

**GENERAL AMERICAN OIL COMPANY OF TEXAS**

21  
DISTRICT OFFICE  
BOX 412  
LOCO HILLS, NEW MEXICO

December 17, 1964

Mr. A. L. Porter  
Secretary-Director  
New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico

W.F. 111  
Dec 15

Dear Sir:

Pursuant to Section 5 of Rule 701-E, General American Oil Company of Texas hereby makes application for administrative approval to convert its Keely C No. 37 well to water injection. This well is within the boundaries of an injection project approved by Commission Order No. R-2324 on October 3, 1962.

Pertinent data concerning Keely C No. 37 is as follows:

General American Oil Company of Texas Keely C #37 located 1295 feet from the South Line and 2615 feet from the East Line of Section 25, Township 17 South, Range 29 East, N. M. P. M., Eddy County, New Mexico. This well was completed in the Grayburg-Jackson formation and put on production August 29, 1950. To date this well has made 38,576 barrels of oil.

Water will be injected into the open hole interval from 3069 to 3228. The water injected will be purchased from the Caprock Water Company and will be fresh water from their Red Lake Basin area, however the water is not potable. The volume to be injected should not exceed 1000 barrels per day.

Keely C #37 began receiving response in April, 1964 when its fluid level began to rise after being shut in since mid 1963. By July, 1964 the fluid level was at the surface and the well had to be capped. Currently the well is carrying a shut in pressure of 350# and the fluid is all water.

December 17, 1964

Page 2

Enclosed herewith are the following as required by Rule 701:

1. Plat depicting location of Keely C #37 and all wells within a radius of two miles showing the formation from which they are producing or have produced.
2. Forms C-116 listing test before and after response.
3. Well record on Keely C #37 showing all formations encountered, casing strings, etc.
4. Schematic diagram of Keely C #37 showing casing strings, cement tops, approximate packer setting, etc.

A Copy of this application along with all enclosures is being sent to the office of the State Engineer. Since there is current injection into Keely C #25 and since there are no direct offset operators no outside operators are being notified.

Respectfully submitted

GENERAL AMERICAN OIL COMPANY OF TEXAS

By: R. J. Heard  
R. J. Heard  
District Superintendent

RJH/rlc  
Enclosures

NEW MEXICO OIL CONSERVATION COMMISSION

GAS-OIL RATIO REPORT

OPERATOR General American Oil Company of Texas POOL Grayburg-Jackson

ADDRESS P. O. Box 416, Loco Hills, New Mexico MONTH OF \_\_\_\_\_, 19 64

SCHEDULED TEST \_\_\_\_\_ COMPLETION TEST \_\_\_\_\_ SPECIAL TEST X (Check One)

(See Instructions on Reverse Side)

Lease	Well No.	Date of Test	Producing Method	Choke Size	Test Hours	Daily Allowable Bbls.	Production During Test			GOR Cu. Ft. Per Bbl.
							Water Bbls.	Oil Bbls.	Gas MCF	
Keely C	37	4-11-63	Pump		24		0	2		
		5-4-63	Pump		24		13	12		
		5-18-63	Pump		24		12	3		
		6-63	Shut-in							
		1-64	Fluid Level		2320 feet					
		7-64	Fluid Level		Surface					
		12-64	Fluid Level		Surface Pressure 350#					

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60 degrees F. Specific gravity base will be 0.60.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission. In accordance with Rule 301 and Appropriate Pool Rules.

(I certify that the information given is true and complete to the best of my knowledge.)

