

**TEE Engineering Company, Inc.**  
 320 Collins Hill Court  
 Lexington, KY 40509  
 (859) 263-5350  
 Fax (859) 263-5345

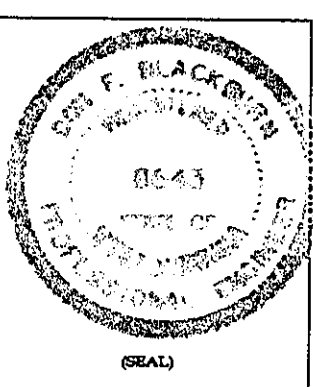
**GeoMet Operating Company, Inc.**  
 Well No. PMC South 109-103-071

FILE NO. 1883-08  
 DRAWING NO. WELL PMC 071 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 109-103-071

API WELL NO. 47 - 047 - 01760C  
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION 2,217.63' NORTHING 105,348.00 EASTING 1,775,462.69  
 DISTRICT BIG CREEK WATER SHED LAUREL FORK OF LITTLE SLATE CREEK  
 QUADRANGLE BROADSHAW 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 2,248'  
 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

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

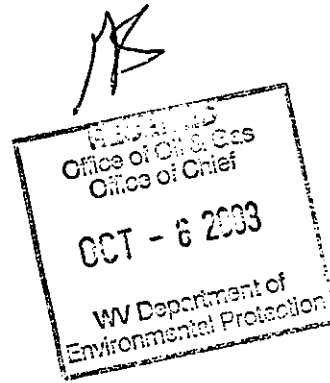
Well Operator's Report of Well Work

FARM NAME: Pocahontas Mining, LLC. OPERATOR WELL NO.: 109-103-071

LOCATION:

Elevation: 2,217.63' Quadrangle: Bradshaw

District: Big Creek County: McDowell  
Latitude: 6325' Feet South of 37 Deg. 17 Min. 30 Sec.  
Longitude: 1796' 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: <u>5336 Stadium Trace Parkway, Suite 206 Birmingham, Alabama 35244</u>	<u>13-3/8"</u>	<u>18'</u>	<u>18'</u>	
Agent: <u>Gregg Cleary</u>				
Inspector: <u>Ronnie Scott</u>	<u>8-5/8"</u>	<u>400'</u>	<u>400'</u>	<u>90/Pumped 120</u>
Date Permit Issued: <u>March 13, 2003</u>				
Date Well Work Commenced: <u>June 27, 2003</u>	<u>5-1/2"</u>	<u>1981.91'</u>	<u>1981.91'</u>	<u>344/Pumped 390</u>
Date Well Work Completed: <u>July 11, 2003</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <u>XXXX</u> Cable Rig				
Total Depth (feet): <u>1982'</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): 415, 545, 546, 620, 668, 717, 755, 756, 828, 864, 1091, 1129, 1130, 1131, 1194, 1215, 1245, 1282, 1310, 1390, 1423, 1460, 1461, 1499, 1613, 1777, 1780, 1781, 2000.

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 11 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:

Quandrea Smith

DATE:

OCT 14 2003

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

Well Name PMC South 071

PBTD

1982

**Zone and Perforation Table**

Frac			Ball Out	Bridge Plug Set @	Est Sand Weight	Actual Sand Weight
	1778	1781				
Stage 1 Interval	1778	1781				
N2 Scf	61,000		No Plug		20,000	
Acid	200	15%				
Gel Volume	5,000				No Frac	
ISIP	3,403					
ATP	3,800					
AIR	12	BPM				
Stage 2 Interval	1,497	1500				25,000
N2 Scf	323,000		1480'			
Acid	200	15%				
Gel Volume	9,800					
ISIP	1,411					
ATP	2,968					
AIR	22	BPM				
Stage 3 Interval	1,459	1462				25,000
N2 Scf	229,000		60 Balls On Plug @ 1440'			
Acid	200	15%				
Gel Volume	8,800					
ISIP	2,797					
ATP	3,155					
AIR	18	BPM				
Stage 4 Interval	1,158	1390				30,000
N2 Scf			1392' 1422' -1424'			
Acid	650	15%				
Gel Volume	4,000					
ISIP	3,593					
ATP	3,680					
AIR	2.5	BPM				
Stage 5 Interval	1,193	1195				55,000
N2 Scf	491,000		1214' -1216' 1243' -1246'  1170'			
Acid	250	15%				
Gel Volume	17,000					
ISIP	1,139					
ATP	2,688					
AIR	30	BPM				

Well Name PMC SOUTH 071

PBTD 1982

**Zone and Perforation Table**

		Ball Out	Bridge Plug Set @	Est Sand Weight	Actual Sand Weight
Stage 6 Interval	1,129	1,132			
N2 Scf	363,000		No Plug	30,000	28,000
Acid	300	15%			
Gel Volume	10,000				
ISIP					
ATP	3,493				
AIR	18	BPM			
Stage 7 Interval					
N2 Scf					
Acid					
Gel Volume					
ISIP					
ATP					
AIR		BPM			
Stage 8 Interval					
N2 Scf					
Acid					
Gel Volume					
ISIP					
ATP					
AIR		BPM			
Stage 9 Interval					
N2 Scf					
Acid					
Gel Volume					
ISIP					
ATP					
AIR		BPM			
Stage 10 Interval					
N2 Scf					
Acid					
Gel Volume					
ISIP					
ATP					
AIR					

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# DRILL DATA HOLE - NOAH HORN WELL DRILLING, INC.

