

0.085
4.71W

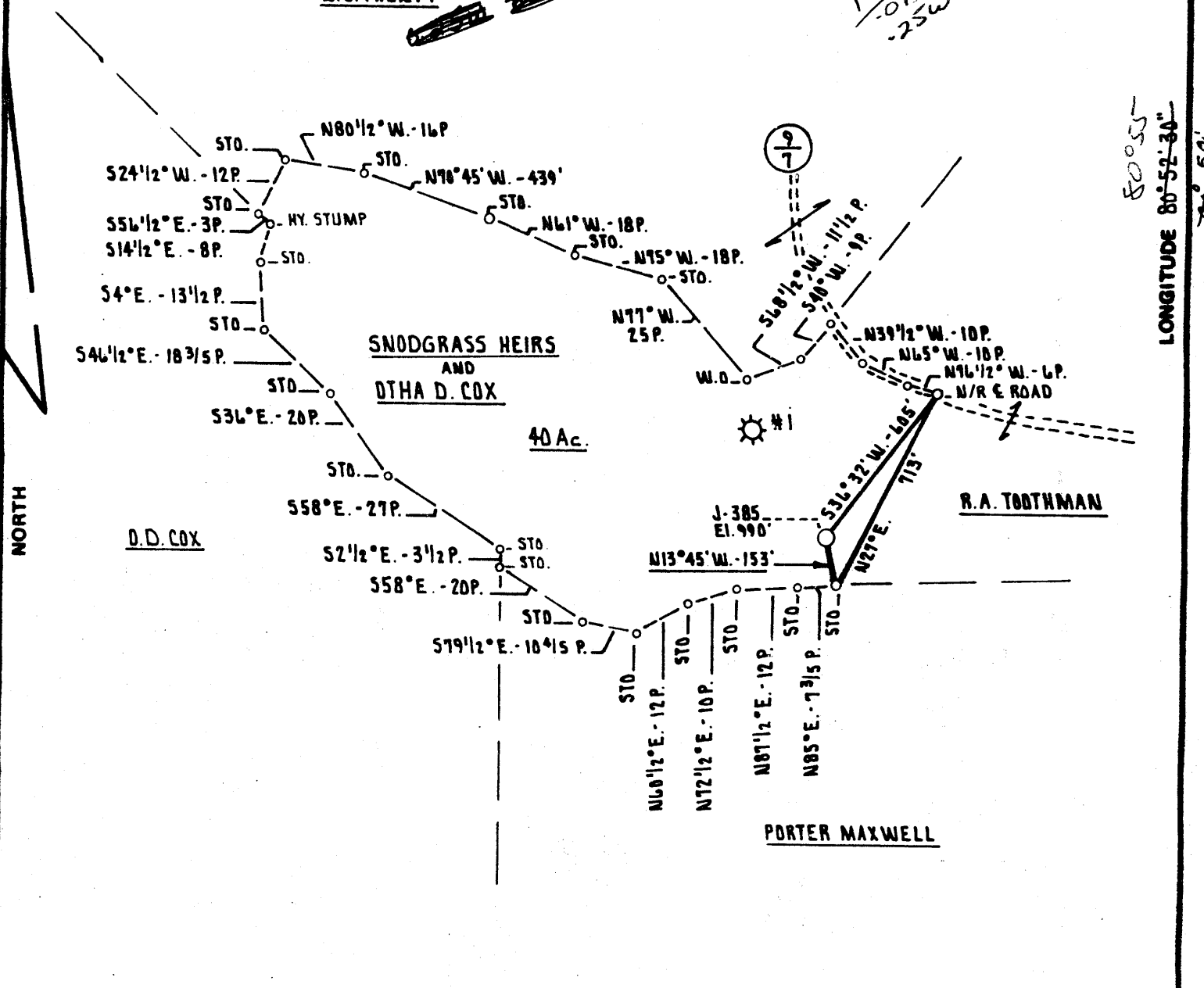
LATITUDE 39° 10' 00"

0.085
2.48W

W. J. PRUNTY

15' col
-075
-25W

075
25W



NORTH

80° 55'
80° 52' 30"

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200
 PROVEN SOURCE OF ELEVATION SNODGRASS - COX #1
 ELEVATION 879'

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) Samuel L. Wooder
 R.P.E. _____ L.L.S. 530

