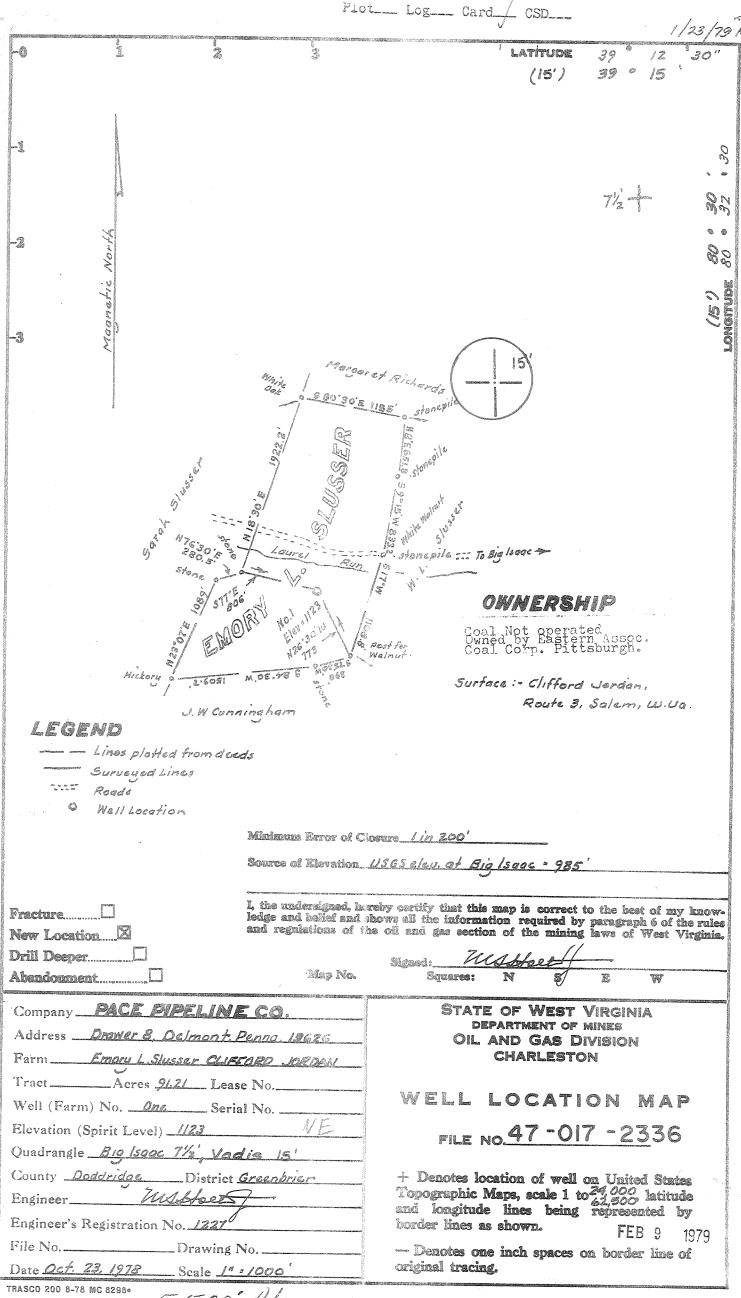
5500° alexander 6 BIG 15AAGS 147

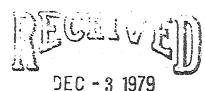
TRASI 00 12-78 MUSSES



TRASCO 200 8-78 MC 8298. 5500 Alexander



STATE OF WEST VIRGINIA DEPARTMENT OF MINES



40000

____ Inches

Salt Water

Oil and Gas Division

WELL RECORD

| OIL & | GAS DIVISION | N QiJ |
|-------|---------------------|-----------|
| DEPI. | Rotary MIN Cable | |
| | Recycling | |
| | Water Flood_ | _ Storage |
| | Dienocal | |

(Kind)

