

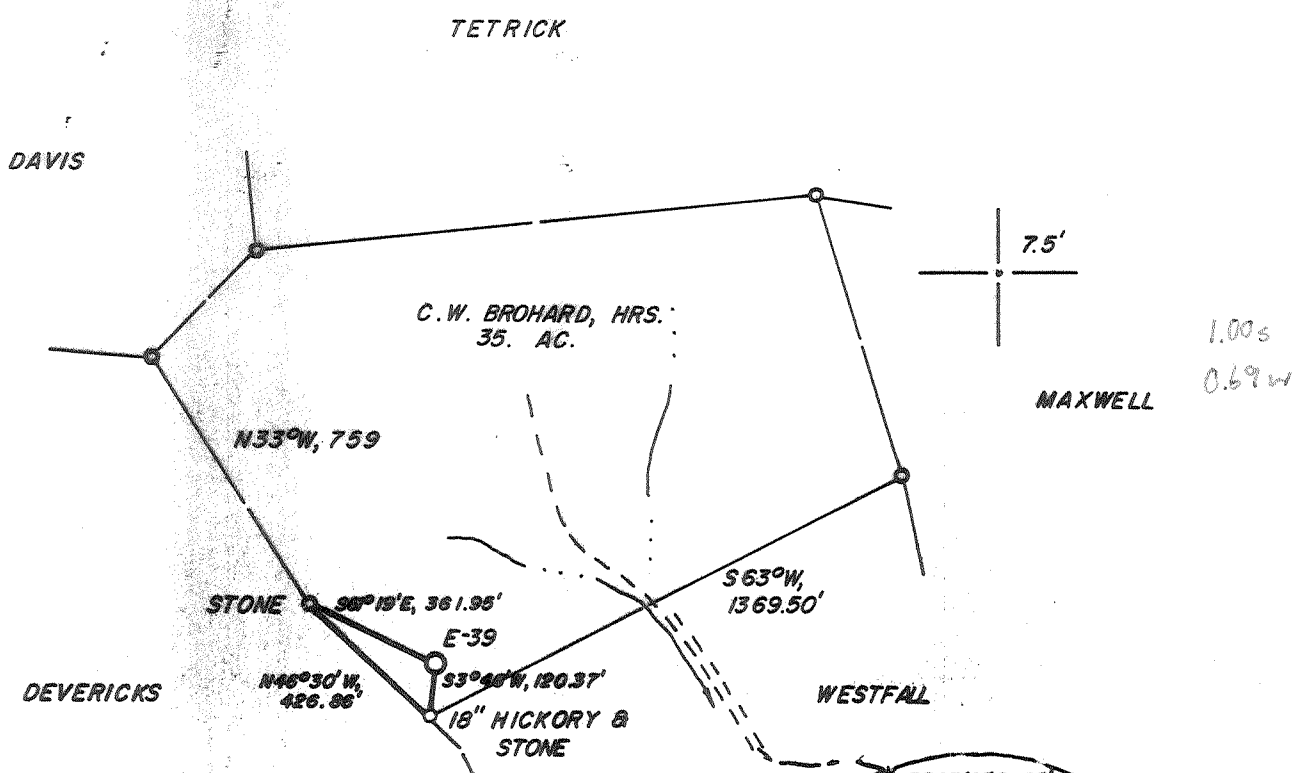
9/3/15/88

Janice
9/5/96

3650'
LATITUDE 39° 15' 00"

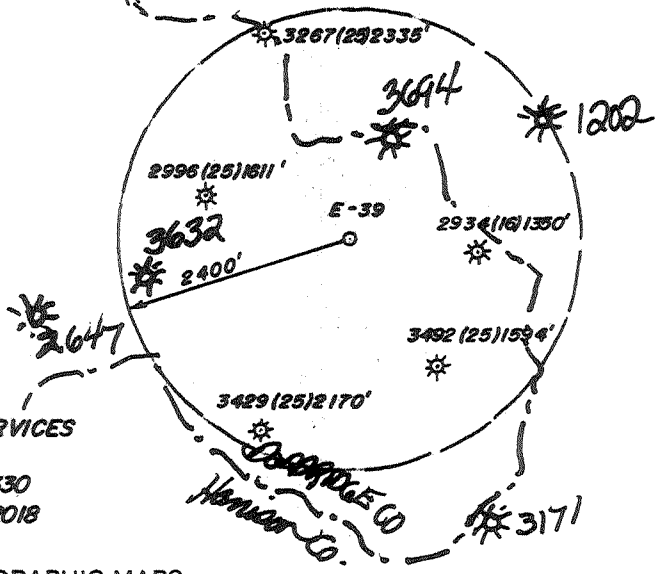
5255'
LONGITUDE 80° 32' 30"

