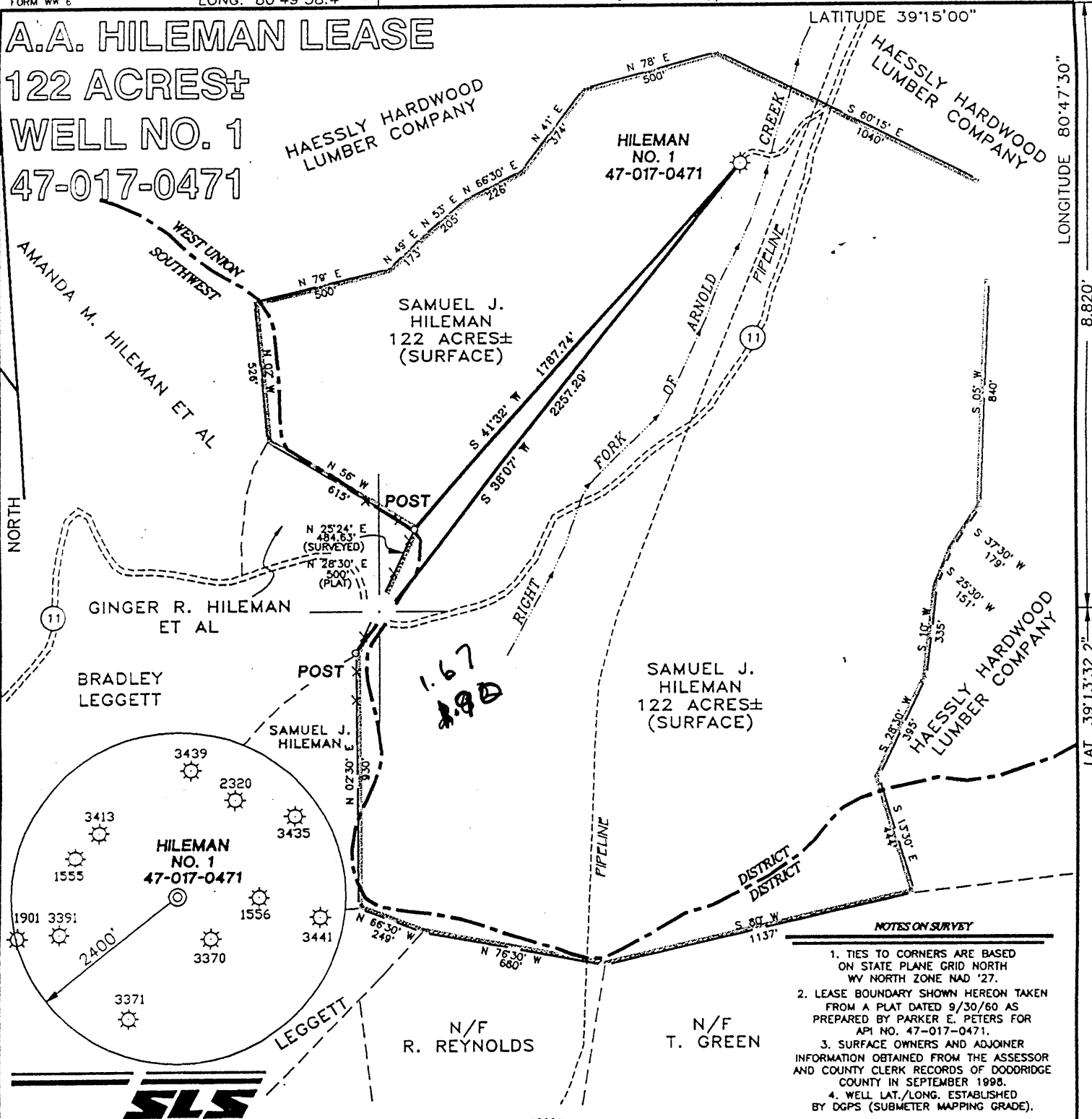


A.A. HILEMAN LEASE

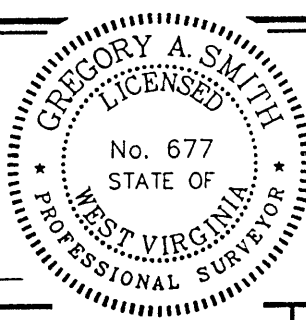
122 ACRES± WELL NO. 1 47-017-0471



- NOTES ON SURVEY**
1. TIES TO CORNERS ARE BASED ON STATE PLANE GRID NORTH WV NORTH ZONE MAD '27.
 2. LEASE BOUNDARY SHOWN HEREON TAKEN FROM A PLAT DATED 9/30/60 AS PREPARED BY PARKER E. PETERS FOR API NO. 47-017-0471.
 3. SURFACE OWNERS AND ADJOINER INFORMATION OBTAINED FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF DODDRIDGE COUNTY IN SEPTEMBER 1998.
 4. WELL LAT./LONG. ESTABLISHED BY DGPS (SUBMETER MAPPING GRADE).

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 ENERGY.

P.S. 677 Gregory A. Smith



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE SEPTEMBER 9, 19 98
 OPERATORS WELL NO. HILEMAN #1
