



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,
Charleston, W. Va.

DATE June 5, 1980

Surface Owner Olan Cumberledge
Address Rt. 3, Salem, WV 26426

Company Doran & Associates, Inc.
Address 728 Washington Rd., Pgh., PA 15228

Mineral Owner Daniel Louchery
Address P. O. Box 1206, Clarksburg, WV 26201

Farm D. Louchery #4 Acres 172
Location (waters) Traugh Fork

Coal Owner Virginia Tetrick
Address Union National Center West, Clarksburg, WV 26301

Well No. 4 Elevation 1152
District Greenbrier County Doddridge

Coal Operator SAME AS ABOVE
Address _____

Quadrangle Big Isaac 7 1/2

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions being in accordance with Chapter 22, of the W. Va. Code, the location is hereby approved for drilling. This permit shall expire if operations have not commenced by 3-25-81.

INSPECTOR
TO BE NOTIFIED Paul Garrett
ADDRESS 321 Beech Street, Clarksburg, WV 26301
PHONE 304-622-3871

Thomas E. Henny
Deputy Director - Oil & Gas Division

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated April 17 1979 by Daniel L. Louchery made to R & P Associates and recorded on the 10th day of Sept. 1979 in Doddridge County, Book 110 Page 572
XXX NEW WELL DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days. *

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address this day before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:

WEST VIRGINIA GEOLOGICAL AND ECONOMIC SURVEY
P. O. BOX 879
MORGANTOWN, WEST VIRGINIA 26505
AC-304 - 292-6331

Address of Well Operator

Very truly yours,
(Sign Name) Donald R. Laughlin
Well Operator
Donald R. Laughlin
728 Washington Road
Street
Pittsburgh,
City or Town
PA 15228
State

RECEIVED
JUN 5 1980
OIL & GAS DIVISION
DEPT. OF MINES

12/08/2023

*SECTION 3 If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

(FORMERLY-DOD-)
DOD-2799 PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements."

Signed by _____

BLANKET BOND

Date 6-19 1980
Well No. _____
API No. 47 - 000 - 2799
State LOUCKERY # 4 County 4 Permit

VOID - See: Return

STATE OF WEST VIRGINIA
OFFICE OF OIL AND GAS

Company Name DORAN + ASSOCIATES, INC. Designated Agent ALVIN SORCAN
Address PITTS. PA. Address BUCKHANNON, W. VA.
Telephone 412-344-4866 Telephone 472-0007
Landowner OLAN CUMBERLEDGE Soil Cons. District WEST FORK

Revegetation to be carried out by HYDROCARBON ENERGIES INC. (Agent)

This plan has been reviewed by West Fork SCD. All corrections and additions become a part of this plan. 7-21-80 Clifford Redding
(Date) (SCD Agent)

Access Road	Location
Structure <u>CULVERT</u> (A)	Structure <u>DIVERSION DITCH (1)</u>
Spacing <u>8" MINIMUM</u>	Material <u>EARTHEN</u>
Page Ref. Manual <u>1-8</u>	Page Ref. Manual <u>1-8</u>
Structure <u>BREAKERS</u> (B)	Structure <u>BREAKERS</u> (2)
Spacing <u>150'</u>	Material <u>EARTHEN 150'</u>
Page Ref. Manual <u>1:5</u>	Page Ref. Manual <u>1:5</u>
Structure _____ (C)	Structure <u>DRAINAGE DITCH (3)</u>
Spacing _____	Material _____
Page Ref. Manual _____	Page Ref. Manual <u>1-8</u>

All structures should be inspected regularly and repaired if necessary.

Revegetation

Treatment Area I		Treatment Area II	
Lime _____ Tons/acre	Lime _____ Tons/Acre	or correct to pH <u>6.5</u>	or correct to pH <u>6.5</u>
Fertilizer <u>500</u> lbs/acre	Fertilizer <u>500</u> lbs/acre	(10-20-20 or equivalent)	(10-20-20 or equivalent)
Mulch <u>2</u> Tons/Acre	Mulch <u>2</u> Tons/Acre		
* Seed* <u>TIMOTHY 20</u> lbs/acre	* Seed* _____ lbs/acre	<u>ORCHARD GRASS 15</u> lbs/acre	_____ lbs/acre
<u>CLOVER 5</u> lbs/acre	_____ lbs/acre		

*Inoculate all legumes such as vetch, trefoil and clovers with the proper bacterium. Inoculate with 3X recommended amount.

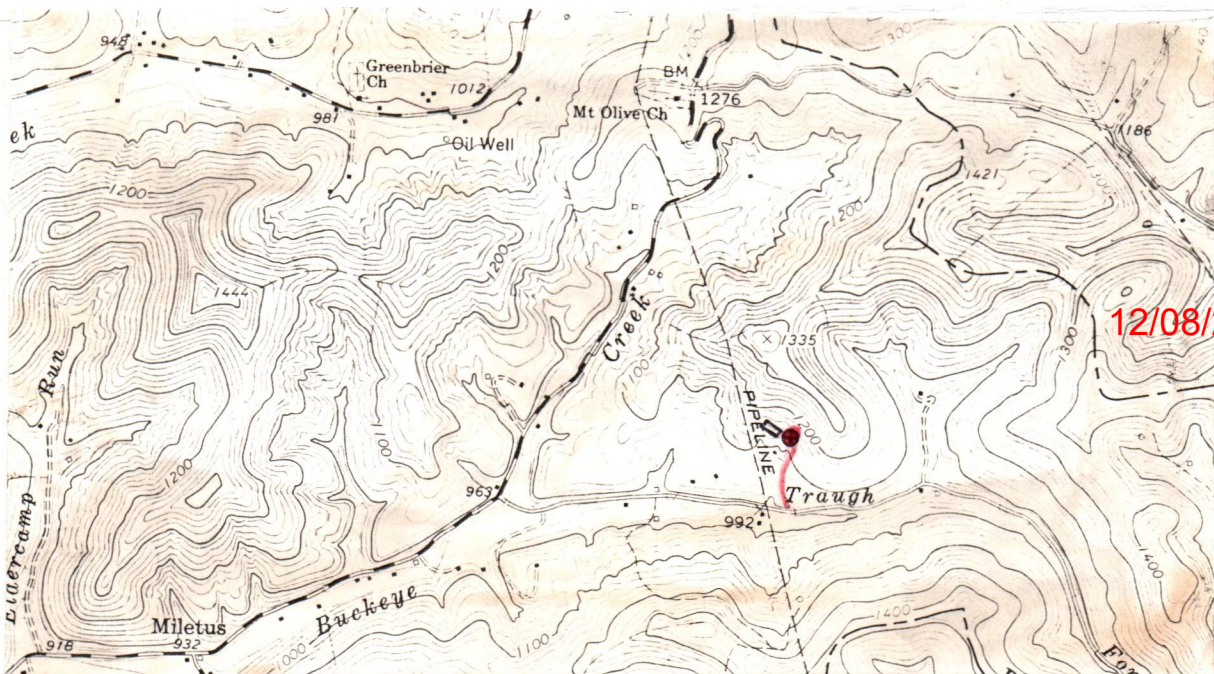
RECEIVED

JUL 25 1980

OIL & GAS DIVISION
DEPT. OF MINES

Attach or photocopy section of involved Topographic map. Quadrangle BIG ISAAC 7.5

