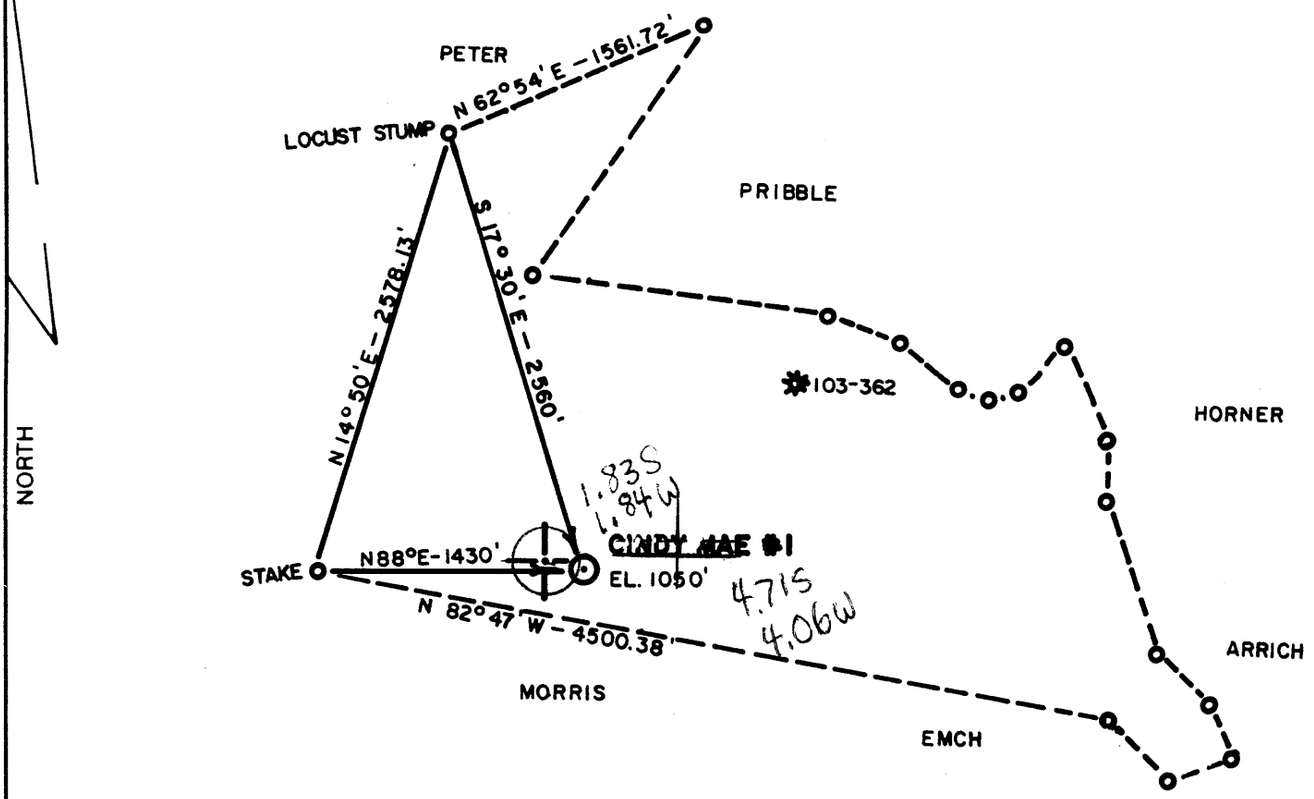
9650' WEST — 39 45

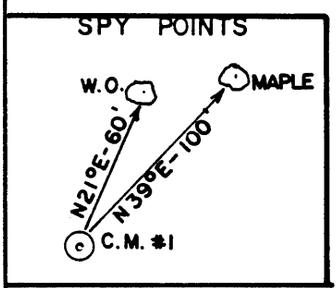
CODE ____ CARD ____ PLOT ✓

LATITUDE 39° 42' 30"

LONGITUDE 80° 47' 30" — 9680' SOUTH — 80 45'



SPY POINTS



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

FILE NO. 84-651
DRAWING NO. ____
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY 1'/200'
PROVEN SOURCE OF ELEVATION WELL #1 (1309')

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) Robert Waterman

R.P.E. 3788 L.L.S. ____

PLACE SEAL HERE

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

DATE 11/5, 19 84
OPERATOR'S WELL NO. CINDY MAE #1
API WELL NO. 47 - 103 - 1323 (STATE - COUNTY - PERMIT)

