

U. S. LAND OFFICE **Santa Fe**SERIAL NUMBER **078156**

LEASE OR PERMIT TO PROSPECT

Govt. Salge

UNITED STATES

DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company **British-American Oil Prod Co** Address **Box 180, Denver 1, Colorado**
Lessor or Tract **Govt. Salge** Field **Bisti-Gallup** State **New Mexico**
Well No. **B-2** Sec. **33** T. **26N** R. **13W** Meridian **NMPM** County **San Juan**
Location **1980** ft. **XXX** of **N** Line and **1980** ft. **XXX** of **W** Line of **SW/4 Sec 33** Elevation **6333** GL
(Derrick floor 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.

Signed

Original Signed by:

Thomas M. HoganTitle **District Superintendent**Date **December 3, 1956**

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

Commenced drilling **Sept. 4**, 19**56** Finished drilling **Sept. 12**, 19**56**

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from _____ to _____ No. 4, from _____ to _____
No. 2, from _____ to _____ 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—	
9-5/8	25.4		Arco	200'	Baker				
5-1/2	13.5		Arco	175	Baker				
5-1/2	13.5		Arco	175	Baker				
							5038	5049	
							5060	5017	

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
9-5/8	214' KB	175	HOWCO		
5-1/2	5098' KB	100	HOWCO		

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

TOOLS USED

Rotary tools were used from **0** feet to **5099** feet, and from _____ feet to _____ feet
Cable tools were used from **5031** feet to **5079** feet, and from _____ feet to _____ feet

DATES

December 3, 19**56** Put to producing **November 18**, 19**56**

The production for the first 24 hours was **12** barrels of fluid of which **59**% was oil; _____%
emulsion; **41**% water; and _____% sediment. 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

Force Drilling Company, Driller _____, Driller
_____, Driller _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
See Completion and sample description reports attached.			
<u>GEOLOGICAL TOPS</u>			
Pictured Cliffs		1374	
Mesa Verde		1665	
Point Lookout		3830	
Mancos		3970	
Upper Gallup		4910	
Gallup		4989	

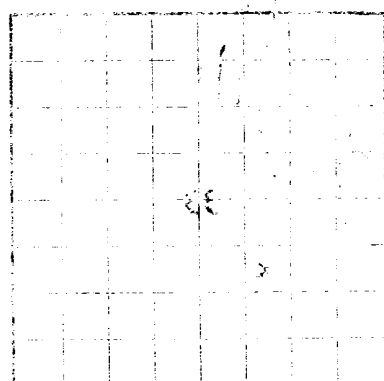
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16-48004-3

LOWELL LION RECORD—COMPLETION

[illegible]

LOG OF OIL OR GAS WELL



Date of completion of work _____
 Location of the Mine and _____
 Well No. _____
 Lessor or Trust _____
 Company _____
 Address _____
 State _____
 County _____
 City _____
 Elevation _____
 of _____
 The information given herewith is a complete and correct record of the well and all work done thereon
 as far as can be determined from all available records.
 Signed _____
 Official _____
 License No. _____
 This statement is made by _____
 of _____
 Elevation _____
 of _____
 County _____
 State _____
 City _____
 Address _____
 Company _____

Commenced drilling _____ 1950 Finished drilling _____ 1950
The summary on this page is for the condition of the well at above date.

OIL OR GAS SANDS OR ZONES

(D) $\frac{1}{2} \log 2$

No. 1, from	to	No. 4, from	to
No. 2, from	to	No. 5, from	to
No. 3, from	to	No. 6, from	to

IMPORTANT WATER SANDS

to	from	to	from
to	from	to	from

CASING RECORD

[illegible]

It is of the greatest importance to have a complete history of the well. Please state in detail the date of drilling, together with the reasons for the work and its results. If there were any changes made in the casing, state size and location. If the well has been dynamited, give date, position, and number of shots. If pipes or bridges were pulled in test for water, state kind of material used, position, and results of pumping or bailing.

HISTORY OF OIL OR GAS WELL

U. S. GOVERNMENT PRINTING OFFICE: 1964 O - 350842

LOADING AND CEMENTING RECORD

[illegible]

