

UTAH DIVISION OF OIL, GAS AND MINING

REMARKS: WELL LOG _____ ELECTRIC LOGS _____ FILE WATER SANDS _____ LOCATION INSPECTED _____ SUB. REPORT/ABD. _____

* Application terminated

DATE FILED 9-12-78

LAND: FEE & PATENTED STATE LEASE NO. PUBLIC LEASE NO. U-7420 INDIAN

DRILLING APPROVED: 9-11-78

SPUDED IN:

COMPLETED: PUT TO PRODUCING:

INITIAL PRODUCTION:

GRAVITY A.P.I.

GOR:

PRODUCING ZONES:

TOTAL DEPTH:

WELL ELEVATION:

DATE ABANDONED: 1-12-82 - termination (paid)

FIELD: ~~S. Agate~~ 3/86 Greater Cisco

UNIT:

COUNTY: Grand

WELL NO. Federal 1-420

API NO: 43-019-30461

LOCATION 2310' FT. FROM ~~XX~~ (S) LINE. 2310' FT. FROM (E) ~~XX~~ LINE. NW SE ¹⁰ 1/4 - 1/4 SEC. 17

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
				20S	24E	17	GEORGE W. GRAHAM, INC.

FILE NOTATIONS

Entered in NID File
Location Map Pinned
Card Indexed

Checked by Chief
Approval Letter
Disapproval Letter

COMPLETION DATA:

Date Well Completed
 .. WW..... TA.....
 OS..... PA.....

Location Inspected
Bond released
State or Fee Land

LOGS FILED

Driller's Log.....
Electric Logs (No.)
E..... I..... Dual I Lat..... GR-N..... Micro.....
BHC Sonic GR..... Lat..... MI-L..... Sonic.....
CBLog..... CCLog..... Others.....

Frank B. Adams
Oil Properties
716 Wilson Building
Corpus Christi, Texas 78401
August 18, 1978

Sc 114

*NW
SE*



Re: George W. Graham No. 1-420
Federal Lease U-7420
Grand County, Utah

The District Engineer
U. S. Geological Survey
8440 Federal Building
Salt Lake City, Utah 84138

Dear Sir:

Enclosed in triplicate is Form 9-331 C " Application to Drill"
the above noted test well.

The undersigned is record owner of said lease and have accordingly
executed a " Designation of Operator " in Mr. Graham's favor and
made it a part of the enclosed application.

The undersigned has a \$25,000 Statewide Drilling Bond of record
with the BLM. Attached to the Form 9-331 C is all of the support-
ing information required by NTL-6.

Kindly review the enclosed and contact me when an on-site inspection
can be arranged.

Sincerely yours,

For George W. Graham, Inc.

Frank B. Adams
Frank B. Adams, Agent

Encl- Original = 2

cc: State of Utah O&GCC ✓
George W. Graham, Inc.
Al Wadzeck

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

5. LEASE DESIGNATION AND SERIAL NO.
U-7420

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

9. WELL NO.
1-420

10. FIELD AND POOL, OR WILDCAT
S. Agate Field

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Section 17
T20S-R24E SLB&M

12. COUNTY OR PARISH | 13. STATE
Grand | Utah

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1A. TYPE OF WORK
DRILL DEEPEN PLUG BACK

B. TYPE OF WELL
OIL WELL &/or GAS WELL OTHER
SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR George W. Graham, Inc. (U-38700)
400 First Wichita National Bank Building

3. ADDRESS OF OPERATOR
Wichita Falls, TX 76301

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface 2,310' fsl and 2,310' fel of Section 17
At proposed prod. zone TwN 20 South, Range 24 East SLB & M
Same as above

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
Seven miles nne of Cisco, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
330'

16. NO. OF ACRES IN LEASE
160 acres

17. NO. OF ACRES ASSIGNED TO THIS WELL
10 acs-oil/160 acs- gas

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
None

19. PROPOSED DEPTH
1,650'

20. ROTARY OR CABLE TOOLS
Rotary (air)

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
4,582' Ground and 4,592' KB

22. APPROX. DATE WORK WILL START*

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8-5/8ths	7" *	20#	100-120'	40 sks to surface
6-1/4th	4 1/2" **	9.5#	1,650'	100 ska + 2% KCL

* 7" will be new 20# K-55 *R ST&C R-3
** 4 1/2" will be new 9.5# K-55 8R ST&C R-2

Note - Attachments

- Supplement to 9-331 C attached as required by NTL-6
- Surface use plan
- Designation of Operator attached
- Seven point pressure control plan w/schematic of BOP (Exhibit "B")

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Frank B. Adams TITLE W.I. PARTNER DATE August 18, 1978
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY [Signature] TITLE ACTING DISTRICT ENGINEER DATE OCT 27 1978
CONDITIONS OF APPROVAL, IF ANY:

CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY

NOTICE OF APPROVAL
State O and G.

*See Instructions On Reverse Side

NECESSARY FLARING OF GAS DURING DRILLING AND COMPLETION APPROVED SUBJECT TO ROYALTY (NTL-4)

FROM: DISTRICT GEOLOGIST, MFC SALT LAKE CITY, UTAH

TO: DISTRICT ENGINEER, O&G, SALT LAKE CITY, UTAH

SUBJECT: APD MINERAL EVALUATION REPORT

LEASE NO. U-7420

OPERATOR: GEORGE W. GRAHAM, INC

WELL NO. 1-420

LOCATION: 1/4 NW 1/4 SE 1/4 sec. 17, T. 20S., R. 24E., SLM

GRAND County, UTAH

1. Stratigraphy: OPERATOR ESTIMATES ARE REASONABLE.

2. Fresh Water: SEE ATTACHED WRD REPORT.

3. Leasable Minerals: VALUABLE PROSPECTIVELY FOR COAL IN DAKOTA

4. Additional Logs Needed: OPERATOR SUITE SHOULD BE RUN THROUGH DAKOTA

5. Potential Geologic Hazards: NONE EXPECTED.

6. References and Remarks: WITHIN 1 MI. OF SAGE AND GRAND PILE KGS.
U.S.G.S FILES, S.L.S., UT.

Signature: TRA

Date: 9 - 7 - 78

(D-20-24) 21:00

Depths of fresh-water zones:

Walter D. Broadhead, Fed Cisco #4, Gravelpile

980' fsl, 930' fwl, sec. 29, T.20 S., R.24 E., SLBM, Grand Co., Utah

Elev. 4,481 ft GR, test to 800 ft

Casing proposed to 90 ft

Formation tops, approx.:

Mancos Shale	surface
Dakota Ss & Cedar Mtn Sh	350 ft
Morrison Fm	470 ft
Salt Wash Mem	850 ft

Useable water, fresh or slightly saline, may occur in sandstone units of the Mancos Shale, Dakota Sandstone, and the conglomerate member of the Cedar Mtn Shale. Moderately saline water occurs in the sandstones of the Morrison Formation in this area.

