



[08-78]

PROPOSED WORK ORDER

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

DRILLING CONTRACTOR (IF KNOWN) S.W. Jack Drilling Company  
Address Box 48  
Buckhannon, WV 26201

GEOLOGICAL TARGET FORMATION, Haverty

Estimated depth of completed well, 5500 feet Rotary  / Cable tools  /  
Approximate water strata depths: Fresh, 1150 feet; salt, 0 feet.  
Approximate coal seam depths: 285-95 Is coal being mined in the area? Yes  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	11 3/4	H-40	42	x		30	30	0 sks.	Kinds
Fresh water	8 5/8	ERW	23	x		1100	1100	to surface	
Coal	8 5/8	ERW	23	x		1100	1100	to surface	Sizes
Intermediate									
Production Tubing	4 1/2	J-55	10.5	x		5450	5450	500 sks	Depths set
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 a 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 10-6-81.

John W. Binkley  
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.

03/15/2024

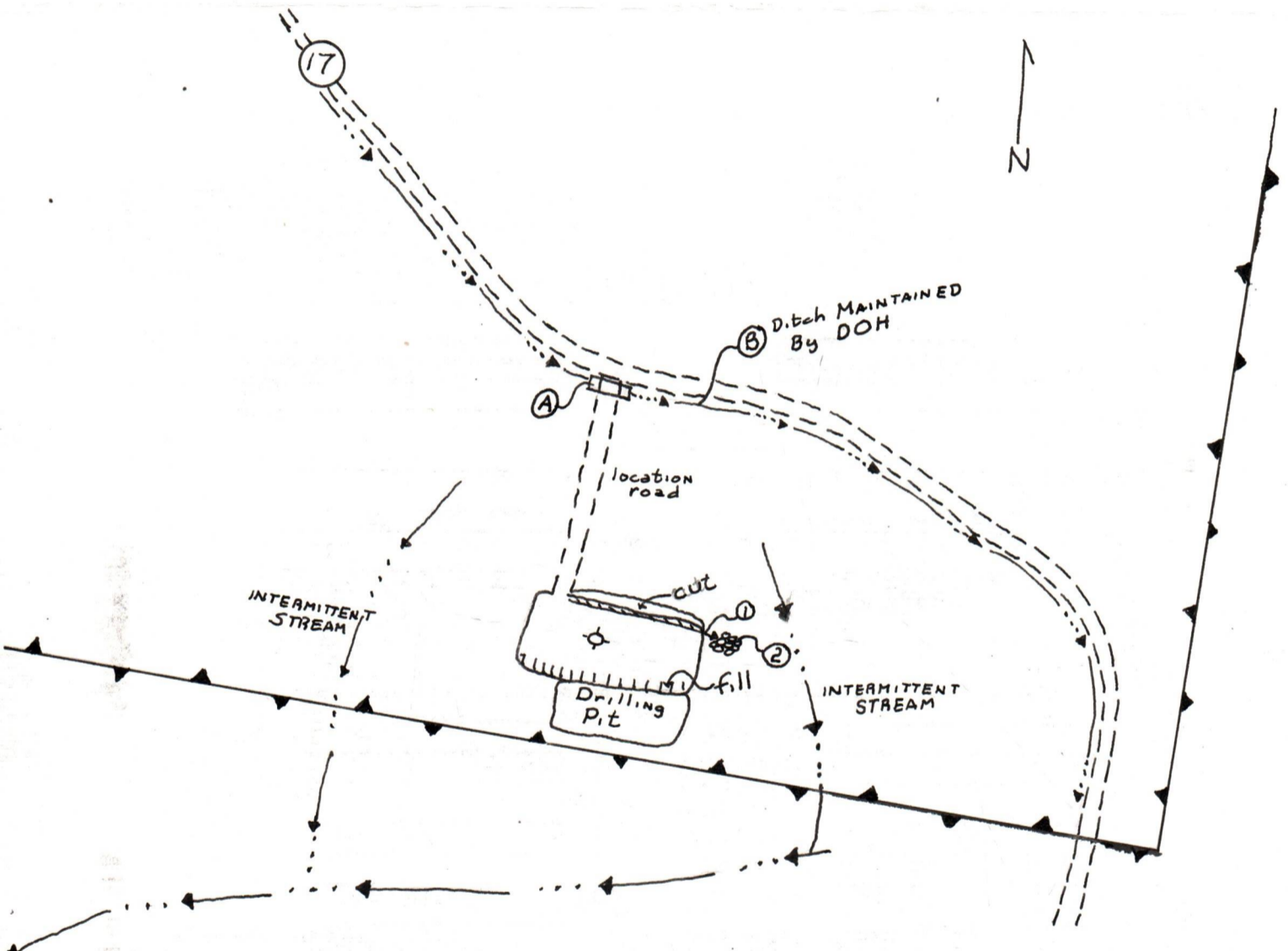
Date:           , 19           

By             
Its

Well Site Plan

- |                          |  |            |  |
|--------------------------|--|------------|--|
| Legend: Property Boundry |  | Diversion  |  |
| Road                     |  | Spring     |  |
| Existing Fence           |  | Wet Spot   |  |
| Planned Fence            |  | Building   |  |
| Stream                   |  | Drain Pipe |  |
| Open Ditch               |  | 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.

