

Operator's  
Well No. KAS 1

API Well No. 47      039      3872

---

State      County      Permit

WELL TYPE: Oil \_\_\_\_\_ / Gas X /  
(If "Gas", Production \_\_\_\_\_ / Underground storage \_\_\_\_\_ / Deep \_\_\_\_\_ / Shallow \_\_\_\_\_ /)  
LOCATION: Elevation: 723.99' Watershed: Blue Creek  
District: Elk County: Kanawha Quadrangle: Quick  
WELL OPERATOR Blue Creek Gas Company DESIGNATED AGENT Steven Rubin  
Address P.O. Box 6357 Address P.O. Box 6357  
Charleston, WV 25302 Charleston, WV 25302  
OIL & GAS ROYALTY OWNER Union Carbide COAL OPERATOR Union Carbide  
Address P.O. Box 8004 Address P.O. Box 8004  
South Charleston, WV 25303 South Charleston, WV 25303  
Acreage 2389 COAL OWNER(S) WITH DECLARATION ON RECORD:  
SURFACE OWNER Union Carbide Name \_\_\_\_\_  
Address P.O. Box 8004 Address \_\_\_\_\_  
South Charleston, WV 25303 \_\_\_\_\_  
Acreage \_\_\_\_\_ MAY 24 1982  
FIELD SALE (IF MADE) TO: Name \_\_\_\_\_  
Address \_\_\_\_\_ OIL AND GAS DIVISION  
WV DEPARTMENT OF MINES  
COAL LESSEE WITH DECLARATION ON RECORD:  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
OIL & GAS INSPECTOR TO BE NOTIFIED  
Name Martin Nichols  
Address Clendenin, WV

# BLANKET BOND

Its Director of Operations

PROPOSED WORK ORDER

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

DRILLING CONTRACTOR (IF KNOWN) N/A  
Address \_\_\_\_\_  
\_\_\_\_\_

GEOLOGICAL TARGET FORMATION, Shale

Estimated depth of completed well, 4045 feet Rotary X / Cable tools \_\_\_\_\_ /  
Approximate water strata depths: Fresh, 123' feet; salt, \_\_\_\_\_ feet.  
Approximate coal seam depths: \_\_\_\_\_ Is coal being mined in the area? Yes X / 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	Left in well		
Conductor	9 5/8			X		300	300	Cement to Surface	Kinds
Fresh Water									
Coal									Sizes
Intermediate	7"		20'	X		1460	1460	40 sks.	
Production	4 1/2"		10.5	X		4045	4045	100 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-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 dwelling 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,  
ARTICLE 4 OF THE W. VA. CODE, THE LOCATION IS HEREBY  
APPROVED FOR drilling. THIS PERMIT SHALL EXPIRE  
IF OPERATIONS HAVE NOT COMMENCED BY 2-9-83,  
BY [Signature]

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.

WAIVER

The undersigned coal operator \_\_\_\_\_ / owner \_\_\_\_\_ / lessee \_\_\_\_\_ / of the coal under this well location 02/16/2024 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.

Date: \_\_\_\_\_, 19 \_\_\_\_\_

By \_\_\_\_\_  
Its \_\_\_\_\_

Date May 4 1982  
Well No. KAS #1  
API No. 47 - 039 - 3872  
State County PermitSTATE OF WEST VIRGINIA  
OFFICE OF OIL AND GASCompany Name Blue Creek Gas Co. Designated Agent Steven Rubin  
Address P.O. Box 6357 Address P.O. Box 6357  
Telephone 342-0141 Telephone 342-0141  
Undowner UNION CARBIDE Soil Cons. District Capitol SCD  
Revegetation to be carried out by Blue Creek Gas Co. (Agent)This plan has been reviewed by CAPITOL SCD. All corrections  
and additions become a part of this plan. R. C. [Signature]  
(SCD AGENT)Date: MAY 19, 1982Address: 1422 Federal Bldg., 500 Quarrier St.  
Street  
Chas., WV25301 PH 343-6181, Ext. 232  
City

Access Road	Location
Structure _____ (A)	Structure <u>Diversion Ditch</u> (1)
Spacing _____	Material <u>Earth</u>
Page Ref. Manual _____	Page Ref. Manual <u>2-12</u> 5.0
Structure _____ (B)	Structure <u>Rip Rap</u> (2)
Spacing _____	Material <u>Rock</u>
Page Ref. Manual _____	Page Ref. Manual <u>N/A</u>
Structure _____ (C)	Structure _____ (3)
Spacing _____	Material _____
Page Ref. Manual _____	Page Ref. Manual _____

All structures should be inspected regularly and repaired if necessary. MAY 24 1982

