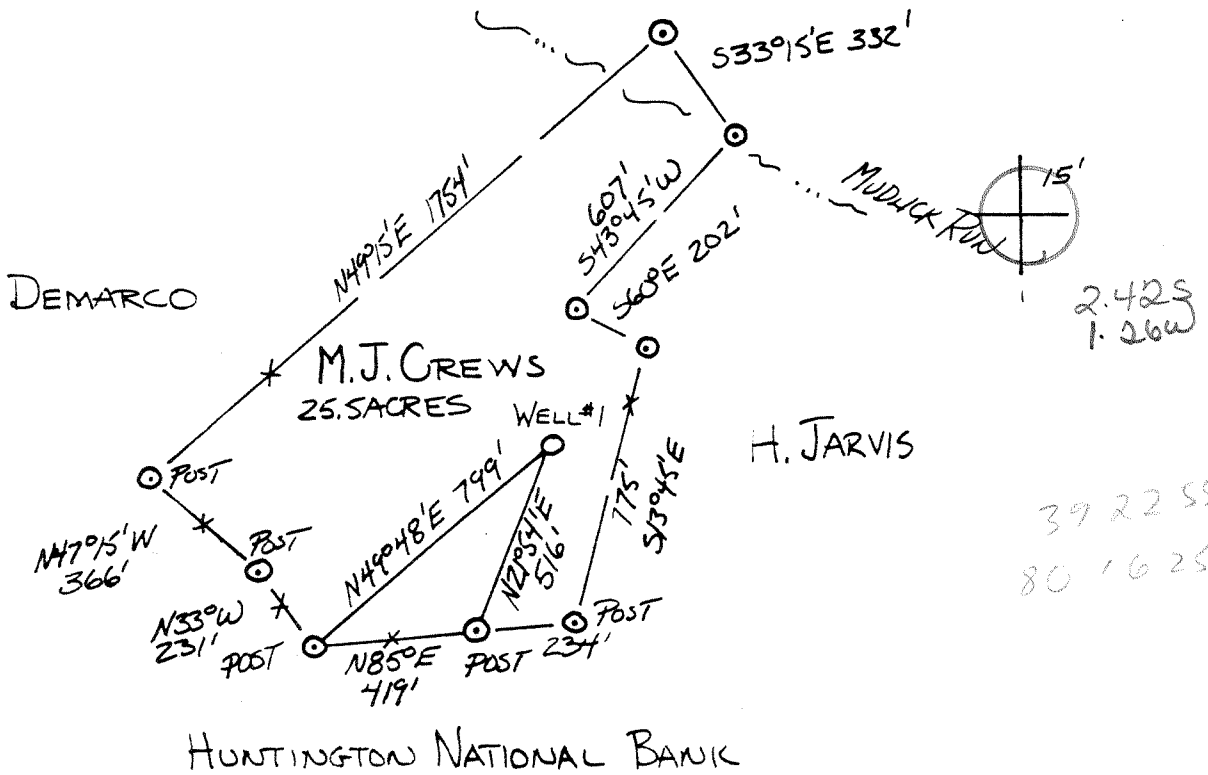


LATITUDE 39°25'

LONGITUDE 80°15'

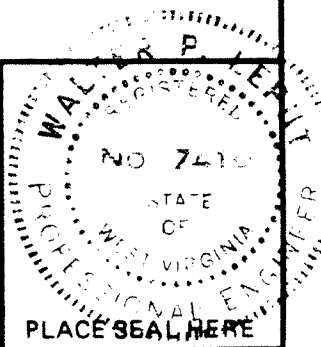


NORTH

12,700'

FILE NO. 6-1-81
 DRAWING NO. 6-1-81
 SCALE 1"=500'
 MINIMUM DEGREE OF ACCURACY 1 IN 200
 PROVEN SOURCE OF ELEVATION OF ROADS
±1000' NORTH (493)

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) Walter P. Lepout
 R.P.E. 7410 L.L.S. _____



