

FILE NO: _____
 DRAWING NO _____
 SCALE 1"=1320'
 MINIMUM DEGREE OF ACCURACY _____
 PROVEN SOURCE OF ELEVATION _____

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.
 (SIGNED) Arnold J. Gay
 R.P.E. _____ L.L.S. 247

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-6 (8-78)



DATE MAR 25, 1980
 OPERATOR'S WELL NO. GW291(A-53)
 API WELL NO. _____
47 - 017 - 2140
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE: OIL ___ GAS ___ LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION ___ STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 1110' WATER SHED LEFT FK OF ARNOLDS CK
 DISTRICT WEST UNION COUNTY RODDRIDGE
 QUADRANGLE OXFORD 7 1/2' Holbrook NE
 SURFACE OWNER _____ ACREAGE _____
 OIL & GAS ROYALTY OWNER MAXWELL A' LEASE ACREAGE _____
 LEASE NO. _____
 PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
F.E.R.C. FILING
 PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION _____ ESTIMATED DEPTH _____
 WELL OPERATOR CITIES SERVICE Co DESIGNATED AGENT SAM J. MATTHEWS
 ADDRESS PO BX 873 ADDRESS PO BX 873
CHARLESTON WV CHARLESTON WV

original + deepening 6-6 Straight Fork Stonecreek (103)

Conductor Box				0	10	10
Red & Red Rock				0	10	10
Red Rock	White	Hard		15	40	30
Red Rock	Red	Soft		40	100	60
White Limestone	White	Hard		100	150	50
Red Rock	Red	Soft		120	128	8
White	Soft	Soft		120	140	12
Red Stone & Iron	Soft & Hard			140	270	130
Water 11 1/2 Gallons per hour. In Broken Limestone				155		
White Limestone	Gray	Hard		275	350	15
Slate	Dark	Soft		300	350	10
White Rock	White	Hard		300	340	40
10" casing put in well				304		
Red Rock	Soft			340	360	20
White Stone	Soft	Soft		350	425	45
Slate	White	Soft		425	460	35
White Stone	Gray	Hard		400	505	45
Red Rock	Red	Soft		505	550	25
White Stone	White	Hard		550	600	30
Red Rock	Red	Soft		560	575	15
White Stone	White	Hard		575	610	35
Red Rock	Red	Soft		610	640	30
White Stone	White	Hard		640	670	50
Red Rock	Red	Soft		670	675	5
White Rock	Gray	Hard		675	715	40
Slate	Black	Soft		715	725	10
White Stone	White	Hard		725	760	35
Red Rock	Red	Soft		760	790	30
White Stone	Gray	Soft		790	830	40
Slate	Black	Soft		830	855	25
White Stone	White	Hard		855	885	40
Slate	Dark	Soft		885	910	15
White Stone	Gray	Hard		910	950	20
Slate	Black	Soft		950	950	20
Little Buckard Sand	Gray	Hard		950	1022	72
Slate	Black	Soft		1022	1044	20
Big Buckard Sand	Gray	Hard		1044	1110	66
3 1/4" casing put in well; 55 joints 1000 ft. and 6" drilling nipple 15 ft. 7"						
Slate	Black	Soft		1110	1120	10
Big Sand	White	Hard		1120	1185	65
Slate and Shells	White	Soft		1185	1200	15
Slate	Black	Soft		1200	1255	55
White Stone	White	Hard		1255	1255	20
First Salt Sand	White	Hard		1255	1289	34
Little Spec of Oil		Soft		1270	1270	5
Slate	Black	Soft		1289	1308	19
White Stone	Gray	Hard		1308	1336	28
Slate	Black	Soft		1336	1375	39
Second Salt Sand	White	Hard		1375	1404	29
Slate	Black	Soft		1404	1490	66
Third Salt Sand	White	Hard		1490	1503	16
Slate	Black	Soft		1503	1536	29
Fourth Salt Sand	White	Hard		1536	1500	45
Slate	Black	Soft		1500	1610	30
Little Gas at 1537 to 1562						
White Sand	White	Hard		1610	1655	25
Gas at 1628 to 1629 4 ft. of pay sand; 14/16 Mercury through 2" = 58 58 1/2 wgs						
Slate	White	Soft		1655	1660	25
White Stone	Gray	Hard		1660		
Total Depth				1668		
Finished drilling June 23, 1880; well was shut in; the 3 1/4" casing June 29; Millers on well;						
C. L. Pratt of Boston and F. S. C.						
Tool-drillers:						
George McGaffick and H. C. Knight, West Union, W. Va.						

