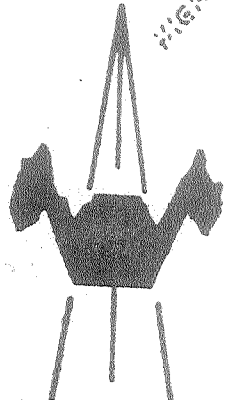
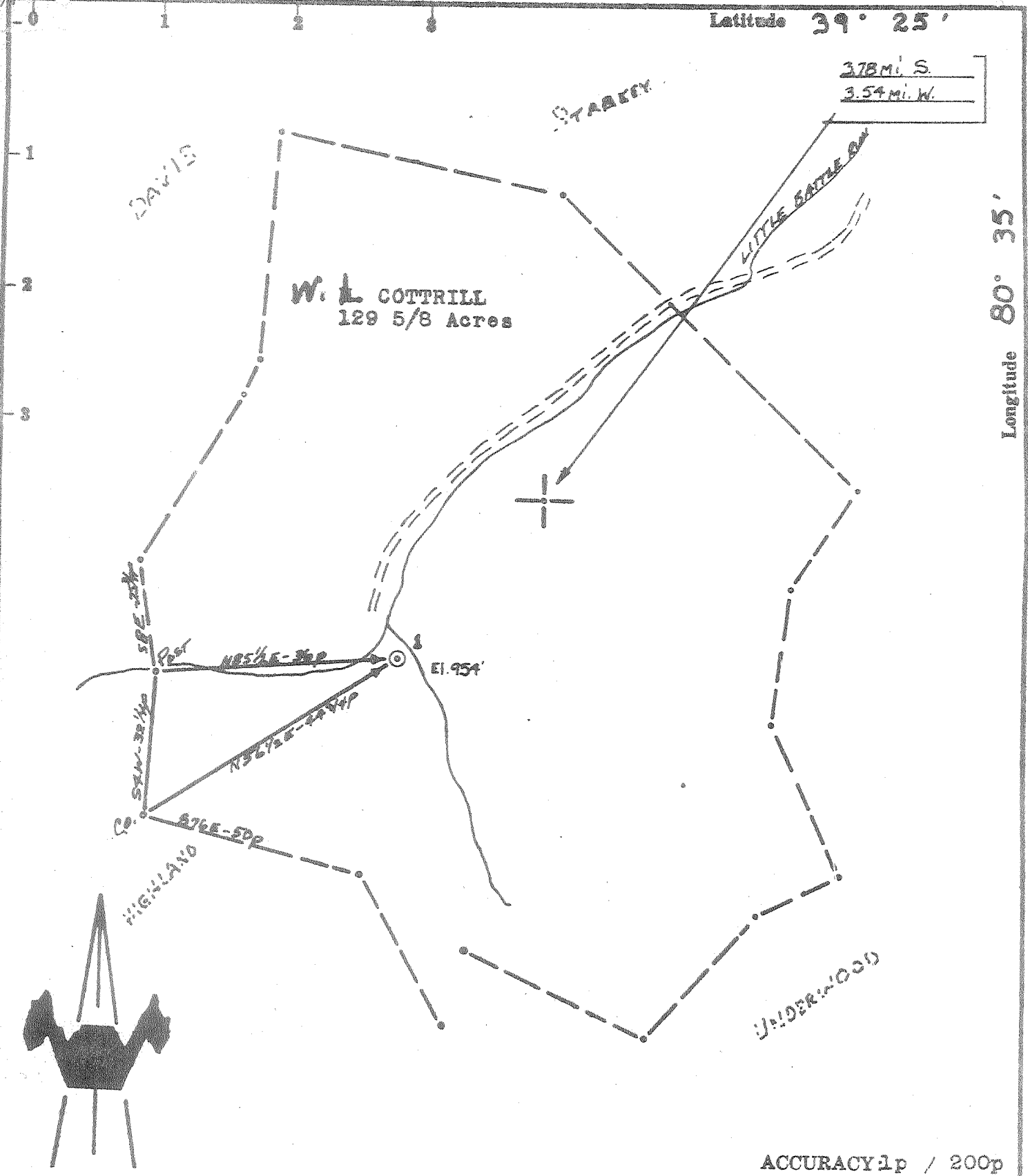


Pick



ACCURACY 1p / 200p

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

Source of Elevation B. M. @ CENTERPOINT (790')

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

Company	T. W. M. PETROLEUM, INC.
Address	CLARKSBURG, W. VA.
Farm	W. L. COTTRILL
Tract	Acres 129 5/8 Lease No.
Well (Farm) No.	1 Serial No.
Elevation (Spirit Level)	954'
Quadrangle	CENTERPOINT - C
County	DODDRIDGE District MCCLELLAN
Engineer	CHET WATERMAN
Engineer's Registration No.	3788
File No.	66003-62 Drawing No.
Date	9/26/66 Scale 1" = 300'

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

WELL LOCATION MAP
FILE NO. DOD - 1395

+ 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.