OIL AND GAS DIVISION  
WV DEPARTMENT OF MINES

## Revegetation

Treatment Area I		Treatment Area II	
Lime _____ 3 Tons/acre	or correct to pH <u>6.5</u>	Lime _____ 3 Tons/Acre	or correct to pH <u>6.5</u>
Fertilizer <u>500-600</u> lbs/acre	(10-20-20 or equivalent)	Fertilizer <u>600</u> lbs/acre	(10-20-20 or equivalent)
Mulch <u>Hay (2)</u> Tons/Acre		Mulch <u>Hay (2)</u> Tons/Acre	
Seed* <u>Ky 31</u> 20 lbs/acre		Seed* <u>Ky 31</u> 3020 lbs/acre	
<u>Platp</u> 20 lbs/acre		<u>Platp</u> 20 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 Quick

Legend:



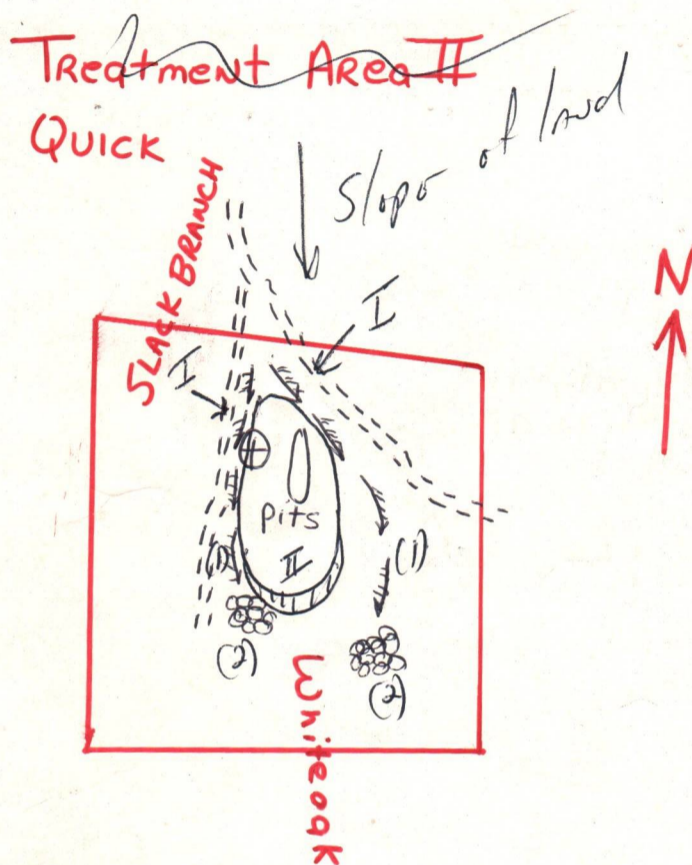
02/16/2024

# Well Site Plan

Legend: 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: Existing Road will serve as access road. Ditches will catch any possible location fluid and divert to rip rap.

Entire area will be seeded after grading and filling have occurred. 02/16/2024

PLAN PREPARED BY: Steven Rubin

P.O. Box 6357 Chas WVA

NAME

342-0141

ADDRESS

PHONE NO.

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



IV-35  
(Rev 8-81)

State of West Virginia  
Department of Mines  
Oil and Gas Division

Date August 24, 1983  
Operator's KAS #1  
Well No.             
Farm             
API No. 47 - 039 - 3872

WELL OPERATOR'S REPORT  
OF  
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

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

LOCATION: Elevation: 723.99' Watershed Blue Creek  
District: Elk County Kanawha Quadrangle Quick

COMPANY Blue Creek Gas Company  
ADDRESS P. O. Box 6357, Charleston, WV  
DESIGNATED AGENT Stanley Rubin  
ADDRESS P. O. Box 6357, Charleston, WV  
SURFACE OWNER Union Carbide  
ADDRESS Sanderson, WV  
MINERAL RIGHTS OWNER Union Carbide  
ADDRESS Sanderson, WV  
OIL AND GAS INSPECTOR FOR THIS WORK Homer  
Dougherty ADDRESS             
PERMIT ISSUED May 24, 1982  
DRILLING COMMENCED January 18, 1983  
DRILLING COMPLETED January 25, 1983  
IF APPLICABLE: PLUGGING OF DRY HOLE ON  
CONTINUOUS PROGRESSION FROM DRILLING OR  
REWORKING. VERBAL PERMISSION OBTAINED  
ON           

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.	30	30	To Surface
13-10"	200	200	50 sks.
9 5/8			
8 5/8			
7	1335	1335	75 sks.
5 1/2			
4 1/2	4150	4150	115 sks.
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Shale Depth 1876-4150 feet  
Depth of completed well 4150 feet Rotary X / Cable Tools             
Water strata depth: Fresh            feet; Salt            feet  
Coal seam depths:            Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Shale Pay zone depth 1876-4150 feet  
Gas: Initial open flow            Mcf/d Oil: Initial open flow            Bbl/d  
Final open flow 300,000 Mcf/d Final open flow            Bbl/d  
Time of open flow between initial and final tests            hours  
Static rock pressure 720 psig (surface measurement) after 48 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 Oil: 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

(Continue on reverse side)

## INSPECTOR'S PLUGGING REPORT

Permit No. \_\_\_\_\_

Well No.

