



**O.A. NEWBROUGH, ET AL
5.45 ACRE
LEASE**

**HARRIS
NURSERY
ADDITION**

FILE NO. _____
DRAWING NO. _____
SCALE 1" = 100'
MINIMUM DEGREE OF ACCURACY 1:200
PROVEN SOURCE OF ELEVATION ROAD INT.
ELEV. 935'

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) William P. Mahone
R.P.E. _____ L.L.S. 551

PLACE SEAL HERE

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



DATE 13 SEPT. 19 83
OPERATOR'S WELL NO. NEWBROUGH 1
API WELL NO. _____
47 - 005 - 6699
STATE COUNTY PERMIT

**STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION**

WELL TYPE: OIL GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
(IF "GAS") PRODUCTION STORAGE _____ DEEP _____ SHALLOW
LOCATION: ELEVATION 932' WATER SHED FRONT RUN
DISTRICT UNION COUNTY RITCHIE
QUADRANGLE HARRISVILLE 7 1/2' QUAD +15' NE
SURFACE OWNER O.A. NEWBROUGH - PAUL BEALL ACREAGE 5.45
OIL & GAS ROYALTY OWNER O.A. NEWBROUGH, ET AL. LEASE ACREAGE 5.45
LEASE NO. _____
PROPOSED WORK: DRILL 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 ALEXANDER ESTIMATED DEPTH 5200' 6-6
WELL OPERATOR PRIOR OIL COMPANY DESIGNATED AGENT FERRILL Mahone SEP 10 1983
ADDRESS P.O. BOX 1486 ADDRESS P.O. BOX 1486
PARKERSBURG, W.VA 26101 PARKERSBURG, W.VA. 26101



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD

Quadrangle Harrisville, 7.5

Permit No. 47-085-6699

Rotary Oil _____
Cable _____ Gas _____
Recycling _____ Comb
Water Flood _____ Storage _____
Disposal _____ (Kind)

Company Ferrell Prior
Address P. O. Box 1486, Parkersburg, W. Va.
Farm Newbrough Josie No. 1 Acres 6
Location (waters) Front Run
Well No. No. 1 Elev. 922
District Union County Ritchie
The surface of tract is owned in fee by Paul Beall and O. A. Newbrough
Address Harrisville, W. Va.
Mineral rights are owned by Newbrough et al
Address Harrisville, W. Va.
Drilling Commenced 9-20-1983
Drilling Completed 9-24-1983
Initial open flow Show cu. ft. Show bbbls.
Final production 1 million ft. per day 5 per bbls.
Well open 4 hrs. before test 900 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement Tail up (u ft. (Sks.))
Size 20-1/2			
Cond. 1XXX 11 3/4	60'	60'	
9 5/8			
8 5/8	1107	1107	To surface
7			
5 1/2			
4 1/2		5960	630 sks. Cement
3			
2			
Liners Used			

Well treatment details:

Attach copy of cementing record.

NOVSCO Nitrogen, Fracture	September 28, 1983;	Four Stages	
750,000 SCF of Nitrogen	5400	5850	Hamilton 17 holes
850,000 SCF of Nitrogen	4650	5000	Alexander, Benson, John Sand 15 holes
850,000 SCF of Nitrogen	3700	4450	Riley, Balltown, Speechley 28 holes
550,000 SCF of Nitrogen	3250	3450	Warren, 13 holes

Coal was encountered at None Feet _____ Inches _____
Fresh water 33 Feet None Salt Water _____ Feet _____
Producing Sand Warren Riley, Balltown, Speechley Depth _____
Alexander Benson John Sand

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
Sand and Shale			0	1100		
Lime			1100	1110		
Sand			1110	1140		
Shale			1140	1214		
First Salt Sand			1214	1270		
Shale			1270	1334		
Second Salt Sand			1334	1400		
Shale			1400	1460		
Third Salt Sand			1460	1500		
Shale			1500	1590		
Maxon Sand			1590	1608		
Shale			1608	1712		
Lower Maxon Sand			1712	1728		
Shale			1728	1764		
Blue Monday Sand			1764	1794		
Shale			1794	1800		
Big Lime			1800	1868		
Keener			1868	1910		
Shale			1910	1912		
Big Injun Sand			1912	1952		
Shale			1952	1956		
Lower Injun Sand			1956	1984		
Shale			1984	1988		
Squaw Sand			1988	2000		

JUL 9 1984

(Over) →

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil Cap or Water	Notes
shale			2000	2084		
and Stringers			2084	2110		
shale			2110	2234		
shale			2234	2312		
shale			2312	2466		
shale			2466	2488		
shale			2488	2556		
shale			2556	2580		
ifty Foot Sand			2580	2640		
shale			2640	2700		
irty Foot Sand			2700	2732		
shale			2732	2770		
ordon			2770	2814		
shale			2814	2860		
ourth Sand			2860	2908		
shale			2908	2924		
ifth Sand			2924	2978		
shale			2978	3010		
ayard			3010	3168		
shale			3168	3196		
Elizabeth			3196	3272		
shale			3272	3338		
pper Warren			3338	3360		
shale			3360	3436		
ower Warren			3436	3710		
shale			3710	3798		
pper Speechley			3798	3868		
shale			3868	3918		
ower Speechley			3918	4098		
shale			4098	4226		
alltown			4226	4326		
shale			4326	4358		
irst Riley			4358	4390		
shale			4390	4450		
second Riley			4450	4646		
shale			4646	4768		
ohn Sand			4768	4918		
shale			4918	4940		
enson			4940	4952		
shale			4952	5020		
alexander			5020	5260		
shale			5260	5350		
pper Hamilton			5350	5494		
shale			5494	5860		
ower Hamilton Shale			5860	5938		
shale			5938	5960		
arcellus			5960			
otal Depth			5960			

Perforations:

5400	5850	Rhinestreet
4650	5000	Java-Angola
3700	4450	Huron
3250	3450	- Up Dev. undiff

5160
2466
3494

Rhinestreet @ TD.

September 29, 1983

APPROVED

Stephen J. Jordan

Geologist



1) Date: September 14, 19 83
 2) Operator's Well No. One (1)
 3) API Well No. 47 - 085 - 6699
 State _____ County _____ Permit _____

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES, 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: 922 Watershed: Front Run
 District: Union County: Ritchie Quadrangle: Harrisville, 7.5
 6) WELL OPERATOR Prior Oil Company 7) DESIGNATED AGENT Ferrell Prior
 Address P. O. Box 1486 Address P. O. Box 1486
Parkersburg, W. Va. 26101 Parkersburg, W. Va. 26101
 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
 Name Samuel N Hersman Name William Putman
 Address P. O. Box 66 Address Mile Run
Smithville, W. Va. Marietta, Ohio 45750
 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, Alexander
 12) Estimated depth of completed well, 5200 feet
 13) Approximate trata depths: Fresh, 60 feet; salt, None feet.
 14) Approximate coal seam depths: None Is coal being mined in the area? Yes _____

RECEIVED
 SEP 15 1983

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		Kinds	Sizes
Conductor										
Fresh water										
Coal										
Intermediate										
Production										
Tubing	8 5/8					1072	1072	To surface	Neat	By Rule 45.0
Liners										
Casing	4 1/2						5200	545 sks.	Top	Bottom
								Cement		

DEPT. OF MINES

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-085-6699 Date September 15, 19 83

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 September 15, 1985 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing:	Fee:
NET BOND	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	92.50

[Signature]

Administrator, Office of Oil and Gas

NOTE: Keep one copy of this permit posted at the drilling location.