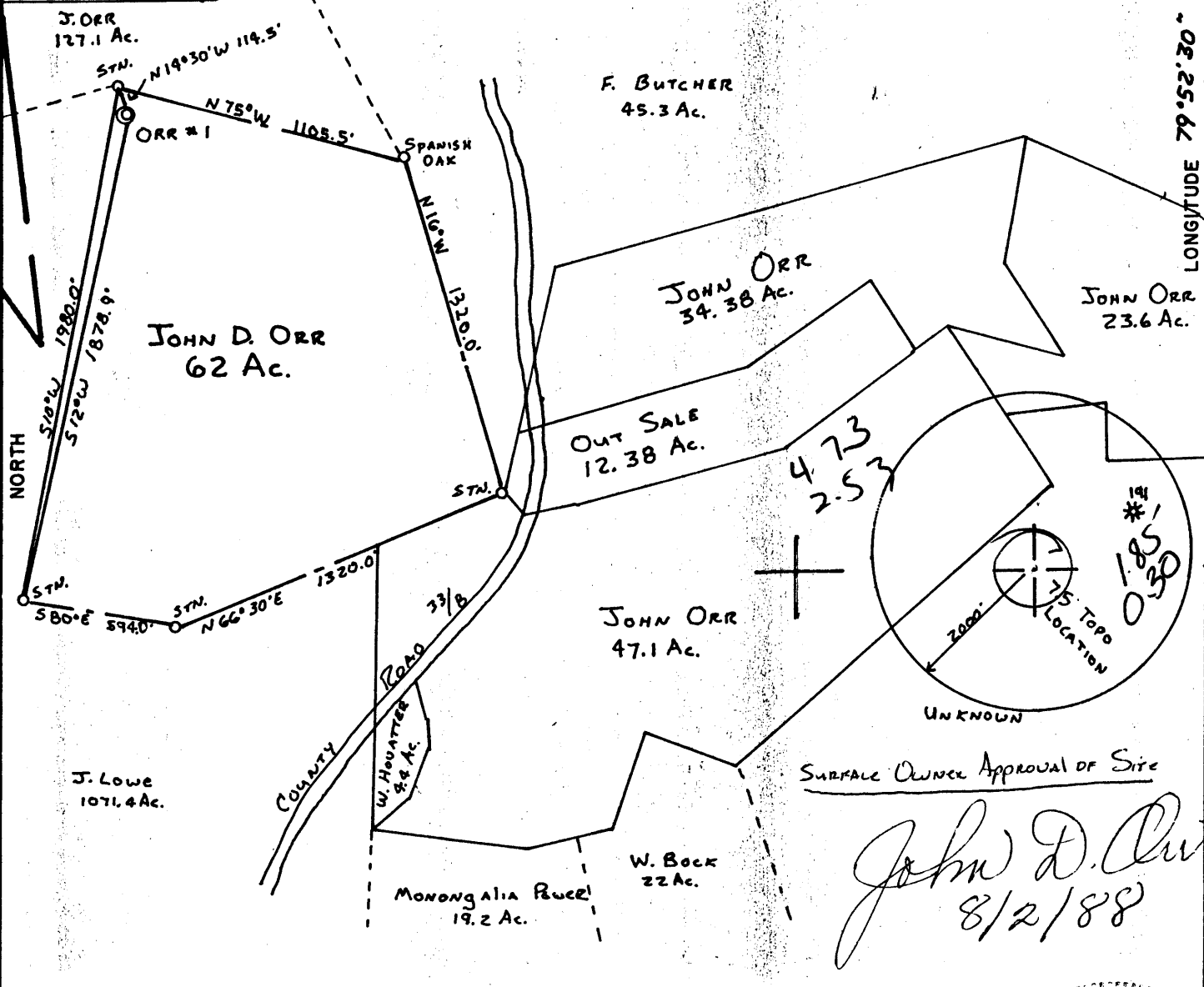
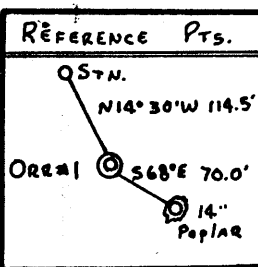


