INVESTIGATION AND EVALUATION OF
GEOPRESSURED-GEOTHERMAL WELLS

SUMMARY OF
GRUY FEDERAL'S WELL-OF-OPPORTUNITY PROGRAM
TO JANUARY 31, 1980

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Date Published--March 1980

Prepared for the
U.S. Department of Energy
Division of Geothermal Energy
Under Contract No. DE-AC08-77ET28460

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PREFACE

The contract between the U.S. Department of Energy (DOE) and Gruy Federal, Inc. to acquire and test geopressured wells drilled by operators in the oil and gas industry was effective from Sept. 26, 1977, through Sept. 30, 1979. Contract extensions were provided to cover work in progress on the Beulah Simon No. 2 and Tenneco Fee "N" No. 1 test wells, and for limited screening (through Jan. 31, 1980) of previously identified well candidates.

This report was prepared in response to a request by the Director of DOE's Geopressure Projects Office for a summary of information relative to the screening process (a copy of this request is included as Appendix 1). It updates a similar report prepared in February 1979.* Reports covering operations on each of the wells already tested have been submitted; those for test operations only recently completed or still under way will be submitted on completion of those tests. A final report on the entire program will be submitted when all test operations have been completed.

Topics covered in this report are arranged in the order requested by the Geopressure Projects Office. Some of the details requested are not a matter of record, and certain information (such as telephone numbers) has been omitted. To a large extent this information has already been provided in daily, weekly, and monthly contract reports.

*"Notes on Gruy Federal's Well-of-Opportunity Program," February 9, 1979; available as report no. NVO/1528-5 from the DOE Technical Information Center, P. O. Box 62, Oak Ridge, Tenn. 37830.

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1. Scouting and Monitoring Techniques Peculiar to Geopressured-Geothermal Wells

Two weekly subscription services were utilized to screen potential "Well-of-Opportunity" (WOO) locations: Petroleum Information Service for South Louisiana and the Texas Gulf Coast and F. & A. Reports for South Louisiana. A comparison of the location listings in the two reports showed nearly identical coverage. Sometimes one publication or the other was a week late in listing a newly permitted location.

Once a drilling operation has begun it can be followed in the "Drilling Progress" section of either report. This information is sufficient for the early stages of a lengthy operation, but it is frequently more than two weeks old and cannot be trusted when a well approaches critical depths. Nevertheless, this provided a means of tracking operations without the nuisance inflicted by frequent calls to an operator's representative.

As a result of extensive investigation of Geo² trends, the Gruy Federal staff has gained independent knowledge of pressure-temperature occurrences in a large number of previously drilled wells. This was particularly true during the period in which the search was concentrated on previously abandoned wells that might be reentered. In many instances this background permitted instant recognition and ranking of the area in which a location was announced.

An additional early screening process eliminated operators who had consistently declined to participate in the program and whose attitude was unlikely to change.

Whenever possible, the initial contact with an operator who was not familiar with the program was made by someone who had a personal acquaintance with a key man in the operator's organization. Two senior landmen of long experience assisted members of the Gruy Companies' staff in making these contacts. The combined oilfield experience of the four people who made initial contacts exceeded 150 years.

As the program became better known and more widely accepted, contacts relative to specific wells were made with offices, functions, or persons designated by the operator.

Mechanical details of the screening procedure are shown in Figure 1, a PERT/Critical Path chart. These operations are self-explanatory.

GEOPRESSURED-GEOTHERMAL WELL PROGRAM PERT/CPM NETWORK PLAN

LEGEND			
MILESTONE	G		
APPROVAL MILESTONE	LOGIC	ESTIMATES	TRACED
DECISION MILESTONE	R.L.M. 6-79	R.L.M. 6-79	S.L. 6-79
NO ACTIVITY	YES	NO	NO
LOGICAL CONSTRAINT	NO	YES	NO
GRUY FEDERAL, INC. 2500 TANGLEWILDE HOUSTON, TEXAS 77063			
PERT/CPM NETWORK PLAN GEOPRESSURED-GEOTHERMAL WELL PROGRAM			
CHART: IN-HOUSE WELL-OF-OPPORTUNITY SCREENING PROCEDURE			
CONTRACT: DE-AC08-77ET28460			
CLIENT: DEPARTMENT OF ENERGY			

2. Legal Problems: Methods for Surmounting Them and Recommendations for Future Approaches*

Every drilling activity, whether for oil and gas or for geopressured-geothermal testing, faces patent or latent legal problems in matters relating to contract, property, tort, governmental statutes, codes, and regulations. Careful planning should anticipate the obvious and be structured to avoid the latent problems. Gruy Federal encountered difficult trade and contract situations, but was able to avoid most problems by successful negotiations. There has been no litigation in respect of such matters.

Contract Negotiations and Related Matters

The negotiator must know the area and must ascertain the requirements of federal, state, and local governmental bodies pertaining to drilling operations.

Current production and drilling activity in the area should be determined, along with prevailing prices and terms being offered for oil and gas leases. The potential lessor will make little distinction between the prices for oil and gas and those for geothermal rights. The argument that geopressured-geothermal testing is simply an evaluation of the potential of the area may cause the lessor to insist on high advance payments, for he will anticipate no royalty income from the operation.

Each area has different customs. In South Louisiana, bonuses, rentals, and royalties are high; annual rentals sometimes range from 50 to 100 percent of the initial bonus. In the Texas Gulf Coast bonuses may be high but rentals may be lower--in the range \$1 to \$10 per acre.

A sophisticated landowner may bring an attorney, a geologist, or an engineer to represent him in negotiations. The contractor's representative must thoroughly understand the planned program and be able to present it clearly and accurately. Gruy Federal encountered one situation in which a consulting geologist claimed that (1) the saltwater disposal procedure (underground) would trespass upon adjacent land; (2) the water removed during the test would damage the oil and gas reservoir (which had already been tested and found non-commercial); and (3) the proposed test might possibly condemn a yet-untested (and undiscovered) oil and gas reservoir, to the detriment of his client, who would lose the opportunity to lease his property for oil and gas if it were condemned by the geopressured-geothermal operation.

In another instance, where a well was located near a producing field, third-party operators would not cooperate for fear the test operation would endanger the producing reservoir.

* This section was prepared by Mr. Eugene H. Dobbs, attorney and senior landman for Gruy Federal. Mr. Dobbs has nearly 30 years of experience with major and independent oil companies and 10 years in private practice.

If an attorney represents a landowner, the contractor representative should determine what information he may have in respect of the ownership of the land and minerals and of any problems in connection with them.

Site Selection

Alternative sites should be available. A hard-nosed landowner may create problems, not only in contract negotiations and monetary demands but throughout the course of the project.

Leases should be made with an eye to expansion, since pooling or unitization may prove desirable. State regulations covering pooling or unitization should be determined. Test sites should be on tracts large enough to avoid conflict with adjoining tracts; if those tracts are not under lease, claims for underground trespass (in saltwater disposal) may be brought, or claims for participation may be lodged if production is secured.

It is generally better to deal with the owners of large tracts or large landowners, since this simplifies negotiations. Dealing with several owners is always more complex, since they may act independently or in collusion. The use of third-party land to gain access to the test site should be avoided if possible, although negotiation of right-of-way agreements for ingress and egress is usually necessary. Pre-negotiation information should include current prices and terms in the area for rights of way, initial considerations, rentals, maintenance, etc.

Ownership

The contractor should determine who owns the surface and mineral rights to a prospective test site, who has executive rights to drill, whether such rights can be transferred under the lease to drill, who must be parties to such a lease, the rights of surface owners, tenants, and lessees, the correlative rights of oil and gas lessees, and consents required.

Title Examination

When a well is taken over from an oil or gas operator under an existing oil and gas lease and collateral permits from the mineral and surface owners have been secured, the title opinion obtained by the oil and gas operator (brought up to date if necessary) can generally be relied upon. For a short-term lease, say one year or less, this is probably a reasonable business risk.

When an new well is to be drilled, an approving drill site title opinion based on abstracts or record examination should be secured from a competent attorney qualified in the state. If a high price is to be paid for the geopressured-geothermal lease, it may be worthwhile to make the bonus payment and acceptance of the lease subject to title examination.

Geopressured-Geothermal Lease Contract

A short-term contract (one year or less) for a re-entry effort can be relatively simple. A long-term contract should contain (1) provision for a

cash consideration; (2) provision for a royalty payable to the lessor in the event of production; (3) a stipulated term of years, which might include the possibility of being perpetuated so long as there is production, if the lessor will agree; and (4) a drilling delay rental clause giving the lessee the option either to drill a well or pay a delay rental periodically during the fixed term. These can be written in many ways, including a partial rental where drilling is carried out on the rental date and into the next ensuing term. Other features of the lease should provide for matters of pooling/unitization, surface damages, force majeure warranty, assignability, etc.

