

**TEE Engineering Company, Inc.**  
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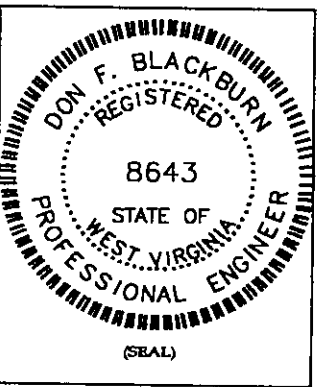
**GeoMet Operating Company, Inc.**  
 Well No. PMC South 107-103-068

FILE NO. 1883-08  
 DRAWING NO. WELL PMC 068 PLAT  
 SCALE: 1" = 2,000'  
 MIN. DEGREE OF ACCURACY 1 : 2,500  
 PROVEN SOURCE OF ELEVATION  
 GPS STATION TEC-1 (ELEV. 2406.60)

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.

*Don F. Blackburn*  
 (SIGNATURE)

R.P.E. 8643 R.P.S. \_\_\_\_\_



**STATE OF WEST VIRGINIA**  
 DEPARTMENT OF ENVIRONMENTAL PROTECTION  
 OFFICE OF OIL AND GAS

DATE DECEMBER 31, 2002  
 OPERATOR'S WELL NO. PMC SOUTH 107-103-068  
 API WELL NO. 47 - 047 - 017570  
 STATE COUNTY PERMIT

WELL TYPE: OIL  GAS X  CBM  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION 2,746.37 NORTHING 105,172.98 EASTING 1,770,267.64  
 DISTRICT BIG CREEK WATER SHED MUDLICK BR. OF LITTLE SLATE CREEK  
 QUADRANGLE BRADSHAW COUNTY MCDOWELL

SURFACE OWNER POCAHONTAS MINING, LLC. ACREAGE 1,108  
 CBM ROYALTY OWNER POCAHONTAS MINING, LLC. LEASE ACREAGE 1,108  
 LEASE NO. RECORDING IN PROGRESS

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 NEW RIVER AND POCAHONTAS COALS ESTIMATED DEPTH 2,221'  
 WELL OPERATOR GEOMET OPERATING COMPANY, INC. DESIGNATED AGENT GREGG CLEARY  
 ADDRESS 5336 STADIUM TRACE PARKWAY SUITE 3206 ADDRESS 1105 HEATHERWOOD ROAD  
BIRMINGHAM, ALABAMA 35244 BLUEFIELD, WV 24701

MCDOWELL 1757C

(Bradshaw 270)

MAR 14 2003

State of West Virginia  
Department of Environmental Protection  
Office of Oil and Gas

Well Operator's Report of Well Work

AP

RECEIVED  
Office of Oil & Gas  
SEP 13 2003  
WV Department of Environmental Protection

FARM NAME: Pocahontas Mining, LLC. OPERATOR WELL NO.: 107-103-068

LOCATION:

Elevation: 2746.37' Quadrangle: Bradshaw

District: Big Creek County: McDowell  
Latitude: 11.518' Feet South of 37 Deg. 17 Min. 30 Sec.  
Longitude: 2014' Feet West of 81 Deg. 45 Min. 00 Sec.

Company: <u>GeoMet Operating Company</u>	Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. Ft.
Address: 5336 Stadium Trace Parkway, Suite 206 Birmingham, Alabama 35244	16"	22.2'	22.2'	
Agent: <u>Gregg Cleary</u>				
Inspector: <u>Ronnie Scott</u>	11-3/4"	325'	325'	195/Pumped 228
Date Permit Issued: <u>March 13, 2003</u>				
Date Well Work Commenced: <u>April 30, 2003</u>	8-5/8"	657'	657'	148/Pumped 270
Date Well Work Completed: <u>May 15, 2003</u>				
Verbal Plugging:	5-1/2"	2481'	2481'	430/ Pumped 481
Date Permission granted on:				
Rotary <u>XXXX</u> Cable Rig				
Total Depth (feet): <u>2495'</u>				
Fresh Water Depth (feet): <u>Unknown</u>				
Salt Water Depth (feet): <u>Unknown</u>				
Is coal being mined in area (N/Y)? <u>No</u>				

Coal Depths (feet): 658, 659, 661, 662, 663, 665, 684, 732, 733, 761, 762, 811, 815, 954, 1129, 1131, 1212, 1256, 1265, 1306, 1335, 1336, 1446, 1703, 1705, 1706, 1749, 1769, 1786, 1815, 1878, 1961, 1987, 2025, 2092, 2093, 2124, 2181, 2182, 2235, 2363, 2365, 2367, 2376.

OPEN FLOW DATA

Producing formation All Zones Commingled Pay zone depth (ft) \_\_\_\_\_  
 Gas: Initial Open Flow N/A MCF/d Oil: Initial Open Flow \_\_\_\_\_ Bbl/d  
 Final Open Flow N/A MCF/d Final Open Flow \_\_\_\_\_ Bbl/d  
 Time of Open Flow between initial and final tests N/A Hours  
 Static Rock Pressure 26 psig (surface pressure) after 96 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.