Jamie 8/12/88 N N

30 2150'

LATITUDE 39° 27' 30"

LONGITUDE 79° 52' 30"



FILE NO. 1
 DRAWING NO. 88007
 SCALE 1"=600'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION BENCH MARK 1931' NORTH EAST OF LOCATION

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) Mark C. Shanley
 R.P.E. _____ L.L.S. 827

MARK C. SHANLEY
 No. 827
 STATE OF WEST VIRGINIA
 LAND SURVEYOR
 PLACE SEAL HERE

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



Department of Mines
 Oil & Gas Division

DATE 7-20, 1988
 OPERATOR'S WELL NO. ORR #1
 API WELL NO. 47-077-0246
 STATE COUNTY PERMIT

WELL TYPE: OIL _____ GAS X LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS", PRODUCTION _____ STORAGE _____ DEEP _____ SHALLOW X)
 LOCATION: ELEVATION 1817.6' WATER SHED THREE FORK CREEK
 DISTRICT Lyons 3 COUNTY PRESTON
 QUADRANGLE GLADESVILLE (7.5) 368 122 2 Thornton NC
 SURFACE OWNER JOHN D. & FRANCES K. ORR ACREAGE 62
 OIL & GAS ROYALTY OWNER JOHN D. & FRANCES K. ORR LEASE ACREAGE 62
 LEASE NO. _____
 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 _____ AUG 12 1988
 TARGET FORMATION FOURTH SAND ESTIMATED DEPTH 2300'
 WELL OPERATOR MARK RESOURCES CORP. DESIGNATED AGENT JOHN O. KISER C.T. SYSTEMS INC.
 ADDRESS PENN CENTER WEST, Bldg II, SUITE 224 ADDRESS 1200 CHARLESTON NATIONAL PLAZA
PITTSBURGH, PA. 15276 CHARLESTON, WV. 25301

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

Well Operator's Report of Well Work

Farm name: ORR, JOGN D. Operator Well No.: ORR 1

LOCATION: Elevation: 1817.60 Quadrangle: GLADESVILLE

District: LYON County: PRESTON
Latitude: 9850 Feet South of 39 Deg. 27Min. 30 Sec.
Longitude 2150 Feet West of 79 Deg. 52 Min. 30 Sec.

Company: MARK RESOURCES CORP.

PENN CTR. W, BLDG. II, STE 224
PITTSBURGH, PA

Agent: JOHN O. KIZER

Inspector: DONALD ELLIS
Permit Issued: 08/12/88
Well work Commenced: 11/4/88
Well work Completed: 11/7/88
Verbal Plussing
Permission granted on:
Rotary X Cable _____ Ris
Total Depth (feet) 2287
Fresh water depths (ft) None
(damp @ 550')
Salt water depths (ft) _____

Is coal being mined in area (Y/N)? N
Coal Depths (ft): 73-78, 375-380, 513-516,
545-550

Size	Used in	Left	Cement
	Tubing	in Well	Fill Up
	Drilling		Cu. Ft.
7"		1140'	175 Sk. C.T.S.
4 1/2"		2260'	35 Sk.
1 1/2"		2215'	

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DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

OPEN FLOW DATA

Producing formation Upper Fourth Pay zone depth (ft) 2134-2143
Gas: Initial open flow 103 Nat MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 1500* MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 6 Hours
Static rock Pressure 575* psig (surface pressure) after 72 Hours

Second producing formation Lower Fourth Pay zone depth (ft) 2221-2228
Gas: Initial open flow _____ MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 1500* MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 575* psig (surface pressure) after 72 Hours

*Commingled

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.

Gregory R. Wrightstone
For: MARK RESOURCES CORP.

By: [Signature]
Date: December 13, 1988

FEB 3 1989

11/11/88 - First Stage: Perfed 2221-2228'. Broke formation down @ 2370 psi. Treated with 16,000 gallons fluid, 25,500 lbs. of 20/40 mesh sand.

Second Stage: Perfed 2134-2143'. Broke formation down @ 3080 psi. Treated with 31,000 gallons fluid and 56,500 lbs. 20/40 mesh sand.