CTS
9-21-70

United States Department of the Interior
Geological Survey
8440 Federal Building
Salt Lake City, Utah 84138

Usual Environmental Analysis

Lease No. U-7420

Operator George W. Graham, Inc.

Well No. 1-420

Location 2310' FS&EL (NW1/4 SE1/4) Sec. 17 T. 20 S R. 24 E

County Grand State Utah Field S. Agate

Status: Surface Ownership Federal Minerals Federal

Joint Field Inspection Date September 15, 1978

Participants and Organizations:

Gary Stephens

U.S. Geological Survey

Bob Kershaw

Bureau of Land Management

Al Wadzeck

George W. Graham, Inc.

Related Environmental Analyses and References:

(1)

(2)

*Pad 200 x 200
incl pit
1600' new access
flow line not incl
Stock pits top soil
1/2 ac*

Analysis Prepared by:

Gary Stephens
Environmental Scientist
Albuquerque, New Mexico

Reviewed by:

Lynn Rust
Environmental Scientist
Casper, Wyoming

Date September 16, 1978

noted - George Dinwiddie

Proposed Action

On August 22, 1978, George W. Graham, Inc. filed an Application for Permit to Drill the No. 1-420 development well, a 1,650-foot (oil and gas) test of the Morrison and Dakota Formations of Triassic and Cretaceous ages; located at an elevation of 4,582 ft. in the NW 1/4 SE 1/4, section 17, T. 20 S., R. 24 E., Grand Co., Utah on Federal mineral lands and Federal surface; lease No. U-7420. There was no objection raised to the wellsite nor to the access road.

A rotary rig would be used for the drilling. An adequate casing and cementing program is proposed. Fresh-water sands and other mineral-bearing formations would be protected. A Blowout Preventer would be used during the drilling of the well. The proposed pressure rating should be adequate. Details of the operator's NTL-6 10-Point Subsurface and 13-Point Surface Protection Plans are on file in the U.S. Geological Survey District Office in Salt Lake City, Utah and the U.S. Geological Survey Northern Rocky Mountain Area Office in Casper, Wyoming.

A working agreement has been reached with the Bureau of Land Management, the controlling surface agency. Rehabilitation plans would be decided upon as the well neared completion; the Surface Management Agency would be consulted for technical expertise on those arrangements.

The operator proposes to construct a drill pad 200 ft. wide x 200 ft. and a cuttings pit. A new access road will be constructed 16 ft. wide x 1,600 feet long from an existing and improved road. The operator proposes to construct production facilities on disturbed area of the proposed drill pad.

If production is established, plans for a gas flow line will be submitted to the appropriate agencies for approval. The anticipated starting date is December 15, 1978 and duration of drilling activities would be about 10 days.

Location and Natural Setting:

The proposed drillsite is approximately 7.0 miles north-northeast of Cisco, Utah, the nearest town. A fair road runs to within 1500 feet northwest of the location. This well is in the South Agate field.

Topography:

Flat to gently undulating desert.

Geology:

The surface geology is Mancos shale. The soil is sandy loam. No geologic hazards are known near the drillsite. Seismic risk for the area is minor. Anticipated geologic tops are filed with the 10-Point Subsurface Protection Plan.

Approval of the proposed action would be conditioned that adequate and sufficient electric/radioactive/density logging surveys would be made to locate and identify any potential mineral resources. Production casing and cementing would be adjusted to assure no influence of the hydrocarbon zones through the well bore on these minerals. In the event the well is abandoned, cement plugs will be placed with drilling fluid in the hole to assure protection of any mineral resources.

The potential for loss of circulation would exist. Loss of circulation may result in the lowering of the mud levels, which might permit exposed upper formations to blow out or to cause formation to slough and stick to drill pipe. A loss of circulation would result in contamination due to the introduction of drilling muds, mud chemicals, filler materials, and water deep into the permeable zone, fissures, fractures, and caverns within the formation in which fluid loss is occurring. The use of special drilling techniques, drilling muds, and lost circulation materials may be effective in controlling lost circulation.

A geological review of the proposed action has been furnished by the Area Geologist, U.S. Geological Survey, Salt Lake City, Utah.

The operator's drilling, cementing, casing and blowout prevention programs have been reviewed by the Geological Survey engineers and determined to be adequate.

Soils:

No detailed soil survey has been made of the project area. The top soils in the area range from a sandy loam to a silty sand. The soil is subject to runoff from rainfall and has a high runoff potential and sediment production would be high. The soils are mildly to moderately alkaline.

Top soil would be removed from the surface and stockpiled. The soil would be spread over the surface of disturbed areas when abandoned to aid in rehabilitation of the surface. Rehabilitation the location and access roads per the recommendations of the Bureau of Land Management.

Approximately 1 1/2 acres of land would be stripped of vegetation. This would increase the erosional potential. Proper construction practice, construction of water bars, reseeding of slope-cut area would minimize this impact.

Air:

No specific data on air quality is available at the proposed location; however, the existing air quality relative to federal Ambient Air Quality Standards is believed to be good. There would be a minor increase in air pollution due to emissions from rig and support traffic engines. Particulate matter would increase due to dust from travel over unpaved dirt roads. The potential for increased air pollution due to leaks, spills, and fire would be possible.

Relatively heavy traffic would be anticipated during the drilling operations phase, increasing dust levels and exhaust pollutants in the area. If the well was to be completed for production, traffic would be reduced substantially to a maintenance schedule with a corresponding decrease of dust levels and exhaust pollutants to minor levels. If the project results in a dry hole, all operations and impact from vehicular traffic would cease after abandonment. Due to the limited number of service vehicles and limited time span of their operation, the air quality would not be substantially reduced.

Toxic or noxious gases would not be anticipated

Precipitation:

Annual rain fall should range from about 8 to 11" at the proposed location. The majority of the numerous drainages in the surrounding area are of a non-perennial nature flowing only during early spring runoff and during extremely heavy rain storms. This type of storm is rather uncommon as the normal annual precipitation is around 8".

Winds are medium/strong and gusty, occurring predominately from southwest to northwest. Air mass inversions are rare.

The climate is semi-arid with abundant sunshine, hot summers and cold winters with temperature variations on a daily and seasonal basis.

Surface Water Hydrology:

There are no surface waters in the vicinity.

Some additional erosional would be expected in the area since surface vegetation would be removed. If erosion became serious, drainage systems such as water bars and dikes would be installed to minimize the problem.

The potentials for pollution would be present from leaks or spills. The operator is required to report and clean-up all spills or leaks.