COMPANY \_\_\_\_\_ ADDRESS \_\_\_\_\_

FARM \_\_\_\_\_ DISTRICT \_\_\_\_\_ COUNTY \_\_\_\_\_

### Filling Material Used

[illegible]

### Drillers' Names

Remarks:

**RATE**

I hereby certify I visited the above well on this date.

DISTRICT WELL INSPECTOR

## Well Operator

By: Steven M. Rubin

02/16/2024

Date: August 24, 1983

*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."

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

# RECEIVED

JAN 25 1983

OIL AND GAS DIVISION  
WV DEPARTMENT OF MINES

## INSPECTOR'S WELL REPORT

Permit No. 039-3872Oil or Gas Well Gas  
(KIND)

Company <u>Blue Creek Gas</u>	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Address <u>Charleston, WVA</u>	Size			
Farm <u>Union Carbide</u>	16		19'	Kind of Packer
Well No. <u>Kas #1</u>	13			
District <u>ELK</u> County <u>Kanawha</u>	10 3/4		198	Size of
Drilling commenced <u>1/12/83</u>	8 1/4			Depth set
Drilling completed _____ Total depth _____	6 1/2			
Date shot _____ Depth of shot _____	5 3/16			Perf. top
Initial open flow _____ /10ths Water in _____ Inch	3			Perf. bottom
Open flow after tubing _____ /10ths Merc. in _____ Inch	2			Perf. top
Volume _____ Cu. Ft.	Liners Used			Perf. bottom
Rock pressure _____ lbs. _____ hrs.	CASING CEMENTED <u>10 3/4</u> SIZE <u>198</u> No. FT. <u>1/24/83</u> Date			
Oil _____ bbls., 1st 24 hrs.	NAME OF SERVICE COMPANY <u>Halliburton</u>			
Fresh water _____ feet _____ feet	COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES			
Salt water _____ feet _____ feet	_____ FEET _____ INCHES _____ FEET _____ INCHES			

Drillers' Names Bob Golden Pusher Paul WebbClint Hurt Rig #7

Remarks: 1/19/83 Set 19 ft. of 16" Conduction Pipe & cemented with 150 Sacks of Regular Plug Down 5:00 PM by Halliburton Hole washed out Bad around & under Sub base in beginning.  
1/20/83 Ran 198 ft. Lbl of 10 3/4" Surface pipe & cemented with 125 Sacks of Regular 3 7/8 C.C. Plug Down 12:00 noon by Halliburton  
1/21/83 950 ft. Deep Drilling on Air + Soap Running 8 3/4" Bit, going to 1332 for 9" casing point.

1/21/83

DATE

Homer H. Daugherty 02/16/2024

DISTRICT WELL INSPECTOR

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

## INSPECTOR'S PLUGGING REPORT

Permit No. \_\_\_\_\_

Well No. \_\_\_\_\_

COMPANY \_\_\_\_\_ ADDRESS \_\_\_\_\_

FARM \_\_\_\_\_ DISTRICT \_\_\_\_\_ COUNTY \_\_\_\_\_

Filling Material Used \_\_\_\_\_

[illegible]

Drillers' Names \_\_\_\_\_

Remarks:

DATE \_\_\_\_\_

I hereby certify I visited the above well on this date.

02/16/2024.

DISTRICT WELL INSPECTOR

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

**RECEIVED**  
APR 10 1984

## INSPECTOR'S WELL REPORT

OIL & GAS DIVISION  
DEPT. OF MINES

Permit No. 039-3872

Oil or Gas Well \_\_\_\_\_  
(KIND)