Legend: Well Site
 Access Road

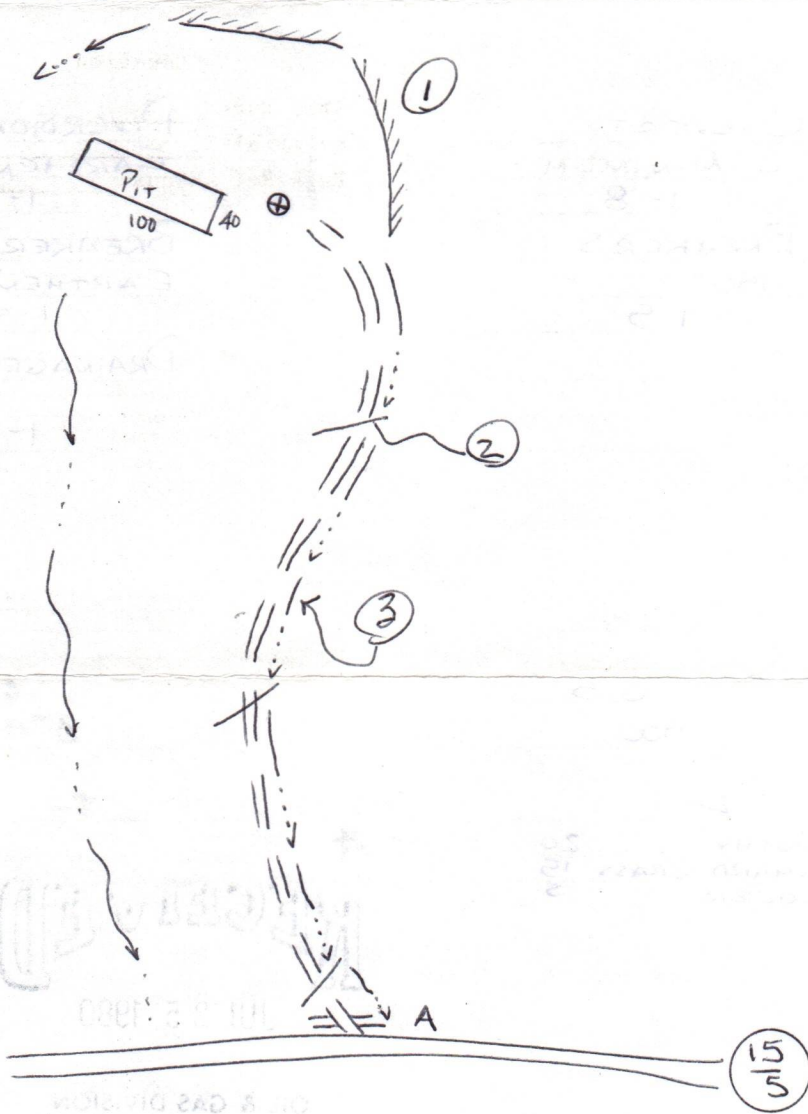


Well Site Plan

Legend: Property Boundry Road Existing Fence Planned Fence Stream Open Ditch

Diversion Spring Wet Spot Building Drain Pipe Waterway

Sketch to include well location, existing access road, roads to be constructed, wellsite, drilling pits and necessary structures numbered or lettered to correspond with first part of this plan. Include all natural drainage.



ALL TIMBER WILL BE CUT AND PILED TOPS WILL BE BURNED OR BURIED

Comments: ROAD WILL BE ON 15% GRADE OR LESS
ALL CUTS WILL BE 2:1 OR LESS
DITCHES + BREAKERS WILL BE MAINTAINED AT ALL TIMES.

Signature: _____
 Agent Address Phone Number

12/08/2023

Please request landowners cooperation to protect new seeding for one growing season.

Date 1-20 1981

Well No. _____
 API No. 47 - 017 - 2799 - Rev 1
 state County Permit
 D. LOUCHERY #4

STATE OF WEST VIRGINIA
OFFICE OF OIL AND GAS

REVISED

Company Name DORAN + ASSOC., INC. Designated Agent ALVIN SOCCAN
 Address 200 ROESSLER RD. PGH. Address BUCKHANNON, W.V.
 Telephone 412-344-5200 Telephone 472-0007
 Landowner OLAN CUMBERLEDGE Soil Cons. District WEST FORK

Revegetation to be carried out by HYDROCARBON ENERGIES, INC. (Agent)

This plan has been reviewed by West Fork SCD. All corrections and additions become a part of this plan. 1-22-81 Clifford G. Gilling
 (DATE) (SIGNATURE)

Access Road

Structure CULVERT (A)
 Spacing 12" MIN
 Page Ref. Manual 1-8

Structure DRAIN DITCH (B)
 Spacing _____
 Page Ref. Manual 1-11

Structure BREAKER (C)
 Spacing 150-200'
 Page Ref. Manual _____

Location

Structure RIP RAP (1)
 Material ROCK
 Page Ref. Manual N/A

Structure _____ (2)
 Material _____
 Page Ref. Manual _____

Structure _____ (3)
 Material _____
 Page Ref. Manual JAN 27 1981

RECEIVED
 JAN 27 1981

All structures should be inspected regularly and repaired if necessary.

OIL & GAS DIVISION
DEPT. OF MINES

Revegetation

Treatment Area I

Treatment Area II

* Lime _____ Tons/acre
 or correct to pH 6.5

Fertilizer 600 lbs/acre
 (10-20-20 or equivalent)

Mulch 2 Tons/Acre

Seed* TIMOTHY 20 lbs/acre
ORCHARD GRASS 15 lbs/acre
CLOVER 5 lbs/acre

* Lime As. AREA I Tons/Acre
 or correct to pH _____



Fertilizer _____ lbs/acre
 (10-20-20 or equivalent)

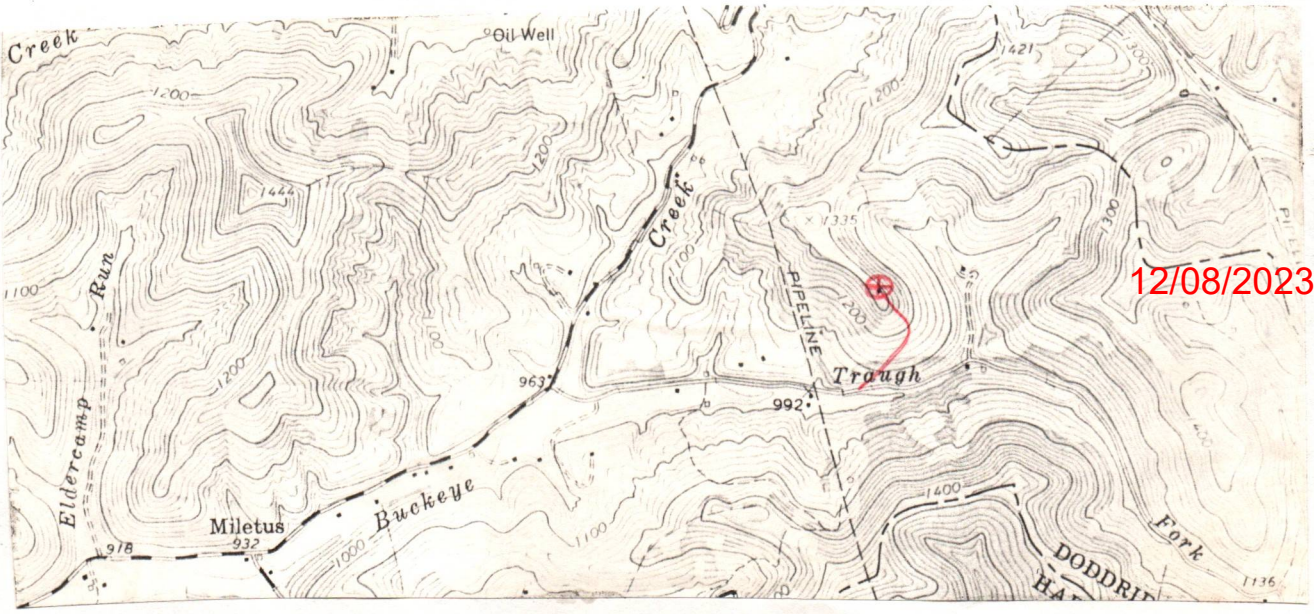
Mulch _____ Tons/Acre

Seed* _____ lbs/acre
 _____ lbs/acre
 _____ lbs/acre

*Inoculate all legumes such as vetch, trefoil and clovers with the proper bacterium. Inoculate with 3X recommended amount.