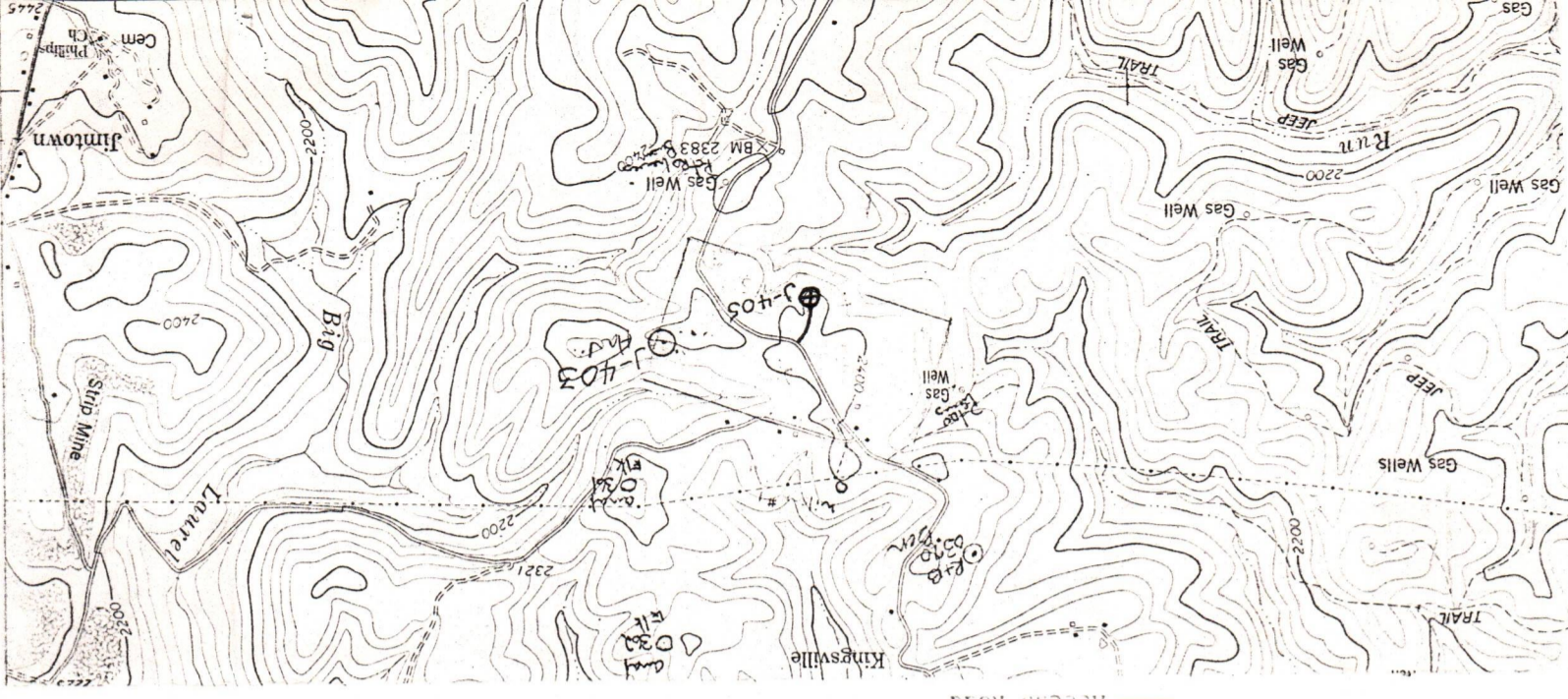


Comments: Access road slope is less than 5%--Any timber cut will be stacked--Cuts and fill will be on a 2:1 slope or less-- Location is fairly flat,cuts will be minimal.

Signature: John Rattler Agent P.O. Box 48, Buckhannon, WV (304)-472-9403  
Address Phone Number

03/15/2024

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



Legend:  
 ⊕ Well Site  
 — Access Road

Attach or photocopy section of involved topographic map. Quadrangle Ellamore 7.5'

\*Inoculate all legumes such as vetch, trefoil and clovers with the proper bacterium. Inoculate with 3X recommended amount.

Woodland	Woodland
Treatment Area I	Treatment Area II
Time or correct to pH <u>6.5</u>	Time or correct to pH <u>6.5</u>
3 tons/acre	3 tons/acre
Fertilizer (10-20-20 or equivalent) 600 lbs/acre	Fertilizer (10-20-20 or equivalent) 600 lbs/acre
Match Hay 2 tons/acre	Match Hay 2 tons/acre
Seed* Kentucky 31 30 lbs/acre	Seed* Kentucky 31 30 lbs/acre
Birdfoot Trefoil 10 lbs/acre	Birdfoot Trefoil 10 lbs/acre
Dom. Rye Grass 10 lbs/acre	Dom. Rye Grass 10 lbs/acre

DEPT. OF MINES  
 OIL & GAS DIVISION

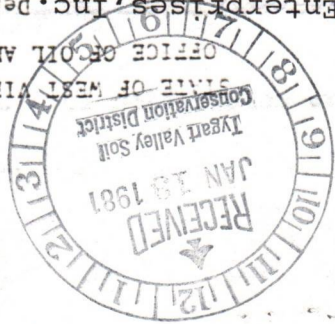
Revegetation

All structures should be inspected regularly and repaired if necessary.

Access Road	Location