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



DATE JUNE 1, 1981
 OPERATOR'S WELL NO. _____
 API WELL NO. _____
47 - 033 - 2638
 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 1072 WATER SHED MUDLICK RUN
 DISTRICT CLAY COUNTY HARRISON
 QUADRANGLE SHINNSTON 7 1/2 Clarksburg 1st EC
 SURFACE OWNER KENNETH STRAIT ACREAGE 25.5
 OIL & GAS ROYALTY OWNER M.J. CREWS LEASE ACREAGE 25.5
 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 _____ ESTIMATED DEPTH 2800
 WELL OPERATOR DORAN+ASSOCIATES INC DESIGNATED AGENT L. J. DORAN
 ADDRESS 200 ROESSLER ROAD ADDRESS Box 4
PGH, PA. 15220 PA. 15220 1981



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD

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

Quadrangle Shinnston 7 1/2

Permit No. 47-033-2638

Company <u>Doran & Associate, Inc.</u>	Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Address <u>200 Roessler Road Pgh., PA 15220</u>				
Farm <u>Margaret Crews</u> Acres <u>25.5</u>	Size			
Location (waters) <u>Mudlick</u>	20-16			
Well No. <u>#1 K-J-27</u> Elev. <u>1072</u>	Cond.			
District <u>Clay</u> County <u>Harrison</u>	<u>13-10" 11 3/4</u>	147	147	90 sks
The surface of tract is owned in fee by _____	<u>9 5/8</u>			
<u>Kenneth Strait, Rt. 2, Shinnston, WV 26431</u>	<u>8 5/8</u>	1091	1091	200 sks
Address _____	<u>7</u>			
Mineral rights are owned by <u>Kenneth Strait</u> address above	<u>5 1/2</u>			
M. Crews Address <u>1343 Sheperd St., South Boston, VA 24592</u>	<u>4 1/2</u>	2682	2682	200 sks
Drilling Commenced <u>10-15-81</u>	<u>3</u>			
Drilling Completed <u>10-21-81</u>	<u>2</u>			
Initial open flow _____ cu. ft. _____ bbls.	Liners Used			
Final production <u>59 M</u> cu. ft. per day <u>3</u> bbls.				
Well open <u>72</u> hrs. before test <u>360#</u> RP.				

Well treatment details:

Attach copy of cementing record.

STIMULATION RECORD

DATE	INTERVAL PERFORATED: FROM TO	AMT FLUID	AMT SAND
<u>11-3-81</u>	<u>2570 2583</u>	<u>555 bbls</u>	<u>60,000#</u>

Coal was encountered at _____ Feet _____ Inches
Fresh water 70 Feet _____ Salt Water _____ Feet _____
Producing Sand Fifth Sand Depth 2568

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Substructure			0	10		
Sandy Shale			10	50		
Sand			50	103	F.W. 70	
Sandy Shale			111	190		
Shale			190	225		
Sand			225	280		
Shale			280	370		
Sand			370	390		
Sandy Shale			390	440		
Red Rock & Shale			440	460		
Sandy Shale			460	505		
Sand			505	560		
Sandy Shale			560	630		
Sand			630	665		
Sandy Shale			665	797		
Sand			797	850		
Sandy Shale			850	1128		
Sand			1128	1210		
Red Rock & Shale			1210	1303		
Sand & Shale			1303	1490		
Lime			1490	1580		
Sand			1580	1686		
Shale			1686	1725		

RECEIVED

JAN 12 1982

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

(over)

* Indicates Electric Log tops in the remarks section.

JAN 27 1982

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Sand & Shale			1725	1855		
Shale			1855	2045		
Sand & Shale			2045	2570		
<u>Sand</u>			2570	2600	Gas @ 2570'	
Shale			2600	2754		
Driller's T.D.				2754		
5th Sand			2568	2598		
4th Sand			2470	2505		
Gordon			2250	2275		
30' Sand			2202	2238		
50' Sand			2115	2175		
Gantz			2070	2096		
Big Injun			1565	2670		
Big Lime			1495	2565		
Logger's T.D.						

Date January 5, 19 81

APPROVED Donald R. Laughlin, Owner

By Donald R. Laughlin, Vice President-
Operations



FORM IV-2
(Obverse)
(08-78)

M. Crews #1
lse. 1245

Date: June 16, 1981, 19

Operator's Crews # 1
Well No.