Insurance

The DOE will not accept unlimited liability. Gruy Federal's experience with third-party operators included dealing with one company which would not contract with Gruy Federal for this reason. Another insisted that Gruy Federal's \$20 million liability and \$25 million regain-of-control insurance be used first. Others did not seriously question Gruy Federal's insurance coverage. The contractor should consider doubling insurance coverage to take care of the situation.

3. Wells of Opportunity in Texas and Louisiana Screened, by Months and Cumulative Total

This information is presented graphically in Figure 2.

4. Wells of Opportunity Screening Process, Cumulative Graph

This information is presented graphically in Figure 2.

5. Activity and Milestone History of the Well-of-Opportunity Contract

The principal activity and milestone history is shown in Figure 3.

6. Manpower Utilization on Well-of-Opportunity Contract

This information is presented graphically in Figure 4.

Figure 2.--Monthly and cumulative total Well-of-Opportunity candidate monitored.

Figure 3.--Activity and milestone history of Gruy Federal Well-of-Opportunity contract.

Figure 4.--Manpower utilization on Gruy Federal Well-of-Opportunity contract.

7. Tables Listing Wells Screened as WOO Candidates by Month, with Comments Covering Acceptance or Rejection and Reasons for Disposition

Table 1 lists the priority wells considered during the period February through December 1979, the monthly progress of candidate wells, and the reasons for their ultimate disposition.

8. Industry Contacts, Including Company, Location (Address and Telephone Number), and Persons Contacted, with Comments Relating Results

Table 2 lists the company contacts made during the entire program. Only the key names are included. No record was made of every telephone call or conversation, but Table 2 provides a generalized idea of the response received.

9. Contact Report Tabulations, Including Follow-up Contacts Made (Number, Dates, and Communication Means Used, Done in Chronological Order)

This information is included in the response to Item 8.

10. Summaries of Industry Responses to Mail Solicitations, Telephone Surveys and Contacts.

Table 3 gives a summary categorization of the responses listed in Table 2.

11. Tabulation of Prospective Wells Investigated in Detail, with Brief Comments Regarding Disposition

This information is included in the response to Item. 7.

12. Tabulation of Weekly Report Well Files (Inventory of Priority WOO Prospects)

The weekly reports since February 1979 have been furnished to the Geopressure Projects office in Houston.

13. Gruy Federal Staff Participation in Workshops, Conferences, and Technical Meetings

R. J. Dobson:

C-K GeoEnergy Forum - August 1, 1979

C-K GeoEnergy (Legal Forum) - December 18, 1979

(Gayland Daugherty also spoke before this Legal Forum)

H. J. Gruy:

Society of Independent Petroleum Earth Scientists - October 18, 1979

American Institute of Petroleum Geologists - December 13, 1979

A & M Petroleum Engineering Society of Houston - January 10, 1980

Dr. Alan Lohse:

C-K GeoEnergy Symposium (First year of the contract)

Two talks given before Boy Scouts of America Groups 1 - B.S.A. and 1 - Explorers Post

Desk & Derrick Opening Fall Program, Houston Chapter, 1978 - (600 people)

J. H. Hartsock:

C-K GeoEnergy Forum in Houston, Texas - August 1, 1979

C-K GeoEnergy Forum in New Orleans, La. - March 12, 1980

Desk & Derrick in Morgan City, La. - March 12, 1980 (Evening)

Associated Builders & Contractors - New Orleans, La. - March 26, 1980
(This is an offshore builders group)

R. L. McCoy:

4th United States Gulf Coast Geopressured-Geothermal Energy Conference at the University of Texas at Austin, October 29-31, 1979.

SPE/DOE Symposium on Unconventional Gas Recovery, Pittsburgh, Pa., May 18-21, 1980

TABLE 1--PRIORITY WELLS ACTIVELY MONITORED

MONTH: February 1979

<u>Well Name</u>	<u>Operator</u>	<u>Location</u>	<u>Objective Depth</u>	<u>Comments</u>
Crews No. 1	Atlantic Richfield	Brazoria, Tex.	22,000	Reaming at 12,100 ft.
Fee "N" No. 1	Tenneco	Terrebonne, La.	18,000	Operator considering testing options
Willis Hulin No. 1	Superior	Vermilion, La.	22,000	Sidetracking below 20,000 ft.
L. B. Broussard No. 1	Stone Oil Co.	Vermilion, La.	18,000	Drilling at 13,000 ft.
B. Simon No. 2	Southport	Vermilion, La.	16,500	Has been offered if "Dry"
Williams No. 1	Inexco	Assumption, La.	19,500	Drilling below 15,600 ft.
J. M. Graham No. 1	Prairie Prod.	Brazoria, Tex.	14,000	Operator expressed interest in participating
E. Christenson No. 1	Prairie Prod.	Brazoria, Tex.	16,500	Installing a liner below 13,000 ft.
Trahan No. 1	Conoco	Acadia, La.	19,500	Drilling below 14,800 ft.
State No. 1	Peltex-McMoran	Terrebonne, La.	21,500	Drilling below 14,500 in open water location
J. B. LeBlanc No. 1	Marathon	E. Baton Rouge, La.	21,500	Having lost circulation problems at 18,500 ft.
O. Zellerbach No. 2	Natomas	Livingston, La.	22,079	Offered but was rejected due to mechanical problems
Fairfax Foster Sutter No. 2	Neuhoff	St. Mary, La.	15,500	Tentatively offered for W.O.O. operations
Boudreaux No. A-I-M	Shell Oil	Cameron, La.	NA	Drilling in sidetracked hole
Palmer Bros. No. 1	Wainoco-Bradco	Terrebonne, La.	15,500	Well was junked after uncontrolled saltwater flow

PRIORITY WELLS ACTIVELY MONITORED

Table 1 (continued)

MONTH: March 1979

<u>Well Name</u>	<u>Operator</u>	<u>Location</u>	<u>Objective Depth</u>	<u>Comments</u>
L. B. Broussard No. 1	Stone Oil Co.	Vermilion, La.	18,000 ft.	Drilling below 15,731 ft.
W. Hulin No. 1	Superior	Vermilion, La.	22,000 ft.	Drilling below 20,305 ft. in second sidetracked hole
Trahan No. 1	Conoco	Acadia, La.	19,500 ft.	Drilling below 15,726 ft.
Williams No. 1	Inexco	Assumption, La.	19,000 ft.	Fishing for stuck drillpipe. T.D. is 16,084
Fee "N" No. 1	Tenneco	Terrebonne, La.	18,000 ft.	Operator considering joint venture with Gruy
J. B. LeBlanc No. 1	Marathon	E. Baton Rouge, La.	21,500 ft.	Operations suspended due to high water
Crews No. 1	Atlantic Richfield	Brazoria, Tex.	22,000 ft.	Drilling below 14,149 ft.
No. 1 S/L 7752	Peltex-McMoran	Terrebonne, La.	21,500 ft.	Losing returns at 16,450. Open-water location
Salinas No. 1	Border Expl. Co.	Hidalgo, Tex.	NA	Well has been offered if dry
Masterson No. 1	Prairie Prod. Co.	Brazoria, Tex.	NA	Rejected because of sand quality
Graham No. 1	Prairie Prod. Co.	Brazoria, Tex.	NA	Completed as oil well
Christenson No. 1	Prairie Prod. Co.	Brazoria, Tex.	NA	Rejected because of sand quality
Boudreaux A-1	Shell	Cameron, La.	NA	Encountered two gas sands
Duplantis 1-C	McMoran	Terrebonne, La.	NA	Aquifer is productive up-dip. Won't be offered
Duplantis 2-C	McMoran	Terrebonne, La.	NA	Aquifer is productive up-dip. Won't be offered
Savana No. 1	Quintana	Terrebonne, La.	NA	Operator declined to consider geo ² operations
Southdown Sugars No. 1	Quintana	Terrebonne, La.	NA	Operator declined to consider geo ² operations

PRIORITY WELLS ACTIVELY MONITORED

Table 1 (continued)

