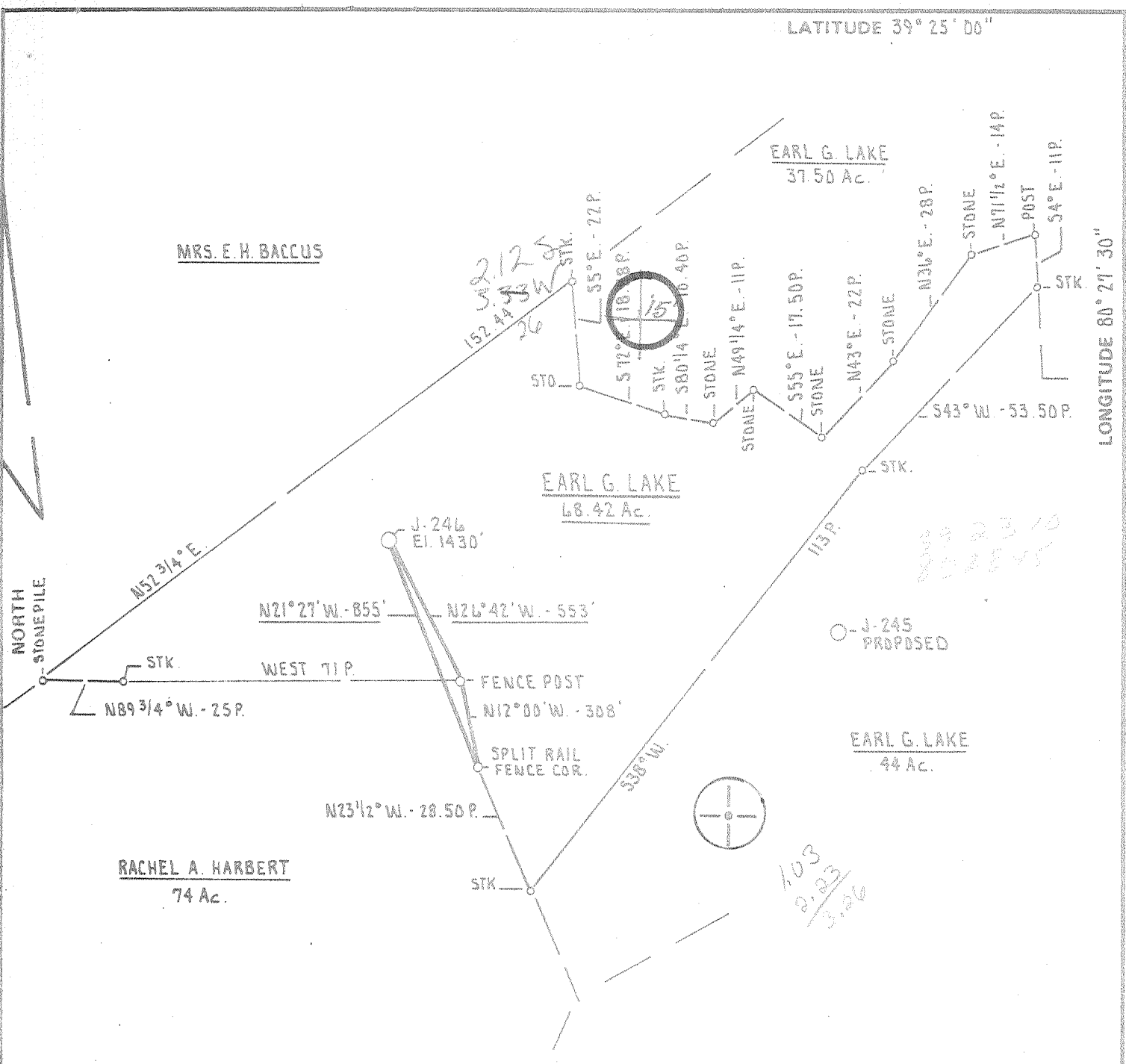


LATITUDE 39° 25' 00"



LONGITUDE 80° 21' 30"
(15') 80° 25'

