

Latitude

39 1730

5/18

Longitude

0 → 0615 7.5'
loc
Kia 3/27/2001
2.67S
0.40W

Topo Location

7.5' Loc. _____ 15' Loc. 5.55S
_____ (calc.) 0.40W

Company _____

Farm _____

15' Quad Marotta SE
(sec.) _____

7.5' Quad Willow Island

District _____

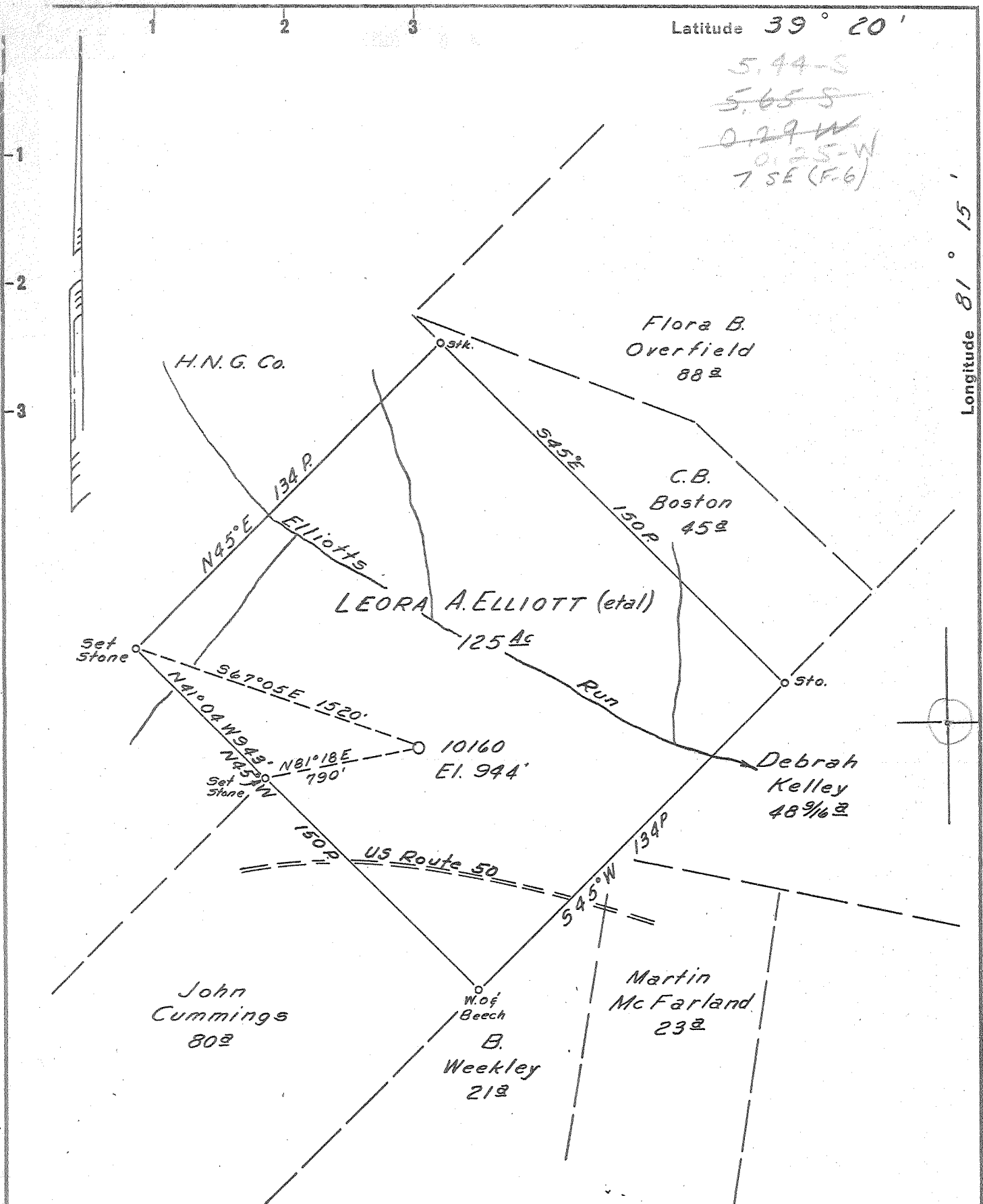
WELL LOCATION PLAT

County OS Permit 1894

DEEP WELL

TM

P



Latitude 39° 20'

Longitude 81° 15'

5,44-5
~~5,65-5~~
~~0.29 W~~
~~0.25 W~~
 7 SE (F-6)

New Location.
 Drill Deeper.....
 Abandonment.....

Map Sheet 79, 5-13 W-35; F.B. 1194 P 1
 F.B. 1190, P 9-10

Company HOPE NATURAL GAS Co.
 Address CLARKSBURG, W.VA.
 Farm LEORA A. ELLIOTT
 Tract _____ Acres 125 Lease No. 67790
 Well (Farm) No. _____ Serial No. 10160
 Elevation (Spirit Level) 944' *(Willow Island 28)*
 Quadrangle MARIETTA, O.-W.VA. SE
 County Bitchele District GRANT
 Engineer Guy H. Bradley
 Engineer's Registration No. 2425
 File No. _____ Drawing No. _____
 Date 4/24/58 Scale 1"=40 POLES

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

WELL LOCATION MAP
 FILE NO. Rit-1894

+ 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.

