

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

Source of Elevation WELL 4025, ELV. 960'

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.

Minimum accuracy, one part in 200

Issued 4/22/74

Company	WILLARD E. FERRELL	
Address	PHILADELPHIA, PA. Box 5056	
Farm	C.J. SPURGEON	
Tract	Acres 142	Lease No. 6122
Well (Farm) No.	2	Serial No. 1
Elevation (Spirit Level)	1151'	EC
Quadrangle	HOLBROOK 21 635	
County	DODD RIDGE District COVE	
Engineer	<i>James H. Ferrell</i>	
Engineer's Registration No.	11684	
File No.	214/114	Drawing No.
Date	7-15-68	Scale 1" = 500'

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

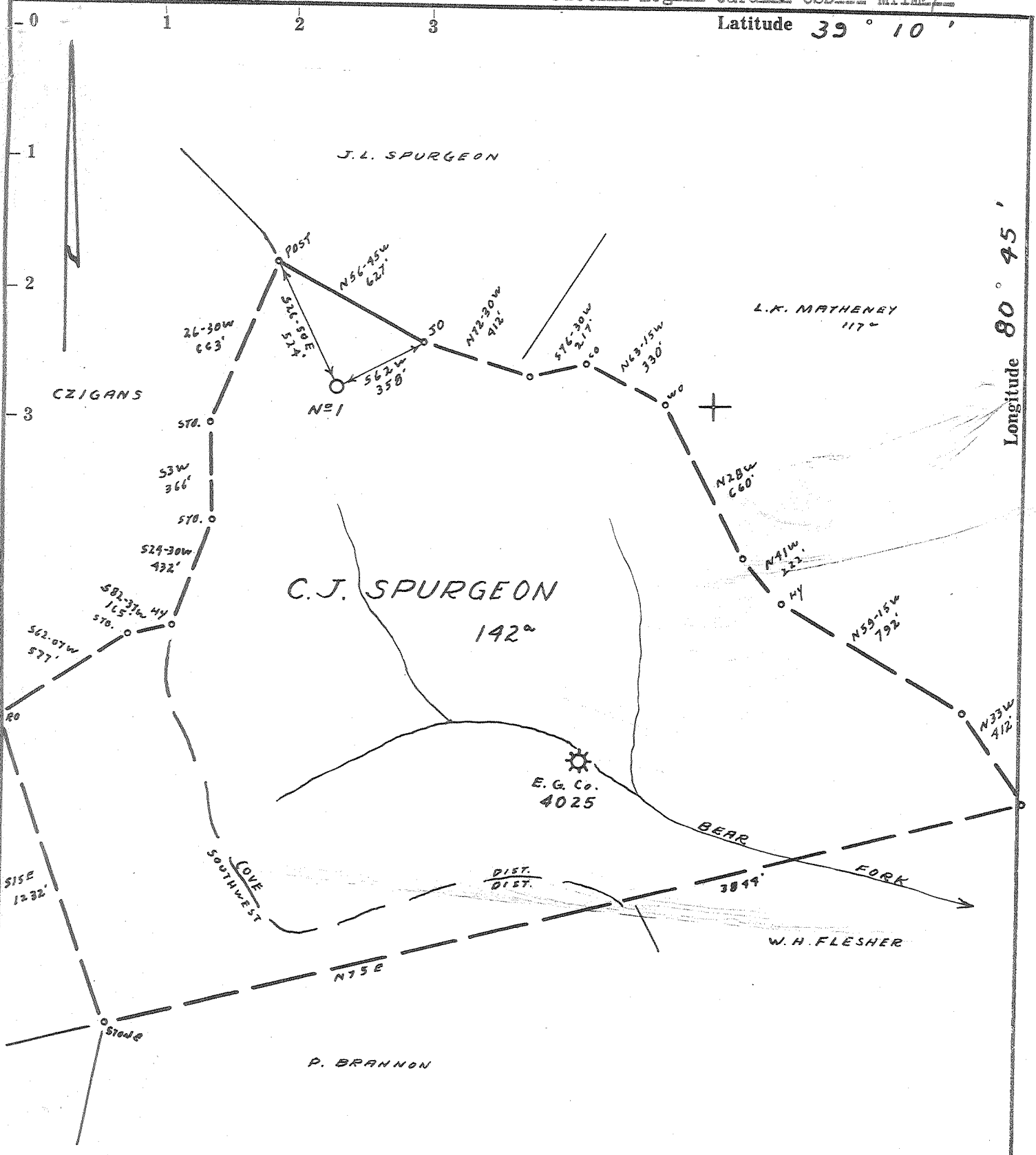
WELL LOCATION MAP
FILE NO. *Dod-1522-P*

+ 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.

47-017

FORM 4



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County	DODDRIDGE District COVE	
Engineer	James D. Ferrell	
Engineer's Registration No.	1084	
File No.	214/114	Drawing No.
Date	7-15-68	Scale 1" = 500'

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
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WELL LOCATION MAP
 FILE NO. DOD-1522

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STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

Rotary
Spudder
Cable Tools
Storage

Quadrangle.....

