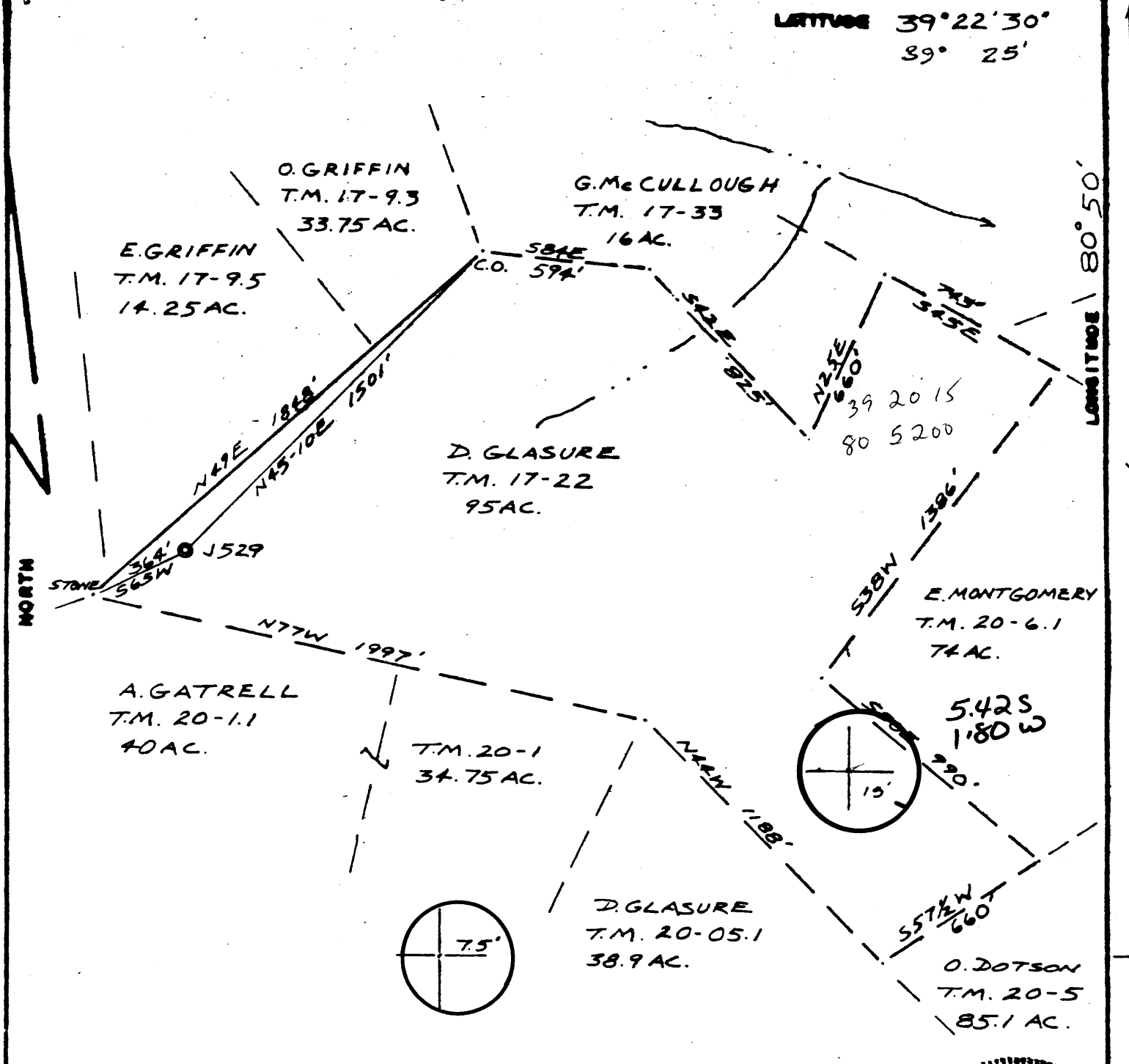
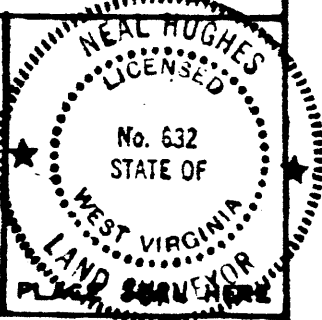


