

A-1

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. JOHN MILLS, JR. #157

API Well No. 47 - 103 - 1227 State County Perm

WELL TYPE: Oil X / Gas / (If "Gas", Production / Underground storage / Deep / Shallow /)

LOCATION: Elevation: 1354 Watershed: Buffalo Run District: Grant County: Wetzel Quadrangle: Pine Grove 7.5'

WELL OPERATOR QUAKER STATE OIL REFG. CORP. DESIGNATED AGENT Carl J. Carlson Address P.O. Box 1327 Parkersburg, WV 26101

OIL & GAS ROYALTY OWNER Mills Wetzel Lands, Inc. COAL OPERATOR None Address 115 So. LaSalle Street Chicago, Illinois 60603

SURFACE OWNER Lewis Wetzel Hunting Ground Name Mills Wetzel Lands, Inc. Address Dept. of Natural Resources Charleston, WV 25305

FIELD SALE (IF MADE) TO: Name None Address

OIL & GAS INSPECTOR TO BE NOTIFIED Name Phillip L. Tracy 758-4573 Address Rt. #3 Alma, WV 26320

RECEIVED MAR 18 1981

OIL & GAS DIVISION DEPT. OF MINES

RECEIVED MAR 24 1981

OIL & GAS DIVISION DEPT. OF MINES

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed XX / lease / other contract / dated Nov. 30, 1948, to the undersigned well operator from Mills Wetzel Lands, Inc.

[If said deed, lease, or other contract has been recorded:] Recorded on Sept. 22, 1980, in the office of the Clerk of the County Commission of Wetzel County, West Virginia, in Deed Book 60A at page 381. A permit is requested as follows:

PROPOSED WORK: Drill XX / 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 hereof.

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 the 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 lessee on or before the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

09/08/2023

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO: WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION 1615 WASHINGTON STREET EAST CHARLESTON, WV 25311 TELEPHONE: (304) 343-3092

BLANKET BOND

QUAKER STATE OIL REFINING CORPORATION Well Operator Carl J. Carlson By [Signature] Its Asst. Dist. Production Manager

PROPOSED WORK ORDER

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

DILLING CONTRACTOR (IF KNOWN) Clint Hurt & Associates

Address P.O. Box 388

Elkview, WV 25071

GEOLOGICAL TARGET FORMATION, Gordon

Estimated depth of completed well, 3270 feet, Rotary XX / Cable tools /

Approximate water strata depths: Fresh, 150 feet; salt, 1770 feet.

Approximate coal seam depths: no mineable coals coal being mined in the area? Yes / No XX /

DRILLING AND TUBING PROGRAM

DRILLING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling	Left in well		
Conductor									Kinds
Fresh water	8 5/8	J-55	20	XX		350	350	cemented to	surface
Intermediate									Sizes
Production	4 1/2	K-55	9.5	XX		3270	3270	450 sx	Depths set
Logging									Perforations:
Packers									Top Bottom

NOTE: Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 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 drilling within 200 feet of the proposed well.

A separate Form IV-2 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-2 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. This permit shall expire if operations have not commenced by 11-30-81.

[Signature]
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.

09/08/2023

Date: , 19

By
Its

STATE OF WEST VIRGINIA
OFFICE OF OIL AND GAS

Company Name QUAKER STATE OIL REFG. CORP. Designated Agent Carl J. Carlson
Address P.O.Box 1327, Parkersburg, WV Address P.O.Box 1327, Parkersburg, WV
Telephone 614-423-9543 Telephone 614-423-9543
Landowner Lewis Wetzel Hunting Ground Soil Cons. District Upper Ohio SCD
Revegetation to be carried out by QUAKER STATE OIL REFG. CORP. (Agent)
This plan has been reviewed by Upper Ohio SCD. All corrections
and additions become a part of this plan. 3/20/81 Kenneth R. Plam
(Date) (SCD Agent)

Access Road	Location
Structure <u>Cross Drains</u> (A)	Structure <u>Ditch</u> (1)
Spacing <u>100' or less</u>	Material <u>Soil</u>
Page Ref. Manual <u>1:5</u>	Page Ref. Manual <u>1:11</u>
Structure <u>Sediment Barrier</u> (B)	Structure <u>Sediment Barrier</u> (2)
Spacing <u>Stone or Gravel</u>	Material <u>Brush or Gravel</u>
Page Ref. Manual <u>1:15</u>	Page Ref. Manual <u>1:15</u>
Structure _____ (C)	Structure _____ (3)
Spacing _____	Material _____
Page Ref. Manual _____	Page Ref. Manual _____

All structures should be inspected regularly and repaired if necessary.
All commercial timber is to be cut and stacked. All brush and small timber
to be cut and removed from site before dirt work begins.