Ground Water Hydrology:

Some minor pollution of ground water systems would occur with the introduction of drilling fluids (filtrate) into the aquifer. This is normal and unavoidable during rotary drilling operations. The potential for communication, contamination and comingling of formations via the well bore would be possible. The drilling program is designed to prevent this. There is need for more data on hydrologic systems in the area and the drilling of this well may provide some basis information as all shows of fresh water should be reported. Water production with the gas would require disposal of produced water per the requirements of NTL-2B.

The depths of fresh-water formations are listed in the 10-Point Subsurface Protection Plan. There would be no tangible effect on water migration in fresh-water aquifers. The pits would be unlined. If fresh-water should be available from the well, the owner or surface agency may request completion as a water well if given approval.

Vegetation:

Saltbrush, muhly, and shadscale.

Plants in the area are of the salt-desert-shrub types.

Proposed action would remove about 1 1/2 acres of vegetation. Removal of vegetation would increase the erosional potential and there would be a minor decrease in the amount of vegetation available for grazing.

The operator proposes to rehabilitate the surface upon completion of operations.

Animal and plant inventory has been made by the BLM. No endangered or threatened plants or animals are known to habitat on the project area. The fauna of the area consists predominantly of the mule deer, coyotes, foxes, badgers, rabbits, and varieties of small ground squirrels and other types of rodents and various types of reptiles. The area is used by man for the primary purpose of grazing domestic livestock and sheep.

The birds of the area are raptors, finches, ground sparrows, magpies, crows, and jays.

Social-Economic Effect:

An on the ground surface archaeological reconnaissance would be required prior to approval of the proposed action. Appropriate clearances would then be obtained from the surface managing agency. If a historic artifact, an archaeological feature or site is discovered during construction operations; activity would cease until the extent, the scientific importance, and the method of mitigating the adverse effects could be determined by a qualified cultural resource specialist.

There are no occupied dwellings or other facilities of this nature in the general area. Minor distractions from aesthetics would occur over the lifetime of the project and is judged to be minor. All permanent facilities placed on the location would be earthtoned to blend in with the natural environment. Present use of the area is grazing, recreation, and oil and gas activities.

Noise from the drilling operation may temporarily disturb wildlife and people in the area. Noise levels would be moderately high during drilling and completion operations. Upon completion, noise levels would be infrequent and significantly less. If the area is abandoned, noise levels should return to pre-drilling levels.

The site is visible from a major road. After drilling operations, completion equipment would be visible to passersby of the area but would not present a major intrusion.

The economic effect of one well would be difficult to determine. The overall effect of oil and gas drilling and production activity are rather significant in Grand Co., Utah. But should this well discover a significant new hydrocarbon source, local, state and possibly national economics might be improved. In this instance, other development wells would be anticipated, with substantially greater environmental and economic impacts.

Should the well site be abandoned, surface rehabilitation would be done according to the surface agency's requirements and to USGS's satisfaction. This would involve leveling, contouring, reseeding, etc., of the location and possibly the access road. If the well should produce hydrocarbons, measures would be undertaken to protect wildlife and domestic stock from the production equipment.

Land Use:

Livestock grazing.

There are no national, state or local parks, forests, wildlife refuges or ranges, grasslands, monuments, trails or other formally designated recreational facilities near the proposed location.

Waste Disposal:

The mud and reserve pits would contain all fluids used during the drilling operations. A trash pit would be utilized for any solid wastes generated at the site and would be buried at the completion of the operations. Sewage would be handled according to State sanitary codes. For further information, see the 13-Point Surface Plan.

Alternatives to the Proposed Action:

(1) Not approving the proposed permit -- The oil and gas lease grants the lessee exclusive right to drill for, mine, extract, remove and dispose of all oil and gas deposits.

Under leasing provisions, the Geological Survey has an obligation to allow mineral development if the environmental consequences are not too severe or irreversible. Upon rehabilitation of the site, the environmental effects of this action would be substantially mitigated, if not totally annulled. Permanent damage to the surface and sub-surface would be prevented as much as possible under U.S.G.S. and other controlling agencies supervision with rehabilitation planning reversing almost all effects. Additionally, the growing scarcity of gas should be taken into consideration. Therefore, the alternative of not proceeding with the proposed action at this time is rejected.

(2) Minor relocation of the well site and access road or any special, restrictive stipulations or modifications to the proposed program would not significantly reduce the environmental impact. There are no severe vegetative, animal or archaeological-historical-cultural conflicts at

the site. Since only a minor impact on the environment would be expected, the alternative of moving the location is rejected. At abandonment, normal rehabilitation of the area such as contouring, reseeding, etc., would be undertaken with an eventual return to the present status as outlined in the 13-Point Surface Plan.

Adverse Environmental Effects Which Cannot Be Avoided:

Surface disturbance and removal of vegetation from approximately 1.5 acres of land surface for the lifetime of the project which would result in increased and accelerated erosional potential. Grazing would be eliminated in the disturbed areas and there would be minor and temporary disturbance of wildlife and livestock. Minor induced air pollution due to exhaust emissions from rig engines of support traffic engines would occur. Minor increase in dust pollution would occur due to vehicular traffic associated with the operation. If the well is a gas producer, additional surface disturbance would be required to install production pipelines. The potential for fires, leaks, spills of gas, oil or water would exist. During the construction and drilling phases of the project, noise levels would increase. Potential for sub-surface damage to fresh water aquifers and other geologic formations exists. Minor distractions from aesthetics during the lifetime of the project would exist. If the well is a producer, an irreplaceable and irretrievable commitment of resources would be made. Erosion from the site would eventually be carried as sediment in the Colorado River. The potential for pollution to the River would exist through leaks and spills.

Determination:

This requested action does not constitute a major federal action significantly affecting the environment in the sense of NEPA, Sec. 102(2)(C).