MONTH: April 1979

<u>Well Name</u>	<u>Operator</u>	<u>Location</u>	<u>Objective Depth</u>	<u>Comments</u>
Beulah Simon No. 2	Southport	Vermilion, La.	16,500	After temporary abandonment, well was acquired for testing
Fee "N" No. 1	Tenneco	Terrebonne, La.	18,000	Well has been offered for joint testing operation
W. Hulin No. 1	Superior	Vermilion, La.	21,000	Drilling in sidetracked hole below 21,100 ft.
S/L 7752 No. 1	Peltex-McMoran	Terrebonne, La.	21,500	Drilling below 18,000 ft. in open water
N. B. Collins No. 1	N. American Royalties	Vermilion, La.	16,500	Logged at 14,395 ft. prior to setting liner
W. L. Crews No. 1	Atlantic Richfield	Brazoria, Tex.	22,000	Preparing to drill ahead at 16,600 ft
A. M. Leina No. 1	Houston Oil & Minerals	Cameron, La.	15,000	Preparing to drill ahead after setting 9 5/8 casing at 11,038 ft.
G. P. Trahan No. 1	Conoco	Acadia, La.	19,500	Drilling below 16,650 with 17.9 ppg mud
La. Furs F-15	Union California	Vermilion, La.	17,500	Drilling below 13,600 ft.
Williams No. 1	Inexco	Assumption, La.	19,500	Drilling below 15,607 ft in side-tracked hole.
S/L 7098 No. 1	Badger Oil	Cameron, La.	16,000	Drilling below 11,408 ft. with 15.8 ppg. mud
Lamplain & Talbot No. 2	Chevron	LaFourche, La.	17,000	Drilling below 12,432 ft.
D. Plantation No. 1	Chevron	St. Landry, La.	15,700	Drilling below 12,730 ft.
VU-36 No. 4	Texaco, Inc.	Terrebonne, La.	17,700	Stuck drill pipe at 17,749 ft.
A. G. Faulk No. 1	Atlantic Richfield	Vermilion, La.	20,000	Drilling below 14,100 ft with 17.7 ppg mud
Keseling U-2 No. 1	Champlin	DeWitt, Tex.	14,500	Drilling below 13,800 ft.
B. Salina No. 1	Border Exploration Co.	Hidalgo, Tex.	14,000	Drilling below 6,510 ft.
H. Holm No. 1	Lana Oil & Gas	Live Oak, Tex.	12,000	Offsets exhibit poor sand development

MONTH: April 1979 (continued)

PRIORITY WELLS ACTIVELY MONITORED

Table 1 (continued)

<u>Well Name</u>	<u>Operator</u>	<u>Location</u>	<u>Objective Depth</u>	<u>Comments</u>
S/L 74444 No. 1	Superior	Cameron, La.	15,000	Offsets exhibit high pressure & temp. but broken sand developed
W. Simon No. 1	Atlantic Richfield	Vermilion, La.	17,500	Temporarily abandoned, pending offset well
J. B. Leblanc No. 1	Marathon	E. Baton Rouge, La.	21,000	Shut down due to high water
N. N. McVea No. 1	Shell	E. Baton Rouge, La.	18,000	Drilling at 14,500 ft.
M. Redd No. 1	Stone Oil Corp.	Jefferson Davis, La.	17,000	Drilling at 13,837 ft with 16.1 ppg mud
C. Menteur No. 1	Chevron	Orleans, La.	18,000	Drilling at 11,087 ft.
E. Christensen No. 1	Prairie Prod.	Brazoria, Tex.	16,500	Sand development unsuitable for testing
A. Masterson No. 1	Prairie Prod.	Brazoria, Tex.	N.A.	Sand development unsuitable for testing
J. M. Graham No. 1	Prairie Prod.	Brazoria, Tex.	14,000	Made a well
Exxon Fee No. 1	Shell	Iberia, La.	16,000	Development well
E. M. Cessoc. No. 2	Amerada Hess	Vermilion, La.		Development well
YUG-12	Shell	Iberia, La.	15,200	Development well
Southdown A No. 7	Superior	Terrebonne, La.	16,000	Development well
Weeks No. 1	Stone Oil	Iberia, La.	18,500	Insufficient pressures
L. B. Broussard No. 1	Stone Oil	Vermilion, La.	18,000	Plugged back above geo ² zones
B. J. Lirette No. 2	Quintana	Terrebonne, La.	17,500	Unavailable due to lease problems
Guilbeau No. 1	Southport	Vermilion, La.	14,729	Rejected by DOE because of poor sand development
H. A. Grp. No. 1	Champlin	De Witt, Tex.	N/A	Well offered, but did not qualify
J. W. Cappel No. 2	Sun Oil	Allen, La.	16,000	Offered, but rejected due to sand quality
M. Camel No. 1	Exchange	Lafayette, La.	15,500	Junked and abandoned

PRIORITY WELLS ACTIVELY MONITORED

Table 1 (continued)

MONTH: May 1979

<u>Well Name</u>	<u>Operator</u>	<u>Location</u>	<u>Objective Depth</u>	<u>Comments</u>
W. Hulin No. 1	Superior	Vermilion, La.	22,000	Operator advises that he will test gas show possible
S/L 7752	Peltex-McMoran	Terrebonne, La.	21,500	Drilling at 20,360 in open water
W. L. Crews No. 1	Atlantic Richfield	Brazoria, Tex.	22,000	Drilling below 17,445 ft.
G. P. Trahan No. 1	Conoco	Acadia, La.		Drilling below 18,305 ft. with 18.0 ppg. mud
M. Ledd No. 1	Stone Oil	Jefferson Davis, La.		Drilling below 15,744 ft. with 17.7 ppg. mud
J. B. Vice No. 1	Stone Oil	Iberia, La.	17,500	Drilling below 8,791 ft.
Williams No. 1	Inexco	Assumption, La.	19,500	Drilling below 16,137 ft.
Cont. Land & Fur No. 1	Houston Oil & Minerals	Terrebonne, La.		Drilling below 7,050 ft., tentatively offered
W. Simon No. 1	Atlantic Richfield	Vermilion, La.	17,795	Temporarily abandoned pending offset drilling
W. F. McQuaig No. 1	Inexco	Vermilion, La.		Drilling below 13,034 ft.
S/L 7098 No. 1	Badger Oil	Cameron, La.		Rejected due to poor sand development
VU-36 No. 4	Texaco	Terrebonne, La.		Made a well
A. M. Reina No. 1	Houston Oil & Minerals	Cameron, La.		Plugged and abandoned; poor sand development
N. B. Collins No. 1	N. American Royalties	Vermilion, La.	16,433	P & A - well bad "serious title problem"
La. Fur F-15	Union California	Vermilion, La.		Temporarily abandoned pending offset drilling
H. A. Gip No. 1	Champlin	DeWitt, Tex.		Rejected due to insufficient sand, temperature and pressure

PRIORITY WELLS ACTIVELY MONITORED

Table 1 (continued)

MONTH: June 1979

<u>Well Name</u>	<u>Operator</u>	<u>Location</u>	<u>Depth</u>	<u>Comments</u>
W. Hulin No. 1	Superior	Vermilion, La.	22,000 ft.	Has been completed as commercial gas well
S/L 7752 No. 1	Pel-Tex McMoRan	Terrebonne, La.	21,500	Drilling cement at 19,997 ft. after side-tracking
W. L. Crews No. 1	Atlantic Richfield	Brazoria, Tex.	22,000	Drilling below 18,879 ft.
A. G. Faulk No. 1	Atlantic Richfield	Vermilion, La.	20,000	Drillpipe stuck at 17,829 ft.
J. B. Vice No. 1	Stone Oil	Iberia, La.	17,500	Drilling below 14,866 ft. with 11.1 ppg mud
M. Redd No. 1	Stone Oil	Jefferson Davis, La.		Fishing at 15,748 ft.
Williams No. 1	Inexco	Assumption, La.		Having lost circulation problems at 17,344 ft.
G. Eschete No. 1	First Energy	LaFourche, La.	15,500	Drilling at 12,254 ft. with 10.7 ppg mud
Cont.Land & Fur. No. 1	Hou.Oil & Minerals	Terrebonne, La.	17,500	Drilling at 14,800 ft.
W. Simon No. 1	Atlantic Richfield	Vermilion, La.		Temporarily abandoned pending offset well
S. Sommer No. 1	Highland Resources	Lafayette, La.	16,000	Drilling at 11,880 in sidetracked hole
A. D. Broussard No. 1	Texas Gulf	Lafayette, La.	16,000	Drilling at 11,936 ft. with 15.5 ppg mud
J. B. LeBlanc	Marathon	E. Baton Rouge, La.	21,500	Drilling at 17,067 ft. with 17.4 ppg mud in S. T. hole
Fee "N" No. 1	Tenneco	Terrebonne, La.		Proposal submitted for D.O.E. approval
Keseling U-3 No. 1	Champlin	DeWitt, Tex.		Well tested commercial
G. P. Graham No. 1	Conoco	Acadia, La.		Offered but rejected due to poor sand development
S/L 7098 No. 1	Badger Oil	Cameron, La.		Rejected because of poor sand development
W. F. McQuaid No. 1	Inexco Oil	Vermilion, La.		Offered but rejected due to poor sand development
F. F. Farwell No. 2	Chevron	W. Baton Rouge, La.		Operator declined to consider participation
Tamplain & Talbot No. 2	Chevron	LaFourche, La.		Operator declined to consider participation
D. Plantation No. 1	Chevron	St. Landry, La.		" " " " "
C. Menteur No. 1	Chevron	Orleans, La.		" " " " "

PRIORITY WELLS ACTIVELY MONITORED

Table 1 (continued)

