

Pocahontas Land Corporation Co
 N -4,446.2571
 E 925.0623

Gary

1676.45
 Lat. 37° 22' 30"
 Long. 81° 32' 30"
 7470.86

Pocahontas Land Corporation - Surface and Mineral
 Penn Virginia Oil and Gas Corporation - Oil and Gas

City of Gary City Limit

Proposed M-22
 Elevation 1400.48

Topo Location

1000' Radius
 Sandlick

1/2 Mile Radius

County Route 13

County Route 13/2

BM 1510

Water Tank

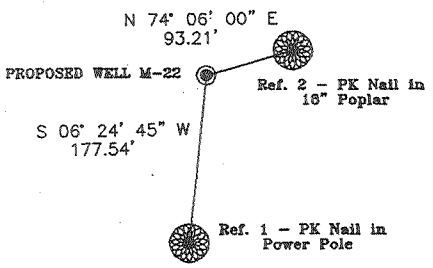
Ream

NORFOLK
 Mine Dump

Water Tank

Mine Air Shaft

REFERENCES
 N.T.S.



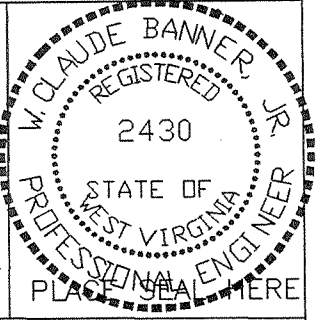
Notes:

No dwellings exist within 200 feet of M-22
 Residents within 1000' of Gas Well M-22 obtain their water supply from the City of Gary
 (+) Denotes location of well on USGS map.

FILE No. CABOT-OIL-GAS-2001
 DRAWING NAME PLAT-M-22
 SCALE 1" = 1000'
 DRAWING NUMBER 2-7-01-1SP
 MINIMUM DEGREE OF ACCURACY 1 : 2500
 PROVEN SOURCE OF ELEVATION BENCH MARK 1578

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 MINES.

(SIGNED) *W. Claude Banner Jr.*
 R.P.E. 2430 R.P.S.



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



DATE FEBRUARY 7 2001
 OPERATOR'S WELL No. M-22-S
 API WELL No. 47 - 047 - 01531
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 1400.48 WATER SHED SANDLICK CREEK OF TUG FORK
 DISTRICT ADKIN COUNTY McDOWELL
 QUADRANGLE GARY, WV
 SURFACE OWNER POCAHONTAS LAND CORPORATION ACREAGE 55.22 (Tax Map GARY COPR. MAP 7 & 8, PIO 5-125)
 ROYALTY OWNER PENN VIRGINIA OIL AND GAS CORPORATION LEASE ACREAGE
 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)

PLUG AND ABANDON CLEAN OUT AND REPLUG
 TARGET FORMATION
 WELL OPERATOR CABOT OIL & GAS CORP.
 ADDRESS 900 LEE ST. EAST SUITE 500 CHARLESTON, WV 25301
 ESTIMATED DEPTH JUN 15 2001
 DESIGNATED AGENT JOHN ABSHIRE
 ADDRESS 900 LEE ST. EAST SUITE 1500 CHARLESTON, WV 25301

Deep Well 5-5 267

McDow. 1531

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas
Well Operator's Report of Well Work

Am B

Farm name: Pocahontas Land Corp Operator Well No.: Pocahontas Land M-22R

LOCATION: Elevation: 1400' Quadrangle: Gary
District: Adkin County: McDowell
Latitude: 7470' feet South of 37° DEG. 22' MIN. 30" SEC.
Longitude: 1676' feet West of 81° DEG. 32' MIN. 30" SEC.

Company: Cabot Oil & Gas Corporation
900 Lee Street East, Suite 500
Charleston, WV 25301

Agent: John Abshire
Inspector: Ofie Helmick
Permit Issued: 6/13/01
Well Work Commenced: 6/13/01
Well Work Completed: 8/10/01
Verbal Plugging
Permission granted on:
Rotary X Cable
Total Depth (feet) 6650' TD - 3129'
PBSD
Fresh Water Depths (ft) 45', 515'
Salt Water Depths (ft)
Is coal being mined in area (Y / N)? YES

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill up Cu. Ft.
18"		40'	
13 3/8"	202'	202'	200 sks
9 5/8"	838'	838'	300 sks
7"	2135'	2135' Grouted	291 sks 120 sks
4 1/2"		3129'	75 sks

Coal Depths (ft) 75'-76', 137'-138', 185'-186', 313'-314', 536'-537'

OPEN FLOW DATA

Producing formation	BIG LIME	Pay zone depth (ft)	2665'-2671' 2880'-2886'
Gas: Initial open flow	1700 MCF/d	Oil: Initial open flow	N/A Bbl/d
Final open flow	440 MCF/d	Final open flow	N/A Bbl/d
Time of open flow between initial and final tests			44 Hours
Static rock pressure	220 psig (surface pressure after		12 Hours

Office of Oil & Gas Permitting
OCT 09 2001
WV Department of Environmental Protection

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

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: CABOT OIL & GAS CORPORATION

By: *Ray Purdinick* Operations Manager
Date: 10-7-01

McDow 1531

Inflatable packer at 2564' and 2596'.

Perforate Lower Big Lime section with 3 1/8" HSC 4 SPF from 2880' - 2886' KB (28 total holes).

Perform Gel-acid treatment using 3000 gals of 15% HCL-FE gelled acid. BD - 2759#, ATP - 1700# at 10BPM, MTP-2220#, ISIP - 2142#, 5-Min - 2010#, 10-Min - 2000#. Total fluid 71bbls.

Perforate Upper Big Lime using 3 1/8" HSC 4SPF from 2665' - 2671' KB. (28 total shots). Set LMFP at 2710' KB. Pumped 2 bbls of acid, dropped frac ball and pumped remaining break down acid. Perform 75Q FF using 250 gals 15% HCL acid, 64,800# 20/40 sand ramped to 16 ppa, 421,900SCF N2 at 12,000 scf/min. BD-1176#, ISIP after BD-200#, ATP-1776# at 20 BPM/foam, MTP-2733#, ISIP-2467#, 5-Min 2179#, 10-Min 2069#. Total fluid - 189 bbls clean.

FORMATION	TOP	BOTTOM	REMARKS
SILT/SHALE	0	790	
RAVENCLIFF	790	974	
SHALE	974	1078	
AVIS	1078	1122	
SILT/SHALE	1122	2110	
MAXTON	2110	2195	
SHALE	2195	2285	
LITTLE LIME	2285	2390	
P. CAVE	2390	2600	
BIG LIME	2600	3300	
POCONO	3300	3552	
SHALE	3552	3923	
BEREA	3923	3935	
SILT/SHALE	3935	6540	
LIMESTONE	6540	6650'TD	

Original hole drilled to 170 TD under
4704701504. Lost hole, plugged
& skidded rig.

KLA 9/15/2000