SIGNED: \_\_\_\_\_  
 BY: Dundee Smith  
 DATE: \_\_\_\_\_

09 17 2003

McDow 1757

**GeoMet Operating Company, Inc.**  
**Perforation and Frac Volume Specification**

Well Name PMC SOUTH 068 PBTB 2480'

**Zone and Perforation Table**

Frac			Ball Out	Bridge Plug Set @	Est Sand Weight	Actual Sand Weight
Stage 1 Interval	2363	2367				
N2 Scf	174,000		2250'		15,000	18,000
Acid	200					
Gel Volume	6,550					
ISIP	1,081					
ATP	1,996					
AIR	24	BPM				
Stage 2 Interval	2,180	2183				
N2 Scf	184,000		30 Balls on Plug @ 2150'			
Acid	200					
Gel Volume	6,500					
ISIP	1,434					
ATP	2,438					
AIR	21	BPM				
Stage 3 Interval	2,093	2096				
N2 Scf	260,000		Together - Ball Out			
Acid	250					
Gel Volume	9,400					
ISIP	1,452					
ATP	2,328					
AIR	28	BPM				
Stage 4 Interval	2,024	2027				
N2 Scf	260,000		No Cement Between 2010'			
Acid	100					
Gel Volume	6,800					
ISIP	1,416					
ATP	3,094					
AIR		BPM				
Stage 5 Interval	1,960	1962				
N2 Scf	260,000		1986' - 1988'			
Acid	100					
Gel Volume	6,800					
ISIP	1,416					
ATP	3,094					
AIR	22	BPM				
					1850'	

Well Name PMC SOUTH 068

PBTD

1946'

**Zone and Perforation Table**

	Ball Out	Bridge Plug Set @	Est Sand Weight	Actual Sand Weight
Stage 6 Interval	1,813	1,816		
N2 Scf	145,000		15,000	17,000
Acid	200			
Gel Volume	4,800			
ISIP	1,424			
ATP	2,416			
AIR	20	BPM		
	31 Balls on Plug @ 1800'			
Stage 7 Interval	1,748	1,750	20,000	22,000
N2 Scf	186,000			
Acid	450			
Gel Volume	5,900			
ISIP	1,398			
ATP	2,476			
AIR	25	BPM		
	1768' - 1770', 1786' - 1788'			
	1725'			
Stage 8 Interval	1,703	1,706	24,000	22,500
N2 Scf	254,000			
Acid	200			
Gel Volume	8,200			
ISIP	3,401			
ATP	3,594			
AIR	16	BPM		
	NO PLUG			
Stage 9 Interval				
N2 Scf				
Acid				
Gel Volume				
ISIP				
ATP				
AIR		BPM		
Stage 10 Interval				
N2 Scf				
Acid				
Gel Volume				
ISIP				
ATP				
AIR				

OCT 17 2003

McDow 1757

DRILL DATA HOLE - NOAH HORN WELL DRILLING, INC.

COMPANY: GEOMET OPERATING CO. HOLE NO.: PMC-068

LOCATION: PEA PATCH DRILL: RIG # 23

DATE STARTED: 04-29-2003 DATE COMPLETED: 05-05-2003

DEPTH		THICKNESS	STRATA	REMARKS
FROM	TO	FT.	DESCRIPTION	VOIDS, ETC
0	10	10	OVERBURDEN / SOFT SAND	
10	22.2	12.2	SANDY SHALE / SANDSTONE	
			22.2' W/ 16" CASING	
22.2	61.0	38.8	SANDSTONE	
61.0	92.0	31.0	SANDSTONE/COAL/SANDY SHALE	
92.0	123.0	31.0	SANDY SHALE/COAL/SANDSTONE	
123.0	154.0	31.0	SANDSTONE/SANDY SHALE STRKS.	
154.0	185.0	31.0	SANDSTONE	
185.0	215.0	30.0	SAND/SANDY SHALE	
215.0	245.0	30.0	SANDY SHALE/COAL/SANDSTONE	
245.0	275.0	30.0	SANDSTONE/SANDY SHALE STRKS.	
275.0	305.0	30.0	SANDSTONE/SANDY SHALE	
305.0	335.0	30.0	SANDY SHALE/COAL/SANDSTONE	
335.0	365.0	30.0	SANDY SHALE/SAND/SANDY SHALE	
365.0	425.0	60.0	SANDSTONE	
425.0	455.0	30.0	SANDY SHALE/SAND	
455.0	485.0	30.0	SANDSTONE	
485.0	515.0	30.0	SANDY SHALE/COAL STRKS.	
515.0	545.0	30.0	SANDY SHALE/SAND	
545.0	575.0	30.0	SANDY SHALE/SAND STRKS.	
575.0	580.0	5.0	SANDSTONE	
580.0	583.0	3.0	VOID	
583.0	605.0	22.0	SANDY SH/COAL/SHALE/COAL/SANDST.	
605.0	635.0	30.0	SANDSTONE	
635.0	665.0	30.0	SANDSTONE/SANDY SHALE	657' OF 8-5/8"
665.0	680.0	15.0	SANDY SHALE/SANDSTONE	
680.0	725.0	45.0	SANDY SHALE/SANDSTONE	
725.0	755.0	30.0	SANDSTONE	
755.0	785.0	30.0	SANDSTONE/COAL/SANDY SHALE/SAND	
785.0	815.0	30.0	SAND/SANDY SHALE	
815.0	845.0	30.0	COAL/SANDY SHALE/SAND	
845.0	875.0	30.0	SAND/SANDY SHALE/SAND	
875.0	905.0	30.0	SANDSTONE/SANDY SHALE	
905.0	965.0	60.0	SANDY SHALE	
965.0	995.0	30.0	SANDY SHALE/SAND	
995.0	1025.0	30.0	SAND/SANDY SHALE	
1025.0	1055.0	30.0	SANDY SHALE/SAND/SANDY SHALE	
1055.0	1115.0	60.0	SANDY SHALE	
1115.0	1145.0	30.0	SANDY SHALE/COAL/SAND/SANDY SHALE	
1145.0	1175.0	30.0	SANDY SHALE/SAND/SANDY SHALE	
1175.0	1205.0	30.0	SANDY SHALE/SAND/SANDY SHALE	
1205.0	1235.0	30.0	SANDY SHALE/SAND	

