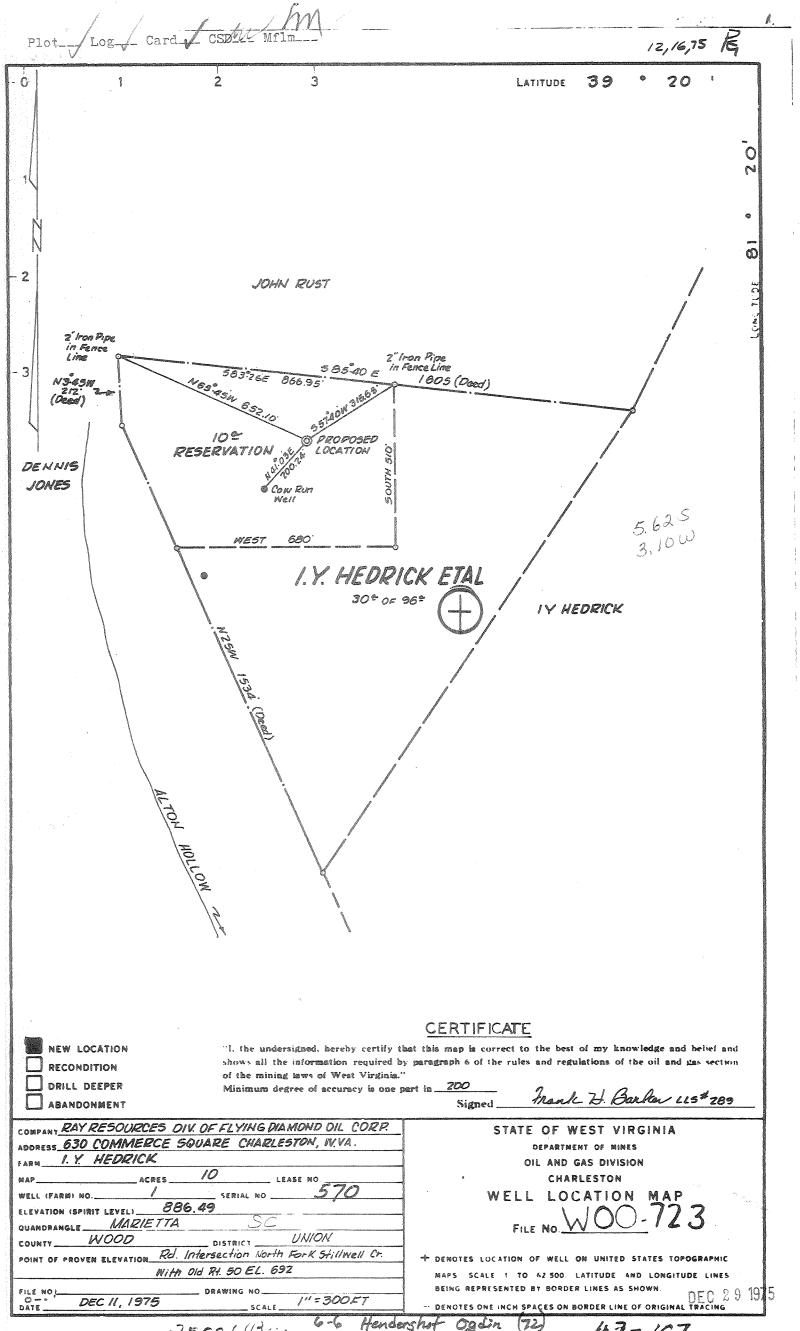
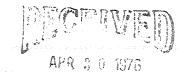


25001 Bires 47-107







STATE OF WEST VIRGINIA DEPARTMENT OF MINES

Oil and Gas Division

RECORDS

| Quadrangle_ | Mar | i | et | ta |
|-------------------|-------------|---|----|----|
| ~ need: a 1 & 10- | | | | |