Quadrangle **Big Isaac 7**½

Permit No. <u>47-017-2336</u>

Fresh water 3/4" @ 40

| | | 1 | | |
|---------------------------------------------------------------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Company PACE PIPE LINE COMPANY Address DRAWER B. DELMONT, PA. 15626 | Casing and Tubing | Used in Drilling | Left in Well | Cement fill up Cu. ft. (Sks.) |
| Farm E. L. Slusser Acres 91.21 | | | ļ | |
| Location (waters) Laurel Run of Big Isaac Creek | Size | | | · |
| Well No. 1 Elev. 11238 | 20-16 | | | A STATE OF THE STA |
| District Greenbrier County Doddridge | Cond. | | | |
| The surface of tract is owned in fee by | 13-10" | | | economic de la companya de la compan |
| Clifford Jordan | 9 5/8 | | | |
| Address RFD #3, Salam, W. Va. | 8 5/8 | 965 | 965 | 188 CF |
| Mineral rights are owned by E. L. Slussar Hairs | 7 | | | The state of the s |
| Address Salem, W. Va. | 5 1/2 | and positions are | | |
| Drilling Commenced October 10, 1979 | 4 1/2 | - Constitution of the Cons | 53,88 | 210 GF |
| Drilling Completed October 16, 1979 | 3 | | | |
| Initial open flow cu. ft. bbls. | 2 | | | |
| Final production 888 H cu. ft per daybbls. | Liners Used | | | |
| Well open hrs. before test 2100 RP. | | | <u> </u> | |
| Well treatment details: | Attach copy of | cementing reco | ord. | |
| 5320-5327 Water frac, F78-10 gal, W-22 15 | | | | il, L-41 Iron |
| Agt. 100#, 80-100-10000, 20-40 Pro agt 300 | | | | |
| 5065-56. / 8 holes, 5086-90 7 holes 500 gal | MSR acid, J | 266 gel ag | t 425#, T | 122 Non emul 20 |
| F78 EZE Flo 10 gal, L53 & L41 | | | ** | |
| 4723-4736 500 gal X acid, J266 gel agt 42 | 5#. F78 EZE 1 | Flo 10 gal | . W22 Em | ul Agt 20 gal. |

L-53 Clay agt 13 gal, L41 Iron agt 100#, 80-100 10000, 20-40

___Feet __

Coal was encountered at 120-125, 457-460 Feet 60" & 36"

| rresn water_= | | | l | Sair A | vater reet | |
|--------------------------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Producing Sand Alexander | | | Depth | | | |
| | | The state of the s | | | | |
| Formation | Color | Hard or Soft | Top Feet | Bottom Feet | Oil, Gas or Water * Remarks | |
| Clay | | | 0 | 10 | | |
| Shale | | a de constante de | 10 | 20 | ukasasasasasasasasasasasasasasasasasasas | |
| Sand | White | | 20 | 120 | 3/4" Stream Water @ 40" | |
| Coal | | | 120 | 125 | | |
| Sand | | ing process | 125 | 150 | | |
| Rock | Red | | 150 | 160 | | |
| Shala | | | 160 | 190 | | |
| Sand | | DO COSPANIE | 190 | 290 | | |
| Shale | | | 290 | 360 | A The second of | |
| Rock | Red | | 360 | 370 | | |
| Shale | | | 370 | 457 | | |
| Coal | | | 457 | 460 | | |
| Sand & Sha | le | | 460 | 515 | | |
| Rock | Red | and the second | 515 | 675 | | |
| Shale | | | 675 | 755 | | |
| Rock | Red | | 755 | 840 | 9 11 | |
| Sand | | | 840 | 860 | | |
| Shale | | | 860 | 890 | appendigo | |
| Sand | | | 890 | 965 | · | |
| Shale | | | 965 | 1885 | | |
| Big Lime & | | | 1885 | 2005 | n de la companya del companya de la companya del companya de la c | |
| Sand & Sha | | | 2005 | 2360 | · · · · · · · · · · · · · · · · · · · | |
| Sand & Sha | Le | | 2360 | 2830 | | |
| Shale | | | 2830 | 3100 | Gas 3093- 4/10-1" FM Water | |