Structure Culverts	Structure Diversion Ditch (1)
Spacing	Material Earthen
Page Ref. Manual I:7	Page Ref. Manual I:11
Structure Open Ditch	Structure Rip-Rap
Spacing	Material Rock
Page Ref. Manual N/A	Page Ref. Manual N/A
Structure	Structure
Spacing	Material
Page Ref. Manual	Page Ref. Manual

RECEIVED  
 JAN 22 1981

Company Name J & J Enterprises, Inc. Designated Agent H. L. Barnett  
 Address P.O. Box 48, Buckhannon, WV  
 Telephone (304)-472-9403  
 Landowner C. I. Moss  
 This plan has been reviewed by Tygart Valley and additions become a part of this plan. 1-20-81  
 (Agent) Robert Rogers  
 SOA All corrections Tygart Valley  
 (Soil Agent)



Date Jan. 12 1981  
 Well No. J-405  
 API No. 083 - 0421  
 State \_\_\_\_\_ County \_\_\_\_\_ Permit \_\_\_\_\_

03/15/2024

Form IV-9 (01-80)

[08-78]

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

Haverty:Perfs: 5016-24 (13 holes)

Fracturing:130 sks. 80/100 sand: 320 sks. 20/40 sand: 400 Bbls. fluid.

1st, 2nd, & 3rd Elk: Perforations : 4106-4640 (15 holes)

Fracturing: 500 gal. Acid: 200 sks. 80/100 sand: 500 sks. 20/40 sand: 600 Bbls. fluid.

Benson & Riley: Perforations: 3695-3829 (17 holes)

Fracturing: 500 gal. Acid: 200 sks. 80/100 sand: 500 sks. 20/40 sand: 600 Bbls. fluid.