MONTH: July 1979

<u>Well Name</u>	<u>Operator</u>	<u>Location</u>	<u>Depth</u>	<u>Comments</u>
S/L 7752 No. 1	Peltex McMoran	Terrebonne, La.		Drilling below 21,424 ft.
Petitjean No. 1	Stone Oil	Acadia, La.	16,000'	Fishing at 10,874 ft.
J. B. Nice No. 1	Stone Oil	Iberia, La.	17,500'	Drilling below 16,197 ft.
A. D. Broussard No. 1	Texasgulf	Lafayette, La.	16,000	Drilling at 13,478 ft. with 17.1 ppg mud
G. Eschete No. 1	First Energy	LaFourche, La.	15,500	Drilling at 14,387 ft. with 17.3 ppg mud
H. Bourg No. 1	Mosbacher	Terrebonne, La.	15,400	Drilling at 12,923 ft. in sidetracked hole
S. Cocke No. 1	Texaco	Terrebonne, La.	18,000	Drilling at 13,487 ft. with 16.5 ppg mud
Cont. Land&Fur No.1	Hou.Oil & Minerals	Terrebonne, La.	17,500	Drilling below 16,775 ft.
La. Furs F-16	Union Cal.	Vermilion, La.	17,000	Drilling at 10,000 ft.
A.G.Faulk No. 1	Atlantic Richfield	Vermilion, La.	20,000	Repairing casing leak at 11,140 ft.
D.Broussard No. 1	Stone Oil	Vermilion, La.	16,000	Drilling at 13,924 ft. with 14.0 ppg mud
A. Graham No. 2	Superior	Vermilion, La.		Fishing at 11,546 ft.
J.B.LeBlanc No.1	Marathon	E.Baton Rouge, La.	21,500	Drilling at 18,076 ft. with 16.5 ppg mud in sidetracked hole
G. C. Conner No. 1	Anschutz	Brazoria, Tex.	17,000	Drilling at 10,171 ft.
W.L.Crews No.1	Atlantic Richfield	Brazoria, Tex.	22,000	Drilling at 19,194 ft.
H. H. Tolusso No. 1	A.N.G.P.Co.	E. Feliciana, La.	17,000	Dropped due to insufficient pressures
B. Simon No. 2	Southport	Vermilion, La.		Proposal submitted for DOE approval
Lake No. 1	Quintana	St. Mary, La.		Field replacement well
Williams No. 1	Inexco	Assumption, La.	19,500	Abandoned at 17,344 ft. due to mechanical problems
Kean No. 2	Inexco	Pointe Coupee, La.		Dropped due to low temperature
B. Salinas No. 1	Border Expl.	Hidalgo, Tex.	14,000	Abandoned due to mechanical problems
C. Kennedy No. 1	I.M.C.	Vermilion, La.		Offered but rejected because of mechanical problems

PRIORITY WELLS ACTIVELY MONITORED

MONTH: August

<u>Well Name</u>	<u>Operator</u>	<u>Location</u>	<u>Objective Depth</u>	<u>Comments</u>
Petitjean No.1	Stone Oil	Acadia, La.	16,000'	Drilling at 11,660'
Ivory Ward No.1	Resources Invest.	Acadia, La.	14,000	Drilling at 10,800'
C.K.Kirklin No.1	Shell Oil	Avoyelles, La.	17,000	Fishing at 16,215'
Miami Corp.Fee No.1	Texaco	Cameron, La.	14,000	Reaming at 11,191'
N.N.McVea No.1	Shell Oil	E.Baton Rouge, La.	20,000	Prep. to test
J.Burton LeBlanc No.1	Marathon	E.Baton Rouge, La.	21,000	Drilling at 18,700'
E.D.Bickham	LL & E Co.	E.Feliciana, La.	18,000	Drilling at 15,500'
Luke Babin	Hou.Oil & Min.	Iberville, La.	15,500	Drilling at 11,000'
Mabel H.Henry No.1	Texasgulf	Lafayette, La.	15,000	Drilling at 10,500'
J.T.Butler Ra Sud No.1	Amoco	Pointe Coupee, La.	20,500	Running 9-5/8 casing at 15,200'
Williams No. 3	Amerada-Hess	St. Martin, La.	13,600	Drilling at 12,000'
Shadyside No. 1	Quintana Prod.	St. Mary, La.	18,000	Running 9-5/8 casing at 14,775'
Miami Corp. No. 4	Texaco	St. Mary, La.	17,400	Drilling at 11,000'
Suzanne Cocke No. 1	Texaco	Terrebonne, La.	18,000	Sidetracking at 13,350'
Desire Broussard No.1	Stone Oil	Vermilion, La.	16,000	Dri-ling at 15,600'
F.A.Godcheaux No.1	Amerada-Hess	Vermilion, La.	14,500	Drilling at 12,500'
McDonnell Estate No.1	Adobe Oil & Gas	Vermilion, La.	18,500	Drilling at 13,400'
Ambrois Trahan No.2	Superior Oil	Vermilion, La.	17,800	Setting liner at 16,000'
La. Furs F-16	Union Cal.	Vermilion, La.	17,000	Drilling at 12,670'
Wilson Wilturner No.1	J.P.Owen & Co.	Vermilion, La.	17,500	Drilling at 14,350'
Vern.Pa.Sch.Board No.5	Gen.Am.Oil Co.	Vermilion, La.	16,500	Drilling at 9,100'
Whitney Simon No.1	Atlantic Richfield	Vermilion, La.	17,500	Temporarily abandoned
Azena T. Faulk No. 1	Atlantic Richfield	Vermilion, La.	20,000	Drilling at 13,000'
J.R.Morris Sua No.2	S.La.Prod.Co.	W.Baton Rouge,La.	21,500	Drilling at 18,000'
A-1 Kaechele	Pogo Prod. Co.	Austin, Tex.	15,500	"TITE" drilling at appr. 15,000
G.C.Cannan No.1	Anschutz	Brazoria, Tex.	17,000	Fishing at 4,100'

August, cont.

Table 1 (continued)

<u>Well Name</u>	<u>Operator</u>	<u>Location</u>	<u>Objective Depth</u>	<u>Comments</u>
W.L.Crews No.1	Atlantic Richfield	Brazoria, Tex.	22,000	Fishing at 19,184'
Hancock "H" No.1	Texas Oil & Gas	Lavaca, Tex.	14,300	Prep. to test
Maxine B.Means No.1	Bill Forney, Inc.	Live Oak, Tex.	15,500	Drilling at unknown depth
E.L.Summers No.1	Prairie Prod.	Matagorda, Tex.	14,000	Drilling at 4,000'
F.M.Watson No.1-A	Prairie Prod.	Matagorda, Tex.	14,000	Drilling at 11,000'
Florence Trull No.1	Narmco Inc.	Matagorda, Tex.	14,000	Drilling near T. D.
G.P.Muzza No. 1	Shell Oil	Zapata, Tex.	18,500	Drilling at 9,500'
Sterling Sugars, No.1	James A. Whitson, Jr.	Iberia, La.	18,000	Rejected. Insufficient pressures
R.Bieber et al No.1	Mabee Petr.	Evangeline, La.	14,200	Rejected. Insufficient pressures
S/L 7780 No.1	Hilliard O & G	Jefferson, Tex.	14,500	Rejected. Insufficient pressures
Jeanerette Lbr. No.1	C.F. Braun	St. Martin, La.	14,500	Rejected. Insufficient pressures
Shinn; GC MA-12, RA SU #9	Quintana	St. Mary, La.	18,500	Rejected. Development well
Pennzoil Fee et al No.1	Prairie Prod.	Brazoria, Tex.	14,000	Rejected. Plugged back and completed
Cont. Land & Fur No.2	Hou. Oil & Min.	Terrebonne, La.	17,500	Rejected. Operator will not drill. (Well cancelled)
El Paso Nat. Gas No.2	Aminoil U.S.A.	Live Oak, Tex.	14,100	Rejected. Confirmation well
El Paso Nat. Gas No.3	Aminoil U.S.A.	Live Oak, Tex.	14,100	Rejected. Development well
Gaddis Wittjen No.1	Prairie Prod.	Brazoria, Tex.	14,000	Rejected. Made well
Laterre Co. No.37	Exxon	Terrebonne, La.	16,500	Rejected. Unit development well
VU 39; LB U39 No.25	Texaco	Terrebonne, La.	17,160	Rejected. Unit development well
LB Up MS RD SU: LB U 38 No.29	Texaco	Terrebonne, La.	14,375	Rejected. Unit development well
Petit Anse Co. No.6	Texas Crude	Iberia, La.	16,000	Rejected. Unit development well
Lucy Viator Lopez No.1	Energy Reserves	Iberia, La.	13,000	Rejected. Made well
S/L 3052 No.38	Superior Oil	Vermilion, La.	16,500	Rejected. Unit development well
Hathaway GU No.2	Howell Drlg.	Lavaca, Tex.	14,018	Rejected. Unit development well
Lake Crk Un No.32	Superior Oil	Montgomery, Tex.	16,000	Rejected. Unit development well

August, cont.