Company <u>Blue Creek Gas</u>	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Address <u>Charleston, WV</u>	Size			
Farm <u>Union Carbide</u>	16			Kind of Packer
Well No. <u>Kas #1</u>	13			
District <u>EIK</u> County <u>Kanawha</u>	10			Size of
Drilling commenced	8 1/4			
Drilling completed	6 5/8			Depth set
Total depth	5 3/16			
Date shot	3			Perf. top
Depth of shot	2			Perf. bottom
Initial open flow	Liners Used			Perf. top
/10ths Water in				Perf. bottom
Inch				
Open flow after tubing				
/10ths Merc. in				
Inch				
Volume	CASING CEMENTED	SIZE	No. FT.	Date
Cu. Ft.				
Rock pressure	NAME OF SERVICE COMPANY			
lbs.				
hrs.				
Oil	COAL WAS ENCOUNTERED AT	FEET	INCHES	
bbls., 1st 24 hrs.				
Fresh water	FEET	INCHES	FEET	INCHES
feet				
Salt water	FEET	INCHES	FEET	INCHES
feet				

Drillers' Names \_\_\_\_\_

Remarks:

Meet With Steve Ruben Check Reclamation  
Reclamation Incomplete  
Need Seed, Lime Muck

4-4-84

DATE

Loelney D. Dean  
02/16/2024  
DISTRICT WELL INSPECTOR

RECEIVED

## INSPECTOR'S PLUGGING REPORT

Well No.

-ADDRESS.

DISTRICT.

COUNTY

### Liner

Amount

## Packer

Location

### Drillers' Names.

Remarks:

DATE \_\_\_\_\_

I hereby certify I visited the above well on this date.

02/16/2024



State of West Virginia  
Department of Mines  
Oil and Gas Division  
Charleston 25305

FINAL INSPECTION REPORT  
INSPECTORS COMPLIANCE REPORT

RECEIVED

MAY 30 1984

OIL & GAS DIVISION  
DEPT. OF MINES

COMPANY Blue Creek Gas  
Charleston, WV

PERMIT NO 039-3872  
FARM & WELL NO Union Carbide / GAS #1  
DIST. & COUNTY ELK / Kan

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		
15.04	Adequate Cement Strenght		
15.05	Cement Type		
23.02	Maintained Access Roads		
25.01	Necessary Equipment to Prevent Waste		
23.04	Reclaimed Drilling Pits		
23.05	No Surface or Underground Pollution		
23.07	Requirements for Production & Gathering Pipelines		
16.01	Well Records on Site		
16.02	Well Records Filed		
7.05	Identification Markings		

I HAVE INSPECTED THE ABOVE CAPTIONED WELL AND RECOMMEND THAT IT BE RELEASED:

SIGNED Rock Hill

DATE 5/21/84

Your well record was received and reclamation requirements approved. In accordance with Chapter 22, Article 4, Section 2, the above well will remain under bond coverage for the life of the well.

T. L. R. B.  
Administrator-Oil & Gas Division

6/1/84

DATE

02/16/2024

1.0 API well number: (If not available, leave blank. 14 digits.)	7-039-3872			
2.0 Type of determination being sought: (Use the codes found on the front of this form.)	107 Section of NGPA		3 Category Code	
3.0 Depth of the deepest completion location: (Only needed if sections 103 or 107 in 2.0 above.)	OIL & GAS DIVISION DEPT. OF MINES			
4.0 Name, address and code number of applicant: (35 letters per line maximum. If code number not available, leave blank.)	Blue Creek Gas Company Name P.O. Box 6357 Street Charleston WV 25302 City State Zip Code			
5.0 Location of this well: [Complete (a) or (b).] (a) For onshore wells (35 letters maximum for field name.)	Elk District Field Name Kanawha WV County State			
(b) For OCS wells:	Area Name Block Number Date of Lease: Mo. Day Yr. OCS Lease Number			
(c) Name and identification number of this well: (35 letters and digits maximum.)	KAS #1			
(d) If code 4 or 5 in 2.0 above, name of the reservoir: (35 letters maximum.)				
6.0 (a) Name and code number of the purchaser: (35 letters and digits maximum. If code number not available, leave blank.)	Columbia Gas Transmission Corporation 004030 Name Buyer Code			
(b) Date of the contract:	Mo. Day Yr.			
(c) Estimated annual production:	20 MMcf.			
7.0 Contract price: (As of filing date. Complete to 3 decimal places.)	(a) Base Price (\$/MMBTU)	(b) Tax	(c) All Other Prices [Indicate (+) or (-).]	(d) Total of (a), (b) and (c)
8.0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.)	5.4 4 4			5.4 4 4
9.0 Person responsible for this application:	Stanley Rubin Vice President Name Title Signature January 24, 1983 304-342-0141 Date Application is Completed Phone Number			
Agency Use Only Date Received by Juris. Agency JAN 27 1983 Date Received by FERC				

FT7900806/2 2

02/16/2024

PARTICIPANTS:

WELL OPERATOR:

FIRST PURCHASER:

OTHER:

DATE:

APR 28 1983

BUYER-SELLER CODE

Blue Creek Gas Company

Columbia Gas Transmission

004030

W. Va. Department of Mines, Oil & Gas Division

WELL DETERMINATION FILE NUMBER

83 D127-107-039-3872

Use Above File Number on all Communications  
Relating to Determination of this Well

~~DEFERRED~~  
Worksheet

QUALIFIED

CHECK EACH ITEM AS COMPLETE OR NOTE WHAT IS MISSING

ITEM NO.

