Completion Report

9

Form 9-330

Budget Bureau No. 42-R355.1.
Approval expires 11-30-49.

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

LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

RECEIVED
MAY 27 1953
U.S. GEOLOGICAL SURVEY
SALT LAKE CITY, UTAH

DRY HOLE

LOG OF OIL OR GAS WELL

Company Three States Natural Gas Co. Address P. O. Box 730, Price, Utah

Lessor or Tract Hacatch Livestock Co. Field N.E. Mcofield State Utah

Well No. 1 Sec. 22 T. 12S R. 7E Meridian Salt Lake County Carbon

Location 2337 ft. {N. / S.} of S Line and 1001 ft. {E. / W.} of E Line of Sec 22 Elevation 8163 KB
(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 John Hayes

Date May 15, 1953 Title District Clerk

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

Commenced drilling October 11, 19 52 Finished drilling April 10, 19 53

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 From—	Perforated To—	Purpose
10-3/4	28#	None	Acme	140		Set at 162.06			Surf. Casing
10-3/4	40.5#	8 RD		22.06					
					161.00 to Float Collar				

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
10-3/4	477.06	275 Sacks	Howe-circ		
		Added 30 cement and 11 bridget for surface job			

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PLUGS AND ADAPTERS

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

TOOLS USED

Rotary tools were used from -0- feet to 7217 feet, and from ..... feet to ..... feet

Cable tools were used from ..... feet to ..... feet, and from ..... feet to ..... feet

DATES

....., 19..... Put to producing Dry Hole, 19.....

The production for the first 24 hours was ..... barrels of fluid of which ..... % was oil; ..... % emulsion; ..... % 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

D. W. Bodkin, Driller J. W. Robertson, Driller

D. W. Tracy, Driller ....., Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	322	322	Sand
322	371	49	Sand and Shale
371	500	129	Sand
500	618	118	Sandstone
618	690	72	Shale-Hard Rock
690	902	212	Sand
902	972	70	Sandstone
972	1,036	64	Sand-Shale
1,036	1,416	380	Sand
1,416	1,545	129	Sand-Shale
1,545	1,699	154	Sand
1,699	1,731	32	Sand-Shale
1,731	2,206	475	Sand
2,206	2,235	29	
2,235	2,237	2	Sand
2,237	2,244	7	
2,244	2,296	52	Sand
2,296	2,484	188	Sand-Shale
2,484	2,524	40	Sand
2,524	2,562	38	Sand-Shale
2,562	2,714	152	Sand
2,714	2,766	52	Sand-Shale
2,766	2,773	7	
2,773	2,805	32	Sand
2,805	2,947	142	Sand-Shale
2,947	2,997	50	Sand

FORMATION RECORD—Continued

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FROM—	TO—	TOTAL FEET	FORMATION
2,997	3,101	104	and-Shale
3,101	3,144	43	and-Shale Streaks
3,144	3,231	87	and-Lime
3,231	3,256	25	and-Shale
3,256	3,315	59	and
3,315	3,336	21	and-Shale
3,336	3,347	11	and
3,347	3,434	87	and
3,434	3,468	34	and-Trace Shale
3,468	3,490	22	and
3,490	3,640	150	and-Shale
3,640	3,679	11	
3,679	4,155	476	and
4,155	4,436	281	and-Shale
4,436	4,459	23	and
4,459	4,955	496	and-Shale
4,966	5,973	1,007	hale
5,973	6,375	402	and-Shale
6,375	6,387	12	and
6,387	6,448	61	and-Shale
6,448	6,478	30	and
6,478	6,481	3	and-Trace Shale
6,481	6,501	20	Lime & Shaley Sand-Shale
6,501	6,581	80	hale
6,581	6,660	79	[illegible]
6,660	6,734	134	hale
6,734	7,022	288	and-Shale
7,022	7,026	24	and-Shale-Bonnite Streak
7,026	7,100	74	and-Shale
7,100	7,125	25	and-Shale-Strangers Sand
7,125	7,163	38	rok-Shale
7,163	7,166	3	hale-Sandy Streaks
7,166	7,173	7	and-Shale
7,173	7,185	12	Crinoids-Green Shale-Lime Stone
7,185	7,244	59	and-Shale
7,244	7,256	12	hale & Sandy Streak
7,256	7,284	28	and-Shale & Sandy Streak
7,284	7,308	24	and-Shale
7,308	7,352	44	hale-and-Bonnite Streaks
7,352	7,454	102	hale-Sand
7,454	7,474	20	hale-Sand-Streaks Lime
7,474	7,527	53	hale-Limestone
7,527	7,563	36	hale-Lime Streaks
7,563	7,573	10	and-Shale-Limestone
7,573	7,597	24	and-Shale
7,597	7,605	8	hale-Sandy Shale
7,605	7,613	8	and-Shale
7,613	7,623	10	hale
7,623	7,640	17	hale-Sand
7,640	7,653	13	hale-Trace Lime
7,653	7,690	37	hale-Lime-Sand Streaks
7,690	7,716	26	hale-Sand-Limestone
7,716	7,760	44	hale-Sand-Lime Streaks
7,760	7,829	[illegible]	and-Chalcedony.
7,829	7,832	3	hirt-Sand
7,832	7,917	Coring	
7,917			Total Depth

