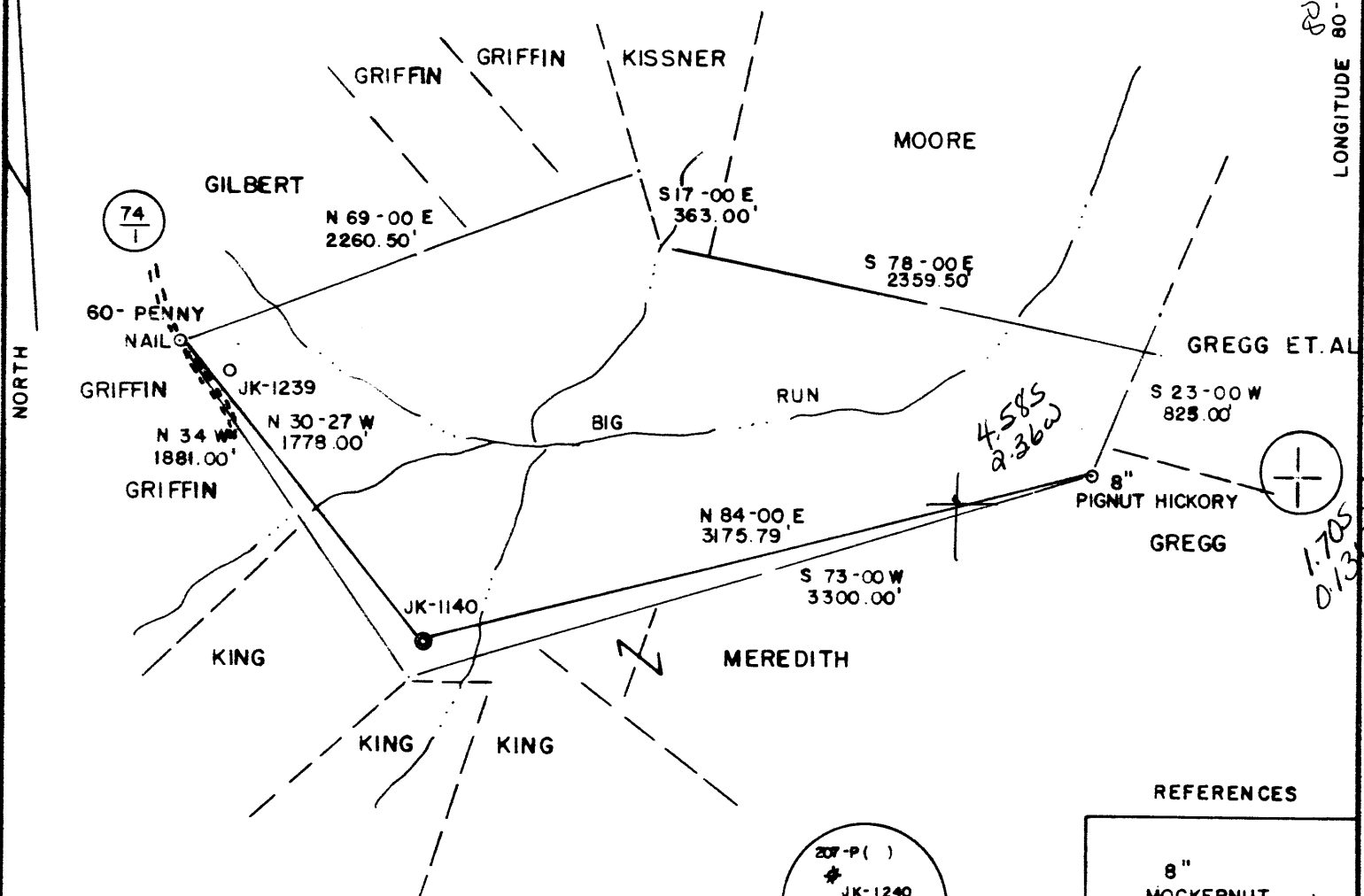


HESS LEASE

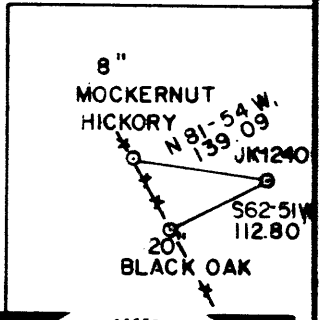
WELL NO. JK-1240



125 ACRES ±

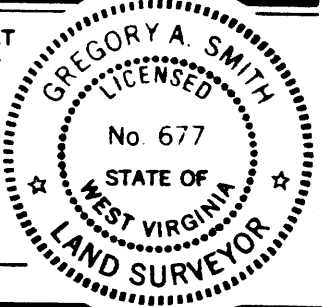


REFERENCES



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 DATE SEPT. 9, 1985
 OPERATORS WELL NO. JK-1240
 API WELL NO. _____
47 - 095 - 1115
 STATE COUNTY PERMIT