WELL LOG

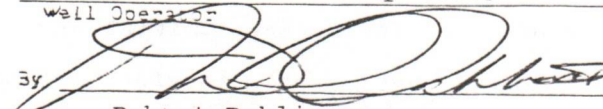
FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all frac and salt water, coal, oil and gas
Top soil & clay			0	25	
Sand			25	85	½" stream @ 150'
Sand & shale			85	110	
Coal			110	114	Gas ck @ 1756 No show
Shale			114	125	Gas ck @ 2438 6/10-¼" w.water
Coal			125	126	1,152 cu.ft.
Sand & shale			126	160	
Coal			160	162	Gas ck @ 3644 6/10-¼" w/water
Sand & shale			162	180	1,152 cu.ft.
Coal			180	182	Gas ck @ 3922 18/10-¼" w/water
Sand & shale			182	400	1,996 cu.ft.
Coal			400	405	
Sand & shale			405	630	Gas ck @ 4293 22/10 ¼" w/water
White sand			630	700	2,207 cu.ft.
Black shale			700	735	
Sand, shale & red rock			735	1010	Gas ck @ 4694 20/10-¼" w/water
Sand, shale & red rock			1010	1345	2,104 cu.ft.
Big Lime			1345	1495	
Injun			1495	1600	
Sand & shale			1600	2000	
Sand & shale			2000	2600	
Sand & shale			2600	3695	
Benson & Riley			3695	3870	
Sand & shale			3870	4100	
1st, 2nd & 3rd. Elk			4100	4640	
Sand & shale			4640	4750	
Sand & shale			4750	5016	
Haverty			5016	5024	
Sand & shale			5024	5526TD	

(Attach separate sheets to complete as necessary)

J & J Enterprises, Inc.

Well Operator

By

 03/15/2024

Its

Robert Dahlin

Geologist

NOTE: Regulation 2.02(d) 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."

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

TYPE: Oil \_\_\_ / Gas x / Liquid Injection \_\_\_ / Waste Disposal \_\_\_ / (If "Gas", Production x / Underground storage \_\_\_ / Deep \_\_\_ / Shallow x /) Elevation: 2405 Watershed: Big Laurel Run District: Roaring Creek County: Randolph Quadrangle: Ellamore

OPERATOR J & J Enterprises, Inc. DESIGNATED AGENT Roger Rolston Address P.O. Box 48 Buckhannon, WV 26201 Address P.O. Box 48 Buckhannon, WV 26201

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

DATE ISSUED ON 1/22, 19 81 OIL & GAS INSPECTOR FOR THIS WORK: Name Robert Stewart Address P.O. Box 345 Jane Lew, WV 26378

LOGICAL TARGET FORMATION: Haverty Depth 5016-5024 feet Depth of completed well, 5526 feet Rotary x / Cable Tools \_\_\_ Water strata depth: Fresh, 150 feet; salt, 0 feet. 180-82,400-05 Coal seam depths 10-14, 125-26, 160-62 Is coal being mined in the area? No Work was commenced 2/19, 19 81, and completed 2/25, 19 81

LOGGING AND TUBING PROGRAM

Table with columns: LOGGING OR TUBING TYPE, SPECIFICATIONS (Size, Grade, Weight, New, Used), FOOTAGE INTERVALS (For drilling, Left in well), CEMENT FILL-UP OR SACKS (Cubic feet), PACKERS. Includes rows for Drilling, Production, and Perforations.

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OIL & GAS DIVISION DEPT. OF MINES

FLOW DATA

Producing formation Haverty Pay zone depth 5016-5024 feet Gas: Initial open flow, \_\_\_ Mcf/d Oil: Initial open flow, \_\_\_ Bbl/d Combined Final open flow, 822 Mcf/d Final open flow, \_\_\_ Bbl/d Time of open flow between initial and final tests, 4 hours Static rock pressure, 1400 psig (surface measurement) after 96 hours