LATITUDE 39° 22' 30"
39° 25'



FILE NO. J+J
DRAWING NO. 1
SCALE 1" = 500'
MINIMUM DEGREE OF ACCURACY 1/200
PROVEN SOURCE OF ELEVATION RDB32

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) Neal Hughes
R.P.E. _____ L.L.S. 632



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



DATE JUNE 22, 1981
OPERATOR'S WELL NO J529
API WELL NO. 47-095-0935
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 1180' WATER SHED ARNOLDS CREEK
DISTRICT CENTERVILLE COUNTY TYLER
QUADRANGLE WEST UNION 75' 415' C
SURFACE OWNER DAVID GLASURE ACREAGE 95
OIL & GAS ROYALTY OWNER N.M. WELCH LEASE NO. J+J 1130 LEASE ACREAGE 75
PROPOSED WORK: DRILL CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE PLUS OFF OLD FORMATION _____ PERFORATE NEW FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
PLUS AND ABANDON _____ CLEAN OUT AND REPLUS _____ 6-6 Wilbur (92)
TARGET FORMATION BENSON ESTIMATED DEPTH 5200
WELL OPERATOR J+J ENTERPRISES INC. DESIGNATED AGENT ROGER BOLSTON
ADDRESS P.O. Box 48 BUCKHANNON, WV 26201 ADDRESS P.O. Box 48 BUCKHANNON, WV 26201

AUG 31 1981

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

WELL OPERATOR'S REPORT
OF
DRILLING, FRACURING 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: 1180 Watershed: Arnolds Creek
District: Centerville County: Tyler Quadrangle: West Union

WELL OPERATOR J & J Enterprises, Inc. DESIGNATED AGENT James R. Willett
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 8/3, 1981

OIL & GAS INSPECTOR FOR THIS WORK:

(IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED

Name Phillip Lee Tracy

Address Rt. 23
Alma, WV 26320

GEOLOGICAL TARGET FORMATION: Benson Depth 5101-5103 feet

Depth of completed well, 5600 feet Rotary X / Cable Tools ___

Water strata depth: Fresh, 1100 feet; salt, ___ feet.

Coal seam depths: None Is coal being mined in the area? NO

Work was commenced 10/9, 1981, and completed 10/15, 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			Left in well
Conductor	11 ³ / ₄	H-40	42	X		29	0	0 sks.	Kinds
Fresh water	8 ⁵ / ₈	ERW	23	X		1221.15	1221.15	305 sks.	
Coal	8 ⁵ / ₈	ERW	23	X		1221.15	1221.15	305 sks.	Sizes
Intermediate									
Production	4 ¹ / ₂	J-55	10.5	X		5176.25	5176.25	175 sks.	Depths set
Tubing									
Liners									Perforations:
									Top Bottom
									5101 5103
									4697 4727

RECEIVED
NOV 12 1981
OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

OPEN FLOW DATA

Producing formation Benson Pay zone depth 5101-03 feet

Gas: Initial open flow, ___ Mcf/d Oil: Initial open flow, ___ Bbl/d

Combined Final open flow, 959 Mcf/d Final open flow, ___ Bbl/d

Time of open flow between initial and final tests, 4 hours

Static rock pressure, 1700 psig (surface measurement) after 96 hours shut in

[If applicable due to multiple completions--]

Second producing formation Riley Pay zone depth 4697-4727 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

Pf=PweXGLS

$w=1700 \ G=0.676 \ L=5399 \ S=0.9 \ t=60 \ (0.0075 \times 5176) + 459.7 = 558.5 \ X=29791 = 0.0000336$

$Pf=1700 \times 2.72 \ 0.0000336 \ 0.676 \ 5399 \ 0.9 = 1700 \times 2.72 \ 0.110 = 1700 \times 1.116$

Pf= 1898

DEC 4 1981

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

Benson: Perforations: 5101-03

Fracturing: 100 sks. 80/100 sand: 400 sks. 20/40 sand: 600 Bbls. fluid.

Riley: Perforations: 4697-4727

Fracturing: 100 sks. 80/100 sand: 400 sks. 20/40 sand: 500 gals. Acid. 600 Bbls. fluid.

