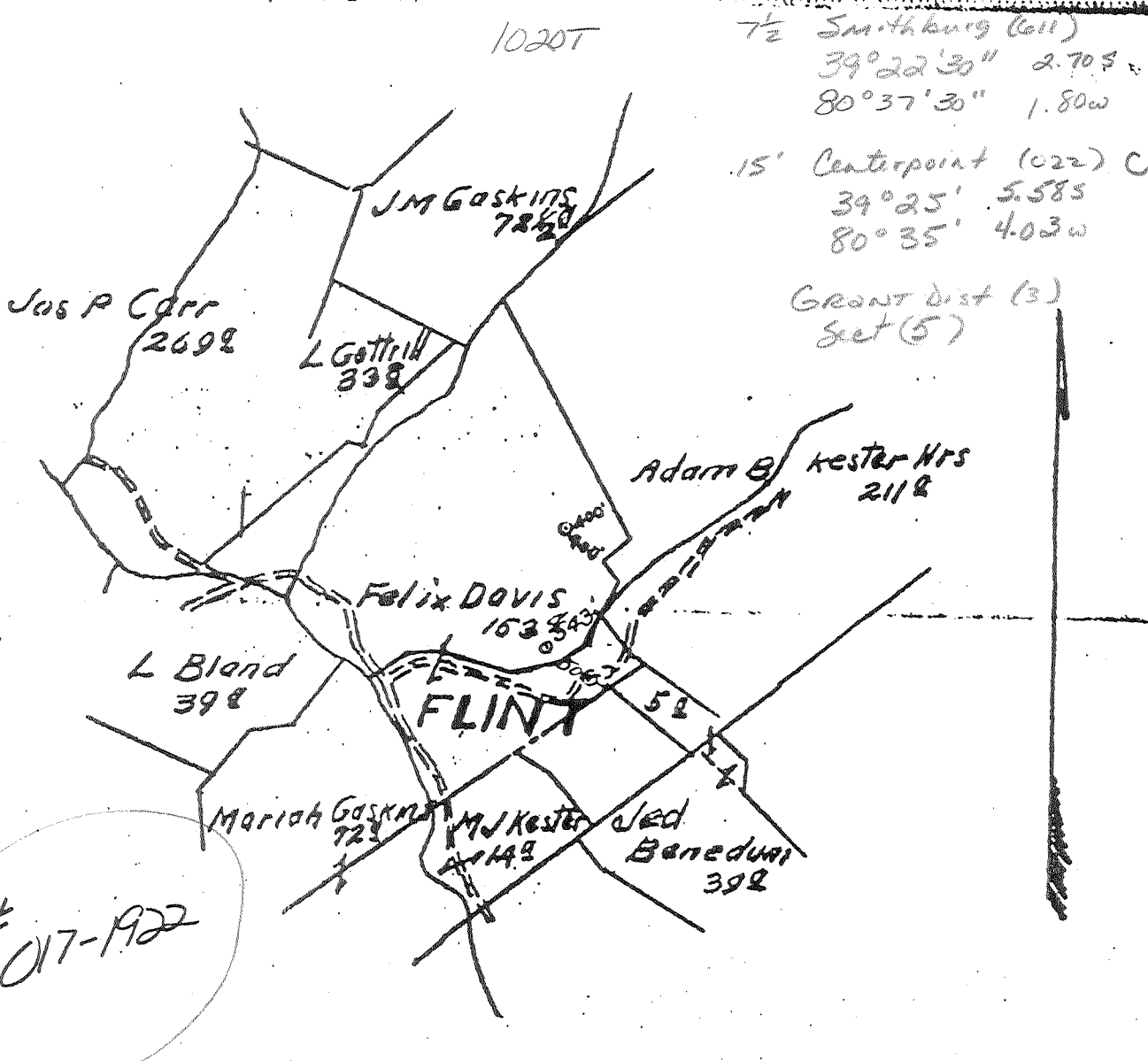


HOPE NATURAL GAS COMPANY.