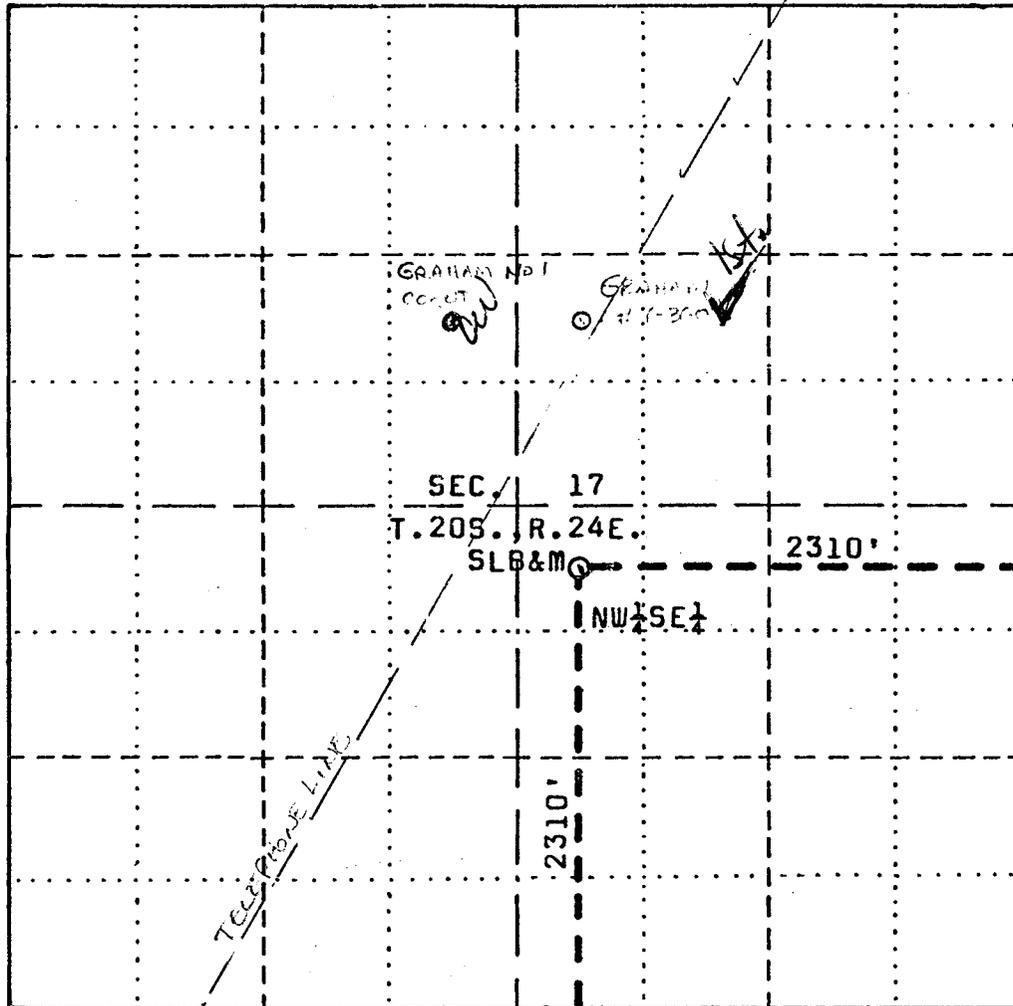
Date

10/4/78

E. W. Luyman

District Engineer
U.S. Geological Survey
Conservation Division
Oil and Gas Operations
Salt Lake City District





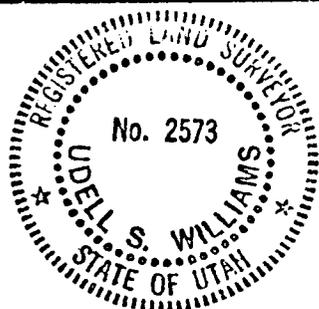
SCALE: 1" = 1000'

GEO. W. GRAHAM, INC. NO. 1-420

Located North 2310 feet from the South boundary and West 2310 feet from the East boundary of Section 17, T.20S., R.24E., SLB&M.

Elev. 4582

Grand County, Utah



SURVEYOR'S CERTIFICATE

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

Udell S. Williams
UTAH R.L.S. NO. 2573



UDELL S. WILLIAMS
751 Rood Avenue
GRAND JUNCTION, COLORADO 81501

PLAT OF
PROPOSED LOCATION
GEO. W. GRAHAM, INC.
#1-420

NW 1/4 SE 1/4 S17, T20S, R24E, SLM

SURVEYED BY: USW DATE: 7/31/78

DRAWN BY: USW DATE: 7/31/78

DESIGNATION OF OPERATOR

The undersigned is, on the records of the Bureau of Land Management, holder of lease

DISTRICT LAND OFFICE: Salt Lake City

SERIAL NO.: U-7420

and hereby designates George W. Graham, Inc. (U-38700)
400 First Wichita National Bank Building

NAME: Wichita Falls, TX 76301

ADDRESS:

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the supervisor or his representative may serve written or oral instructions in securing compliance with the Operating Regulations with respect to (describe acreage to which this designation is applicable):

160 acres of land, being the SW/4 of Section 17
Township 20 South, Range 24 East SLB &M

Grand County, Utah



It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Operating Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated operator, the lessee will make full and prompt compliance with all regulations, lease terms, or orders of the Secretary of the Interior or his representative.

The lessee agrees promptly to notify the supervisor of any change in the designated operator.



(Signature of lessee)

Frank B. Adams
716 Wilson Building
Corpus Christi, TX 78476

(Address)

August 18, 1978

(Date)

Frank B. Adams
Oil Properties
716 Wilson Building
Corpus Christi, Texas 78401

August 18, 1978

Ten point plan to comply with NTL-6 (Supplement to 9-331 C)

Re: George W. Graham, Inc. No. 1-420
nw nw se 17 , 20s 24 e, Grand County, Utah
Federal Lease U- 7420

1. Geological name of surface formation

Mancus shale

2. Estimated tops of important geological markers

Base of Dakota silt	- 1,040'
Dakota	- 1,085'
Morrison	- 1,250'
Salt Wash	- 1,520'

3. Estimated depths at which water, oil and/or gas is anticipated

Water	- Possible gravel beds from surface to 100'
Oil	- Morrison and Salt Wash sections
Gas	- Dakota, Morrison and Salt Wash sections

4. Proposed casing program

See the 9-331 C

5. Pressure control details

- a. Rigan BOP 3,000 psi (Hyd closing unit), tested to 1,000 psi after surface casing is cemented, then daily thereafter
- b. Grant rotating head above BOP
- c. Full shut-off gate valve on well and exhaust line

6. Drilling mud and weight material program

Operator plans to drill with air or mist to total depth. If formation water, oil and/or gas is encountered, the hole will be mudded up with 100 vis 8.2 to 10# starch base drilling mud with KCL added and then drilled to TD. Same procedure to be followed if drilled to TD with air to prepare for logging. Mud will be mixed and ready for use before reaching the base of the Dakota Silt.

7. Auxiliary equipment

- a. Demco kelly cocks
- b. Check valve at bit
- c. Visual monitoring of mud system
- d. A sub on the floor with full opening valve to be stabbed into drillpipe when kelly is out of string.

