

James 6/23/89

0200
3/19

Topo
Loc.

LATITUDE 39°10'00"

0205
0.940

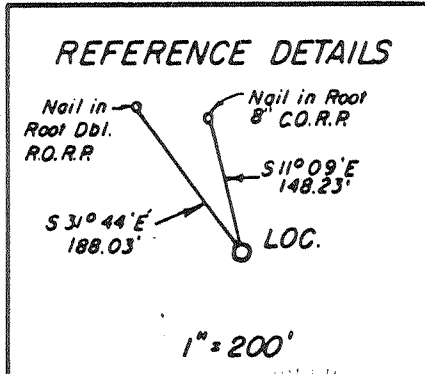
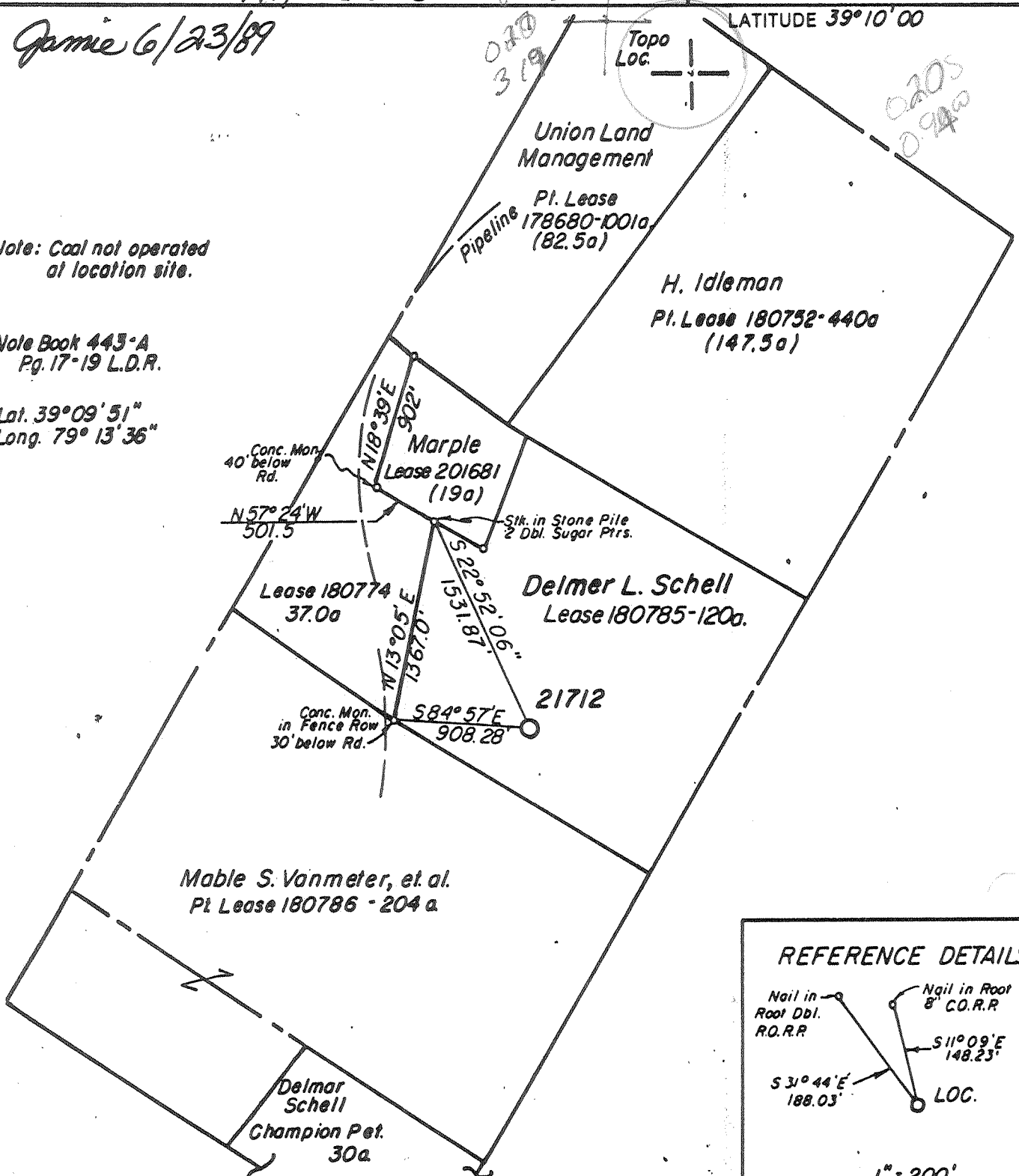
Note: Coal not operated at location site.