Table 1 (continued)

<u>Well Name</u>	<u>Operator</u>	<u>Location</u>	<u>Objective Depth</u>	<u>Comments</u>
<u>R E J E C T E D</u>				
Delano Plantation No.2	Chevron	St.Landry, La.	15,300	Development well. Water location
J.Melancon Heirs No.1	May Petr.	Acadia, La.	14,600	Made well
Delano Plantation No.3	Chevron	St.Landry, La.	15,000	Development well, uncooperative operator. Water location
Devil Swamp Land No.1	Martin Expl.	E.Baton Rouge,La.	22,000	Abandoned location
Willie Lormand No. 2	Amoco	E.Baton Rouge,La.	15,230	Blow-out relief well
Aurelia D.Broussard No.1	Texasgulf	Lafayette, La.	16,000	Mechanical problems
Dixie Rice No.1	Union Cal.	Cameron, La.	16,000	Made well
George Eschete No.1	First Energy	Lafourche, La.	15,500	Uncooperative operator
J. B. Vice No. 1	Stone & Forest	Iberia, La.	17,500	Discovery well
Cont.Land & Fur No.1	Hou.Oil & Min.	Terrebonne,La.	17,500	P & A due to operator's communication problems
Sagrera Heirs No.3	Amerada-Hess-Ethyl	Vermilion, La.	14,000	Mechanical problems
Melvin Camel No.1	Exchange O & G	Lafayette, La.	15,500	Poor sand development
S/L 7752 No.1	Peltex-McMoran	Terrebonne, La.	21,500	Discovery well
McGill; VUA No. 1	Cotton Petr.	E.Feliciania,La.	16,500	Made well
Marie Redd No. 1	Stone-Strata Energy	Jefferson Davis,La.	17,00	Made well
Harry Bourg No.1	Mosbacher-Transco	Terrebonne, La.	15,500	Did not reach Geo pressures
Firth Estate Min. No.2	Cockburn Oil	Galveston, Tex.	9,700	Mechanical problems
Graves No.1	Davis Oil	Brazoria, Tex.	13,000	Inadequate pressures

Table 1 (continued)

PRIORITY WELLS ACTIVELY MONITORED

MONTH: September

<u>Well Name</u>	<u>Operator</u>	<u>Location</u>	<u>Objective Depth</u>	<u>Comments</u>
W.L.Crews No.1	Atlantic Richfield	Brazoria, Tex.	22,000'	Drilling at 21,229'
La.Furs No.F-16	Union Cal.	Vermilion, La.	17,000	Drilling at 13,608 in sidetracked hole
G.E.Cocke No.1	Texaco	Terrebonne, La.		Fishing - no details
G.C.Cannan No.1	Anschutz	Brazoria, Tex.	17,000	Drilling ahead at 13,138
A.T.Faulk No.1	Atlantic Richfield	Vermilion, La.	20,000	Drilling at 16,270' with 17.7 ppg mud in sidetracked hole
Bickham No.1	LL & E	E.Feliciano,La.	18,000	Preparing to drill ahead at 15,767'
W.Wiltturner No.1	J.P.Owen	Vermilion, La.	17,500	Drilling at 15,759' with 16.5 ppg mud
J.B.LeBlanc No.1	Marathon	E.Baton Rouge,La.	21,500	Drilling at 20,021' with 18.0 ppg mud
Petitjean No.1	Stone Oil	Acadia, La.	16,000	Drilling at 14,600' with 17.4 ppg mud in sidetracked hole
D.Broussard	Stone Oil	Vermilion, La.	18,000	Drilling at 17,900' with 17.4 ppg mud
J.R.Morris No.2	SLAPCo	W.Baton Rouge,La.	21,500	Drilling at 20,210' with 16.9 ppg mud
Shadyside No. 1	Quintana	St.Mary, La.	18,000	Drilling at 15,402'
F.A.Godcheaux No.1	Amerada-Hess	Vermilion, La.	14,500	Drilling at 12,950'
McDonnell Est.No.1	Adobe Oil	Vermilion, La.	18,500	Drilling at 16,024' with 15.4 ppg mud
Graves No. 1	Davis Oil	Brazoria, Tex.	11,810	Did not penetrate geopressures
A.Graham No. 2	Superior	Vermilion, La.	17,800	Productive well
N.N.McVea No.1	Shell	E.Baton Rouge,La.		Poor sand development
M.H.Henry No. 1	Texasgulf	Lafayette, La.	16,000	Junked at 14,166' due to mechanical problems

Table 1 (continued)

PRIORITY WELLS ACTIVELY MONITORED

MONTH: October

<u>Well Name</u>	<u>Operator</u>	<u>Location</u>	<u>Objective Depth</u>	<u>Comments</u>
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CONTRACT HAD LAPSED - NO ACTIVITY

PRIORITY WELLS ACTIVELY MONITORED

Table 1 (continued)

MONTH: November

<u>Well Name</u>	<u>Operator</u>	<u>Location</u>	<u>Objective Depth</u>	<u>Comments</u>
S.E.Cocke No.1	Texaco	Terrebonne, La.	18,000'	Drilling at 16,549' with 18.0 ppg mud in sidetracked hole
G.C.Cannan No.1	Anschutz	Brazoria, Tex.	17,000	Well appears to qualify for short-term testing
A.T.Faulk No.1	Atlantic Richfield	Vermilion, La.	20,000	Drilled to 17,666'. Fishing
D.Broussard No.1	Stone Oil	Vermilion, La.		Drilling at 18,283' with 17.5 ppg mud
I. Ward No. 1	Resource Invest.	Acadia, La.	14,000	Drilling at 12,996' with 14.4 ppg mud
I.Whitfield No.1	Peltex	Acadia, La.	17,000	Drilling at 16,219' with 17.1 ppg mud
Cutler No.1	Quintana	Cameron, La.		Drilling at 15,150' with 18.0 ppg mud
E.H.Peterman No.1	Quintana	Iberia, La.		Drilled to 15,150' with 14.8 ppg mud
L. Babin No.1	Hou. Oil & Min.	Iberville, La.	15,500	Drilling at 13,302' with 16.6 ppg mud
Williams "H" No. 1	Chevron	St.Martins, La.	14,500	Drilling at 13,605'
Bickham No. 1	L L & E	E.Feliciano, La.		Producing well
Miami Corp. No. 4	Texaco	St. Mary, La.		Producing well
Morris Heirs No. 2	SLAPCo	W.Baton Rouge,La.		Producing well
McDowell Est. No. 1	Adobe	Vermilion, La.	17,700	Producing well
W.L.Crews No.1	Atlantic Richfield	Brazoria, Tex.	22,000	Poor sand development
LaFurs No. F-16	Union Cal.	Vermilion, La.		Junked due to mechanical problems
W.Wiltturner No.1	J. P. Owen	Vermilion, La.		Dropped due to borehole problems
J.B.LeBlanc No. 1	Marathon	E.Baton Rouge,La.		Offered but rejected due to excessive costs
Shadyside No.1	Quintana	St. Mary, La.		Operator decided not to participate
F.A.Godcheaux No. 1	Amerada-Hess	Vermilion, La.		Operator decided not to participate

Table 1 (continued)

PRIORITY WELLS ACTIVELY MONITORED

MONTH: December

<u>Well Name</u>	<u>Operator</u>	<u>Location</u>	<u>Objective Depth</u>	<u>Comments</u>
G.C.Cannon No. 1	Auschutz	Brazoria, Tex.	7,000	Operator testing gas "show"
I. Whitfield No. 1	Pel-Tex	Acadia, La.	17,500	Drilling at 16,281' with 17.1 ppg mud
E.H.Peterman No. 1	Quintana	Iberia, La.	17,000	Tite hole - operator not very co-operative
S. E. Cocke No. 1	Texaco	Terrebonne, La.	18,300	Offered, but lease could not be negotiated
D.Broussard No. 1	Stone Oil	Vermilion, La.	18,283	Rejected because of high salinity
S. D. Weil No. 1	Texaco	Pointe Coupee, La.	23,000	Well rejected due to poor sand development
A. T. Faulk No. 1	Atlantic Richfield	Vermilion, La.	20,000	Junked at 17,666 due to mechanical problems
Morris Heirs No. 2	SLAPCo	W.Baton Rouge, La.	21,000	Producing well
Cutler No. 1	Quintana	Cameron, La.	16,200	Operator uncooperative
25 McDowell Est. No. 1	Adobe	Vermilion, La.	18,000	Producing well
I. Ward No. 1	Resource Invest.	Acadia, La.	14,000	Insufficient pressures
Lawton No. 1	Sante Fe Energy	Calcasieu, La.	13,500	Had severe mechanical problems

TABLE 2
INDUSTRY CONTACTS MADE BY GRUY FEDERAL, INC.