Revegetation

Treatment Area I	Treatment Area II
Lime _____ Tons/acre or correct to pH <u>6.5</u>	Lime _____ Tons/Acre or correct to pH _____
Fertilizer <u>600</u> lbs/acre (10-20-20 or equivalent)	Fertilizer _____ lbs/acre (10-20-20 or equivalent)
Mulch <u>Straw 2</u> Tons/Acre	Mulch _____ Tons/Acre
Seed* <u>Ky 31 Fescue 45</u> lbs/acre	Seed* _____ lbs/acre
_____ lbs/acre	_____ 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 Pine Grove.

Legend:  Well Site
 Access Road

RECEIVED

MAR 24 1981

OIL & GAS DIVISION
DEPT. OF MINES

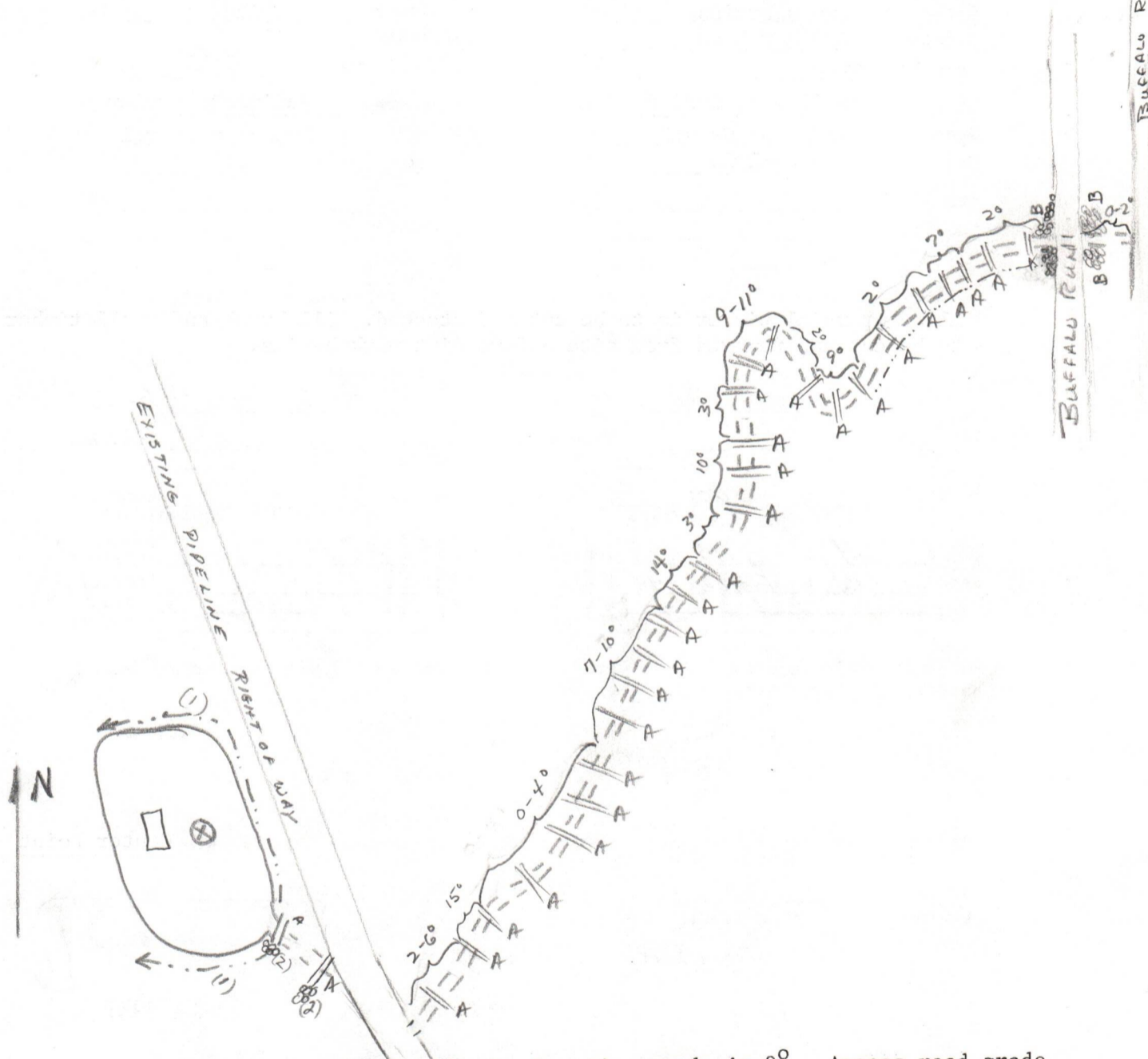
09/08/2023

A-5

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.

