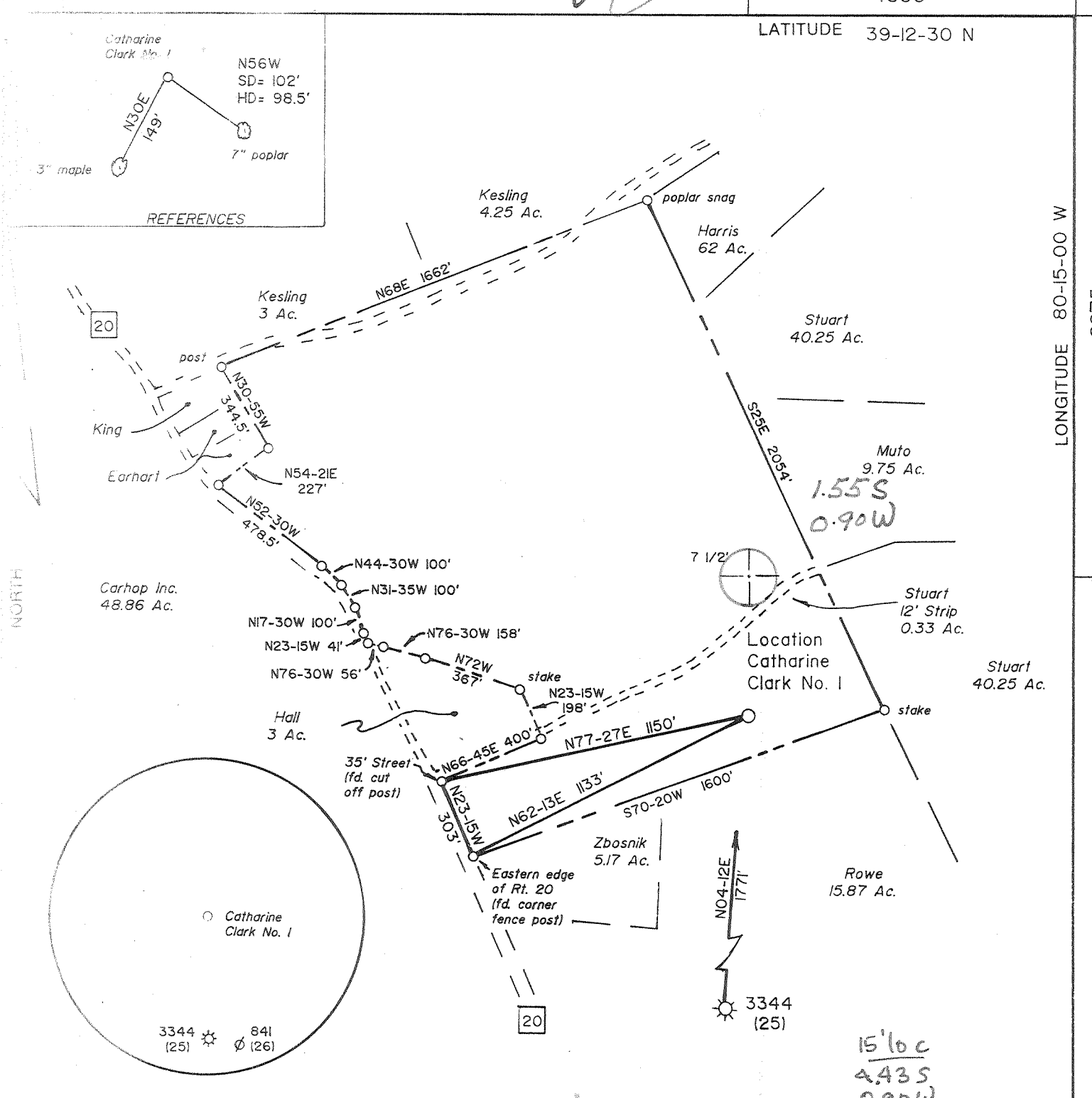
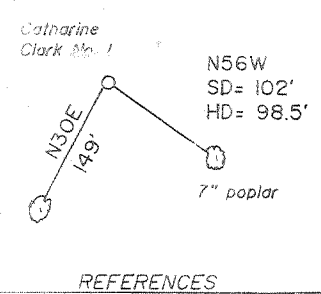