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 ENERGY.
 L.L.S. 677 *Gregory A. Smith*



MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 17-65
 PROVEN SOURCE OF ELEVATION TOP OF KNOB ELEV.=1199' SCALE 1" = 800'



STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 OIL AND GAS DIVISION

WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___ "GAS" PRODUCTION STORAGE ___ DEEP ___ SHALLOW
 LOCATION: ELEVATION 1100' WATERSHED BIG RUN West Union
 DISTRICT CENTERVILLE COUNTY TYLER QUADRANGLE PENNSBORO 75' 539
 SURFACE OWNER O.W. GRIFFIN ACREAGE 125 133 CS
 OIL & GAS ROYALTY OWNER GARNET I. HESS, et. al. LEASE ACREAGE 125
 PROPOSED WORK: DRILL CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE PLUG OFF ___
 OLD FORMATION ___ PERFORATE NEW FORMATION ___ PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION RHINE STREET
 ESTIMATED DEPTH 5995'

WELL OPERATOR J&J ENTERPRISES, INC DESIGNATED AGENT RICHARD REDOECLIFF
 ADDRESS P.O. BOX 48, BUCKHANNON, WV 26201 ADDRESS P.O. BOX 48, BUCKHANNON, WV 26201

05-25-08 8930 LONGITUDE 01330

COUNTY NAME PERMIT NO. 1005



V-35
rev 8-81)

Date November 25, 1985
Operator's Well No. JK-1240
Farm Hess
API No. 47 - 095 - 1115

State of West Virginia
Department of Mines
Oil and Gas Division

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

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

LOCATION: Elevation: 1100 Watershed Big Run
District: Centerville County Tyler Quadrangle Pennsboro 7.5

COMPANY J&J Enterprises, Inc.
ADDRESS P.O. Box 48, Buckhannon, WV 26201
DESIGNATED AGENT Richard Reddecliff
ADDRESS P.O. Box 48, Buckhannon, WV 26201
SURFACE OWNER O.W. Griffin
ADDRESS P.O. Box 3025, Parkersburg, WV 26101
MINERAL RIGHTS OWNER Garnet I. Hess, et al
ADDRESS _____
OIL AND GAS INSPECTOR FOR THIS WORK Robert Lowther
ADDRESS General Delivery Middlebourne, WV 26149
PERMIT ISSUED 9/30/85
DRILLING COMMENCED 10/18/85
DRILLING COMPLETED 10/24/85
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.			
13-10"	30	0	0 sks.
9 5/8			
8 5/8	1268	1268	270 sks.
7			
5 1/2			
4 1/2	5940.70	5940.70	285 sks.
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Rhine Street Depth feet
Depth of completed well 5978 feet Rotary / Cable Tools
Water strata depth: Fresh 740,1615 feet; Salt 0 feet
Coal seam depths: None Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 5876-84 feet
Gas: Initial open flow Mcf/d Oil: Initial open flow Bbl/d
Combined Final open flow 696 Mcf/d Final open flow Bbl/d
Time of open flow between initial and final tests 4 hours
Static rock pressure 1325 psig (surface measurement) after 96 hours shut in
(If applicable due to multiple completion--)
Second producing formation Alexander, Benson Pay zone depth 4973-74 5264-77 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.

Rhinestreet
Devonian Shale: Perforations: 5876-84 (16 holes)
Fracturing: 300 sks. 20/40 sand: 408 Bbls. fluid.
Alexander: Perforations: 5264-66 (8 holes) 5275-77 (8 holes)
Fracturing: 450 sks. 20/40 sand:500 gal. acid: 518 Bbls. fluid.