RAY RESOURCES, DIVISION OF FLYING DIAMOND OIL CORPORATION

Permit No. WOO-723

| Rotary_XX(| Oil XX |
|-------------|---------|
| Cable | Gas |
| Recycling | Comb |
| Water Flood | Storage |
| Disposal | (Kind) |

| Company FLYING DIAMOND OIL CORPO | DRATION | Casing and | Used in | Left | Cement fill up |
|--|--|--|---------------|---|----------------|
| ddress 630 Commerce Sq., Chas., WV 25301 | | Tubing | Drilling | in Well | Cu. ft. (Sks.) |
| Farm I. Y. Hedrick Ac | res10 | 2 601116 | Dimme | 331 77 (21) | Cu. It. (DKS.) |
| Location (waters) | Size | | | | |
| Well No. 570 Elev. 886.49' | | 20-16 | | | |
| District Union County | Wood | Cond. | | | |
| The surface of tract is owned in fee by I | | 13-10" | | | |
| Hedrick | | 9 5/8 | | | |
| Address Walker, W. Va. | | 8 5/8 | 2991 | 299 ' | To Surf. |
| Mineral rights are owned by I. Y. Hedr: | | 7 | | | |
| AddressWalker, W. Va | 1. | 5 1/2 | | | 80 m - 6 |
| Drilling Commenced 12-17-75 | | 4 1/2 | 2374* | 2374' | 75 Sks. |
| Drilling Completed 1-6-76 | *************************************** | 3 | | | |
| Initial open flowcu. ft | The state of the s | 4 | | | |
| Final productioncu. ft. per day _ | <u>2bbls.</u>) | Liners Used | | | |
| Well openhrs. before test_ | RP. | | <u> </u> | | |
| Well treatment details: | | Attach copy of c | ementing reco | rd. | |
| Perforated from 2275' - 2279 | with 16 ho | les | _ | | |
| Fraced with: 22,000# - 20/4 | | | nd | | |
| Breakdown: 1400 psi; Avg. | Pressure: 2 | 413 psi: Avo | g. hpm 29 | 7 | |
| Immediate shut-in - 1000 psi | | | | | |
| oil: 5% mud acid - 250 gal. | · · · · · · · · · · · · · · · · · · · | | | *************************************** | |
| | | | | | |
| Coal was encountered at | F2 4 | | * 4 | | |
| | 27 A A 7 | | inches | , | |
| | | | | | |
| Fresh water 110' Fe | et | Salt V | Vater1 | 480' | Feet |
| Fresh water 110' Fe | et | | Vater1 | 480' | |
| Fresh water 110' Fe | et | Salt V | Vater1 | 480' | |
| Fresh water 110' Fe | et | Salt V | Vater1 | 480' - 2277' | |
| Fresh water 110' Fe Producing Sand Berea Formation Color Hard or Soft | Top Feet | Salt V Depth Bottom Feet | Vater 1 2274 | 480' - 2277' | |
| Fresh water 110' Fe Producing Sand Berea Formation Color Hard or Soft Slate | Top Feet | Salt V Depth Bottom Feet | Vater 1 2274 | 480' - 2277' | |
| Fresh water 110' Fe Producing Sand Berea Formation Color Hard or Soft Slate Red Rock | Top Feet 315 450 | Bottom Feet 450 471 | Vater 1 2274 | 480' - 2277' | |
| Fresh water 110' Fe Producing Sand Berea Formation Color Hard or Soft Slate Red Rock Slate | Top Feet 315 450 471 | Bottom Feet 450 471 493 | Vater 1 2274 | 480' - 2277' | |
| Fresh water 110' Fe Producing Sand Berea Formation Color Hard or Soft Slate Red Rock Slate Sand | Top Feet 315 450 471 493 | Bottom Feet 450 471 493 510 | Vater 1 2274 | 480' - 2277' | |
| Fresh water 110' Fe Producing Sand Berea Formation Color Hard or Soft Slate Red Rock Slate Sand Red Rock | Top Feet 315 450 471 493 510 | Bottom Feet 450 471 493 510 524 | Vater 1 2274 | 480' - 2277' | |
| Fresh water 110' Fe Producing Sand Berea Formation Color Hard or Soft Slate Red Rock Slate Sand Red Rock Sand Red Rock Sand | Top Feet 315 450 471 493 510 524 | Bottom Feet 450 471 493 510 524 552 | Vater 1 2274 | 480' - 2277' | |