8. Testing and logging program

No formation tests anticipated

Cuttings to be examined for hydrocarbon shows

No coring planned

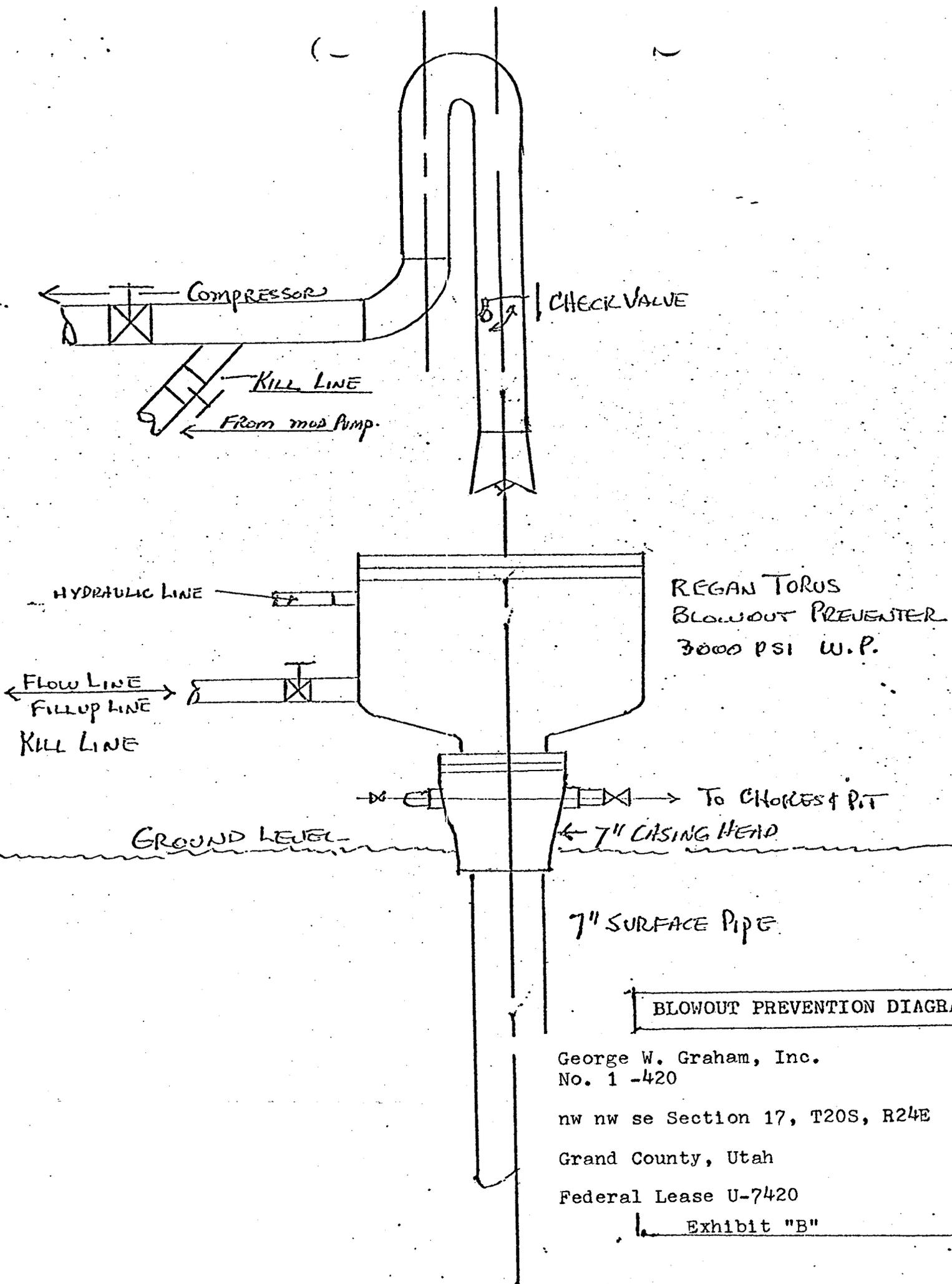
Dual induction log to TD and if productive or questionable, Compensated Neutron-Formation Density log will be run through prospective pay zones.

9. Anticipated abnormal pressures or temperatures

No abnormal conditions expected - estimated BHP at TD , if productive = 750 psi

10. Anticipated starting date and duration of operations

On or about December 15, 1978 depending on rig availability, and once spudded, the operation should be complete within 10 days, if a dry hole.



BLOWOUT PREVENTION DIAGRAM

George W. Graham, Inc.
 No. 1 -420

nw nw se Section 17, T20S, R24E

Grand County, Utah

Federal Lease U-7420

Exhibit "B"

Frank B. Adams
Oil Properties
715 Wilson Building
Corpus Christi, Texas 78401
August 18, 1978

Re: George W. Graham, Inc. No. 1 - 420
Federal Lease U- 7420
nw nw se 17, 20s 24e, SLB&M,
Grand County, Utah

SURFACE USE PLAN (NTL-6)

1. Existing roads

- a. Proposed well site shown on attached plat (Exhibit "A")
- b. George W. Graham, Inc. No. 1 -420 is located approximately 2 miles nne of the East Cisco exit of I-70 on the Cottonwood Canyon road.
- c. Access road to location color-coded and labeled on attached (Exhibit "A")
- d. This location is classified as a field extention or development well
- e. Existing roads within a one mile radius are shown on attached Exhibit "A". The service road to the George W. Graham, Inc. No. 1 CO-UT Livestock well will be used with permission of the fee owner and the access road from that well to the Graham No. 1-360 will be followed to that point, then a access road will be prepared from the No. 1-360 - 1,320' south to the proposed location.
- f. There will be no need to improve existing road across the fee land since it is maintained on a regular basis by the Operator

2. Planned Access roads

Items 1 through 8 are included in remarks on attached plat shown as Exhibit "C".

3. Location of existing wells

- | | |
|---------------------------------------|-------------------------------------------------------------------------------------------------|
| a. Water wells - none | b. Abandoned wells - (See Exhibit "A") |
| c. Temporarily abandoned wells - none | d. Disposal wells - none |
| e. Drilling wells - none | f. Producing wells - 2 oil wells
Graham No. CO-UT Livestock No.1
Pumpelly No. 5 Effie Fee |
| g. Shut-in wells - none | |

- h. Injection well - none
- i. Monitoring or observation wells for other reasons - none

4. Location of existing and/or proposed facilities

- a. Operator owns oil well on adjoining fee lease and in addition to wellhead and pump jack there is a 110 bbl welded crude oil tank next to well. Other than that Operator does not own or control any other facilities within a 1 mile radius of the proposed location.
- b. In the event of oil production a tank battery consisting of two 210 barrel crude oil tanks, and if necessary a separator, will be constructed on the pad. Oil will be removed by tank truck as produced. Tanks will be welded steel and connected by a steel catwalk. All surface equipment will be painted "desert tan" to conform with the BLM regulations.
In event of gas production - Producing facilities will be installed by either the operator or Northwest Pipeline depending on the size of the gas reserves. Gas facilities in either case will consist of a meter run and other facilities that might be required to produce and market the production. Those facilities will be located on the pad and details of construction of any gathering lines and other producing facilities will be presented for BLM approval when a right-of-way permit is applied for to connect to the sales line.
Complete protective measures, such as fences, will be used to turn livestock and wildlife known to be in the area.
- c. Rehabilitation of all disturbed areas no longer needed after operations are completed will be restored to a smooth contour and all debris will be cleaned up. All pits will be back filled and smoothed after drilling operations are concluded. If there is any delay in backfilling, fences will be erected around pits to be filled. All pits that might be required for production will be fenced.

