

Source of Elevation HOPE WELL 7756 1143

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.

Minimum accuracy, one part in 200

Cabot Oil & Gas Corporation
 400 Fairway Drive, Suite 400
 Coraopolis, Pa. 15108
 Surface: Barbara Joyce Moyer

STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL & GAS
 NITRO, WEST VIRGINIA 25143

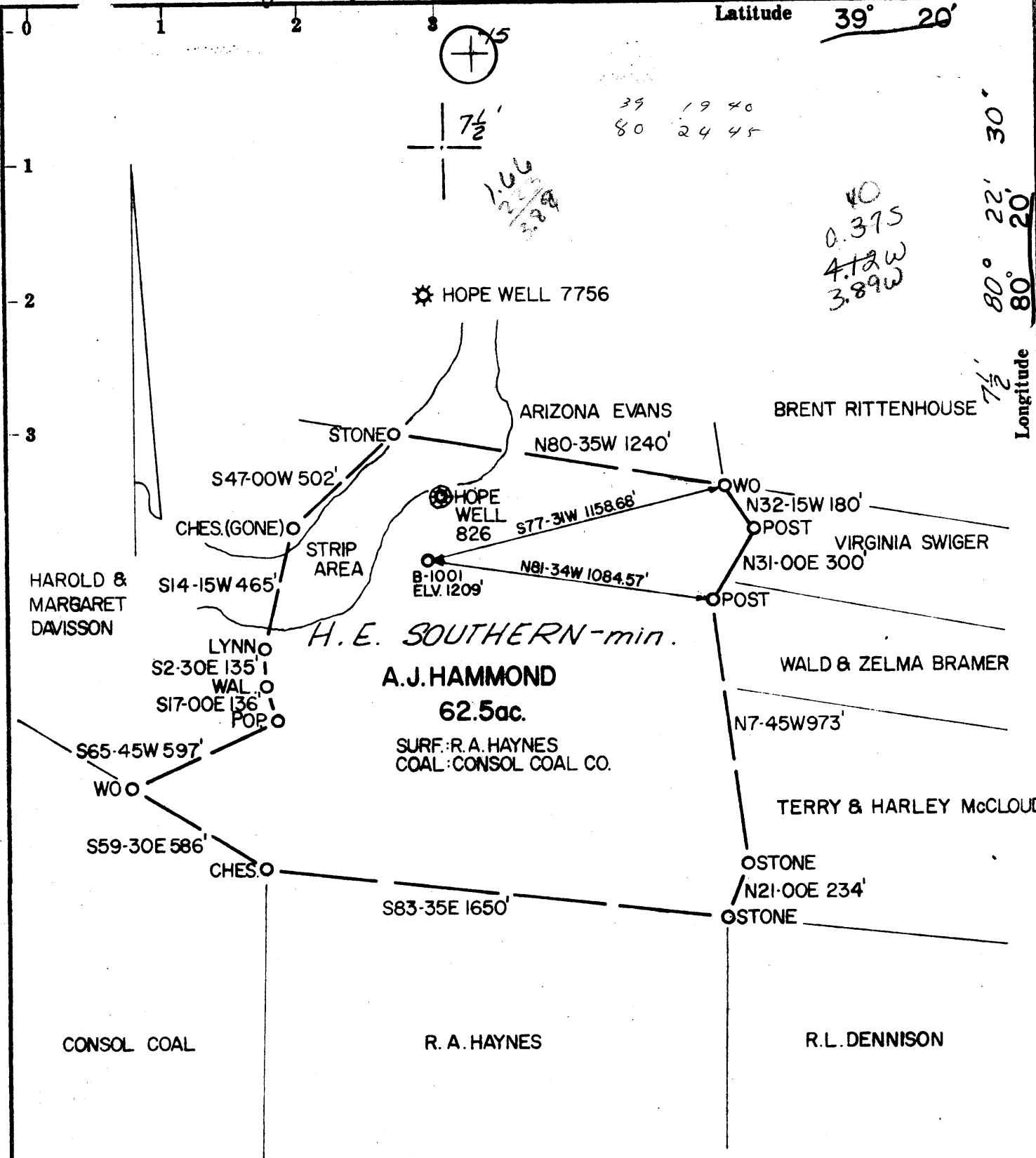
Tract	Area 62.5	Lease No. 77858
Well (Farm) No.	5-218	Serial No. B-1001
Elevation (Spirit Level)	1209'	
Quadrangle	CLARKSBURG 15 Well Summit 7.5	
County	HARRISON	District SARDIS
Engineer	R. L. S. No. 105	
Engineer's Registration No.	L.L.S. No. 105	
File No.	230-B/86	Drawing No.
Date	6-25-77	Scale 1"=500'

