

(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Land Office Las Cruces  
Lease No. 057210  
Unit \_\_\_\_\_

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL <u>GAS INPUT WELL</u>	<input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

BAISH "B" LEASE Tulsa, Oklahoma, November 18, 1946  
Gas Input  
/ Well No. 30 is located 2600 ft. from N line and 25 ft. from E line of sec. 27  
SW/4 NW/4 Sec 27 17S 32E N.M.P.M.  
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)  
Maljamar Lea New Mexico  
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 3287.2 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

We propose to drill this location to an approximate total depth of 4225'. We also plan on cementing 7" O.D. 25# casing 30' above the top of the 6th zone. Well to be drilled by Marshall & Smith, Artesia, New Mexico. See attached plat prepared by Registered Professional Engineer and Land Surveyor.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Kewanee Oil Company

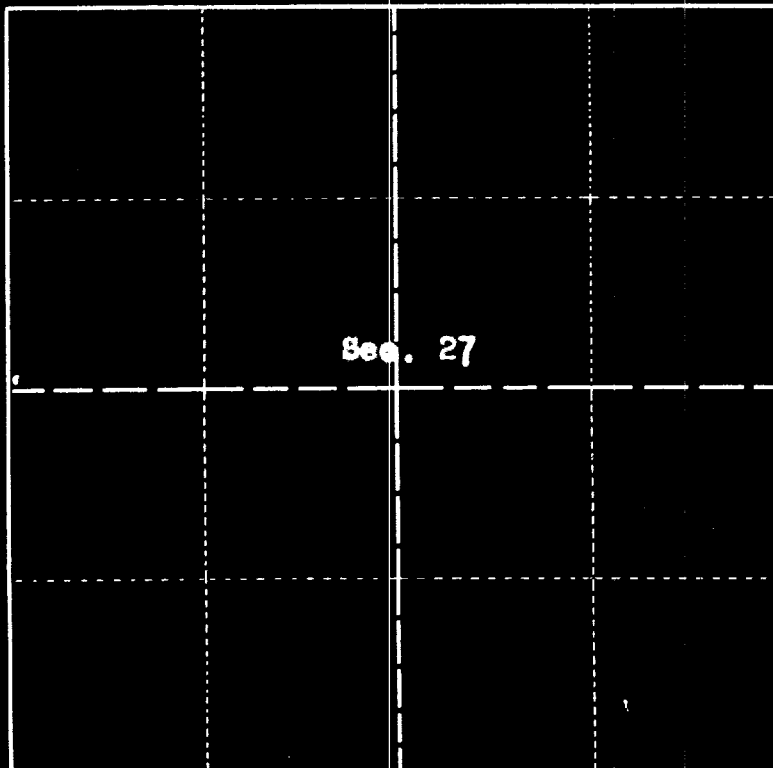
Address P. O. Box 729

Tulsa 1, Oklahoma

By J. B. Steete

Title Superintendent

Company Keweenaw Oil Company  
Lease Baigh "B" Well No. IP #30  
Sec. 27 T. 17 S., R. 32 E., N.M.P.M.  
Location 40' N & 25' E of SW Cor. of NW $\frac{1}{4}$   
County Lea, New Mexico



Scale 4" = 1 mile.

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

Seal:  
Artesia, New Mexico

  
Registered Professional  
Engineer and Land Surveyor.

Surveyed July 12, 1946



EXHIBIT "B"

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

P. O. Box 997  
Roswell, New Mexico  
October 22, 1947

Kewanee Oil Company  
1004-114 Kennedy Building  
Tulsa 1, Oklahoma

Gentlemen:

Receipt is acknowledged of your application executed October 9, 1947, for an amendment and exception to "Amended Application for Approval of Plan for Drilling and Reconditioning of Injection Wells", approved July 10, 1946, Maljamar Cooperative Repressuring Area, Lea County, New Mexico.