<u>COMPANY</u>	<u>LOCATION</u>	<u>PERSON CONTACTED</u>	<u>RESPONSE</u>
Ada Oil Exploration, Inc.	Houston	W. M. Kennedy	Receptive
Adobe Oil & Gas Corp.	Midland, Tex.	Joe Pevehouse, Pres. (Midland); Don Hockaday (Houston); H. R. Holcomb, Vice Pres., Exploration & Land (Midland)	Joe Pevehouse was extremely cooperative and has offered several wells, including our first offer, which was rejected by DOE. Others either produced or did not qualify.
Alcorn Development Co.	Houston	Fred C. Alcorn George A. Alcorn	Alcorn offered the first well which was formally proposed, Fairfax Sutter No. 1. It turned out to be an excellent gas producer.
William A. Alexander Engineering, Inc.	Houston	William A. Alexander	For leads only.
Amarillo Oil Company	Amarillo	E. W. Mathis, Vice Pres., Land R. E. McCrehan, Dist. Mgr., Houston District	No record of response.
Amerada Hess Corp.	Lafayette, La.	Jack Mathis	Initially receptive, but subsequently elected not to cooperate. No reason given.
American Natural Gas Production Co.	Houston	A. Earl Swift, Vice Pres.; George A. Stovall, Director, Drilling and Prod.	Offered two non-qualifying wells which were rejected.
American Petrofina Co. of Texas	Dallas	L. A. Adams, Jr., Vice Pres., Property Acquisition	No record of response.
American Quasar Petroleum	Ft. Worth		No record of response. They cooperated in turning over the Georgia thermal test well, C. D. Hopkins No. 2
Aminoil USA Inc.	Houston	W. P. Oliver, Manager, Eastern Division	Receptive, but nothing qualified.
Amoco Production Co.	Houston	John W. Phenicie, Vice Pres.	"Referred to committee" - No further response.
Amoco Production Co.	New Orleans	R. M. Darling, Regional Production Manager	Violently opposed to any Geo ² operations on Rockefeller Game Refuge. Indicated cooperation elsewhere, but really not interested.
Anadarko Production Co.	Houston	C. E. Lasseter, Vice Pres., Controller	No candidates. Active in hot rock program.
Anschutz Corp.	Houston	W. R. Strickland, Mgr. of Land	Quite receptive. Offered one non-qualifying well. Offered second well which qualified but which was still testing for oil or gas as of March 1, 1980.
Asamera Oil International,	Houston	Bob Gray	Do not operate in Geo ² trends.
Ashland Exploration, Inc. Domestic Exploration and Production	Houston	B. E. Hamric, Group Vice Pres., Domestic	No record of response.

Table 2 (continued)

<u>COMPANY</u>	<u>LOCATION</u>	<u>PERSON CONTACTED</u>	<u>RESPONSE</u>
Atlantic Pacific Marine Corp.	Houston	E. C. Hellums, Mgr., Special Projects	For leads only
Atlantic Richfield Co. (Arco)	Houston	C. T. Hime, Jr., Dist. Landman; B. D. Honeycutt, Supervisor, Dist. Supt.	Monitored a very deep Texas operation which was made available to program, but was rejected because of sand conditions. Arco was most cooperative.
Atlantic Richfield Co. (Arco)	Lafayette	Barrett Booth, Division Operations Mgr.	Offered choice of two qualifying wells, assuming second well was dry. However, second well was junked and contact was not pursued because of proximity to Beulah Simon test.
B T A Oil Producers	Midland	Carlton Beal, Partner	No record of response. Not Geo ² trend operators.
Barber Oil Exploration, Inc.	Houston	John W. Cooke, Pres. (since terminated)	Principally offshore.
David C. Bintliff Interests Oil & Gas Division	Houston	W. Bruce Barbour, Supt. - Drilling and Production; C. E. Norton, Pres.	"Too many partners," nothing applicable
	Lafayette	Joseph F. Moss, Manager of Exploration	
Bonanza Oil Corp.	Houston	Don M. Hall, Mgr., Exploration (Now retired)	No operations in Geo ² trend.
Border Exploration Co. (a subsidiary of Coastal States Gas Corp.)	Houston	Dick Holt, Division Mgr.	See Total Petroleum Company comments.
Brewer & Company, Geophysicists	Houston	Richard Brewer, Pres.	For leads only.
Buttes Resources Co.	Dallas		Company reorganized and moved to Dallas. Virtually out of business. Limited operations and no qualified candidates at this time.
C & K Petroleum, Inc.	Houston	M. J. Kutner, Vice Pres.	Nothing applicable.
Carl Oil & Gas, Inc.	Corpus Christi, Tex.	William E. Carl, Pres.	No response and no candidates.
Cities Service Co.	Houston		Offered one or more non-qualifying wells.
Coastal States Gas Corp.	Houston		Border Exploration is a subsidiary. Border and TOTAL offered a well which qualified, but was junked. See TOTAL.
Columbia Gas Development Corp.	Houston	Edward D. Callahan, Senior Vice Pres.	Expressed interest but nothing developed.
Continental Oil Co.	Houston	F. E. "Tut" Ellis, Vice Pres., North American Production	Conoco does little onshore exploration in the Geo ² trends. They were most cooperative in offering a deep candidate in the Rayne field area. We had a deal, but Geo ² sands were missing.

Table 2 (continued)

<u>COMPANY</u>	<u>LOCATION</u>	<u>PERSON CONTACTED</u>	<u>RESPONSE</u>
Milton M. Cooke Co.	Houston	Milton M. Cooke, Sr., Pres.	"Bubba" Cooke, Milton's son, planned a deep test in Brazoria County. The well has not yet been drilled. The deep Frio sands are hot but tight. The well is available if or when drilled and non-productive.
Edwin L. Cox	Dallas	Edwin L. Cox, Owner	No reply.
Crown Central Petroleum Corp.	Bellaire	R. M. Kobdich, Vice Pres.	No candidates.
Crystal Oil Co.	Shreveport, La.	Robert F. Roberts, Pres.	No response and no known candidates.
Damson Oil Corp.	Houston	Charles H. Moore, Vice Pres., Production	No response of record.
Davis Oil Company	Houston	Rex Hannon, Land Manager; Chuck Noll, District Mgr.	One candidate was offered and rejected.
Dow Chemical Company	Houston	V. H. Buckley, J. S. Talbot, General Mgr.; Mkt. Coord.	A tentative deal was arranged on a location which made a producer. It was a barge job and we did not consider barge jobs at the time. Later Dow got into the Geo ² Act on its own.
Drilling Tools, Inc.	Houston	Robert D. Dilworth, S. Vice Pres.	For leads only.
ENI Exploration	Houston	Richard Snyder, Mgr., Houston office	Most receptive. Had interest in Beulah Simon No. 2 and Fairfax Foster Sutter No. 1. ENI does not operate.
Energy Reserves Group (formerly Clinton Oil)	Houston	A. S. Bonner, Jr., Vice Pres. Production	No record of response.
Enserch Exploration, Inc. (Lone Star Gas)	Dallas		No candidates screened.
Energy Resources Group (Entex-formerly United Gas)	Houston	John C. Capshaw, Senior Vice Pres., Energy Resources Group; Jack H. Abernathy, Vice Chairman	No response of record.
Enterprise Production Co.	Houston		Offered well which was recommended to DOE as qualified candidate. Some associates in the deal refused to go along because of possible effect on updip hydrocarbon reservoirs.
Exchange Oil & Gas Corp.	New Orleans	Robert J. Martin, Chief Landman, Assistant Secretary	Exchange is receptive. They offered several wells which failed to qualify.
Exxon Company, USA	Houston	A. Salvador, Chief Geologist	Exxon is a master of delaying tactics. They are unlikely to participate in programs but may conduct tests for own account. They do not appear to have any interest in a joint DOE project.

Table 2 (continued)

<u>COMPANY</u>	<u>LOCATION</u>	<u>PERSON CONTACTED</u>	<u>RESPONSE</u>
Florida Gas Exploration Co.	Houston	J. B. "Brick" Goldman, Pres.	No response of record.
Forest Oil Corp.	Lafayette	E. L. Villeregal, Div. Mgr.	Offered two non-qualifying wells. Anxious to cooperate.
Forest Oil Corp.	Denver General Office	Herbert J. Warner, Vice Pres., Exploration	Herb Warner is very cooperative.
Forest Oil Corp.	Corpus Christi	George O. Page, Division Manager	We negotiated takeover of a Wilcox well in DeWitt County, but the sands were too tight and well was rejected.
Bill Forney, Inc.	Houston	Bill Forney, Sr., Pres.	No record of response.
Freeport Oil Co.	Houston	Donald N. Collins, Division Manager	Limited operations in area of interest.
General American Oil Co. of Texas	Dallas	James W. Goss, Executive Vice Pres.; Joe M. Haas, Vice Pres., Engineering; Jim Perkins, Ass't. Vice Pres., Land	The program was discussed with all three of these men, but nothing ever came of it. The company has not been active in deep exploration.
General Crude Oil Co.	Houston	R. L. Draper, Vice Pres.; Mark F. Wray, Vice Pres.	Sold to Mobil. Before that, managed the first design Geo ² well, which was as much involvement as they desired.
Getty Oil Co.	New Orleans	J. E. Pierce, District Mgr.	Getty and partners were willing to make a well in Cameron Parish, near the Gladys McCall location, available to the program. The bottom portion of the well was lost for mechanical reasons. Mr. Pierce was the first major company representative to express willingness to cooperate.
Goldking Production Co.	Houston	Allan C. King, Pres.	Promised cooperation before they got into the act themselves.
Gulf Oil Exploration and Production Co.	Houston		No candidates appeared in screening procedure. Gulf is believed to be concentrating exploration efforts offshore.
Hamilton Brothers	Denver	Scott A. Cunningham, Vice Pres. Exploration	No response of record.
Jake L. Hamon	Dallas	Owner	No response of record.
Hawkins & Hawkins	New Orleans	H. L. Hawkins, Jr., Owner	No candidates.
Helmerich & Payne, Inc.	Tulsa	Carl H. Young, Vice Pres., Drilling	Do not operate in area of interest.
Highland Resources, Inc.	Houston	Ralph S. O'Connor, Pres.	No candidates and no response.

