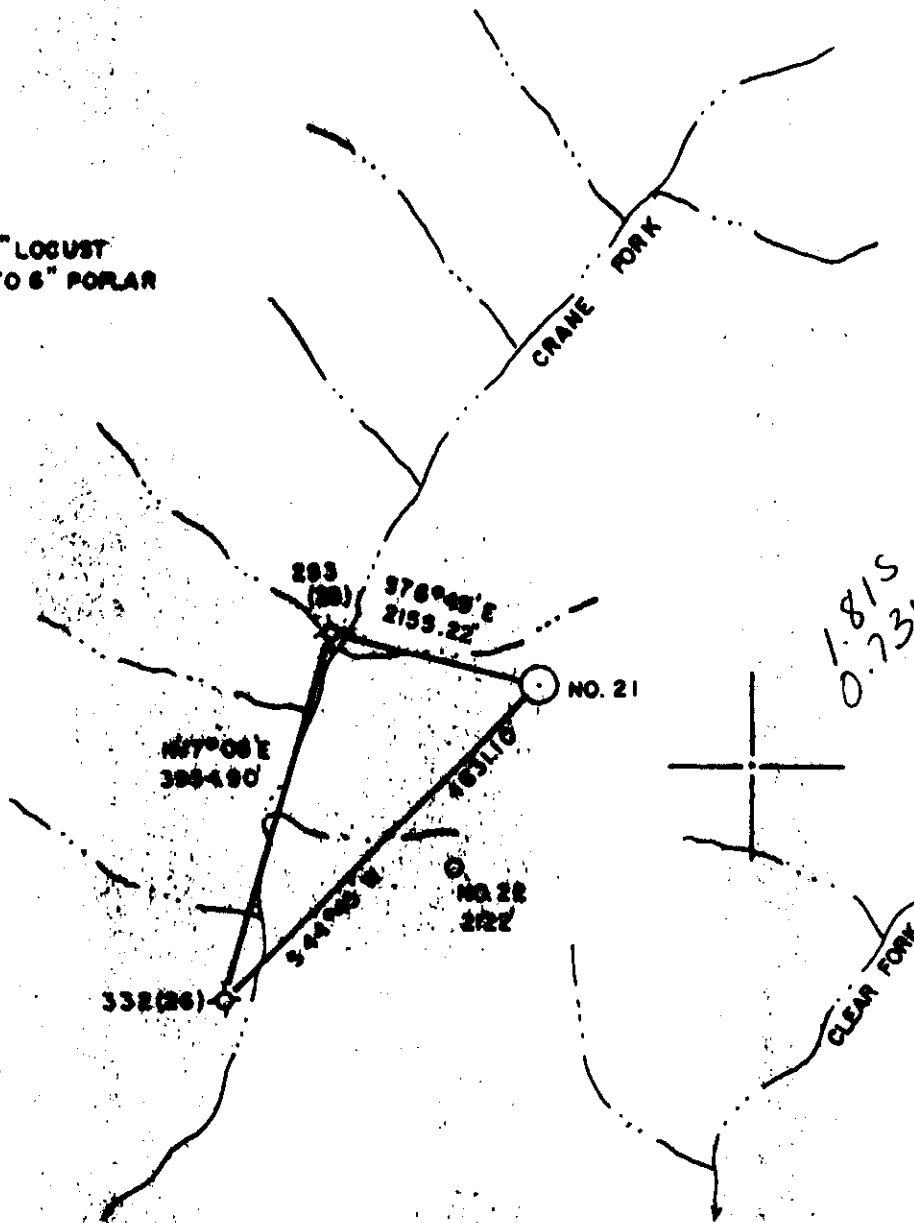


**BAND SURVEYING SERVICES**  
 21 CEDAR LANE  
 BRIDGEPORT, WV 26330  
 PHONE: 304-842-2018

LATITUDE 37°47'30"

**WELL REFERENCES:**  
 N55°E, 134.50' TO 6" LOGUST  
 S89°30' W, 111.50' TO 6" POPLAR

NORTH



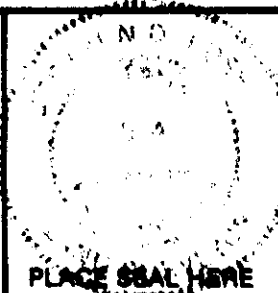
**POCA. LAND COOR.:**  
 NO. 21: N. 145,210  
 E. 10,670