Attach or photocopy section of involved Topographic map. Quadrangle BIG ISAAC

Legend:  Well Site
 Access Road

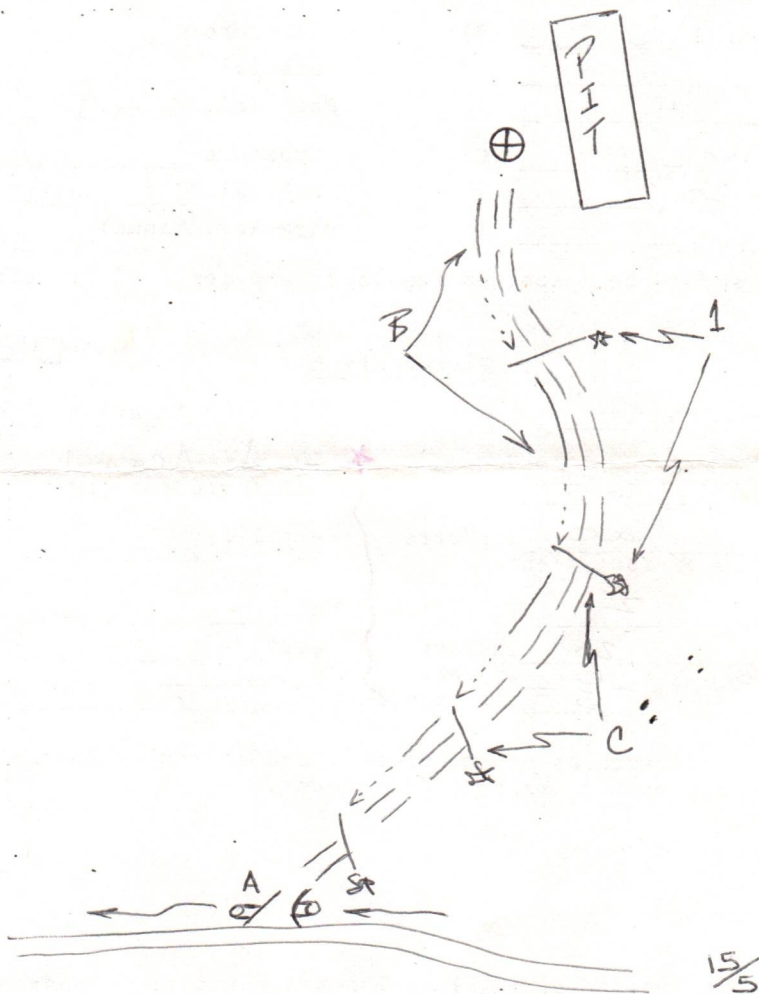


Well Site Plan

Legend: Property Boundary ————
 Road = = = =
 Existing Fence — x — x —
 Planned Fence ————
 Stream ————
 Open Ditch ————

Diversion ————
 Spring ○ →
 Wet Spot ⊕
 Building ■
 Drain Pipe — ○ — ○ —
 Waterway ————

Sketch to include well location, existing access road, roads to be constructed, wellsite, drilling pits and necessary structures numbered or lettered to correspond with first part of this plan. Include all natural drainage.



15/5

Comments: LOCATION & ROAD ARE IN CLEARED FIELD. SLOPE OF ROAD WILL BE 15% OR LESS. ALL CUTS WILL BE 2:1 OR LESS. DITCHES & CULVERTS WILL BE MAINTAINED.

Signature: Alvin Soren
 Agent

Rt. 4, Box 444, Buckhannon, WV 47200
 Address Phone Number

12/08/2023

Please request landowners cooperation to protect new seeding for one growing season.

RECEIVED
MAR 25 1981

MAR 25 1981

OIL & GAS DIVISION
DEPT. OF MINES

STATE OF WEST VIRGINIA
OFFICE OF OIL AND GAS

Date 3-16 1981
Well No. _____
API No. 47 - 017 - _____
state County Permit

D. LOUCHEE #4

REAPPLICATION

Company Name DORAN + ASSOCIATES Designated Agent ALVIN SORCAN
Address PGH, PA Address BUCKHANNON, W.V.
Telephone 412-344-5200 Telephone 472-0007
Landowner OLAN COMBERLEDGE Soil Cons. District WEST FORK

Revegetation to be carried out by HYDROCARBON ENERGIES (Agent)

This plan has been received by West Fork SCD. All corrections and additions become a part of this plan. 3-20-81
(Date) [Signature] (Agent)

Access Road	Structure	Location
Structure <u>DRAIN DITCH</u> (A)	Structure <u>RIP RAP</u> (1)	
Spacing _____	Material <u>ROCK</u>	
Page Ref. Manual <u>1-11</u>	Page Ref. Manual <u>N/A</u>	
Structure <u>BREAKER</u> (B)	Structure _____ (2)	
Spacing <u>150-200'</u>	Material _____	
Page Ref. Manual <u>1-5</u>	Page Ref. Manual _____	
Structure _____ (C)	Structure _____ (3)	
Spacing _____	Material _____	
Page Ref. Manual _____	Page Ref. Manual _____	

All structures should be inspected regularly and repaired if necessary.