| Fresh water 110' Fe Producing Sand Berea Formation Color Hard or Soft Slate Red Rock Slate Sand Red Rock Sand Slate | Top Feet 315 450 471 493 510 524 552 | Bottom Feet 450 471 493 510 524 552 564 | Vater 1 2274 | 480' - 2277' | |
| Fresh water 110' Fe Producing Sand Berea Formation Color Hard or Soft Slate Red Rock Slate Sand Red Rock Sand Slate Sand Slate Sand | Top Feet 315 450 471 493 510 524 552 564 | Bottom Feet 450 471 493 510 524 552 564 594 | Vater 1 2274 | 480' - 2277' | |
| Fresh water 110' Fe Producing Sand Berea Formation Color Hard or Soft Slate Red Rock Slate Sand Red Rock Sand Slate Sand Slate Sand Slate Sand Slate Sand Shale | Top Feet 315 450 471 493 510 524 552 564 594 | Bottom Feet 450 471 493 510 524 552 564 594 620 | Vater 1 2274 | 480' - 2277' | |
| Fresh water 110' Fe Producing Sand Berea Formation Color Hard or Soft Slate Red Rock Slate Sand Red Rock Sand Slate Sand Slate Sand Shale Sand | Top Feet 315 450 471 493 510 524 552 564 594 620 | Salt V Depth Bottom Feet 450 471 493 510 524 552 564 594 620 625 | Vater 1 2274 | 480' - 2277' | |
| Fresh water 110' Fe Producing Sand Berea Formation Color Hard or Soft Slate Red Rock Slate Sand Red Rock Sand Slate Sand Shale Sand Shale | Top Feet 315 450 471 493 510 524 552 564 594 620 625 | Salt V Depth Bottom Feet 450 471 493 510 524 552 564 594 620 625 634 | Vater 1 2274 | 480' - 2277' | |
| Fresh water 110' Fe Producing Sand Berea Formation Color Hard or Soft Slate Red Rock Slate Sand Red Rock Sand Slate Sand Shale Sand Shale Sand | Top Feet 315 450 471 493 510 524 552 564 594 620 625 634 | Salt V Depth Bottom Feet 450 471 493 510 524 552 564 594 620 625 634 653 | Vater 1 2274 | 480' - 2277' | |
| Fresh water 110' Fe Producing Sand Berea Formation Color Hard or Soft Slate Red Rock Slate Sand Red Rock Sand Slate Sand Shale Sand Shale Sand Red Rock | Top Feet 315 450 471 493 510 524 552 564 594 620 625 634 653 | Salt V Depth Bottom Feet 450 471 493 510 524 552 564 594 620 625 634 653 657 | Vater 1 2274 | 480' - 2277' | |
| Fresh water 110' Fe Producing Sand Berea Formation Color Hard or Soft Slate Red Rock Slate Sand Red Rock Sand Slate Sand Shale Sand Shale Sand Red Rock Shale Sand Red Rock Shale | Top Feet 315 450 471 493 510 524 552 564 594 620 625 634 653 657 | Bottom Feet 450 471 493 510 524 552 564 594 620 625 634 653 657 687 | Vater 1 2274 | 480' - 2277' | |
| Fresh water 110' Fe Producing Sand Berea Formation Color Hard or Soft Slate Red Rock Slate Sand Red Rock Sand Slate Sand Shale Sand Shale Sand Red Rock Shale Sand Red Rock Shale Sand Red Rock Shale Sand | Top Feet 315 450 471 493 510 524 552 564 594 620 625 634 653 657 687 | Salt V Depth Bottom Feet 450 471 493 510 524 552 564 594 620 625 634 653 657 687 698 | Vater 1 2274 | 480' - 2277' | |
| Fresh water 110' Fe Producing Sand Berea Formation Color Hard or Soft Slate Red Rock Slate Sand Red Rock Sand Slate Sand Shale Sand Shale Sand Red Rock Shale Sand Red Rock Shale Sand Shale Sand Shale Sand Red Rock Shale Sand Shale | Top Feet 315 450 471 493 510 524 552 564 594 620 625 634 653 657 687 698 | Salt V Depth Bottom Feet 450 471 493 510 524 552 564 594 620 625 634 653 657 687 698 780 | Vater 1 2274 | 480' - 2277' | Remarks |