The application states that Kewanee Oil Company's original Baish "B" well No. 9 located in the C SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 27, T. 17 S., R. 32 E., was completed for production on May 1, 1940, at a total depth of 4,036 feet with an initial production of 125 barrels of oil per day and that on April 17, 1942, it was converted into a gas input well. From that date until October 4, 1946, 292,549,000 cubic feet of gas has been injected into this well. Injection was discontinued on the above referred date to permit the laying of a new gas injection system and the enlargement of the pressure maintenance plants connected with the injection project. It is further stated that well Baish "B" No. 9 has demonstrated by performance the fact that it has been and is an exceptionally good gas injection well.

It is also stated that, on November 19, 1946, in accordance with the plan for drilling and reconditioning injection wells, Kewanee Oil Company commenced its Baish "B" 30 well, located in the southwest corner of the SW $\frac{1}{4}$ NW $\frac{1}{4}$  of said section 17 which well was drilled for the purpose of using same as an input well. Approval of the drilling of this well was granted on July 10, 1946, with the understanding that injection wells drilled will be used for injection purposes only and not produced for oil or gas. This well was completed on January 30, 1947, at a depth of 4,088 feet and swabbed 140 barrels of oil per day on test without shooting. In drilling this well it was noted that there was a well developed sixth zone but little or no saturation was encountered in the lower San Andres section. The seventh zone covered scattered porosity and saturation and the eighth zone was entirely barren. As the San Andres pay sections were absent in this well you consider that maximum benefit to the gas injection program could not be obtained in utilizing this well for gas input service in preference to Baish "B" 9, which well by performance has demonstrated its value for use for input service.

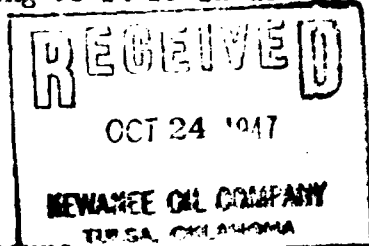
It is further stated that under the gas injection program and agreement provision is made that on a 40-acre subdivision where there is located an injection well the operator is entitled to a compensatory producer. You therefore request that you be permitted to convert well Baish "B" 30 into a producer and in case this office considers favorably the application you will petition the Conservation Commission of the State of New Mexico for approval of the resulting unorthodox well location pursuant to the rules and regulations of that body.

On the basis of the facts set forth in the subject application, which are deemed to be substantially correct, it is believed that well No. "B" 30 would be of greater value as a producing well than if it were used as a gas injection well and that it would increase the ultimate recovery from the leasehold. Producing this well will not create any inequities from drainage from other leases as the surrounding lands are held by your company. Accordingly, your application of October 9, 1947, is approved and considered an acceptable amendment to the plan for drilling and reconconditioning injection wells, approved July 10, 1946, provided that the production from well Baish "B" 30 shall conform with the general and any special proration orders of the New Mexico Oil Conservation Commission. One conditionally approved copy of the application is returned herewith.

If the Oil Conservation Commission approves your petition you are requested to file a notice to produce this well on our form 9-331(a) for approval by the District Engineer before producing operations are commenced.

In the last paragraph of the application of October 9 you request that you be allowed to reverse the number of I.P. Baish "B" No. 30 and Baish "B" No. 9, and designate the present "B" 30 input as Baish "B" 9, and Baish "B" 9 I.P. as Baish "B" 30 I.P. It is believed that such a change would create unnecessary work and confusion in the many offices maintaining records of this producing area and would be of no particular benefit. Accordingly, the request to change well numbers or designations is denied.

For convenience and reference it is requested that the use of the letters "I.P." be discontinued from well Baish "B" 30 when it is converted into an oil well and that this designation be continued on well Baish "B" 9 as long as it is in use as an injection well.



Enclosure

Very truly yours,

*Foster Morrell*  
FOSTER MORRELL,

Supervisor, Oil and Gas Operations.

cc: Kewanee Oil Company

UNITED STATES DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
WASHINGTON, D. C.