017-2140

LAWIS, MAXWELL, Well # 291

DRILLED BY THE COLUMBIAN CARBON CO. OF NEW YORK, N.Y.

CONTRACTOR F.S. GREATHOUSE, OF WESTON, W VA.

Drilled Leeper

THIS WELL WAS DRILLED FROM 1688- To 2521

Started Rigging Up April 24 /1930 Finished Drilling May 10/1930

Gray Lime Stone		1660	1695	35	Foot
Red Rock	Soft	1695	1703	8	"
Little Lime	Hard	1703	1736	33	"
Slate	Dark	1736	1740	4	"
Blue Monday Sand	Hard	1740	1750	10	"
Pencil Cove	Soft	1750	1757	7	"
Big Lime	Hard	1757	1818	61	"
6 5/8" Casing	Put In	1783- 6"			
Big Injun Sand	Hard	1818	1910	92	"
Gas		1868	1880	20/10	In 2 ? Worm 3?
Slate	Soft	1920	1916	30	"
Squaw Sand	Hard	1946	2040	94	"
Slate & Lime Shells		2040	2065	25	"
Gantz Sand	Hard	2065	2185	120	"
Slate & Lime Shells		2185	2205	20	"
Lime	Hard	2205	2250	45	"
Slate	Dark & Soft	2250	2280	30	"
Lime	Hard	2280	2290	10	"
Slate	Soft	2290	2305	15	"
Lime	Hard	2305	2391	86	"
Thirty Foot	Hard	2391	2408	17	"
Slate	Soft	2408	2418	10	"
Lime	Hard	2418	2430	12	"
Slate	Soft	2430	2480	50	"
Gorden Stray	Hard	2480	2490	10	"
Slate	Soft	2490	2497	7	"
Gorden Sand	Hard	2497	2507	10	"
Steal Line	Soft				
Slate	Soft	2507	2514	7	"
Gas		2514	2518	4	" Pay S
Slate	Soft				
		60/10 Water In 3" = 735 McF			
Slate	Soft	2518	2521	3	"
TOTAL DEPTH		<u>2521</u>			
FINISHED DRILLING		MAY 10/1930			

10" Casing Pulled In two Left 2 Joints in Hole Pulled Out 256-11"
DRILLERS ON WELL C.L. PRAIT OF WESTON, W VA.

TOOL DRESSERS F.F.G.
" GAUER PRAT.
" G.F. McGAFFICK.

RECORD COPIED FROM ORIGINAL WELL RECORD BY F.S. GREATHOUSE.

