

TEE Engineering Company, Inc.

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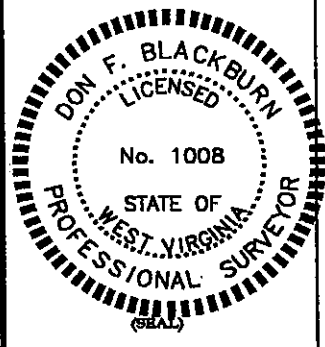
GeoMet Operating Company, Inc.
Well No. Hall North 108-105-135

FILE NO. 1883-08
DRAWING NO. HALL NORTH 135 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. _____ R.P.S. 1008



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

DATE JULY 8, 2004
OPERATOR'S WELL NO. HALL NORTH 108-105-135
API WELL NO. 47 - 047 - 0193916
STATE COUNTY PERMIT

WELL TYPE: OIL GAS X CBM LIQUID INJECTION WASTE DISPOSAL
(IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
LOCATION: ELEVATION 2,416.88' NORTHING 108763.04 EASTING 1772626.07
DISTRICT BIG CREEK WATER SHED MUDLICK BR. OF LITTLE SLATE CREEK
QUADRANGLE BRADSHAW COUNTY McDOWELL
SURFACE OWNER HALL MINING COMPANY et al ACREAGE 370.12
CBM ROYALTY OWNER HALL MINING COMPANY et al LEASE ACREAGE 370.12
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 REFLUG
TARGET FORMATION NEW RIVER AND POCAHONTAS COALS ESTIMATED DEPTH 2,153'
WELL OPERATOR GEOMET OPERATING COMPANY, INC. DESIGNATED AGENT KERRY HILL
ADDRESS 5336 STADIUM TRACE PARKWAY SUITE 206 ADDRESS 330 HARPER PARK DRIVE SUITE A
BIRMINGHAM, ALABAMA 35244 BECKLEY, WV 25801

6-6 Bradshaw (CBM) 383

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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: Hall Mining Company, et al OPERATOR WELL NO.: Hall Mining 108-105-135

LOCATION:

Elevation: 2,416.88' Quadrangle: Bradshaw

District: Big Creek County: McDowell
Latitude: 9,189' Feet South of 37 Deg. 20 Min. 00 Sec.
Longitude: 13,575' 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	13-3/8"	37'	37'	
Agent: Gregg Cleary				
Inspector: Carlos Hively	8-5/8"	333'	333'	85/Pumped 120
Date Permit Issued: July 30, 2004				
Date Well Work Commenced: August 11, 2004	5-1/2"	2136'	2136'	370/Pumped 403
Date Well Work Completed: September 2, 2004				
Verbal Plugging:				
Date Permission granted on:				
Rotary XXXX Cable Rig				
Total Depth (feet): 2142'				
Fresh Water Depth (feet): Unknown				
Salt Water Depth (feet): Unknown				
Is coal being mined in area (N/Y)? No				

Coal Depths (feet): 791, 995, 996, 997, 1053, 1095, 1097, 1317, 1351, 1381, 1421, 1422, 1424, 1438, 1473, 1631, 1643, 1677, 1715, 1873, 1878, 1993, 1995, 2028

OPEN FLOW DATA

Producing formation All Zones Commingled Pay zone depth (ft) _____
Gas: Initial Open Flow 0 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 105 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: Karen Rye
DATE: 9-10-2004

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DEC 10 2004

RECIRCULATING SAND FILTER
ENGINEERS INFO.