GEO-MET OPERATIONS  
HOLE #PMC-068  
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1235.0	1265.0	30.0	SAND/SHALE/COAL/SANDY SHALE
1265.0	1295.0	30.0	SANDY SHALE/SANDSTONE
1295.0	1325.0	30.0	SANDY SHALE/COAL/SANDST./SANDY SH.
1325.0	1355.0	30.0	SANDY SHALE/COAL/SANDY SH./SANDST.
1355.0	1385.0	30.0	SANDY SHALE/SANDSTONE STRKS.
1385.0	1415.0	30.0	SANDSTONE/SANDY SHALE/SANDSTONE
1415.0	1445.0	30.0	SANDSTONE/SANDY SHALE/COAL
1445.0	1475.0	30.0	SANDY SHALE/SAND
1475.0	1505.0	30.0	SANDSTONE
1505.0	1535.0	30.0	SAND/SANDY SHALE
1535.0	1565.0	30.0	SANDY SHALE/SAND
1565.0	1595.0	30.0	SANDY SHALE
1595.0	1625.0	30.0	SANDY SHALE/SAND
1625.0	1655.0	30.0	SANDSTONE/SANDY SHALE
1655.0	1685.0	30.0	SANDSTONE
1685.0	1715.0	30.0	SANDY SHALE/COAL/SANDY SHALE
1715.0	1745.0	30.0	SANDY SHALE/COAL/SANDY SH/SANDST.
1745.0	1805.0	60.0	SANDY SHALE/COAL
1805.0	1835.0	30.0	COAL/SANDY SHALE/SANDSTONE STRKS
1835.0	1865.0	30.0	SANDSTONE/SANDY SHALE STRKS.
1865.0	1895.0	30.0	SANDSTONE/SANDY SHALE
1895.0	1925.0	30.0	SANDY SHALE/SANDSTONE
1925.0	1955.0	30.0	SAND/SANDSTONE/COAL
1955.0	1985.0	30.0	SAND/COAL
1985.0	2015.0	30.0	SANDY SHALE/SAND
2015.0	2045.0	30.0	COAL/SANDY SHALE
2045.0	2075.0	30.0	SANDY SHALE/SANDSTONE
2075.0	2105.0	30.0	SANDSTONE/SANDY SHALE/COAL/SHALE/
2105.0	2135.0	30.0	SANDY SHALE/COAL/SAND
2135.0	2165.0	30.0	SANDY SHALE
2165.0	2195.0	30.0	SANDY SHALE/SANDSTONE STRKS.
2195.0	2225.0	30.0	SANDY SHALE/SANDSTONE/SANDY SHALE
2225.0	2255.0	30.0	SANDY SHALE
2255.0	2285.0	30.0	SANDY SHALE/SANDSTONE STRKS.
2285.0	2315.0	30.0	SANDY SHALE/SHALE/SANDY SHALE
2315.0	2335.0	20.0	SANDY SHALE/SAND
2335.0	2345.0	10.0	SANDSTONE
2345.0	2375.0	30.0	SANDY SHALE/SHALE OR COAL/SANDST
2375.0	2405.0	30.0	SANDY SHALE/SANDSTONE STRKS.
2405.0	2435.0	30.0	SANDY SHALE/SANDSTONE/SANDY SHALE
2435.0	2465.0	30.0	SANDY SHALE/SANDSTONE
2465.0	2495.0	30.0	SANDSTONE/SANDY SHALE STRKS.

TOTAL DEPTH: 2495'  
22.20' OF 16"  
325' OF 11-3/4"  
657' OF 8-5/8"

MCDOW 1757

OCT 17 2003