35-1-10  
14  
RECEIVED  
JUL 11 1946  
GEOLOGICAL SURVEY  
WASHINGTON, D. C.

Re: Application for an Amendment and  
Exception to "Amended Application  
for Approval of Plan for Drilling  
and Reconditioning of Injection Wells"

To the Supervisor of United States Geological Survey,  
Washington, D. C.

Comes now, Kewanee Oil Company, a member of the Maljamar Cooperative Repressuring Agreement and Supplemental thereto, joined by the Operators' Committee, acting under and pursuant to the Maljamar Cooperative Repressuring Agreement and Supplemental thereto, heretofore approved by the Honorable Secretary of Interior and assigned Contract No. I-Sec. No. 341, and files herewith its application for the modification and amendment of its "Amended Application for Approval of Plan for Drilling and Reconditioning Injection Wells" filed and approved July 10, 1946, by the Supervisor, Oil and Gas Operations, United States Department of Interior, Geological Survey, a copy of which is attached hereto for convenient reference as "Exhibit A".

Applicants herein respectfully request that paragraph 3 of the aforesaid approved plan for drilling and reconditioning injection wells, "Exhibit A" be amended and modified to permit Kewanee Oil Company to convert its input well Baish "B" No. 30 to a producer for the production of oil and gas.

Applicants, for reason and in justification of its application for the modification and amendment, as aforesaid, states and respectfully shows:

(1) That Kewanee Oil Company's original Baish "B" well #9, located 1980 feet from the north line and 660 feet from the west line (C SW $\frac{1}{4}$  NW $\frac{1}{4}$ ) of Section 27, Township 17 South, Range 32 East, Lea County, New Mexico, (Las Cruces Lease 057210) was completed for production on May 1, 1940, at a total depth of 4036' with an initial production of 125 barrels per day. That the completion of this well reflected a well developed 6th zone from 3836 to 3889 feet. Additional pay horizons were encountered in the lower San Andres section. The 7th zone carried good porosity and saturation from 3894 to 3954 feet and the 8th zone was well developed from 3930 to 4036 feet. The wells immediately offsetting Baish B #9 are also producing from both the Grayburg and San Andres sections. That situation was the reason that Baish "B" #9 was selected as a gas injection well by the Maljamar Cooperative Repressuring Agreement.

On April 17, 1942, Baish "B" #9 was converted into a gas input

well and from that date until October 1, 1946, 292,549,000 cubic feet of gas has been injected into this well. Injection was discontinued on the above referred to date to permit the laying of a new gas injection system and the enlargement and revamping of the pressure maintenance plant connected with the injection project.

(2) The aforesaid well, Baish B No. 9, now designated Baish "B" No. 9 I.P. well, has demonstrated by performance the fact that it has been and is an exceptionally good gas injection well, as the benefits derived therefrom are best reflected in the following figures, to-wit:

From September, 1942 to January, 1947, the four producing wells immediately offsetting this gas injection well, namely Baish B #6, Baish B #4, Baish B #19 and Baish B #22, have produced 219,034 barrels of oil. During the same period bottom hole pressure on these same four wells only declined from an average of 1100 barrels per square inch to 1019 barrels per square inch, or an average well decline of 81 barrels. This decline represents .37 barrels pressure decline per 1000 barrels of oil produced. As of January 1, 1947, the gas-oil ratios on these same four wells averaged only 712 cubic feet per barrel.

From these figures it appears that exceptional results have been obtained from Baish B #9 as an input well, and that therefore its continuation as such is most definitely desired in order to assure maximum recovery.