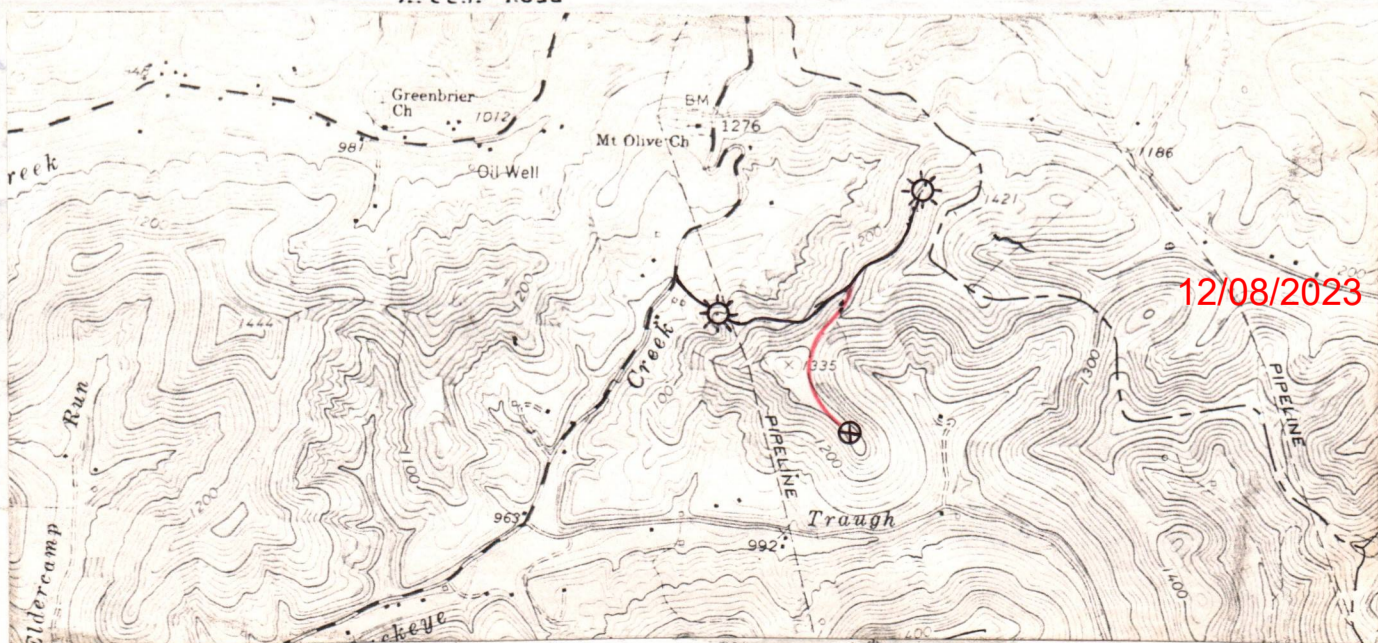
Revegetation

Treatment Area I	Treatment Area II
Lime <u>1 1/2 tons</u> Tons/acre or correct to pH <u>6.5</u>	Lime <u>AS AREA I</u> Tons/Acre or correct to pH <u>6.5</u>
Fertilizer <u>500</u> lbs/acre (10-20-20 or equivalent)	Fertilizer _____ lbs/acre (10-20-20 or equivalent)
* Mulch <u>2</u> Tons/Acre	* Mulch _____ Tons/Acre
Seed* <u>TIMOTHY</u> <u>20</u> lbs/acre	Seed* _____ lbs/acre
<u>OR. GRASS</u> <u>15</u> lbs/acre	_____ lbs/acre
<u>CLOVER</u> <u>5</u> lbs/acre	_____ lbs/acre

*Inoculate all legumes such as vetch, trefoil and clovers with the proper bacterium. Inoculate with 3X recommended amount.

Attach or photocopy section of involved Topographic map. Quadrangle BIG ISSAC 7 1/2.

Legend: Well Site
 Access Road

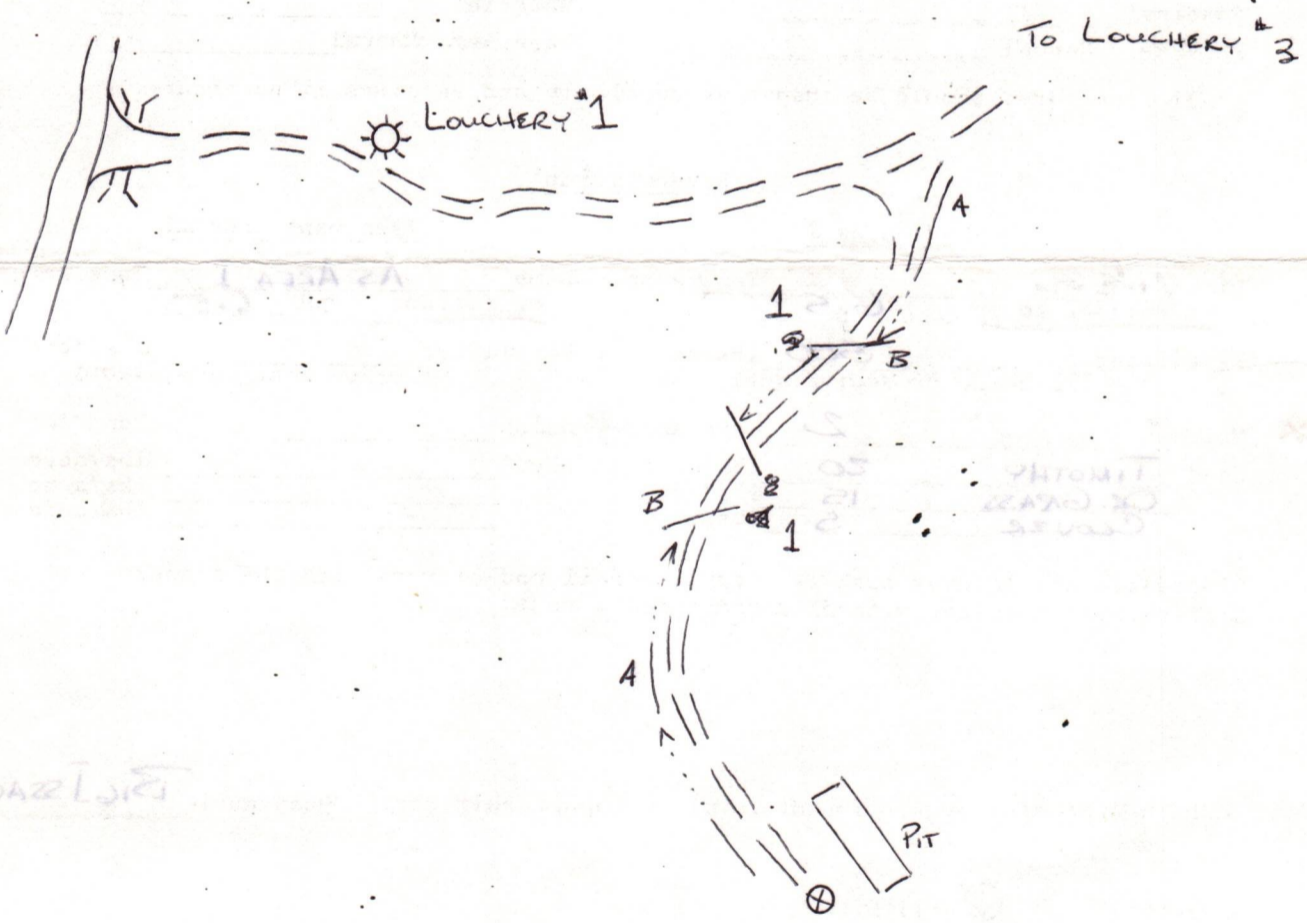


Well Site Plan

- Legends:
- Property Boundary
 - Road
 - Existing Fence
 - Planned Fence
 - Stream
 - Open Ditch

- Diversion
- Spring
- Wet Spot
- Building
- Drain Pipe
- Waterway

Sketch to include well location, existing access road, roads to be constructed, wellsite, drilling pits and necessary structures numbered or lettered to correspond with first part of this plan. Include all natural drainage.



Comments: Will use ROAD TO LOUCHERY #1 & 3 + EXTEND TO LOUCHERY #4.

SLOPE OF ROAD WILL NOT EXCEED 15%. CUTS WILL BE 2:1 OR LESS.

DITCHES & BREAKERS WILL BE MAINTAINED. ALL TIMBER WILL BE CUT + STACKED - TOPS WILL BE BURNED OR BURIED.

Signature: *Alvin Sweet*

Agent

Rt. 4, Box 444, Buckhannon

Address

477-9600
12/08/2023
Phone Number

Please request landowners cooperation to protect new seeding for one growing season.