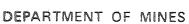
(over)

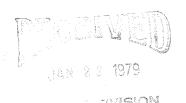
^{*} Indicates Electric Log tops in the remarks section.

| Formation Colo | Hard or Soft | Top Feet | Bottom Feet | Oil, Gas or Water * Remarks |
|-------------------------------|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Sand Shale Sand & Shale | | 3100 3130 3342 | 3130 3342 3779 | Gas 3400- 2/10-1" FM Water |
| Shale Sand & Shale | | 3379 4152 | 4152 5000 | Gas 3716- 2/10-1" FM Water Gas 3997- 2/10-1" FM Water Gas 4300- 2/10-1" FM Water Gas 4587- 2/10-1" FM Water Gas 4900- 2/10-1" FM Water |
| Benson Sand Shale ALEX | | 5000 5025 | 5025 5515 | Gas 5515- 6/10-1" FM Water |
| H L L K | | | | TD 5515* |
| | | | | |
| | | eregoziania angles angl | | |
| | | | | |
| | | | Attitudes as process representation of the control | Perforations: |
| | | | | 13 Perf. 5330-5324 13 Perf. 5068-5093 14 Perf. 2339 -4726 |
| | | | The state of the s | |
| | | | | |
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| | | | | |
| • | : - | | sa garage | |

APPROVED PAGE PIPE LINE COMPANY, Owne







Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

| TO THE DEPARTMENT OF MINES, | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Charleston, W. Va. | | DATE | an. 10, 1979 | |
| Surface Owner Clifford Jordan | | Company | Pace Pipe | L133 00. |
| Address 33 33 | | Address | | Delmont, Fa. 1362 |
| Mineral Owner 3007 L 3108321 | and the second second | Farm | mory L. Slusser | Acres91*21 |
| Address Sales, W | | Location (wa | ters) Lourol Ru | 1 |
| Coal Owner Satern Coal Co. | | | | |
| Address Pittaburgh | | District | Greenbrier | County Octoridge |
| Coal Operator Sons | | | | |
| Address. THIS PERMIT MUST BE POSTED AT THE | WELL SITE | | | |
| All provisions being in accordance with of the W. Va. Code, the location is hereb | oy approved | | | |
| for <u>drilling</u> . This permit sl | In and I was the single state of the | PECTOR BE NOTIFIE | D PAUL GARRET | prp |
| operations have not commenced by 9-2 | | <i></i> | FROM GRADA. | in and the second secon |
| | ADD | RESS 32 | L BEECH ST., CLA | RKSBURG, WV |
| Deputy Director - Oil & Gas Division | PHO | NE 622-3 | 871 | |
| GENTLEMEN: | | | • | |
| The undersigned well operator is entitled | | | | |
| title thereto, (or as the case may be) under to | 708t | and reco | ded on the | by day of |
| | | Ŭ | | |
| NEW WELLDRI | | | | RE OR STIMULATE |
| OIL AND GAS WELL ORIGI | NALLY DRILLED B | EFORE JUNE | 5, 1969. | |
| The enclosed plat was prepared by a re have been notified as of the above date. | gistered engineer or l | icensed land s | urveyor and all coal o | wners and/or operators |
| The above named coal owners and/or op to make by Section 3 of the Code, must be | perator are hereby not received by, or filed | ified that any with the Dep | objection they wish to artment of Mines withi | make, or are required n ten (10) days. * |
| Copies of this notice and the enclosed pl or coal owners at their above shown respe same day with the mailing or delivery of th | ctive address | | day | before or on the |
| | • | ry truly yours | 1070 L. office wish minu hillhouse who have hills high side. | _ |
| PLEASE SUBMIT COPIES OF ALL | | | 3.9. Angol | |
| GEOPHYSICAL LOGS DIRECTLY TO: | (Sig | gn Name) | Well Operator | as John. |
| WEST VIRGINIA GEOLOGICAL AND | | | | |
| ECONOMIC SURVEY | Address | | Street | |
| P. O. BOX 879 | of | | | |
| MORGANTOWN, WEST VIRGINIA 2650 | 95 Well Operator | r | | |
| AC-304 - 292-6331 | | in a serie in the series of th | City or Town | er flyg |
| | | | FERNO 15626 | water water and the same and the |
| | | | State | |

