

LSTA 100

MULLENS 190

confidential

PERMIT RAL 255

WEST VIRGINIA

RALEIGH CO.

SLAB FORK DIST.

PHILLIPS PETROLEUM CO.

NO. 1 BEAVER 'A'

LOCATION: 9200' E 81-20,

2800' N 37-40

DT DEPTH 7035' (HELD. LM.)

CONTRACTOR: DELTA DRLG. CO. (RIG 39)

SPUD: 1-20-62

COMP: 4-19-62

SAMPLES 10'-7035' EXAM. BY A. L.
COXEN.

ELEV:

RKB 2052.6

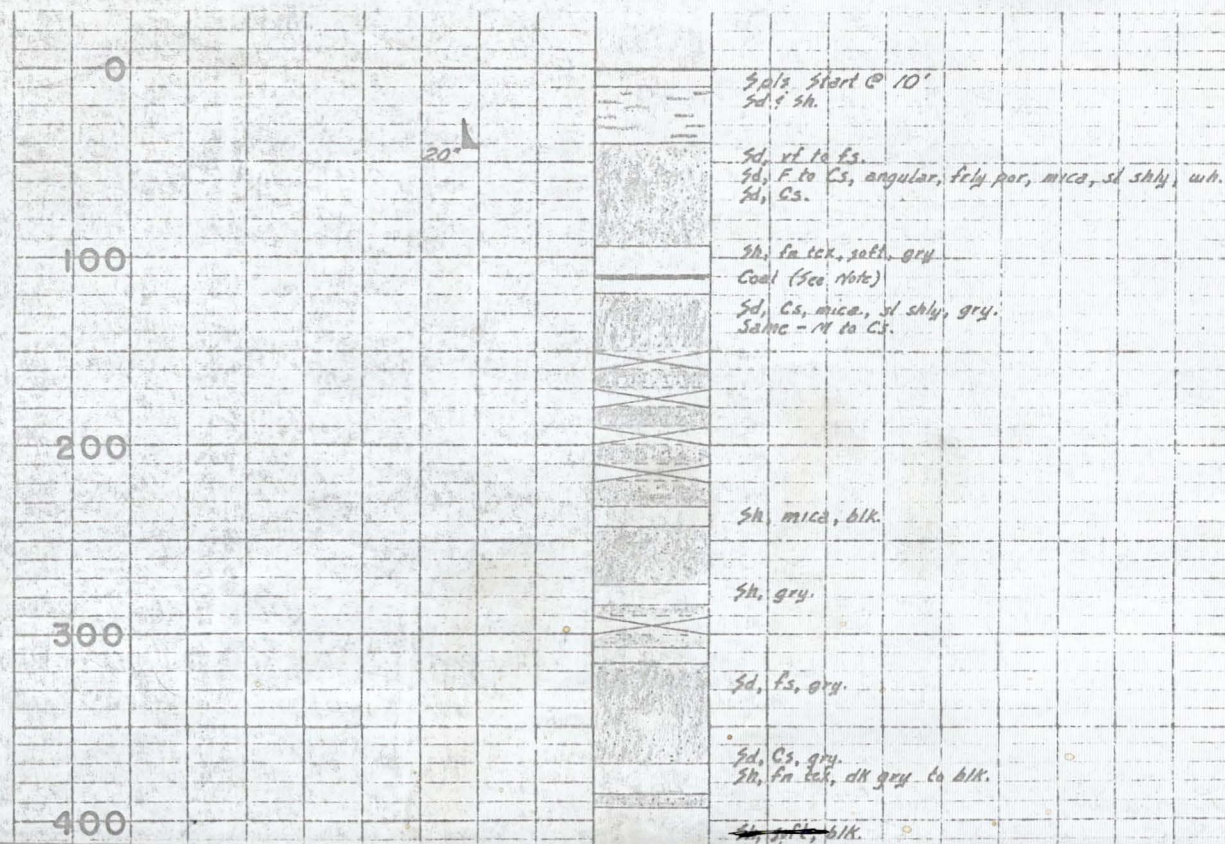
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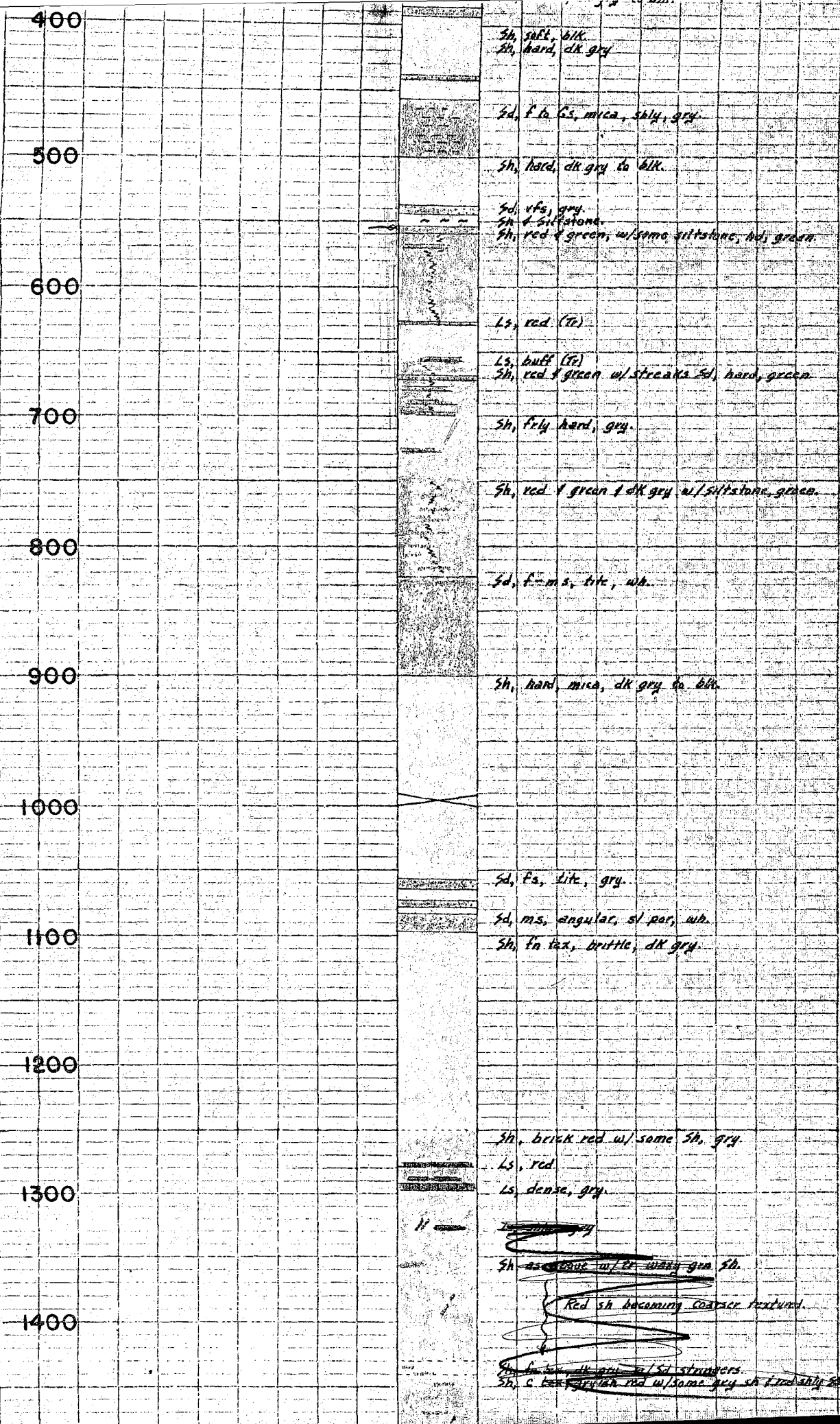
GL 2039

CASING RECORD

20"	41.25'	100 XX
8 5/8"	2715'	300 XX
5 1/2"	6855'	125 XX

PRODUCTION: F 150 MCFG A/F (OSK. SS - OH)





sh, soft, blk.
sh, hard, dk gry

sd, f to ls, mica, shly, gry.

sh, hard, dk gry to blk.

sd, vfs, gry.
sh & siltstone.
sh, red & green, w/ some siltstone, blk, green.

ls, red (te)

ls, buff (te)
sh, red & green w/ streaks sd, hard, green.

sh, fly hard, gry.

sh, red & green & dk gry w/ siltstone, green.

sd, f-m s, etc, wh.

sh, hard, mica, dk gry to blk.

sd, fs, etc, gry.

sd, ms, angular, sl por, wh.
sh, fn fax, brittle, dk gry.

sh, brick red w/ some sh, gry.

ls, red

ls, dense, gry.