Louchery #4 K-U-5

OIL AND GAS WELL PERMIT APPLICATION

Date: 3-10-81

WELL TYPE: Oil / Gas /
(If "Gas", Production / Underground storage / Deep / Shallow /
API NO. 47 - 017 - 2799-REN.
State County Permit

LOCATION: Elevation: 1309 Watershed: Traugh Fork
District: Greenbrier County: Doddridge Quadrangle: Big Issac 7 1/2

WELL OPERATOR Doran & Associates, Inc.
Address 200 Roessler Road
Pittsburgh, PA
COAL OPERATOR Virginia Tetrick
Address Union National Center
Clarksburg, WV 26301

OIL & GAS ROYALTY OWNER Daniel Louchery
Address P. O. Box 1206
Clarksburg, WV 26201
COAL OWNER(S) WITH DECLARATION ON RECORD:
Name same as above
Address

SURFACE OWNER Olan Cumberledge
Address Rte. 3,
Salem, WV 26426
COAL LESSEE WITH DECLARATION ON RECORD:
Name
Address MAR 19 1981

Well NO. 4 Acreage 172

FIELD SALE (IF MADE) TO:
Name N/A
Address
Name Steve Casey
Rte 2, Box 232-D
Street
Jane Lew, WV 26378
City Zip

DESIGNATED AGENT Al Sorcan
Address Rte. 4, Box 444 Buckhannon, WV
PH: (304) 884-7470

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed / lease / other contract / dated April 17, 1979, to the undersigned well operator from R. & P. Associates from Daniel L. Louchery (If said deed, lease or other contract has been recorded:)

Recorded on Sept 9, 1981, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Book 110, at page 572. A permit is requested as follows:

PROPOSED WORK: Drill / Drill Deeper / Redrill / Fracture or stimulate /
Plug off old formation / Perforate new formation /
Other physical change in well (specify)

--planned as shown on the work order on the reverse side 12/08/2023

The above named coal operator, coal owner(s), and coal lessee are hereby notified that any objection they wish to make or are required to make by Code §22-4-3 must be filed with the Department of Mines within fifteen (15) days after the receipt of this Application by Department. Copies of this Permit Application and the enclosed plat and reclamation plan have been mailed by registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessees on or before the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO: BLANKET BOND

OFFICE OF OIL AND GAS, 1615 Washington Street, East Charleston, West Virginia

Donald R. Laughlin
Well Operator

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) S. W. Jack Drilling Co.
Address P. O. Box 697
Indiana, PA 15701

GEOLOGICAL TARGET FORMATION, ALEXANDER

Estimated depth of completed well, 5700 feet Rotary / Cable tools
Approximate water strata depths: Fresh, 80 feet; salt, 1450 feet.
Approximate coal seam depths: 1445 Is coal being mined in the area? Yes / No

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		
Conductor	11 3/4			X		✓	To SURFACE	Kinds
Fresh water								
Coal								Sizes
Intermediate	8 5/8		20	X			1550 To SURFACE	
Production	4 1/2		10 1/2	X			5700 450 Sks.	Depths set
Tubing								
Liners								Perforations:
								Top Bottom

NOTE: Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-3 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code § 22-4-2, (iii) Form IV-9, "Reclamation Plan", applicable to the reclamation required by Code § 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code § 22-4-12a, and (v) if applicable, the consent required by Code § 22-4-8a from the owner of any water well or dwelling within 200 feet of the proposed well.

A separate Form IV-3 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-3 filed in connection therewith.

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions being in accordance with Chapter 22, of the W. Va. Code, the location is hereby approved for drilling renewed. This permit shall expire if operations have not commenced by 11-23-81.

John W. Boudette
Deputy Director - Oil & Gas Division

The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code § 22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof:

W A I V E R

The undersigned coal operator / owner / lessee / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

12/08/2023



RECEIVED
JUL 2 1981

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

OIL & GAS DIVISION
DEPT. OF MINES **Oil and Gas Division**
WELL RECORD

Quadrangle Big Isaac 7 1/2
Permit No. 47-017-2799

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

Company Doran & Associates, Inc.
Address 200 Roessler Rd., Pgh., PA 15220
Farm D. Louchery #4 Acres 172
Location (waters) Trough Fork
Well No. K-U-5 Elev. 1309
District Green brier County Doddridge
The surface of tract is owned in fee by Olan Cumberledge

Address Rte. 3, Salem, WV 26426
Mineral rights are owned by Daniel Louchery
Address P.O. Box 1206, Clarksburg,
Drilling Commenced 5-17-81 WV 26201
Drilling Completed 5-22-81
Initial open flow -- cu. ft. -- bbls.
Final production 1007 m. cu. ft. per day --- bbls.
Well open --- hrs. before test 1950 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 3-10" 11 3/4			
9 5/8			
8 5/8	1524	1524	265 sks
7			
5 1/2			
4 1/2	5640	5640	215 sks
3			
2			
Liners Used			

Well treatment details:

Attach copy of cementing record.

STIMULATION RECORD

DATE:	INTERVAL PERFORATED:	FROM	TO	AMT FLUID	AMT SAND
6-12-81		2500	2529	446 BBLs	60,000
		2400	2444	514 BBLs	60,000

Coal was encountered at 115', 1270' Feet _____ Inches _____
Fresh water 388' Feet _____ Salt Water _____ Feet _____
Producing Sand Gantz, 30' Sand, 50' Sand, Fifth Sand, Depth 2882, 3004, 2954, 3210, 3874,
Speechley, Balltown, Bradford, Riley, Benson 4028, 4420, 5038, 5128

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Substructure			0	5		
Sand			5	75		
Shale			75	115		
Coal			115	128		
Sand & Shale			128	388	F.W. @388	
Sand & Shale			388	1270		
Coal			1270	1275		
Sand & Shale			1275	1524		
Shale			1524	1801		
Sand			1801	2100		
Lime			2100	2240		
Sand			2240	2280		
Sand			2280	3027	gas @2320, 2360	
Shale			3027	3425		
Slate			3425	3550		
Sand			3550	3577		
Shale			3577	3600		
Sand & Shale			3600	3650		
Sand			3650	3700		
Sand & Shale			3700	3800		
Sandy Shale			3800	3870		
Sand			3870	3884		
Sandy Shale			3884	4010		
Sand			4010	4056		

12/08/2023

(over)

* Indicates Electric Log tops in the remarks section

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
Sandy Shale			4056	4150		
Sand			4150	4188		
Shale			4188	4300		
Sand & Shale			4300	4460		
Sand			4460	4480		
Shale			4480	4550		
Sand			4550	4560		
Shale			4560	4650		
Sand			4650	4700		
Sand & Shale			4700	5182		
Sand			5182	5224	Gas @5185'	
Shale			5224	5310		
Sand			5310	5404		
Sandy Shale			5404	5490		
Sand			5490	5580		
Shale & Sand			5580	5690		
Sand			5690	5700		
Sandy Shale			5700	5710		
Shale			5710	5714		
Driller's T.D.				5714		
Gantz			2882	2908		
50' Sand			2954	2985		
30' Sand			3004	3025		
Fourth Sand			3110	3120		
Fifth Sand			3210	3220		
Speechley			3874	3904		
Balltown			4028	4058		
Bradford			4420	4430		
Riley			5038	5064		
Benson			5182	5194		
Logger's T.D.				5796		

12/08/2023

Date June 26 19 81
APPROVED Donald P. Laughlin Owner
By Vice President - Operations
(T118)

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

Corrected - 7-18-81

WELL RECORD

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

Quadrangle Big Issac 7 1/2

Permit No. 47-017-2799

Company <u>Doran & Associates, Inc.</u>	Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Address <u>200 Roessler Road</u>				
Farm <u>D. Louchery #4</u> Acres <u>172</u>	Size			
Location (waters) <u>Traugh Fork</u>	<u>20-16</u>			
Well No. <u>K-U-5</u> Elev. <u>1309</u>	Cond.			
District <u>Greenbrier</u> County <u>Doddridge</u>	<u>13-10"</u>			
The surface of tract is owned in fee by <u>Olan Cumberledge</u>	<u>9 5/8</u>			
Address <u>Rt. 3, Salem WV 26426</u>	<u>8 5/8</u>	<u>1524</u>	<u>1524</u>	<u>265sks</u>
Mineral rights are owned by <u>Daniel Louchery</u>	<u>7</u>			
Address <u>P. O. Box 1206, Clarksburg WV 26201</u>	<u>5 1/2</u>			
Drilling Commenced <u>5-17-81</u>	<u>4 1/2</u>	<u>5640</u>	<u>5640</u>	<u>215sks</u>
Drilling Completed <u>5-22-81</u>	<u>3</u>			
Initial open flow <u>--</u> cu. ft. <u>--</u> bbls.	<u>2</u>			
Final production <u>1007 m</u> cu. ft. per day <u>--</u> bbls.	Liners Used			
Well open <u>72</u> hrs. before test <u>1950</u> RP.				
Well treatment details:				

Attach copy of cementing record.