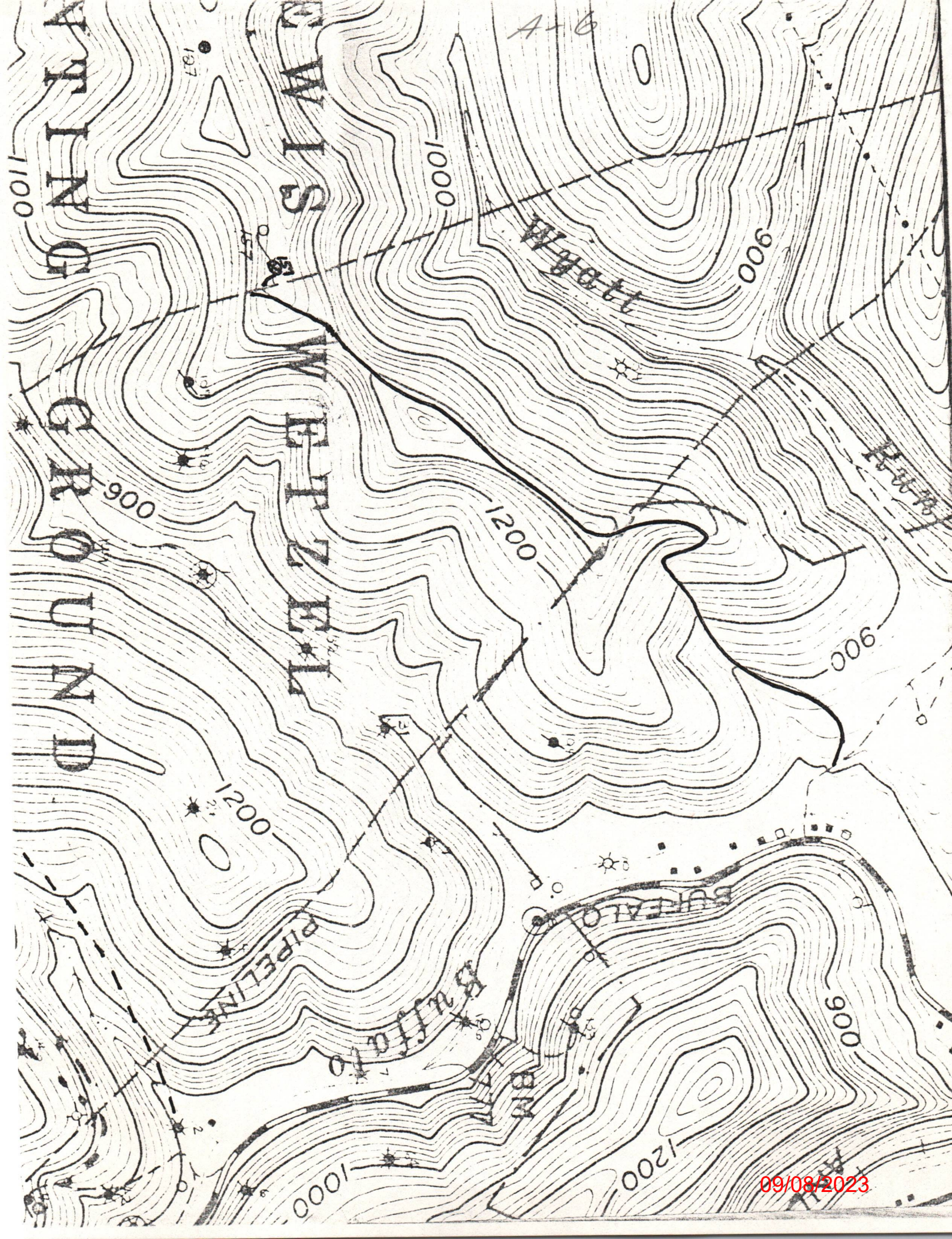


Comments: Pit will be plastic lined. Location grade is 0°. Access road grade varies 0 - 15°. Cross drain locations to be flagged out under supervision of DNR service forester. Interceptor ditch to be constructed at base of slope on north side of location. Stream crossing location to be gravelled on east and west banks. Soil is type C.