Date \_\_\_\_\_

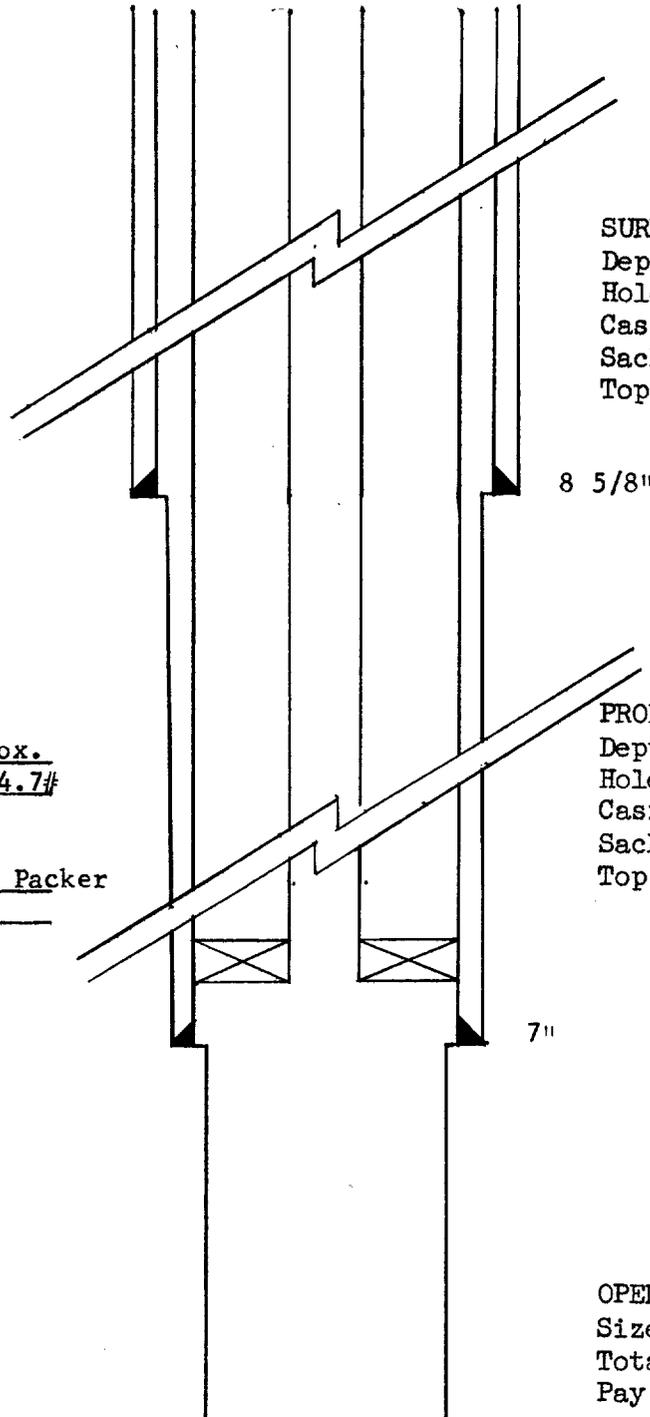
General American Oil Company of Texas  
Company

By R. J. Heard R. J. Heard

District Superintendent  
Title

GENERAL AMERICAN OIL COMPANY OF TEXAS  
SCHEMATIC DIAGRAM OF  
PROPOSED INJECTION WELL

Lease and Well No.: Keely C #37  
 Location: 1295 feet from South line and  
2615 feet from East line of  
 Section 25 TWP 17-S RGE 29-E  
 N.M.P.M. Eddy County, New Mexico



SURFACE CASING  
 Depth Set: 485'  
 Hole Size: 10"  
 Casing Size & Wt.: 8 5/8" 24 + 28#  
 Sacks Cement: 75  
 Top of Cement: 75' Approx.

8 5/8"

PRODUCTION CASING  
 Depth Set: 3069'  
 Hole Size: 8"  
 Casing Size & Wt.: 7" 20#  
 Sacks Cement: 100  
 Top of Cement: 2150' approx.

7"

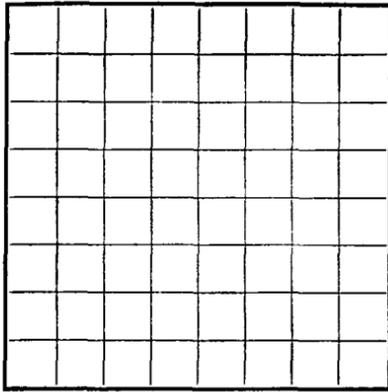
OPEN HOLE  
 Size: 6"  
 Total Depth: 3228'  
 Pay Zone: 3188-3228'

TUBING  
 Depth Set: 3020' approx.  
 Size, Wt. & Type: 2" EUE 4.7#

PACKER  
 Make & Type: Totem Tension Packer  
 Depth Set: 3020' approx.