STIMULATION RECORD

DATE:	INTERVAL PERFORATED:	FROM	TO	AMT FLUID	AMT SAND
<u>6-12-81</u>		<u>5531</u>	<u>5539</u>	<u>446 BBLs</u>	<u>60,000</u>
"		<u>5182</u>	<u>5192</u>	<u>514 BBLs</u>	<u>60,000</u>
"		<u>5060</u>	<u>5064</u>		

Coal was encountered at 115', 1270' Feet _____ Inches
Fresh water 388' Feet _____ Salt Water _____ Feet _____
Producing Sand Alexander, Benson, Riley Depth 5520', 5182', 5038'

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Substructure			0	5		
Sand			5	75		
Shale			75	115		
Coal			115	128		
Sand & Shale			128	388		F. W. @ 388'
Sand & Shale			388	1270		
Coal			1270	1275		
Sand & Shale			1275	1524		
Shale			1524	1801		
Sand			1801	2100		
Lime			2100	2240		
Sand			2240	2280		
Sand			2280	3027		gas @ 2320, 2360
Shale			3027	3425		
Slate			3425	3550		
Sand			3550	3577		
Shale			3577	3600		
Sand & Shale			3600	3650		
Sand			3650	3700		
Sand & Shale			3700	3800		
Sandy Shale			3800	3870		
Sand			3870	3884		
Sandy Shale			3884	4010		
Sand			4010	4056		
Sandy Shale			4056	4150		

RECEIVED
12/08/2023

JUL 22 1981

OIL & GAS DIVISION
DEPT. OF MINES

(over)

* Indicates Electric Log tops in the remarks section.

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Sand			4150.	4188		
Shale			4188	4300		
Sand & Shale			4300	4460		
Sand			4460	4480		
Shale			4480	4550		
Sand			4550	4560		
Shale			4560	4650		
Sand			4650	4700		
Sand & Shale			4700	5182		
Sand			5182	5224	Gas @ 5185	
Shale			5224	5310		
Sand			5310	5404		
Sandy shale			5404	5490		
Sand-			5490	5580		
Shale & Sand			5580	5690		
Sand			5690	5700		
Sandy Shale			5700	5710		
Shale			5710	5714		
Driller's T.D.				5714		
Gantz			2882	2908		
50' Sand			2954	2985		
30' Sand			3004	3025		
Fourth Sand			3110	3120		
Fifth Sand			3210	3220		
Speechley			3874	3904		
Balltown			4028	4058		
Bradford			4420	4430		
Riley			5038	5064		
Benson			5182	5194		
Alexander			5520	5530		
Logger's T. D.				5796		

12/08/2023

Date July 18, 1981, 19__
 APPROVED Donald R. Laughlin, Owner
 By Donald R. Laughlin Vice President -
 Operations

6-25-80
3-23-81-Ren

INSPECTOR'S PERMIT SUMMARY FORM

WELL TYPE Shallow
ELEVATION _____
DISTRICT Greenbrier
QUADRANGLE Big Tacos
COUNTY Dodd

API# 47-017-2799-Ren
OPERATOR DORAN ASS. INC.
TELEPHONE _____
FARM _____
WELL # Louchery O. 4#

SURFACE OWNER _____ COMMENTS _____ TELEPHONE _____
TARGET FORMATION _____ DATE APPLICATION RECEIVED _____
DATE STARTED _____
LOCATION _____ NOTIFIED _____ DRILLING COMMENCED _____

RECEIVED
DEPARTMENT OF ENERGY
OIL AND GAS

WATER DEPTHS _____, _____, _____, _____
COAL DEPTHS _____, _____, _____, _____

MAY 28 1986

CASING

Ran _____ feet of _____ "pipe on _____ with _____ fill up
Ran _____ feet of _____ "pipe on _____ with _____ fill up
Ran _____ feet of _____ "pipe on _____ with _____ fill up
Ran _____ feet of _____ "pipe on _____ with _____ fill up

TD _____ feet on _____

PLUGGING

Type	From	To	Pipe Removed

Pit Discharge date: _____ Type _____
Field analysis ph _____ fe _____ cl _____
Well Record received _____

Date Released 5-21-86

Mike Anderson
Inspector's signature 12/08/2023

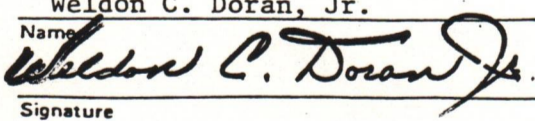
API# 47 017 - 2799.

LIST ALL VISITS FOR THIS PERMIT

	DATE	TIME	PURPOSE	COMMENTS
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

O.k to Rel ————— Notes

1981

1.0 API well number: (If not assigned, leave blank. 14 digits.)	47-017-2799				
2.0 Type of determination being sought: (Use the codes found on the front of this form.)	103 Section of NGPA	---	OIL & GAS DIVISION DEPT. OF MINES		
3.0 Depth of the deepest completion location: (Only needed if sections 103 or 107 in 2.0 above.)	2529 feet				
4.0 Name, address and code number of applicant: (35 letters per line maximum. If code number not available, leave blank.)	Doran & Associates, Inc. Name 200 Roessler Street Pittsburgh City		PA State	15220 Zip Code 023835 Seller Code	
5.0 Location of this well: [Complete (a) or (b).] (a) For onshore wells (35 letters maximum for field name.)	Greenbrier Field Name Doddridge County		WV State		
(b) For OCS wells:	NA Area Name		NA Block Number		
	Date of Lease: Mo. Day Yr.		NA OCS Lease Number		
(c) Name and identification number of this well: (35 letters and digits maximum.)	D. Louchery #4 KU - 5				
(d) If code 4 or 5 in 2.0 above, name of the reservoir: (35 letters maximum.)	NA				
6.0 (a) Name and code number of the purchaser: (35 letters and digits maximum. If code number not available, leave blank.)	Consolidated Gas Supply Corp. Name		004228 Buyer Code		
(b) Date of the contract:	Not Yet Available				
(c) Estimated total annual production from the well:	30 Million Cubic Feet				
		(a) Base Price	(b) Tax	(c) All Other Prices [Indicate (+) or (-).]	(d) Total of (a), (b) and (c)
7.0 Contract price: (As of filing date. Complete to 3 decimal places.)	\$/MMBTU	NA	NA	NA	NA
8.0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.)	\$/MMBTU	2.476	NA	NA	2.476
9.0 Person responsible for this application:	Weldon C. Doran, Jr. President				
Agency Use Only	Name  Signature Date Application is Completed: 7-2-81 Phone Number: 412-344-5200				
Date Received by Juris. Agency					
Date Received by FERC					
JUL 9 1981					

12/08/2023

AUG 11 1981

PARTICIPANTS:

DATE: _____

BUYER-SELLER CODE

WELL OPERATOR: Doran & Associates, Inc

023835

FIRST PURCHASER: Consolidated Gas Supply Corp.