4800
LATITUDE 39-12-30 N



W 00-51-08 E (LONG) N 01

NORTH

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. _____
 DRAWING NO. 1
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 in 200
 PROVEN SOURCE OF ELEVATION Spot elev. 4000' SE of Location: elev. 1021'

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 ENERGY.
 (SIGNED) Jeffrey A. Adams
 R.P.E. _____ L.L.S. 791

PLACE SEAL HERE

STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 OIL AND GAS DIVISION



DATE February 5, 19 90
 OPERATOR'S WELL NO. Catharine Clark
 API WELL NO. No. 1

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 1115 WATERSHED Elk Creek
 DISTRICT Elk 5 COUNTY Harrison
 QUADRANGLE Mount Clare 7 1/2' Weston NE
 SURFACE OWNER Catharine P. Clark et vir ACREAGE 75.06
 OIL & GAS ROYALTY OWNER Catharine P. Clark LEASE ACREAGE 75.06 ac. part of 240 ac.
 LEASE NO. 419600

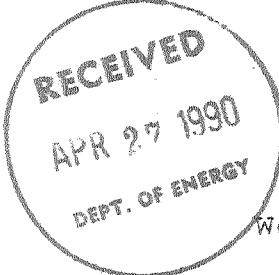
PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION Benson ESTIMATED DEPTH 5000
 WELL OPERATOR Petroleum Development Corp. DESIGNATED AGENT Steven Williams
 ADDRESS P.O. Box 26, Bridgeport, WV 26330 ADDRESS P.O. Box 26, Bridgeport, WV 26330

MAR 05 1990

687
 6-b Weston-Jane Lew (153)

COUNTY NAME PERMIT



State of West Virginia
DEPARTMENT OF ENERGY
Division of Oil and Gas

Well Operator's Report of Well Work

Farm name: CLARK, CATHARINE P. Operator Well No.: C. CLARK #1

LOCATION: Elevation: 1115.00 Quadrangle: MOUNT CLARE

District: ELK County: HARRISON
Latitude: 8275 Feet South of 39 Deg. 12Min. 30 Sec.
Longitude 4800 Feet West of 80 Deg. 15 Min. 0 Sec.

Company: PETROLEUM DEVELOPMENT COR
P. O. BOX 26
BRIDGEPORT, WV 26330-0026

Agent: ERIC R. STEARNS

Inspector: STEVE CASEY
Permit Issued: 02/26/90
Well work Commenced: 03/27/90
Well work Completed: 04/02/90
Verbal Plugging
Permission granted on: _____
Rotary x Cable _____ Rig
Total Depth (feet) 4426'
Fresh water depths (ft) _____
540; 700
Salt water depths (ft) _____

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"	31	31	
8 5/8"	976	976	220 sks
4 1/2"	4371	4371	523 sks

Is coal being mined in area (Y/N)? n
Coal Depths (ft): 380-382; 840-843

OPEN FLOW DATA

Producing formation Benson Pay zone depth (ft) 4278-4281
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 1.517 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 1250 psig (surface pressure) after 72 Hours

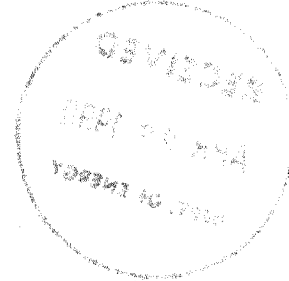
Second producing formation Balltown Pay zone depth (ft) 1397.5-1405.5
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow co-mingled MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface 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: PETROLEUM DEVELOPMENT CORP.

By: Eric R. Stearns
Date: April 19, 1990

MAY 04 1990



Clark #1

STAGE	FORMATION	PERFS	80/100 SKS	20/40 SKS	ACID GAL	N2 (MCF)
1ST	Benson <i>Injun. (RFE)</i>	13 (4278-4281)	100	450	500	63.7
2ND	Balltown	17 (1397.5-1405.5)	100	450	750	70.7

