

ACCURACY: 1/200'

New Location

Drill Deeper

Abandonment

Fracture

Redrill

Other

Formation GORDON

Est. Depth 2900'

Oil

Gas

Other

Source of Elevation B.M. ON BUFFALO (823')

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.

Company QUAKER STATE CORP.

Address P.O. Box 189, Bellevue, Ohio 45714

Surface Owner LEWIS WETZEL HUNTING GROUND

Mineral Owner MILLS WETZEL LANDS, INC.

Farm JOHN MILLS, JR.

Well No. 125 Acres 5228.5

Elevation 1220' LITTLETON 15'

Quadrangle PINE GROVE Series 7.5'

County WETZEL District GRANT

Date 9/24/80 Scale 1" = 2000'

STATE OF WEST VIRGINIA

Division of Environmental Protection

Office of Oil and Gas

Chet Waterman, REGISTERED PROFESSIONAL ENGINEER

WELL LOCATION MAP

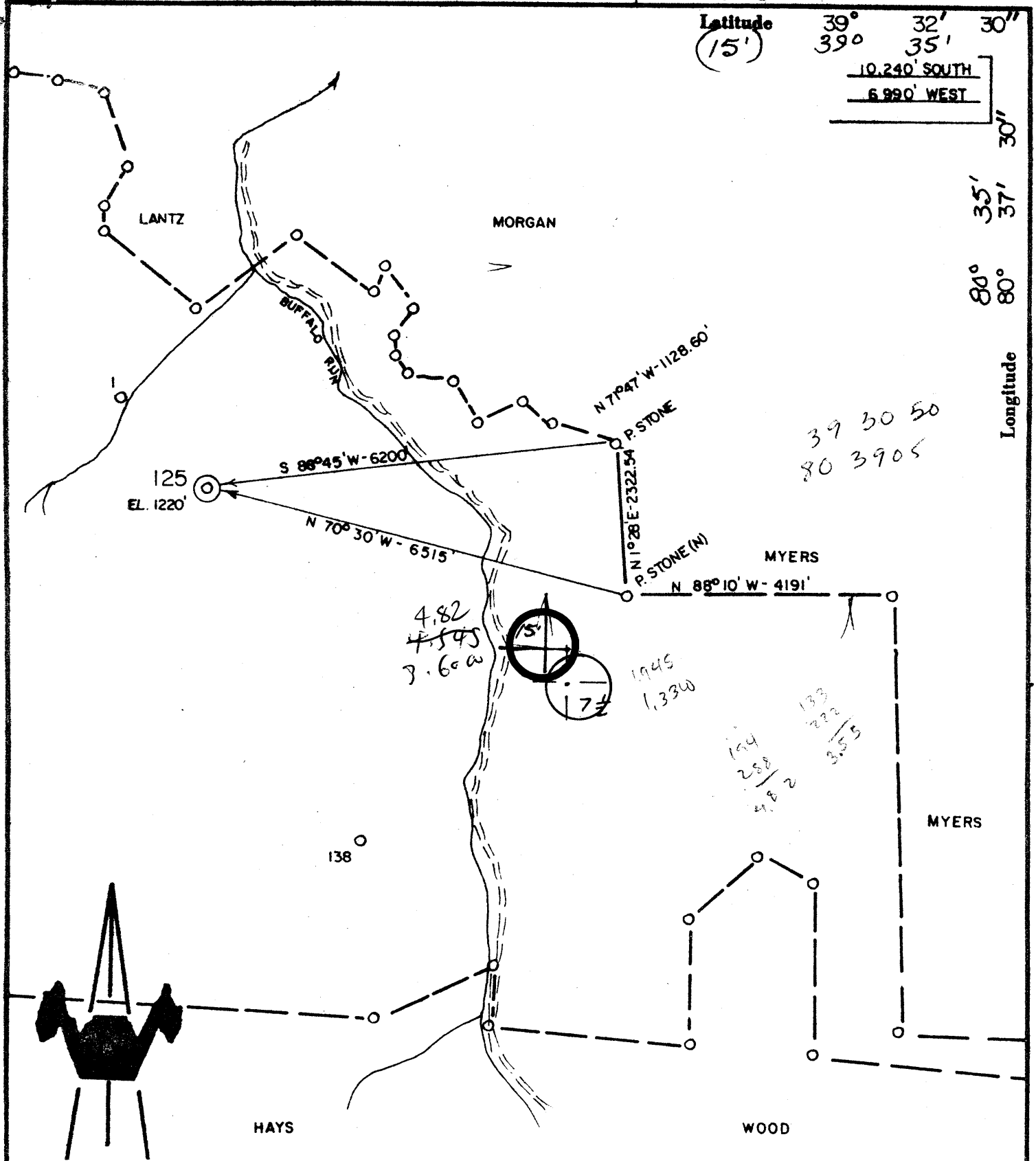
STATE COUNTY PERMIT

+ Denotes location of well on United States Topographic Maps.

Engineer CHET WATERMAN

Engineer's Registration No. 3788 File No. 80-558

10-380



ACCURACY: 1/200'

- New Location
- Drill Deeper
- Abandonment
- Fracture
- Redrill
- Other

Formation BORDON Oil

Est. Depth 2300' Gas

Other

Source of Elevation B.M. ON BUFFALO (823')

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.

Company QUAKER STATE OIL REF. CORP.

Address PARKERSBURG, WV

Surface Owner LEWIS WETZEL HUNTING GROUND

Mineral Owner MILLS WETZEL LANDS, INC.

Farm JOHN MILLS, JR.

Well No. 125 Acres 5228.5

Elevation 1220' LITTLETON 15' 50"

Quadrangle PINE GROVE Series 7.5'

County WETZEL District GRANT

Date 9/24/80 Scale 1" = 2000'