Signature: *Carl J. Carlson* Agent P.O. Box 1327, Parkersburg, WV 614-423-9543
 Address

09/08/2023

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



09/08/2023

RECEIVED

MAR 24 1981

OIL & GAS DIVISION
DEPT. OF MINES

09/08/2023

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

Date Sept. 29, 1981

FORM IV-35
(Obverse)

Operator's
Well No. J. MILLS, JR. #157

[08-78]

WELL OPERATOR'S REPORT
OF

API Well No. 47 - 103 - 1227
State County Permi-

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

RECEIVED
SEP 30 1981
OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

WELL TYPE: Oil XX / Liquid Injection ___ / Waste Disposal ___
Production ___ / Underground storage ___ / Deep ___ / Shallow ___
LOCATION: Elevation: 1354 Watershed: Buffalo Run
District: Grant County: Wetzel Quadrangle: Pine Grove 7.5'

WELL OPERATOR QUAKER STATE OIL REFG. CORP. DESIGNATED AGENT Carl J. Carlson
Address P.O. Box 1327 Address P.O. Box 1327
Parkersburg, WV 26102-1327 Parkersburg, WV 26102-1327

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

PERMIT ISSUED ON March 30, 1981 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: Gordon Depth 3143 - 3200 feet
Depth of completed well, 3270 feet Rotary XX / Cable Tools ___
Water strata depth: Fresh, na feet; salt, 1565 feet.
Coal seam depths: none Is coal being mined in the area? no
Work was commenced July 19, 1981 and completed July 24 1981

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling	Left in well		
Conductor									Kinds
Fresh water	8 5/8		20	XX		392	392	125 sx	
Coal									Sizes
Intermediate									
Production	4 1/2	J-55	9.5	XX		3241	3241	490 sx	Deaths set
Tubing									
Liners									Perforations:
									Top Bottom

OPEN FLOW DATA

Producing formation Gordon Pay zone depth 3143 - 3200 feet
Gas: Initial open flow, show Mcf/d Oil: Initial open flow, show Bbl/d
Final open flow, 15 Mcf/d Final open flow, 10 Bbl/d
Time of open flow between initial and final tests, --- hours
Static rock pressure, 250 psig (surface measurement) after 12 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

09/08/2023

[08-78]

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

Perforated from 3145 to 3193 GL with 30 shots.
 Frac'd with 780 bbl. water and 28,000# 20/40 sand. Breakdown at 2900 psi.
 Treated at 2650 psi and 33 BPM. I.S.I. 2000 psi.

RECEIVED
 OIL AND GAS DIVISION
 2310 WEST 10TH AVENUE
 DENVER, COLORADO 80202

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Shale			0	155	
Sandstone			155	181	
Shale & Siltstone			181	901	
Sandstone			901	958	
Shale			958	1055	
Sandstone			1055	1073	
Shale			1073	1130	
Sandstone & Siltstone			1130	1565	
Sandstone			1565	1621	
Shale			1621	1643	
Sandstone			1643	1704	
Shale			1743	1833	
Sandstone			1833	1907	
Shale			1907	1933	
Sandstone			1933	2008	
Shale			2008	2053	
Sandstone			2053	2108	
Shale			2108	2235	
Sandstone			2235	2250	
Shale			2250	2276	
Little Lime			2276	2289	
Pencil Cave			2289	2305	
Big Lime			2305	2365	
Big Injun			2365	2569	
Shale			2569	3136	
Gordon Stray			3136	3140	
Shale			3140	3143	
Gordon			3143	3200	
Shale			3200	3270 D.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

09/08/2023

NOTE: 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."