2521

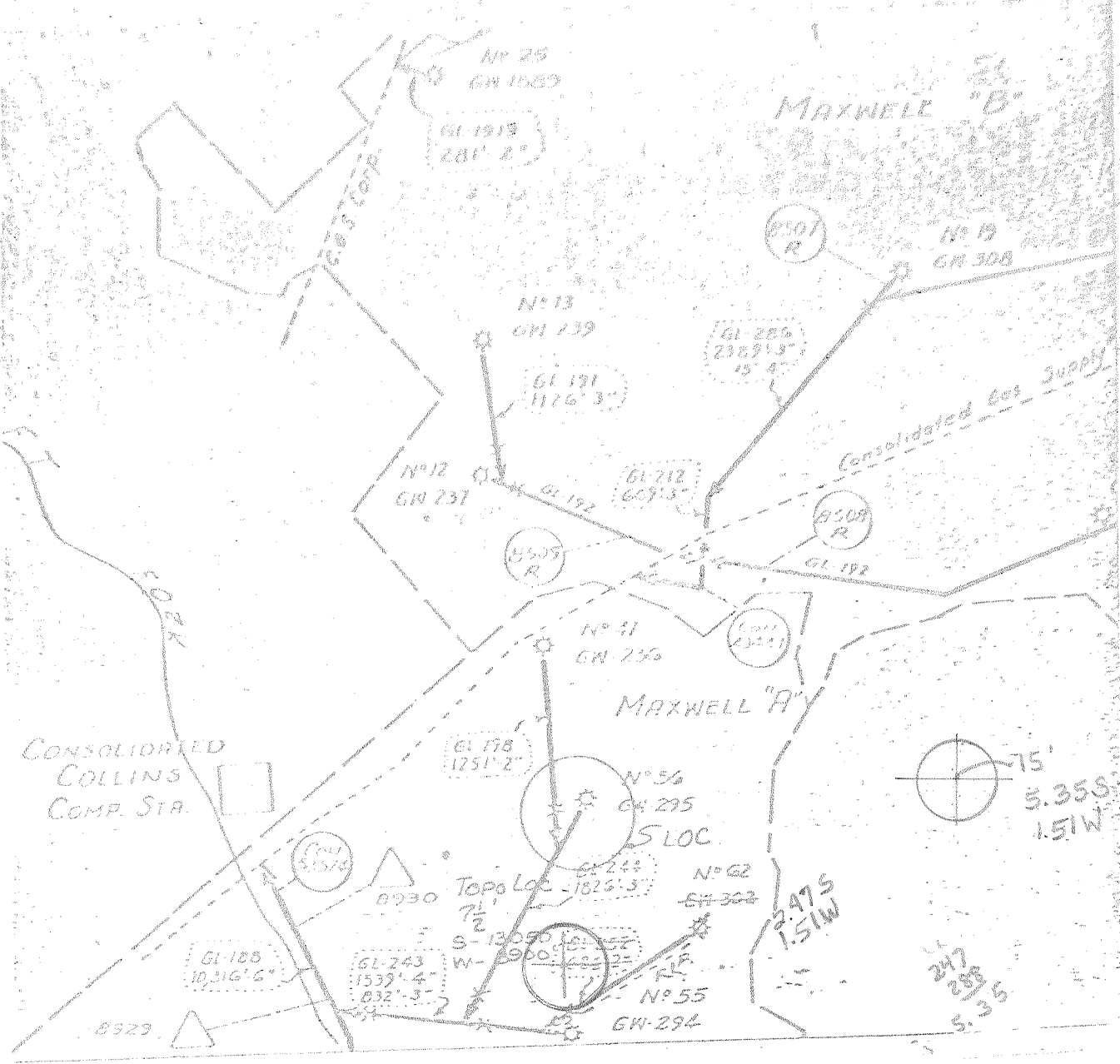
1688

DD Ag - 833 #

LATITUDE 39° 17' 30"
 39° 20' 15"

LONGITUDE 80° 25' 00"

NORTH



FILE NO. _____
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 SCALE 1" = 1320'
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 (SIGNED) Samuel J. Matthews
 R.P.E. _____ U.S. 247

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-6 (8-78)



DATE MAR 26, 19 80
 OPERATOR'S WELL NO. GW 295 (A-56)
 API WELL NO. 47-017-2142
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE: OIL _____ GAS X LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS,") PRODUCTION _____ STORAGE _____ DEEP _____ SHALLOW X
 LOCATION: ELEVATION 960' WATER SHED LT. FK. OF ARNOLDS CK. & BLUESTONE CK.
 DISTRICT WEST UNION COUNTY DODDRIDGE
 QUADRANGLE WEST UNION 7 1/2 West Union SE-15
 SURFACE OWNER _____ ACREAGE _____
 OIL & GAS ROYALTY OWNER MAXWELL 'A' LEASE ACREAGE _____
 LEASE NO. _____
 PROPOSED WORK: DRILL _____ CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE _____ PLUG OFF OLD FORMATION _____ PERFORATE NEW FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
F.E.R.C. FILING
 PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
 TARGET FORMATION _____ ESTIMATED DEPTH 6-6 Straight Fork-Bluestone Creek
 WELL OPERATOR CITIES SERVICE CO. DESIGNATED AGENT SAM J. MATTHEWS (133)
 ADDRESS PO Box 873 ADDRESS PO Box 873
CHARLESTON WV 25323 CHARLESTON WV 25323

