





P.C. & K.D. STARKEY  
220 ACRES

EL. 733.3'

Latitude 39° 00'

5.58-S

4.72 MI. S

4.50 MI. W

4.45 MI. W

Longitude 81° 40'

PULLINS

PULLINS

RIPLEY - RAVENSWOOD TURNPIKE

NSW - 158P  
NW 1/4 - 122P

POST  
NW 1/4 - 40P  
FISH

LATHAM RIDGE ROAD  
N7E - 37P  
HICHOORY

ACCURACY: 1P / 200P

Source of Elevation INTERSECTION OF LATHAM RIDGE ROAD AND RIPLEY - RAVENSWOOD TURNPIKE (742')

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.

CHET WATERMAN  
28.6P

*Chet Waterman*

- New Location
- Drill Deeper
- Abandonment
- Fracture
- Redrill

Company MID ATLANTIC OIL COMPANY

Address HILLSDALE, MICHIGAN

Farm P.C. & K.D. STARKEY

Tract \_\_\_\_\_ Acres 220 Lease No. \_\_\_\_\_

Well (Farm) No. 1 Serial No. \_\_\_\_\_

Elevation (Spirit Level) 733.3'

Quadrangle RIPLEY NW

County JACKSON District RAVENSWOOD

Engineer CHET WATERMAN

Engineer's Registration No. 3788

File No. 70003-376 Drawing No. \_\_\_\_\_

Date 9/23/70 Scale 1" = 20P

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION  
CHARLESTON

WELL LOCATION MAP  
FILE NO. Proc-1237

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.

-- Denotes one inch spaces on border line of original tracing.

SPD?

6-4 Groundhog Creek 337

Deep Well (Newburg)

OCT 5 1970



RECEIVED

DEC 7 1970

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS WELLS DIVISION 4

- Rotary
- Spudder
- Cable Tools
- Storage

Quadrangle Ripley  
Permit No. Jac 1237

WELL RECORD

Oil or Gas Well Gas  
(KIND)

Company Mid-Atlantic Oil Company  
Address Hillsdale, Michigan  
Farm P. C. & D. D. Starkey Acres 220  
Location (waters) \_\_\_\_\_  
Well No. One Elev. 747 KB  
District Ravenswood County Jackson  
The surface of tract is owned in fee by Paul & Karl Starkey  
Address Ravenswood, W. Va.  
Mineral rights are owned by Paul and Karl Starkey  
Address Ravenswood, W. Va.  
Drilling commenced 9-29-70  
Drilling completed 10-7-70  
Date Shot \_\_\_\_\_ From \_\_\_\_\_ To \_\_\_\_\_

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Pack <u>Arkins</u>
16			<u>Hook Wall Pkr.</u>
13	<u>125</u>	<u>125</u>	Size of <u>4 1/2</u>
10			Depth set _____
8 1/4	<u>1951</u>	<u>1951</u>	<u>5215</u>
6 3/4			Perf. top _____
5 3/16	<u>5170</u>	<u>5170</u>	Perf. bottom _____
4 1/2			Perf. top _____
3		<u>5200</u>	Perf. bottom _____
2 Tubing			
Liners Used			

With \_\_\_\_\_  
Open Flow \_\_\_\_\_ /10ths Water in \_\_\_\_\_ Inch  
\_\_\_\_\_ /10ths Merc. in \_\_\_\_\_ Inch  
Volume \_\_\_\_\_ Cu. Ft.  
Rock Pressure \_\_\_\_\_ lbs. \_\_\_\_\_ hrs.  
Oil \_\_\_\_\_ bbls., 1st 24 hrs.  
WELL ACIDIZED (DETAILS) \_\_\_\_\_  
WELL FRACTURED (DETAILS) Yes: 10-24-70

Attach copy of cementing record.  
CASING CEMENTED Yes \_\_\_\_\_ SIZE (O.V.G.) No. Ft. \_\_\_\_\_ Date \_\_\_\_\_  
Amount of cement used (bags) \_\_\_\_\_ (over) \_\_\_\_\_  
Name of Service Co. Dowell  
COAL WAS ENCOUNTERED AT None FEET \_\_\_\_\_ INCHES \_\_\_\_\_  
FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES  
FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES  
650 B.W. 20,000# Sd.  
RESULT AFTER TREATMENT (Initial open Flow or bbls.) Not gauged Est. 5,000 Mcf.  
ROCK PRESSURE AFTER TREATMENT 2100 HOURS 24 hours  
Fresh Water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
Producing Sand Newburg Depth \_\_\_\_\_

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Soil			0	10			
Shale, Sand & Red Rock			10	1360			
Sand			1360	1406			
Shale			1406	1424			
Sand			1424	1460			
Shale			1460	1500			
Sand			1500	1514			
Shale			1514	1570			
Sand			1570	1594			
Shale			1594	1618			
Kittle Lime - Pencil Cave			1618	1636			
Big Lime			1636	1770			
Shale			1770	1816			
Big Injun Sand & Shale			1816 1900	1900 1960			

See next page!