DEPARTMENT OF MINES
OIL AND GAS WELLS DIVISION

RECEIVED

AUG 27 1981

INSPECTOR'S WELL REPORT

Permit No. 103-1229

Oil or Gas Well
KIND: W OIL AND GAS DIVISION
DEPARTMENT OF MINES

COMPANY	CASING AND TUBING	USED IN DRILLING	Left in Well	PACKERS
<u>Leader State Oil</u>				
<u>Parkersburg W.Va.</u>				
<u>Mull Wetzel Lumber Co.</u>				
<u>153-154-155</u>				
District _____ County <u>Wetzel</u>				
Drilling commenced _____				
Drilling completed _____ Total depth _____				
Date shot _____ Depth of shot _____				
Initial open flow _____ /10ths Water in _____ Inch				
Open flow after tubing _____ /10ths Merc. in _____ Inch				
Volume _____ Cu. Ft.				
Block pressure _____ lbs. _____ hrs.				
Oil _____ bbls., 1st 24 hrs.				
Fresh water _____ feet _____ feet				
Salt water _____ feet _____ feet				
	CASING CEMENTED _____ SIZE _____ No. FT _____ Date _____			
	NAME OF SERVICE COMPANY _____			
	COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			

Drillers' Names _____

Remarks: Look at reclamation work that Leader State is doing on the location & road.

Aug 19, 81
DATE

D. J. Long 512
DISTRICT INSPECTOR
09/08/2023



State of West Virginia

Department of Mines
Oil and Gas Division

Charleston 25305

WALTER N. MILLER
DIRECTOR

May 20, 1982

Quaker State Oil Refining Corp.
P. O. Box 1327
Parkersburg, W. V. 26101

Dear Sir:

The required records and reports have been received in this office and the District Inspectors have submitted Final Inspections for the following wells listed below:

<u>PERMIT NO.</u>	<u>FARM AND WELL NO.</u>	<u>DISTRICT</u>
WET-1198-FRAC.	John Mills, Jr., #1	Grant
WET-1199-FRAC.	John Mills, Jr., #125	Grant
WET-1200-FRAC.	John Mills, Jr., #138	Grant
WET-1224	Mills Wetzel Lands, Inc./J. Mills, Jr. #154	Grant
WET-1225	Mills Wetzel Lands, Inc./John Mills, Jr. #155	Grant
WET-1226	Mills Wetzel Lands, Inc./John Mills, Jr. #156	Grant
WET-1227	Mills Wetzel Lands, Inc./John Mills, Jr. #157	Grant

In accordance with Chapter 22, Article 4, Section 2, the bond coverage for above captioned wells will stay in force for life of well. Reclamation requirements have been approved..... ..

ss

Very truly yours,

Fred Burdette

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

INSPECTOR'S WELL REPORT

Permit No. 103-1227

Oil or Gas Well _____
(KIND)

Company	Address	Farm	Well No.	District	County	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
						Size			Kind of Packer
<u>Quaker State</u>	<u>Parkersburg, W. Va.</u>	<u>mills wetzel lands</u>	<u>157</u>	<u>Grant</u>	<u>wetzel</u>	16			
						13			
						10			Size of
						8 1/4			
						6 5/8			Depth set
						5 3/16			
						3			Perf. top
						2			Perf. bottom
									Perf. top
									Perf. bottom
Drilling commenced _____						CASING CEMENTED _____ SIZE _____ No. FT. _____ Date _____			
Drilling completed _____ Total depth _____						NAME OF SERVICE COMPANY _____			
Date shot _____ Depth of shot _____						COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES			
Initial open flow _____ /10ths Water in _____ Inch						_____ FEET _____ INCHES _____ INCHES			
Open flow after tubing _____ /10ths Merc. in _____ Inch						<div style="text-align: center;"> RECEIVED APR 19 1982 </div>			
Volume _____ Cu. Ft.									
Rock pressure _____ lbs. _____ hrs.									
Oil _____ bbls., 1st 24 hrs.						_____ FEET _____ INCHES _____ INCHES			
Fresh water _____ feet _____ feet						_____ FEET _____ INCHES _____ INCHES			
Salt water _____ feet _____ feet						_____ FEET _____ INCHES _____ INCHES			

Drillers' Names _____

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

Remarks:

Final Inspection accepted

4-15-82

DATE

R.A. Lowther 512

09/08/2023

DISTRICT WELL INSPECTOR

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

RECEIVED
 NOV 17 1983
 OIL & GAS DIVISION
 DEPT. OF MINES

FINAL INSPECTION REQUEST
INSPECTOR'S COMPLIANCE REPORT

Permit No. 103-1227 County Wetzel
 Company Quaker State Oil Farm mills Wetzel hands
 Inspector _____ Well No. 157
 Date _____