~~sh, as coarse w/ cr wavy gen sh.~~

Red sh becoming coarser textured.

~~sh, c brgyish red w/ some gry sh & red shly sd.~~

560-625

635-700

825-900

WEST
RALE
SLAB

ELE
F
T

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

3500

Sh, brown red w/ some sh, gry.

Ls, red.

Ls, dense, gry.

Ls, shly, gry.

Sh as above w/ tr waxy gen sh.

Red sh becoming coarser textured.

Sh, fn. tex, dk gry. w/ sd stringers.

Sh, c tex, grayish red w/ some gry sh & red shly sh.

Sh, gry & gray-green
some w/ calcite veining.

Ls, blk. (Tr)

Sh, gry & red w/ some sd, wh.

Ls, blk

sd, fs, wh.

sd, quartzitic.

Ls, blk (Tr) - sh, gry.

sh, gry w/ abundant large pyrite xls

sd, fs, shly por, wh.

Ls, hard, foss., sl pyritic, brown to blk.

Ls, dense, foss, brown.

sh, grny, pyritic, carbonaceous, blk.

TOP LOWER MARON
SD 2060

TOP LITTLE LIME
2155

TOP SUNBURY SH.
3490

TOP BEREH SD
3510

2900

sd, vts, sl shaly, lt to m gry.

Same as above only green to rust red color.

3000

Same as above - dk gry to blk.
- lt gry " dk gry.sd, vts to fs, tr fs, sl shaly, gry.
sd, f to fs, sl shaly, gry.

3100

sh, f to m. tex, sl sdy, m gry.

3200

sd, vts, shaly, lt gry.

sd same only vts to fs.

3300

sh, gry w/ thin sd stringers.

3400

TOP SUNBURY SH.
3490

sh, gritty, pyritic, carbonaceous, blk.

3500

TOP BEREA SD.
3518

sh, gry, siltstone, lt to m gry. Some sd, vts, gry.

3600

sd vts, gry w/ some sh, gry and siltstone, gry.

(Samples from 3520 to 4560' are mixture of sh, sd, and siltstone. Sh becomes the predominant lithologic type down section in this interval.)

3700

3800

3900

3900

4000

Slight Show Gas

4100

4200

4300

4400

4500

4600

4700

4800

4900

sh, m. tex., lt. gry and sh, m. tex., mica,
pyritic, B.R.

4900

5000

5100

5200

5300

Hammerdrill log, -->
hole @ 5345'

5400

5500

5600

5700

5800

5900

Same as above w/ some Sh, carbonaceous,
blk.

Ls, dense, brn (Tr.)

Sh as above w/ calcite veining.

Definite Sh Change @ 5610'

Sh, f tex, brittle, M. gry w/ some
Siltstone and Sh, carbonaceous, blk.

Same w/ tr. red mica.