NORTH



WELL REFERENCES:
 S70°30'E, 129' TO 6" ELM
 S11°30'W, 120.35' TO 18" HICKORY

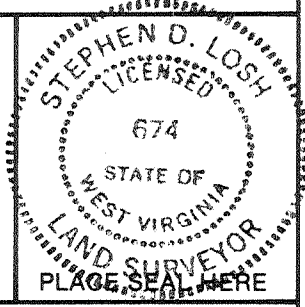
LAND SURVEYING SERVICES
 21 CEDAR LANE
 BRIDGEPORT, WV 26330
 PHONE: 304-842-2018



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

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 IN 200
 PROVEN SOURCE OF ELEVATION ROAD INT. 2420'SE.
 OF LOC. AT ELEV. 1136'

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.
 (SIGNED) Stephen D. Losh
 R.P.E. _____ L.L.S. NO. 674
 STEPHEN D. LOSH



STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 OIL AND GAS DIVISION



DATE NOV. 23, 19 87
 OPERATOR'S WELL NO. BROHARD 1 (E-39)
 API WELL NO.

47 - 017 - 03633 - 7
 STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 1384' WATER SHED TRAUGH FORK
 DISTRICT GREENBRIER COUNTY DODDRIDGE
 QUADRANGLE BIG ISAAC 7.5'

SURFACE OWNER GARY L. DAVIS, ET AL. ACREAGE 3.5
 OIL & GAS ROYALTY OWNER C. W. BROHARD, HRS. LEASE ACREAGE 35.
 LEASE NO. _____

PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY)
Temporary Plug Back Bradford, Balltown & Speechley Corns

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION ALEXANDER ESTIMATED DEPTH 5300' 5725' with Benson & Alexander

WELL ADDI Exploration Partners Producing Co. SIGNATED AGENT Louis Ferrari
 P.O. Box 1245 ADDRESS Same Address
 Bridgeport, WV 26330-1245 PH: 304-304-842-8777

COUNTY NAME DODD PERMIT 3633

FORM WW-6 H.T. HALL 48673

Q88 3/15/88

3650'

LATITUDE 39° 15' 00"

5255'

LONGITUDE 80° 32' 30"

NORTH

DAVIS

TETRICK

C.W. BROHARD, HRS.
35. AC.

MAXWELL

N33°W, 759

STONE S68°19'E, 361.95'

S63°W, 1369.50'

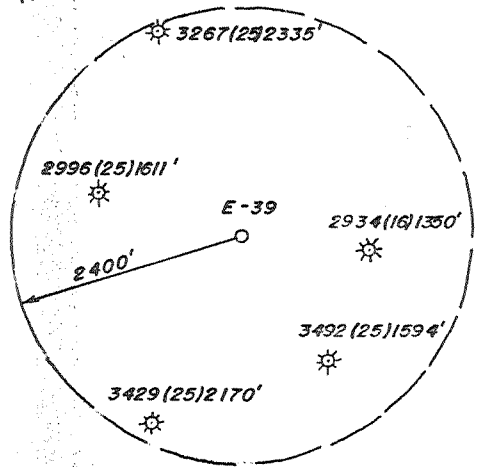
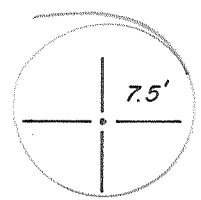
DEVERICKS

N46°30'W, 426.86'

E-39 S3°48'W, 120.37'

WESTFALL

18" HICKORY & STONE



WELL REFERENCES:

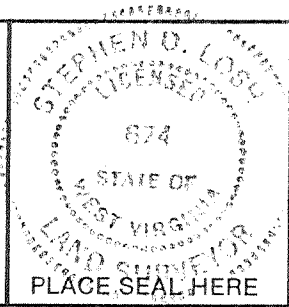
S70°30'E, 129' TO 8" ELM
S11°30'W, 120.35' TO 18" HICKORY

LAND SURVEYING SERVICES
21 CEDAR LANE
BRIDGEPORT, WV 26330
PHONE: 304 - 842 - 2018

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

FILE NO. _____
DRAWING NO. _____
SCALE 1" = 500'
MINIMUM DEGREE OF
ACCURACY 1 IN 200
PROVEN SOURCE OF
ELEVATION ROAD INT. 2420'SE.
OF LOC. AT ELEV. 1136'

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 ENERGY.
(SIGNED) Stephen D. Losh
R.P.E. _____ L.L.S. NO. 674
STEPHEN D. LOSH



STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION



DATE NOV. 23, 19 87
OPERATOR'S WELL NO. BROHARD 1 (E-39)
API WELL NO.

47 - 017 - 3633
STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION ___ STORAGE X DEEP ___ SHALLOW X
LOCATION: ELEVATION 1384' WATER SHED TRAUGH FORK
DISTRICT GREENBRIER 4 COUNTY DODDRIDGE
QUADRANGLE BIG ISAAC 7.5' 252 1233 Vadis NE
SURFACE OWNER GARY L. DAVIS, ET. AL. ACREAGE 3.5
OIL & GAS ROYALTY OWNER C. W. BROHARD, HRS. LEASE ACREAGE 35.
LEASE NO. _____

PROPOSED WORK: DRILL X 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 ALEXANDER ESTIMATED DEPTH 5800'
WELL OPERATOR EXCEL ENERGY, INC. DESIGNATED AGENT HARRY L. BARNETT
ADDRESS P.O. BOX 1020 ADDRESS P.O. BOX 1020
BRIDGEPORT, WV 26330 1028 BRIDGEPORT, WV 26330

MAR 18 1988

6-6 Meathouse Fork - Bristol (146)

RECEIVED
WV Division of
Environmental Protection

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Permitting
Office of Oil & Gas Well Operator's Report of Well Work

Farm name: DAVIS, GARY L. Operator Well No.: BROHARD #1-E-39

LOCATION: Elevation: 1,384.00 Quadrangle: BIG ISAAC

District: GREENBRIER County: DODDRIDGE
Latitude: 5255 Feet South of 39 Deg. 15 Min. 0 Sec.
Longitude 3650 Feet West of 80 Deg. 32 Min. 30 Sec.

Company: Exploration Partners Prod
P.O. Box 930
Bridgeport, WV 26330-1245

Agent: Louis A. Ferrari

Inspector: MIKE UNDERWOOD

Permit Issued: 07/30/96
Well Work Commenced: 10/14/97
Well Work Completed: 10/21/97

Verbal Plugging
Permission granted on: _____
Rotary x Cable _____ Rig
Total Depth (feet) _____
Fresh water depths (ft) _____
Salt water depths (ft) _____

Is coal being mined in area (Y/N)? _____
Coal Depths (ft): _____

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
	SEE ORIGINAL WR-35		
NO ADDITIONAL CASING RUN			
8 5/8"	1435'	1435'	Squeeze 250 sks

OPEN FLOW DATA

Producing formations Bradford, Balltown, Speechley Pay zone depth (ft) 3655-4711
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/
Final open flow 384 MCF/d Final open flow Show Bbl/
Time of open flow between initial and final tests 24 Hour
Static rock pressure 450 psig (surface pressure) after 24 Hour

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial Open flow _____ Bbl/
Final open flow _____ MCF/d Final open flow _____ Bbl/
Time of open flow between initial and final tests _____ Hour
Static rock pressure _____ psig (surface pressure) after _____ Hour

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED IN THE WELLBORE.

For: Louis A. Ferrari
EXPLORATION PARTNERS LLC

By: Louis A. Ferrari
Date: November 18, 1997

JAN 09 1998

FORM IV-35
(REVERSE)

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

SET BRIDGE PLUG @ 3510 & SHOOT 4 SQUEEZE HOLES @ 3470. BREAK CIRCULATION & PUMP 250 SKS CEMENT. CEMENT JOB UNSUCCESSFUL, UPPER PAYS NOT COVERED WITH CEMENT.