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

LOCATION: ELEVATION 1050 WATER SHED HAYNES RUN
DISTRICT PROCTOR 7 509 COUNTY WETZEL
QUADRANGLE NEW MARTINSVILLE 7.5' & 15 NE 3
SURFACE OWNER JUDY M. LONG ACREAGE 200
OIL & GAS ROYALTY OWNER HARRY L. NICE LEASE ACREAGE 200
LEASE NO. ____

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 MARCELLUS SHALE ESTIMATED DEPTH 5990'

WELL OPERATOR CLAY RESOURCES, INC. 172 DESIGNATED AGENT STEVE KUHL
ADDRESS 204 UNION SQUARE MARIETTA, OH 45750 ADDRESS 1004 - 41ST ST. VIENNA, WV 26105

DEC 17 1984

COUNTY NAME — PERMIT

FORM IV-6 (8-78) H.T. HALL

6-6 Cameron - Garner (23)

RECEIVED
JUN 13 1985
OIL & GAS DIVISION
DEPT. OF MINES

IV-35
(Rev 8-81)

State of West Virginia
Department of Mines
Oil and Gas Division

Date May 24, 1985
Operator's
Well No. Cindy Mae #1
Farm Judy Long
API No. 47 - 103 - 1323

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 X / Underground Storage ___ / Deep ___ / Shallow ___ /)

LOCATION: Elevation: 1050' Watershed Haynes Run
District: Proctor County Wetzel Quadrangle New Martinsville 7.5'

COMPANY Clay Resources Inc.
ADDRESS 204 Union Square, Marietta, Ohio 45750
DESIGNATED AGENT Andrew C. Brown, Jr.
ADDRESS Box 32, Reader, W. Va.
SURFACE OWNER Judy M. Long
ADDRESS 230 Lang Drive, New Martinsville, W. Va.
MINERAL RIGHTS OWNER Harry Nice
ADDRESS 912 Highland Avenue, New Martinsville, W. Va.
OIL AND GAS INSPECTOR FOR THIS WORK Robert Lowther ADDRESS General Delivery Middlebourne, W. Va. 26149
PERMIT ISSUED 11/30/84
DRILLING COMMENCED December 10, 1985
DRILLING COMPLETED April 15, 1985
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 Cond.			
13-10"	500'	0	
9 5/8			
8 5/8	1370'	1370'	CTS
7	1681'	1681'	
5 1/2			
4 1/2			
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Gordon Depth 3000' feet
Depth of completed well 2680 feet Rotary ___ / Cable Tools XX
Water strata depth: Fresh ___ feet; Salt N/A feet
Coal seam depths: 400 - 405 745 - 750 Is coal being mined in the area? NO

OPEN FLOW DATA
Producing formation Gordon Pay zone depth 2610 - 2680' feet
Gas: Initial open flow 300 Mcf/d Oil: Initial open flow 0 Bbl/d
Final open flow 180 Mcf/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 3 weeks
Static rock pressure 550 psig (surface measurement) after 24 hours shut in
(If applicable due to multiple completion--)
Second producing formation N/A 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

JUN 24 1985

(Continue on reverse side)

FORM IV-35
(REVERSE)

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

No perforations, fractures, stimulations etc. Natural well.

WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Yellow Clay	0	9	
Gray Shale	9	35	
Red Shale	35	63	
Gray Shale	63	131	
Limestone	131	138	
Red Shale	138	141	
Gray Shale	141	150	Water
Red Shale	150	160	
Gray Shale	160	163	
Red Shale	163	180	
Gray Shale	180	185	
Sandstone	185	191	
Gray Shale	191	193	
Red Shale	193	195	
Gray Shale	195	210	
Red Shale	210	216	
Gray Shale	216	250	
Red Shale	250	263	
Gray Shale	263	284	
Red Shale	284	310	
Gray Shale	310	317	
Sandstone	317	325	
Red Shale	325	340	
Gray Shale	340	343	
Sandstone	343	352	
Gray Shale	352	373	
Limestone	373	376	
Gray Shale	376	400	
Coal	400	405	
Gray Shale	405	470	
Dark Gray Shale	470	473	
Gray Shale	473	577	
Red Shale	577	587	
Gray Shale	587	600	
Sandstone	600	615	
Gray Shale	615	653	
Red Shale	653	660	
Gray Shale	660	745	
(See Attached)	*(Attach separate sheets as necessary)*		

Clay Resources, Inc.
Well Operator

By: Sandra L Schafer

Date: 6/11/85

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 coal, encountered in the drilling of a well."

WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Coal	745	750	
Gray Shale	750	890	
Red Shale	890	911	
Gray Shale	911	953	
Red Shale	953	1023	
Gray Shale	1023	1110	
Limestone	1110	1113	
Gray Shale	1113	1134	
Sandstone	1134	1143	
Gray Shale	1143	1180	
Sandstone	1180	1194	
Gray Shale	1194	1250	
Red Shale	1250	1295	
Gray Shale	1295	1310	
Sandstone	1310	1340	
Limestone	1340	1380	
Sandstone	1380	1400	
Dark Gray Shale	1400	1402	
Gray Shale	1402	1430	
Sandstone	1430	1473	
Dark Gray Shale	1473	1590	
Sandstone	1590	1605	
Dark Gray Shale	1605	1628	
Sandstone	1628	1700	
Gray Shale	1700	1785	
Sandstone	1785	1793	
Gray Shale	1793	1850	
Limestone	1850	1920	
Sandstone	1920	1940	
Sandstone	1940	2030	Engine - water
Slate Blk	2030	2033	
Sandstone	2033	2085	
Gray Shale	2085	2270	
Sandstone	2270	2280	
Slate & Shale	2280	2400	
Brown Shale	2400	2465	
Blue Shale	2465	2570	

(Attach separate sheets as necessary)

Clay Resources, Inc.
Well Operator

By: Sandra L Schafer

Date: 6/11/85

JUN 2 1 1985

WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Sandy Shale	2570	2590	
Gray Shale	2590	2610	
Sandy Shale	2600	2610	
Blue Shale	2610	2680	Gordon - Gas
		TD.	

(Attach separate sheets as necessary)

Clay Resources, Inc.
Well Operator

By: Sandra L Schafer

Date: 6/11/85

FORM IV-2(B) (Obverse) 7-83

FILE COPY

RECEIVED 1984 OIL & GAS DIVISION DEPT. OF MINES

1) Date: November 6, 19 84

2) Operator's Well No. #1 Cindy Mae

3) API Well No. 47 - 103 - 1323
State County Permit

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES, OIL AND GAS DIVISION

APPLICATION FOR A WELL WORK PERMIT

4) WELL TYPE: A Oil ___/ Gas X /
B (If "Gas", Production X / Underground storage ___/ Deep ___/ Shallow ___/)

5) LOCATION: Elevation: 1050' Watershed: Haynes Run
District: Proctor County: Wetzel Quadrangle: New Martinsville 7.5'

6) WELL OPERATOR Clay Resources, Inc. 10025
Address 204 Union Square
Marietta, Ohio 45750

7) DESIGNATED AGENT Steve Kuhl
Address 1004 41st Street
Vienna, W. Va.

8) OIL & GAS INSPECTOR TO BE NOTIFIED
Name Robert Lowther
Address General Delivery
Middlebourne, W. Va. 26149

9) DRILLING CONTRACTOR:
Name Unknown
Address

10) PROPOSED WELL WORK: Drill X / Drill deeper ___/ Redrill ___/ Stimulate ___/
Plug off old formation ___/ Perforate new formation ___/
Other physical change in well (specify) ___

11) GEOLOGICAL TARGET FORMATION, Marcellus Shale

12) Estimated depth of completed well, 5000' feet

13) Approximate trata depths: Fresh, 550 feet; salt, 500 feet.

14) Approximate coal seam depths: 900' - 1000' Is coal being mined in the area? Yes ___/ No X /

15) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS Size	Grade	Weight per ft.	New	Used	FOOTAGE INTERVALS For drilling	Left in well	CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
Conductor									Kinds
Fresh water	8-5/8					~~600'~~	~~600~~	CTS	Per rule 15.05
Coal						1030'	1030'	CTS by	rule 15.05
Intermediate									
Production	4-1/2					5000'	5000'	500+ sks	Depths set Per rule 15.01
Tubing									
Liners									Perforations:
									Top Bottom

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-103-1323

November 30, 19 84
Date

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 November 30, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
38	JL	MD	MH	468

Margaret J. Nasser
Administrator, Office of Oil and Gas

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

File

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