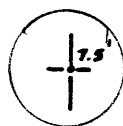
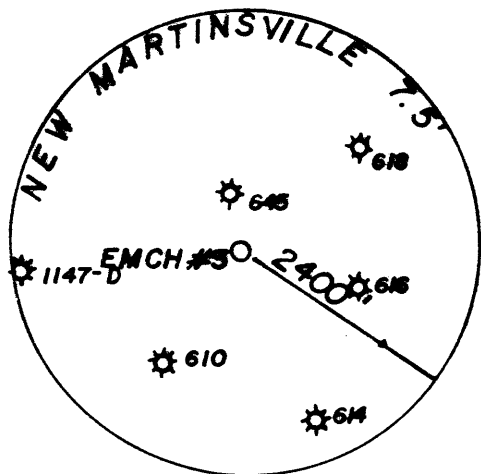
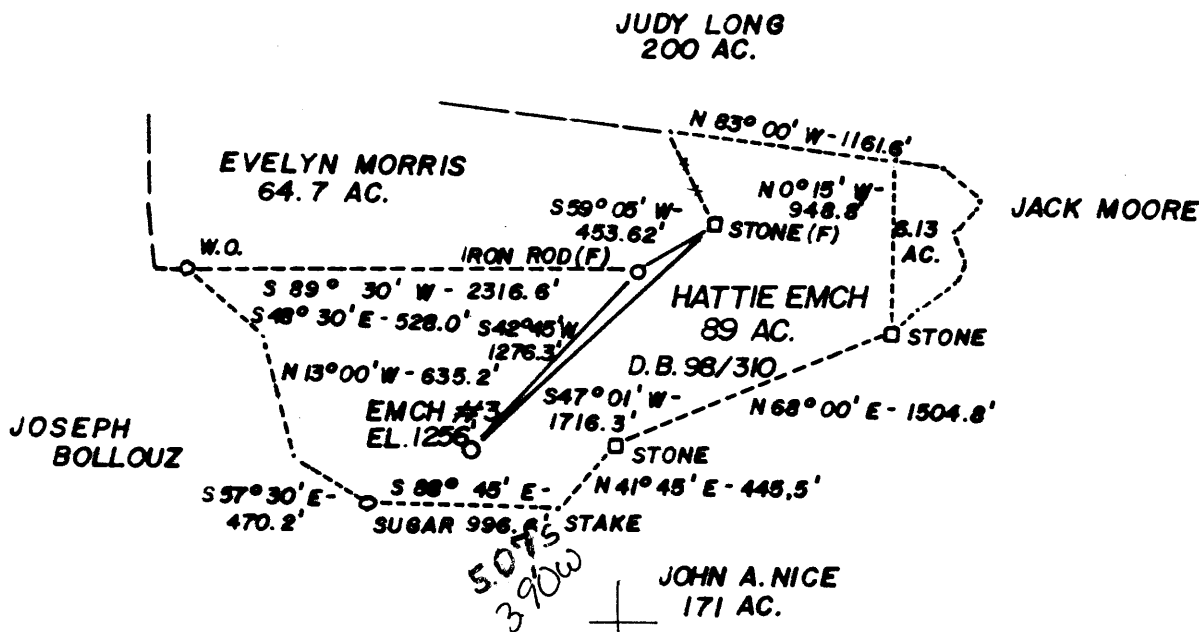


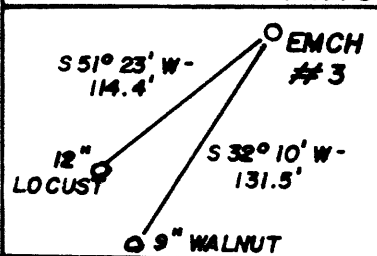
NORTH

LONGITUDE 80° 47' 30"



50 FT STAKE  
390w  
7.5'  
2.195  
1.68w

REFERENCE POINTS

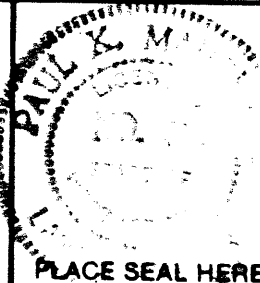


(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1:200  
 PROVEN SOURCE OF ELEVATION ROAD INTERSECTION  
1326'

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) Paul K. Marshall  
 R.P.E. \_\_\_\_\_ L.L.S. 580



STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION



DATE JUNE 27, 19 85  
 OPERATOR'S WELL NO. EMCH #3  
 API WELL NO. \_\_\_\_\_

WELL TYPE: OIL  GAS  LIQUID INJECTION \_\_\_\_\_ WASTE DISPOSAL \_\_\_\_\_  
 (IF "GAS,") PRODUCTION  STORAGE \_\_\_\_\_ DEEP \_\_\_\_\_ SHALLOW   
 LOCATION: ELEVATION 1256' WATERSHED HAYNES RUN  
 DISTRICT PROCTOR COUNTY WETZEL  
 QUADRANGLE NEW MARTINSVILLE 7.5' 509 091 NE 3  
 SURFACE OWNER HATTIE EMCH ACREAGE 89 ACRES  
 OIL & GAS ROYALTY OWNER HATTIE EMCH LEASE ACREAGE 89 ACRES

