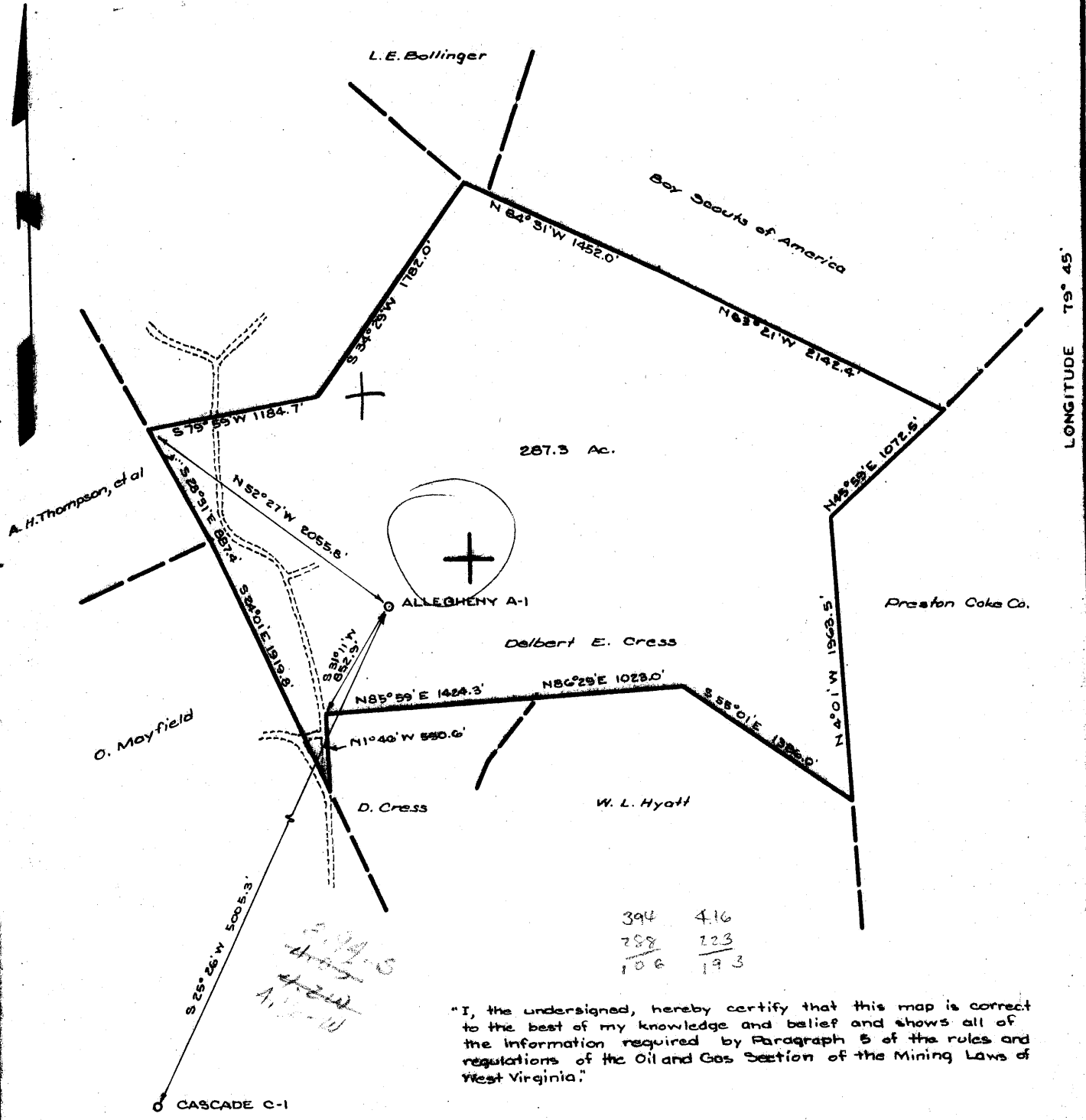


LATITUDE 39° 40'

LONGITUDE 79° 45'

79 47 30



287.3 Ac.

394	416
288	223
106	193

"I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all of the information required by Paragraph 5 of the rules and regulations of the Oil and Gas Section of the Mining Laws of West Virginia."

NEW LOCATION.....

DRILL DEEPER.....

ABANDONMENT.....

Edward C. Caswell
 EDWARD C. CASWELL
 Texas Reg. No. 6998

COMPANY PHILLIPS PETROLEUM COMPANY

ADDRESS BARTLESVILLE, OKLAHOMA

FARM DELBERT E. CRESS

TRACT ACRES 287.3 LEASE NO. C-78145

WELL (FARM) NO. ALLEGHENY A-1 SERIAL NO. _____

ELEVATION (SPIRIT LEVEL) 2161.7

QUADRANGLE MORGANTOWN 6C

COUNTY MONONGALIA DISTRICT MORGAN

ENGINEER Edward C. Caswell

ENGINEER'S REGISTRATION NO. 3998 - TEXAS

FILE NO. _____ DRAWING NO. _____

DATE SEPT. 18, 1968 SCALE 1" = 1000'

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES

OIL AND GAS DIVISION
 CHARLESTON

WELL LOCATION MAP
 FILE NO. Map-318

+ 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.