PLACE SEAL HERE

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



DATE OCTOBER 29th, 19 80
 OPERATOR'S WELL NO. J-385
 API WELL NO. _____
47 - 085 - 4999
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 990' WATER SHED TURTLE RUN
 DISTRICT UNION COUNTY RITCHIE
 QUADRANGLE PULLMAN 7.5' Holbrook
 SURFACE OWNER DTHA D. COX ACREAGE 40 Ac.
 OIL & GAS ROYALTY OWNER COX and SNODGRASS LEASE ACREAGE 40 Ac.
 LEASE NO. M.S. 64
 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 ALEXANDER ESTIMATED DEPTH 5400'
 WELL OPERATOR J. and J. ENTERPRISES, INC DESIGNATED AGENT HARRY BARNETT
 ADDRESS P.O. BOX 48 ADDRESS P.O. BOX 48
BUCKHANNON, WEST VIRGINIA 26201 BUCKHANNON, WEST VIRGINIA 26201

DEC 19 1980

1-6 REASON RUN 179

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

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 X)
 LOCATION: Elevation: 990 Watershed: Turtle Run
 District: Union County: Ritchie Quadrangle: Pullman 7.5'
 WELL OPERATOR: J & J Enterprises, Inc. DESIGNATED AGENT: H.L. Barnett
 Address: P.O. Box 48 Address: P.O. Box 48
 Buckhannon, WV 26201 Buckhannon, WV 26201

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

PERMIT ISSUED ON 11/12, 1981, OIL & GAS INSPECTOR FOR THIS WORK:
 (IF APPLICABLE: PLUGGING OF DRY HOLE OR CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING: VERBAL PERMISSION OBTAINED) Name: K. Paul Goodnight
 Address: Smithville, WV 26178

GEOLOGICAL TARGET FORMATION: Alexander Depth 5037-87 feet
 Depth of completed well, 5374 feet Rotary X / Cable Tools ___
 Water strata depth: Fresh, 945 feet; salt, 0 feet.
 Coal seam depths: 1030-37 Is coal being mined in the area? No
 Work was commenced 1/21, 1981, and completed 1/27, 1981

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	11 3/4	H-40	42	x		0	0	0 sks. Bands
Fresh water	8 5/8	ERW	23	x		1199.50	1199.50	300 sks.
Coal	8 5/8	ERW	23	x		1199.50	1199.50	300 sks. Sizes
Intermediate								
Production	4 1/2	J-55	10.5	x		5175	5175	730 sks. Depths set
Tubing								
Liners								Perforations:
								Top Bottom
								3288 3308
								4207 4419
								5037 5087

OPEN FLOW DATA

Producing formation: Alexander Pay zone depth: 5037-87 feet
 Gas: Initial open flow, ___ Mcf/d Oil: Initial open flow, ___ Bbl/d
 Combined Final open flow, 1,100 Mcf/d Final open flow, ___ Bbl/d
 Time of open flow between initial and final tests, 6 hours
 Static rock pressure, 1600 psig (surface measurement, after 72 hours shut in)
 (If applicable due to multiple completion--)
 Second producing formation: Riley & Warren Pay zone depth: ___ feet
 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

Bottom Hole Pressure Static rock pressure, ___ psig (surface measurement, after ___ hours shut in)
 $P_w = P_{we} XGLS$
 $P_w = 1600 e = 2.72 + 60 + (0.0075 \times 5175) + 459.7 = 559 X = 53.34 \times 559 = 29817 = 0.0000335 G = 0.650 L = 4188$
 $e = 0.9 Pf = 1600 \times 2.72 \times 0.0000335 \times 0.650 \times 4188 \times 0.9 = 1600 \times 2.72 \times 0.082 = 1600 \times 1.085$
 $e = 1736 \text{ psia}$

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

Alexander: Perforations: 5037-87 (14 holes)
Fracturing: 25,000 lbs. 80/100 sand: 50,000 lbs. 20/40 sand: 600 Bbls. fluid.

Riley: Perforations: 4207-4419 (13 holes)
Fracturing: 20,000 lbs. 80/100 sand: 30,000 lbs. 20/40 sand: 1,000 gal. Acid.
500 Bbls. fluid

Warren: Perforations: 3288-3308 (12 holes)
Fracturing: 20,000 lbs. 80/100 sand: 30,000 lbs. 20/40 sand: 500 gal. Acid:
500 Bbls. fluid.