WELL LOCATION MAP

APP. WELL # 7-033-01094-W

Well drilled in 1977 by Scott Enterprises T.D. 4635 Production from Benson, Balttown, Speechley. Cabot to squeeze 4 1/2" base Maclon Corning work Benson, Balttown, Speechley.

Latitude 39° 20'



39 19 40
80 24 45

40
0.375
4.12W
3.89W

30'
22'
20'
80°
80°
Longitude

- Fracture.....
- Redrill.....
- New Location.
- Drill Deeper.....
- Abandonment.....

Source of Elevation HOPE WELL 7756 1143'
 I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.
 Minimum accuracy, one part in 200

Company SCOTT ENTERPRISES, INC.
 Address SALEM, W.VA. 26426
 Farm A. J. HAMMOND, ROBERTA. HAYNES
 Tract 62.5 Acres Lease No. 77858
 Well (Farm) No. 5-218 Serial No. B-1001
 Elevation (Spirit Level) 1209'
 Quadrangle CLARKSBURG SW 23-4
 County HARRISON District SARDIS
 Engineer R. J. McMillan
 Engineer's Registration No. L.L.S.No. 105
 File No. 230-B/86 Drawing No. _____
 Date 6-25-77 Scale 1"=500'

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON
WELL LOCATION MAP
 FILE NO. HAR-1094

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.
 — Denotes one inch spaces on border line of original tracing.
47-033

WR-35

Date: 18-Mar-99
API # 47-033-01094 W

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Reviewed AS

Well Operator's Report of Well Work

Farm name: Moyer, Barbara Joyce Operator Well No.: A.J. Hammond #1

LOCATION: Elevation: 1,209.00 Quadrangle: Wolf Summit

District: Sardis County: Harrison

Latitude: 2,230 Feet South of 39 Deg. 20 Min. 0 Sec.

Longitude: 10,100 Feet West of 80 Deg. 22 Min. 30 Sec.

Company: Cabot Oil & Gas Corporation
400 Fairway Drive: Suite 400
Coraopolis, PA 15108-4308

Agent: John W. Abshire

Inspector: Tim Bennett

Permit Issued: 10/18/96

Well Work Commenced: 12/4/96

Well Work Completed: 4/14/97

Verbal Plugging

Permission granted on:

Rotary X Cable Rig

Total Depth (feet) 4635'

Fresh Water Depths (ft) 595'

Salt Water Depths (ft)

Is coal being mined in area (Y / N)?

Coal Depths (ft) 89'-91', 955'-962'

OPEN FLOW DATA

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill up Cu. Ft.
11-3/4"		21'	
8-5/8"		1110'	260 sks
4-1/2"		4612'	340 sks
			100 sks squeezed 12/7/96

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Office of Oil & Gas
Permitting
MAR 18 1999
WV Division of
Environmental Protection

Producing formation Maxton ** Pay zone depth (ft) 1341' - 1376'
 Gas: Initial open flow MCF/d Oil: Initial open flow N/A Bbl/d
 Final open flow 60 MCF/d Final open flow N/A Bbl/d
 Time of open flow between initial and final tests 4 Hours
 Static rock pressure 70 psig (surface pressure after 18 Hours
 ** commingled with Benson, Balltown and Speechley
 Second producing formation Pay zone depth (ft)
 Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d
 Final open flow MCF/d Final open flow Bbl/d
 Time of open flow between initial and final tests Hours
 Static rock pressure psig (surface pressure after Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: CABOT OIL & GAS CORPORATION
By: Ray Rudnick Jr.
Date: 3-18-99 - MAR 29 1999