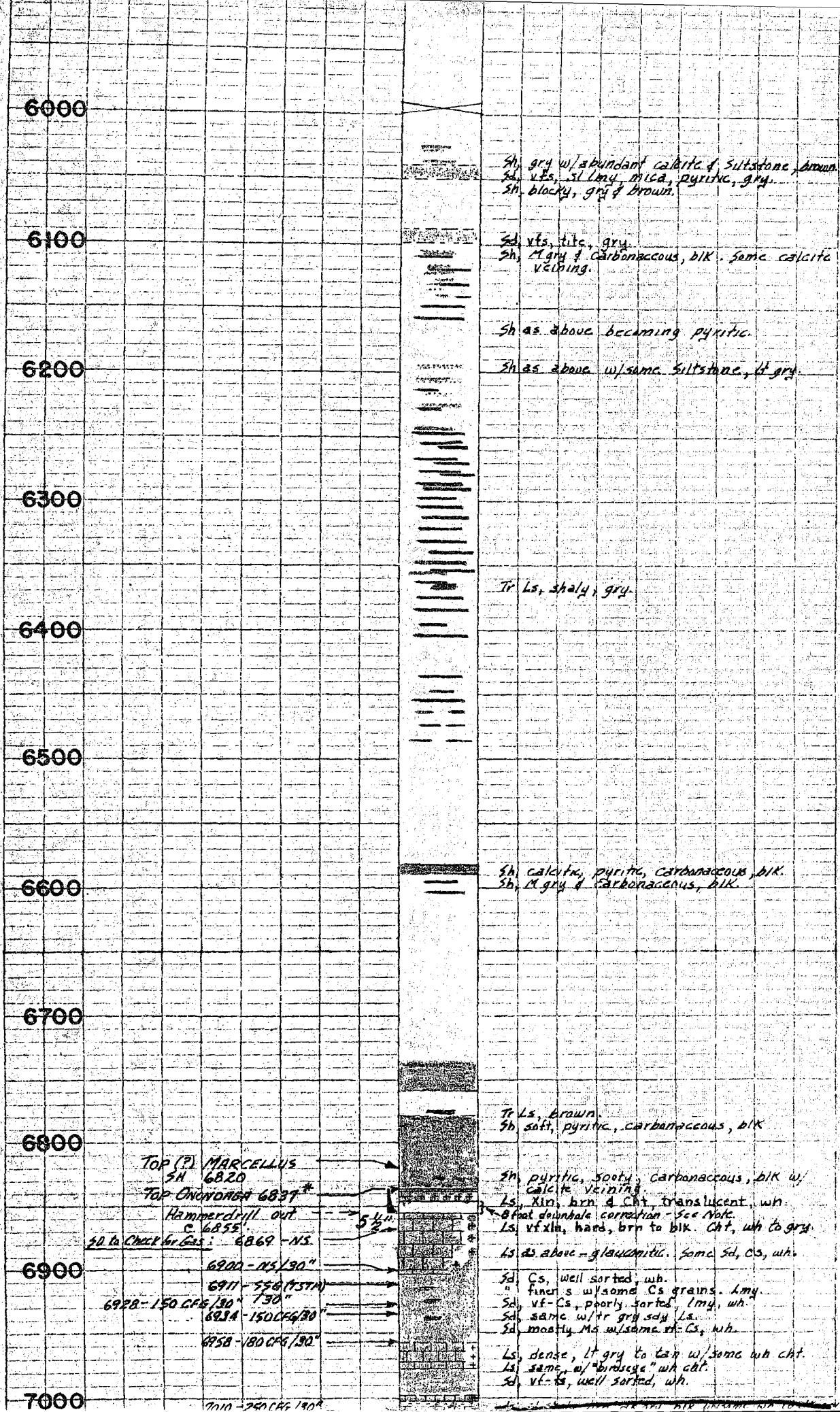
w/ clusters red mica

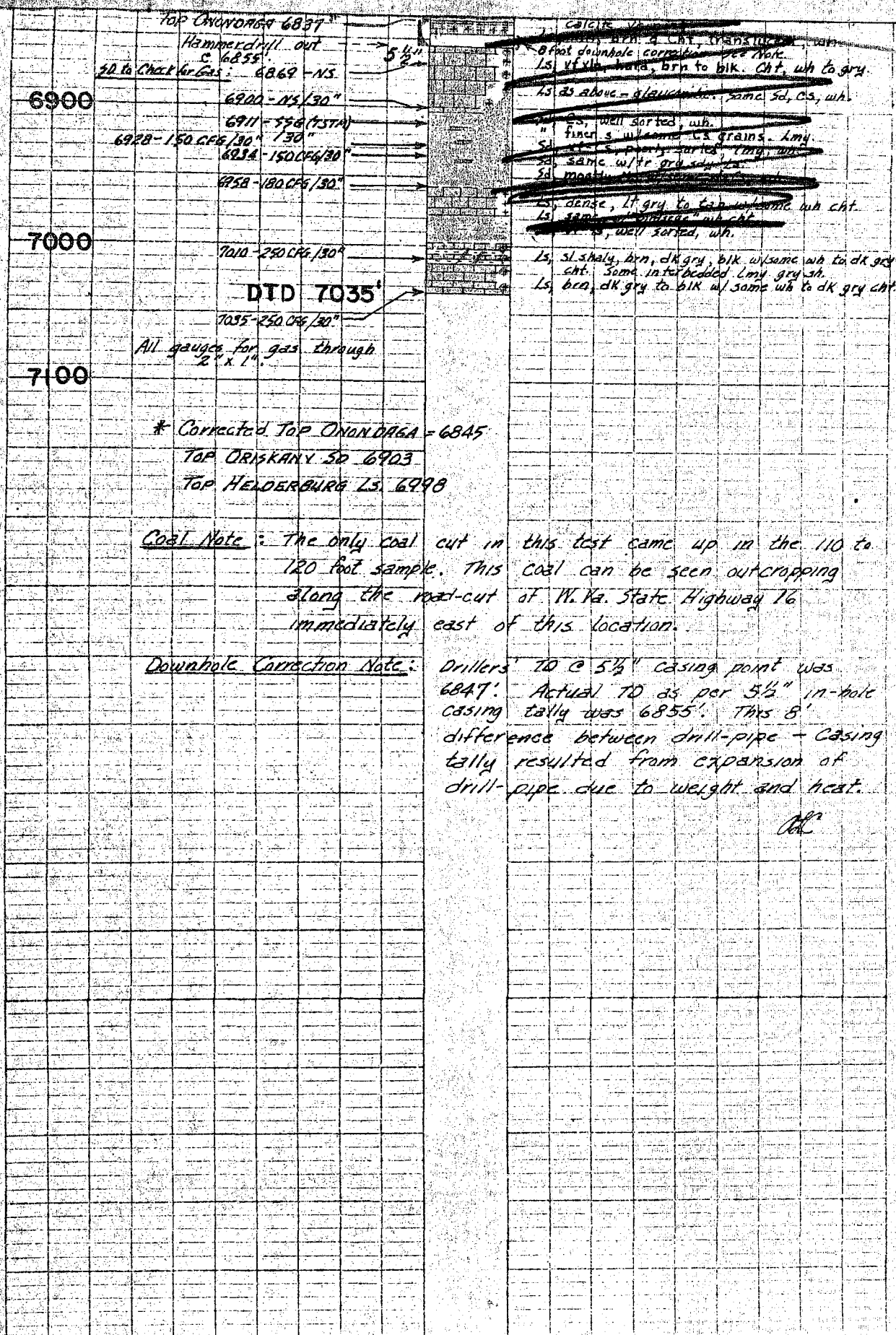
Same w/ some Sh, soft, brown.

Sh, f tex, gry. Tr Sh, blk. Ls, brn (Tr.)

Sh, f tex, gry & some Sh, blk.

Sh, v.f. tex, M. gry w/ some calcite veining





Company Phillips Petroleum Company
 Address Bartlesville, Oklahoma
 Farm Beaver "A" Acres 1070
 Location (waters) Alderson Branch 2038.18 Gr
 Well No. One 2048.95 DF
 District Slab Fork County Raleigh
 The surface of tract is owned in fee by Beaver Coal Co.
 Address Beckley, West Va.
 Mineral rights are owned by Beaver Coal Co.
 Address Beckley, West Va.
 Drilling commenced January 20, 1962
 Drilling completed March 11, 1962
 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 Halliburton pumped 9 1/2 Bbls. 15%
acid down 5 1/2" Csg. Flushed with 154 Bbls.
fresh water. 3-13-62

WELL FRACTURED Halliburton Fraced 3-14-62 with 27,500# 20-40 mesh sand & 655 Bbls. galled water.
Used 163 Bbls. soap water for flush. Max. Press. 2000#, Min. Press. 1650#.

RESULT AFTER TREATMENT 150 MCF gas per day with 3 Bbls. salt water per hour.

ROCK PRESSURE AFTER TREATMENT 1050# - 12 Hrs., 1425# - 24 Hrs., 1535# - 30 Hrs.