3-3-0

Well Plugged 4/1/60

Deep Well

Handwritten initials and marks on the right margin.



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION 8

Quadrangle Marietta

WELL RECORD

Permit No. Ritchie 1894

Oil or Gas Well Gas
(KIND)

Company Hope Natural Gas Company
Address Clarksburg, West Virginia
Farm Leora Elliott Acres 125
Location (waters) _____
Well No. 10160 Elev. 944 ¹⁰⁶⁶
District Grant County Ritchie
The surface of tract is owned in fee by _____
Address _____
Mineral rights are owned by _____
Address _____
Drilling commenced 6-4-58
Drilling completed 10-13-58
Date Shot _____ From _____ To _____
With _____
Open Flow _____ /10ths Water in _____ Inch
16 /10ths Merc. in 7" Inch
Volume 6,400-M Nat. before casing _____ Cu. Ft.
Rock Pressure _____ lbs. _____ hrs.
Oil _____ bbls., 1st 24 hrs.
WELL ACIDIZED _____
WELL FRACTURED (See Remarks)

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
20"	103	86	Kind of Packer
18	2607	2583	
10			Size of
8 1/4			
6 3/4 7"	7440	7440	Depth set
5 3/16			
3			Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED 7 SIZE 7440 No. Ft. 9-26-58 Date

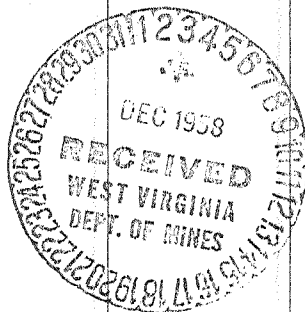
COAL WAS ENCOUNTERED AT 562 FEET 12 INCHES
630 FEET 60 INCHES 683 FEET 12 INCHES
717 FEET 24 INCHES 847 FEET 24 INCHES
877 " 24 "

RESULT AFTER TREATMENT 5,290 M.c.f.

ROCK PRESSURE AFTER TREATMENT 2075 p.s.i.g. - 13 days

Fresh Water _____ Feet Salt Water _____ Feet

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Sand-shale	lite-red		0	101			
Sand-sandy-sh	lite		101	180			
Shale	red-blue		180	255			
Sdy-sh	grey		255	294			
Sand	lite		294	335			
Shale	grey		335	345			
Lime	dark		345	350			
Shale	grey		350	373			
Shale	black		373	397			
Sand	grey	hard	397	405			
Shale	black		405	426			
Shale	grey-sdy		426	450			
Sand	brown		450	498			
Shale	grey		498	530			
Sdy-sh			530	537			
Shale	grey		537	562			
Coal		soft	562	563			
Shale	grey		563	608			
Sand	brown		608	627			
Shale	grey		627	630			
Coal		soft	630	635			
Shale	red-grey		635	645			
Sdy-sh	grey		645	656			
Sand	lite	soft	656	683			
Coal		soft	683	684			
Sand	lite		684	700			
Sdy-sh	grey		700	717			
Coal		soft	717	719			
Sdy-sh	lite-grey		719	724			



(over)

Formation	Color	Hard or Soft	Top ⁸	Bottom	Oil, Gas or Water	Depth Found	Remarks
Shale	grey		724	751			
Sd-sh	grey	hard	751	777			
Lime			777	800			
Sand			800	830			
Sd-sh	grey		830	847			
Coal	black		847	849			
Sd-sh	grey		849	877			
Coal			877	879			
Lime	dark		879	883			
Sdy lime & sh			883	897			
Lime & sh			897	909			
Sd-sh	lite grey		909	940			
Sdy-sh			940	959			
Sand	lite		959	965			
Lime		hard	965	975			
Sd-sh	grey		975	980			
Sand (Chert)	lite		980	1012			
Sd-sh			1012	1034			
Sd-lime			1034	1054			
Shale	black		1054	1074			
Sand		hard	1074	1227			
Lime - <i>English</i>	lite	hard	1227	1333			
Sand - <i>shy</i>	lite	hard	1333	1456			
Sd-sh	dark		1456	1474			
Shale	dark		1474	1525			
Sand		hard	1525	1526			
Shale	dark		1526	1825	Oil show	1825	
Sand - <i>Be...</i>		hard	1825	1891			
Sd-sh			1891	1900			
Sdy-sh	dark-grey		1900	2005			
Shale	dark-grey		2005	2020			
Sdy-sh			2020	2087			
Sd-sh			2087	2111			
Sdy-sh			2111	2131			
Sd-sh			2131	2198			
Sdy-sh			2198	2239			
Sd-sh			2239	2251			
Sdy-sh			2251	2270	Oil show		
Shale	dark brown		2270	2275			
Shale	dark brown		2275	2289			
Sd-sh			2289	2319			
Sdy-shale	grey		2319	2683			
Shale			2683	2812			
Sdy-sh			2812	2837			
Shale	grey-brown		2837	4820			
Shale	dark		4820	5120			
Shale	lite		5120	5127			
Shale-lime	grey-dark		5127	5180			
Shale	dark		5180	5272			
Lime-chert	lite		5275	5487			
Sand - <i>Chert</i>	lite		5487	5570			
Lime - <i>HDBG</i>			5570	5915	Oil show	5487	
Chert-lime-dolomite			5915	5980			
Chert-sand-dolomite			5980	6081			
Lime-salt-dolomite			6081	6141			
Salt-anhydrite-dolomite			6141	6174			
Salt-anhydrite-dolo-lime-sh			6174	6258			
Lime-dolomite			6258	6337			
Lime-dolomite-anhydrite			6337	6390			
Lime-dolomite			6390	6524			
Dolomite-anhydrite			6524	6587			
Lime-dolomite			6587	6733			
Sand-dolomite-lime			6733	6775			
Sand-dolomite			6775	6835			
Sand-dolomite-siltstone		dark	6835	6895			