API Well No. 47 - 033 - 2638
State County Permit

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

OIL AND GAS WELL PERMIT

WELL TYPE: Oil XX / Gas _____ /
(If "Gas", Production XX / Underground storage _____ / Deep _____ / Shallow _____ /)

LOCATION: Elevation: 1072 Watershed: Mudlick Run
District: Clay County: Harrison Quadrangle: Shinnston 7 1/2

WELL OPERATOR Doran & Associates, Inc DESIGNATED AGENT Al Sorcan
Address 200 Roessler Road Address Rt. 4, Box 444
Pittsburgh, PA 15220 Buckhannon, WV 26201

OIL & GAS ROYALTY OWNER M. Crews et vir. / Kenneth Strait COAL OPERATOR _____
Address 1343 Shepherd St. Address _____
South Boston, VA
24592

ACREAGE 25.5 COAL OWNER(S) WITH DECLARATION ON RECORD:
SURFACE OWNER Kenneth Strait Name Clay Development Co.
Address Rt. 2, Address Shinnston, W. Va. 26431
Shinnston, W. Va. 26431

ACREAGE 25.5 Name _____

FIELD SALE (IF MADE) TO: Address _____
Address N/A

OIL & GAS INSPECTOR TO BE NOTIFIED Name Stephen Casey
Address Rt. 2, Box 232-D
Jane Lew, WV 26378

COAL LESSEE WITH DECLARATION ON RECORD:
Name N/A Address _____
JUN 22 1981

OIL & GAS DIVISION
DEPT. OF MINES

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed _____ / lease XX
other contract _____ / dated December 9, 19 80, to the undersigned well operator from Margaret J. Crews
et vir.

(If said deed, lease, or other contract has been recorded:)
Recorded on February 4, 19 81, in the office of the Clerk of the County Commission of Harrison County, West
Virginia in _____ Book 1099 at page 971. A permit is requested as follows:

PROPOSED WORK: Drill _____ / Drill deeper _____ / Redrill _____ / Fracture or stimulate _____ /
Plug off old formation _____ / Perforate new formation _____ /
Other physical change in well (specify) _____

—planned as shown on the work order on the reverse side hereof.
The above named coal operator, coal owner(s), and coal lessee are hereby notified that any objection they wish to make or are required to
make by Code §22-4-3 must be filed with the Department of Mines within fifteen (15) days after the receipt of this Application by the
Department.

Copies of this Permit Application and the enclosed plat and reclamation plan have been mailed by registered mail or delivered by hand to
the above named coal operator, coal owner(s), and coal lessee on or before the day of the mailing or delivery of this Permit Application to
the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL
GEOPHYSICAL LOGS DIRECTLY
TO:
WEST VIRGINIA OIL AND GAS
CONSERVATION COMMIS-
SION
1615 WASHINGTON STREET EAST
CHARLESTON, WV 25311
TELEPHONE: (304) 348-3092

Donald R. Laughlin
Well Operator

By _____
Its _____

BLANKET BOND

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) S. W. Jack Drilling Co.
Address P. O. Box 697
Indiana, PA 15701

GEOLOGICAL TARGET FORMATION, 5th Sand

Estimated depth of completed well, 2900 feet Rotary / Cable tools /

Approximate water strata depths: Fresh, 50 feet; salt, feet.

Approximate coal seam depths: 60, 580, 650 Is coal being mined in the area? Yes / No /

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	Left in well		
Conductor	11 3/4			X			30		Kinds
Fresh Water									
Coal									Sizes
Intermediate	8 5/8			X			1100	To Surface	
Production	4 1/2		9 1/2	X			2900	300 SKS	Depths set
Tubing									
Liners									Perforations:
									Top Bottom

NOTE: Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code § 22-4-2, (iii) Form IV-9, "Reclamation Plan", applicable to the reclamation required by Code § 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code § 22-4-12a, and (v) if applicable, the consent required by Code § 22-4-8a from the owner of any water well or dwelling within 200 feet of the proposed well.

A separate Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.

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 3-1-82.

J. W. Burdette
Deputy Director - Oil & Gas Division

The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code 22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof.

WAIVER

The undersigned coal operator / owner / lessee / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: , 19

By

Its