5. Location and type of water supply

- a. Water for drilling operations will be obtained at Cisco Springs, located about six miles west of the location.
- b. Water will be transported by truck over existing roads, private, county and lease service roads.
- c. No water well is planned to be drilled on the lease.

6. Source of construction materials

- a. No construction materials, such as, sand, gravel and soil, will be required other than native material found in place.
- b. No Federal or Indian lands will be the source of construction material.
- c. In the event of production, a gravel pad is required for

for the tank battery, gravel will be hauled to the location by a private contractor on a F.O.B. location basis.

- d. Does not apply - no materials coming from Federal or Indian lands.

7. Methods of handling waste disposal

- a. Cuttings- Cuttings from air or mist drilling will be exhausted into a pit at the end of exhaust line, with the line being centered in the pit. After operations are completed the pit will be covered over.
- b. Drilling fluids - To be contained in two steel mud tanks. A reserve pit will be prepared to contain any excess flow out of the well during drilling, cementing and completion operations. The pit(s) will be backfilled after operations are completed unless the pits are to be used in connection with production.
- c. Produced fluids, such as oil and water - Oil will be properly stored in tanks erected for that purpose and water will be diverted to the pits and be disposed of as required by the amount involved.
- d. Sewerage- A chemical toilet will be provided on the location for use by personnel.
- e. Garbage and other waste material - Will be contained in 42 gal. drums and hauled off the location or buried in a pit. In the case of trash to be burned or buried later, a small mesh wire will enclose the pit to prevent wind from scattering the trash.
- f. Well site clean up - Well site and pad will be properly cleaned up and restored to smooth contour when operations are completed and rig moved off. Only that part of the pad required for producing facilities will be kept in use. In the event of a dry hole, only the required dry hole marker will remain.

8. Ancillary Facilities

There will be no field camps or air strips required for this operation.

9. Well site layout

A plat on a scale of 1" = 50' is attached to this plan as exhibit "D" showing:

- a. Cross-section of drill pad not shown since the rise in elevation is very gradual and no cuts or fills are anticipated.
- b. Location of mud tanks, reserve, burn and trash pits, pipe-racks, living facilities and soil material stockpiles are shown on attached exhibit "D".

- c. Rig orientation, parking areas and access road is also shown on attached exhibit "D".
- d. Pits shown are unlined and the only water that will be introduced into these pits will be fresh water used in the drilling operations.

10. Plans to restore the surface

- a. Upon completion, the entire location will be restored, including backfilling and leveling of all pits, the waste disposed of and spoils material segregated, if required. The location will then be contoured to its original contour.
- b. The pad and access road will be revegetated and rehabilitated during the month of October or November, as required by the BLM
- c. Pits will be fenced and maintained after moving rig out until clean up can be performed.
- d. If there is any oil on the pits, it will either be removed by truck or covered and the pit flagged on the surface.
- e. Commencement and completion of rehabilitation operations will be completed during the month of October or November, weather permitting.

11. Other information

- a. This location is located in a very flat area. The surface is raw Mesa Verde shale with sparse vegetation consisting of scattered sage brush. Lack of ground cover limits this area to a few coyotes and cottontails.
- b. At times the surface is leased to sheepmen for winter grazing by the BLM.
- c. The proximity of water has been noted on paragraph 5 above, which is Cisco Springs. The nearest occupied buildings (dwellings) are located in Cisco, Utah, some seven miles south of the location. There are no known archeological, historical or cultural sites in the area.

The surface is under the jurisdiction of the Moab District of the Bureau of Land Management.