MAR 29 1999

HAR 1094W

OPEN FLOW DATA

Perf'd Maxton from 1341'-1376'. Broke down with 500 gals of 15% HCl acid @ 2409 psi. ISIP: 1000 psi.
Treated with 5000 gals of 15% HCl acid @ 8 bpm and 1750 psi. ISIP: 970 psi.

FORMATION	TOP	BOTTOM
Top Soil	0	25
Sandy Shale	25	46
Gray Shale	46	70
Gray Sand	70	89
Coal	89	91
White Sand	91	150
Shale	150	490
Sand	490	520
Shale	520	560
Sandy Shale	560	585
Sand	585	615
Sand/Shale	615	955
Coal	955	962
Sand	962	1120
Shale	1120	1165
Sand	1165	1200
Red Shale/Sand	1200	1340
Maxton	1340	1490
Big Lime	1490	1525
Big Injun	1525	1590
Sandy Shale	1590	2025
Fifty Foot Sand	2025	2095
Sand/Siltstone	2095	2280
Fourth Sand	2280	2330
Gray Shale	2330	3020
Spechley	3020	3160
Gray Siltstone	3160	3350
Balltown	3350	3390
Gray Shale	3390	4260
Brown Shale	4260	4500
Benson Sand	4500	4515
Shale	4515	4635 - TD



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD 17

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OIL & GAS DIVISION
DEPT. OF MINES

Quadrangle WOLF SUMMIT

Permit No. HAR-1094

Rotary Oil _____
Cable _____ Gas
Recycling _____ Comb. _____
Water Flood _____ Storage _____
Disposal _____ (Kind)

Company Scott Enterprises, Inc.
Address P.O. Box 112, Salem, WV 26426
Farm A.J. Hammond Acres 62.5
Location (waters) Gregory Run
Well No. B-1001 (S-218) Elev. 1209'
District Sardis County Harrison
The surface of tract is owned in fee by _____
Robert A. Haynes
Address Rt. 3, Box 203A, Clarksburg, WV
Mineral rights are owned by H.E. Southern
Address Clarksburg, WV
Drilling Commenced 7-12-77
Drilling Completed 7-17-77
Initial open flow Show gas cu. ft. _____ bbls.
Final production 2,232M cu. ft. per day _____ bbls.
Well open 4 hrs. before test 1015 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 13-10"			
9 5/8			
8 5/8	1110	1110	260 sacks
7			
5 1/2			
4 1/2	4612	4612	340 sacks
3			
2			
Liners Used			

Well treatment details:

Attach copy of cementing record.

BENSON FRAC: Perforations 4504-14 18 holes
60,000# 20-40 sand; 500 gal. 15% acid; 800 bbls. water.
BALLTOWN FRAC: Perf. 3360-64 7 holes; 3375-79 7 holes; 3384-86 4 holes.
45,000# 20-40 sand; 500 gal 15% acid; 600 bbls. water.
SPEECHLEY FRAC: Perforations 3032-42 7 holes; 3147-50 7 holes.
35,000# 20-40 sand; 500 gal. 15% acid; 500 bbls. water.
Coal was encountered at 89-91, 955-62 Feet _____ Inches
Fresh water Damp st 595 Feet _____ Salt Water None Feet _____
Producing Sand Benson, Balltown, Speechley Depth 4504-14, 3360-86, 3032-3150

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Top soil			0	25		
Sandy shale			25	46		
Gray shale			46	70		
Gray sand			70	89		
COAL			89	91		Pittsburgh Seam
White sand			91	150		
Shale			150	490		
Sand			490	520		
Shale			520	560		
Sandy shale			560	585		
Sand			585	615		Hole damp at 595
Sand & shale			615	955		
COAL			955	962		
Sand			962	1120		
Shale			1120	1165		
Sand			1165	1200		
Red shale & sand			1200	1340		
Sand			1340	1490		
* BIG LIME			1490	1525		
* BIG INJUN			1525	1590		
Sandy shale			1590	2025		
* FIFTY FOOT SAND			2025	2095		
Sand & siltstone			2095	2280		

NOV 22 1977

(over)

* Indicates Electric Log tops in the remarks section.