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

WELL LOCATION MAP

47 - 103 - 1199 FRAC

STATE COUNTY PERMIT

+ Denotes location of well on United States Topographic Maps.  
 Engineer CHET WATERMAN  
 Engineer's Registration No. 3788 File No. 80-558

[08-78,

WELL OPERATOR'S REPORT

Operator's  
Well No. JOHN MILLS, JR. #125

OF  
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

API Well No. 47 - 103 - 11091  
State County Permi

WELL TYPE: Oil XX / Gas      / Liquid Injection      / Waste Disposal      /  
(If "Gas", Production      / Underground storage      / Deep      / Shallow     )

LOCATION: Elevation: 1220 Watershed: Buffalo Run  
District: Grant County: Wetzel Quadrangle: Pine Grove 7.5'

WELL OPERATOR QUAKER STATE OIL REFG. CORP.  
Address P.O. Box 1327  
Parkersburg, WV 26102-1327

DESIGNATED AGENT Carl J. Carlson  
Address P.O. Box 1327  
Parkersburg, WV 26102-1327

PERMITTED WORK: Drill      / Convert      / Drill deeper      / Redrill      / Fracture or stimulate XX  
Plug off old formation      / Perforate new formation      /  
Other physical change in well (specify)     

PERMIT ISSUED ON Oct. 14, 19 81

OIL & GAS INSPECTOR FOR THIS WORK:

(IF APPLICABLE: PLUGGING OF DRY HOLE ON  
CONTINUOUS PROGRESSION FROM DRILLING OR  
REWORKING. VERBAL PERMISSION OBTAINED

Name Phillip L. Tracy  
Address Rt. #3  
Alma, WV 26320

GEOLOGICAL TARGET FORMATION: Big Injun Dept: 2203 - 2425 feet

Depth of completed well, 2425 feet Rotary      / Cable Tools XX

Water strata depth: Fresh, na feet; salt, na feet.