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16—43004-1 U. S. GOVERNMENT PRINTING OFFICE

HISTORY OF OIL OR GAS WELL

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

Size	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated From—	Perforated To—	Purpose

CASING RECORD

NOTE: See Attached Core and Drill Stem Tests Descriptions.

No. 1 from ..... to ..... No. 3 from ..... to .....

Plugged Well on April 11, 1953

Plugged well with cement plugs as follows:

No. 2 from ..... to ..... No. 4 from ..... to .....

6000' to 5950' - 50 Sacks Cement

4000' to 3900' - 100 Sacks Cement

2850' to 2750' - 100 Sacks Cement

1950' to 1900' - 50 Sacks Cement

50' - To Top of 10-3/4" Surface Casing.

4-1/2" Drill Pipe Marker placed in Top of Surface Casing.

IMPORTANT WATER SANDS

No. 1 from ..... to ..... No. 3 from ..... to .....

No. 2 from ..... to ..... No. 4 from ..... to .....

(Denote gas by G)

Commenced drilling ..... 19.. Completed drilling ..... 19..

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

Date ..... Title .....

Signed .....

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.

Location ..... ft. {S. / N.} of ..... line and ..... ft. {E. / W.} of ..... line of ..... Elevation ..... (Derrick floor relative to sea level)

Well No. ..... Sec. ..... T. ..... R. ..... Meridian ..... County .....

Lessor or Tract ..... Field ..... State .....

Company ..... Address .....

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Wasatch Livestock Co. #1, Section 22, T12 S., R. 7 E

Core #1	6000-6016	Recovered 16 feet
	6000-6000.7	Sandstone - very hard, very fine grained, light gray, calcareous, well cemented, tight, (5 to 10% porosity), vertical fractures, no fluorescence.
	6000.7-6001.3	Shale - medium hard, greenish gray, sandy and silty, pyritic, has wavy bedding and flow structure, non-calcareous, no fluorescence, probably bentonitic.
	6001.3-6004.7	Shale - medium hard, light gray, very silty, non-calcareous, has a vertical streak 3/8" wide of micro-crystalline pyrite.
	6004.7-6006.5	Shale - medium hard, black very carbonaceous, fossiliferous, calcareous.
	6006.5-6010.2	Shale - as 6001.3-6004.7
	6010.2-6016	Sandstone - very hard, very very fine grained, light gray, glauconitic, very tight calcareous, small vertical fractures.
Core #2	6016-6037	Recovered all 21 feet Pulled core 10:30 p.m. 1-8-53
	6016-6021	Sandstone - as above, large vertical fractures at 6020, very slight spotted yellow fluorescence.
	6021-6021.6	Sandstone - very hard very fine grained, medium gray, glauconitic, calcareous, with inclusions and a few 1 mm. streaks of black, very carbonaceous, shale has some vuggular porosity.
	6021.6-6021.9	Shale - medium hard, black, very carbonaceous slightly calcareous, conchoidal fractures, exhibits well developed slickensides.
	6021.9-6029	Interbedded Sandstone & Shale - Sandstone is very hard, very fine grained to very very fine grained, medium gray calcareous, tight with no binible porosity. Shale is medium hard, black slightly calcareous. Occurs in streaks showing flow structure. Both sandstone and shale have many fractures filled with calcite shale is slightly micaceous and has small inclusions of sandstone.
	6029-6030	Shale - as 6021.6-6021.9
	6030-6032	Interbedded Sandstone & Shale - as above.
	6032-6034.5	Shale - very hard, black, silty, calcareous.
	6034.5-6037	Sandstone - very hard, fine grained, light gray, "salt & pepper", tight, broken very badly, spotted yellow-white fluorescence, calcite lined fractures.

