/8			
8 5/8	1453	1453	365 SKS
7			
5 1/2			
4 1/2	2885	2885	200 SKS
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Gordon Depth 3100 feet  
Depth of completed well 2974 feet Rotary  / Cable Tools \_\_\_\_\_  
Water strata depth: Fresh \_\_\_\_\_ feet; Salt 2201 feet  
Coal seam depths: 1011 Is coal being mined in the area? NO

OPEN FLOW DATA

Producing formation Gordon Pay zone depth 2784-2820 feet  
Gas: Initial open flow 25 Mcf/d Oil: Initial open flow 0 Bbl/d  
Final open flow (25) Mcf/d Final open flow 0 Bbl/d  
Time of open flow between initial and final tests 72 hours  
Static rock pressure 320 psig (surface measurement) after 72 hours shut in  
(If applicable due to multiple completions...)  
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)

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

Perforated: 20 Shots: 2780 - 2800 Gordon

Frac: 1st Stage FOAM: Broke @ 2910: ISP - 1350: 400 SKS 20/40 Sand:  
N2 - 483,000 SCF

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Sand, limestone, SS			0	2250	
SS, redrock			2250	2400	Squaw: 2344 - 2366 Weir: 2380 - 2394
Sand, Sandstone			2400	2600	1st Berea: 2534 - 2538 2nd Berea: 2548 - 2552
Sand, Shale			2600	2750	
Shale			2750	<u>2974</u> T.D.	<u>Gordon</u> : 2784 - 2820

(Attach separate sheets as necessary)

CLAY RESOURCES, INC.

Well Operator

By:

*Joan Ketting*

Date:

August 20, 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 those encountered in the drilling of a well."

**RECEIVED**  
DEC 11 1985



1) Date: December 5, 1985  
 2) Operator's Well No. Horner #2  
 3) API Well No. 47 103 -1384  
 State County Permit

DIVISION OF OIL & GAS 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  )  
 5) LOCATION: Elevation: 1221' Watershed: Proctor Creek  
 District: Proctor County: Wetzel Quadrangle: New Martinsville  
 6) WELL OPERATOR Clay Resources CODE: 10025 7) DESIGNATED AGENT Andy Brown  
 Address 204 Union Square Address Box 32  
Marietta, OH 45750 Reader, WV 26167  
 8) OIL & GAS INSPECTOR TO BE NOTIFIED Name Robert Lowther  
 Address General Delivery  
Middlebourne, WV 26149  
 9) DRILLING CONTRACTOR: Name Unknown  
 Address \_\_\_\_\_  
 10) PROPOSED WELL WORK: Drill  / Drill deeper  / Redrill  / Stimulate   
 Plug off old formation  / Perforate new formation   
 Other physical change in well (specify) \_\_\_\_\_  
 11) GEOLOGICAL TARGET FORMATION, Gordon  
 12) Estimated depth of completed well, 3100' feet  
 13) Approximate strata depths: Fresh, ≈ 421' feet; salt, 2200' feet.  
 14) Approximate coal seam depths: 844' Is coal being mined in the area? Yes  / No   
 15) CASING AND TUBING PROGRAM FROM PERMIT # 103-0038

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						* 451'	* 451'	CTS Per	Rule 15.05
Fresh water	8 5/8					1421'	1421'	CTS	Per rule 15.05
Coal									Sizes
Intermediate									
Production	4 1/2					3100' app.	3100' app.	500 + SKS	Depths set Per rule 15.01
Tubing									
Lin...									Perforations: Top Bottom
* ONLY TO BE RUN IF FRESH WATER IS ENCOUNTERED									

OFFICE USE ONLY  
**DRILLING PERMIT**

Permit number 47-103-1384 Date February 10 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 February 10, 1988 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent: <u>AS</u>	Plat: <u>ES</u>	Casing: <u>25</u>	Fee: <u>1397</u>	WPCP: <u>AS</u>	S&E: <u>MV</u>	Other:
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NOTE: Keep one copy of this permit posted at the drilling location.

*[Signature]*  
 Director, Division of Oil and Gas

File

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