

14" WHITE OAK
N 23°35'31" E
89°20'00" W
18" RED OAK
N 24°56'17" E
48°59'17" W

PROPOSED PMC NORTH
111-108-066

REFERENCES	SCALE 1" = 100'
WELL COORDINATES WV STATE PLANE NAD 1983 N 11496.65 E 1778463.82	

TEE Engineering Company, Inc.
 2000 Salem Hill Road
 Charleston, WV 25309
 (606) 263-5180
 Fax (606) 263-5345

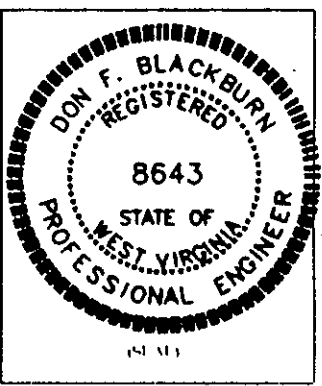
GeoMet Operating Company, Inc.
 Well No. PMC North 111-108-066

FILE NO. 1883-08
 DRAWING NO. WELL PMC-N-066 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 27, 2012
 OPERATOR'S WELL NO.: PMC NORTH 111-108-066
 API WELL NO. 47 - 047
 STATE COUNTY PERMIT 01749C

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

LOCATION: ELEVATION 2,246.81' WATER SHED RIGHT FORK OF LITTLE SLATE CREEK
 DISTRICT BIG CREEK COUNTY McDOWELL
 QUADRANGLE BRADSHAW

SURFACE OWNER POCAHONTAS MINING, LLC. ACREAGE 1,252
 CBM ROYALTY OWNER POCAHONTAS MINING, LLC. LEASE ACREAGE 1,252
 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 1,954'
 WELL OPERATOR GEOMET OPERATING COMPANY, INC. DESIGNATED AGENT GREGG CLEARY
 ADDRESS 5336 STADIUM TRACE PARKWAY SUITE 3206 BIRMINGHAM, ALABAMA 35244 ADDRESS 1105 HEATHERWOOD ROAD BLUEFIELD, WV 24701

FEB 14 2013

BRADSHAW 272

McDowell 1749C

h17

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

Well Operator's Report of Well Work

FARM NAME: Plum Creek Timberlands, L.P. OPERATOR WELL NO.: PMC North 066

LOCATION:

Elevation: 2,246.81' Quadrangle: Bradshaw

District: Big Creek County: McDowell
Latitude: 3,402 Feet South of 37 Deg. 20 Min. 00 Sec.
Longitude: 7,319 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>17.35'</u>	<u>17.35'</u>	
Agent: <u>Gregg Cleary</u>				
Inspector: <u>Ronnie Scott</u>	<u>8-5/8"</u>	<u>330.26'</u>	<u>330.26'</u>	<u>136/Pumped 162</u>
Date Permit Issued: <u>February 13, 2003</u>				
Date Well Work Commenced: <u>March 10, 2003</u>	<u>5-1/2"</u>	<u>1945'</u>	<u>1945'</u>	<u>337/Pumped 468</u>
Date Well Work Completed: <u>April 24, 2003</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <u>XXXX</u> Cable Rig				
Total Depth (feet): <u>1955'</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): 562, 637, 761, 827, 837, 886, 1011, 1012, 1013, 1014, 1015, 1082, 1126, 1127, 1128, 1142, 1177, 1199, 1233, 1312, 1314, 1404, 1429, 1469, 1522, 1551, 1552, 1554, 1555, 1556, 1557, 1558, 1559, 1560, 1561, 1591, 1648, 1649, 1732, 1733, 1761, 1782, 1849, 1851, 1863

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 22 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: Dundrea Smith

DATE: September 2, 2003

171-200 1171

10/23/2003

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

Well Name PMC NORTH 066

PBTD

1946'

Zone and Perforation Table

Frac			Ball Out	Bridge Plug Set @	Est Sand Weight	Actual Sand Weight
Stage 1 Interval	1848	1852				
N2 Scf	193,000		1848' - 1852'	26 Balls on Plug @1830'	25,000	25,000
Acid	250					
Gel Volume	12,000					
ISIP	1,305					
ATP	2,098					
AIR	30	BPM				
Stage 2 Interval	1,730	1734				
N2 Scf	203,000		1782' - 1785'	1700'		
Acid	450					
Gel Volume	10,000					
ISIP	1,230					
ATP	2,155					
AIR	29	BPM				
Stage 3 Interval	1,647	1650				
N2 Scf	163,000		1590'			
Acid	200					
Gel Volume	6,400					
ISIP	1,542					
ATP	2,348					
AIR	20	BPM				
Stage 4 Interval	1,550	1554				30,000
N2 Scf	382,000		40 Balls on plug @1540'			
Acid	200					
Gel Volume	13,000					
ISIP	1,296					
ATP	2,642					
AIR	29	BPM				
Stage 5 Interval	1,521	1524				16,000
N2 Scf	150,000		No Plug			
Acid	400					
Gel Volume	6,000					
ISIP	3,684					
ATP	3,890					
AIR	10	BPM				