Coal seam depths: 882' Is coal being mined in the area? no

Work was commenced April 13, 19 81, and completed September 15, 19 81

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	13					16	16	) Old well record
Fresh water	10					332'	0	
Coal	8 1/4					1402	0	
Intermediate	6 5/8					2162	2162 on BHP	) Depths set
Production	4 1/2	K-55	9.5	XX		2324	2324	
Tubing							50 sx	Perforations:
Liners								

RECEIVED  
OCT 15 1981

OIL AND GAS DIVISION  
WV DEPARTMENT OF MINES

OPEN FLOW DATA

1 BOPD

Producing formation Big Injun Pay zone depth 2203 - 2425 feet

Gas: Initial open flow, --- Mcf/d Oil: Initial open flow, --- Bbl/d

Final open flow, show Mcf/d Final open flow, 1 Bbl/d

Time of open flow between initial and final tests, -- hours

Static rock pressure, 75 psig (surface measurement) after 24 hours shut in

[If applicable due to multiple completion--]

Second producing formation      Pay zone depth      feet

Gas: Initial open flow,      Mcf/d Oil: Initial open flow,      Bbl/d

Final open flow,      Mcf/d Final open flow,      Bbl/d

Time of open flow between initial and final tests,      hours

Static rock pressure,      psig (surface measurement) after      hours shut in

OCT 22 1981

TAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Perforated from 2206 to 2263 with 17 shots.

Frac'd on 8/26/81 with 519 bbl. water and 9000# of 10/20 sand.  
Breakdown at 2100 psi, treated at 3022 psi and 27 BPM. I.S.I. 1900 psi.

## L LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Pittsburgh Coal				882	
Little Dunkard			1287	1304	
Big Dunkard			1400	1426	
Shale			1426	1485	
Sandstone			1485	1618	
Shale			1618	1676	
Sandstone			1676	1744	
Shale			1744	1795	
Sandstone			1795	1840	
Shale			1840	1893	
Sandstone			1893	1905	
Shale			1905	2108	
Little Lime			2108	2122	
Pencil Cave			2122	2118	
Big Lime			2118	2203	
Big Injun			2203	2425	L.T.D.

(Attach separate sheets to complete as necessary)

QUAKER STATE OIL REFINING CORPORATION

Well Operator

By

*Michael C. Brannock*

Its

Michael C. Brannock - Sr. Geologist

RE: Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic, detailed geological record of all formations, including coal, encountered in the drilling of a well."



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

RECEIVED  
OCT - 2 1980

OIL & GAS DIVISION  
DEPT. OF MINES

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

DATE October 1, 1980

Surface Owner Lewis Wetzel Hunting Ground

Company QUAKER STATE OIL REFG. CORP.

Address Charleston, WV 25305

Address P.O. Box 1327, Parkersburg, WV 26101

Mineral Owner Mills Wetzel Lands, Inc.

Farm John Mills, Jr. Acres 5228.5

Address 10 S. LaSalle Street, Chicago, IL 60600

Location (waters) Buffalo Run

Coal Owner Mills Wetzel Lands, Inc.

Well No. 125 Elevation 1220

Address same as above

District Grant County Wetzel

Coal Operator None

Quadrangle Pine Grove 7.5'

Address \_\_\_\_\_

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 fracturing. This permit shall expire if operations have not commenced by 6-14-81.

INSPECTOR  
TO BE NOTIFIED Phillip L. Tracy

ADDRESS Rt. #3, Alma, WV 26320

PHONE 758-4573

John B. Burdette  
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 November 30, 1948 by Mills Wetzel Lands Inc. made to QUAKER STATE OIL REFG. CORP. and recorded on the 22 day of Sept. 1980, in Wetzel County, Book 60A Page 381

NEW WELL DRILL DEEPER REDRILL XXX FRACTURE OR STIMULATE  
XXX 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 owners or coal owners at their above, shown respective address 1st. day October 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, QUAKER STATE OIL REFINING CORP.

(Sign Name) Carl J. Carlson

Well Operator  
Carl J. Carlson  
P.O. Box 1327,  
Street

Parkersburg,  
City or Town

West Virginia 26101  
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.