Formation	Color	Hard or Soft	Top $\frac{1}{4}$	Bottom	Oil, Gas or Water	Depth Found	Remarks
Shale			1960	2202			
Shuffie Shale			2202	2224			
Area			2224	2228			
Shale			2228	4440			
Coniferous Lime			4440	4530			
Criskany Sand			4530	4535			
Limestone & Docomite			4535	5218			
Newburg Sandstone			5218	5224	Gas @ 5220		
Dolomite	McKenzie		5224	5238			
				5238	Total Depth		
Casing							
9-29-70	13 in.	@ 125 ft.	cemented	to surface			
10-1-70	8 5/8 in.	@ 1951 ft.	"	W/ 450 sx.			
10-5-70	5 1/2 in.	@ 5170 ft.	"	W/ 150 sx.			

Date December 1, 1970

APPROVED Mid-Atlantic Oil Co., Owner

By [Signature] Secretary/Treasurer

Secretary/Treasurer

Form CG-10  
 1-1-70  
 11



RECEIVED  
 DEC 7 1970

CORRECTED WELL RECORD

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS WELLS DIVISION 3

Rotary   
 Spudder   
 Cable Tools   
 Storage

Quadrangle Ripley  
 Permit No. Jac 1237

WELL RECORD

Oil or Gas Well  **Gas**  
 (KIND)

Company	Address	Farm	Acres	Location (waters)	Well No.	Elev.	District	County	The surface of tract is owned in fee by	Mineral rights are owned by	Drilling commenced	Drilling completed	Date Shot	With	Open Flow	Volume	Rock Pressure	Oil	WELL ACIDIZED (DETAILS)	WELL FRACTURED (DETAILS)	RESULT AFTER TREATMENT (Initial open Flow or bbls.)	ROCK PRESSURE AFTER TREATMENT	Fresh Water	Producing Sand	Casing and Tubing	Used in Drilling	Left in Well	Packers
Mid-Atlantic Oil Company	Hillsdale, Michigan	P. C. & D. D. Starkey	220		One	747 KB	Ravenswood	Jackson	Paul & Karl Starkey	Paul and Karl Starkey	9-29-70	10-7-70			/10ths Water in					Yes: 10-24-70	Not gauged	2100			16	125	125	Kind of Packers Hook Wall Pkr.
															/10ths Merc. in					650 B.W. 20,000# Sd.	Est 5,000 MCF	24 hours			13	1951	1951	Kind of Packers Size of 4 1/2
																					5000 MCF - NOT NAT GAS			10	5170	5170	Depth set	
																									3			5215
																									2			Perf. top
																									2			Perf. bottom
																												Perf. top
																												Perf. bottom

Attach copy of cementing record.  
 CASING CEMENTED Yes SIZE (O.V.G.) No. Ft. Date  
 Amount of cement used (bags) (over)  
 Name of Service Co. Dowell  
 COAL WAS ENCOUNTERED AT None FEET INCHES  
 FEET INCHES FEET INCHES  
 FEET INCHES FEET INCHES  
 650 B.W. 20,000# Sd.  
 P.P. To 2300' - ~~From Berca Sand 2230' - 2230'~~ Natural Berca Production Location Est.  
 Not gauged Est 5,000 MCF  
 24 hours  
 1000 MCF  
 Berca  
 Depth 2224-2230

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Soil			0	10			
Shale, Sand & Red Rock			10	1360			Est 5000 in Newberg - of 504 - Plugged off - will produce ? Berca Natural.
Sand			1360	1406			
Shale			1406	1424			
Sand			1424	1460			5000 MCF - NOT NAT GAS
Shale			1460	1500			
Sand			1500	1514			
Shale			1514	1570			
Sand			1570	1594			
Shale			1594	1618			
Kittle Lime - Pencil Cave			1618	1636			
Big Lime			1636	1770			
Shale	340		1770	1816			
Big Injun			1816	1900			
Sand & Shale			1900	1960			

(over)

Formation	Color	Hard or Soft	Top 3	Bottom	Oil, Gas or Water	Depth Found	Remarks
Shale			1960	2202			
Shoffie Shale			2202	2224			
Area			2224	2228			
Shale			2228	4440			
Ironiferous Lime		463	4440	4530			
Priskany Sand			4530	4535			
Limestone & Dolomite		SALINA	4535	5218			
Newburg Sandstone			5218	5224	Gas @ 5220		
Dolomite	McKenzie		5224	5238			
				5238	Total Depth		
				545			
Casing							
9-29-70	13 in.	@	125 ft.	cemented	to surface		
10-1-70	8 5/8 in.	@	1951 ft.	"	W/ 450 sx.		
10-5-70	5 1/2 in.	@	5170 ft.	"	W/ 150 sx.		