LOCATION FOR WELL No. 1468

District *Daleny*  
Farm, on waters of *Big Flint*  
District, *Doddridge* County, West Virginia.  
Acres *154*  
N. *8* S. *8* E. *3* W.  
Scale, one inch equals *80 Poles* Sent to *W. J. C. 10-26-1909*  
Location to be *Four hundred feet from Adam B. Kester*  
*Mrs farm line*



WELL BOOK *GAK Dec. 15*  
LEASE RECORD  
LEASE DOCKET  
WELL MAP *11-26-1909*  
WORKING MAP  
LOCATION BOOK

ENTERED  
LINE MAP  
11-26-09  
*J.G.D.*

RESERVE *Five acres around the buildings*

SPECIAL INSTRUCTIONS *Complete well on or before*  
*Jan 20, 1910*

Location made *10-30-09* by *Wester* As per plat, except as noted. On field map.

*11-1-09* Returned to Pittsburgh *11-2-09*

Location changed on account of *Rough ground*

Authorized by *Jos. Martin* Date *11-11-09* Signed *J. W. Wallace*  
*Res.*

No. 1468

REPAIR RECORD

Salina

District

Name Felix Davis

N S E W 3

First Work Done June 14, 1961

Nature of Work Moving in tools

Completed: Cleaning Out June 16, 1961

Completed: Cleaning Out Aug. 31, 1961

Drilling Deeper

Drilling Deeper

Abandoning

Abandoning

CASING AND TUBING RECORD

	Before Repairs		Pulled		Put in Well		After Repairs		Weight
	Tally	Steel Line	Tally	Steel Line	Tally	Steel Line	Tally	Steel Line	
1/4	166		None		None		166		
1/8	926		"		"		926		
	1728		"		"		1728		
1/2	1760		1760		"		None		
1/2	None		None		1819	1807	1819	1807	11.60 #

RECORD OF TREATING FORMATIONS

Sand	DEPTH		TEST BEFORE			TEST AFTER			
	From	To	Read.	Liq.	Opn.	Read.	Liq.	Opn.	Hrs.

Quarts	Shooting Agent	Open or Tamped	SHOT BY						
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Gallons	Acid Used	ACIDIZED BY						
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Injun	1800	1820	Bbls.	Lbs.	Agent	Max. Press.	HYDRAFRAC BY			
							14/10 W	18/10 M	3/4	8
			35	X	Water	1900				
			992	X	Water	2500				
			X	60,000	Sand	2500				
			33	X	Water	2300				
				X						
			X							
				X						

RECORD OF ANY DEEPER DRILLING

Formation	Top	Bottom	Oil at	Gas at
Hydrafraced only				
Total Depth		1910		

PACKER RECORD

Size	Kind	Set At (Steel Line)
Size 6-5/8 x 5-1/2	Kind Disc. Wall	
OIL PRODUCTION		
Estimated	hbl. per day	Sand
CLARKSBURG OFFICE ENTRIES		
Repair Card		
Well Card		
Memo Book		
Well Map		
Map Sheets		

VOLUME AND PRESSURE REPORT

BEFORE CLEANING OUT (Take Test When Ready to Clean Out)

Date of Test	Flow Meter or Open Flow	Reading	Liquid Used	Opening	CUBIC FEET	Sands Gas From	Time Blows
June 20, 1961	FM	14/10	Water	1/2	7.0	Injun	6 hrs.

AFTER CLEANING OUT

Date of Test	Flow Meter or Open Flow	Reading	Liquid Used	Opening	CUBIC FEET	Sands Gas From	Time Blows
Aug. 31, 1961	FM	18/10	Mercury	3/4	66.4	Injun	8 hrs.

AFTER DRILLING DEEPER

Date of Test	Flow Meter or Open Flow	Reading	Liquid Used	Opening	CUBIC FEET	Sands Gas From	Time Blows
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HOPE NATURAL GAS COMPANY  
Report on Hydraulic Fracturing

WELL NO. 1468  
MAP \_\_\_\_\_  
SQUARES N E S W 1

WELL NAME Pelix Davis DISTRICT Grant COUNTY Doddridge STATE W. Va.  
OPERATOR H.N.G. Co. SERVICE COMPANY Dowell Inc. DATE 7-10-61