HEALTH DEPT. REG'S
511.2 - CLEAN-OUTS REQ'D
511.6 - TIME CLOCKS w/ OVERRIDES
511.6 - LINES TO BE SELF DRAINING
511.6.2 - TIME CLOCK SPEC'S
511.6.4 - FILTER LOADING
1" TO 4"

4 FILTERS - 28' X 28' EACH
DOSING PUMP 130 gpm
6' Ø WETWELL

1. CHECK FILTER SIZE

$28' \times 28' = 784 \text{ ft}^2$

2. CHECK PUMP SIZE + WETWELL

130 gpm Pump 6' X 6' WETWELL = $36 \text{ ft}^2 = 269.3 \text{ gal/ft}^2$

PUMPING RANGE 605.0 - 604.0 = 1.0'
AVAILABLE PUMPING VOLUME 269.3 gal

PUMP TIME @ 130 gpm = 2.07 min

ADJUST TIME TO INCLUDE ADF VS PUMP TIME
 $269.3 \text{ gal Volume} + (4.2 \times 2.07 \text{ min}) = 356 \text{ gal}$

3. FILTER LOADING

A. TRY 3" (.25') $784 \text{ ft}^2 \times .25' = 196 \text{ ft}^3 = 1466 \text{ gal}$
(No Go)

B. USE AVAILABLE VOLUME 269.3 gal + 353 gal
 $353 \text{ gal} = 47.2 \text{ ft}^3$

$47.2 \text{ ft}^3 \div 784 \text{ ft}^2 = 0.60' \text{ FLOOD DEPTH } \approx \frac{3}{4}''$

4. CHECK RESIZE of WETWELL & PUMP VOLUME

TRY 8' X 8' $64 \text{ ft}^2 = 478.7 \text{ gal}$
ASSUME 20' PUMP VOLUME = 997 gal

$133.3 \text{ ft}^3 \div 784 \text{ ft}^2 = 0.17' \approx 2''$

5. CHECK PUMP TIME

$997 \text{ gal} \div 135 \text{ gpm} = 7.4 \text{ min.}$

50 SHEETS
100 SHEETS
200 SHEETS
22-141
22-142
22-144
AMPAD

DRILL DATA HOLE-NOAH HORN WELL DRILLING, INC

COMPANY: GEOMET

HOLE #: HALL MINING NORTH 135

LOCATION: BUD HURLEY

DRILL RIG #: 45

DATE STARTED: 08-09-04

DATED COMPLETED: 08-13-04

ELECTRIC LOGGED: YES

GROUTED: YES

DEPTH		THICKNESS	STRATA	REMARKS
FROM	TO	FT	DESCRIPTION, VOIDS ETC	
0	24	24	OVERBURDEN	
24	37	13	OVERBURDEN 37' W/ 13 3/8" CASING	
37	120	83	SAND	
120	150	30	SAND / SANDY SHALE / COAL	
150	180	30	SANDY SHALE / SAND	
180	210	30	SANDY SHALE / COAL / SANDY SHALE	
210	240	30	SANDY SHALE / SAND	
240	270	30	SAND	
270	300	30	SAND / SANDY SHALE / COAL	
300	330	30	SANDY SHALE / SAND	
330	345	15	SAND 335.13' W/ 8 5/8" CASING	
345	360	15	SANDY SHALE / SAND	
360	390	30	SANDY SHALE	
390	450	60	SANDY SHALE / COAL / SANDY SHALE	
450	480	30	SANDY SHALE	
480	510	30	SANDY SHALE / COAL	
510	540	30	SANDY SHALE / SAND	
540	570	30	SAND	
570	600	30	SANDY SHALE / SAND / SANDY SHALE	
600	660	60	SANDY SHALE	
660	690	30	SANDY SHALE / SAND	
690	720	30	SAND	
720	750	30	SAND / SANDY SHALE	
750	810	60	SANDY SHALE / SAND	
810	840	30	SAND / SANDY SHALE / COAL / SANDY SHALE	
840	870	30	SANDY SHALE / COAL / SANDY SHALE	
870	900	30	SANDY SHALE	
900	930	30	SANDY SHALE / SAND	
930	960	30	SANDY SHALE	
960	990	30	SANDY SHALE / SAND	
990	1020	30	SAND / SANDY SHALE	
1020	1050	30	SANDY SHALE / COAL / SANDY SHALE	
1050	1080	30	SANDY SHALE	
1080	1110	30	SANDY SHALE / SAND	
1110	1140	30	SANDY SHALE	
1140	1170	30	SANDY SHALE / SAND	
1170	1200	30	SANDY SHALE	
1200	1230	30	SAND / SANDY SHALE	
1230	1260	30	SANDY SHALE / SAND	
1260	1320	60	SANDY SHALE	
1320	1350	30	SAND / SANDY SHALE	