W E L L L O G

FORMATION	TOP FEET	BOTTOM FEET	REMARKS: FRESH & SALT WATER, COAL, OIL & GAS
KB - GL	0	10	
sand, shale, RR	10	1266	1/2" stream H2O @ 540'
Little Lime	1266	1283	1/2" stream H2O @ 700'
sand, shale	1283	1306	
Big Lime	1306	1394	
Big Injun	1394	1485	Coal 380-382, 840-843
sand, shale	1485	1712	
Gantz	1712	1730	
sand, shale	1730	1745	
50 ft	1745	1802	gas chk @ 1778' 16/10-2" H2O
sand, shale	1802	1817	
30 ft	1817	1845	
sand, shale	1845	1910	
Gordon	1910	1948	
sand, shale	1948	2049	
3rd	2049	2070	
sand, shale	2070	2125	gas chk @ 2115' 16/10-2" H2O
4th	2125	2147	
sand, shale	2147	2260	
5th	2260	2294	
sand, shale	2294	2648	gas chk @ 2330' 24/10-2" H2O
Speechley	2648	3036	
sand, shale	3036	3088	gas chk @ 3069' 22/10-2" H2O
Balltown	3088	3442	
sand, shale	3442	3492	
Bradford	3492	3635	gas chk @ 3566' 22/10-2" H2O
sand, shale	3635	3990	gas chk @ 3752' 24/10-2" H2O
Riley	3990	4106	gas chk @ 4061' 24/10-2" H2O
sand, shale	4106	4272	
Benson	4272	4324	gas chk @ 4277' 24/10-2" H2O
sand, shale	4324	4397	
	4397	4397	Driller TD 24/10-2" H2O
		4426	gas chk @ DC 24/10-2" H2O
			Logger TD

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
WELL WORK PERMIT APPLICATION

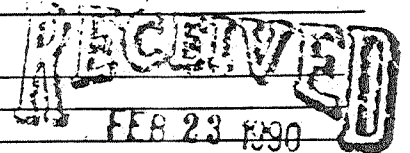
Page 1 of 1
Issued 2/26/90
Expires 2/26/92

- 1) Well Operator: Petroleum Development Corporation *38200 (5) 1157*
- 2) Operator's Well Number: Catherine Clark #1 3) Elevation: 1115'
- 4) Well type: (a) Oil / or Gas XX /
(b) If Gas: Production XX / Underground Storage /
Deep / Shallow XX
- 5) Proposed Target Formation(s): Benson
- 6) Proposed Total Depth: 5000 feet
- 7) Approximate fresh water strata depths: 32, 132, 307
- 8) Approximate salt water depths: N/A
- 9) Approximate coal seam depths: 397
- 10) Does land contain coal seams tributary to active mine? Yes / No XX
- 11) Proposed Well Work: *Drill & Stimulate New Well*
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	11 3/4	H-40	42	-----	-----	-----
Fresh Water						
Coal						
Intermediate	8 5/8	H-40	20#	950	950	<i>345 SKT. 3</i> <i>345 SKT. 2.5</i>
Production	4 1/2	J-55	10.5#	5000	5000	450 sks
Tubing						<i>345 SKT. 1</i>
Liners						

PACKERS : Kind
Sizes
Depths set



For Division of Oil and Gas Use Only

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

0254791

Fee(s) paid: Well Work Permit Reclamation Fund WPCP

Plat WW-9 WW-2B Bond *Blanket* Agent

(Type)

RECEIVED
FEB 23 1990

DIVISION OF OIL AND GAS
DEPARTMENT OF ENERGY

1)
2)
3)

Date: February 13, 1990
Operator's well number
Catharine P. Clark #1
API Well No: 47 - 033 - 3696
State - County - Permit

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

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:
(a) Name Catharine P. Clark
Address Rt. #1, Box 443
Mt. Clare, WV 26408
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Stephen Casey #2
Address Rt. 2, Box 232 D
Jane Lew, WV 26378
Telephone (304)-745-4888

5) (a) Coal Operator:
Name _____
Address _____
(b) Coal Owner(s) with Declaration
Name Same as Surface
Address _____
(c) Coal Lessee with Declaration
Name _____
Address _____

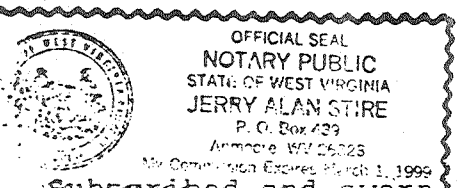
TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

_____ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR
XX Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22B 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)
XX Certified Mail (Postmarked postal receipt attached)
_____ Publication (Notice of Publication attached)

I have read and understand Chapter 22B 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 Petroleum Development Corporation
By: _____
Its: _____ Geologist
Address P.O. Box 26
Bridgeport, WV 26330
Telephone 304-842-6256



Subscribed and sworn before me this 22nd day of February, 1990
Jerry A. Stire Notary Public
My commission expires March 1, 1999