

December 22, 1960

RECEIVED

DEC 27 1960

D. G. E.
ARTESIA, OFFICE

United States Geological Survey
District Engineer
P. O. Box 6721
Roswell, New Mexico

Gentlemen:

Enclosed please find Log of Oil or Gas Well covering Southern Union Gas Company's Federal Saunders No. 1 well located in Section 9, Township 20-South, Range 35-East in Lea County, New Mexico.

We are enclosing two copies of the Gamma Ray Neutron Log. We are also enclosing two copies of Form 9-330 to the New Mexico Oil Conservation Commission.

Yours very truly,

SOUTHERN UNION GAS COMPANY


L. S. Muenzink
Exploration Engineer

LSM:jc
Encls.

cc: New Mexico Oil Conservation Commission ✓
Artesia, New Mexico

Wesley Swanson
Box 146
Hobbs, New Mexico

bcc: Land Dept.
Proration Dept.

Q 34

Q 35

Q 36

Q 37

Q 38

Q 39

Q 40

Q 41

Q 42

Q 43

Q 44

Q 45

Q 46

Q 47

Q 48

Q 49

Q 50

Q 51

Q 52

Q 53

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Q 57

Q 58

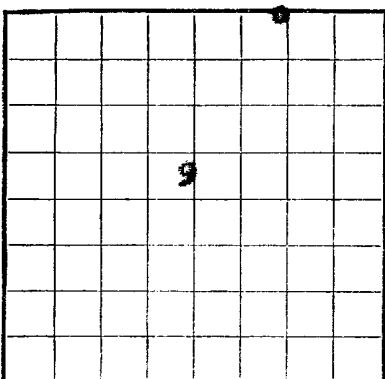
Q 59

Q 60

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U. S. LAND OFFICE Santa Fe
SERIAL NUMBER 10-00000
LEASE OR PERMIT TO PROSPECT

RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYDEC 27 1960
O. C. C.
ARTESIA, OFFICE

LOCATE WELL CORRECTLY

LOG OF OIL OR GAS WELL

Company Southern Union Gas Company Address High Fidelity Union Tower Building
Lessor or Tract Federal Lands Field Four Corners State New Mexico
Well No. 1 Sec. 9 T. 32-N R. 3-E Meridian N.M.P.M. County San Juan
Location 130 ft. S. of 1 Line and 1000 ft. W. of 1 Line of Section 9 Elevation 3574.4
(Derrick base relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Original Signed By L. S. MUENNINK
Signed L. S. MUENNINK Title Exploration Engineer
Date December 22, 1960

The summary on this page is for the condition of the well at above date.

Commenced drilling December 14, 19 60 Finished drilling December 3, 19 60

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 4564 to 4560 (G) No. 4, from _____ to _____
No. 2, from 4573 to 4570 (G) No. 5, from _____ to _____
No. 3, from _____ to _____ No. 6, from _____ to _____

IMPORTANT WATER SANDS

No. 1, from _____ to _____ No. 3, from _____ to _____
No. 2, from _____ to _____ No. 4, from _____ to _____

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated		Purpose
							From—	To—	
<u>8-5/8</u>	<u>26</u>	<u>4</u>	<u>AMERICAN</u>	<u>100</u>	<u>REG</u>	<u>4564</u>	<u>4560</u>	<u>4570</u>	<u>PRODUCTION</u>
<u>4-1/2</u>	<u>17</u>	<u>4</u>	<u>AMERICAN</u>	<u>100</u>	<u>REG</u>	<u>4570</u>	<u>4570</u>	<u>4570</u>	<u>PRODUCTION</u>
<u>2-3/8</u>	<u>10</u>	<u>4</u>	<u>AMERICAN</u>	<u>100</u>	<u>REG</u>	<u>4570</u>	<u>4570</u>	<u>4570</u>	<u>PRODUCTION</u>

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
<u>8-5/8</u>	<u>362'</u>	<u>Quant to surface w/100 sacks.</u>			
<u>4-1/2</u>	<u>1500'</u>	<u>400 sacks</u>			

PLUGS AND ADAPTERS

Heaving plug—Material _____ Length _____ Depth set _____
Adapters—Material _____ Size _____

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out
<u>2-3/8</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>19/60</u>	<u>4564</u>	<u>4560</u>

TOOLS USED

Rotary tools were used from 0 feet to 3000 feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

December 20, 19 60 Put to producing _____, 19 _____
The production for the first 24 hours was 114 barrels of fluid of which 100 % was oil; _____ %
emulsion; _____ % water; and _____ % sediment. 19/60 chokes Gravity, °Bé. _____
If gas well, cu. ft. per 24 hours _____ Gallons gasoline per 1,000 cu. ft. of gas _____
Rock pressure, lbs. per sq. in. _____