**ILLEGIBLE**

U. S. LAND OFFICE Las Cruces  
 SERIAL NUMBER 028784 (c)  
 LEASE OR PERMIT TO PROSPECT Keely C



LOCATE WELL CORRECTLY

UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 GEOLOGICAL SURVEY

**LOG OF OIL OR GAS WELL**

Company General American Oil Co. of Texas Address P. O. Box 416, Loco Hills, N. M.  
 Lessor or Tract Keely C Field Grayburg-Jackson State New Mexico  
 Well No. 37 Sec. 25 T. 17S R. 29E Meridian N.M.P.M. County Eddy  
 Location 1295 ft. N. of S. Line and 2615 ft. W. of E. Line of Section 25 Elevation 3585'  
(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 R. J. Heard  
 Title District Superintendent

Date December 17, 1964

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

Commenced drilling July 20, 1950 Finished drilling August 27, 1950

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

No. 1, from 1405 to 1414 No. 4, from 2646 to 2656  
 No. 2, from 1643 (g) to          No. 5, from 3150 to 3154  
 No. 3, from 2626 to 2635 No. 6, from 3156 to 3157  
3188 3193

**IMPORTANT WATER SANDS**

No. 1, from 313 to          No. 3, from 3213 to 3228  
 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-	
8-5/8"	28.4	4	Lucas	478'	None	Surface casing			Surface casing
7"	20.0	4	Lucas	3066'	None	Production casing			Production casing

**MUDDING AND CEMENTING RECORD**

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8-5/8"	485'	50	Pump & Plug	Heavy	To Surface
7"	3069'	100	Pump & Plug	Heavy	To Surface

**PLUGS AND ADAPTERS**

Heaving plug—Material          Length          Depth set           
 Adapters—Material          Size         

**ACIDIZING RECORD**

Size	Shell used	Chemical	Quantity	Date	Depth shot treated	Depth cleaned out
		20% HCL	500 gal	8-28-50	50 (Wash)	
		20% HCL	1670 gal	8-28-50	3111-3228'	
		20% HCL	3500 gal	8-29-50	3069-3228'	

**TOOLS USED**

Rotary tools were used from          feet to          feet, and from          feet to          feet  
 Cable tools were used from 0 feet to 3228 feet, and from          feet to          feet

**DATES**

December 17, 1964 Put to producing August 29, 1950  
 The production for the first 24 hours was 265 barrels of fluid of which 100 % was oil;          % emulsion;          % water; and          % sediment.  
 Gravity, 37° API  
 If gas well, cu. ft. per 24 hours          Gallons gasoline per 1,000 cu. ft. of gas           
 Rock pressure, lbs. per sq. in.         

**EMPLOYEES**

Harlan Johnson, Driller Clay Rook, Driller  
L. W. Ledbetter, Driller Don T. Thorp, Driller

**FORMATION RECORD**

LOG	LOG	TOTAL FEET	FORMATION
5880	5880	12	CELLAR
5881	5881	12	MUD
5882	5882	125	Sand & Red Mud
5883	5883	100	Red Bed & Sand
5884	5884	1095	Anhy & Gyp
5885	5885	100	Red Bed
5886	5886	170	Red Bed
5887	5887	515	Gyp
5888	5888	130	Red Bed
5889	5889	330	Red Bed & Gyp
5890	5890	127	Red Bed
5891	5891	108	Red Bed
5892	5892	420	Red Bed
5893	5893	320	Anhy
5894	5894	350	Anhy & Red Shale
5895	5895	390	Anhy
5896	5896	210	Anhy & Red Shale
5897	5897	105	Broken Anhy
5898	5898	345	Anhy & Red Shale
5899	5899	330	Anhy
5900	5900	145	Anhy & Shale
5901	5901	360	Anhy
5902	5902	145	Anhy & Red Sandy Shale
5903	5903	215	Anhy
5904	5904	24	Anhy
5905	5905	11	Anhy
5906	5906	35	Anhy & Shale

FORMATION RECORD—Continued

(OAFB)