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Core #3	6037-6048.5	Quit drilling-Waiting on Johnston tester before starting out with core 1-9-53. Core pulled at 9:00 p.m. Recovered samples of all 11.5 feet although the whole core was badly shattered and it is difficult to tell if all of it was recovered.
	6037-6039	Sandstone - very hard, fine grained, light gray calcareous, "salt & pepper" quartz grains tightly cemented, badly fractured, spotted white fluorescence.
	6039-6042	Sandstone - very hard, fine grained-very fine grained, medium gray, tight, calcareous pyritic, glauconitic, with seams and inclusions of shiny waxy coal. Bleeding gas from small fractures, spotted slightly white fluorescence.
	6045-6048.5	Sandstone - very hard, fine grained, calcareous, "salt & pepper" tight, glauconitic, light gray, abundant white fluorescence.
Core #4	6048.5-6099	Recovered all 51 feet Pulled 2:00 a.m. 1-12-53. Began coring 5:34 a.m. 1-11-53. Gas readings varied from 3 mv. at beginning to 22 mv. at 6062 and averaged about 10 from there to 99.
	6048.5-6052	Sandstone - very hard, very fine grained, light gray, calcareous, glauconitic, with many vertical fractures, very tight, no fluorescence.
	6052-6057	Shale - medium hard, dark gray, non-calcareous with waxy slickensides. Some fractures in lower part.
	6057-6060	Sandstone - very hard, very very fine grained, medium gray, non-calcareous, vertical fractures lined with calcites.
	6060-6064	Sandstone - as above, bleeding gas.
	6064-6070	Sandstone - very hard, very fine grained, medium gray, calcareous, with many thin very carbonaceous shale laminae. No fractures, no fluorescence.
	6070-6077	Sandstone - very hard, very fine grained, very tightly cemented, light gray, calcareous, glauconitic, slightly carbonaceous, some vertical fractures.
	6077-6080	Shale - medium hard, black, very carbonaceous, non-calcareous.
	6080-6096	Shale - medium hard, dark green, non-calcareous, very bituminitic 6084-6088.
	6096-6099	Sandstone - very hard, very fine grained, light gray, slightly calcareous, tight with vertical fractures, no fluorescence
Core #5	6099-6109	Recovered all 10 feet. Began coring at 6:40 a.m. 1-12-53 Pulled core at 3:30 p.m. 1-12-53. Bit plugged.

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6099-6104	Sandstone	- as above except tighter.
6104-6106	Shale	- hard, black, slightly calcareous, sandy in streaks, very carbonaceous.
6106-6109	Sandstone	- very hard, light gray, very fine grained, slightly calcareous, some vertical fractures, no fluorescence.
#6 6109-6157	Recovered all 48 foot. Commenced coring 6:20 a.m. 1-16-53 Pulled core 3:00 a.m. 1-17-53	
6109-6110	Sandstone	- very hard, light gray, very fine grained, tight calcareous, glauconitic with black shale inclusions, slightly vertical fractures, no fluorescence.
6110-6111	Shale	- medium hard, black, very carbonaceous with thin light gray sand stringers.
6111-6115	Sandstone	- as above except with particles of coal.
6115-6151	Shale	- medium hard, gray to green to black, non-calcareous, very bentonitic.
6151-6157	Shale	- hard, grayish green, silty, non-calcareous, bentonitic.
#7 6157-6203	Recovered all 46 foot. Commenced coring 12:25 p.m. 1-17-53 Pulled core 11:00 a.m. 1-18-53	
6157-6159	Shale	- medium hard, dark green, non-calcareous, very bentonitic, with a few black shale inclusions.
6159-6162	Shale	- as above except no inclusions.
6162-6165	Shale	- as above except greenish black.
6165-6167	Shale	- very hard, dark green, very sandy and silty, non-calcareous.
6167-6168	Shale	- medium hard, dark green to black, silty, non-calcareous, pyritic with vertical fractures.
6168-6171	Shale	- medium hard, dark green, bentonitic, with small colites (?) of dark brown-black slightly hard non-calcareous material.
6171-6176	Shale	- as above but with many more colites.
6176-6181	Shale	- dark gray, medium hard, non-calcareous with carbonaceous inclusions.
6182-6192	Shale	- medium hard, dark green, very bentonitic, non-calcareous, with carbonaceous inclusions.
6192-6198	Shale	- as above - less bentonitic.