PROPOSED WORK: DRILL  CONVERT \_\_\_\_\_ DRILL DEEPER \_\_\_\_\_ REDRILL \_\_\_\_\_ FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION \_\_\_\_\_ PERFORATE NEW FORMATION \_\_\_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_  
 LEASE NO. \_\_\_\_\_  
 AUG 26 1985

PLUG AND ABANDON \_\_\_\_\_ CLEAN OUT AND REPLUG \_\_\_\_\_  
 TARGET FORMATION GORDON ESTIMATED DEPTH 3500' 6-0 Cameron-Garner (23)  
 WELL OPERATOR CLAY RESOURCES INC. DESIGNATED AGENT ANDY BROWN  
 ADDRESS 204 UNION SQUARE ADDRESS P.O. BOX 32  
172 MARIETTA, OHIO 45750 READER, WV 26167

COUNTY NAME PERMIT

WR-35

FEB 21 1986



State of West Virginia DEPARTMENT OF ENERGY Oil and Gas Division

Date February 17, 1986 Operator's Well No. Emch #3 Farm Hattie Emch API No. 47 - 103 - 1360

WELL OPERATOR'S REPORT OF DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

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

LOCATION: Elevation: 1256 Watershed Haynes Run District: Proctor County Wetzel Quadrangle New Martinsville 7.5'

COMPANY Clay Resources, Inc. ADDRESS 204 Union Square, Marietta, OH 45750 DESIGNATED AGENT Andy Brown ADDRESS Box 32, Reader, WV 26167 SURFACE OWNER Hattie Emch 532 Briarcliff Court ADDRESS New Martinsville, WV 26155 MINERAL RIGHTS OWNER SAME ADDRESS OIL AND GAS INSPECTOR FOR THIS WORK Robert General Delivery Lowther ADDRESS Middlebourne, WV PERMIT ISSUED 8-20-85 DRILLING COMMENCED 9-12-85 DRILLING COMPLETED 9-15-85 IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON

Table with 4 columns: Casing & Tubing Size, Used in Drilling, Left in Well, Cement fill up Cu. ft. Rows include sizes 20-16 Cond., 13-10", 9 5/8, 8 5/8, 7, 5 1/2, 4 1/2, 3, 2, and Liners used.

GEOLOGICAL TARGET FORMATION Gordon Depth 3500 feet Depth of completed well 3000 feet Rotary X / Cable Tools Water strata depth: Fresh feet; Salt 2235 feet Coal seam depths: 1046 Is coal being mined in the area? No

OPEN FLOW DATA Producing formation Gordon Pay zone depth 2824-2840 feet Gas: Initial open flow 30 Mcf/d Oil: Initial open flow 0 Bbl/d Final open flow 20 Mcf/d Oil: 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 completion--)

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

PERFORATIONS: 12 Shots: 2816-2831  
 2 Shots: 2953-2954

FRACTURING: 9/20/85 - Foam Frac: Broke @ 2700#: ISP-2030#: 40,000# 20/40:  
 483,000 SCF, N<sub>2</sub> :

**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 & Shale			0	500	
Shale & Limestone			500	1284	
Shale, Limestone, Redrock			1284	1350	
Shale, Limestone			1350	2100	
Shale			2100	2500	Weir: 2378-2394 Squaw: 2424-2436
Sand & Shale			2500	2550	
Sand			2550	2600	1st Berea: 2573-2582 2nd Berea: 2584-2592
Sand & Shale			2600	2750	
Shale			2750	<u>3000</u>	<u>Gordon: 2824-2840</u>

(Attach separate sheets as necessary)

CLAY RESOURCES, INC.

Well Operator

By: Sandra L. Schaefer V. President, Operation

Date: February 17, 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 ~~any~~, encountered in the drilling of a well."

FILE COPY  
AUG - 2 1985



1) Date: July 31, 19 85  
 2) Operator's Well No. Emch #3  
 3) API Well No. 47 103 - 1360  
 State County Permit

DIVISION OF OIL & GAS  
 DEPARTMENT OF ENERGY 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: 1256' Watershed: Haynes Run  
 District: Proctor County: Wetzel Quadrangle: New Martinsville 7.5'
- 6) WELL OPERATOR Clay Resources (172) CODE: 10025 7) DESIGNATED AGENT Andrew C. 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 419
- 12) Estimated depth of completed well, 3500 feet
- 13) Approximate strata depths: Fresh, 550 feet; salt, 500 feet.
- 14) Approximate coal seam depths: 900 - 1000' 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		
Conductor								Kinds
Fresh water	8 5/8					1030'	1030'	CTS Per rule 15.05
Coal								Sizes
Intermediate								
Production	4 1/2					3500'	3500'	500 + S&S Depths set 15.01
Tubing								
Liners								Perforations: Top Bottom

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-103-1360

Date August 20 19 85

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 August 20, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <input checked="" type="checkbox"/>	Agent: <input checked="" type="checkbox"/>	Plat: <input checked="" type="checkbox"/>	Casing: <input checked="" type="checkbox"/>	Fee: <u>823</u>	WPC: <input checked="" type="checkbox"/>	S&E: <input checked="" type="checkbox"/>	Other: <input type="checkbox"/>
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NOTE: Keep one copy of this permit posted at the drilling location.

[Signature]  
 Director, Division of Oil and Gas

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