16-48094-2

FROM	TO	TOTAL FEET	FORMATION
3010	3092	82	...
3000	3010	11	...
2995	2975	20	Broken Anhy
2990	2970	20	Red Sand
2985	2960	25	Anhy & Shale
2980	2940	40	Anhy & Shale
2975	2920	55	Anhy & Shale
2970	2900	70	Anhy & Shale
2965	2880	85	Anhy & Shale
2960	2860	100	Anhy & Shale
2955	2840	115	Anhy & Shale
2950	2820	130	Anhy & Shale
2945	2800	145	Anhy & Shale
2940	2780	160	Anhy & Shale
2935	2760	175	Anhy & Shale
2930	2740	190	Anhy & Shale
2925	2720	205	Anhy & Shale
2920	2700	220	Anhy & Shale
2915	2680	235	Anhy & Shale
2910	2660	250	Anhy & Shale
2905	2640	265	Anhy & Shale
2900	2620	280	Anhy & Shale
2895	2600	295	Anhy & Shale
2890	2580	310	Anhy & Shale
2885	2560	325	Anhy & Shale
2880	2540	340	Anhy & Shale
2875	2520	355	Anhy & Shale
2870	2500	370	Anhy & Shale
2865	2480	385	Anhy & Shale
2860	2460	400	Anhy & Shale
2855	2440	415	Anhy & Shale
2850	2420	430	Anhy & Shale
2845	2400	445	Anhy & Shale
2840	2380	460	Anhy & Shale
2835	2360	475	Anhy & Shale
2830	2340	490	Anhy & Shale
2825	2320	505	Anhy & Shale
2820	2300	520	Anhy & Shale
2815	2280	535	Anhy & Shale
2810	2260	550	Anhy & Shale
2805	2240	565	Anhy & Shale
2800	2220	580	Anhy & Shale
2795	2200	595	Anhy & Shale
2790	2180	610	Anhy & Shale
2785	2160	625	Anhy & Shale
2780	2140	640	Anhy & Shale
2775	2120	655	Anhy & Shale
2770	2100	670	Anhy & Shale
2765	2080	685	Anhy & Shale
2760	2060	700	Anhy & Shale
2755	2040	715	Anhy & Shale
2750	2020	730	Anhy & Shale
2745	2000	745	Anhy & Shale
2740	1980	760	Anhy & Shale
2735	1960	775	Anhy & Shale
2730	1940	790	Anhy & Shale
2725	1920	805	Anhy & Shale
2720	1900	820	Anhy & Shale
2715	1880	835	Anhy & Shale
2710	1860	850	Anhy & Shale
2705	1840	865	Anhy & Shale
2700	1820	880	Anhy & Shale
2695	1800	895	Anhy & Shale
2690	1780	910	Anhy & Shale
2685	1760	925	Anhy & Shale
2680	1740	940	Anhy & Shale
2675	1720	955	Anhy & Shale
2670	1700	970	Anhy & Shale
2665	1680	985	Anhy & Shale
2660	1660	1000	Anhy & Shale
2655	1640	1015	Anhy & Shale
2650	1620	1030	Anhy & Shale
2645	1600	1045	Anhy & Shale
2640	1580	1060	Anhy & Shale
2635	1560	1075	Anhy & Shale
2630	1540	1090	Anhy & Shale
2625	1520	1105	Anhy & Shale
2620	1500	1120	Anhy & Shale
2615	1480	1135	Anhy & Shale
2610	1460	1150	Anhy & Shale
2605	1440	1165	Anhy & Shale
2600	1420	1180	Anhy & Shale
2595	1400	1195	Anhy & Shale
2590	1380	1210	Anhy & Shale
2585	1360	1225	Anhy & Shale
2580	1340	1240	Anhy & Shale
2575	1320	1255	Anhy & Shale
2570	1300	1270	Anhy & Shale
2565	1280	1285	Anhy & Shale
2560	1260	1300	Anhy & Shale
2555	1240	1315	Anhy & Shale
2550	1220	1330	Anhy & Shale
2545	1200	1345	Anhy & Shale
2540	1180	1360	Anhy & Shale
2535	1160	1375	Anhy & Shale
2530	1140	1390	Anhy & Shale
2525	1120	1405	Anhy & Shale
2520	1100	1420	Anhy & Shale
2515	1080	1435	Anhy & Shale
2510	1060	1450	Anhy & Shale
2505	1040	1465	Anhy & Shale
2500	1020	1480	Anhy & Shale
2495	1000	1495	Anhy & Shale
2490	980	1510	Anhy & Shale
2485	960	1525	Anhy & Shale
2480	940	1540	Anhy & Shale
2475	920	1555	Anhy & Shale
2470	900	1570	Anhy & Shale
2465	880	1585	Anhy & Shale
2460	860	1600	Anhy & Shale
2455	840	1615	Anhy & Shale
2450	820	1630	Anhy & Shale
2445	800	1645	Anhy & Shale
2440	780	1660	Anhy & Shale
2435	760	1675	Anhy & Shale
2430	740	1690	Anhy & Shale
2425	720	1705	Anhy & Shale
2420	700	1720	Anhy & Shale
2415	680	1735	Anhy & Shale
2410	660	1750	Anhy & Shale
2405	640	1765	Anhy & Shale
2400	620	1780	Anhy & Shale
2395	600	1795	Anhy & Shale
2390	580	1810	Anhy & Shale
2385	560	1825	Anhy & Shale
2380	540	1840	Anhy & Shale
2375	520	1855	Anhy & Shale
2370	500	1870	Anhy & Shale
2365	480	1885	Anhy & Shale
2360	460	1900	Anhy & Shale
2355	440	1915	Anhy & Shale
2350	420	1930	Anhy & Shale
2345	400	1945	Anhy & Shale
2340	380	1960	Anhy & Shale
2335	360	1975	Anhy & Shale
2330	340	1990	Anhy & Shale
2325	320	2005	Anhy & Shale
2320	300	2020	Anhy & Shale
2315	280	2035	Anhy & Shale
2310	260	2050	Anhy & Shale
2305	240	2065	Anhy & Shale
2300	220	2080	Anhy & Shale
2295	200	2095	Anhy & Shale
2290	180	2110	Anhy & Shale
2285	160	2125	Anhy & Shale
2280	140	2140	Anhy & Shale
2275	120	2155	Anhy & Shale
2270	100	2170	Anhy & Shale
2265	80	2185	Anhy & Shale
2260	60	2200	Anhy & Shale
2255	40	2215	Anhy & Shale
2250	20	2230	Anhy & Shale
2245	0	2245	Anhy & Shale