Deep Well (Oriskany) 6-6 OCT 14 1968

Copy: 1-Consolidated Gas Supply Corp
 1-Bartlesville
 1-Oklahoma
 1-File



STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

Quadrangle Morgantown

Permit No. MON-318

WELL RECORD

Oil or Gas Well Gas (KIND)

Company Phillips Petroleum Company
 Address Bartlesville, Oklahoma
 Farm Allegheny "A" Acres 287.3
 Location (waters) 20,550' S of Lat 39°40' & 21,900' W
 Well No. 1 of Long 79°45' Elev. 2161.7'
 District Morgan County Monongalia
 The surface of tract is owned in fee by Allegheny Trails
Boy Scouts of America Address Council Pittsburg, Pa
 Mineral rights are owned by Delbert E. Cress & Beatrice L.
Cress, his wife, etal Address _____

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size	Set @		Kind of Packer
16			
13-3/8" 48#	50'	32.27'	50 sx by Halliburton
10-9-5/8 36#	1029'	1014.05'	350 " " "
		(Less thds)	Size of " "
			Depth set
5 3/16			
4 1/2" 11.6#	8316.29'	8296.60'	Perf. top <u>7896'</u>
		(Less thds)	Perf. bottom <u>8166'</u>
2			Perf. top
Liners Used	Perf'd 4 1/2" csg in		Perf. bottom
Onondaga Chert	7896-8166' w/94		
.45" holes.			

Drilling commenced September 28, 1968
 Drilling completed October 16, 1968
 Date Shot None From _____ To _____
 With _____
 Open Flow /10ths Water in _____ Inch
 _____/10ths Merc. in _____ Inch
 Volume See reverse side _____ Cu. Ft.
 Rock Pressure _____ lbs. _____ hrs.
 Oil _____ bbls., 1st 24 hrs.
 WELL ACIDIZED w/1000 gals Acetic acid following
 cementing of 4 1/2" casing.
 WELL FRACTURED See reverse side

CASING CEMENTED 4 1/2" SIZE 8297' No. Ft. 10-17-68 Date
 Cmt'd w/225 sx Howco bulk w/20% Diacel D

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

RESULT AFTER TREATMENT See reverse side

4,014 McF (Huntersville, Ch.)
9,014,000

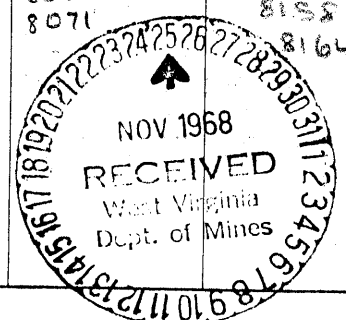
ROCK PRESSURE AFTER TREATMENT

Fresh Water 120 Feet 1 Salt Water _____ Feet

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Surface Soil, rock			0	50			
Shale & Sand			50	84			FORMATION TOPS-Gamma Ray Log
Sand			84	350			Allegheny A 1
Sand & Red Rock			350	525			Tulley Lime 7397'
Lime			525	570			Marcella Shale 7763'
Lime, Sand, Red Rock			570	725			Onondaga Lime 7875'
Sand & Shale			725	1160			Onondaga Chert 7896'
Lime, Sand & Shale			1160	1360			Oriskany 8218'
Sand & Shale			1360	2211			Helderberg Lime 8275'
Shale (show of gas 2550')			2211	2880			
Sand & Shale			2880	3170			
Shale			3170	3630			
Sand			3630	3873			
Sand & Shale			3873	4036			7896-7906 8075-8079
Sandy Shale			4036	4090			7913 8083-8085
Sand & Shale			4090	4877			7929-7932 8089-8092
Sand Strks & Shale			4877	4967			7939-7941 8096-8098
Sand & Shale			4967	5200			7945 8107-8109
Shale			5200	5514			8040-8042 8112
Sandy Shale			5514	5760			8048-8052 8134-8138
Shale			5760	7085			8065-8067 8158-8160
Shale & Lime			7085	7615			8071 8164-8166
Shale			7615	7895			
Chert			7895	7950			
Shale			7950	8035			
Chert			8035	8225			
O'Hara Sand			8225	8270			
Lime			8270	8310			