12. Operators Representative

Al Wadzeck
P. O. Box 503
Greenriver, UT 84525

or Frank B. Adams
716 Wilson Building
Corpus Christi, TX 78476

801-564-3570

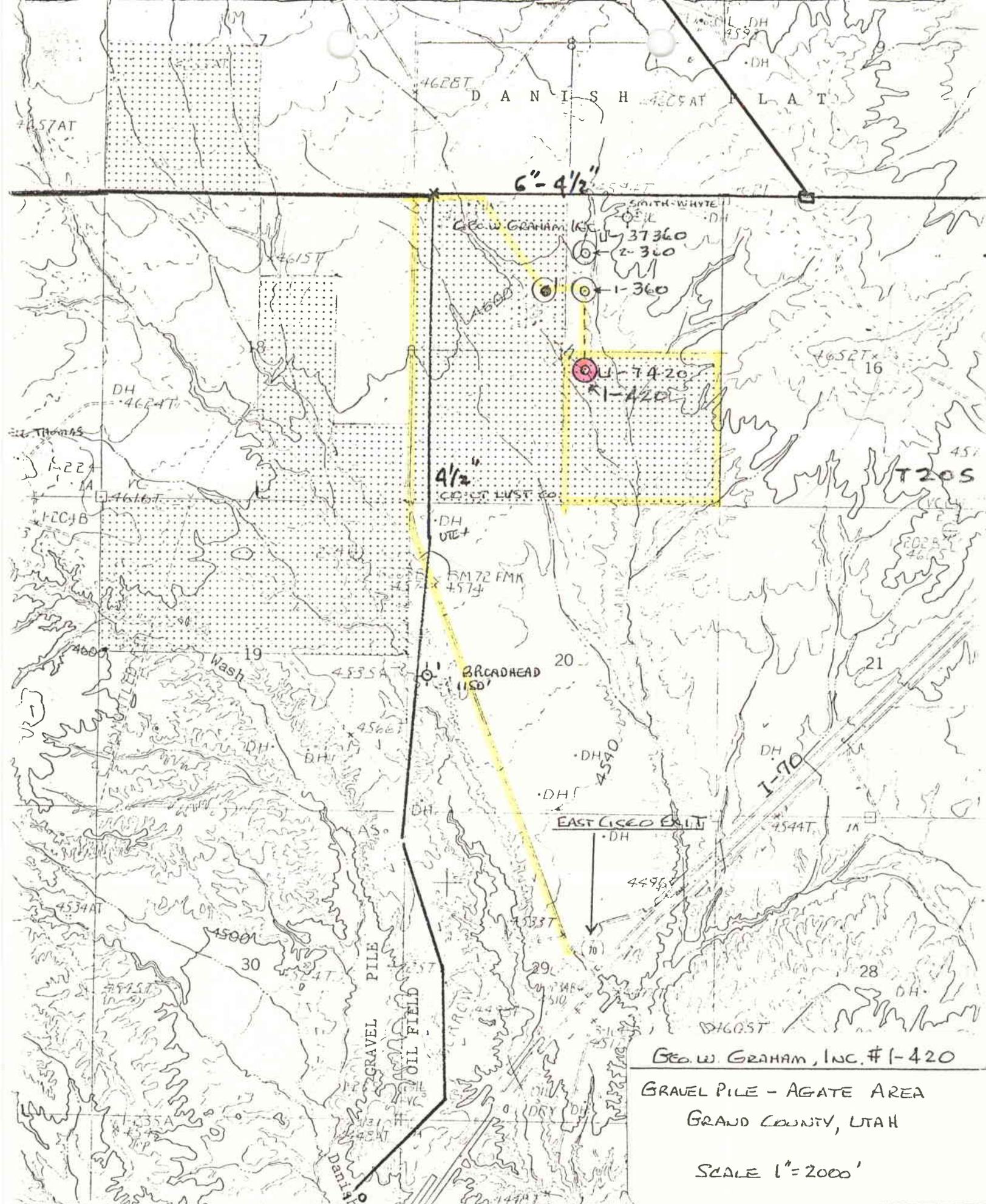
512-884-9004

13. I hereby certify that I or persons under my direct supervision have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by George W. Graham, Inc. and his contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

George W. Graham, Inc.

By: *Frank B. Adams*
Frank B. Adams, Agent

August 18, 1978



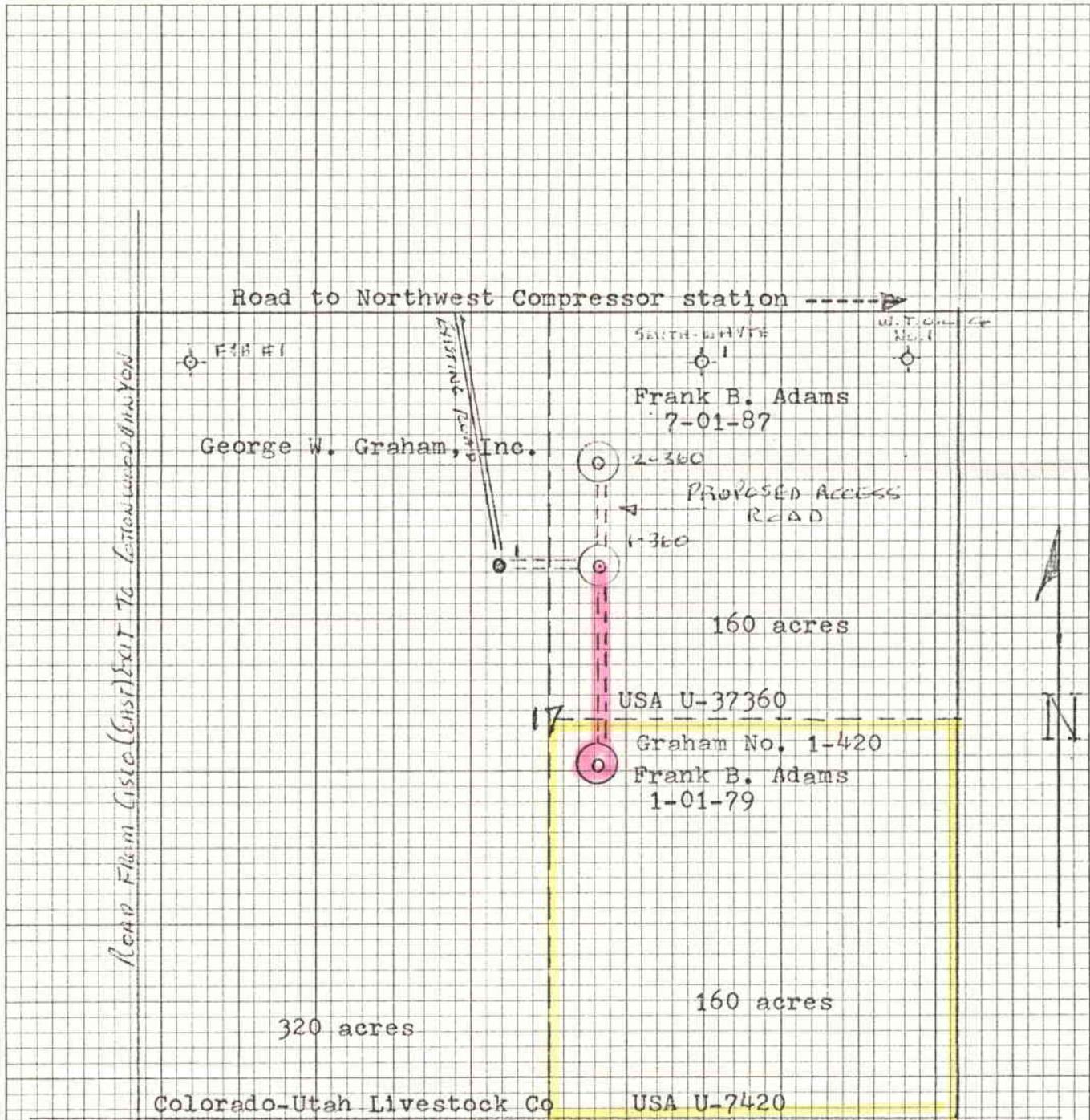
GEO. W. GRAHAM, INC. #1-420

GRAVEL PILE - AGATE AREA
 GRAND COUNTY, UTAH

SCALE 1" = 2000'

R 24 E

EXHIBIT "A"