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 GEOMET OPERATING CO
 HALL MINING NORTH 135

FROM	TO	FT.	DESCRIPTION
1350	1380	30	SHALE / COAL / SANDY SHALE
1380	1410	30	SANDY SHALE / SAND
1410	1470	60	SAND
1470	1500	30	SANDY SHALE / COAL / SANDY SHALE
1500	1530	30	SANDY SHALE / COAL / SAND
1530	1560	30	SAND / COAL / SANDY SHALE
1560	1620	60	SANDY SHALE
1620	1650	30	SANDY SHALE / SAND
1650	1710	60	SAND
1710	1740	30	SAND / SANDY SHALE / SAND
1740	1770	30	SAND
1770	1800	30	SAND / SANDY SHALE / SAND
1800	1830	30	SAND
1830	1860	30	SAND / SANDY SHALE
1860	1890	30	SANDY SHALE / SAND
1890	1920	30	SANDY SHLAE / COAL / SANDY SHALE
1920	1950	30	SAND
1950	1980	30	SANDY SHALE / SAND
1980	2010	30	SANDY SHALE
2010	2040	30	SANDY SHALE / SAND / SANDY SHALE
2040	2070	30	SANDY SHALE / SAND
2070	2100	30	SAND
2100	2130	30	SAND / SANDY SHALE / SAND
2130	2150	20	SAND

TD 7 7/8" HOLE
 2138.51' W/ 5 1/2" CASING

2150.00 FT. TOTAL DEPTH
 37.00 FT. OF 13 3/8" CASING
 335.13 FT. OF 8 5/8" CASING
 2138.51 FT. OF 4 1/2" CASING

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

Well Name PC 132 PBSD 1274'

Zone and Perforation Table

Frac Stage 1 Interval			Ball Out	Bridge Plug Set @	Est Sand Weight	Actual Sand Weight
	1118	1120				
N2 Scf	218,000		30 Balls on Bottom No Plug		15,000	4,400
Acid	400					
Gel Volume	8,881	Gal				
ISIP	3,186					
ATP	3,774					
AIR	14	BPM				
Stage 2 Interval	923	925				
N2 Scf	275,000		1003' - 1005' Ball Out 870'			
Acid	500					
Gel Volume	6,943					
ISIP	1,998					
ATP	3,684					
AIR	25	BPM				
Stage 3 Interval	836	838				
N2 Scf	290,000		820'			
Acid	200					
Gel Volume	10,000					
ISIP	1,533					
ATP	2,713					
AIR	30	BPM				
Stage 4 Interval	795	797				
N2 Scf	211,000		48 Balls on Plug 600'			
Acid	200					
Gel Volume	6,855					
ISIP	1,538					
ATP	2,498					
AIR	27	BPM				
Stage 5 Interval	511	513				
N2 Scf	234,000		527' - 529'/549' - 551' 576' - 578' Ball Out			
Acid	450					
Gel Volume	9,700					
ISIP	782					
ATP	1,918					
AIR	35	BPM				

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Well Name PC 132

PBTD

1274'

Zone and Perforation Table

	Ball Out	Bridge Plug Set @	Est Sand Weight	Actual Sand Weight
Stage 6 Interval	448	450		
N2 Scf	117,000		20,000	21,000
Acid	200			
Gel Volume	5,100			
ISIP	701			
ATP	1,711			
AIR	25	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				