STAGE I (4686-4711) 12 HOLES 500 GAL 15% HCL, 25,000# SAND, 308 BBL GELLED H2O, 33 MSCF N2 ASSIST.

STAGE II (3655-4069) 17 HOLES 500 GAL 15% HCL, 25,000# SAND, 372 BBL GELLED H2O, 34 MSCF N2 ASSIST.

WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	<u>REMARKS</u> Including indication of all fresh and salt water, coal and gas



IV-35
(Rev 8-81)

Date 6-24-88
Operator's
Well No. E-39
Farm BROHARD
API No. 47 - 017 - 3633

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 X / Liquid Injection ___ / Waste Disposal ___ /
(If "Gas," Production X / Underground Storage ___ / Deep ___ / Shallow X/)

LOCATION: Elevation: 1384 Watershed TRAUGH FORK OF BUCKEYE CREEK
District: GREENBRIER County DODDRIDGE Quadrangle BIG ISAAC

COMPANY EXCEL ENERGY, INC.

ADDRESS P.O. BOX 1020, BRIDGEPORT, WV 26033

DESIGNATED AGENT H. L. BARNETT

ADDRESS P.O. BOX 1020, BRIDGEPORT, WV 26033

SURFACE OWNER DAVIS HEIRS

ADDRESS UNKNOWN

MINERAL RIGHTS OWNER BROHARD

ADDRESS UNKNOWN

OIL AND GAS INSPECTOR FOR THIS WORK _____

MIKE UNDERWOOD ADDRESS RT. 1 BOX 114, SALEM, WV

PERMIT ISSUED 3-16-88

DRILLING COMMENCED 6-9-88

DRILLING COMPLETED 6-14-88

IF APPLICABLE: PLUGGING OF DRY HOLE ON
CONTINUOUS PROGRESSION FROM DRILLING OR
REWORKING. VERBAL PERMISSION OBTAINED
ON _____

Casing & Tubing Size Cond.	Used in Drilling	Left in Well	Cement fill up Cu. ft.
13-10"		20'	SANDED IN
9 5/8			
8 5/8	1435	1435	325 SKS
7			
5 1/2			
4 1/2	5668	5668	410 SKS
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION ALEXANDER, BENSON Depth 5800 feet

Depth of completed well 5725 feet Rotary X / Cable Tools _____

Water strata depth: Fresh 120,460 feet; Salt _____ feet

Coal seam depths: 469-473 Is coal being mined in the area? no

OPEN FLOW DATA

Producing formation ALEXANDER - LEOPOLD Pay zone depth 5404-5598 feet

Gas: Initial open flow SHOW Mcf/d Oil: Initial open flow _____ Bbl/d

Final open flow 1,750 Mcf/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ hours

Static rock pressure 1900# psig (surface measurement) after 72 hours shut in

(If applicable due to multiple completion--)

Second producing formation BENSON Pay zone depth 5216-5224 feet

Gas: Initial open flow SHOW Mcf/d Oil: Initial open flow _____ Bbl/d

Final open flow 1,750 Mcf/d Oil: Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ hours

Static rock pressure 1900# psig (surface measurement) after 72 hours shut in

(Continue on reverse side)

NOV 19 1988

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

STAGE I - ALEXANDER, LEOPOLD
 PERFORATIONS - 5426-5580
 500 gal 15% HCL
 450 SKS 20/40 SAND IN 600 BBL 75Q FOAM

STAGE II - BENSON
 PERFORATIONS - 5216-5221
 500 gal 15% HCL
 450 SKS 20/40 SAND IN 600 BBL 75Q FOAM

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
FILL			0	5	
SHALE			5	40	
SAND & SHALE			40	108	
RED ROCK			108	118	
SAND			118	150	
SAND & SHALE			150	469	
COAL (SOLID)			469	473	
SAND & SHALE			473	760	
SAND & SHALE			760	860	
SAND & SHALE			860	2310	
BIG LIME			2310	2360	
BIG INJUN			2360	2460	
SHALE & SAND			2460	2930	
50' SAND			2930	2955	
SHALE & SAND (GORDON)			2955	3210	
SHALE			3210	3650	
SHALE & SAND			3650	3820	
SHALE			3820	5210	
SAND BROWN (BENSON)			5210	5235	
SHALE			5235	5550	
SAND (ALEXANDER)			5550	5600	
SHALE			5600	<u>5742</u>	
				DTD	

(Attach separate sheets as necessary)

EXCEL ENERGY, INC.