Table 2 (continued)

<u>COMPANY</u>	<u>LOCATION</u>	<u>PERSON CONTACTED</u>	<u>RESPONSE</u>
Houston Oil & Minerals Corp.	Houston	Charles A. Swize, General Manager, Eastern Division	Good people and cooperative. Several wells offered which did not qualify. A good continuing contact.
Hunt Energy Corp.	Dallas		No qualified wells turned up except Tuscaloosa wildcats.
IMC Exploration Co.	Houston	Gene Roark, President	Very cooperative. Several old wells in the Perry Point Field were offered but were rejected by GFI because of probable pressure depletion and probable difficulty in recovering old tubing strings with congealed mud in annuli.
Inexco Oil Co.	Houston	William G. Goodwin, Vice Pres., Land	Offered two prospects: one was junked and the other never encountered geopressures.
Kilroy Co. of Texas, Inc.	Houston	W. J. Graham, Executive Vice Pres.	Kilroy operates a fund with many partners. This makes a quick decision difficult when a well reaches total depth. However, they have offered one or two wells. One qualified, but they elected not to engage in negotiations over the holiday season.
Kirby Exploration Co.	Houston	Jeff Montgomery, Chairman	No candidates - principally offshore.
Ladd Petroleum Corp. (now owned by G.E.)	Houston	Sam H. Peppiatt, Mgr., Exploration; R. G. Spence, Vice Pres., Land	No response.
Louisiana Land and Exploration Co.	New Orleans	Jack Barnett	Excellent contact. L.L. & E. is interested in a design well on its land and has submitted a model Geo ² lease. They also have offered WOO candidates which either produced or did not qualify.
Marathon Oil Co.	Houston	W. L. Parker, Manager, Prod. Div.	Marathon was willing to turn over a deep expensive Tuscaloosa well but recommend we not accept it because it has a history of trouble and difficult logistics. They were most cooperative.
Marion Corp.	Mobile-Lafayette		Offered several wells which did not quite qualify.
Marr Company	Dallas	Jack W. Shirley, Exploration Mgr.	No response and no candidates.
McCormick Oil & Gas Corp.	Houston	Don B. Clutterbuck, Senior Vice Pres.	Another fund company. They drill deep wells in Geo ² trends, but we were never able get together.
McCulloch Oil & Gas Corp.	Houston	John W. Moore, District Mgr.	We have good contacts at all levels, including the head office, but they had no qualifying wells.

Table 2 (continued)

<u>COMPANY</u>	<u>LOCATION</u>	<u>PERSON CONTACTED</u>	<u>RESPONSE</u>
Martin Exploration Co.	Metairie		A lead which did not materialize.
McMoran Exploration Co.	Metairie	James R. Moffett, President	No wells turned up in screening process.
Mesa Development Co.	Amarillo	J. D. Larsen, Group Vice Pres.	Mostly offshore.
Michigan Wisconsin Pipe Line Co.	Houston	A. E. Swift, Vice Pres., Exploration	Offered to cooperate on at least two locations which did not qualify.
Mitchell Energy Corp.	Houston	F. D. Covey, Senior Vice Pres.	"No good candidates - will keep your plans in mind."
Mobil Oil Corp.	Houston		No response - no screening candidates.
Mobil Oil Corp.	New Orleans		"No candidates now"
Moran Corp.	Houston	John Perkins	Had a candidate which was not drilled.
Mosbacher Production Co.	Houston	W. T. Mendell, Exec. Vice Pres.	Could not get together - probably too busy to bother
Monsanto Chemical Intermediates Co.			No response
Murphy Oil Corp.	El Dorado, Ark.		"Nothing at present time - will keep proposal in mind."
Natomas North America, Inc.	Houston	Al Truex, Regional Land Mgr.	Tuscaloosa Wells only - one or two were offered, but were attempting to blow out at the time and were respectfully declined.
Neuhoff Oil & Gas Corp.	Dallas	Henry Neuhoff, Jr., Pres.	Neuhoff made the F.F. Sutter No.2 well available. Relations with their people are excellent.
North American Royalties, Inc.	Lafayette	Jim Smyth, District Mgr.	Leasehold problems prevented consideration of one potential candidate.
North Central Oil Corp.	Houston	C. A. Watts, Pres.	No qualifying wells. Probably can do business with these folks.
Ocean Drilling & Exploration Co.	New Orleans	Jack McGregor, Vice Pres., Production	Offshore only.
Oleum, Inc.	Longview		Offered reentry prospect in Matagorda County - very hot, but pressure depleted. This was our first offer of any well.
J. P. Owens	Lafayette	J. P. Owens, Owner	Jimmy's wells were always messed up. We talked a lot.
Patrick Petroleum Co.	Houston	Wayne Rea, Land Mgr.	No response.
Pel Tex Oil Company, Inc.	Houston	John Mistrot, Vice Pres., Land	A deep candidate in Vermilion Bay was negotiated but it made a well. Also, this was a water job.

Table 2 (continued)

<u>COMPANY</u>	<u>LOCATION</u>	<u>PERSON CONTACTED</u>	<u>RESPONSE</u>
Pend Oreille Oil & Gas	Houston	John H. Lollar President	These are the people who blew the Enterprise Oil Co. candidate.
Pennzoil Exploration & Prod. Co.	Houston		No response.
Petro Lewis Corp.	Denver	Richard Bennett, Vice Pres., Developing Engineer	Petro Lewis made its entire 1978-79 program available to us and we followed it. No wells qualified - some near misses.
Phillips Petroleum Co.	Houston	J. T. Carlisle, Regional Exploration Mgr.	Phillips was willing to make one of two reentry candidates available in Chocolate Bayou field. About that time reentries became unpopular with the DOE.
Prairie Producing Co.	Houston	James Hinson, Land Manager	Monitored two potential wells in Brazos Co. which could have been available; both made producers
Quintana Petroleum Corp.	Houston	John B. Brock, Exec. Vice Pres.; D. W. Keller, Manager, Special Projects	Several contacts with Quintana failed to turn up anything.
Reading & Bates	Houston	W. D. Kent, Pres.	No candidates.
Republic Mineral Corp.	Houston	E. G. Wallace, Jr., Pres.	No response - no deep operations.
Sabine Corp.	Houston	R. C. Cline, Landman; J. L. Pritchett III, District Mgr.	Sabine offered a Tuscaloosa well and sale of special tubulars. The well got into mechanical trouble and the Tuscaloosa pressures were lower than expected. Both parties were disappointed as they wanted to deal.
Sanchez O'Brien Petroleum Corp.	Houston	Pete Groth, Landman	Offered a TA Wilcox well. Sand was too thin and too tight.
Shell Oil Company Exploration & Production	Houston - Head Office	C. P. St. Laurent, Manager, Production Administration	
Shell Oil Co.	Houston	Charlie Mathews, Consulting Reservoir Engineer	
	New Orleans Region	Sam Paine, General Mgr., Production; Joe Babin, Division Production Mgr. Coastal Division	Shell's exploration activity is mainly offshore and in the Tuscaloosa trend. They also have been active in the deep Wilcox of South Texas, where sands generally are too thin and tight. Shell does not think much of the program, but has offered to make qualifying wells available except for the Tuscaloosa. They promised a well in Cameron Parish, but it had insufficient sand. Shell has stated that "for public relations reasons they will cooperate" (Sam Paine). However, they have drilled few qualifying onshore wells except on Tuscaloosa trend.