03/15/2024

3695-3829 4106-4132 4443-4445 4638-4640

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

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FEB 23 1981

INSPECTOR'S WELL REPORT

OIL & GAS DIVISION  
 DEPT. OF MINES & ENERGY

Permit No. 083-0421

Company	CASING AND TUBING	USED IN DRILLING	Left in Well	PACKERS
<u>JJ Enterprises</u>				
<u>Buck Hannon</u>	Size			Kind of Packer
<u>C. L. Moss</u>	16			
<u>J-405</u>	13			Size of
<u>Roaring Creek</u> County <u>Randolph</u>	10			
<u>2-18-81</u>	8 1/4			Depth set
	6 3/4			
	5 3/16			Perf top
	3			Perf bottom
	2			Perf top
	Liners Used			Perf bottom
	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 Si. W. JACK Rig 20

Remarks: Move Rig - SPD

2-18-81

DATE

Robert Stewart 511  
 DISTRICT INSPECTOR

03/15/2024





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

INSPECTOR'S WELL REPORT

Permit No. 083-0421

Oil or Gas Well GAS  
(KIND)

Company <u>JH Enterprises</u>	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Address <u>Buck Hannon</u>	Size			
Farm <u>C. L. Moss</u>	16			Kind of Packer
Well No. <u>J-405</u>	13			
District <u>Boaring Creek</u> County <u>RANDOLPH</u>	10			Size of
Drilling commenced <u>2-81</u>	8 1/4			
Drilling completed _____ Total depth _____	6 5/8			Depth set
Date shot _____ Depth of shot _____	5 3/16			
Initial open flow _____ /10ths Water in _____ Inch	3	<b>RECEIVED</b> DEC 17 1981 OIL AND GAS DIVISION WV DEPARTMENT OF MINES		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 _____ SIZE _____ No. FT. _____ Date _____			
Fresh water _____ feet _____ feet	NAME OF SERVICE COMPANY _____			
Salt water _____ feet _____ feet	COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			

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

Remarks:

O.K. To Release

12-15-81

Robert Stewart 03/15/2024 511

**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 \_\_\_\_\_

Liner \_\_\_\_\_ Location \_\_\_\_\_ Amount \_\_\_\_\_ Packer \_\_\_\_\_ Location \_\_\_\_\_

PLUGS USED AND DEPTH PLACED			BRIDGES	CASING AND TUBING		
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION	RECOVERED	SIZE	LOST

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

Remarks: \_\_\_\_\_

\_\_\_\_\_ I hereby certify I visited the above well on this date. 03/15/2024  
DATE

PARTICIPANTS:

DATE: NOV 17 1981

BUYER-SELLER CODE

WELL OPERATOR:

Leak Enterprises

009480

FIRST PURCHASER:

Petro Lewis Corp

014876

OTHER:

W. Va. Department of Mines, Oil & Gas Division  
 WELL DETERMINATION FILE NUMBER  
81-08-03 - 103 - 083 = 0421  
 Use Above File Number on all Communications  
 Relating to Determination of this Well

*CK map 1500' plat OK*  
*Petro Lewis 7 = 1700'*  
*Petro Lewis 8 = 1600'*  
*I-403 (380) = 1600'*  
*300'*  
~~Deferred for OIP calculation~~  
*Qualifies* *J. H. Huggins*

CHECK EACH ITEM AS COMPLETE OR NOTE WHAT IS MISSING

ITEM NO.

- 1. FERC -121  Items not completed - Line No. 7.0 c 8.0 c
- 2. IV-1 Agent James R Willett
- 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: 2-19-81 Date completed 2-25-81 Deepened
- (5) Production Depth: 5016-5024
- (5) Production Formation: Haverly
- (5) Final Open Flow: 822 mcf
- (5) After Frac. R. P. 1400 # 96 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? yes
- Additional information \_\_\_\_\_ Does computer program confirm? 03/15/2024
- Was Determination Objected to \_\_\_\_\_ By Whom? \_\_\_\_\_

HHH

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

Date \_\_\_\_\_, 19\_\_\_\_  
Operator's Well No. \_\_\_\_\_  
API Well No. 47 - 085 - 20421  
State County Permit