1. FERC -121 ☒ Items not completed - Line No. 11 7.0 8.0 bc
2. IV-1 Agent Steven M. Rubin
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: 1-18-83 Date completed 1-25-83 Deepened —
- (5) Production Depth: 1876-4150
- (5) Production Formation: Shale
- (5) Final Open Flow: NA
- (5) After Frac. R. P. NA
- (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? yes 02/16/2024
- Additional information — Does computer program confirm? —
- Was Determination Objected to — By Whom? —

703

DEPARTMENT OF MINES OIL AND GAS DIVISION

Operator's  
Well No. KAS #1

API Well No.

47 - 039 - 3872  
State County Permit

WELL CLASSIFICATION FORM  
HIGH COST GAS WELL - DEVONIAN SHALE  
NGPA Section 107

DESIGNATED AGENT Stanley Rubin

ADDRESS P.O. Box 6357

Charleston, WV 25302

LOCATION Elevation 723.99'

Watershed Blue Creek

Dist. Elk County Kanawha Quad. Quick

Gas Purchase

Contract No. \_\_\_\_\_

Meter Chart Code \_\_\_\_\_

Date of Contract \_\_\_\_\_

WELL OPERATOR Blue Creek Gas Company

ADDRESS P.O. Box 6357

Charleston, WV 25302

GAS PURCHASER Columbia Gas Transmission

ADDRESS 1700 MacCorkle Avenue

Charleston, WV 25304

\* \* \* \* \*

Date surface drilling began: January 18, 1983

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

$$\text{BHP} = P_1 + \frac{.25 \times P_1}{100} \times \frac{(D)}{100}$$

$P_1 = 825 \text{ est.}$   
 $D = 4150$

BHP = ~~940~~ est.  
910\*

AFFIDAVIT

I, \_\_\_\_\_, having been first sworn according to law, state that I have calculated the percentage of footage of the producing interval which is not Devonian Shale as indicated by a Gamma Ray index of less than 0.7 if a Gamma Ray log described in subparagraph (3)(i) or (3)(ii)(A) has been filed, or as indicated by the report described in subparagraph (3)(ii)(B); I have demonstrated that the percentage of potentially disqualifying non-shale footage is equal to or less than five (5) percent of the gross Devonian age interval; and I have no knowledge of any information not described in the application which is inconsistent with a conclusion that the well qualifies as a high-cost natural gas well.

Stanley M. Rubin

STATE OF WEST VIRGINIA

COUNTY OF KANAWHA, TO-WIT:

I, DANIEL RUBIN, a Notary Public in and for the state and county aforesaid, do certify that STANLEY M. RUBIN, whose name is signed to the writing above, bearing date the 24th day of JAN, 1983, has acknowledged the same before me, in my county aforesaid.

02/16/2024

Given under my hand and official seal this 27th day of JANUARY, 1983.  
My term of office expires on the 7th day of NOV., 1983.

Daniel Rubin  
Notary Public

(NOTARIAL SEAL)

# APPLICATION FOR DETERMINATION OF THE MAXIMUM LAWFUL PRICE UNDER THE NATURAL GAS POLICY ACT

Operator: Blue Creek Gas Co Agent: Stanley Rubin  
Type Determination being sought - 107 (Devonian Shale)  
API Well No. 47-039-3872 Well Name: KAS #1  
West Virginia Office of Oil and Gas County: KANAWHA  
References: SJA File No.

Vol.      Page      Line     

I. NOTE: A Gamma Ray Log has been marked with the (a) Shale Base Line, (b) a line representing 0.7 x (Shale Base Line), (c) intervals with Gamma Ray units less than 0.7 x (Shale Base Line) and that log is included with this analysis.