Sand & Shale	0 - 73
Coal	73 - 78
Sand & Shale	78 - 375
Coal	375 - 380
Sand & Shale	380 - 513
Coal	513 - 516
Sand & Shale	516 - 588
Sand	588 - 692
Shale	692 - 718
Sand & Shale	718 - 1064
Little Lime	1064 - 1078
Pencil Cave	1078 - 1097
Big Lime	1097 - 1288
Injun	1288 - 1304
Shale	1304 - 1386
Upper Weir	1386 - 1431
Shale	1431 - 1452
Lower Weir	1452 - 1486
Shale	1486 - 1596
Berea	1596 - 1608
Shale	1608 - 1634
Middle Gantz	1634 - 1674
Shale	1674 - 1690
Lower Gantz	1690 - 1704
Shale	1704 - 1713
Fifty Foot Sand	1713 - 1804
Shale	1804 - 1908
Thirty Foot Sand	1908 - 1914
Shale	1914 - 2128
Upper Fourth	2128 - 2146
Shale	2146 - 2170
Middle Fourth	2170 - 2184
Shale	2184 - 2220
Lower Fourth	2220 - 2229
Shale	2229 - 2287

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DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

7566

077-0246

Issued 8/12/88 Expires 8/12/91

FORM WW-2B

Page ___ of ___

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

- 1) Well Operator: ⁵⁴⁶ Mark Resources Corporation 30275, 3, 368
- 2) Operator's Well Number: Orr #1 3) Elevation: 1817.6'
- 4) Well type: (a) Oil ___ / or Gas x /
(b) If Gas: Production ___ / Underground Storage ___
Deep ___ / Shallow x /
- 5) Proposed Target Formation(s): Fourth Sand ⁴²¹
- 6) Proposed Total Depth: 2300 feet
- 7) Approximate fresh water strata depths: 265', 106', 371', 626'
- 8) Approximate salt water depths: None
- 9) Approximate coal seam depths: 560, 610 ^{278'-285', 384'-387', 528'-531'}
^{498'-504', 565'-568', 754'-759'}
- 10) Does land contain coal seams tributary to active mine? Yes ___ / No x /
- 11) Proposed Well Work: Drill and 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						
Fresh Water	7"				1220'	110 Sk. (CTS per rule 38CSR 18-11 and 11.22)
Coal						
Intermediate						
Production	4 1/2"				2300'	100 Sk. (as per rule 38CSR 18-11.1)
Tubing						
Liners						

PACKERS : Kind _____
Sizes _____
Depths set _____

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DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

For Division of Oil and Gas Use Only

1566

1398

Fee(s) paid: Plat WW-9 WW-2B Bond 50 Blanket WPCP Agent

(Type)

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AUG 12 1988

Page 1 of
Form W2-A
(09/87)
File Copy

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

1) Date: July 26, 1988
2) Operator's well number
Orr ~~WV~~ #1
3) API Well No: 47 - 077 - 0246
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:</p> <p>(a) Name <u>Mr. John D. Orr</u>
Address <u>Route 1, Box 121</u>
<u>Independence, WV 26374</u></p> <p>(b) Name _____
Address _____</p> <p>(c) Name _____
Address _____</p> | <p>5) (a) Coal Operator:</p> <p>Name _____
Address _____</p> <p>(b) Coal Owner(s) with Declaration</p> <p>Name _____
Address _____</p> <p>Name _____
Address _____</p> <p>(c) Coal Lessee with Declaration</p> <p>Name _____
Address _____</p> |
| <p>6) Inspector <u>Donald Ellis</u>
Address <u>2604 Crab Apple Lane</u>
<u>Fairmont, WV 26554</u>
Telephone (304) <u>534-5596</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:

- x Personal Service (Affidavit attached)
- ___ 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 Mark Resources Corporation
By: Henry C. Smyth *Henry C. Smyth*
Its: Vice President of Operations
Address Penn Center West, Bldg. II, Suite 224
Pittsburgh, PA 15276
Telephone (412) 788-1340

Subscribed and sworn before me this 26th day of July, 1988

Florence L. Dixon
My commission expires October 2, 1989 Notary Public