(3) In November, 1946, in accordance with the "Plan for Drilling and Reconditioning of Injection Wells" heretofore referred and approved by the United States Geological Survey, Kewanee Oil Company commenced its Baish B #30, located 2600 feet from the north line and 25 feet from the west line (SW corner SW 1/4 NW 1/4) of Section 27-17S-32E, Lea County, New Mexico, (Lease Las Cruces 057210), which well was drilled for the purpose of using same as an input well. That this well was completed on January 30, 1947, at a total depth of 4088 feet and swabbed 140 barrels of oil per day on test without shooting. That in drilling this well there was drilled a well developed 6th zone, but little or no saturation was encountered in the lower San Andres section. The 7th zone carried scattered porosity and saturation, and the 8th zone was entirely barren. This well, completed at 4088 feet, was some 50 or 60 feet above the water table, as found in this particular area. Therefore, as the San Andres pay sections were absent in this well, applicant considers, from the result and information from the drilling of said well, that maximum benefit to the gas injection program could not be obtained in utilizing this well for gas input service in



preference to Baish "B" #9, which well by performance has demonstrated its value as to its use for input service.

(4) Applicant further states that under the gas injection program and agreement it is provided that on the 40-acre subdivision where there is located an injection well, the operator is entitled to a compensating producer.

(5) Applicant further states that should the United States Department of the Interior, Geological Survey favorably consider this application, it will then petition the Conservation Commission of the State of New Mexico for approval of the resulting unorthodox well location, pursuant to all rules and regulations of that body.

(6) Applicant submits herewith the statement of Kewanee Oil Company in triplicate to the effect that Kewanee Oil Company agrees, in the event it is permitted to convert Baish "B" #30 to a producer, not to subdivide by assignment or otherwise the SW $\frac{1}{4}$  NW $\frac{1}{4}$ ; NW $\frac{1}{4}$  SW $\frac{1}{4}$  Section 27; SE $\frac{1}{4}$  NE $\frac{1}{4}$ ; NE $\frac{1}{4}$  SE $\frac{1}{4}$  Section 28, Township 17 South, Range 32 East, unless and until well Baish "B" #30 is properly plugged and abandoned, and the abandonment is approved under the operating regulations.

WHEREFORE, the undersigned applicants respectfully request that this application be approved in order to permit Kewanee Oil Company to convert its Baish "B" well #30 into a producer for the recovery of oil and gas. Kewanee Oil Company further requests that if this application is favorably considered, that it be permitted to reverse the number of I.P. Baish "B" #30 and Baish "B" #9, and designate the present B #30 input as Baish "B" #9, and Baish "B" #9 I.P. as Baish "B" #30 I.P.

Dated this 9<sup>th</sup> day of October, 1947.

Approved as an acceptable amendment to the Plan for Drilling and Reconditioning of Injection Wells, approved July 10, 1946, for the Maljamar Cooperative Repressuring area except as to request for reversing the numbers of wells Baish "B" #30 and "B" #9, which request is hereby denied.

Foster Norrell  
Supervisor, Oil and Gas Operations

October 22, 1947.

KEWANEE OIL COMPANY

By J. B. Steele  
Superintendent

OPERATORS' COMMITTEE, ACTING UNDER  
AND PURSUANT TO MALJAMAR COOPERATIVE  
REPRESSURING AGREEMENT

By Emery Co. H. C.  
Emery Carpen, Chairman

UNITED STATES OF AMERICA  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
WASHINGTON, D. C.

Re: Maljamar Cooperative  
Repressuring Agreement  
I-sec. No. 341

AMENDED APPLICATION FOR APPROVAL OF PLAN FOR  
DRILLING AND RECONDITIONING OF INJECTION WELLS

To The Supervisor of United States Geological Survey  
Washington, D. C.

Come the Operators' Committee, acting under and pursuant to the Maljamar Cooperative Repressuring Agreement and Supplement thereto, heretofore approved by the Honorable Secretary of the Interior, and assigned contract No. I-Sec. No. 341, and files its Amended Application for Approval of Plan for the Drilling and Reconditioning of Injection wells, and respectfully shows:

1. That the parties owning oil and gas leasehold interests subject to the Maljamar Cooperative Repressuring Agreement and Supplement thereto hereinabove referred to, have agreed among themselves and with each other to a program for the drilling and reconditioning of injection wells within the boundaries of the cooperative area upon the lands committed thereto, to be carried out in two 12 month periods, subject, however, to approval of the program and to the location of the injection wells by the Local Supervisor of the United States Geological Survey.