II. Gamma Ray elevation indices:

A. Shale Base Line (API Units)

- GR Value at Base Line = 150 \* API Units
- Remarks:

B. Gamma Ray Log Value at 0.7 x Value at Base Line

- GR Value = 150 \* API Units
- Calculation:  $0.7 \text{ (GR Value at Base Line)}$   
 $0.7 \text{ (150 *)} = \underline{105}$  API Units

III. Intervals with GR index less than 0.7 x (Value at Base Line):

Interval		Thickness of Interval Feet	Feet of less than* 0.7 (Shale Base Line) Feet
From**	To***		
1900	2100	200	0
2100	2650	550	5
2650	3500	850	0
3500	4150	650	0
		<u>2250</u>	<u>5</u>

Total Devonian Interval

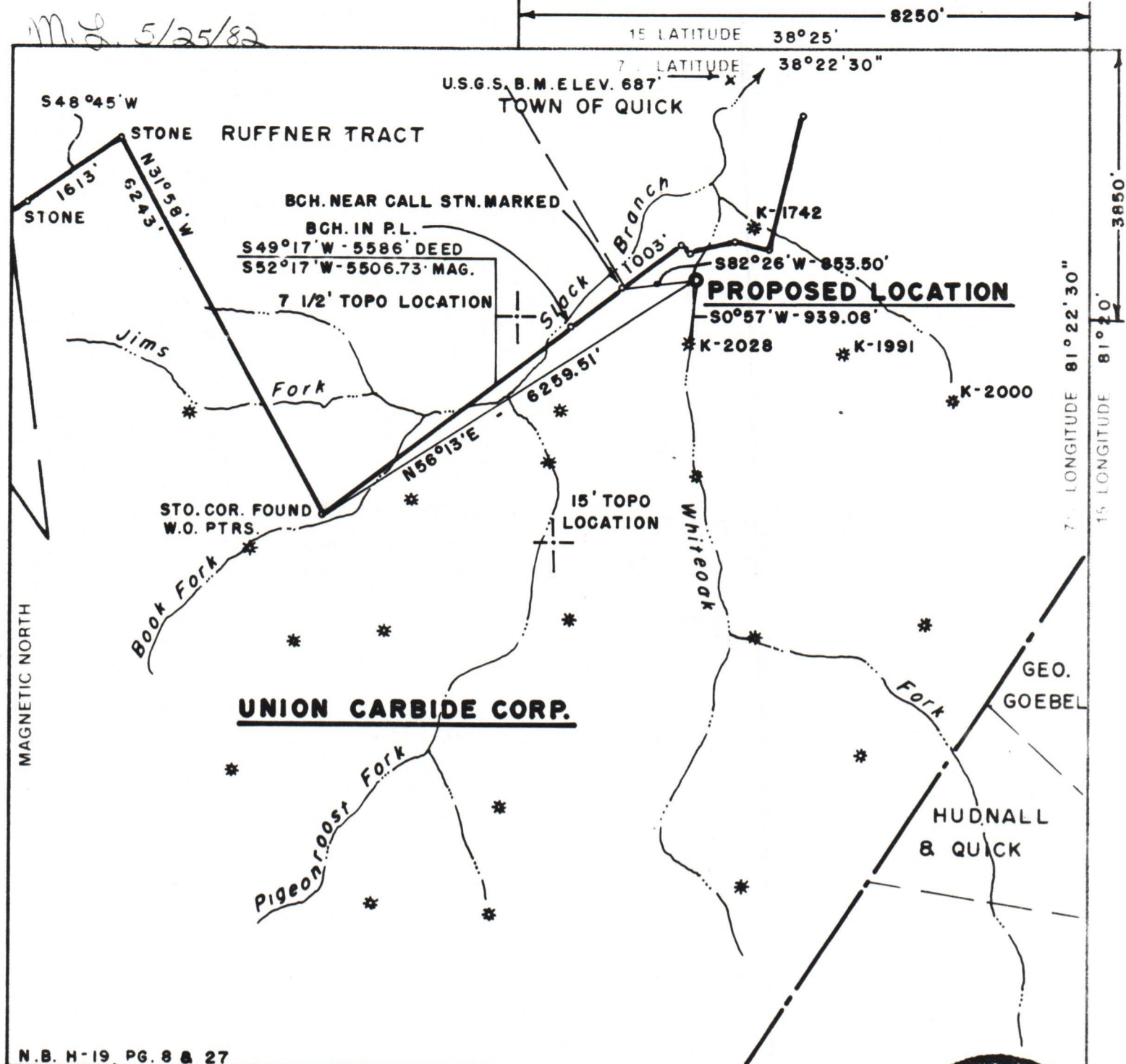
2250

Total Less Than 0.7 (Shale Base)

% Less Than 0.7 (Shale Base Line) =  $\frac{5}{2250} \times 100 = \underline{0.22\%}$

02/16/2024

\*Marked on log included with analysis.  
\*\*Top of Devonian Section Recorded on First Interval in this Column  
\*\*\*Lesser of TD or Bottom of Devonian Section Recorded as last interval in this Column.

