

U. S. LAND OFFICE
SERIAL NUMBER
LEASE OR PERMIT TO PROSPECT

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY (No. change from #5 to 29)

Company **Parther City Investment Company** Address **Box 1178 Marshall, Texas**
Lessor or Tract **Harry Federal** Field **Paducah-Blaine** State **New Mexico**
Well No. **1900** Sec. **21** T. **25N** R. **32E** Meridian **NPN** County **Lee**
Location **1900** ft. **(N)** of **8** Line and **1900** ft. **(E)** of **W** Line of **Sec 21** Elevation **3405' IF.**
(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 **Wm. B. Smith**
Date **March 8, 1961** Title **Asst. Div. Office Manager**

The summary on this page is for the condition of the well at above date.
Commenced drilling **February 20**, 19**61** Finished drilling **March 1**, 19**61**

OIL OR GAS SANDS OR ZONES
(Denote gas by G)

No. 1, from **1635** to **1658** No. 4, from _____ to _____
No. 2, from **1674** to **1680** No. 5, from _____ to _____
No. 3, from _____ to _____ No. 6, from _____ to _____

IMPORTANT WATER SANDS

No. 1, from **None** 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—	
7-5/8	24	4 1/2	API	372.75	Ball	1635'			1635' to 1658'
5-1/2	18	4 1/2	API	152.25	Ball	1658'			1658' to 1680'
3-1/2	10	4 1/2	API	120.00	Ball	1680'			1680' to 1697'
Perforations: (1635' to 1658') (1658' to 1680') (1680' to 1697') (1697' to 1700')									

MUDDING AND CEMENTING RECORD					
Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
7-5/8	393.75	300	RF	15.0	Full
5-1/2	1728.71	150	RF	14.0	Full
3-1/2	1617.00	Strong	Water		Full

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
Completed normal						

TOOLS USED

Rotary tools were used from **0** feet to **1700** feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

March 8, 19**61** Put to producing **March 5**, 19**61**
The production for the first 24 hours was **36.50** barrels of fluid of which **100** % was oil; _____ %
emulsion _____ % water; and _____ % sediment. Gravity, °Bé. **12.3 at 60 deg.**
If gas well, cu. ft. per 24 hours _____ Gallons gasoline per 1,000 cu. ft. of gas _____
Rock pressure, lbs. per sq. in. _____

EMPLOYEES

J. C. Hardin, Driller **Ray Williams**, Driller
O. E. Cross, Driller _____, Driller

FORMATION RECORD			
FROM—	TO—	TOTAL FEET	FORMATION
0	716	716	Sand & Shale
716	810	96	Anhydrite
810	970	160	Dolomite
970	995	25	Anhydrite
995	1115	120	Shale & Anhydrite
1115	1274	159	Anhydrite & Salt
1274	1325	51	Anhydrite
1325	1375	50	Salt
1375	1390	15	Anhydrite
1390	1439	49	Salt & Anhydrite
1439	1500	61	Anhydrite
1500	1574	74	Shaly Lime
1574	1700	126	Sand - Total Depth
			Plug Back Total Depth

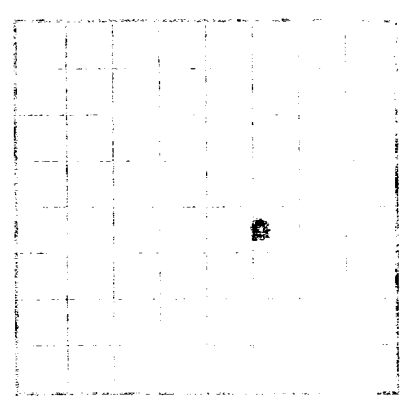
See attached sheet for cores and core descriptions.

ILLEGIBLE

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20500

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL



Location of well: _____
County: _____
State: _____
Date of completion: _____
Name of operator: _____
Name of driller: _____
Name of recorder: _____
The information given here is a complete and correct record of the well and all work done thereon.
Signed: _____
The undersigned, _____, State of _____, County of _____, do hereby certify that the above is a true and correct copy of the original record of the well.

OIL OR GAS SANDS OR ZONES			
From	To	Depth	Remarks
No. 1 from	No. 1 to		
No. 2 from	No. 2 to		
No. 3 from	No. 3 to		
No. 4 from	No. 4 to		
No. 5 from	No. 5 to		
No. 6 from	No. 6 to		
No. 7 from	No. 7 to		
No. 8 from	No. 8 to		
No. 9 from	No. 9 to		
No. 10 from	No. 10 to		

CASING RECORD			
Casing size	Weight	Length	Remarks
No. 1			
No. 2			
No. 3			
No. 4			
No. 5			
No. 6			
No. 7			
No. 8			
No. 9			
No. 10			

MUDGING AND CEMENTING RECORD			
Amount of mud used	Method used	Depth	Remarks
No. 1			
No. 2			
No. 3			
No. 4			
No. 5			
No. 6			
No. 7			
No. 8			
No. 9			
No. 10			

PLUGS AND ADAPTERS			
Depth	Remarks	Depth	Remarks
No. 1		No. 1	
No. 2		No. 2	
No. 3		No. 3	
No. 4		No. 4	
No. 5		No. 5	
No. 6		No. 6	
No. 7		No. 7	
No. 8		No. 8	
No. 9		No. 9	
No. 10		No. 10	

SHOOTING RECORD			
Depth	Remarks	Depth	Remarks
No. 1		No. 1	
No. 2		No. 2	
No. 3		No. 3	
No. 4		No. 4	
No. 5		No. 5	
No. 6		No. 6	
No. 7		No. 7	
No. 8		No. 8	
No. 9		No. 9	
No. 10		No. 10	