 API WELL NO. 47-017-0471D
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 4064P1 (68-60)
 PROVEN SOURCE OF ELEVATION BENCH MARK ELEVATION 944' SCALE 1" = 500'

STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS

WELL TYPE : OIL GAS LIQUID INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW

LOCATION :
 ELEVATION 969' WATERSHED RIGHT FORK OF ARNOLD CREEK
 DISTRICT WEST UNION COUNTY DODDRIDGE QUADRANGLE OXFORD 7.5'

SURFACE OWNER SAMUEL J. HILEMAN ACREAGE 122
 ROYALTY OWNER A.A. HILEMAN SUCCESSORS AND ASSIGNS LEASE ACREAGE 122

PROPOSED WORK :
 DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER

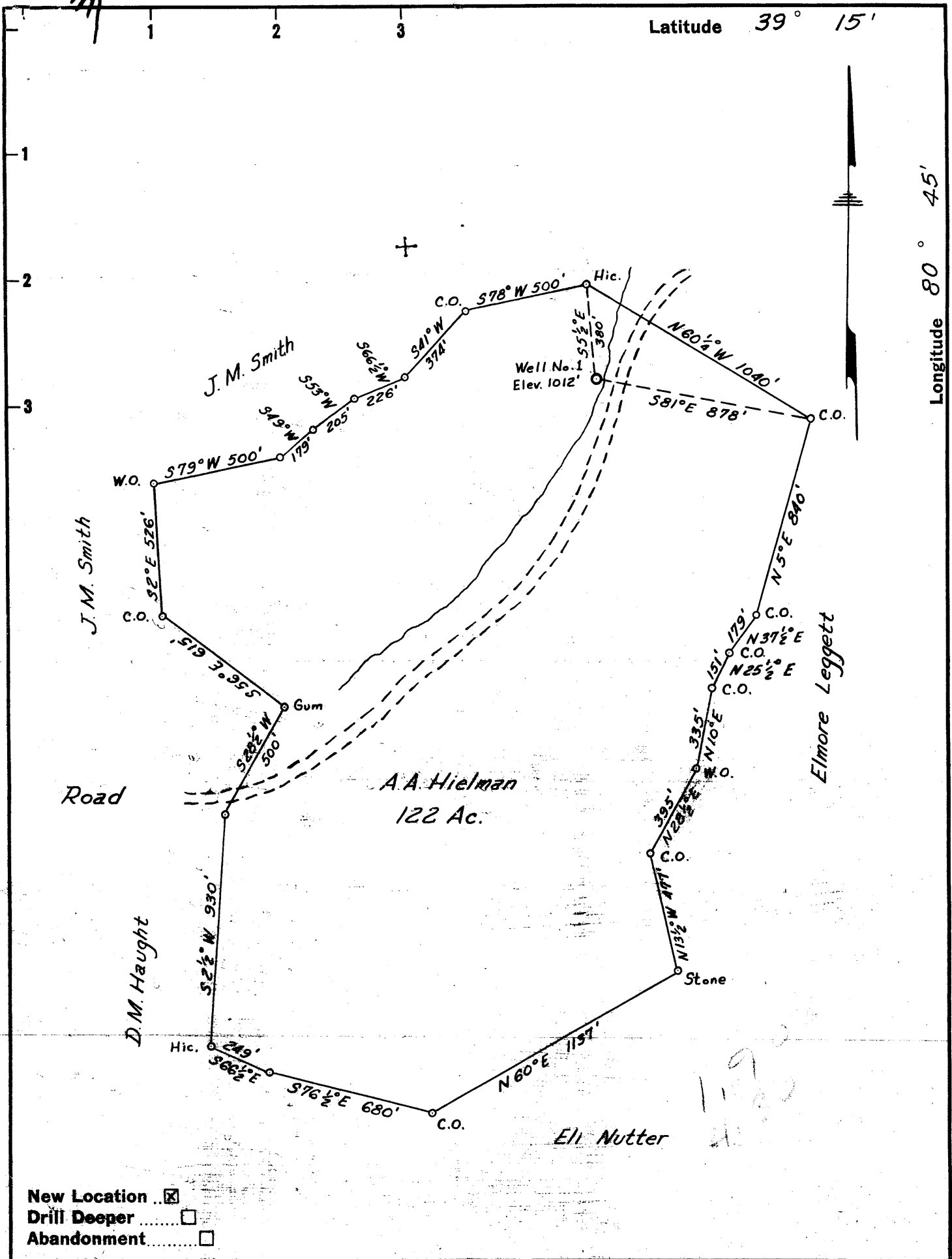
PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION ALEXANDER
 ESTIMATED DEPTH 5,500'