COMPANY: GEO-MET

HOLE NO. PMC-SOUTH-071

LOCATION: BUG HURLEY HOLLOW

DRILL: RIG 25

DATE STARTED: 06-26-03

ELECTRIC LOGGED: YES

DATE COMPLETED: 07-01-03

GROUTED: YES

DEPTH		THICKNESS	STRATA	REMARKS
FROM	TO	FT.	DESCRIPTION	VOIDS, ETC
0	18	18	OVERBURDEN/SANDY SHALE/SAND	
18	30	12	SAND	
30	61	31	SAND/SANDY SHALE/SANDSTONE	
61	92	31	SANDSTONE	
92	123	31	SANDY SHALE/COAL STRKS/SANDSTONE	
123	154	31	SANDSTONE	
154	185	31	COAL -4/SANDSTONE	
185	215	30	SANDSTONE/COAL-2/SANDY SHALE	
215	245	30	SANDSTONE	
245	275	30	SANDSTONE/SANDY SHALE STRKS/SANDSTONE	
275	305	30	SANDSTONE/SANDY SHALE	
305	335	30	SANDY SHALE/COAL-2/SANDY SHALE	
335	365	30	SANDY SHALE/SANDSTONE STRKS.	
365	410	45	SANDSTONE 400' OF 8-5/8" CASING	
410	420	10	SANDY SHALE	
420	450	30	SAND/SANDY SHALE	
450	480	30	SANDY SHALE/COAL	
480	510	30	SAND/SHALE	
510	540	30	SAND/SANDY SHALE	
540	570	30	COAL/SAND/SANDY SHALE	
570	600	30	COAL/SANDY SHALE	
600	630	30	SANDY SHALE/SCOAL/SAND	
630	660	30	SAND/SANDY SHALE	
660	690	30	COAL/SANDY SHALE/SAND	
690	720	30	SANDY SHALE/COAL/SANDY SHALE	
720	780	60	SANDY SHALE	
780	870	90	SANDY SHALE/COAL/SANDY SHALE	
870	900	30	SANDY SHALE	
900	960	60	SANDY SHALE/COAL/SANDY SHALE	
960	990	30	SANDY SHALE/COAL/SANDY SHALE	
990	1020	30	SAND/SANDY SHALE	
1020	1050	30	SANDSTONE/SANDY SHALE	
1050	1080	30	SANDY SHALE/SANDSTONE	
1080	1110	30	COAL-2/SANDY SHALE/SANDSTONE	
1110	1140	30	SANDSTONE/SANDY SHALE	
1140	1170	30	SANDY SHALE/COAL STRKS/SANDSTONE	
1170	1200	30	SANDY SHALE/COAL-2/SANDY SHALE	
1200	1230	30	SANDY SHALE/SANDSTONE	
1230	1260	30	SANDSTONE/SANDY SHALE/COAL STRKS.	
1260	1290	30	SANDY SHALE/SANDSTONE	
1290	1320	30	SANDSTONE	
1320	1350	30	SANDSTONE/SANDY SHALE/SANDSTONE	
1350	1380	30	SANDY SHALE/SANDSTONE	
1380	1410	30	SANDSTONE/SANDY SHALE/SANDSTONE	
1410	1440	30	SANDSTONE/COAL STRKS/SANDY SHALE	

GEO-MET OPERATIONS  
HOLE: PMC-SOUTH-071  
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1440	1470	30	SANDSTONE/SANDY SHALE/SANDSTONE
1470	1500	30	R.S.-3/SANDY SHALE/SANDSTONE
1500	1530	30	COAL-2/SANDSTONE/SANDY SHALE
1530	1560	30	SANDSTONE
1560	1590	30	SAND/R.S. STRKS/SANDSTONE
1590	1620	30	SAND STRKS/SANDY SHALE
1620	1650	30	COAL STRKS/SAND/SANDY SHALE
1650	1680	30	SANDY SHALE/SAND STRKS.
1680	1710	30	SANDY SHALE
1710	1740	30	SANDY SHALE
1740	1770	30	SANDY SHALE/COAL W/SHALE
1770	1800	30	SANDSTONE/SANDY SHALE
1800	1830	30	SAND/SANDY SHALE
1830	1860	30	SANDY SHALE/SAND/SANDY SHALE
1860	1890	30	SAND/SANDY SHALE
1890	1920	30	SANDY SHALE/SAND/SANDY SHALE
1920	1950	30	SAND/SANDY SHALE
1950	1980	30	RED SHALE
1980	2000	20	R.S.-10/SANDY SHALE

TOTAL DEPTH: 2000  
400' OF 8-5/8" CASING

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