Table 2 (continued)

<u>COMPANY</u>	<u>LOCATION</u>	<u>PERSON CONTACTED</u>	<u>RESPONSE</u>
Southport Exploration Co.	Tulsa	John Brock, President	Southport and Associates made the Beulah Simon well available. They also offered several other candidates, some of which were junked, made producers, or did not qualify. Another qualifying candidate was rejected by DOE. No reason was given, but it was toward the end of the contract.
Southern Natural Gas Co.	Houston	F. D. Leigh, Vice Pres., Exploration and Production	No response.
Southland Royalty Co.			No response.
South Louisiana Production Co. "SLAPCO"	Lafayette	Bill Hollingsworth, Vice Pres., Exploration	Offered 22,000 ft Tuscaloosa well which was kicking 19.5 lb/gal mud. We replied "thanks but no thanks."
Stone Oil Corp.	Lafayette	Joe Klutts, Executive Vice Pres., Exploration; Howard M. Kirsck, Chief Landman	Stone offered a deep Pecan Island well which had Geo ² sands behind pipe and in open hole. A takeover was being negotiated. A day or two before takeover the drill pipe was stuck in open hole. The DOE did not elect to test the behind pipe Geo ² sands and reject the well because the open hole objective sands were not available.
Sun Gas Company	Houston	Clarence Prihode, Mgr. Engineering	Offered well which qualified but we had insufficient time to consider.
Sunlite International, Inc.	Houston	Edwin C. James, President	No qualifying wells.
Superior Oil Co.	Houston	F. F. Martin, Div. Mgr.; E. C. Hixon, Manager, Land	Superior is hard to do business with. They are always in meetings, however, they drill more deep wells in Geo ² trends than most major companies. They agreed to make the outstanding Geo ² test well of all time available to the program. This was the Superior Willis Hulin No. 1 well in Vermilion parish, a 22,000-foot well with massive sands. However, Superior made a gas completion below the massive sands and the well is now producing. Superior had other candidates which were not pushed since the Hulin well was believed to be available and Superior was disinclined to spend more time in negotiations than required for that well.
Tejas Production Co.	Houston	M. L. Zeid, Exec. Vice Pres.	No deep wells.
Tenneco Oil Exploration & Production	Houston	Mickey Braden, Mgr., Frontier Prod. Proj.; Joe B. Foster, President	Tenneco made its Fee "N" No. 1 well available to the program.

Table 2 (continued)

<u>COMPANY</u>	<u>LOCATION</u>	<u>PERSON CONTACTED</u>	<u>RESPONSE</u>
Terra Resources, Inc.	Houston	Bob Stevenson, Landman	Offered a candidate which produced.
Texaco, Inc.	Houston Division	M. L. Mixon, Division Landman (now with Kilroy)	Several conferences were held in the Houston office. The matter of limited liability was a sticking point and caused them to withdraw a Brazoria County candidate. (This was academic because the well was completed as a producer).
	New Orleans Division	R. C. Shields, Vice Pres.; B. D. McGrath, Mgr., Exploration; D. R. Byrne, Division Landman	At the end of the year, Texaco offered an outstanding dry hole candidate in Terrebonne Parish. Texaco could not have been more cooperative. However, they were sublessees and the owner of the reversionary rights made outrageous demands which were rejected by DOE.
Texas City Refining, Inc.	Texas City	Ross Bolton, Vice Pres.	No candidates.
Texas Crude, Inc.	Houston	Charles Weiner, President	No candidates.
Texas Eastern Transmission Corp.	Houston	W. C. Lonquist, General Manager	No response - no record of qualifying wells.
Texas Gas Exploration Corp.	Houston	Fred Schall, Mgr., Drilling & Production	No candidates or no interest.
Texas Gulf, Inc.	Houston	Richard Johnson	No qualifying wells.
Texas Oil & Gas Corp.	Dallas	Donald Chase, Sr. Vice Pres., Drilling Operations	No record of response
Texas Pacific Oil Co., Inc.	Dallas	R. M. Brackbill, Exec. Vice Pres., Production	Did not respond to letters or calls.
Total Petroleum, Inc.	Houston	Calvin G. Chimene, Exploration Mgr.	Total and Border offered the best Wilcox candidate we have seen. While we were preparing the prognosis, they junked the hole. If we dealt with them once, they can be dealt with again.
Transco Petroleum, Inc.	Houston		No record of response.
Sheridan A. Thompson Consulting Geologist	New Orleans	Lyle H. Harvey, District Manager	No candidates.
Trunkline Gas Co.	Houston	W. C. Keefe, Chairman	No reply.
Union Oil Co. of California	Houston	J. D. Clark, Regional Reservoir Engineer	
J. A. Whitson, Jr.	Houston	J. A. Whitson	
Williams Exploration Co.	Houston	Kenneth E. Masters, Division Exploration Manager	

Table 2 (continued)

<u>COMPANY</u>	<u>LOCATION</u>	<u>PERSON CONTACTED</u>	<u>RESPONSE</u>
Wintershall Oil and Gas Co.	Houston	Curry Hall Senior Geologist	
Zapata Exploration Co.	Houston	Donald S. Hare, Vice President, Drilling and Production	

TABLE 3
SUMMARY OF INDUSTRY RESPONSES
TO WELL-OF-OPPORTUNITY SOLICITATION

	<u>Major companies</u>	<u>Inde- pendents</u>
Possible interest but no candidate wells	2	5
Expressed interest but no candidate wells	0	4
No apparent interest and no candidate wells	5	1
Offered one or more wells that were rejected by Gruy Federal	8	21
Few if any onshore Geo ² trend operations (no prospects in screening)	0	16
No response	2	18
Offered well that was later junked	4	0
Offered well that was later junked and offered well that Gruy Federal recommended	2	0
Offered well that was later junked and offered well that Gruy Federal rejected	1	0
No response and few if any onshore Geo ² trend operations (no prospects in screening)	0	12
Expressed interest but had few if any onshore Geo ² trend operations	0	1
Offered well which Gruy Federal recommended	1	4
Not an operator, or rated elsewhere, or not rated	8	
Miscellaneous unknown reasons for referral	16

APPENDIX 1

Department of Energy
Nevada Operations Office
P. O. Box 14100
Las Vegas, NV 89114

JAN 17 1980

Reply to:
Geopressure Projects Office
Suite 8620, Federal Building
515 Rusk Street
Houston, Texas 77002

January 16, 1980

Mr. Richard J. Dobson
Gruy Federal, Inc.
2500 Tanglewilde, Suite 150
Houston, TX 77863

Dear Mr. Dobson:

Gruy Federal's assistance in compiling further data for the orderly transferral of the Wells-of-Opportunity (WOO) contract is required for program continuity. In particular, DOE needs an update of the summary report: "NOTES ON GRUY FEDERAL'S WELLS-OF-OPPORTUNITY PROGRAM", covering Gruy Federal WOO activities to January 31, 1980, the extension date beyond the original contract which was mutually agreed upon to permit continuous monitoring and acquisition of Wells of Opportunity.

The report will be similar to the one referred to above and should include a summary of the development of the program so that needed information can be transferred to present and future program participants. Accordingly, the report should include the narrative, exhibits, charts and illustrations that track Gruy Federal's effort to interest industry in cooperating in the DOE-sponsored program to obtain data on geopressured geothermal aquifers.

A description of the search, screening, identifying, negotiating for, acquiring, and completion and testing of wells of opportunity drilled by industry and analyzed for test data should be provided. Information on the methods of implementation and execution of the monitoring/tracking/acquisition phase is required along with an evaluation of the success of these methods and to include recommendations for improvement.

The following list of items should be included in the report (not necessarily in the order provided):

1. Description of scouting techniques peculiar to geopressured geothermal wells.
2. Description of legal problems encountered with an explanation of the method for surmounting these problems if accomplished and including recommendations for a future approach to finding solutions if they were not found.

January 16, 1980

3. Graphical display of wells-of-opportunity prospects screened by month for Texas and Louisiana and also providing a graph of total wells screened.
4. Wells-of-opportunity screening progress cumulative graph.
5. Activity and milestone history of W00 contract.
6. Manpower utilization on W00 contract.
7. Tables listing wells screened as W00 candidates by month with comments covering acceptance or rejection and reasons for.
8. Appendices providing industry contacts including company, location (address and telephone number) and person(s) contacted with comments relating results (i.e., degree of interest, reasons for non-participation if provided.)
9. Contact report tabulations should include follow-up contacts made (number, dates, and communication means used - done in chronological order.)
10. Summaries of industry responses to mail solicitations, telephone surveys and contracts, etc.
11. Tabulation of prospective wells investigated in detail with brief comments regarding disposition.
12. Appendix of weekly report well files (Inventory of Priority W00 Prospects).
13. Chronological listing of Gruy Federal staff participation in workshops, conferences and technical meeting. Include presentations before technical and business societies, i.e., SIPES, AIME-SPE, Houston Geological Society, Landman Associations, etc.

We request that an outline for this report be submitted as soon as you think practical, hopefully the week of January 28-31, 1980 with a draft of the report submitted by February 18, 1980.

If you have questions concerning this report, please contact the Geopressure Projects Office.

Your assistance is greatly appreciated and will contribute to the continuance of the W00 work that Gruy Federal initiated.

Sincerely,

Keith Westhusing

cc: R. Stearns, DOE NV, Las Vegas, NV