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	6199-6200	Shale	- hard, light green, very silty and sandy, calcareous, bentonitic.
	6200-6201	Shale	- medium hard, dark green, very bentonitic, non-calcareous.
	6201-6203	Shale	- medium hard, dark gray, very bentonitic, silty, non-calcareous.
Core #8	6203-6243	Recovered top 15 feet only Commenced coring 3:56 p.m. 1-18-53 Pulled core 11:00 a.m. 1-19-53	
	6203-6205	Shale	- as above
	6205-6207	Shale	- hard, light green, very silty and sandy, slight calcareous with calcite filled fractures.
	6207-6209	Shale	- medium hard, dark gray, non-calcareous, slightly bentonit
	6209-6211	Sandstone	- very hard, very very fine grained shaley, medium gray, light, glauconitic, non-calcareous.
	6214-6218	Sandstone	- as above, except less shaley, vertical fractures.
		Remainder of core not recovered.	
Core #9	6243-6288	Recovered all 45 feet. Commenced coring 6:00 p.m. 1-21-53 Pulled core 12:00 noon 1-22-53	
	6243	Shale	- hard, dark green, silty and sandy, slightly calcareous.
	6243-6244	Shale	- hard, dark green, silty and sandy, slightly calcareous, bentonitic with a few carbonaceous inclusions.
	6244-6257	Shale	- hard, dark green, silty, non-calcareous, bentonitic with a few carbonaceous inclusions.
	6257-6260	Shale	- medium hard, dark gray to black, carbonaceous, bentonitic non-calcareous.
	6260-6266	Shale	- medium hard, light green, bentonitic, non-calcareous with carbonaceous inclusions.
	6266-6267.5	Shale	- non-calcareous, medium hard, dark gray, very bentonitic,
	6267.5-6273	Shale	- very hard, medium gray, very sandy and silty, slightly calcareous
	6273-6274.5	Shale	- medium hard, dark gray, silty, carbonaceous, non-calcareo
	6274.5-6286	Sandstone	- as above except has many laminae of black very carbonaceo shale.
Core #10	6290-6305	Recovered 15 feet	
		Sandstone	- all very hard, light to medium gray very fine grained, calcareous, glauconitic. No fluorescent fair porosity, horizontal and some vertical fractures.

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ore #11	6305-6315	Recovered 10 foot
		Sandstone - same sandstone as above except fine grain with some carbonaceous laminae and crossbedded.
ore #12	6320-6337	Recovered 9 foot
		Shale - hard, dark gray, silty, non-calcareous, carbonaceous, bentonitic.
ore #13	6337-6343	Recovered 5 feet
	6337-6341	Shale - as above
	6341-6343	Sandstone - very hard, very fine grained, medium gray, very silty and shaley, calcareous, with many vertical fractures lined with calcite.
ore #14	6346-6349	Recovered 3 foot
	6346-6347	Shale - medium hard black to gray carbonaceous
	6347-6349	Sandstone - very hard, medium gray, very fine grained, calcareous
ore #15	6349-6361	Recovered 12 foot
		Sandstone - very hard, very fine grained, medium gray, calcareous, cross bedded with carbonaceous laminae and many vertical fractures lined with calcite.
ore #16	6361-6371	Recovered 8 foot
	6361-6365	Sandstone - very hard, very fine grained, to medium grain, medium to dark gray, carbonaceous, calcareous, glauconitic, with traces of coal.
	6365-6369	Shale - medium hard, black, very carbonaceous
ore #17	6795-6835	Recovered 40 foot
	6795-6812.5	Sandstone - hard, fine grained, light gray, calcareous, glauconitic, pyritic, very tight, with pieces of gilsonite. Some vertical and horizontal fractures. No fluorescence.
	6812.5-6813	Bentonite - white to light gray, soft, plastic, slightly sandy, micaceous.
	6813-6815	Sandstone - hard, very fine grained, dark gray, carbonaceous, calcareous, glauconitic.
	6815-6818	Shale - medium hard, dark green to dark gray, bentonitic, non-calcareous.
	6818-6822	Siltstone - very hard, medium gray, glauconitic, calcareous
	6822-6826	Shale - medium hard, black, very carbonaceous, calcareous.
	6826-6835	Interbedded Shale & Siltstone - shale as above. Siltstone is very hard, carbonaceous, very calcareous, medium gray with calcite filled fractures