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

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 2000'  
 MINIMUM DEGREE OF ACCURACY 1 in 2500  
 PROVEN SOURCE OF ELEVATION EXIST. WELL 332-P  
 ELEV. 1724'

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) \_\_\_\_\_

R.P.E. \_\_\_\_\_ L.L.S. 674  
 STEPHEN D. LOSH



**STATE OF WEST VIRGINIA**  
 DEPARTMENT OF ENERGY  
 OIL AND GAS DIVISION



DATE APRIL 13, 1994  
 OPERATOR'S WELL NO. LOUP CK. NO. 21  
 API WELL NO.

WELL TYPE: OIL \_\_\_ GAS  LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION  STORAGE \_\_\_ DEEP \_\_\_ SHALLOW   
 LOCATION: ELEVATION 2436' WATER SHED CRANE FORK  
 DISTRICT OCEANA COUNTY WYOMING  
 QUADRANGLE PILOT KNOB 7.5 min. Bald Knob SE  
 SURFACE OWNER POCAHONTAS LAND CORP. ACREAGE 23058.93  
 OIL & GAS ROYALTY OWNER LOUP CK. COLLIERY CO. LEASE ACREAGE 34586.60  
 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) 6-6 248

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION BEREA/Gordon ESTIMATED DEPTH 4600'  
 WELL OPERATOR UMG PETROLEUM CORP. DESIGNATED AGENT GREG SHOCKLEY  
 ADDRESS P.O. DRAWER 1738 4587 ADDRESS P.O. DRAWER 1738  
 CLARKSBURG, WV 26302-1738 CLARKSBURG, WV 26302-1738

JUN 3 1994

00 00 018 EQUILIBRIUM

0556

COUNTY NAME

PERMIT

OCT 31 1994

WR-35

API # 47-109-01435

**Permitting  
 Office of Oil & Gas**

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

Well Operator's Report of Well Work

Farm Name: POCAHONTAS LAND CORP. Operator Well No. LOUP CREEK # 21

LOCATION: Elevation: 2,436.00 Quadrangle: PILOT KNOB

District: Oceana County: Wyoming  
 Latitude: 9550 Feet South of 37 Deg. 47 Min. 30 Sec.  
 Longitude 3920 Feet West of 81 Deg. 30 Min. 0 Sec.

Company: UMC PETROLEUM CORPORATION  
P.O. DRAWER 1738  
CLARKSBURG, WV 26301-1738

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill up Cu. Ft.
16"	30'	30'	
8 5/8"	1712'	1712'	579
4 1/2"		4516'	546

Agent: GREGORY A. SHOCKLEY

Inspector: OFIE A. HELMICK  
 Permit Issued: 06/01/94  
 Well work Commenced: 09/20/94  
 Well Work Completed: 09/29/94  
 Verbal Plugging

Permission granted on: \_\_\_\_\_  
 Rotary X Cable \_\_\_\_\_ Rig \_\_\_\_\_  
 Total Depth (feet) 4567'  
 Fresh Water depths (ft) 170'  
 Salt water depths (ft) None  
 Is coal being mined in area (Y/N)? N  
 Coal Depths (ft): 97'-100', 159'-161',  
201'-203', 205'-207', 255'-258', 383'-  
385', 492'-495', 660'-663', 834'-836,  
1628'-1632'

OPEN FLOW DATA

Lower Maxon } \* 3280' - 3284'  
 Producing formations Gordon } Pay zone depth (ft) 4420' - 4432'  
 Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open Flow \_\_\_\_\_ Bbl/d  
 Final open flow \*245 MCF/d Final open flow \_\_\_\_\_ Bbl/d  
 Time of open flow between initial and final tests \_\_\_\_\_ Hours  
 Static rock Pressure \*560 psig (surface pressure) after 24 Hours  
 \* Co-mingled

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 BY THE WELLBORE.