004228

OTHER: _____

W. Va. Department of Mines, Oil & Gas Division
 WELL DETERMINATION FILE NUMBER
81-0709 - 103-017-2799
 Use Above File Number on all Communications
 Relating to Determination of this Well

*Deferred for notarization of IV-54
 and PIP calculation factors
 Qualifies J. Hezzy*

CHECK EACH ITEM AS COMPLETE OR NOTE WHAT IS MISSING

ITEM NO.

- 1. FERC -121 Items not completed - Line No. 7.0 All, 8.0 bc
- 2. IV-1 Agent Al Sorcan
- 3. IV-2 Well Permit
- 4. IV-6 Well Plat
- 5. IV-35 Well Record Drilling Deepening
- 6. IV-36 Gas-Oil Test: Gas Only Was Oil Produced? Ratio
- 7. IV-39 Annual Production _____ years
- 8. IV-40 90 day Production _____ Days off line: _____
- 9. IV-48 Application for certification. Complete?
- 10-17. IV Form 51 - 52 - 53 - 54 - 55 - 56 - 57 - 58 Complete? Affidavit Signed
- 18-28. Other: Survey _____ Logs _____ Geological Charts _____
 Structure Map _____ 1: 4000 Map _____ Well Tabulations _____
 Gas Analyses _____
- (5) Date commenced: 5-17-81 Date completed 5-22-81 Deepened _____
- (5) Production Depth: 2882, 3004, 2954, 3210, 3874, 4028, 4420, 5038, 5128
- (5) Production Formation: Gantz, 30' sand, 50' sand, 5' sand, Speerly, Beltain, Bedford, Bens ^{Riley}
- (5) Final Open Flow: 1007 MCF
- (5) After Frac. R. P. 1950#
- (6) Other Gas Test: _____
- (7) Avg. Daily Gas from Annual Production: _____
- (8) Avg. Daily Gas from 90-day ending w/1-120 days _____
- (8) Line Pressure: _____ PSIG from Daily Report
- (5) Oil Production: _____ From Completion Report _____
- 10-17. Does lease inventory indicate enhanced recovery being done NO
- 10-17. Is affidavit signed? Notarized? _____
- Does official well record with the Department confirm the submitted information? 12/08/2023
- Additional information _____ Does computer program confirm? _____
- Was Determination Objected to _____ By Whom? _____

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

Date July 2 1981

Operator's Well No KU - 5

API Well No 47 - 017 - 2799
State County Permit

WELL CLASSIFICATION FORM
NEW ONSHORE PRODUCTION WELL
MCPA Section 103

WELL OPERATOR Doran & Associates, Inc
ADDRESS 200 Roessler Road
Pittsburgh, PA 15220
GAS PURCHASER Consol. Gas Supply Corp.
ADDRESS 445 W. Main St.
Clarksburg, WV 26301

DESIGNATED AGENT Alvin Sorcan
ADDRESS Rt. 4 Box 444
Buckhannon, WV 26201
LOCATION: Elevation 1309
Watershed Trough Fork
Dist. Green- County Doddridge Quad Big Isaac
brier
Gas Purchase Contract No. NA
Meter Chart Code NA
Date of Contract NA

* * * * *

Date surface drilling was begun: 5-17-81

Indicate the bottom hole pressure of the well and explain how this was calculated:

2220
2073.3 PSI calculated from $P_{ws} = P_{wh} e^{\frac{.01875 \times SG \times D}{Z \times \gamma_g \times T \times \gamma_g}}$
SG = .6
D = 5530
Z AND = .83
T AND = 575

AFFIDAVIT

I, Weldon C. Doran, Jr., having been first sworn according to law state that surface drilling of the well for which this determination is sought was begun on or after February 14, 1977; the well satisfies applicable state or federal well spacing requirements and the well is not within a proration unit, in existence at the time surface drilling began, which was applicable to the reservoir from which gas is or will be produced and which applied to any other well producing gas in commercial quantities or on which surface drilling began on or after February 14, 1977, and which was capable of producing gas in commercial quantities. I state, further, that I have concluded, to the best of my information, knowledge and belief, that the well for which this determination is sought is a new onshore production well and that I am not aware of any information not described in the application which is inconsistent with this conclusion.

Weldon C. Doran, Jr.

Pennsylvania
STATE OF ~~WEST VIRGINIA~~
COUNTY OF Allegheny, TO WIT:

I, M. Laurie Cecchini, a Notary Public in and for the state and county aforesaid, do certify that Weldon C. Doran, Jr. whose name is signed to the writing above, bearing date the 2nd day of July, 1981, has acknowledged the same before me, in my county aforesaid.

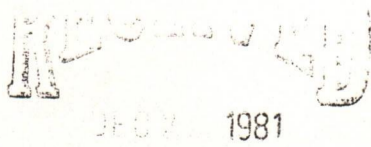
Given under my hand and official seal this 30th day of September, 1981.

My term of office expires on the 11th day of July, 1988.

M. LAURIE CECCHINI, NOTARY PUBLIC
SCOTT TOWNSHIP, ALLEGHENY COUNTY
MY COMMISSION EXPIRES JULY 11, 1983
Member, Pennsylvania Association of Notaries

[NOTARIAL SEAL]