| Fresh water 110' Fe Producing Sand Berea Formation Color Hard or Soft Slate Red Rock Slate Sand Red Rock Sand Slate Sand Shale Sand Shale Sand Red Rock | Top Feet 315 450 471 493 510 524 552 564 594 620 625 634 653 657 687 698 780 | Salt V Depth Bottom Feet 450 471 493 510 524 552 564 594 620 625 634 653 657 687 698 780 794 | Vater 1 2274 | 480' - 2277' | |
| Fresh water 110' Fe Producing Sand Berea Formation Color Hard or Soft Slate Red Rock Slate Sand Red Rock Sand Slate Sand Shale Sand Shale Sand Red Rock Shale Sand Red Rock Shale Sand Shale Sand Shale Sand Red Rock Shale Sand Shale | Top Feet 315 450 471 493 510 524 552 564 594 620 625 634 653 657 687 698 780 794 | Salt V Depth Bottom Feet 450 471 493 510 524 552 564 594 620 625 634 653 657 687 698 780 794 879 | Vater 1 2274 | 480' - 2277' | Remarks |
| Fresh water 110' Fe Producing Sand Berea Formation Color Hard or Soft Slate Red Rock Slate Sand Red Rock Sand Slate Sand Shale Sand Shale Sand Red Rock Shale Sand Red Rock Shale Sand Red Rock Shale Sand Shale Sand Shale Sand Shale Sand Shale Sand Shale | Top Feet 315 450 471 493 510 524 552 564 594 620 625 634 653 657 687 698 780 794 879 | Salt V Depth Bottom Feet 450 471 493 510 524 552 564 594 620 625 634 653 657 687 698 780 794 879 892 | Vater 1 2274 | 480' - 2277' | Remarks |
| Fresh water 110' Fe Producing Sand Berea Formation Color Hard or Soft Slate Red Rock Slate Sand Red Rock Sand Slate Sand Shale Sand Red Rock Shale Sand Red Rock Shale Sand Red Rock Shale Sand | Top Feet 315 450 471 493 510 524 552 564 594 620 625 634 653 657 687 698 780 794 879 892 | Salt V Depth Bottom Feet 450 471 493 510 524 552 564 594 620 625 634 653 657 687 698 780 794 879 892 903 | Vater 1 2274 | 480' - 2277' | Remarks |
| Fresh water 110' Fe Producing Sand Berea Formation Color Hard or Soft Slate Red Rock Slate Sand Red Rock Sand Slate Sand Shale Sand Shale Sand Red Rock Shale Sand Shale Red Rock Shale Sand Shale | Top Feet 315 450 471 493 510 524 552 564 594 620 625 634 653 657 687 698 780 794 879 | Salt V Depth Bottom Feet 450 471 493 510 524 552 564 594 620 625 634 653 657 687 698 780 794 879 892 | Vater 1 2274 | 480' - 2277' | Remarks |
| Fresh water 110' Fe Producing Sand Berea Formation Color Hard or Soft Slate Red Rock Slate Sand Red Rock Sand Slate Sand Shale Sand Red Rock Shale Sand Red Rock Shale Sand | Top Feet 315 450 471 493 510 524 552 564 594 620 625 634 653 657 687 698 780 794 879 892 903 | Salt V Depth Bottom Feet 450 471 493 510 524 552 564 594 620 625 634 653 657 687 698 780 794 879 892 903 921 | Vater 1 2274 | 480' - 2277' | Remarks |
| Fresh water 110' Fe Producing Sand Berea Formation Color Hard or Soft Slate Red Rock Slate Sand Red Rock Sand Slate Sand Shale Sand Red Rock Shale Sand Red Rock Shale Sand Shale | Top Feet 315 450 471 493 510 524 552 564 594 620 625 634 653 657 687 698 780 794 879 892 903 921 | Salt V Depth Bottom Feet 450 471 493 510 524 552 564 594 620 625 634 653 657 687 698 780 794 879 892 903 921 925 | Vater 1 2274 | 480' - 2277' | Remarks |