LORD WARR

HISTORY OF OIL OR GAS WELL

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

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 balling.

December 17, 1964

Mr. Frank Irby  
Office of State Engineer  
Santa Fe, New Mexico

Dear Sir:

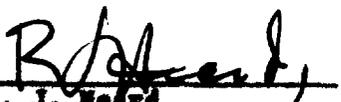
Attached is a copy of the application which General American Oil Company of Texas has filed with the New Mexico Oil Conservation Commission requesting administrative approval for the conversion of its Kealy C No. 37 well to water injection.

We have enclosed copies of all exhibits furnished the Commission in support of our request. If any additional data is required please let us know.

If your office has no objection to the conversion of this well please so notify the Commission.

Very truly yours,

GENERAL AMERICAN OIL COMPANY OF TEXAS

By:   
R. J. Heard  
District Superintendent

RJH/rjc  
Encis.

December 17, 1924

Mr. Frank Troy  
Office of State Engineer  
Sears 701, New Mexico

Dear Sir:

Attached is a copy of the application which General American Oil Company of Texas has filed with the New Mexico Oil Conservation Commission requesting administrative approval for the conversion of the Keely C No. 27 well to water injection.

We have enclosed copies of all exhibits furnished the Commission in support of our request. If any additional data is required please let us know.

If your office has no objection to the conversion of this well please so notify the Commission.

Very truly yours,

GENERAL AMERICAN OIL COMPANY OF TEXAS

By:   
E. J. Heild  
District Superintendent

ENCL  
Encs.



STATE OF NEW MEXICO  
STATE ENGINEER OFFICE  
SANTA FE

S. E. REYNOLDS  
STATE ENGINEER

December 30, 1964

ADDRESS CORRESPONDENCE TO:  
STATE CAPITOL  
SANTA FE, N. M.

JAN 4 1965

Mr. A. L. Porter, Jr.  
Secretary-Director  
Oil Conservation Commission  
Santa Fe, New Mexico

Dear Mr. Porter:

Reference is made to the application of General American Oil Company of Texas which seeks administrative approval to convert its Keely C No. 37 well in the Northeast Loco Hills Cooperative Flood to water injection. The data set forth on the diagrammatic sketch of the proposed injection well gives the top of the cement surrounding the 7 inch casing and the setting of the tension packer on the 2 inch tubing at approximate levels.

It appears that no threat of contamination to the fresh waters which may exist in the area will occur, provided the packer on the end of the tubing is set well below the top of the cement surrounding the 7 inch casing. Therefore, this office offers no objection to the granting of the application if the tubing and packer are set as provided above.

Yours truly,

S. E. Reynolds  
State Engineer

By *Frank E. Irby*  
Frank E. Irby  
Chief  
Water Rights Div.

FEI/ma  
cc-General Amer. Oil Co. of Tex.  
F. H. Hennighausen

LARGE FORMAT  
EXHIBIT HAS  
BEEN REMOVED  
AND IS LOCATED  
IN THE NEXT FILE