WELL RECORD

Permit No. DOD 1522

Oil or Gas Well Gas
(KIND)

Company Tortuga Development Co. Willard E. Ferrell
Address P.O. Box 5056 Philadelphia, Pa. Agent
Farm C.J. Spurgeon 19111 Acres 142

Location (waters).....
Well No. Farm # 2- Serial 1 Elev. 1151
District Cove County Doddridge

The surface of tract is owned in fee by Rose Spurgeon
Address Burnt House, W. Va.

Mineral rights are owned by Howard C. Grey
RFD Address Fairmont, W. Va.

Drilling commenced Sept. 10, 1968
Drilling completed Oct. 11, 1968

Date Shot..... From..... To.....
With.....

Open Flow 10/10ths Water in..... 1 Inch
...../10ths Merc. in..... Inch

Volume 38M Cu. Ft.
Rock Pressure Not taken lbs..... hrs.

Oil..... bbls., 1st 24 hrs.
WELL ACIDIZED (DETAILS).....

FRACTURED (DETAILS) Well was fractured in two zones, Big Injun & Gordon sands, using 1400 bbls fluid, 56,000 lbs sand. (20/40) 500 gal acid.

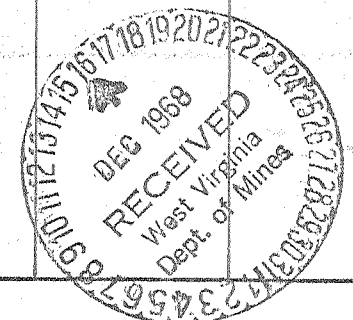
RESULT AFTER TREATMENT (Initial open Flow or bbls.) 10/10ths - 2 inch Approx 550M cuft. 350,000
ROCK PRESSURE AFTER TREATMENT 750 HOURS 24

Fresh Water..... Surface only..... Feet..... Salt Water..... Feet.....
Producing Sand..... Big Injun & Gordon Depth 2070 & 2640

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16	18-6	18-6	
13			
10	212	212	Size of
8 1/4	724		
6 3/4	7in 1220		Depth set
5 3/16			
4 1/2	2700	2700	
3			Perf. top 2070
2			Perf. bottom
Liners Used			Perf. top 2640
			Perf. bottom

Attach copy of cementing record.
CASING CEMENTED 4 1/2 SIZE 960 No. Ft. Oct. 12 Date '68
Amount of cement used (bags) 100
Name of Service Co. Lawson
COAL WAS ENCOUNTERED AT None FEET..... INCHES
..... FEET..... INCHES..... FEET..... INCHES
..... FEET..... INCHES..... FEET..... INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil Gas or Water	Depth	Remarks
Red Rock			0	25			
Slate & Shells			25	41			
Red Rock			41	51			
Slate & Shells			51	125			
Red Rock			125	267			
Sand			267	297			
Red Rock			297	307			
Slate & Shells			307	374			
Sand			374	386			
Slate			386	395			
Red Rock			395	440			
Slate & Shells			440	490			
Sand			490	508			
Slate			508	515			
Red Rock			515	525			
Slate & Shells			525	545			
Red Rock			545	551			
Sand			551	566			
Slate & Shells			566	710			
Red Rock			710	725			
Lime			725	762			
Red Rock			762	812			
Slate & Shells			812	835			
Slate & Shells			835	878			
Red Rock			878	883			
Slate & Shells			883	935			
Lime			935	945			
Slate			945	950			
Sand			950	968			
Red Rock			968	982			



Formation	Color	Hard or Soft	Top ⁴	Bottom	Oil, Gas or Water	Depth Found	Remarks
Slate & Shells			982	1005			
Lime			1005	1019			
Slate			1019	1075			
Sand			1075	1098			
Slate			1098	1115			
Slate & Shells			1115	1190			
Pink Rock			1190	1199			
White Slate			1199	1225			
Sand			1225	1273			
Gritty Lime			1273	1279			
Slate			1279	1330			
Sand			1330	1378			
Slate			1378	1400			
Sand			1400	1430			
Slate			1430	1460			
Sand			1460	1540			
Blk. Slate			1540	1586			
Lime			1586	1597			
Sand			1597	1630			
Gritty Lime			1630	1690			
Sand			1690	1706			
Blk. Slate			1706	1740			
Slate & Shells			1740	1795			
Sand			1795	1838			
Blk. Slate			1838	1870			
Sand			1870	1897			
Slate			1897	1903			
Slate & Red Rock			1903	1950			
Lime			1950	1979			
Slate Dark			1979	1993			
Blime Grey			1993	2062			
Sand			2062	2070			
Lime Gritty			2070	2126			
Sand			2126	2136			
Slate			2136	2142			
Lime Gritty			2142	2255			
XXXXXXXXXX				2255			
Sand			2255	2405			
Slate & Shells			2405	2640			
Sand	Gordon		2640	2670			
Slate & Shells			2670	2702			
Total Depth				2702			

Date Dec. 10, 1968, 19__

APPROVED *Paul E. Fensel*, Owner

By _____ (Title)