FORMATION Injun TOP 1786 BOTTOM 1834

KEY ZONE: TOP 1800 BOTTOM 1820 WAS FORMATION SHOT? Has been

TOTAL DEPTH 1910 PLUGGED BACK TO 1820 WITH Stone & calseal cement

TESTS: CALIPER X TEMPERATURE X GAMMA RAY X OTHER \_\_\_\_\_

PROF. ORIGINAL 550 MCF, R. P. ? # IN \_\_\_\_\_ HOURS

PROF. BEFORE FRAC. 6 MCF, R. P. 250 # IN 72 HOURS

PRODUCTION STRING: SIZE 4-1/2 LENGTH 1800 CEMENTED WITH 35 BAGS OF Portland CEMENT

IS LINER SET? No SIZE \_\_\_\_\_ TOP \_\_\_\_\_ BOTTOM \_\_\_\_\_

SECTION STRING: SIZE 4-1/2 LENGTH 1800 PACKER: SET @ \_\_\_\_\_ SIZE \_\_\_\_\_

PACKER (CONTD): TYPE \_\_\_\_\_ MAKE \_\_\_\_\_ CEMENTED WITH \_\_\_\_\_ BAGS OF \_\_\_\_\_ CEMENT

(TO BE FILLED IN BY SERVICE ENGINEER)

TYPE OF TREATMENT Riverfrac VOLUME OF FLUID REQUIRED TO FILL HOLE 29 BBLs ~~XXXX~~

TREATMENT - BREAKDOWN

FLUID: KEROSENE \_\_\_\_\_ GALS  
WATER 35 ~~XXXX~~ BBL  
M. C. A. \_\_\_\_\_ GALS  
\_\_\_\_\_ GALS  
TOTAL 35 ~~XXXX~~ BBL

BREAKDOWN PRESSURE: MAXIMUM 1900 #  
FINAL 1500 #  
TIME 2 MINUTES  
INJECTION RATE: 41 BBL ~~XXXX~~ PER MINUTE  
VISCOSITY \_\_\_\_\_ (SSU) SP. GR. \_\_\_\_\_

TREATMENT - FRACTURE

FLUID: KEROSENE \_\_\_\_\_ GALS  
WATER 992 ~~XXXX~~ BBL  
GEL AGENT \_\_\_\_\_ GALS  
\_\_\_\_\_ GALS  
TOTAL 992 ~~XXXX~~ BBL

SAND: AMOUNT 60,000 POUNDS  
SIZE 20-40  
PRESSURE: MAXIMUM 2500 #  
FINAL 2300 #  
TIME \_\_\_\_\_ MINUTES  
INJECTION RATE: START OF GEL 41 BBL ~~XXXX~~ PER MINUTE  
AVERAGE 32 BBL ~~XXXX~~ PER MINUTE  
VISCOSITY \_\_\_\_\_ (SSU) SP. GR. \_\_\_\_\_

TREATMENT - FLUSH

FLUID: KEROSENE \_\_\_\_\_ GALS  
WATER 33 ~~XXXX~~ BBL  
TOTAL 33 ~~XXXX~~ BBL

PRESSURE: MAXIMUM 2300 #  
FINAL 1800 #  
TIME 2 MINUTES  
INJECTION RATE: 33 BBL ~~XXXX~~ PER MINUTE  
VISCOSITY \_\_\_\_\_ (SSU) SP. GR. \_\_\_\_\_

TOTAL FLUID USED 1060 ~~XXXX~~ BBL

COMPLETION

PRESSURE 10 MINUTES AFTER PUMPS SHUT DOWN: 1000 #  
PRESSURE AT END OF SHUT IN PERIOD: Vacuum IN \_\_\_\_\_ HOURS  
FLUID RECOVERED: \_\_\_\_\_ BBL IN 24 HOURS, \_\_\_\_\_ IN 48 HOURS, \_\_\_\_\_ IN \_\_\_\_\_ HOURS  
FLUID REMAINING IN FORMATION: 900 BBL ~~XXXX~~ VOLUME OF SAND RECOVERED 1000 #  
PROF. AFTER FRAC. 66.4 MCF, R. P. 65 # IN 72 HOURS

REMARKS: Shut in on 4-1/2" casing

(CONTINUE ON BACK)

COPY TO: A. R. MCCAMEY  
LAND DEPARTMENT  
DIVISION SUPERINTENDENT  
DISTRICT SUPERINTENDENT

REPORTED BY: N. R. Mason  
DATE: 8-16-61  
WORKING DISTRICT: Salem