RULE	DESCRIPTION	IN COMPLIANCE	
		Yes	No
23.06	Notification Prior to starting Work	_____	_____
25.04	Prepared before Drilling to prevent waste	_____	_____
25.03	High-Pressure Drilling	_____	_____
16.01	Required Permits at wellsite	_____	_____
15.03	Adequate Fresh Water Casing	_____	_____
15.02	Adequate Coal Casing	_____	_____
15.01	Adequate Production Casing	<u>✓</u>	_____
15.04	Adequate Cement Strength	_____	_____
23.02	Maintained Access Roads	<u>✓</u>	_____
25.01	Necessary Equipment to prevent Waste	<u>✓</u>	_____
23.03	Reclaimed Drilling Site	<u>✓</u>	_____
23.04	Reclaimed Drilling Pits	<u>✓</u>	_____
23.05	No surface or underground Pollution	<u>✓</u>	_____
7.03	Identification Markings	<u>✓</u>	_____

COMMENTS: This well was drilled before I started to work

I have inspected the above well and (HAVE) found it to be in compliance with all of the rules and regulations of the Office of Oil and Gas Department of Mines of the State of West Virginia.

SIGNED: R.A. Lowther
 DATE: 11-15-83

09/08/2023

RECEIVED

NOV 17 1983

DEPT. OF MINES
OIL & GAS DIVISION

[Faint handwritten notes]

[Faint handwritten notes]

77777777

[Faint handwritten notes]

[Faint handwritten notes]

09/08/2023

C-1

FERC-121

MAR 11 1982
OIL & GAS DIVISION
DEPT. OF MINES

1.0 API well number: (If not available, leave blank. 14 digits.)	<u>47 103 2 1227 ** 14</u>			
2.0 Type of determination being sought: (Use the codes found on the front of this form.)	<u>103</u> Section of NGPA	<u>N/A</u> Category Code		
3.0 Depth of the deepest completion location: (Only needed if sections 103 or 107 in 2.0 above.)	<u>3193</u> feet			
4.0 Name, address and code number of applicant: (35 letters per line maximum. If code number not available, leave blank.)	<u>Quaker State Oil Refining Corporation</u> Name		<u>015540</u> Seller Code	
	<u>P.O. Box 1327</u> Street			
	<u>Parkersburg</u> City	<u>W.Va.</u> State	<u>26101</u> Zip Code	
5.0 Location of this well: [Complete (a) or (b).] (a) For onshore wells (35 letters maximum for field name.)	<u>Grant District</u> Field Name			
	<u>Wetzel County</u> County	<u>W.Va.</u> State		
(b) For OCS wells:	<u>N/A</u> Area Name	<u>N/A</u> Block Number		
	Date of Lease: <u> </u> <u> </u> <u> </u> Mo. Day Yr.		<u>N/A</u> OCS Lease Number	
(c) Name and identification number of this well: (35 letters and digits maximum)	<u>J. Mills, Jr. #157</u>			
(d) If code 4 or 5 in 2.0 above, name of the reservoir: (35 letters maximum)	<u>Gordon</u>			
6.0 (a) Name and code number of the purchaser: (35 letters and digits maximum. If code number not available, leave blank.)	<u>Tentative:</u> <u>Consolidated Gas Supply Corporation</u> Name		<u> </u> Buyer Code	
(b) Date of the contract:	<u>Under Negotiation</u> <u> </u> <u> </u> <u> </u> Mo. Day Yr.			
(c) Estimated annual production:	<u>5.475</u> MMcf.			
	(a) Base Price (\$/MMBTU)	(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.)	<u>Under Negotiation</u>	<u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u>	<u>Under Negotiation</u>
8.0 Maximum lawful rate (As of filing date. Complete to 3 decimal places.)	<u>2.608</u>	<u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u>	<u>2.608</u>
9.0 Person responsible for this application	<u>Carl J. Carlson</u> Name			
Agency Use Only	<u>Dist. Prod. Mgr.</u> Title			
Date Received by Juris. Agency	<u> </u> Signature			
MAR 11 1982	<u>March 9, 1982</u> Date Application is Completed			
Date Received by FERC	<u>614-423-9543</u> Phone Number			

FT790306/2 2

09/08/2023

PARTICIPANTS:

DATE:

JUL 13 1982

BUYER-SELLER CODE

WELL OPERATOR: Quaker State Oil Refining Corp.

015540

FIRST PURCHASER: Consolidated Gas Supply Corp.

004228

OTHER: _____

W. Va. Department of Mines, Oil & Gas Division
 WELL DETERMINATION FILE NUMBER
820311-103-103-1227
 Use Above File Number on all Communications
 Relating to Determination of this Well

1500' Radius
checked

QUALIFIED TB

M.S.