Well Name PMC NORTH 066

PBTD

1946'

Zone and Perforation Table

	Ball Out	Bridge Plug Set @	Est Sand Weight	Actual Sand Weight
Stage 6 Interval	1,403	1,405		
N2 Scf	282,000		40,000	42,000
Acid	250			
Gel Volume	12,000			
ISIP	1,184			
ATP	2,512			
AIR	25	BPM		
	1427' - 1429'/1467' - 1469'			
	1350'			
Stage 7 Interval	1,311	1,314	20,000	16,000
N2 Scf	182,000			
Acid	200			
Gel Volume	6,000			
ISIP	2,262			
ATP	2,951			
AIR	20	BPM		
	32 Balls on plug @1280'			
Stage 8 Interval	1,176	1,178	25,000	27,000
N2 Scf	196,000			
Acid	450			
Gel Volume	9,200			
ISIP	1,103			
ATP	2,186			
AIR	30	BPM		
	1197' - 1199'/1232' - 1234'			
	1160'			
Stage 9 Interval	1,126	1,130	25,000	26,000
N2 Scf	188,000			
Acid	200			
Gel Volume	7,600			
ISIP	1,641			
ATP	2,284			
AIR	25	BPM		
	1100'			
Stage 10 Interval	1,010	1016	40,000	41000
N2 Scf	175,000			
Acid	200			
Gel Volume	9,000			
ISIP	1,010			
ATP	1,642			
AIR	28			
	NO PLUG			

71 - 06W 1177

NOAH HORN WELL DRILLING, INC. – DRILL DATA HOLE

COMPANY: GEOMET

HOLE NO.: PMC-066

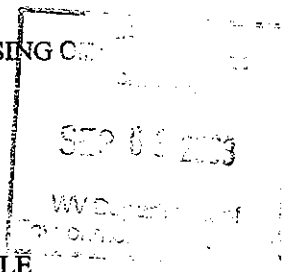
LOCATION: BUG HURLEY HOLLOW

DRILL: RIG # 23

DATE STARTED: 03-10-2003

DATE COMPLETED: 03-12-2003

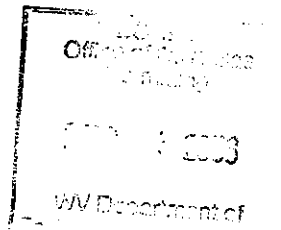
DEPTH		THICKNESS	STRATA	REMARKS
FROM	TO	FT.	DESCRIPTION	VOIDS, ETC
0.00	5.00	5.00	OVERBURDEN	
5.00	17.35	12.35	SOFT SAND / SAND	17.35' W/ 13 3/8" CASING
17.35	61.00	43.65	SANDSTONE	
61.00	92.00	31.00	SAND / SANDY SHALE / SAND	
92.00	123.00	31.00	SANDSTONE	
123.00	154.00	31.00	SAND / COAL STR / SANDY SHALE	
154.00	185.00	31.00	SANDSTONE / COAL STR	
185.00	215.00	30.00	SAND / SANDY SHALE STR / SAND	
215.00	245.00	30.00	COAL / SAND / SANDY SHALE	
245.00	275.00	30.00	SANDSTONE	
275.00	305.00	30.00	SAND / SANDY SHALE / SAND	
305.00	340.00	35.00	SANDSTONE	330.26' W/ 8 5/8" CASING
340.00	365.00	25.00	SANDY SHALE / SAND	
365.00	395.00	30.00	SAND / COAL STR / SAND	
395.00	425.00	30.00	SANDSTONE	
425.00	455.00	30.00	SAND / SANDY SHALE	
455.00	485.00	30.00	SANDY SHALE / SAND	
485.00	515.00	30.00	SAND / SANDY SHALE	
515.00	545.00	30.00	SANDY SHALE / SAND STR / SANDY SHALE	
545.00	575.00	30.00	SANDY SHALE / SAND	
575.00	605.00	30.00	SAND / COAL STR / SAND	
605.00	635.00	30.00	SANDY SHALE	
635.00	665.00	30.00	COAL / SANDY SHALE / SAND	
665.00	695.00	30.00	SAND / SANDY SHALE	
695.00	725.00	30.00	SANDSTONE / COAL STR / SANDY SHALE	
725.00	755.00	30.00	COAL / SANDY SHALE / COAL STR	
755.00	785.00	30.00	SANDY SHALE / SAND	
785.00	815.00	30.00	SAND / SANDY SHALE	
815.00	845.00	30.00	SANDY SHALE / COAL STR / SANDY SHALE	
845.00	875.00	30.00	SANDY SHALE	
875.00	905.00	30.00	SANDY SHALE / COAL STR / SANDY SHALE	
905.00	935.00	30.00	SANDY SHALE / SAND STR / SANDY SHALE	
935.00	965.00	30.00	SANDY SHALE / SAND	
965.00	995.00	30.00	SAND / SANDY SHALE	
995.00	1025.00	30.00	SANDY SHALE / COAL STR / SANDY SHALE	
1025.00	1055.00	30.00	SANDY SHALE / SAND	
1055.00	1085.00	30.00	SAND / SANDY SHALE	
1085.00	1115.00	30.00	SANDY SHALE / SAND STR / SANDY SHALE	
1115.00	1145.00	30.00	SAND STR / SANDY SHALE	
1145.00	1175.00	30.00	SANDY SHALE / COAL STR	