*SECTION 3.... If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of motice 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.

47-017-2336 PERMIT NUMBER

THIS IS AN ESTIMATE ONLY ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

| PROPOSED WORK ORDER TO | RESPONSIBLE AGENT NAME ADDRESS TELEPHONE ROTARY | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ADDRESS TELEPHONE ESTIMATED DEPTH OF COMPLETED WELL: PROPOSED GEOLOGICAL FORMATION: | ADDRESS TELEPHONE ROTARY | 6-18-28-28-48-18-18-18-18-18-18-18-18-18-18-18-18-18 |
| TELEPHONE ESTIMATED DEPTH OF COMPLETED WELL: 5500 PROPOSED GEOLOGICAL FORMATION: | TELEPHONE ROTARY | (A. 1800) |
| ESTIMATED DEPTH OF COMPLETED WELL: PROPOSED GEOLOGICAL FORMATION: | ROTARY | |
| PROPOSED GEOLOGICAL FORMATION: | and the second of the second o | |
| | | CABLE TOOLS |
| · · · · · · · · · · · · · · · · · | COMP | ** |
| | | |
| | CLING WATER FL | OOD OTHER |
| TENTATIVE CASING PROGRAM: | | |
| | | |
| CASING AND TUBING USED FOR SIZE DRILLING | LEFT IN | CEMENT III UP |
| SIZE DRILLING | Will | OR SACKS - CUBIC LL |
| 13 - 10 | | |
| 9 - 5/8 | | |
| 8 - 5/8 | | 100 |
| 7 | | |
| 5 1/2 | | |
| 4 1/2 | | |
| 3 | | Perf. Top. |
| 2 | | Perf. Botton |
| Liners | | Perf. Top. |
| | | Perf. Bottom |
| S COAL BEING MINED IN THE AREA? CO DRILL: SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PEROF PLAT. CO DRILL DEEPER OR REDRILL: SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING OR WELLS DRILLED PRIOR TO 1929, A PERMANENT MUST ALSO BE SUBMITTED. | RMIT FEE, PERFORMANCE B | |
| O FRACTURE - STIMULATE: | | |
| OIL AND/OR GAS WELL ORIGINALLY DRILLED BE BOND, PERMANENT PLAT AND ORIGINAL WELL I | RECORD. | |
| OIL AND/OR GAS WELL ORIGINALLY DRILLED ON ING ORIGINAL PERMIT NUMBER, AND PERFORMAN | CE BOND. | |
| Required forms must be filed within ninety (90) days (four (24) hours in advance. | of completion for bond release. | Inspector to be notified twenty- |
| | | • |
| A. | | The state of the s |
| | | |
| The following waiver must be completed by the coal ereof. | operator if the manual to the | |
| ereof. | operator if the permit is to be i | ssued within ten days of receipt |
| AIVER: I the undersigned, Agent for | Coal Coal Coal | |
| this lease have examined and place on our mine | maps this proposed well locati | |
| We the Coal Compare providing operator has complied with all rules and a Code. | ny have no objections to said we regulations in Articles 4, 5, and 7 | ell being drilled at this location, , Chapter 22 of the West Virginia |
| coue. | D n | ************************************** |
| | Fo | r Coa Company |
| | CA: 4 | |
| | | Official Title |