WELL OPERATOR FLUHARTY ENTERPRISES 394 DESIGNATED AGENT THOMAS FLUHARTY SEP 14 1998
 ADDRESS GOFF BUILDING SUITE 21 CLARKSBURG, WV 26301 ADDRESS GOFF BUILDING SUITE 21 CLARKSBURG, WV 26301

LONGITUDE 80°47'30" LAT. 39°13'32.2" COUNTY NAME PERMIT 04710

Latitude 39° 15'

Longitude 80° 45'



New Location
 Drill Deeper
 Abandonment

Company NEVEN H. VEAIL
 Address 1401 MCKINLEY ST., GREAT BEND, KANSAS
 Farm A. A. HIELMAN
 Tract 1 Acres 122 Lease No. _____
 Well (Farm) No. 1 Serial No. _____
 Elevation (Spirit Level) 1012'
 Quadrangle HOLBROOK NE
 County DODDRIDGE District WEST UNION
 Engineer Parker E. Peters
Field - W.P. Ireland
 Engineer's Registration No. 485
 File No. _____ Drawing No. _____
 Date SEPT. 30, 1960 Scale 1" = 500'

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

WELL LOCATION MAP
 FILE NO. D00-471

+ 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 7

Quadrangle Holbrook

Permit No. DOD-471

WELL RECORD

Oil or Gas Well Gas
(KIND)

Company Neven H. Veail & Etal
Address L401 McKinley, Great Bend, Kansas
Farm A. A. Hileman Acres 122
Location (waters) Arnolds, Creek
Well No. 1 Elev. 1012'
District West Union County Doddridge
The surface of tract is owned in fee by A. A. Hileman
Address West Union, RR 1
Mineral rights are owned by A. A. Hileman
Address West Union, RR#1
Drilling commenced 10-26-60
Drilling completed 11-23-60
Date Shot _____ From _____ To _____
With _____
Open Flow /10ths Water in _____ Inch
/10ths Merc. in 67 Inch
Volume 500,000 Cu. Ft.
Rock Pressure 350 lbs. 16 hrs.
Oil none bbls., 1st 24 hrs.
WELL ACIDIZED 750 gals of 15% Acid
ahead of water Frac