(over)

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

| Formation Color Hard or Soft | Top Feet & | Bottom Feet | Oil, Gas or Water * Remarks |
|--|--|--|--|
| Red Rock Shale Sandy Shale Sand Shale Sand Shale Sand Slate & Sand Slate Sand Slate Sand Slate Sand Shale Sand Shale Sand Shale Sand Shale Sand Shale Sand Shale Sand Slate Lime & Sand Slate Lime & Sand Slate Berea | 962 978 997 1035 1101 1114 1135 1257 1265 1360 1420 1425 1662 1676 1807 1820 1926 1974 2042 2276 2286 | 978 997 1035 1101 1114 1135 1257 1265 1360 1420 1425 1662 1676 1807 1820 1926 1974 2042 2276 2286 | Gas & Oil @ 1467' |
| | | | |
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| | | | n faza Harri Historia |
| | general Para Para Para Para Para Para Para Para | | eraal Europe Jave August Tosaka |
| | 5 (10) 12.1 13.2 | 1 (1) (1) (1) | er festaste 1 - Stendato Avest, 2 Januarie: |
| | Section (Contraction of the Association of the Asso | | April 27. 10 76 |

| ī | Date | Ap: | ril | 27, | | 1 | 9 76 |
|----------|------|--------|------|--------|------|----|------|
| APPROVED | RAY | RESOUR | CES, | DIVI | SION | OF | ON |
| AFFROVED | | Low | / L | 0-50 | La | la | |
| | GEC | LOGIST | | While) | | | |





DEPT. OF WINDS

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

| TO THE DEPARTMENT OF MINES, Charleston, W. Va. | | | |
|---|-----------------------------------|------------------------------|-----------------------|
| • | DATE | December 12, | |
| Surface Owner I. Y. Bedrick | | ny FARING DIMOND (| |
| Address Welker, W. Va. | Addres | s 630 Commarce Squar | Me, Chas., W. Va. |
| Mineral Owner I. Y. Hodrick | Farm | I. Y. Hodrick | Acres |
| Address Walker, W. Va. | Location | on (waters) | |
| Coal Owner | | / ****** | Elevation 886,49 |
| Address | Distric | tUnion | County_Wood |
| Coal Operator | Quadra | | |
| Address | | | |
| All provisions being in accordance wi of the W. Va. Code, the location is he for <u>drilling</u> . This perm | ith Chapter 22, ereby approved | | |
| operations have not commenced by U. | · | E NOTIFIED Donald | Conners |
| Deputy Director - Oil & Gas Division GENTLEMEN: | PH: 428-8172 | | Wells, W. Va. |
| title thereto, (or as the case may be) u made to 19, in Count | an an | a recorded on the | day of |
| NEW WELLD | ORILL DEEPERR | EDRILLFRACT | URE OR STIMULATE |
| OIL AND GAS WELL OR | | | |
| The enclosed plat was prepared by a have been notified as of the above date. The above named coal owners and/or to make by Section 3 of the Code, must | operator are hereby notified th | at any objection than wish t | to make an are united |
| Copies of this notice and the enclosed or coal owners at their above shown res same day with the mailing or delivery of | | | |
| PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO: | Very truly (Sign Name | yours, June DIAMONE | OIL COMPONITION |
| West Virginia Geological and Ec P. O. Box 879 | | Well Operator | quare |
| Morgantown, W. Va. 26505 | Address of | Street | |
| AC 304-296-4461 | Well Operator | Charleston, | |
| | | City or Town | |
| | | West Virginia | |
| | | 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 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.