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Core #18	6835-6865	Recovered 30 foot
	6835-6836	Shale & Siltstone - As above
	6836-6837.5	Sandstone - hard, dark gray, very fine grained, very carbonaceous, slightly calcareous, with thin black shale laminae and inclusions.
	6837.5-6864	Sandstone - very hard, light gray to medium gray, calcareous, glauconitic, with specks of black shale. Spotted yellow & white fluorescence
	6864-6865	Shale - hard, dark gray, carbonaceous, sandy, bentonitic, non-calcareous.
Core #19	6867-6890	Recovered 23 foot
	6867-6887	Shale - medium hard, dark gray, very sandy and silty to soft, very carbonaceous, black, with horizontal fractures lined with calcite.
	6887-6890	Siltstone - very hard, medium gray, shaley, slightly calcareous, carbonaceous, with many horizontal and vertical fractures
Core #20	6890-6897 6890-6897	Recovered 7 foot Siltstone - very hard, medium gray to greenish gray, very shaley. Many vertical fractures.
Core #21	6897-6927	Recovered 30 foot
	6897-6899	Sandstone - hard light gray to dark gray calcareous, carbonaceous, pyritic, with the thin veins of coal and calcite filled fractures up to ½ inch thick.
		Top Morrison at 6899
	6899-6927	Shale - hard dark green, gray bentonitic variegated, some green mottled with reddish brown, sandy, glauconitic in part, non-calcareous, some calcite filled vertical fractures.
Core #22	7832-7882	Recovered 4 foot only
		Conglomerate - very hard, light gray to pink, composed of chert pebbles up to 1-1/2 inch diameter.
Core #23	7882-7915 TD	Full Recovery
		Shale - medium soft, dark reddish-brown non-calcareous, with chert pebbles and streaks of hematite.

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DRILL STEM TESTS ——— Wasatch Livestock Co. #1

ST # 1 3439-3528 Tool open 3 hours 7 minutes. Shut in 30 minutes. Recovered 180 feet of gas cut mud and 1240 feet of gas cut fresh water. Fair blow throughout test. No gas to surface.

Hydrostatic Pressure 1750 pounds
Shut in Pressure 1125 pounds
Initial Flowing Pressure 300 pounds
Final Flowing Pressure 875 pounds

This was a test of a section of the Ivory sandstone which had intermittent high methane readings on the mud logging unit.

ST # 2 6010-6048 Tool open 1 hour. Shut in 1 hour. Recovered 585' gas cut mud. Strong blow when tool opened, dead in 1 hour. No gas to surface.

Hydrostatic Pressure 3000 pounds.

Bomb plugged. No true flowing pressure or shut in pressure. This was a test of the top part of the Ferron Sandstone which was topped in the well at 5992 feet.

ST # 3 6005-6109 Tool open 4 hours. Shut in 30 minutes. Gas to surface in 9 minutes. Burned with 8 foot flame. Volume too small to register on manometer filled with water. Recovered 180 feet mud and 2340 feet fresh water.

Hydrostatic Pressure	2840 pounds
Initial Flow Pressure	364 pounds
Final Flow "	1375 pounds
Shut in "	1328 pounds

ST # 4 6210-6288 Top of 6th Ferron Sand. Tool open 2 hours. Shut in 1 hour. No gas to Surface. Recovered 30' mud and 941 feet gas cut fresh water. Good air blow throughout test.

Hydrostatic Pressure	3048 Pounds
Initial Flow	75 Pounds
Final "	452 Pounds
Shut in "	1710 Pounds

ST # 5 6350-6372 Top of 7th Ferron Sand. Tool open 4 hours. Shut in one hour. Fair blow throughout test. No gas to surface. Recovered 1100 feet fresh water.

Hydrostatic Pressure	3025 Pounds
Initial Flow "	60 Pounds
Final " "	490 Pounds
Shut in "	1680 Pounds

ST # 6 Dakota Sandstone
6807'-6865' Tool open 2 hours. Shut in 1 hour. Fair blow throughout test. No gas to surface.

Hydrostatic Pressure	3200 Pounds
Initial Flowing Pressure	65 Pounds
Final " "	428 Pounds
Shut in Pressure	1900 Pounds

Recovered 1000' slightly gas cut fresh water. Gas in water was all methane.

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Wasatch Livestock Co. #1, Section 22, T.12 S., R 7 E

DST # 7 Lower Morrison Sand

7818-7914 Tool open 7 hours. Shut in 1 hour. Good initial blow, weak in 7 hours. Recovered 5037' fresh water.

Initial Flowing Pressure	295 Pounds
Final Flowing Pressure	2190 Pounds
Shut in Pressure	2400 Pounds
Hydrostatic Pressure	3675 Pounds

Ferron Sandstone

DST # 8 6281-6324 Tool open 2 hours. Shut in 1 hour. Strong Blow. Recovered 3615' fresh water.

Initial Flowing Pressure	35 Pounds
Final Flowing Pressure	1605 Pounds
Shut in Pressure	1765 Pounds
Hydrostatic Pressure	2942 Pounds

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