For: UMC Petroleum Corporation

By: Gregory A. Shockley / DISTRICT MANAGER

Date: 10/19/94

RECEIVED

109-1435

FORM WW-2B Environmental Protection

STATE OF WEST VIRGINIA

Issued 06/01/94

MAY 16 1994

DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS

WELL WORK PERMIT APPLICATION

Expires 06/01/96

4587

(6) 547

1) Well Operator: UMC Petroleum Corporation (50410)

2) Operator's Well Number: Loup Creek #21 3) Elevation: 2436'

Well type: (a) Oil \_\_\_ / or Gas X /

(b) If Gas: Production X / Underground Storage \_\_\_ /  
Deep \_\_\_ / Shallow X /

Proposed Target Formation(s): Gordon 41A

Proposed Total Depth: 4600' feet

Approximate fresh water strata depths: 575' (From 47-109-0253)

8) Approximate salt water depths: None (From 47-109-0253)

9) Approximate coal seam depths: 1650', 1831'. (From 47-109-0253)

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

11) Proposed Well Work: Drill and frac new well.

12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	16"	N/A	Used PE	40'	40'	CTS By Hand
Fresh Water						38 CSR 11.3
Coal	8 5/8"	J-55	24#/32#	1900'	1900'	38 CSR 11.22 CTS
Intermediate						
Production	4 1/2"	J-55	10.5#		4600'	300
Tubing						
Liners						38 CSR 11.1

PACKERS : Kind \_\_\_\_\_  
Sizes \_\_\_\_\_  
Depths set \_\_\_\_\_

For Division of Oil and Gas Use Only

Fee(s) paid:  Well Work Permit  Reclamation Fund  WCCF  
 Plat  WW-9  WW-2E  Bond Blanket  Agent

062935  
17

19188

RECEIVED  
Environmental  
MAY 16 94  
Permitting  
Office of Oil & Gas

- 1) Date: May 13, 1994
- 2) Operator's well number  
Loup Creek #21
- 3) API Well No: 47 - 109 - 1435  
State - County - Permit

STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- 4) Surface Owner(s) to be served:
  - (a) Name Pocahontas Land Corporation  
Address P.O. Box 1517  
Bluefield, WV 24701
  - (b) Name \_\_\_\_\_  
Address \_\_\_\_\_
  - (c) Name \_\_\_\_\_  
Address \_\_\_\_\_
- 5) (a) Coal Operator:
  - Name Eastern Associated Coal Corporation  
Address P.O. Box 1233  
Charleston, WV 25324
  - (b) Coal Owner(s) with Declaration
    - Name Pocahontas Land Corporation  
Address P.O. Box 1517  
Bluefield, WV 24701
    - Name \_\_\_\_\_  
Address \_\_\_\_\_
  - (c) Coal Lessee with Declaration
    - Name Eastern Associated Coal Corporation  
Address P.O. Box 1233  
Charleston, WV 25324
- 6) Inspector Ofie Helmick  
Address P.O. Box 218  
Fanrock, WV 24834  
Telephone (304)-732-9135

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 pages 1 through 9 on the above named parties, by:

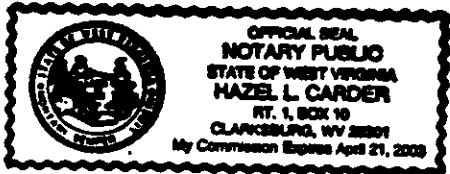
- \_\_\_\_\_ Personal Service (Affidavit attached)
- X Certified Mail (Postmarked postal receipt attached)
- \_\_\_\_\_ Publication (Notice of Publication attached)

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 UMC Petroleum Corporation (50410)  
By: Gregory A. Shockley  
Its: District Manager/Designated Agent  
Address P.O. Drawer 1738  
Clarksburg, WV 26302  
Telephone (304) 624-9653



Subscribed and sworn before me this 13th day of May, 1994  
Hazel L. Carder Notary Public  
My commission expires April 21, 2003

Perforated Gordon at 4420' - 4432' with 15 shots. Broke down with 500 gals. 18% HCL. Fraced with 75 quality foam and 50,000# 20/40 sand. Break = Hydrostatic, AIR = 30 BPM foam, ATP = 1,820#, ISIP = 1,850#.

Perforated Lower Maxon at 3280' - 3284' with 12 shots. Broke down with 500 gals. 18% HCL and fraced with gelled water and 300 Scf N<sub>2</sub>/Bbl. and 20,000# 20/40 sand. Break = 2,500#, AIR = 23 BPM, ATP = 1,930#, ISIP = 850#.