Formation	Color	Hard or Soft	Top Feet 17	Bottom Feet	Oil, Gas or Water	* Remarks
* FOURTH SAND			2280	2330		
Gray shale			2330	3020		
* SPEECHLEY			3020	3160		Small show of gas
Gray siltstone			3160	3350		
* BALLTOWN			3350	3390		Increase in gas
Gray shale			3390	4260		
Brown shale			4260	4500		
* <u>BENSON SAND</u>			4500	4515		Good show of gas-- 84 Mcf
Shale			4515	4635		
T D				4635		

Date November 7, 1977

APPROVED Scott Enterprises, Inc., Owner

By Donald O. Kaus, Engineer
(Title)

RECEIVED WORKOVER*
WV Division of Environmental Protection

Page 1 of _____
Form WW2-A
(6/94)
File Copy

SEP 23 1996

1) Date: SEPTEMBER 20, 1996
2) Operator's well number A.J. Hammond #1 (F)AS-WW m101 Form WW-2-A (1)
Well No: 47 - 033 - 1094 - W (A) (2)
State County Permit

Permitting
Office of Oil & Gas

STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- 4) Surface Owner(s) to be served: (a) Coal Operator:
- (a) Name Barbara Joyce Moyer Name Not Operated
Address 25 Bridgewood Street Address _____
Irvine, CA 92714
- (b) Name _____ (b) Coal Owner(s) with Declaration
Address _____ Name Ivorine Coulson, et al
Address 684 Deerfield Estate
Bridgeport, WV 26330
- (c) Name _____ Name Elene Ethel Nielsen
Address _____ Address 25 Bridgewood Street
Irvine, CA 92714
- 6) Inspector Tim Bennett (c) Coal ~~lease~~ with Declaration OWNER
Address 737 Karl Street Name Hodgeville Trucking Co.
Weston, WV 26452 Address RR 5 Box 361
Telephone (304)- 269-6167 Buckhannon, WV 26201

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

 Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas **OR**

 x Included is the information required by Chapter 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through on the above named parties, by:

- Personal Service (Affidavit attached)
 x Certified Mail (Postmarked postal receipt attached)
 Publication (Notice of Publication attached)

I have read and understand Chapter 22-6 and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator Cabot Oil & Gas Corporation
By: John W. White
Its: Geologist
Address 400 Fairway Drive Suite 400
Coraopolis, PA 15108
Telephone (412)299-7000

Subscribed and sworn before me this 5th day of SEPTEMBER, 1996

Cynthia M. Stegenka Notary Public

My commission expires

JUNE 17, 2000
Cynthia M. Stegenka, Notary Public
West Bethlehem Twp., Washington County
My Commission Expires June 17, 2000
Member, Pennsylvania Association of Notaries

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

- 1) Well Operator: Cabot Oil & Gas Corporation ¹⁴⁹ 8145 ^① 492
- 2) Operator's Well Number: A.J. Hammond #1 3) Elevation: 1209'
- 4) Well type: (a) Oil ___ / or Gas X / *Issued 10/18/96*
 (b) If Gas: Production X / Underground Storage ___ / *Expires 10/18/98*
 Deep ___ / Shallow X /
- Proposed Target Formation(s): Maxton 325
- Proposed Total Depth: 4635 feet
- Approximate fresh water strata depths: 595'
- 8) Approximate salt water depths: None
- 9) Approximate coal seam depths: 89', 955'
- 10) Does land contain coal seams tributary to active mine? Yes ___ / No X /
- 11) Proposed Well Work: Complete Maxton formation and commingle with Benson, Balltown and Speechley
- 12) Existing