RECEIVED

SEP - 1 1981

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Clay			0	5	
Shale, red rock & sand			5	50	
Shale & sand			50	104	Damp @ 162
White sand			104	162	Very damp @ 945'
Sand, shale & red rock			162	199	
Shale, red rock & sand			199	947	Gas ck @-8/10-1/2" w/water
Shale, red rock & sand			947	1030	2017 5,324 cu.ft.
Coal & shale			1030	1037	
Sand & shale			1037	1721	Gas ck @-6/10-1/2" w/water
Sand & shale			1721	1795	2522 4,611 cu.ft.
Big Lime			1795	1801	
Sand & shale			1801	3288	Gas ck @-4/10-1/2" w/water
Warren			3288	3308	4221 3,765 cu.ft.
Sand & shale			3308	4207	
Riley			4207	4419	
Sand, shale & Lt. Brown sand			4419	4750	Gas ck @ 4926-8/10-1/2" w/water
Sand & shale			4750	4780	5,324 cu.ft.
Brown sand & shale			4780	5030	
Alexander			5030	5087	Gas ck @ 5343 6/10-1/2" w/water
Brown sand & shale			5087	5374	4,611 cu.ft.
				TD	

(Attach separate sheets as complete as necessary.)

J & J Enterprises, Inc.
Well Operator

By Peter Battles
cc Peter Battles Geologist

NOTE: Regulation 2.02(d) 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."

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. J-385

API Well No. 47 - 0854999
State County Per:

WELL TYPE: Oil / Gas
(If "Gas", Production / Underground storage / Deep / Shallow /
LOCATION: Elevation: 990 Watershed: Turtle Run
District: Union County: Ritchie Quadrangle: Pullman 7.5'

WELL OPERATOR J & J Enterprises, Inc.
Address P.O. Box 48
Buckhannon, WV 26201

DESIGNATED AGENT H.L. Barnett
Address P.O. Box 48
Buckhannon, WV 26201

OIL & GAS ROYALTY OWNER O.D. Cox/Snodgrass
Address Pullman, WV 26421

COAL OPERATOR None
Address:

SURFACE OWNER Otha D. Cox
Address Pullman, WV 26421
Acreage 40

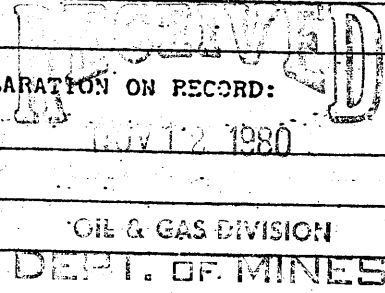
COAL OWNER(S) WITH DECLARATION ON RECORD:
Name O.D. Cox
Address Pullman, WV 26421

FIELD SALE (IF MADE) TO:
Name Unknown
Address:

Name:
Address:

OIL & GAS INSPECTOR TO BE NOTIFIED
Name K. Paul Goodnight
Address Smithville, WV 26178

COAL LESSEE WITH DECLARATION ON RECORD:
Name None
Address:
NOV 12 1980



The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed / lease / other contract dated 9/2, 1979, to the undersigned well operator from W.H. Mosser

[If said deed, lease, or other contract has been recorded:]
Recorded on 9/4, 1980, in the office of the Clerk of the County Commission of Ritchie County, West Virginia, in oil & gas Lease Book 130 at page 385. 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 COMMISSION
1615 WASHINGTON STREET EAST
CHARLESTON, WV 25311
TELEPHONE: (304) 348-3092

BLANKET BOND

J & J Enterprises, Inc.
Well Operator
By Peter Battles
Peter Battles Geologist

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 Company
Address Box 48
Buckhannon, WV 26201

GEOLOGICAL TARGET FORMATION, Alexander

Estimated depth of completed well, 5400 feet Rotary Cable tools
Approximate water strata depths: Fresh, 80 feet; salt, 1200 feet.
Approximate coal seam depths: 180 Is coal being mined in the area: Yes No

CASING AND TUBING PROGRAM

Table with columns: CASING OR TUBING TYPE, SPECIFICATIONS (Size, Grade, Weight, New, Used), FOOTAGE INTERVALS (For drilling, Left in well), CEMENT FILL-UP OR SACKS (Cubic feet), PACKERS (Kinds, Sizes, Depths set, 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 included as such on the Form IV-2 filed in connection therewith. THIS PERMIT MUST BE HOSTED 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 7-17-81

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:

W A I V E R

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