EMPLOYEES

Tom Brown Drilling Company, Driller _____, Driller
_____, Driller _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
<u>0</u>	<u>1110</u>	<u>1110</u>	<u>Bedrock</u>
<u>1110</u>	<u>1645</u>	<u>535</u>	<u>Bedrock and shale</u>
<u>1645</u>	<u>1830</u>	<u>185</u>	<u>Bedrock</u>
<u>1830</u>	<u>1998</u>	<u>168</u>	<u>Bedrock</u>
<u>1998</u>	<u>2070</u>	<u>72</u>	<u>Bedrock and shale</u>
<u>2070</u>	<u>2165</u>	<u>95</u>	<u>Bedrock and shale</u>
<u>2165</u>	<u>2234</u>	<u>69</u>	<u>Bedrock</u>
<u>2234</u>	<u>3134</u>	<u>900</u>	<u>Bedrock and shale</u>
<u>3134</u>	<u>3374</u>	<u>240</u>	<u>Bedrock and shale</u>
<u>3374</u>	<u>3581</u>	<u>207</u>	<u>Bedrock and shale</u>
<u>3581</u>	<u>3667</u>	<u>86</u>	<u>Bedrock and shale</u>
<u>3667</u>	<u>3723</u>	<u>56</u>	<u>Bedrock and shale</u>
<u>3723</u>	<u>3820</u>	<u>97</u>	<u>Bedrock and shale</u>
<u>3820</u>	<u>3860</u>	<u>40</u>	<u>Bedrock and shale</u>
<u>3860</u>	<u>3940</u>	<u>80</u>	<u>Bedrock and shale</u>
<u>3940</u>	<u>4002</u>	<u>62</u>	<u>Bedrock and shale</u>
<u>4002</u>	<u>4300</u>	<u>298</u>	<u>Bedrock and shale</u>
<u>4300</u>	<u>4380</u>	<u>80</u>	<u>Bedrock and shale</u>
<u>4380</u>	<u>4392</u>	<u>12</u>	<u>Bedrock and shale</u>
<u>4392</u>	<u>4570</u>	<u>178</u>	<u>Bedrock and shale</u>
<u>4570</u>	<u>4688</u>	<u>118</u>	<u>Bedrock and shale</u>
<u>4688</u>	<u>4722</u>	<u>34</u>	<u>Bedrock and shale</u>
<u>4722</u>	<u>4860</u>	<u>138</u>	<u>Bedrock and shale</u>
<u>4860</u>	<u>4865</u>	<u>5</u>	<u>Bedrock and shale</u>
<u>4865</u>	<u>4868</u>	<u>3</u>	<u>Bedrock and shale</u>
<u>4868</u>	<u>4870</u>	<u>2</u>	<u>Bedrock and shale</u>
<u>4870</u>	<u>4878</u>	<u>8</u>	<u>Bedrock and shale</u>

LOCALITY WELL CORRELATION

UNITED STATES

The summary on this page is for the condition of the well at above date.

Commenced drilling _____ 19____
Finished drilling _____ 19____

OIL OR GAS SANDS OR ZONES

(7) $\forall x \exists y (x \neq y \wedge \neg \exists z (x \neq z \wedge y \neq z))$

From	To	Amount
From 100.00	To 100.00	100.00
From 100.00	To 100.00	100.00
From 100.00	To 100.00	100.00

IMPORTANT WATER SOUNDS

No. 8 from the ...
No. 9 from the ...

CRIME RECORD

Well No.	Location	State	Year	Kind of shoe	One and one-half (ft.)	Two (ft.)	Three (ft.)	Four (ft.)	Five (ft.)	Six (ft.)	Seven (ft.)	Eight (ft.)	Nine (ft.)	Ten (ft.)	Eleven (ft.)	Twelve (ft.)	Thirteen (ft.)	Fourteen (ft.)	Fifteen (ft.)	Sixteen (ft.)	Seventeen (ft.)	Eighteen (ft.)	Nineteen (ft.)	Twenty (ft.)	Twenty-one (ft.)	Twenty-two (ft.)	Twenty-three (ft.)	Twenty-four (ft.)	Twenty-five (ft.)	Twenty-six (ft.)	Twenty-seven (ft.)	Twenty-eight (ft.)	Twenty-nine (ft.)	Thirty (ft.)	Thirty-one (ft.)	Thirty-two (ft.)	Thirty-three (ft.)	Thirty-four (ft.)	Thirty-five (ft.)	Thirty-six (ft.)	Thirty-seven (ft.)	Thirty-eight (ft.)	Thirty-nine (ft.)	Forty (ft.)	Forty-one (ft.)	Forty-two (ft.)	Forty-three (ft.)	Forty-four (ft.)	Forty-five (ft.)	Forty-six (ft.)	Forty-seven (ft.)	Forty-eight (ft.)	Forty-nine (ft.)	Fifty (ft.)	Over fifty (ft.)	Not specified	Other	Total																																																																																																																																																																																																																																																																																																																																																	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	3

HISTORY OF OIL OR GAS WELL

U. S. GOVERNMENT PRINTING OFFICE 16-48094-2

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FORMATION RECORD-Continued

7:47 A.M. : 6:50