WELL CLASSIFICATION FORM  
NEW ONSHORE PRODUCTION WELL  
NGPA Section 103

WELL OPERATOR J & J Enterprises, Inc.  
ADDRESS P. O. Box 697  
Indiana, PA 15701  
GAS PURCHASER Petro-Lewis Corp.  
ADDRESS 717 17th St.  
Denver, Col. 80201

DESIGNATED AGENT James R. Willett  
ADDRESS S.W. Jack Drilling Company  
Box 48 Buckhannon, W. VA. 26201  
LOCATION: Elevation 2405'  
Watershed BIG LAUREL RUN  
Dist. ROBERTS County: RANDOLPH Quad. ELLA MORE  
Gas Purchase Contract No. \_\_\_\_\_  
Meter Chart Code \_\_\_\_\_  
Date of Contract \_\_\_\_\_

\* \* \* \* \*

Date surface drilling was begun: 2-19-81

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

Rock Pressure: 1400 # Well was shut in several days after treatment and pressure was measured with a spring gauge.

AFFIDAVIT

I, James H. McElwain, 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.

James H. McElwain

1

STATE OF WEST VIRGINIA,  
COUNTY OF Indiana TO WIT:

I, Vicki Vanderberg a Notary Public in and for the state and county aforesaid, do certify that J.H. McElwain, whose name is signed to the writing above, bearing date the 20 day of July, 1981, has acknowledged the same before me, in my county aforesaid. Given under my hand and official seal this 30 day of July, 1981. My ~~XXXXXX~~ expires on the 23 day of January, 1984.  
Commission

[NOTARIAL SEAL]

VICKI VANDERBERG, NOTARY PUBLIC  
INDIANA BOROUGHS, INDIANA  
MY COMMISSION EXPIRES  
Vicki Vanderberg  
Notary Public

03/15/2024

pf=Pwe XGLS  
Pw=1400 e=2.72 x =  $\frac{1}{53.35T} = \frac{1}{53.35 \times (559.7)} = \frac{1}{29850} = 0.0000335$   
T=60 + (0.0075 x 5339.6) + 459.7 T=559.7 x= 0.0000335 G=0.593 L=4360 S=0.9  
Pf=1400 2.72 (0.0000335) (0.593) (4360) (0.9) =1400 2.72<sup>0.078</sup> =1400 x 1.08=1512  
Pf=1512

OIL & GAS DIVISION  
DEPT. OF MINES

1.0 API well number: (If not assigned, leave blank. 14 digits.)	47 - 083 - 0421 - 0000			
2.0 Type of determination being sought: (Use the codes found on the front of this form.)	103 Section of NGPA	N/A Category Code		
3.0 Depth of the deepest completion location: (Only needed if sections 103 or 107 in 2.0 above.)	5024 feet			
4.0 Name, address and code number of applicant: (35 letters per line maximum. If code number not available, leave blank.)	J & J Enterprises, Inc. Name PO Box 697 Street Indiana City		PA State	15701 Zip Code 009480 Seller Code
5.0 Location of this well: [Complete (a) or (b).] (a) For onshore wells (35 letters maximum for field name.)	Roaring Creek Field Name Randolph County WVA State			
(b) For OCS wells:	N/A 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.)	J-405			
(d) If code 4 or 5 in 2.0 above, name of the reservoir: (35 letters maximum.)	N/A			
6.0 (a) Name and code number of the purchaser: (35 letters and digits maximum. If code number not available, leave blank.)	Petro-Lewis Corporation Name		Buyer Code	
(b) Date of the contract:	Mo. Day Yr.			
(c) Estimated total annual production from the well:	Million Cubic Feet			
		(a) Base Price	(b) Tax	(c) All Other Prices [Indicate (+) or (-).]
7.0 Contract price: (As of filing date. Complete to 3 decimal places.)	\$/MMBTU	2 4 7 6	2 7 8	2 7 5 4
8.0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.)	\$/MMBTU	2 4 7 6	2 7 8	2 7 5 4
9.0 Person responsible for this application:	Richard J. Kline Name Secretary Title Signature Date Application is Completed 7/29/81 Phone Number (412) 349-6800			
Agency Use Only Date Received by Juris. Agency Date Received by FERC NOV 0 1981				

FT7900806/2-2

03/15/2024