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 b/c
- 2. IV-1 Agent Carl J. Carlson
- 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: 7-19-81 Date completed 7-24-81 Deepened
- (5) Production Depth: 3143-3200
- (5) Production Formation: Gordon
- (5) Final Open Flow: 15 MCF
- (5) After Frac. R. P. 250# 12 hrs.
- (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 09/08/2023
- Additional information _____ Does computer program confirm? _____
- Was Determination Objected to _____ By Whom? _____

78

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

Date March 9, 1982

Operator's Well No. J. Mills, Jr. #157

API Well No. 47 - 103 - 1227
State County Permit

WELL CLASSIFICATION FORM
NEW ONSHORE PRODUCTION WELL
NGPA Section 103

DESIGNATED AGENT Carl J. Carlson

ADDRESS P.O. Box 1327

Parkersburg, W. Va. 26101

LOCATION: Elevation 1354

Watershed Buffalo Run

Dist. Grant County Wetzel Quad. Pine Grove

WELL OPERATOR Quaker State

ADDRESS P.O. Box 1327

Parkersburg, W. Va. 26101

GAS PURCHASER ^{Tentative:} Consolidated Gas Supply Corp.

ADDRESS 445 West Main St.

Clarksburg, W. Va. 26301

Gas Purchase Contract No. —

Meter Chart Code —

Date of Contract —

* * * * *

Date surface drilling was begun: 7-19-81

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

$$\begin{aligned}
 P_i &= 250 \\
 X &= \frac{GL}{53.34 TR} \\
 G &= 0.78 \\
 L &= 3270' \\
 TR &= T_f + 460' \\
 T_f &= 72' \\
 BHP &= P_i + P_i (e^X - 1) \\
 &= 250 + 250 \left[e^{\frac{(0.78)(3270)}{(53.34)(72+460)}} - 1 \right] \\
 &= 250 + 250 (e^{2.5506/28376.9} - 1) \\
 &= 250 + 250 (e^{0.09} - 1) \\
 &= 250 + 250 (1.094 - 1) = 250 + 23.5 \\
 &= 273.5
 \end{aligned}$$

AFFIDAVIT

I, Carl J. Carlson, 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 19, 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 19, 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.

Carl J. Carlson

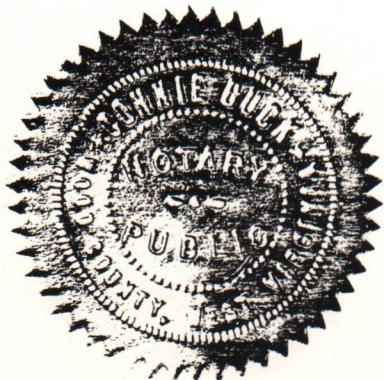
STATE OF WEST VIRGINIA,
COUNTY OF Wood, TO WIT:

I, Connie Buck, a Notary Public in and for the state and county aforesaid, do certify that Carl J. Carlson, whose name is signed to the writing above, bearing date the 9th day of March, 1982, has acknowledged the same before me, in my county aforesaid.