Date December 1, 1970

APPROVED

Mid Atlantic Oil Co., Owner

By

*William W. Halloran*  
(Title)

Secretary-Treasurer



RECEIVED

DEC 7 1970

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS WELLS DIVISION

- Rotary
- Spudder
- Cable Tools
- Storage

Quadrangle Ripley  
Permit No. Jac 1237

WELL RECORD

Oil or Gas Well  **Gas**  
(KIND)

Company Mid-Atlantic Oil Company  
Address Hillsdale, Michigan  
Farm P. C. & D. D. Starkey Acres 220  
Location (waters) \_\_\_\_\_  
Well No. One Elev. 747 KB  
District Ravenswood County Jackson  
The surface of tract is owned in fee by Paul & Karl Starkey  
Address Ravenswood, W. Va.  
Mineral rights are owned by Paul and Karl Starkey  
Address Ravenswood, W. Va.  
Drilling commenced 9-29-70  
Drilling completed 10-7-70  
Date Shot From \_\_\_\_\_ To \_\_\_\_\_  
With \_\_\_\_\_

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Pack <u>Markins</u>
16			<u>Hook Wall Pkr.</u>
13	125	125	Size of <u>4 1/2</u>
10			Depth set <u>5215</u>
8 1/4	1951	1951	
6 5/8			Perf. top _____
5 3/16	5170	5170	Perf. bottom _____
4 1/2			Perf. top _____
3			Perf. bottom _____
2 Tubing		5200	
Liners Used			

Open Flow /10ths Water in \_\_\_\_\_ Inch  
/10ths Merc. in \_\_\_\_\_ Inch  
Volume \_\_\_\_\_ Cu. Ft.  
Rock Pressure \_\_\_\_\_ lbs. \_\_\_\_\_ hrs.  
Oil \_\_\_\_\_ bbls., 1st 24 hrs.  
WELL ACIDIZED (DETAILS) \_\_\_\_\_

Attach copy of cementing record.  
CASING CEMENTED Yes SIZE (O.V.G.) No. Ft. \_\_\_\_\_ Date \_\_\_\_\_  
Amount of cement used (bags) (over) \_\_\_\_\_  
Name of Service Co. Dowell  
COAL WAS ENCOUNTERED AT None FEET \_\_\_\_\_ INCHES \_\_\_\_\_  
FEET \_\_\_\_\_ INCHES \_\_\_\_\_ FEET \_\_\_\_\_ INCHES \_\_\_\_\_  
FEET \_\_\_\_\_ INCHES \_\_\_\_\_ FEET \_\_\_\_\_ INCHES \_\_\_\_\_

WELL FRACTURED (DETAILS) Yes: 10-24-70 650 B.W. 20,000# Sd.  
P.P. To 2300' - Fractured Berca Sand 2224-2230'  
RESULT AFTER TREATMENT (Initial open Flow or bbls.) Not gauged Est 5,000 Mcf 5,000,000  
ROCK PRESSURE AFTER TREATMENT 2100 HOURS 24 hours  
Fresh Water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
Producing Sand BERCA Depth 2224-2230

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Soil			0	10			
Shale, Sand & Red Rock			10	1360			
Sand			1360	1406			
Shale			1406	1424			
Sand			1424	1460			
Shale			1460	1500			
Sand			1500	1514			
Shale			1514	1570			
Sand			1570	1594			
Shale			1594	1618			
Kittle Lime - Pencil Cave			1618	1636			
Big Lime			1636	1770			
Shale			1770	1816			
Big Injun Sand & Shale			1816 1900	1900 1960			

*See previous page!*

(over)

JAN 18 1971

Formation	Color	Hard or Soft	Top //	Bottom	Oil, Gas or Water	Depth Found	Remarks
Shale			1960	2202			
Coffie Shale			2202	2224			
Berea			2224	2228			
Shale			2228	4440			
Corniferous Lime			4440	4530			
Oriskany Sand			4530	4535			
Limestone & Docomite			4535	5218			
Newburg Sandstone			5218	5224	Gas @ 5220		
Dolomite	McKenzie		5224	5238			
				5238	Total Depth		
Casing							
9-29-70	13 in.	@ 125 ft.		cemented	to surface		
10-1-70	8 5/8 in.	@ 1951 ft.		"	W/ 450 sx.		
10-5-70	5 1/2 in.	@ 5170 ft.		"	W/ 150 sx.		

Date December 1, 1970

APPROVED

Mid-Atlantic Oil Co., Owner

By

*Arthur W. Keller*

(Title)

Secretary-Treasurer