BOTTOM HOLE PRESSURE Pf=PweXGLS

t=60 +(5940.7 x 0.0075)+459.7 = 564.25 $x = \frac{1}{53.34T} = \frac{1}{53.34(564.25)} = \frac{1}{30,097} = 0.000033$

Pf=(1325) (2.72) (0.000033) (0.661) (5428.5) (0.9) Pf=(1325) (2.72) (0.1066) = (1325) (1.11)

Pf=1470 psi

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fres and salt water, coal, oil and ga
Top soil & shale			0	15	
Sand & sandy shale			15	170	Damp @ 290'
Sandy shale, red rock & sand			170	365	
Sand, shale & red rock			365	745	1/2" stream @ 740'
Sandy shale & sand			745	1520	
Sand & sandy shale			1520	1670	1/2" stream @ 1615'
Sandy shale			1670	1920	
Little Lime			1920	1940	Gas ck @ 2475 No show
Big Lime Cap & po <i>cap & po</i>			1940	2005	
Sand & sandy shale			2005	2420	Gas ck @ 3467 No show
Sandy shale & sand			2420	2880	
Sandy shale & sand			2880	3455	Gas ck @ 4739 No show
Sandy shale & sand			3455	4560	
Brown sand			4560	4720	Gas ck @ 4987 No. show
Sandy shale & sand			4720	5264	
Alexander			5264	5277	Gas ck @ 5295 No show
Sandy shale & sand			5277	5876	
Devonian Shale			5876	5884	
Sandy shale			5884	5978	
from D.G.E log:					
Top Dev	2500	thickness			
upr Dev unshift	2500	1100			
Low blwan	3600	1250			
Jawa	4850	200			
Nigala	5050	250			
Rhinestreet	5300	600			
Cashaque Sh.	5900				

T.D.

Rhinestreet @ T.D.

(Attach separate sheets as necessary)

J & J Enterprises, Inc.

Well Operator

By: Daniel F. Stark Daniel F. Stark-

Date: 11/25 /85 Asst. Geologist

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 soil, encountered in the drilling of a well."

RECEIVED
 SEP 30 1985



1) Date: September 26, 1985
 2) Operator's Well No. JK-1240
 3) API Well No. 47-095-1115
 State 47 County 095 Permit 1115

STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY, OIL AND GAS DIVISION
 DEPARTMENT OF ENERGY
APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil / Gas X /
 B (If "Gas", Production X / Underground storage / Deep / Shallow X /)
- 5) LOCATION: Elevation: 1100' Watershed: Big Run
 District: Centerville 427 County: Tyler Quadrangle: Pennsboro 7,5'
- 6) WELL OPERATOR J & J Enterprises, CODE: 24150 7) DESIGNATED AGENT Richard Reddecliff
 Address P.O. Box 48 Address P.O. Box 48
Buckhannon, WV 26201 Buckhannon, WV 26201
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED Name Robert Lowther
 Address General Delivery
Middlebourne, WV 26149
- 9) DRILLING CONTRACTOR: Name S.W. Jack Drilling Co.
 Address P.O. Box 48
Buckhannon, WV 26201
- 10) PROPOSED WELL WORK: Drill X / Drill deeper / Redrill / Stimulate X /
 Plug off old formation / Perforate new formation
 Other physical change in well (specify)
- 11) GEOLOGICAL TARGET FORMATION, Rhine Street 4211
- 12) Estimated depth of completed well, 5995' feet
- 13) Approximate strata depths: Fresh, 125' feet; salt, N/A feet.
- 14) Approximate coal seam depths: N/A Is coal being mined in the area? Yes / No X
- 15) 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	1 3/4	H-40	42	X		30'	0'	0 Sacks	Kinds
Fresh water	8 5/8	ERW	23	X		1100'	1100'	To Surface	<i>by rule 15-05</i>
Coal	8 5/8	ERW	23	X		1100'	1100'	To Surface	Sizes
Intermediate									
Production	4 1/2	J-55	10.5	X		5995'	5945'	300 Sacks	Depths set
Tubing								or as required	<i>by rule 15-01</i>
Lin...									Perforations:
									Top Bottom

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-095-1115 Date September 30 1985

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector. (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.

Permit expires September 30, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee	WPCP	S&E	Other
	<i>AKB</i>	<i>MLH</i>	<i>DNH</i>	<i>2081</i>	<i>MLH</i>		

NOTE: Keep one copy of this permit posted at the drilling location.

Margaret J. Hesse
 Director, Division of Oil and Gas

File

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.