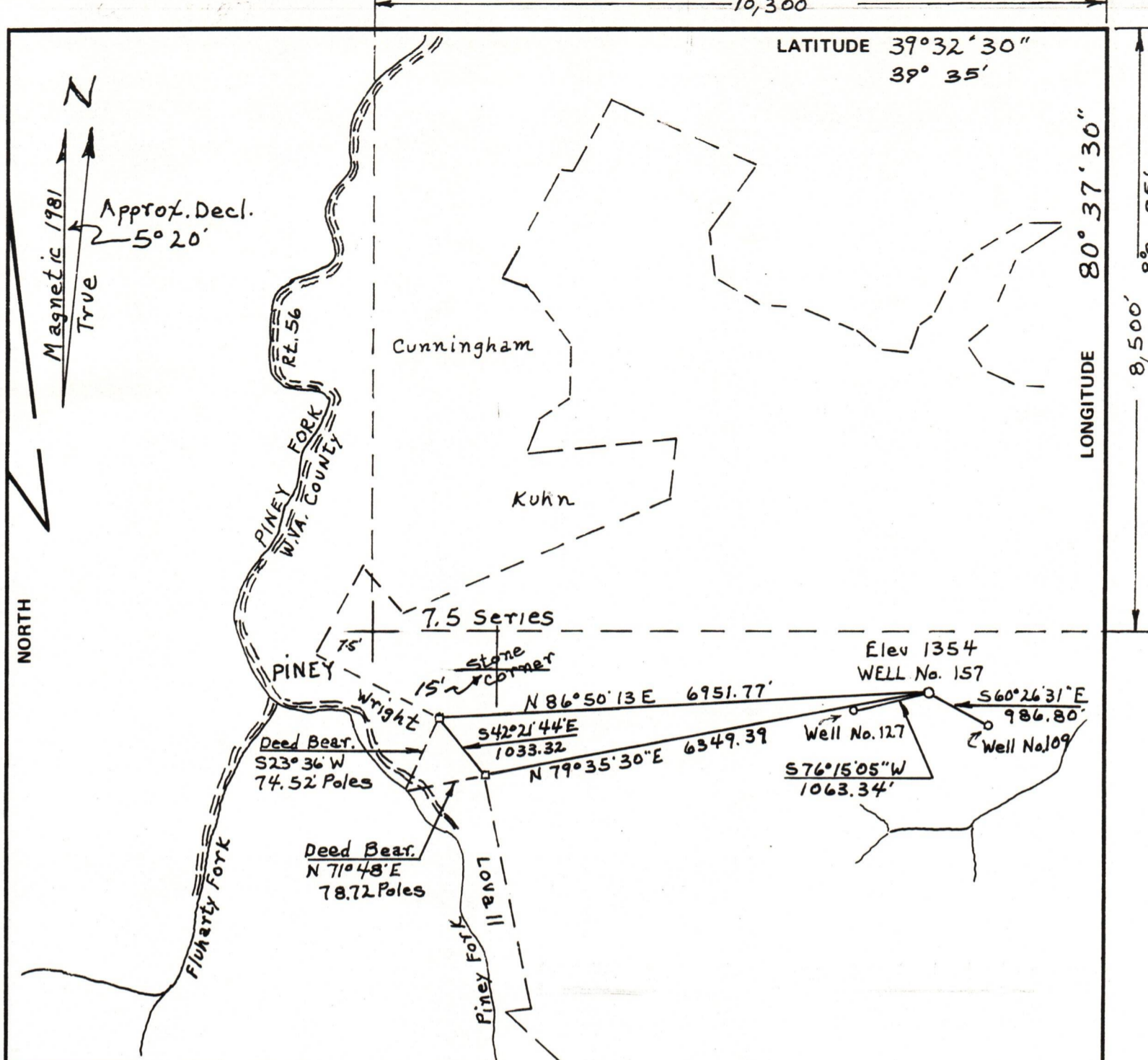
Given under my hand and official seal this 9th day of March, 1982

My term of office expires on the 2nd day of July, 1986.

Connie Buck
Notary Public

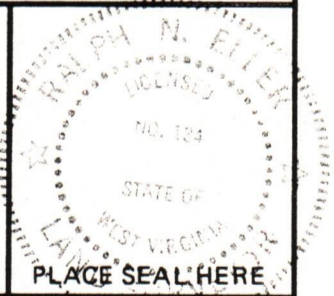


09/08/2023



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 2000'
 MINIMUM DEGREE OF ACCURACY 1/2500
 PROVEN SOURCE OF ELEVATION BM R-138
823'

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) Ralph N. Eller
 R.P.E. _____ L.L.S. No. 184



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



DATE March 4 1981
 OPERATOR'S WELL NO. 157
 API WELL NO. _____
47 - 103 - 1227
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE: OIL GAS _____ LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS,") PRODUCTION _____ STORAGE _____ DEEP _____ SHALLOW _____
 LOCATION: ELEVATION 1354 WATER SHED BUFFALO RUN
 DISTRICT GRANT COUNTY WETZEL
 QUADRANGLE PINE GROVE
 SURFACE OWNER LEWIS WETZEL HUNTING GROUND ACREAGE 5228.50
 OIL & GAS ROYALTY OWNER MILLS WETZEL LAND INC. LEASE ACREAGE 5228.50 09/08/2023
 LEASE NO. W-195
 PROPOSED WORK: DRILL CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE _____ PLUG OFF OLD FORMATION _____ PERFORATE NEW FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
 TARGET FORMATION GORDON ESTIMATED DEPTH 3270
 WELL OPERATOR QUAKER STATE OIL REF. CORP. DESIGNATED AGENT CARL J. CARLSON
 ADDRESS P.O. Box # 1327 ADDRESS P.O. Box # 1327
PARKERSBURG, W. VA. 26101 PARKERSBURG, W. VA. 26101