47-103-1199-FRAC. \_\_\_\_\_ 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 Carl J. Carlson

BLANKET BOND

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

PROPOSED WORK ORDER TO \_\_\_\_\_ DRILL \_\_\_\_\_ DEEPEN XXX FRACTURE-STIMULATE  
 DRILLING CONTRACTOR: (If Known) \_\_\_\_\_ RESPONSIBLE AGENT:  
 NAME QUAKER STATE OIL REFG. CORP. NAME Carl J. Carlson  
 ADDRESS P.O. Box 1327, Parkersburg, WV 26101 ADDRESS P.O. Box 1327, Parkersburg, WV 26101  
 TELEPHONE 614-423-9543 TELEPHONE 614-423-9543  
 ESTIMATED DEPTH OF COMPLETED WELL: 2330' ROTARY \_\_\_\_\_ CABLE TOOLS XXX  
 PROPOSED GEOLOGICAL FORMATION: Big Injun  
 TYPE OF WELL: OIL XXX GAS \_\_\_\_\_ COMB. \_\_\_\_\_ STORAGE \_\_\_\_\_ DISPOSAL \_\_\_\_\_  
 RECYCLING \_\_\_\_\_ WATER FLOOD \_\_\_\_\_ OTHER \_\_\_\_\_

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE In Hole	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
13"	16	16	
10"	332	0	
8 1/4"	1402	0	
6 5/8"	2162	2162 on BHP	
5 3/16"	2330	2330 on BHP	
3	Pull 5 3/16" and run 4 1/2" to 2330' and cemented about		Perf. Top
2	Big Injun.		Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS NA FEET NA FEET SALT WATER NA FEET  
 APPROXIMATE COAL DEPTHS Pittsburgh coal 882'  
 IS COAL BEING MINED IN THE AREA? No BY WHOM? \_\_\_\_\_

TO DRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

TO DRILL DEEPER OR REDRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

TO FRACTURE - STIMULATE:

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.

OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for \_\_\_\_\_ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the \_\_\_\_\_ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

\_\_\_\_\_  
 For Coal Company

\_\_\_\_\_  
 Official Title

STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION  
SECTION OF OIL AND GAS

Permitting  
Office of Oil & Gas AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE IN TRIPLICATE, one copy mailed to the Division, one copy to be retained by the Well Operator and the third copy (and extra copies if required) should be mailed to each coal operator at their respective addresses.

Farm name: WETZEL, LEWIS PUBLIC GR. Operator Well No.: MILLS #125

LOCATION: Elevation: 1,220.00 Quadrangle: PINE GROVE  
District: GRANT County: WETZEL  
Latitude: 9775 Feet South of 39 Deg. 32 Min. 30 Sec.  
Longitude 6810 Feet West of 80 Deg. 37 Min. 30 Sec.

Well Type: OIL X GAS \_\_\_\_\_

Company: Quaker State Corporation  
Box 189  
Belpre, OH 45714

Coal Operator N/A  
or Owner \_\_\_\_\_

Agent: Frank Rotunda

Coal Operator N/A  
or Owner \_\_\_\_\_

Permit Issued: 03/21/95

AFFIDAVIT

STATE OF WEST VIRGINIA,  
County of Wetzel ss:

Myron Perkins and Paul Huggins being first duly sworn according to law depose and say that they are experienced in the work of plugging and filling oil and gas wells and were employed by the above named well operator, and participated in the work of plugging and filling the above well, and Mr. Randall Mick Oil and Gas Inspector representing the Director, say that said work was commenced on the 15<sup>th</sup> day of March, 1995, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
6% gel	2300'	surface	1932'-0'4.5"	1932'-2324'
cement	2300'	2100'	100'-0'6 5/8"	100'-2152'
" "	1950'	1850'	ripped 65/8" for 20'	1400'
" "	1450'	1350'	" " "	882'
" "	930'	830'	" " "	332'
" "	380'	280'	" " "	
" "	100'	surface	" " "	

Description of monument: 6 5/8" casing 4' 47-103-01199-P 4/20/95  
and that the work of plugging and filling said well was completed on the 20<sup>th</sup> day of April, 1995.

And further deponents saith not.

Sworn and subscribe before me this 25 day of May, 1995  
My commission expires: Sept 14, 1999  
Evelyn Callahan  
Notary Public

Evelyn J. Callahan  
Notary Public, State of Ohio  
My Commission Expires Sept 14, 1999

Oil and Gas Inspector: Randall Mick  
JUN 25 1995