22623

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WV Division of
Environmental Protection
SEP 23 1996
Permitting
Office of Oil & Gas

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS		Weight per ft.	For drilling	FOOTAGE INTERVALS Left in well	CEMENT Fill-up (cu. ft.)
	Size	Grade				
Conductor						
Fresh Water						
Coal	8 ⁵ / ₈ "			1110'	1110'	260 sks <i>from well records</i>
Intermediate						
Production	4 ¹ / ₂ "			4612'	4612'	340 sks
Tubing						
Liners						

PACKERS : Kind _____
 Sizes _____
 Depths set _____

For Office of Oil and Gas Use Only

Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond Blanket Agent
 (Type)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

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JUL - 8 1977

Oil and Gas Division

OIL & GAS DIVISION
DEPT. OF MINES

OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,
Charleston, W. Va.

DATE July 7, 1977

Surface Owner Robert A. Haynes Company Scott Enterprises, Inc.
 Address Rt. 3, Box 203A, Clarksburg, WV Address P.O. Box 112, Salem, WV 26426
 Mineral Owner H. E. Southern Farm A. J. Hammond Acres 62 1/2
 Address Rt. 3, Box 203A, Clarksburg, WV Location (waters) Gregory Run
 Coal Owner Consolidated Coal Company Well No. B-1001 (S-218) Elevation 1209'
 Address Monongah, WV District Sardis County Harrison
 Coal Operator Daniel Boone Coal Company Quadrangle Wolf Summit 7 1/2"
 Address Sardis, WV

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions being in accordance with Chapter 22 of the W. Va. Code, the location is hereby approved for drilling. This permit shall expire if operations have not commenced by 11-8-77

INSPECTOR TO BE NOTIFIED Paul Garrett
 ADDRESS Clarksburg, WV 26301
 PHONE 622-3871

Robert J. ...
 Deputy Director - Oil & Gas Division

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated July 24 1972 by _____ made to Hope Natural Gas Co. and recorded on the _____ day of _____ 19____, in _____ County, Book 1006 Page 1202
 NEW WELL _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE
 _____ OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days. *

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address 7-7-77 2 days before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:

WEST VIRGINIA GEOLOGICAL AND ECONOMIC SURVEY
 P. O. BOX 879
 MORGANTOWN, WEST VIRGINIA 26505
 AC-304 - 292-6331

Address of Well Operator

Very truly yours, SCOTT ENTERPRISES, INC.
 (Sign Name) By- Ronald O. Kaiser
 Well Operator
 P.O. Box 112
 Street
 Salem
 City or Town
 West Virginia 26426
 State

*SECTION 3 If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

BLANKET BOND

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements."

Signed by Ronald O. Kaiser

HAR-1094 PERMIT NUMBER

47-033

THIS IS AN ESTIMATE ONLY
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

PROPOSED WORK ORDER TO X DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) RESPONSIBLE AGENT:
 NAME S.W. Jack Drilling Company NAME Scott Enterprises, Inc.
 ADDRESS Buckhannon, WV 26201 ADDRESS P.O. Box 112, Salem, WV 26426
 TELEPHONE 472-2161 TELEPHONE 782-2523
 ESTIMATED DEPTH OF COMPLETED WELL: 4650' ROTARY X CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Benson
 TYPE OF WELL: OIL _____ GAS X COMB. _____ STORAGE _____ DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
11 3/4"			To surface
9 - 5/8			
8 - 5/8	1160	1160	To surface
7			
5 1/2			
4 1/2	4650	4650	150 sacks
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 70, 180 FEET SALT WATER _____ FEET
 APPROXIMATE COAL DEPTHS 90
 IS COAL BEING MINED IN THE AREA? Yes BY WHOM? Daniel Boone Coal Co.

TO DRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

TO DRILL DEEPER OR REDRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

TO FRACTURE - STIMULATE:

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.

OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for Daniel Boone Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the Daniel Boone Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

Daniel Boone
 For Coal Company
John Spurr JR
 Official Title