Date....., 19.....

APPROVED....., Owner

By..... (Title)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION 8A

Quadrangle Marietta-SE.

Permit No. Ritchie 1894

WELL RECORD

Oil or Gas Well (KIND)

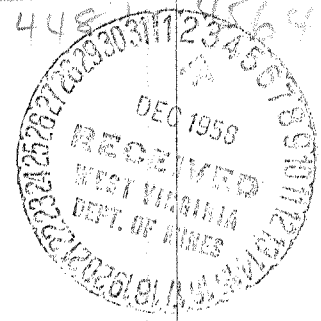
Company Hope Natural Gas Company
 Address _____
 Farm _____ Acres _____
 Location (waters) _____
 Well No. 10160 Elev. _____
 District _____ County _____
 The surface of tract is owned in fee by _____
 Address _____
 Mineral rights are owned by _____
 Address _____
 Drilling commenced _____
 Drilling completed _____
 Date Shot _____ From _____ To _____
 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 _____
 WELL FRACTURED _____

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			Size of
10			
8 1/4			Depth set
6 5/8			
5 3/16			Perf. top
3			Perf. bottom
2			Perf. top
Liners Used			Perf. bottom

CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date _____
 COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES
 _____ FEET _____ INCHES _____ FEET _____ INCHES
 _____ FEET _____ INCHES _____ FEET _____ INCHES

RESULT AFTER TREATMENT _____
 ROCK PRESSURE AFTER TREATMENT _____
 Fresh Water _____ Feet _____ Salt Water _____ Feet _____

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Sand-dolo-sk-siltstone	dark		6895	6965	Gas 6960-65		With Greek Dolomite
Shale with shaly dolomite			6965	7130			Newburg
Dolomite			7130	7204			
Dolomite w/shale			7204	7213			
Lime w/shale			7213	7305			
Dolomite			7305	7345	5275	5487	5570
Lime			7345	7354	1006	1006	1006
Siltstone		Very hard	7354	7367	4269	448	4564
Lime		Very hard	7367	7371			
Dolomite		Very hard	7371	7382			
Lime w/hematite			7382	7386			
Sand		Very hard	7386	7405			
Shale-siltstone	gray		7405	7443			
Shale	red		7436	7443			
Total Depth				7443			



Remarks: Contractor: Delta Drilling Company, Tyler, Texas - Rotary Tools
 Gas encountered at 6960-65 while drilling with compressed air. Test 16/10 Hg in 7" - 6,400 Mcf. Well killed with 9.2 pounds per gallon mud. Cored from 6965 - 7443. Total Depth - 7443. Ran 7440 of 23# N 80 casing. Cemented with 535 sacks uniflow cement and 155 sacks of latex cement in two stages. Perforated 6930-36 with 4 shots per foot; 6946-54 with 4 shots per foot; 6953-68 with 8 shots per foot; Test after perforating 32/10 Hg in 4" open flow (3,500 Mcf). Ran 6886' of 3" tubing on Baker Model C packer. Flushed with 1000 gallons of mud acid. Test after flush 16/10 Hg in 4" open flow (2,477 Mcf). Fractured 10-11-58 with 525 bbls of gelled kerosene and 6000 pounds of 20-40 sand. No breakdown. Injection pressure:

(over)

525
 42
 1050
 2100
 22050
 22050

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
5100-5600	tan s.						Injection rate: 11 - 13 bls per minute. Test after fracture 73/10 Hg in 4" (5,290 Mcf) 10-16-58. Rock pressure 2075 p.s.i.g. in 13 days. Considerable drilling and fracture fluids still in formation.
				42 42 84	92 13 126 42 168		

Date _____, 19____

APPROVED _____, Owner

By _____ (Title)