FILE NO. _____
DRAWING NO. _____
SCALE 1" = 500'
MINIMUM DEGREE OF ACCURACY 1 PART IN 200
PROVEN SOURCE OF ELEVATION INT. RT. 20/27 AND FARM ROAD ELEVATION 1075'

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. Wheeler*
R.P.E. _____ L.L.S. 530

PLACE SEAL HERE

(-) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
FORM IV-6 (878)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

DATE AUGUST 28th 19 80
OPERATOR'S WELL NO. J-246
API WELL NO. 47 - 033 - 2465
STATE 47 COUNTY 033 PERMIT 2465

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS.") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
LOCATION ELEVATION 1430' WATER SHED JAKE RUN TO LITTLE TENMILE CREEK
DISTRICT SARDIS COUNTY HARRISON
QUADRANGLE WALLACE 7.5' CLARKSBURG 15' W
SURFACE OWNER EARL G. LAKE ACREAGE 68.42 Ac.
OIL & GAS ROYALTY OWNER EARL G. LAKE LEASE ACREAGE 68.42 Ac.
LEASE NO. M-358
PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG 6-6 Brown-Lumberport (104)
TARGET FORMATION ALEXANDER ESTIMATED DEPTH 5400' 5725'
WELL OPERATOR J. AND J. ENTERPRISES, INC. DESIGNATED AGENT HARRY BARNETT
ADDRESS P.O. BOX 48 BUCKHANNON WEST VIRGINIA 26201 ADDRESS P.O. BOX 48 BUCKHANNON WEST VIRGINIA 26201

SEP 25 1980

[08-78,

WELL OPERATOR'S REPORT OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

L TYPE: Oil / Gas X / Liquid Injection / Waste Disposal
(If "Gas", Production X / Underground storage / Deep / Shallow X /)
Elevation: 1430 Watershed: Jake Run to Little Tenmile Creek
District: Sardis County: Harrison Quadrangle: Wallace 7.5'

OPERATOR: J & J Enterprises, Inc. DESIGNATED AGENT: H.L. Barnett
Address: P.O. Box 48, Buckhannon, WV 26201
Address: P.O. Box 48, 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 9-4, 19 80

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

OIL & GAS INSPECTOR FOR THIS WORK: RECEIVED
Name: Address: NOV 24 1980

LOGICAL TARGET FORMATION: Alexander
Depth of completed well, 5544 feet Rotary X / Cable Tool
Water strata depth: Fresh, 1845 feet; salt, None feet.
Coal seam depths: 396-400, 680-83, 535-39. Is coal being mined in the area? No
Work was commenced 9-25, 19 80, and completed 10/1, 19 80

LOGGING AND TUBING PROGRAM

LOGGING 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		
Drill pipe	1 3/4	H-40	42	X					
Production casing	8 5/8	ERW	23	X		1907.10	1907.10	500 sks.	Kind
Intermediate casing	8 5/8	ERW	23	X		1907.10	1907.10	500 sks.	Sizes
Completion tubing	4 1/2	J-55	10.5	X		5372.45	5372.45	430 sks.	Depth set
									Perforations:
									Top Bottom
									4164 4182
									4702 4706
									5287 5295

FLOW DATA

Producing formation: Benson
Gas: Initial open flow, Mcf/d. Oil: Initial open flow, Bbl/d
Final open flow, 492 Mcf/d. Final open flow, Bbl/d
Time of open flow between initial and final tests, 4 hours
Static rock pressure, 1250 psig (surface measurement) after 96 hours shut in.

Second producing formation: Bradford, Balltown
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

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

Benson: Perforations: 5287-95 (13 holes)
 Fracturing: 200 sks. 80/100 sand: 400 sks. 20/40 sand: 600 Bbls. fluid.

Bradford: Perforations: 4702-06 (13 holes)
 Fracturing: 100 sks. 80/100 sand: 280 sks. 20/40 sand: 500 gal. Acid:
 400 Bbls. fluid.

Balltown: Perforations 4164-82 (12 holes)
 Fracturing: 500 gal. Acid: 200 sks. 80/100 sand: 400 sks. 20/40 sand:
 600 Bbls. fluid.