M. Laurie Cecchini
Notary Public



12/08/2023

PSEUDO REDUCED PRESSURE

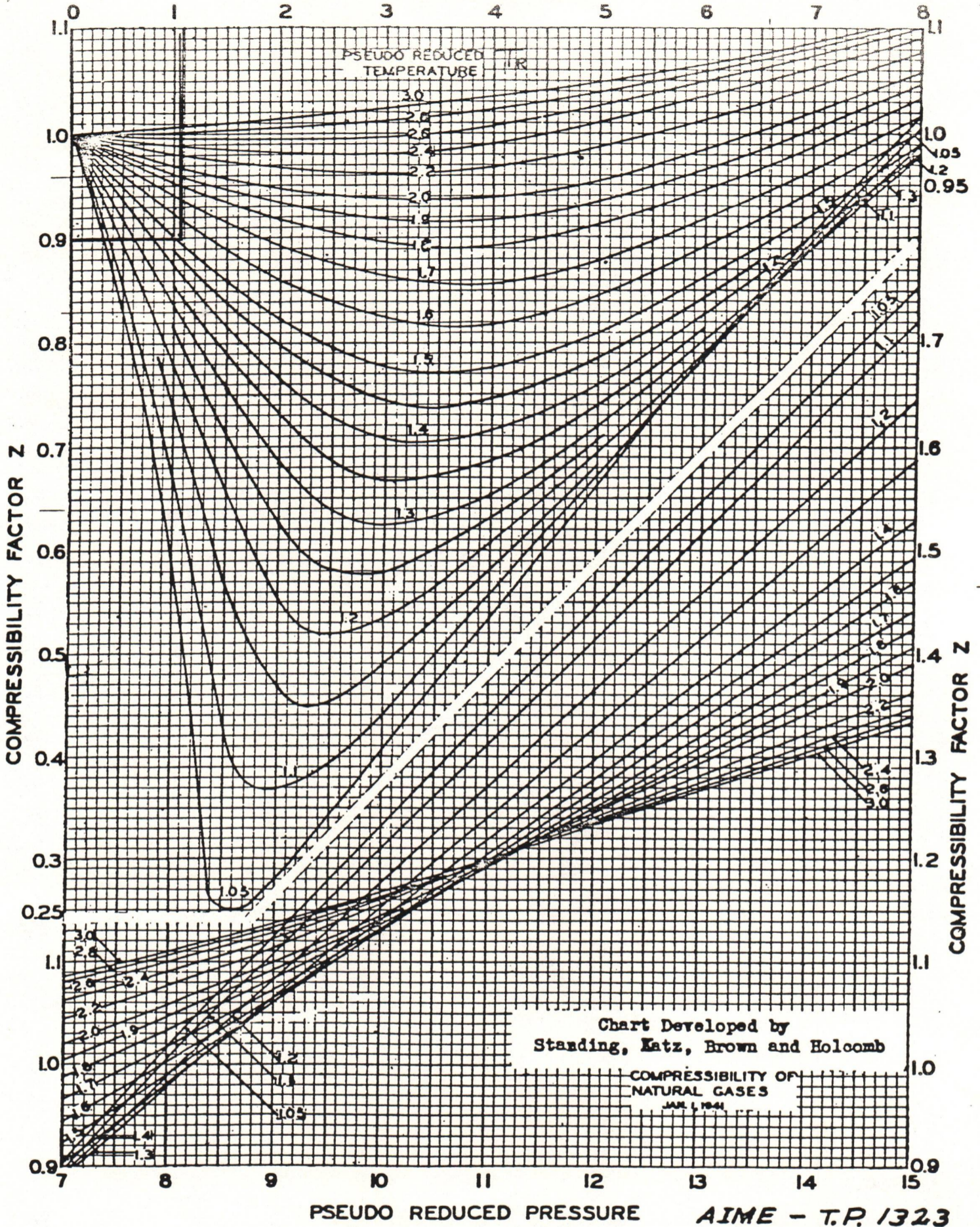


Chart Developed by Standing, Katz, Brown and Holcomb

COMPRESSIBILITY OF NATURAL GASES
JUNE 1, 1944

PSEUDO REDUCED PRESSURE

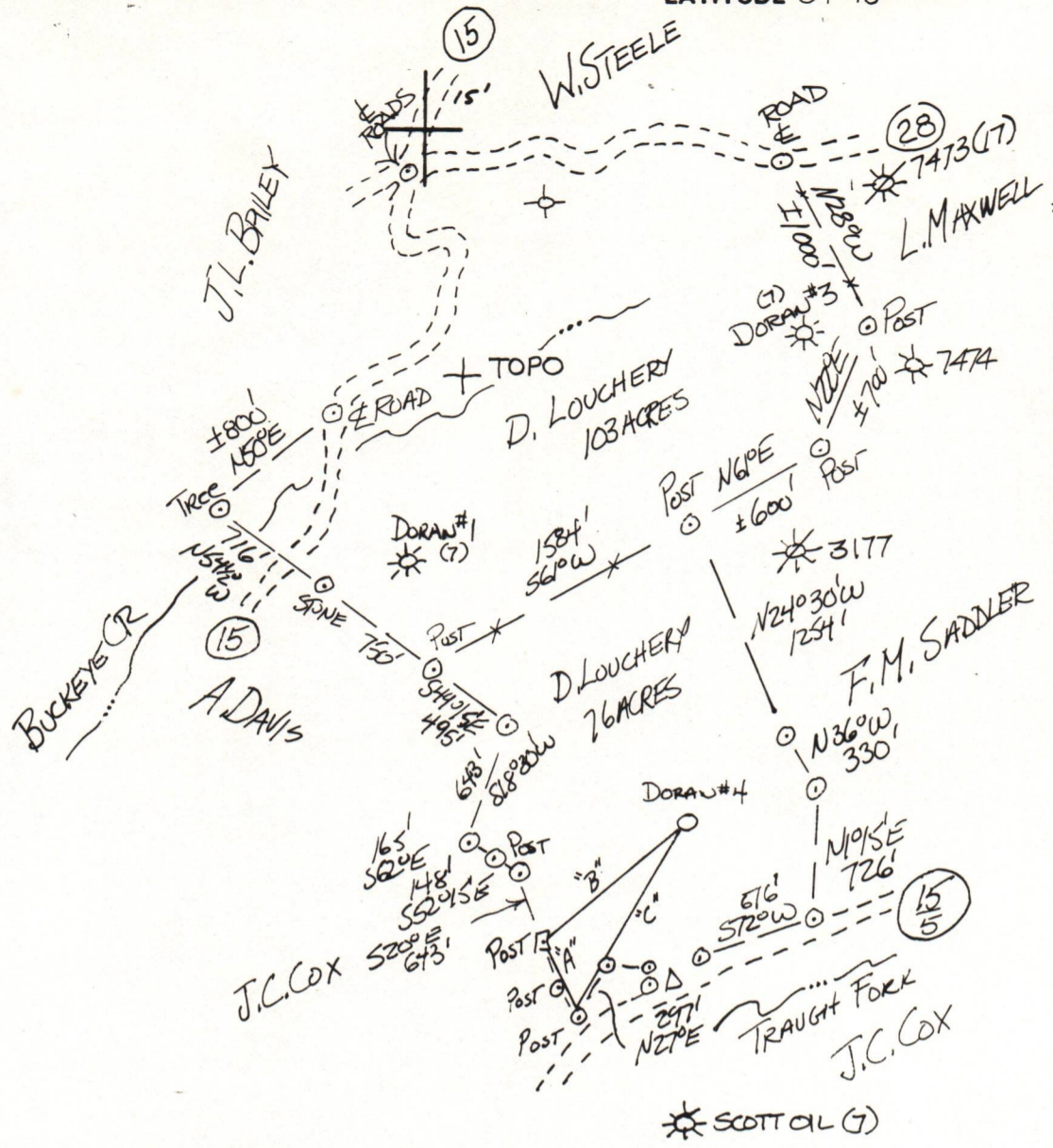
AIME - T.P. 1323

12/08/2023

LATITUDE 39°15'

LONGITUDE 80°32'30"

NORTH



"A" N20°32'W 436'
 "B" S51°40'W 929.5'
 "C" N30°20'E 1141.0'

FILE NO. 12-25-80
 DRAWING NO. _____
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1 IN 200
 PROVEN SOURCE OF ELEVATION BM ± 1/8 MILE SW (992)

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) Walter P. Lepout
 R.P.E. 7410 L.L.S. _____

PLACE SEAL HERE

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



DATE _____, 19____
 OPERATOR'S WELL NO. 4
 API WELL NO. 47-017-2799-R
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

Formerly: DOD-2519

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW ___
 LOCATION: ELEVATION 1309 WATER SHED TRAUGH FORK
 DISTRICT GREENBRIER COUNTY DODDRIDGE
 QUADRANGLE BIG ISAAC 7 1/2 VD 15'
 SURFACE OWNER OLAN CUMBERLEDGE ACREAGE 76
 OIL & GAS ROYALTY OWNER DANIEL LOUCHERY LEASE ACREAGE 172
 LEASE NO. 443

12/08/2023

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 ALEXANDER ESTIMATED DEPTH 5600
 WELL OPERATOR DORAN + ASSOCIATES INC DESIGNATED AGENT AL SORAN
 ADDRESS 200 ROESSLER ROAD PGH, PA. 15220 ADDRESS RTE 4. BOX 444 BUCKHANON WV 36201