SUBJECTS

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SHOOTING RANGE

Year	Number of cases	Number of deaths	Number of cases per 100,000 population	Number of deaths per 100,000 population
1990	1,000	100	10.0	1.0
1991	1,100	110	11.0	1.1
1992	1,200	120	12.0	1.2
1993	1,300	130	13.0	1.3
1994	1,400	140	14.0	1.4
1995	1,500	150	15.0	1.5
1996	1,600	160	16.0	1.6
1997	1,700	170	17.0	1.7
1998	1,800	180	18.0	1.8
1999	1,900	190	19.0	1.9
2000	2,000	200	20.0	2.0
2001	2,100	210	21.0	2.1
2002	2,200	220	22.0	2.2
2003	2,300	230	23.0	2.3
2004	2,400	240	24.0	2.4
2005	2,500	250	25.0	2.5
2006	2,600	260	26.0	2.6
2007	2,700	270	27.0	2.7
2008	2,800	280	28.0	2.8
2009	2,900	290	29.0	2.9
2010	3,000	300	30.0	3.0
2011	3,100	310	31.0	3.1
2012	3,200	320	32.0	3.2
2013	3,300	330	33.0	3.3
2014	3,400	340	34.0	3.4
2015	3,500	350	35.0	3.5
2016	3,600	360	36.0	3.6
2017	3,700	370	37.0	3.7
2018	3,800	380	38.0	3.8
2019	3,900	390	39.0	3.9
2020	4,000	400	40.0	4.0

1900

Cable tools were used from 1941 to 1942 and from 1943 to 1944.	Cable tools were used from 1941 to 1942 and from 1943 to 1944.
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SECRET

The production for all homes was 1.16 million units of water per day, and 1.16 million units of water per day.

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1992

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Chief	Chief

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FROM	TO	TOTAL FEET	FORMATION

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GEOLOGICAL COMPLETION REPORT FOR BRITISH-AMERICAN #B-2 SALGE

Well Classification:

Semi-Exploratory well, Bisti-Gallup
San Juan County, New Mexico
British-American #B-2 Salge
C NE SW Sec 33-26N-13W

Well Data:

Commenced drilling:	September 4, 1956
Completed drilling:	September 12, 1956
Contractor:	Forre Drilling Company
Casing Record:	9-5/8" @ 213.8 w/175 sax cmt 2% CACL ₂ 5-1/2" @ 5098 K.B. w/100 sax 3% gel. 6325' GL; 6335' KB
Elevation:	Driller 5100 plus 1235,
Total Depth and Datum:	E.S. 5109 plus 1226 5079 plus 1256, Gallup sandstone
PBTD, Datum and Formation:	
<u>Completion Data:</u>	
Producing zone:	Gallup sandstone
Perforations and treatment:	Net Pay: 47' perforated
	Perf 5039-5069 w/4 jets/ft 80 gms, sand-oil frac w/30,000 galls oil, 30,000 lbs sand. Broke formation @ 4000 lbs psi to 2400 lbs psi. Injection rate 33.1 BPM at 2400 lbs psi.
	Perf 5000-5017 w/4 jets/ft 80 gms, sand-oil frac w/16,730 galls oil and 20,000 lbs sand. Broke formation @ 3000 lbs psi to 2400 lbs psi. Injection rate 33 BPM @ 2250 lbs psi
	With P BD. of 5030 set packer @ 4946 loaded tubing w/19 bbls oil & broke formation w/12 bbls oil. Mixed radioactive tracer in 1 bbl oil and displaced to formation. Maximum pressure 700 lbs. Injection rate 1.1 BPM Ran Gamma Log & indicated zones 5000-5009, 5011-5016 took fluid
	Ran multfrac as follows: Broke formation @ 2000 lbs psi w/10 bbls oil. Injected 250 galls fix-a-frac w/5 bbls oil spacer Injected 10,000 lbs sand & 10,000 galls oil w/5 bbls oil spacer Injected 200 galls fix-a-frac w/5 bbls oil spacer Injected 20,000 lbs sand & 20,000 galls oil Injected 150 bbls oil Average injection rate of 37.3 bbls per minute @ 2193 lbs psi.
Initial Production:	Purped 4.71 bbls oil, 4.00 bbls water in 24 hours 12 x 54" SPM

British-American #B-2 Salge

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Geological Data:

Logging Data:

Samples:
Electric Log:

10' & 20' from 1200-4900 K.B. Stored at: American-
2" 212-5109 K.B. Stratigraphic Co/.
5" 1200-1500, 3500-4000, Denver, Colorado
4900-5109

Microlog:
Induction Log:
Gamma ray:
Geolograph:

Same as Detail E.S.
Same as Detail E.S.
1500-1500, 3400-4000, 4900-5070 K.B.
212-5100 K.B.

Formation Record:

	<u>Schl. Top</u>	<u>Schl. Datum</u>
Picture Cliff	1374	plus 4961
Mesa Verde	1665	plus 4670
Pt Lookout	3830	plus 2505
Mancos	3970	plus 2365
Upper Gallup	4910	plus 1425
Gallup	4989	plus 1346

Core Record:

	<u>Interval</u>	<u>Formation</u>	<u>Ft. Recovered</u>
Core #1	4900-5030	Gallup	38 feet
Core #2	5030-5082	Gallup	52 feet

Drill Stem Test Record:

None