



FILE NO. BK 106 P 51

DRAWING NO. _____

SCALE 1" = 1000'

MINIMUM DEGREE OF ACCURACY 1:5000'

PROVEN SOURCE OF ELEVATION USGS Road Forks N.E. Location El. 2767

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) _____

R.P.E. _____ L.S. 92

PLACE SEAL HERE

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

FORM IV-6 (8-78)

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

LOCATION: ELEVATION 3147' WATER SHED LINTON CREEK DISTRICT UNION 3 COUNTY GRANT QUADRANGLE MOUNT STORM WV MD. 49/ 039 SW7 Elk Garden

SURFACE OWNER ALLEGHENY MINING CORP. ACREAGE 306 AC TR.

OIL & GAS ROYALTY OWNER ALLEGHENY MINING CORP. LEASE ACREAGE 306 AC TR. LEASE NO. 2559

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 ___

TARGET FORMATION ORISKANY ESTIMATED DEPTH 10, 110'

WELL OPERATOR UNION DRILLING INC. DESIGNATED AGENT JOSEPH C. PETTEY

ADDRESS P.O. DRAWER 40 BUCKHANNON WV 26201 ADDRESS P.O. DRAWER 40 BUCKHANNON WV 26201

DATE April, 28, 19 87

OPERATOR'S WELL NO. 2528

API WELL NO. _____

47 - 023 - 0019

STATE COUNTY PERMIT

(CNR# 21654-TPI)

JUN 1 1987

M T HALL

DEEP WELL

comp site for H-1 NFD-

3-3

(000) chart (Grant 28226 SW)

WR-35

28-Apr-88
API # 47- 23-00019

TIGHT HOLE

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

Well Operator's Report of Well Work

Farm name: ALLEGHENY MINING CORP. Operator Well No.: 2528

LOCATION: Elevation: 3147.00 Quadrangle: MOUNT STORM

District: UNION County: GRANT
Latitude: 11075 Feet South of 39 Deg. 17Min. 30 Sec.
Longitude 1500 Feet West of 79 Deg. 10 Min. 0 Sec.

Company: EQUITABLE RESOURCES EXPLO
P. O. DRAWER 40
BUCKHANNON, WV

Agent: JOSEPH C. PETTEY

Inspector: PHILLIP TRACY
Permit Issued: 05/27/87
Well work Commenced: 06/17/87
Well work Completed: 08/08/87
Verbal Plugging
Permission granted on: _____
Rotary x Cable _____ Rig
Total Depth (feet) 10,098
Fresh water depths (ft) 118,340,490

Salt water depths (ft) 0

Is coal being mined in area (Y/N)? N
Coal Depths (ft): 90/92

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11"	9	9	To surface
13 5/8"	466.5	466.5	503 C.F.
9 5/8"	3151.7	3151.7	1419 C.F.
5 1/2"		10,098	774 C.F.
2 3/8"		9930	

OPEN FLOW DATA TIGHT HOLE

Producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow 131M MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 1500 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 8 Hours
Static rock Pressure 3125 psig (surface pressure) after 72 Hours

*REN
R. D. Walsh
4/4/94
Kla*

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.

RECEIVED
SEP 01 1988

For: EQUITABLE RESOURCES EXPLORATION, INC.

By: Douglas P. Jony
Date: August 29, 1988

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

3/29/94

0104 2796

023 19

9/2/87 - Nowsco Frac
Perforations: 9998-10,026 Shriver Chert
84 sxs 80/100 sand, 1000 sxs. 20/40 sand
2000 gal. HCl Acid

11/19/87 - Halliburton Gel Frac
Perforations: 9851-9902 Oriskany
450,000 lbs. 20/40 sand, 12,600 lbs. 80/100 sand
Production Packer set @ 9930'

Pottsville Group	surface
Top of Foreknobs Group	3854
Sycamore	7722 - 7820
Harrell Shale	8755 - 8966
Tully Horizon	8966 - 8973
Upper Marcellus	9469 - 9498
Purcell L.S.	9498 - 9557
Lower Marcellus	9557 - 9622
Tioga Metabentonite	9608 - 9619
Needmore Shale	9624 - 9753
Oriskany S.S.	9753 - 9925
Shriver Chert	9981 - 10,026

1/2" stream wtr. @ 118'
2 1/2" stream wtr @ 340'
1/2" stream wtr. @ 490'
Damp @ 3790'

RECEIVED
SEP 01 1988.

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

D TD 10,098
L TO 10,099

10098
9925

173 expl fig

1992 production
37,072 mcf

8184 2797

FORM WW-2(B) FILE COPY

(Obverse)

7/85

RECEIVED
MAY 27 1987



1) Date: May 15, 19 87
2) Operator's Well No. 2528
3) API Well No. 47 State 023 County 0019 Permit

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

- 4) WELL TYPE: A Oil / Gas / B (If "Gas", Production / Underground storage / Deep / Shallow)
- 5) LOCATION: Elevation: 3147 Watershed: Linton Creek
District: Union 3 County: Grant 023 Quadrangle: Mt. Storm WV MD 490
- 6) WELL OPERATOR Union Drilling CODE: 50550 7) DESIGNATED AGENT Joseph C. Pettey
Address Post Office Drawer 40 Address Post Office Drawer 40
Buckhannon, WV 26201 Buckhannon, WV 26201
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED Name Phillip Tracy
Address Post Office Box 2536
Elkins, WV 26241
- 9) DRILLING CONTRACTOR: Name Union Drilling, Inc.
Address Post Office Drawer 40
Buckhannon, WV 26201
- 10) PROPOSED WELL WORK: Drill / Drill deeper / Redrill / Stimulate / Plug off old formation / Perforate new formation / Other physical change in well (specify) _____
- 11) GEOLOGICAL TARGET FORMATION, Oriskany
- 12) Estimated depth of completed well, 10110 feet
- 13) Approximate trata depths: Fresh, _____ feet; salt, _____ feet.
- 14) Approximate coal seam depths: _____ Is coal being mined in the area? Yes / No

15) 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									Kinds
Fresh water									
Coal									Sizes
Intermediate	9 5/8	N-80	36&40	X		3000	3000	← <u>CTS</u> <u>Gas required</u> <u>to surface</u> <u>1000 SKS OR AS REQUIRED</u> <u>BY RULE 15.01</u>	<u>By Rule 15.05</u>
Production	5 1/2	N-80	17	X		10150	10150		Depths set
Tubing									Perforations:
Liners									Top Bottom

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-023-0019 Date May 27 19 87

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector. (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.
Permit expires May 27, 1989 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <input checked="" type="checkbox"/>	Agent: <input checked="" type="checkbox"/>	Plat: <u>AS</u>	Casing: <u>AS</u>	Fee: <input type="checkbox"/>	WPCP: <u>AS</u>	S&E: <u>AS</u>	Other: <input type="checkbox"/>
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NOTE: Keep one copy of this permit posted at the drilling location.

John Johnston by Gene Smith
Director, Division of Oil and Gas

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

10211