Fresh Water - Feet - Salt Water - Feet -

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
<u>20"</u>	<u>23.58'</u>	<u>23.58'</u>	Kind of Packer
<u>13 3/8"</u>	<u>405.02'</u>	<u>405.02'</u>	Size of
<u>10</u>			Depth set
<u>8 5/8"</u>	<u>2727.39'</u>	<u>2727.39'</u>	Perf. top
<u>6 1/2"</u>	<u>6902.59'</u>	<u>6902.59'</u>	Perf. bottom
<u>3</u>			Perf. top
<u>2 1 1/2"</u>	<u>6296.00'</u>	<u>6296.00'</u>	Perf. bottom
Liners Used			

20" 41.25 1-22-62
 CASING CEMENTED 13 3/8" 415.00 No. Ft. 1-31-62 Date
8 5/8" 2715.00' 2-11-62
5 1/2" 6855.00 3-2-62

COAL WAS ENCOUNTERED AT - FEET - INCHES
- FEET - INCHES - FEET 9 INCHES
- FEET - INCHES - FEET - INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Shale & Lime	Stone -41'		0	41			20" Csg. 41.25'
Sandstone	59'		41	100			W/100 Sx.Cmt.
Sandstone & Shale	-25'		100	125			Cmt.circulated
Sandstone	86'		125	211			to surface
Sand	49'		211	260			
Sandstone	30'		260	290			
Sand & Shells	22'		290	312			
Sand	18'		312	330			
Sandstone	31'		330	361			
Sand & Shale	54'		361	415	Fr. water	402	13 3/8"Cs. at
Sand & Shale	85'		415	500			415'W/200SxCmt
Shale, Sand & Shells	115'		500	615			Cmt.circulated
Red Rock & Shale	10'		615	625			to surface
Sand & Shale	468'		625	1093			
Sand	32'		1093	1125			
Shale	115'		1125	1240			
Red Shale & Sand	180'		1240	1420			
Sand	30'		1420	1450			
Red Shale	80'		1450	1530			
Gray Shale	50'		1530	1580			
Lime & Shells	132'		1580	1712			
Red Shale & Sand	148'		1712	1860			
Red Shale & Shells	57'		1860	1917			
Gray Sand	53'		1917	1970			
Sand & Shale	100'		1970	2070			
Sand	85'		2070	2155			
Shale & Shells	80'		2155	2235			
Sand	15'		2235	2250			
Shale	90'		2250	2340			
Sandy Shale	140'		2340	2480			

Formation	Color	Hard or Soft	Top 31	Bottom	Oil, Gas or Water	Depth Found	Remarks
Lime & Sand	142'		2480	2622	Gas	2500'	Slight Show
Sand 93'			2622	2715	Water	2669'	8 5/8" Csg.at
Shale 10'			2715	2725			2715 W/300SxCmt
Shale & Sand 50'			2725	2775			Top of cement
Sandy Shale 190'			2775	2965			outside Csg.
Gray Shale 140'			2965	3105			1775'
Shale 170'			3105	3275			
Gray Shale 180'			3275	3455			
Black Shale 25'			3455	3480			
Broken Shale & Shells 250'			3480	3730			
Shale 290'			3730	4020			
Sandy Shale & Shells 398'			4020	4418			
Sandy Shale 306'			4418	4724			
Sandy Shale & Shells 44'			4724	4768			
Shale & Shells 110'			4768	4878			
Shale 219'			4878	5097			
Sandy Shale 188'			5097	5285			
Shale 240'			5285	5525			
Shale & Shells 269'			5525	5794			
Shale 61'			5794	5855			
Shale & Shells 125'			5855	5980			
Shale 45'			5980	6025			
Broken Shale & Sandy Lime 70'			6025	6095			
Sandy Shale & Shells 109'			6095	6204			Marcellas Shale
Shale 633'			6204	6837			6806. Base 6837
Lime 5'			6837	6842			Onondaga 6837
Lime & Chert 47'			6842	6889			5 1/2" Csg.at
Sand 69'			6889	6958	Gas	6911	6855 W/125 SxCmt
Lime 20'			6958	6978			Oriskany. 6889
Sand 32'			6978	7010			Small Show.
Lime 25'			7010	7025			Schriber Lime
				7035	Total Depth		6958
							Halderberg 7010
							Top of cement
							outside 5 1/2" Csg.
							6150'