 SEP 03 2003

FROM	TO	FT.	DESCRIPTION
1175.00	1205.00	30.00	SANDY SHALE / COAL STR / SANDY SHALE
1205.00	1235.00	30.00	SANDY SHALE / COAL
1235.00	1265.00	30.00	SANDY SHALE / SAND
1265.00	1295.00	30.00	COAL STR / SAND / SANDY SHALE
1295.00	1325.00	30.00	SANDY SHALE / COAL / SAND STR
1325.00	1355.00	30.00	SANDY SHALE
1355.00	1385.00	30.00	SAND / SHALE / SAND
1385.00	1445.00	60.00	SANDY SHALE / COAL / SAND
1445.00	1475.00	30.00	SAND / SANDY SH / COAL / SANDY SHALE
1475.00	1505.00	30.00	SANDY SHALE / SAND
1505.00	1535.00	30.00	SANDY SH / COAL / SANDY SHALE / SAND
1535.00	1565.00	30.00	SANDY SHALE / COAL / SAND
1565.00	1595.00	30.00	SAND / SANDY SHALE
1595.00	1625.00	30.00	SANDY SHALE / SAND
1625.00	1655.00	30.00	SAND STR / SANDY SHALE / COAL
1655.00	1685.00	30.00	SANDY SHALE / SAND STR / SANDY SH
1685.00	1715.00	30.00	SAND / SANDY SHALE
1715.00	1745.00	30.00	SHALE / POSS. COAL / SANDY SHALE
1745.00	1775.00	30.00	SANDY SHALE / SHALE / POSS. COAL
1775.00	1805.00	30.00	SAND / SANDY SHALE STR
1805.00	1835.00	30.00	SANDY SHALE / SAND / SANDY SHALE
1835.00	1865.00	30.00	SAND / SANDY SH / COAL STR @ 1855' / SANDY SHALE
1865.00	1895.00	30.00	SAND STR / SANDY SHALE
1895.00	1925.00	30.00	SANDY SHALE / SAND / SANDY SHALE
1925.00	1955.00	30.00	SAND / SANDY SHALE TD 8" HOLE

1955.00 FT. TOTAL DEPTH
 17.35 FT. OF 13 3/8" CASING
 330.26 FT. OF 8 5/8" CASING



11-000-1111

*Incomplete
- Complete
Report
attached*

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

MP

Well Operator's Report of Well Work

FARM NAME: Plum Creek Timberlands, L.P. OPERATOR WELL NO.: PMC North 066

LOCATION:

Elevation: 2,246.81' Quadrangle: Bradshaw

District: Big Creek County: McDowell
Latitude: 3,402 Feet South of 37 Deg. 20 Min. 00 Sec.
Longitude: 7,319 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>17.35'</u>	<u>17.35'</u>	
Agent: <u>Gregg Cleary</u>				
Inspector: <u>Ronnie Scott</u>	<u>8-5/8"</u>	<u>330.26'</u>	<u>330.26'</u>	<u>136/Pumped 162</u>
Date Permit Issued: <u>February 13, 2003</u>				
Date Well Work Commenced: <u>March 10, 2003</u>	<u>5-1/2"</u>	<u>1945'</u>	<u>1945'</u>	<u>337/Pumped 468</u>
Date Well Work Completed: <u>April 24, 2003</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <u>XXXX</u> Cable Rig				
Total Depth (feet): <u>1955'</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): 562, 637, 761, 827, 837, 886, 1011, 1012, 1013, 1014, 1015, 1082, 1126, 1127, 1128, 1142, 1177, 1199, 1233, 1312, 1314, 1404, 1429, 1469, 1522, 1551, 1552, 1554, 1555, 1556, 1557, 1558, 1559, 1560, 1561, 1591, 1648, 1649, 1732, 1733, 1761, 1782, 1849, 1851, 1863

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 22 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: *Dundrea Smith*
DATE: September 2, 2003

SEP 19 2003

McDow 1749

Well Name PMC NORTH 066

PBTD

1946'

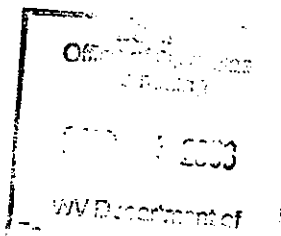
Zone and Perforation Table

	Ball Out	Bridge Plug Set @	Est Sand Weight	Actual Sand Weight
Stage 6 Interval	1,403	1,405		
N2 Scf	282,000		40,000	42,000
Acid	250			
Gel Volume	12,000			
ISIP	1,184			
ATP	2,512			
AIR	25	BPM		
	1427' - 1429'/1467' - 1469'			
	1350'			
Stage 7 Interval	1,311	1,314	20,000	16,000
N2 Scf	182,000			
Acid	200			
Gel Volume	6,000			
ISIP	2,262			
ATP	2,951			
AIR	20	BPM		
	32 Balls on plug @1280'			
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ISIP	1,103			
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AIR	30	BPM		
	1197' - 1199'/1232' - 1234'			
	1160'			
Stage 9 Interval	1,126	1,130	25,000	26,000
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AIR	25	BPM		
	1100'			
Stage 10 Interval	1,010	1016	40,000	41000
N2 Scf	175,000			
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Gel Volume	9,000			
ISIP	1,010			
ATP	1,642			
AIR	28			
	NO PLUG			

M = Down 1749

FROM	TO	FT.	DESCRIPTION
1175.00	1205.00	30.00	SANDY SHALE / COAL STR / SANDY SHALE
1205.00	1235.00	30.00	SANDY SHALE / COAL
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1325.00	1355.00	30.00	SANDY SHALE
1355.00	1385.00	30.00	SAND / SHALE / SAND
1385.00	1445.00	60.00	SANDY SHALE / COAL / SAND
1445.00	1475.00	30.00	SAND / SANDY SH / COAL / SANDY SHALE
1475.00	1505.00	30.00	SANDY SHALE / SAND
1505.00	1535.00	30.00	SANDY SH / COAL / SANDY SHALE / SAND
1535.00	1565.00	30.00	SANDY SHALE / COAL / SAND
1565.00	1595.00	30.00	SAND / SANDY SHALE
1595.00	1625.00	30.00	SANDY SHALE / SAND
1625.00	1655.00	30.00	SAND STR / SANDY SHALE / COAL
1655.00	1685.00	30.00	SANDY SHALE / SAND STR / SANDY SH
1685.00	1715.00	30.00	SAND / SANDY SHALE
1715.00	1745.00	30.00	SHALE / POSS. COAL / SANDY SHALE
1745.00	1775.00	30.00	SANDY SHALE / SHALE / POSS. COAL
1775.00	1805.00	30.00	SAND / SANDY SHALE STR
1805.00	1835.00	30.00	SANDY SHALE / SAND / SANDY SHALE
1835.00	1865.00	30.00	SAND / SANDY SH / COAL STR @ 1855' / SANDY SHALE
1865.00	1895.00	30.00	SAND STR / SANDY SHALE
1895.00	1925.00	30.00	SANDY SHALE / SAND / SANDY SHALE
1925.00	1955.00	30.00	SAND / SANDY SHALE TD 8" HOLE

1955.00 FT. TOTAL DEPTH
 17.35 FT. OF 13 3/8" CASING
 330.26 FT. OF 8 5/8" CASING



M-Dow 1749