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all Green and salt water, coal, oil and gas
Top Soil			0	6	
Brown sand			6	12	Hole damp @ 500'
Red shale			12	26	
Sand, shale & red rock			26	65	Water @ 1100'
Sand & shale			65	110	
Sand, shale & red rock			110	290	Damp @ 1866'
Sand, shale & red rock			290	325	
Red rock, sand & shale			325	380	Gas ck @ 2271 20/10-1/2" w/water
Red rock, sand & shale			380	390	8,419 cu.ft.
Red rock and gray sand			390	420	
Red rock, gray sand & shale			420	530	Gas ck @ 3171 116/10-1" w/water
Red rock, sand & shale			530	600	417.03 cu.ft.
Sand & red rock			600	720	
Sand, shale & red rock			720	912	Gas ck @ 4472 70/10-1" w/water
					62,950 cu.ft.
Sand & shale			912	1866	
Gray shale & sand			1866	1995	Gas ck @ 5371 14/10-2" w/water
Little lime			1995	2010	28,277 cu.ft.
Blue Monday			2010	2015	
Red rock and Sand			2015	2030	Gas ck @ 5537 22/10-2" w/water
Big Lime			2030	2105	35,313 cu.ft.
Injun			2105	2200	
Sand & shale			2200	3326	Gas ck @ 5600 14/10-2" w/water
Gray sand			3326	4697	28,277 cu.ft.
Riley			4697	4727	
Sand & shale			4727	5085	
Sand & shale			5085	5101	
Benson			5101	5103	
Sand & shale			5103	5475	
Alexander			5475	5515	
Sand & shale			5515	5600	
				T.D.	

(Attach separate sheets as complete as necessary)

J & J Enterprises, Inc.
Well Operator

By Peter Battles
Peter Battles Geologist

NOTE: Regulation 2.02(c) 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-529
API Well No. 47-095 0935
State County Pe

WELL TYPE: Oil / Gas /
(If "Gas", Production / Underground storage / Deep / Shallow)
LOCATION: Elevation: 1180 Watershed: Arnolds Creek
District: Centerville County: Tyler Quadrangle: Wesr Union 7.5'

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

DESIGNATED AGENT Roger Rolston
Address P.O. Box 48
Buckhannon, WV 26201

OIL & GAS ROYALTY OWNER N.M. Welch
Address 20 Meadowcrest
Parkersburg, WV 26101

COAL OPERATOR None
Address

SURFACE OWNER David Glasure
Address R.F.D. # 1
Mingo Junction, Ohio 43938
Acreage 95

COAL OWNER(S) WITH DECLARATION ON RECORD:
Name David Glasure
Address R.F.D. # 1
Mingo Junction, Ohio 43938

FIELD SALE (IF MADE) TO:
Name Unknown
Address

COAL LESSEE WITH DECLARATION ON RECORD:
Name None
Address

OIL & GAS INSPECTOR TO BE NOTIFIED
Name Phillip Lee Tracy
Address Rt. # 23
Alma, WV 26320

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 / other contract / dated 6/10, 1981, to the undersigned well operator from Petroleum Services.

[If said deed, lease, or other contract has been recorded:]
Recorded on 6/17, 1981, in the office of the Clerk of the County Commission of Tyler County, West Virginia, in Deed Book 231 at page 301. 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 5 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) 548-3097

BLANKET BOND

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

[08-78]

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 P.O. Box 48
Buckhannon, WV 26201

GEOLOGICAL TARGET FORMATION, Benson

Estimated depth of completed well, 5200 feet Rotary X / Cable tools /

Approximate water strata depths: Fresh, 350 feet; salt, None feet.

Approximate coal seam depths: None 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	H-40	42	x		30	0	0 sks.	Kinds
Fresh water	8 ⁵ / ₈	ERW	23	x		1900	1900	450 sks.	} <i>CTS</i> Sizes
Coal	8 ⁵ / ₈	ERW	23	x		1900	1900	450 sks.	
Intermediate									
Production	4 ¹ / ₂	J-55	10.5	x		5150	5150	<i>515</i> 350 sks. or	Deaths set
Tubing								<i>as reqd. by</i>	
Liners								<i>rule 15.010</i>	Perforations:
									Top Bot

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 drilling 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 stimulation 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 4-18-82.

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

Permit shall 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 this 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