2. That there is attached hereto, made a part hereof, and for purposes of identification marked Exhibit "A", a plat of the cooperative area showing the location of the present wells being used as injection wells, and the injection wells which are proposed to be drilled and the respective locations thereof.

That there is attached hereto, made a part hereof, and for purposes of identification marked Exhibit "B", a schedule showing the injection well reconditioning and drilling program over the next two year period, which wells are numbered from 1 to 37, both inclusive, and which said numbers correspond with the numbers by which said injection wells are designated on the plat attached hereto as Exhibit "A".

It is proposed that 23 of these wells be drilled during the first twelve month period and upon their completion that 9 of the 13 present injection wells be converted into producers. This would give sufficient wells taking gas to conserve a large volume now being wasted. Fourteen additional injection wells would be drilled during the second twelve month period, which would complete the field pattern. The wells to be drilled or reconditioned during the first twelve month period are numbered from 1 to 23 inclusive, and the wells to be drilled during the second twelve month period are numbered from 24 to 37, inclusive, on the plat. Except for the present injection wells which are to be reconditioned, which wells are Nos. 1, 2, 3 and 25, as shown on the plat, the new injection wells would be located in each instance, not closer than

25 feet to any property line, as for example, well No. 4 would be located 30 feet South of the center of Section 19. These locations are as close to the geometric center of the four adjacent producing wells as practical, such wells still not being closer than 25 feet to a property line.

3. That the drilling and reconditioning program as outlined generally herein is to be carried out under the supervision of the Operators' Committee established under and acting pursuant to said Maljamar Cooperative Re-pressuring Agreement and supplement thereto, and the Operators' Committee is to prescribe the completion procedure, tests to be made and equipment to be used in connection with each injection well which is drilled so that all of said wells will be uniformly drilled, tested, and equipped so as to be used in the most efficient manner possible in furthering the objects and purposes of the Maljamar Cooperative Repressuring Agreement and Supplement thereto. It is to be understood and agreed by all of the leasehold owners upon which said wells are drilled that the same when drilled shall not be used for any purpose except as injection wells in connection with said pressure maintenance operations and are not to be regarded as wells drilled for production purposes or to be used for the production of oil and gas.

WHEREFORE the undersigned Operators' Committee respectfully requests that the General plan for drilling and reconditioning of injection wells under and pursuant to the Maljamar Cooperative Repressuring Agreement and Supplement thereto as outlined herein, be approved.

Dated this 9<sup>th</sup> day of July, 1946.

OPERATORS' COMMITTEE, ACTING UNDER AND PURSUANT  
TO MALJAMAR COOPERATIVE REPRESSURING AGREEMENT

BY (Signed) E. M. Cooper

Approved as a generalized plan for conditioning of present injection wells and drilling of new injection wells within the Maljamar Cooperative Repressuring Agreement with the exception of well No. 6 to be drilled in the SE corner, SE/4 NE/4 Sec. 22, T. 17S., R. 32 E. offsetting the NW/4 SW/4 Sec. 23 not committed to the agreement. An opinion from the Department is necessary before drilling of this well is approved as it involves payments by a party not committed to the agreement.

It is also to be understood that injection wells drilled will be used for injection purposes only and not produced for oil or gas and that an intention to drill will be submitted for each well showing drilling and casing program and approval obtained before drilling is started.

Approval is with the further understanding that each lessee will be regarded as solely responsible for the proper abandonment of any well drilled on his lease.

(Signed) Foster Morrell  
Supervisor, Oil and Gas Operations.

Roswell, New Mexico

July 19, 1946  
Date