WOO - 723 PERMIT NUMBER

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

| PROPOSED WORK ORDER TO | OPOSED WORK ORDER TO DRILL | | DEEPEN FRACTURE-STIMULATE | | |
|--|---|--|--|--|--|
| ILLING CONTRACTOR: (If Known) ME Raught Drilling Company | | RESPONSIBLE AGENT: NAME Bill Endicott ADDRESS Rox 234 Culloden, W. Va. | | | |
| ADDRESS Smithville, W. Va. | | | | | |
| TELEPHONE | | TELEPHONE | | | |
| ESTIMATED DEPTH OF COMPL | | | CABLE TOOLS | | |
| PROPOSED GEOLOGICAL FORM | | | • | | |
| TYPE OF WELL: OIL | | ME. STORAGE | . DISPOSAL | | |
| The state of the s | | | OD OTHER | | |
| | | | • | | |
| TENTATIVE CASING PROGRAM | | | | | |
| CASING AND TUBING SIZE CONTRACTOR CONTRACT | USED FOR DRILLING OUT OF THE PROPERTY OF THE | LEFT IN WELL | OR SACKS - CUBIC FT. | | |
| 20 - 16 | % ift is | 9% 38. 2 | | | |
| 13 - 10 | | 30* | To Surf | | |
| 9 - 5/8 | 300* | 3001 | To Surf | | |
| | | The state of the s | ode diffe. ade a negative and | | |
| | | | | | |
| 5 ½ 4 ½ | 2500" | 3500 | 75 83038 | | |
| | | | Perf. Top | | |
| 2 | | | Perf. Bottom | | |
| Liners | | | Perf. Bottom | | |
| | | | - Fert. Bottom | | |
| OF PLAT. TO DRILL DEEPER OR REDRIL SUBMIT FIVE (5) COPIES WELLS DRILLED PRIOR MUST ALSO BE SUBMITTE TO FRACTURE - STIMULATE: OIL AND/OR GAS WELL O BOND, PERMANENT PLAT OIL AND/OR GAS WELL O ING ORIGINAL PERMIT NU | L: OF OG - 1, SHOWING ORIGINATED OF THE SECONDARY OF THE | F FEE, PERFORMANCE BO NAL PERMIT NUMBER AN PY OF THE PLAT AND T RE JUNE 5, 1929, FIVE (5) O ORD. ID/OR AFTER JUNE 5, 192 BOND. | DND AND PERMANENT COPY D PERFORMANCE BOND. ON THE ORIGINAL WELL RECORD COPIES OG - 1, PERFORMANCE 9, FIVE COPIES OG - 1, SHOW- Inspector to be notified twenty- | | |
| | | | | | |
| | | | | | |
| The following waiver must thereof. | be completed by the coal open | rator if the permit is to be | issued within ten days of receipt | | |
| WAIVER: I the undersigned, Age this lease have examin | ent forent for ed and place on our mine ma | | | | |
| | * | | ell being drilled at this location, | | |
| providing operator has | | | 7, Chapter 22 of the West Virginia | | |
| Code. | | | the control of the co | | |
| | | | AL Maga | | |
| | | F | or Coal Company | | |

Official Title