Oriskany
Helderberg

TD



Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
ACID & FRACTURE DETAILS (Referred to on Front Side)							
OCTOBER 1968							
20							Halliburton frac'd down 4 1/2" csg thru perfs 7896-8112'. Pmpd into formation w/1 truck at 2350#. Broke to 1800#. Trtd w/16000# 20-40 sand, 23,660 gals fresh wtr gelled. Used 1600# KCl, 10# FR16, 400# W66, 250# CWL. Max press 5300#; Min 4400#. Instant shut-in csg press 3000#. In 2 mins, 2500#. Impg rate 22.9 BPM. Hydraulic HP used 2770. HP available 4725. Trtmnt set up for 55,000# of 20-40 sand, 58,000 gals gelled wtr. Unable to get all in formation. Flowed well back. Tested on 2" Pitot tube at 980 MCF. Went in hole with 2-3/8" tbg to 8158'. All perfs clear of sand. Pulled tbg. Pmpd frac wtr.
21							Frac Job #2. Halliburton frac'd well down 4 1/2" csg thru perfs 7896' to 8112'. Pmpd into formation w/10 pumps at 5000#. Trtd w/15,500# of 20-40 sand, 23,800 gals 3% gelled acid. Used 450# W66, 150# CWL. Max press 5200#, Min 4800#. Instant shut-in press 4800#; 2 min shut-in press 4450#. Impg rate 16.8 BPM. Hydraulic HP used 2095. HP available 4725. Completed at 3:28 PM 10-20-68. Opened well & flowed to pit 16 hrs. Gas reading on 2" Pitot tube 768 MCF.
22							Birdwell reperforated Chert 7896' to 8091', 24 holes.
23							Flowing small stream acid fluid back to pit. Ran 2-3/8" tbg w/RTTS tool w/179' tail pipe to 8123'. Halliburton loaded & killed well w/135 BPM. Spotted 195 gals 7 1/2% penetrating acid on perf 7996-8112'. Pulled 3 jts tbg & set pkr at 7854' w/bottom tail pipe 7933'. Circulated FW out of hole w/potassium chloride. Pmpd in 1200 gals 7 1/2% acid. Press annulus to 2500#. Trtd w/3000 gals 7 1/2% penetrating acid. Dropped 2 balls with 1st 600 gals and 1 ball with each additional bbl. Initial trtmnt rate with 2 pumps 5 BPM @ 5600#; 1 min with 3 pumps 6 BPM @ 7800#; 2 mins with 3 pumps 6 BPM @ 7300#; 4 mins with balls on perf - 2 pumps 5 BPM @ 6200#; 6 mins displacement acid with 2 pumps 5 BPM @ 6500#; 10 mins balls hit perf - 2 pumps 5 BPM @ 6700#; 12 mins final displacement with 2 pumps 5 BPM @ 6700#. 16 mins - shut pumps off. ISIP 4500#, 5 min SIP 4000#; Min trtng press 5600#, Max 7800#, Displacement 6700#. Injection rate 5 BPM. Opened well to pit thru tbg. 30 min SITP 2500#. No show of gas.
24							Well flowed to pit 24 hrs. Started flowing steady 11:30 AM. Flowed back acid fluid 4 1/2 hrs. Flowed heavy mist of frac wtr 10 hrs. Flowed fine mist of frac wtr 5 1/2 hrs. Tested gas thru 2" Pitot tube at 5:00 AM 10-21-68 @ 1,145 MCF.
25							Halliburton preparing to frac. Unseated pkr at 7854'. Killed well with FW. Picked up tbg & went down hole to 8180'. Spotted 1000 gals Acetic acid 8180-6400. Pulled tbg & pkr. Schlumberger ran correlation log 8179-7800. Schlumberger perf chert with Hyper Jet, 1 hole per ft, 0.45 dia hole, 14-gram charge as follows: 7910-7914 7917-7922 7937 8044 8059-8062 8068-8073 8099-8102 8134-8138 8158-8160 8164-8166 - a total of 30 holes.
26							Halliburton frac job #3 down 4 1/2" csg in Chert thru perf 7910-8166' w/53,000# 20-40 sand and 57,500 gals 3% acid jel w/1800# W66 and 300# CWL. Pmpd into formation with 11 pumps at 23 BPM at 5100#. Minimum trtng press 4700#, Max 5200#. Ave injection rate 33.1 BPM. HP used 4075; HP available 4725. ISIP 3600#. 5 Min SIP 3050#. Job complete 10:45 AM 10-25-68. Total fluid used 66,100 gals. Opened well to pit at 11:00 AM. Ran 263 jts (8128.45' IT) 2-3/8" OD EUE 4.7# J-55 8rd Rge 2 SS 1-Cond tbg with 1' seating nipple with KO plug on bottom set at 8139.45'. Knocked out plug with 15 BPM down tbg. Set down on frac sand at 8170'. Flowed steady 10 1/2 hrs, by heads 9 1/2 hrs.
27							Flowed well to pit.
28							Flowed to pit. SI @ 2:00 P.M. 16 hr SICP 2800# SITP 1400#.
29							SICP 2850# SITP 1400#. Blew well to pit thru tbg 5 mins, recovered 10 bbls.
0-30 - 11-2							SI. SICP 3100# SITP 3100#.
1-2 - 11-15							SI. Blew well daily approx 4 mins to clean up. SICP 3200# SITP 3125#.
11-16							SI. Tested well - NO calculations.
1-17 - 11-21							NO test calculations.
11-22							Well tested @ well head - (CAOPF 4014 MCFD.)

Date November 22, 1968, 19

APPROVED Phillips Petroleum Company, Owner

By *[Signature]* Dist. Supt. (Title)