Note Book 443-A Pg. 17-19 L.D.R.

Lat. 39°09'51"
Long. 79°13'36"

NORTH

LONGITUDE 79°12'30"



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

FILE NO. _____
 DRAWING NO. 21712 - P.I.
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1 Part in 2500'
 PROVEN SOURCE OF ELEVATION U.S. Gov't U.E.
EL. 2978 - JCT. RT. 42

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) James S. Branning
 R.P.E. _____ L.L.S. 398



STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 OIL AND GAS DIVISION



DATE MARCH 21 1989
 OPERATOR'S WELL NO. 21712 P.I.
 API WELL NO. _____

47 - 023 - 00022
 STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP X SHALLOW ___

LOCATION: ELEVATION 2683' WATER SHED LUNICE CREEK

DISTRICT UNION 3 COUNTY GRANT

QUADRANGLE GREENLAND GAP 383 0524 +15' WC

SURFACE OWNER DELMER L. SCHELL ACREAGE 120

OIL & GAS ROYALTY OWNER DELMER L. SCHELL LEASE ACREAGE 120 (640 AC. UNIT)

LEASE NO. 180785

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 ORISKANY ESTIMATED DEPTH 9150'

JUN 30 1989

WELL OPERATOR COLUMBIA NATURAL RES. INC. DESIGNATED AGENT J.E. CAMPBELL

ADDRESS P.O. BOX 1273 ADDRESS SAME

CHARLESTON, WV 25325 DEEP WELL 6-6 Jordan Run (370)

COUNTY NAME PERMIT

21712

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Division of Energy

JUN 22 90

Permitting
Oil and Gas Section

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

Well Operator's Report of Well Work

Farm name: SCHELL, DELMER & EILEEN Operator Well No.: 21712-PI

LOCATION: Elevation: 2683.00 Quadrangle: GREENLAND GAP

District: UNION County: GRANT
Latitude: 900 Feet South of 39 Deg. 10Min. 0 Sec.
Longitude 5200 Feet West of 79 Deg. 12 Min. 30 Sec.

Company: COLUMBIA NATURAL RESOURCES, INC.

P. O. BOX 1273 6070
CHARLESTON, WV 25305-0000
25362

Agent: JOSEPH E. CAMPBELL

Inspector: PHILLIP TRACY
Permit Issued: 06/27/89
Well work Commenced: 11/05/89
Well work Completed: 12/04/89
Verbal Plugging _____
Permission granted on: _____
Rotary X Cable _____ Rig _____
Total Depth (feet) 9134
Fresh water depths (ft) _____

Salt water depths (ft) _____

Is coal being mined in area (Y/N)? N
Coal Depths (ft): _____

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
13-3/8"	84	84	58
9-5/8"	2640	2640	874
5-1/2"	9097	9097	286

OPEN FLOW DATA

Producing formation Oriskany Pay zone depth (ft) 8450-8670
Gas: Initial open flow 36 MCF/d Oil: Initial open flow - Bbl/d
Final open flow 656 MCF/d Final open flow - Bbl/d
Time of open flow between initial and final tests - Hours
Static rock Pressure 1910 psig (surface pressure) after 60 Hours

Second producing formation _____ Pay zone depth (ft) _____
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
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: Joseph E. Campbell
COLUMBIA NATURAL RESOURCES, INC.
Joseph E. Campbell
By: Vice President, Drilling and Production Operation
Date: June 19, 1990