Well Operator

By: Bradley W. Thomas
 BRADLEY W. THOMAS, CONSULTANT

Date: 6-24-88

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 minerals, encountered in the drilling of a well."

NOV 18 1988

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

5588

Well Operator: Exploration Partners Producing Company

16585 (4) 252

Operator's Well Number: E-39 (Brohard #1)

3) Elevation: 1384'

Well type: (a) Oil ___/ or Gas x/

Issued 07/30/96

Expires 07/30/98

(b) If Gas: Production x/ Underground Storage ___/
Deep ___/ Shallow x/

Proposed Target Formation(s): Alexander, ⁴³⁹ Benson

Alexander
5216' - 5221'
Division of Environmental Protection
Benson

6) Proposed Total Depth: ~~5800~~ 5725 5520

7) Approximate fresh water strata depths: 50, 100,

8) Approximate salt water depths: N/A

9) Approximate coal seam depths: 370-375, 727-728,

Permitting
Division of Oil & Gas

10) Does land contain seams tributary to active mine? Yes / No X /

11) Proposed Well Work: FRAC (BRADFORD, BALLTOWN, SPEECHLEY)

12) frac New formations commingle with Alexander & Benson
CASING AND TUBING PROGRAM

TYPE SPECIFICATIONS FOOTAGE INTERVALS CEMENT

TYPE	Size	Grade	Weight per ft	For Drilling	Left in Well	Fill - up (cu. ft)
Conductor	11 3/4			30		
Fresh Water						
Coal					1435'	325 SKS.
Intermediate	8 5/8		1400	1400		To surface
Production	4 1/2		5750	5750		600 SKS
Tubing					5669'	410 SKS.
Liners						Est cannot to 2756'

Existing well records from well records

PACKERS : Kind _____
Sizes _____
Depths set _____

135/20

For Division of Oil and Gas Use Only
[] Fee(s) paid [] Well Work Permit [] Reclamation Fund [] WCP
[] Plat [] WW-9 [] WW-28 [] Bond Blanket [] Agent

35
2

RECEIVED
WV Division of
Environmental Protection

JUL 03 1996

- 1) Date: June 18, 1996
- 2) Operator's Well Number
E-39 (Brohard #1)
- 3) API Well No: 47- 017-3633-F
state-county-permit

Permitting
Office of Oil & Gas

REFRAC

STATE OF WEST VIRGINIA

DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- | | |
|--|---|
| <p>4) Surface owner(s) to be served:</p> <p>(a) Name Gary L. Davis
Address Rt. 1 Box 53
Salem WV 26426</p> <p>(b) Name
Address</p> <p>(c) Name
Address</p> | <p>5) (a) Coal Operator:</p> <p>Name N/A
Address</p> <p>(b) Coal Owner(s) with Declaration
Name Willis G. Tetrick
Address PO Box 267
Clarksburg WV 26302</p> <p>Name
Address</p> <p>(c) Coal Lessee with Declaration
Name N/A
Address</p> |
| <p>6) Inspector Mike Underwood
Address Rt. 2 Box 114
Salem WV 26426
Telephone () -</p> | |

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

 Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR

 x Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents page 1 through on the above named parties, by:

- Personal Service (Affidavit attached)
- x Certified Mail (Postmarked postal receipt attached)
- Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator Exploration Partners Producing Co.

By: Louis A. Ferrari Louis A. Ferrari

Its: Vice President

Address: P.O. Box 1245

Bridgeport, WV 26330

Telephone: (304) 842-8777

Subscribed and sworn before me on this 18 day of June, 1996

Ruth Ann Rigdon Ruth Ann Rigdon

Notary Public

My commission expires July 29, 2002