LL LOG

FORMATION	Color	Hard or Soft	13 Top Feet	Bottom Feet	Remarks Including indication of all free and salt water, coal, oil and
Fill			0	40	
Sand & sandy shale			40	55	
Shale, red rock & sand			5	105	
Sandy shale & sand			105	285	
Sandy shale			285	396	
Coal			396	400	
Sany shale			400	535	
Coal			535	539	
Sandy shale			539	680	Water @ 1845
Coal			680	683	
Sandy shale & sand			683	1410	
Sand, shale & sand			1410	1540	Gasck. @ 3155 No show
Sandy shale & sand			1540	1885	
Sandy shale & sand			1885	2205	Gas ck. @ 3560 No show
Little lime			2205	2230	
Sandy shale			2230	2242	Gas ck @ 5235 2/10 Thru 2" w/ 60,000cu. ft. water
Big Lime			2242	2325	
Sand			2325	2415	Gas ck @ T.D. 6/10 thru 2" w/ 100,000 cu. water ft.
Sandy shale & sand			2415	3845	
Sand & shale			3845	4164	
Balltown			4164	4210	
Sand & sandy shale			4210	4702	
Bradford			4702	4710	
Sandy shale			4710	5287	
Benson			5287	5295	
Sand			5295	5310	
Sandy shale			5310	5544 T.D	

(Attach separate sheets to complete as necessary)

J & J Enterprises, Inc.

Well Operator

By

Peter Battles

Its

Geologist

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."

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. J-246
API Well No. 47-033-2465
State 033 County Per

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

LOCATION: Elevation: 1430 Watershed: Jake Run to Little Tenmile Creek
District: Sardis County: Harrison Quadrangle: Wallace 7.5'

WELL OPERATOR J. & J. Enterprises
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 Earl G. & Fay Lake
Address Rt. 1, Box 365
Wallace, WV 26448

COAL OPERATOR None
Address _____

ACREAGE 68.42
SURFACE OWNER Earl G. & Fay Lake
Address Rt. 1, Box 365
Wallace, WV 26448

COAL OWNER(S) WITH DECLARATION ON RECORD:
Name Willis G. Tetrick
Address Union National Bank Plaza
Clarksburg, WV 26301

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



COAL LESSEE WITH DECLARATION ON RECORD:
Name Pittston Coal Co.
Address _____

OIL & GAS INSPECTOR TO BE NOTIFIED
Name Paul Garrett
Address 321 Beech St.
Clarksburg, WV 26301

Address Wellington Heights
Philippi, WV 26416

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed / lease / other contract / dated December 4, 1979, to the undersigned well operator from Clarence W. Mutschelknaus.

If said deed, lease, or other contract has been recorded:
recorded on April 7, 1980, in the office of the Clerk of the County Commission of Harrison county, West Virginia, in oil & gas lease book 1090 at page 161. 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 plot 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 GEOLOGICAL LOGS DIRECTLY TO:
WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION
615 WASHINGTON STREET EAST
CHARLESTON, WV 25311
TELEPHONE: (304) 345-3097

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 Co.

Address P. O. Box 48
Buckhannon, WV 26201

GEOLOGICAL TARGET FORMATION, Alexander

Estimated depth of completed well, 5725 feet Rotary Cable tools

Approximate water strata depths: Fresh, 275 feet; salt, 1800 feet.

Approximate coal seam depths: 360, 625, 910 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		1600	1600	400 sks	
Coal	8 ⁵ / ₈	ERW	23	X		1600	1600	400 sks	Sizes
Intermediate									
Production Tubing	4 ¹ / ₂	J-55	10.5	X		5700	5700	375 sks	Depths set
Liners									Perforations: Top <input type="checkbox"/> Bottom <input type="checkbox"/>

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 § 22-4-1a from the owner of any water well or drilling within 200 feet of the proposed well.

THIS PERMIT MUST BE POSTED AT THE WELL SITE. 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. All provisions being in accordance with Chapter 12 of the W. Va. Code, the location is hereby approved.

for drilling. This permit shall expire if operations have not commenced by 5-9-81.

Thomas E. Hargy
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: 9-3, 1980

By Earle Delong
Its Chief Engineer