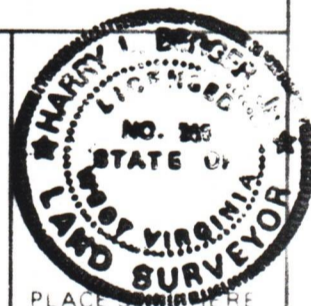


N.B. H-19 PG. 8 & 27

FILE NO **KAS-1**  
MAP NO **QUICK QUAD.**  
SCALE **1" = 2000'**  
MINIMUM DEGREE OF  
ACCURACY **1:2500**  
PROVEN SOURCE OF  
ELEVATION **U.S.G.S. B.M. SHOWN  
E.L. 687'**

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 REGU  
LATIONS ISSUED AND PRESCRIBED BY THE DEPART  
MENT OF MINES

(SIGNED) *Harry L. Berger Jr.*  
HARRY L. BERGER JR.



(+) DENOTES LOCATION OF  
WELL ON UNITED STATES  
TOPOGRAPHIC MAPS

FORM IV-6  
(878)



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

DATE **MAY 21** 19 **82**  
OPERATOR'S WELL NO **KAS-1**  
API WELL NO  
**47** **039** **3872**  
STATE COUNTY PERMIT

WELL TYPE OIL \_\_\_ GAS ☒ LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
(IF "GAS") PRODUCTION ☒ STORAGE \_\_\_ DEEP \_\_\_ SHALLOW ☒  
LOCATION ELEVATION **723.99'** WATER SHED **WHITEOAK FORK**  
DISTRICT **ELK** COUNTY **KANAWHA**  
QUADRANGLE **7 1/2' QUICK & 15' CLENDENIN S.W.**

SURFACE OWNER **UNION CARBIDE CORP.** ACREAGE **2389**  
OIL & GAS ROYALTY OWNER **UNION CARBIDE CORP.** LEASE ACREAGE **2389**  
LEASE NO. \_\_\_\_\_

PROPOSED WORK DRILL ☒ CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR  
STIMULATE \_\_\_ PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW  
FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

02/16/2024

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
TARGET FORMATION **BROWN SHALE** ESTIMATED DEPTH **4045'**  
OPERATOR **BLUE CREEK GAS CO.** AGENT **STEVE RUBIN**  
ADDRESS **BOX 6357** ADDRESS **BOX 6357**  
**CHARLESTON, WV 25302** **CHARLESTON, WV 25302**



IV-35  
(Rev 8-81)

# State of West Virginia

Department of Mines  
Oil and Gas Division

Date August 24, 1983

Operator's  
Well No. KAS #1

Farm  
API No. 47 - 039 - 3872

## WELL OPERATOR'S REPORT OF

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

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

LOCATION: Elevation: 723.99' Watershed Blue Creek  
District: Elk County Kanawha Quadrangle Quick

COMPANY Blue Creek Gas Company  
ADDRESS P. O. Box 6357, Charleston, WV  
DESIGNATED AGENT Stanley Rubin  
ADDRESS P. O. Box 6357, Charleston, WV  
SURFACE OWNER Union Carbide  
ADDRESS Sanderson, WV  
MINERAL RIGHTS OWNER Union Carbide  
ADDRESS Sanderson, WV  
OIL AND GAS INSPECTOR FOR THIS WORK Homer  
Dougherty ADDRESS     
PERMIT ISSUED May 24, 1982  
DRILLING COMMENCED January 18, 1983  
DRILLING COMPLETED January 25, 1983  
IF APPLICABLE: PLUGGING OF DRY HOLE ON  
CONTINUOUS PROGRESSION FROM DRILLING OR  
REWORKING. VERBAL PERMISSION OBTAINED  
ON   

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.	30	30	To Surface
13-10"	200	200	50 sks.
9 5/8			
8 5/8			
7	1335	1335	75 sks.
5 1/2			
4 1/2	4150	4150	115 sks.
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Shale Depth 1876-4150 feet  
Depth of completed well 4150 feet Rotary X / Cable Tools     
Water strata depth: Fresh    feet; Salt    feet  
Coal seam depths:    Is coal being mined in the area? No

#### OPEN FLOW DATA

Producing formation Shale Pay zone depth 1876-4150 feet  
Gas: Initial open flow    Mcf/d Oil: Initial open flow    Bbl/d  
Final open flow 300,000 Mcf/d Final open flow    Bbl/d  
Time of open flow between initial and final tests    hours  
Static rock pressure 720 psig (surface measurement) after 48 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 Oil: 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

(Continue on reverse side)

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

Sand 20/40 60,000#  
800 Gals 15% HCL  
Nitrogen 1,014,000

Perforations  
3010-3868

39 Shots

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Sand, Shale, Rock			0	1286	
Big Lime			1286	1437	
Injun			1437	1462	
Shale			1462	1510	
Upper Weir			1510	1568	
Shale			1568	1606	
Lower Weir			1606	1653	
Shale			1653	1864	
Berea			1864	1876	
Shale			1876	4150 T.D.	