JUN 29 1990

Well 21712

Scherr	3970 - 6381
Brallier	6381 - 7524
Harrell	7524 - 7698
Tully	7698 - 7700
Mahantango	7700 - 8124
Upper Marcellus	8124 - 8199
Purcell	8199 - 8261
Lower Marcellus	8261 - 8324
Needmore	8324 - 8450
Oriskany	8450 - 8670
Helderberg	8670 - T.D.
DTD	9134

Fracturing - No acid used, 180,000# 20/40 sand, 15,700# 80/100 sand,
200 Bbl. 50/50 methanol, 100 Bbl. pad X-Link w/CO₂,
flush 203 bbls. @ 5000 psi, avg. treating press. 4468 psi.

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Division of Energy

JUN 22 90

Permitting
Oil and Gas Section

023-00022

Issued 6/27/89 Expires 6/27/91
Page 3 of 6

FORM WW-2B

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

- 1) Well Operator: Columbia Natural Resources, Inc. 10460, 3, 383
- 2) Operator's Well Number: 21712-PI 3) Elevation: 2683'
- 4) Well type: (a) Oil or Gas
(b) If Gas: Production Underground Storage
Deep Shallow
- 5) Proposed Target Formation(s): Oriskany
- 6) Proposed Total Depth: 9150 feet
- 7) Approximate fresh water strata depths: 90'
- 8) Approximate salt water depths: -
- 9) Approximate coal seam depths: None
- 10) Does land contain coal seams tributary to active mine? Yes No
- 11) Proposed Well Work: Drill Well *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	13-3/8"	H	48#	40	40	28
Fresh Water						
Coal						306SR18-11.5
Intermediate	9-5/8"	J	36#	2650	2650	830
Production	5-1/2"	N	17#	9150	9150	306SR18-11.2 id 260
Tubing						306SR18-11.1
Liners						

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JUN 15 1989

PACKERS : Kind _____
Sizes _____
Depths set _____

For Division of Oil and Gas Use Only

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond Blanket Agent
 (Type)

9050
5015634

Page 1 of 6
Form WW2-A
(09/87)
File Copy

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JUN 15 1989

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

Date: May 16, 1989
Operator's well number 21712-PI
API Well No: 47 - 023 - 00022
State - County - Permit

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

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- | | |
|---|--|
| <p>4) Surface Owner(s) to be served:
 (a) Name <u>Delmer L. & Eileen S. Schell</u>
 Address <u>Box 5</u>
 <u>Scherr, WV 26726</u>
 (b) Name _____
 Address _____
 (c) Name _____
 Address _____</p> | <p>5) (a) Coal Operator:
 Name _____
 Address _____
 (b) Coal Owner(s) with Declaration
 Name _____
 Address _____
 Name _____
 Address _____
 (c) Coal Lessee with Declaration
 Name _____
 Address _____</p> |
| <p>6) Inspector <u>Phillip Tracy</u>
 Address <u>Route 2, Box 37-A</u>
 <u>Montrose, WV 26283</u>
 Telephone (304)-<u>636-8798</u></p> | |

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

X 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:

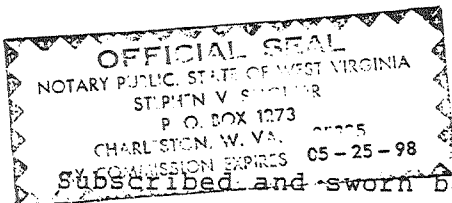
- _____ Personal Service (Affidavit attached)
- X Certified Mail (Postmarked postal receipt attached)
- _____ Publication (Notice of Publication attached)

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 Columbia Natural Resources, Inc.
By: [Signature]
Its: Vice President, Drilling and Production Operations
Address P. O. Box 1273
Charleston, WV 25325
Telephone 304/357-2000



Subscribed and sworn before me this 16 day of May, 1989

My commission expires _____
Stephen V. Snodden Notary Public
May 25, 1998