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size 26'	yes	Left	Kind of Packer _____
16			
13			
10 370'	yes	no	Size of _____
8 1/4 1075	yes	no	
6 5/8			Depth set _____
xxxxx 4 1/2	1961'	1961'	
3			Perf. top <u>1799'</u>
2			Perf. bottom <u>1800'</u>
Liners Used			Perf. top <u>1840'</u>
4 1/2	no	yes	Perf. bottom <u>1861'</u>
<u>1961'</u>			

CASING CEMENTED 1961' SIZE 4 1/2" No. Ft. 12-2-60 Date
60 sks. Cement - 12 sks. Aquagel Mixed Ahead
Halliburton Oil Well Cementing Co.
COAL WAS ENCOUNTERED AT None FEET _____ INCHES
None FEET _____ INCHES FEET _____ INCHES
None FEET _____ INCHES FEET _____ INCHES

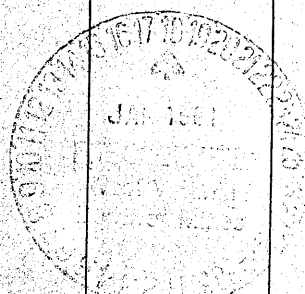
WELL FRACTURED with 600 bbl. of fresh water 24,000 lbs of 20-40 sand.

RESULT AFTER TREATMENT 500,000 cu. ft. gas

ROCK PRESSURE AFTER TREATMENT 350 lbs 16 Hours

Fresh Water none Feet none Salt Water none Feet none

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Top Soil	red	soft	0	10			
red rock	red	"	10	20			
blue shale	blue	hard	20	35	water	25'	
red rock	red	"	35	60			
sand	white	"	60	70			
red rock	red	soft	70	90			
white silt	white	"	90	110			
red rock	red	hard	110	125			
white slate	white	soft	125	130			
red rock	red	hard	130	145			
white slate	white	"	145	180			
red rock	red	soft	180	225			
slate lime	gray	"	225	240			
sand	"	hard	240	268			
slate	"	"	268	301			
sand	"	"	301	320			
white slate	white	soft	320	364			
sand	gray	"	364	367			
blue slate	blue	soft	367	375			
lime	gray	hard	375	395			
slate	"	soft	395	400			
lime	"	hard	400	425			
lime shells	"	soft	425	525			
red lime	red	hard	525	565			
slate shells	gray	soft	565	625			
sand	gray	soft	625	635			
slate shells	gray	soft	635	670			
sand	brown	hard	670	710			
slate shells	gray	soft	710	750			
red rock	red	hard	750	780			
slate shells	gray	"	780	790			



Formation	Color	Hard or Soft	Top 7	Bottom	Oil, Gas or Water	Depth Found	Remarks
red rock	red	hard	790	800			
slate shells	gray	soft	800	860			
sand	brown	"	830	950	oil	875	good
slate shells	gray	"	950	1068			
sand	brown	"	1068	1230			
slate	gray	hard	1230	1250			
sand	"	"	1250	1270			
slate shells	"	"	1270	1350			
sand	"	"	1350	1370			
slate	"	"	1370	1400			
sand	gray	"	1400	1465			
lime shells	"	soft	1465	1595			
maxon sand	brown	hard	1595	1623			
black slate	black	soft	1623	1665			
sand	brown	hard	1665	1690			
lime	gray	"	1690	1710			
blue slate	blue	soft	1710	1720			
shale	gray	"	1720	1730			
pennell cave	brown	"	1730	1733			
big lime	Gray	hard	1733	1800	gas	1733	fair
injun sand	brown	"	1800	1875	"	1808-1845	good
slate shells	gray	hard	1875	2043			
gants sand	blue	"	2043	2066			
lime	gray	"	2066	2243			

Well plugged back to 1963', set 1961 of 4 1/2 inch casing cemented with 60 sacks of common cement with 12 sacks of gel ahead of cement.

Date 12-2, 1960
 APPROVED Wesley H. Veal, Owner
 By Wesley H. Veal
 (Title)