FORMATION	COLOR	HARD OR SOFT	No. OF SAMPLE BOTTLE	TOP	BOTTOM	AMOUNT
STARTED LOG 1 1/2 DECEMBER 30/1929 FINISHED DRILLING JANUARY 31/1930						
CONDUCTOR BOX				18		16
Soil & Red Rock	Red		0	30		30
Line Rock	White	Hard	30	62		32
Water 5 bailers per hr.			60			
Red Rock	Red	Soft	62	95		33
Line Rock	White	Hard	95	125		30
Red Rock	Red	Soft	125	140		15
Hurry Up Sand	White	Soft	140	100		40
Slate Rock	Black	Soft	180	195		15
Line Rock Broken	White	Soft	195	225		30
Red Rock	Red	Soft	225	235		10
Line Rock	White	Hard	235	294		59
Slate Rock	Black	Soft	294	300		6
Line Rock	Gray	Hard	300	312		12
Slate Rock	Black	Soft	312	330		18
Line Rock	White	Hard	330	409		79
Red Rock	Red	Soft	409	435		26
Line Rock	White	Hard	435	500		65
Red Rock	Soft	Soft	500	505		5
Line Rock	White	Hard	505	570		65
Red Rock	Red	Soft	570	582		12
Line Rock	White	Hard	582	652		70
Red Rock	Red	Soft	652	698		46
Slate Rock	Black	Soft	698	715		17
Line Rock	Gray	Hard	715	775		60
Slate Rock	Black	Soft	775	785		10
Line Rock Gritty	Gray	Soft	785	803		18
Slate Rock	Black	Soft	803	820		17
Line Rock	White	Hard	820	835		15
Slate Rock	Black	Soft	835	840		5
LITTLE DUNHARD SAND	Gray	Hard	840	693		53
Slate Rock	Black	Soft	893	900		7
Line Rock	White	Hard	900	945		45
Slate Rock	Black	Soft	945	950		5
Line Rock	White	Hard	950	975		25
BIG DUNHARD SAND	Gray	Hard	983	1043		60
Slate Rock	Black	Soft	1043	1053		10
GAS SAND	White	Hard	1053	1083		30
Slate Rock	Black	Soft	1083	1115		32
Line Rock Gritty	Gray	Hard	1115	1155		40
Slate Rock	Black	Soft	1155	1170		15
Line Rock	White	Hard	1170	1189		19
Slate & Shells	Black	Soft	1189	1243		54
First Sand Sand	White	Hard	1243	1504		61
Slate Salt Rock	Black	Soft	1304	1328		24
Line Rock Gritty	White	Soft	1328	1332		4
Slate Rock	Black	Soft	1332	1347		15
Line Rock	White	Hard	1347	1580		53
Slate Rock	Black	Soft	1580	1587		7
Line Salt Rock	White	Hard	1587	1437		50
SECOND SAND SAND	White	Hard	1437	1449		12
Little Show of Gas			1442			
Slate Rock	Black	Soft	1449	1452		3
Line Rock	White	Hard	1452	1464		12
Slate Salt Rock	Black	Soft	1464	1487		23
Third SAND SAND	White	Hard	1487	1516		29
Slate Rock	Black	Soft	1516	1523		7
Line Rock	White	Hard	1523	1535		12
Slate Rock	White	Soft	1535	1548		14
Line Rock Gritty	Gray	Hard	1548	1568		20
Slate Rock	White	Soft	1568	1588		20

gaswell

017-2142