TOOLS USED			
Tool	Depth	Remarks	Tool
No. 1			No. 1
No. 2			No. 2
No. 3			No. 3
No. 4			No. 4
No. 5			No. 5
No. 6			No. 6
No. 7			No. 7
No. 8			No. 8
No. 9			No. 9
No. 10			No. 10

DATES			
Date	Time	Remarks	Date
No. 1			No. 1
No. 2			No. 2
No. 3			No. 3
No. 4			No. 4
No. 5			No. 5
No. 6			No. 6
No. 7			No. 7
No. 8			No. 8
No. 9			No. 9
No. 10			No. 10

EMPLOYEES			
Name	Position	Remarks	Name
No. 1			No. 1
No. 2			No. 2
No. 3			No. 3
No. 4			No. 4
No. 5			No. 5
No. 6			No. 6
No. 7			No. 7
No. 8			No. 8
No. 9			No. 9
No. 10			No. 10

FORMATION RECORD			
Formation	Depth	Remarks	Formation
No. 1			No. 1
No. 2			No. 2
No. 3			No. 3
No. 4			No. 4
No. 5			No. 5
No. 6			No. 6
No. 7			No. 7
No. 8			No. 8
No. 9			No. 9
No. 10			No. 10

FORMATION RECORD—Continued			
Formation	Depth	Remarks	Formation
No. 1			No. 1
No. 2			No. 2
No. 3			No. 3
No. 4			No. 4
No. 5			No. 5
No. 6			No. 6
No. 7			No. 7
No. 8			No. 8
No. 9			No. 9
No. 10			No. 10

PANTHER CITY INVESTMENT

Perry Federal No. 529

CORE #1

Core #1: 4585-4660', cut and recovered 75'.

Core cut between 6:15 and 8:30 p.m., 2-28-61.

Net coring time 1 hour, 45 minutes.

From	To	Length	Description
4585	4592	7'	SAND - light gray, very fine, slightly shaley, tight, very light stain, good odor and fluorescence.
4592	4600	8'	SAND - light gray, fine to medium fine, clean, friable, trace of pink feldspar, excellent odor and excellent fluorescence.
4600	4602	2'	SAND - light gray, fine to medium fine, clean, slightly friable to tight, excellent odor and fluorescence.
4602	4613	11'	SAND - Light gray, fine to medium fine, clean, friable, excellent fluorescence and odor.
4613	4615	2'	SAND - Fine, clean to slightly argillaceous, friable, excellent odor and fluorescence, light gray.
4615	4633	18'	SAND - Light gray, fine to medium fine, clean, friable, excellent odor and fluorescence.
4633	4635	2'	SAND - Light gray, very fine, tight, well cemented, hard, fair odor, good laminated fluorescence.
4635	4636	1'	SAND - Light gray, very fine to fine, friable, clean, excellent fluorescence and excellent odor.
4636	4637	1'	SAND - Light gray, very fine, tight, well cemented, hard, fair odor, good laminated fluorescence.
4637	4638	1'	SAND - Light gray, very fine to fine, clean, friable, excellent fluorescence and odor.
4638	4638.5	0.5'	SAND - Light gray, very fine to fine, hard, tight, no show.
4638.5	4640	1.5'	SAND - Light gray, very fine to fine, clean, friable with numerous shale nodule inclusions, excellent fluores. and odor.
4640	4651	11'	SAND - Light gray, very fine to fine, clean, friable, excellent fluorescence and odor.
4651	4653	2'	SAND - Light gray, very fine to fine, friable, clean to slightly shaley, with 16" of scattered <u>no</u> show.
4653	4654	1'	SAND - Light gray, very fine to fine, clean, friable, with shale inclusions, excellent fluorescence and odor.
4654	4659	5'	SAND - Very fine to fine, friable, clean to slightly shaley, excellent odor and fluorescence, light gray.
4659	4660	1'	SAND - Light gray, very fine, clean, very hard, tight, well cemented, calcareous, no show.

CORE #2

Core #2: 4660-4735', cut and recovered 75'.

Finished cutting core 7:35 a.m. 3-1-61.

Net coring time 5 hrs. 49 min.

4660	4663	3'	SHALE- Light to dark gray, laminated, with very fine, tight silty sand. No show.
4663	4665	2'	SHALE- Black. No show.
4665	4670	5'	SHALE- Light to dark gray, laminated with very fine, tight, silty sand.
4670	4671	1'	SHALE- Black.
4671	4672½	1½'	SAND- Light gray, very fine, silty, very shaley, tight. No show.
4672½	4680	7½'	SAND- Light gray, very fine to fine, slightly friable, tight, slightly arkosic, good odor, good yellow-green fluorescence.
4680	4681	1'	SAND- As above with no show.
4681	4683	2'	SAND- Light gray, very fine, hard, tight, with shale laminations.
4683	4690	7'	SAND- Light gray, very fine, tight, well cemented, slightly argillaceous, no show.
4690	4691	1'	SAND- Light gray, very fine, tight, well cemented, slightly argillaceous, slightly laminated, no show.
4691	4702	11'	SAND- Light gray, very fine, tight, well cemented, slightly argillaceous, no show.
4702	4713	11'	SAND- Light gray, fine to medium fine, clean, friable, no show.
4713	4715	2'	SHALE- Black.
4715	4723	8'	SAND- Light gray, very fine, tight, hard, very shaley to shaley, slightly laminated, no show.
4723	4728	5'	SHALE- Light to dark gray, laminated with very thin silty-shaley sand stringers. No show.
4728	4731	3'	SHALE- Black, very dense, conchoidal fracture.
4731	4735	4'	SAND- Light gray, very fine to fine, tight, well cemented,

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[illegible]