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

Rotary
Spudder
Cable Tools
Storage

Quadrangle Centerpoint

WELL RECORD

Oil or Gas Well Gas
(KIND)

Permit No. DOD-1375

Company TWM Petroleum, Inc.
Address 912-A Goff Bldg. Clarksburg, West Va.
Farm W. L. Cottrill Acres 130
Location (waters) Little Battle
Well No. 1 Elev. 954.1
District McClellan County Doddridge
The surface of tract is owned in fee by Richard W. Boudette
Address Scattered
Mineral rights are owned by W. L. Cottrill Heirs
Address Scattered

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			
10			Size of
8 1/4			Depth set
6 3/4			
5 3/16			Perf. top <u>2029 ft.</u>
4 1/4	<u>2149 ft.</u>	<u>2149 ft.</u>	Perf. bottom <u>2040 ft.</u>
3			Perf. top <u>See notes</u>
2			Perf. bottom <u>below</u>
Liners Used			

Drilling commenced May 21, 1966
Drilling completed June 8, 1966
Date Shot From To
With
Open Flow /10ths Water in Inch
/10ths Merc. in Inch
Volume Rotary hole, no shows Cu. Ft.
Rock Pressure lbs. hrs.
Oil bbls., 1st 24 hrs.

Attach copy of cementing record. 12 perf shots, 4 1/2" Crack Jet

CASING CEMENTED 4 1/2" SIZE 2149 No. Ft. 5/27/66 Date
Amount of cement used (bags) 100 Sax, Posmix 10% Salt
Name of Service Co. Halliburton

WELL ACIDIZED (DETAILS)

COAL WAS ENCOUNTERED AT FEET INCHES
 FEET INCHES FEET INCHES
 FEET INCHES FEET INCHES

WELL FRACTURED (DETAILS) on 5/20/66 by Halliburton, 1000 bbls water; 10,000 # 20-10 sand; 805 gals

HOWCO Suds; 650 gals MAC 10 Fluid Loss; Break down 2,000 PSI; 18.6 treat at av. 2350 PSI.
RESULT AFTER TREATMENT (Initial open Flow or bbls.) 192 MCF with considerable fluid in hole.
ROCK PRESSURE AFTER TREATMENT 550 with fluid in hole. 1.8 hours

Fresh Water Feet Salt Water Feet
Producing Sand Big Injun Depth 2024-2050 ft.

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Well was drilled to TD of 2153 ft. Set 4 1/2" casing and cemented as noted above.							
Well was perforated 10 shots (6) from 2093-2096 and (4) from 2104-07 to test Squaw. No natural show. Squaw section broken down with acid and acid swabbed back. Still no show in Squaw. Set Baker solid Bridge Plug at 2084-86 ft. Then perforated upper section as noted above.							
Shale & sand			0	120			
Shale & sand shells			120	395			
Sand, Shale & Shells			395	500			
Shale & sand			500	535			
Sand?			535	536			
Shale & sand			536	570			
Sand & Lime streaks			570	685			
Shale with shells			685	750			
Shale and lime streaks			750	810			
Sand & shells			810	1000			
Sand & shale			1000	1120			
Sand & shale			1120	1210			



Formation	Color	Hard or Soft	Top ⁶	Bottom	Oil, Gas or Water	Depth Found	Remarks
me, shaly sand			1210	1215			
shaly sand			1215	1235			
rd sand-Salt sand			1235	1310			
nd & Shale			1310	1370			
nd Salt sand			1370	1450			
nd			1450	1475			
e & sand			1475	1490			
nd with lime streaks		3rd salt	1490	1565			
ale-sandy			1565	1605			
nd-shaley			1605	1630			
nd			1630	1650			
nd and lime			1650	1665			
ale with lime streaks			1665	1750			
nd, shale with lime strks			1750	1764			
nd and shale with lime streaks			1764	1885			
nd			1885	1890			
g Lime, shaley			1890	2027.	From E. Log top BL 1933		
g Injun Sand			2027	2044			
ndy Lime			2044	2070			
nd Squaw			2070	2153	Total Depth		
<p>All was completed and turned into the line (Consolidated Contract #3184) July 11, 1966.</p> <p style="text-align: right;"><i>L. David Wosk</i> L. David Wosk, P.E.</p>							

Date _____, 19__

APPROVED _____, Owner

By _____
(Title)