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas Or Water	Depth	Remarks
Fill	Blue	Soft	0	47			
Sand	Brown	Soft	47	97			
Coal	Black	Soft	97	100			
Sand	Grey	Hard	100	135			
Shale	Brown	Soft	135	159			
Coal	Black	Soft	159	161			
Sd & Sh	Grey	Medium	161	201	Water	170'	1/4" stream
Coal	Black	Soft	201	203			
Shale	Grey	Soft	203	205			
Coal	Black	Soft	205	207			
Sand	Grey	Medium	207	255			
Coal	Black	Soft	255	258			
Sand	Grey	Hard	258	383			
Coal	Black	Soft	383	385			
Sd & Sh	Grey	Hard	385	395			
Sand	Grey	Hard	395	410			
Sd & Sh	Grey	Medium	410	492			
Coal	Black	Soft	492	495			
Sd & Sh	Grey	Hard	495	580			
Sand	Grey	Hard	580	618			
Sd & Sh	Grey	Medium	618	660			
Coal	Black	Soft	660	663			
Sand	Grey	Hard	663	669			
Sd & Sh	Grey	Medium	669	679			
Sand	Grey	Hard	679	686			
Sd & Sh	Grey	Medium	686	702			
Sand	Grey	Hard	702	708			
Shale	Grey	Soft	708	713			
Sand	Grey	Medium	713	751			
Sd & Sh	Grey	Soft	751	834			
Coal	Black	Soft	834	836			
Sd & Sh	Grey	Medium	836	917			
Sand	Grey	Hard	917	957			
Shale	Grey	Hard	957	978			
Sand	Grey	Hard	978	1200			
Sd & Sh	Grey	Medium	1200	1323			
Shale	Grey	Soft	1323	1365			
Sand	Grey	Hard	1365	1373			
Sd & Sh	Grey	Medium	1373	1421			
Sand	Grey	Hard	1421	1470			
Sd & Sh	Grey	Soft	1470	1538			
Sand	Grey	Hard	1538	1628			
Coal	Black	Soft	1628	1632			
Sd & Sh	Grey	Medium	1632	1650			
Sand	Grey	Hard	1650	1725			
Shale	Grey	Medium	1725	1820			
Sand	Grey	Hard	1820	2041			
Sd & Sh	Grey	Medium	2041	2187			
Sand	Grey	Hard	2187	2260			
Shale	Grey	Soft	2260	2273			
Sand	Grey	Hard	2273	2279			
R & R	Grey	Soft	2279	2283			
Sand	Grey	Hard	2283	2290			
Sd & Sh	Grey	Medium	2290	2315			
Sand	Grey	Hard	2315	2345			
Shale	Grey	Soft	2345	2452			
Sd & Sh	Grey	Medium	2452	2463			
Shale	Grey	Soft	2463	2478			
Sand	Grey	Medium	2478	2540			
Avis Lime	Grey	Medium	2540	2563			
R & R	Red	Soft	2563	2586			
Shale	Grey	Soft	2586	2644			
Sand	Grey	Hard	2644	2647			
R & R	Red	Soft	2647	2731			
Shale	Grey	Soft	2731	2840			
Lime	Grey	Medium	2840	2848			
Shale	Grey	Soft	2848	3035			
Maxon	Grey	Medium	3035	3045			
Shale	Grey	Soft	3045	3062			
Sand	Grey	Medium	3062	3072			
Sd & Sh	Grey	Soft	3072	3183			
Shale	Grey	Soft	3183	3220	Gas	3165'	35 MCFPD
Sd & Sh	Grey	Medium	3220	3253			
Lower Maxon	Grey	Hard	3253	3315			
Sand	Grey	Hard	3315	3350			
Little Lime	Grey	Hard	3350	3370			
Shale	Grey	Soft	3370	3386			
Big Lime	Grey	Hard	3386	3712			
Sd & Sh	Grey	Medium	3712	3833			
Weir	Grey	Medium	3833	3960	Gas	3878'	44 MCFPD
Sd & Sh	Grey	Soft	3960	3986			
Shale	Grey	Soft	3986	4242			
Berea	Grey	Medium	4242	4256			
Sd & Sh	Grey	Medium	4256	4406			
Gordon	Grey	Hard	4406	4434			
Shale	Grey	Soft	4434	4567	TD Gas	4567'	38 MCFPD

88161