(Attach separate sheets as necessary)

Blue Creek Gas Company

Well Operator

By: Steven M. Rubin 02/16/2024

Date: August 24, 1983

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."

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

# RECEIVED

JAN 24 1983

## INSPECTOR'S WELL REPORT

OIL AND GAS DIVISION  
WV DEPARTMENT OF MINES

Permit No. 039-3872

Oil or Gas Well Gas  
(KIND)

Company <u>Blue Creek Gas Co</u>	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Address <u>Charleston</u>	Size			
Farm <u>Union Carbide</u>	16			Kind of Packer
Well No. <u>Kas #1</u>	13			
District <u>EIK</u> County <u>Kanawha</u>	10			Size of
Drilling commenced	8 1/4			
Drilling completed	6 5/8			Depth set
Date shot	5 3/16			
Depth of shot	3			Perf. top
Initial open flow	2			Perf. bottom
/10ths Water in	Liners Used			Perf. top
Inch				Perf. bottom
Open flow after tubing				
/10ths Merc. in				
Inch				
Volume	CASING CEMENTED	SIZE	No. FT.	Date
Cu. Ft.	NAME OF SERVICE COMPANY			
Rock pressure	COAL WAS ENCOUNTERED AT			
lbs.	FEET INCHES			
hrs.	FEET INCHES			
Oil	FEET INCHES			
bbls., 1st 24 hrs.	FEET INCHES			
Fresh water	FEET INCHES			
feet	FEET INCHES			
Salt water	FEET INCHES			
feet	FEET INCHES			

Drillers' Names Bob Golden Pusher Paul Webb

Clin E Hunt Rig #7

Remarks: 1/17/83 Moving Rig on location  
going to start Drilling late tonight.

1/17/83  
DATE

Homer H. Dougherty  
DISTRICT WELL INSPECTOR

02/16/2024

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

## INSPECTOR'S PLUGGING REPORT

Permit No. \_\_\_\_\_ Well No. \_\_\_\_\_

COMPANY \_\_\_\_\_ ADDRESS \_\_\_\_\_

FARM \_\_\_\_\_ DISTRICT \_\_\_\_\_ COUNTY \_\_\_\_\_

Filling Material Used \_\_\_\_\_

[illegible]

Drillers' Names \_\_\_\_\_

Remarks:

**RATE**

I hereby certify I visited the above well on this date.

02/16/2024

DISTRICT WELL INSPECTOR

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

# RECEIVED

JAN 27 1983

OIL AND GAS DIVISION  
WV DEPARTMENT OF MINES

## INSPECTOR'S WELL REPORT

Permit No. 039-3822

Oil or Gas Well Gas  
(KIND)

Company <u>Blue Creek Gas</u>	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Address <u>Charleston, W.V.A.</u>	Size			
Farm <u>Union Carbide</u>	16			Kind of Packer
Well No. <u>Kas #1</u>	13			
District <u>E/K</u> County <u>Kanawha</u>	10			Size of
Drilling commenced <u>1/17/83</u>	8 1/4			
Drilling completed _____ Total depth _____	7"		1323	Depth set
Date shot _____ Depth of shot _____	5 3/16			
Initial open flow _____ /10ths Water in _____ Inch	3			Perf. top
Open flow after tubing _____ /10ths Merc. in _____ Inch	2			Perf. bottom
Volume _____ Cu. Ft.	Liners Used			Perf. top
Rock pressure _____ lbs. _____ hrs.				Perf. bottom
Oil _____ bbls., 1st 24 hrs.	CASING CEMENTED <u>7</u> SIZE <u>1323</u> No. FT. <u>1/22/83</u> Date			
Fresh water _____ feet _____ feet	NAME OF SERVICE COMPANY <u>Halliburton</u>			
Salt water _____ feet _____ feet	COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			

Drillers' Names Bob Golden Pusher Paul Webb

Clint Hurt Rig #7

Remarks: 1/22/83 Ran 1323 Ft. o P 7" pipe & cemented with  
75 Sacks of Regular 3% cc. Plug Down 12:45 p.m. by Halliburton  
1/24/83 3670 Ft. Deep Drilling on Air Running 6 1/2" Bit.  
Will T.D. Late in Afternoon

1/24/83

DATE

Homer H. Doughty 02/16/2024  
DISTRICT WELL INSPECTOR

2/16/82

Well No. \_\_\_\_\_

FARM \_\_\_\_\_ DISTRICT \_\_\_\_\_ COUNTY \_\_\_\_\_

[illegible]

Drillers' Names \_\_\_\_\_

**I hereby certify I visited the above well on this date.**

DISTRICT WELL INSPECTOR