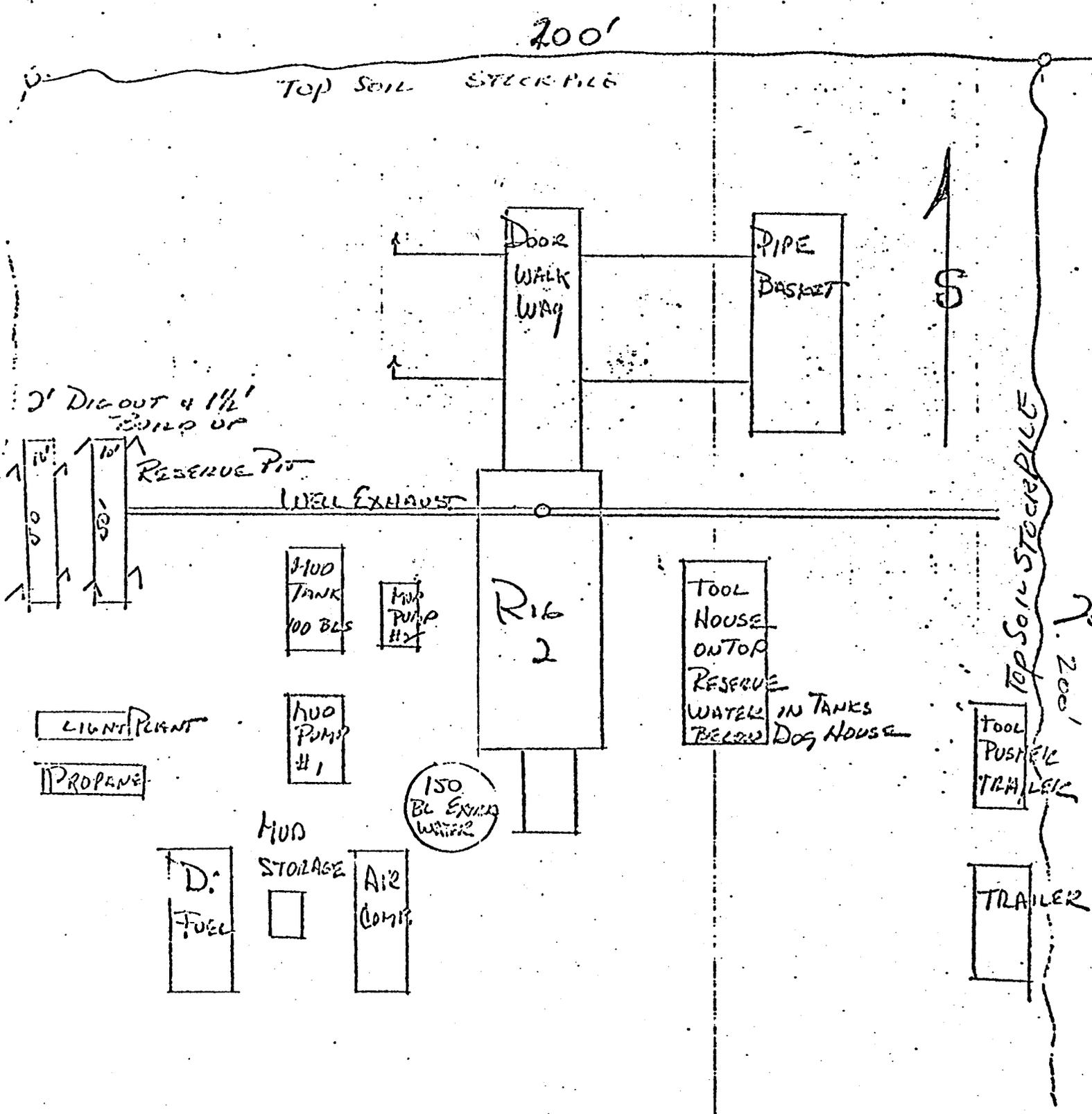


Specs for road:

1. Width = 16' max
2. No grade necessary
3. No turnout required
4. Natural drainage
5. No culverts appear to be necessary
6. Surface material - native bladed no more than 3" deep
7. No gates or fence cut or cattle guards needed
8. Proposed road will be center flagged on Federal lands

Plat showing planned access road
Scale 1" = 1,000'

George W. Graham, Inc.
No. 1-420 (Federal)
se/4 Sec 17, T20S, R24E
Grand County, Utah
Federal Lease U- 7420
EXHIBIT "C"



WELL SITE LAYOUT

Jacobs Drilling Company
 2467 Commerce
 Grand Junction, CO 81501

Rig # 2

PARKING

EXHIBIT "D"

STATE OF UTAH
DIVISION OF OIL, GAS, AND MINING

** FILE NOTATIONS **

Date: August 29, 1978

Operator: George W. Graham

Well No: 7d. 1-420

Location: Sec. 17 T. 20S R. 24E County: Grand

File Prepared:

Entered on N.I.D.:

Card Indexed:

Completion Sheet:

API Number: 43-019-30461

CHECKED BY:

Administrative Assistant: [Signature]

Remarks: Op. operator well 1360 feet, should be gas well - cannot see 1-420 at said loc.

Petroleum Engineer: [Signature]

Remarks:

Director: 7

Remarks:

INCLUDE WITHIN APPROVAL LETTER:

Bond Required:

Survey Plat Required:

Order No. 102-5

Surface Casing Change to

Rule C-3(c), Topographic exception/company owns or controls acreage within a 660' radius of proposed site

O.K. Rule C-3

O.K. In _____ Unit

Other:

Letter Written/Approved



SCOTT M. MATHESON
Governor

OIL, GAS, AND MINING BOARD

GORDON E. HARMSTON
Executive Director,
NATURAL RESOURCES

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING
1588 West North Temple
Salt Lake City, Utah 84116
(801) 533-5771
September 11, 1978

I. DANIEL STEWART
Chairman

CLEON B. FEIGHT
Director

CHARLES R. HENDERSON
JOHN L. BELL
THADIS W. BOX
C. RAY JUVELIN

George W. Graham
400 First Wichita National Bank Bldg.
Wichita Falls, Texas 76301

Re: Well No. Federal #1-420
Sec. 17, T. 20 S, R. 24 E,
Grand County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to well is hereby granted in accordance with the Order issued in Cause No. 102-5.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

PATRICK L. DRISCOLL - Chief Petroleum Engineer
HOME: 582-7247
OFFICE: 533-5771

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43-019-30461.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

CLEON B. FEIGHT
Director

cc: U.S. Geological Survey



SCOTT M. MATHESON
Governor

GORDON E. HARMSTON
Executive Director,
NATURAL RESOURCES

CLEON B. FEIGHT
Director

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING
1588 West North Temple
Salt Lake City, Utah 84116
(801) 533-5771

July 12, 1979

OIL, GAS, AND MINING BOARD

CHARLES R. HENDERSON
Chairman

JOHN L. BELL
C. RAY JUVELIN
THADIS W. BOX
CONSTANCE K. LUNDBERG
EDWARD T. BECK
E. STEELE McINTYRE

George W. Graham
400 First - Wichita National Bank Bldg.
Wichita Falls, Texas 76301

Re: Well No. Federal 1-360
Sec. 17, T. 20S, R. 24E,
Grand County, Utah

Well No. Federal 2-360
Sec. 17, T. 20S, R. 24E,
Grand County, Utah

Well No. Federal 1-420
Sec. 17, T. 20S, R. 24E,
Grand County, Utah

Gentlemen:

In reference to above mentioned wells, considerable time has gone by since approval was obtained from this office.

This office has not received any notification of spudding. If you do not intend to drill these wells, please notify this Division. If spudding or any other activity has taken place, please send necessary forms.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

Kathy Avila

KATHY AVILA
RECORDS CLERK



SCOTT M. MATHESON
Governor

GORDON E. HARMSTON
Executive Director,
NATURAL RESOURCES

CLEON B. FEIGHT
Director

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING
1583 West North Temple
Salt Lake City, Utah 84116
(801) 533-5771

OIL, GAS, AND MINING BOARD

CHARLES R. HENDERSON
Chairman

JOHN L. BELL
C. RAY JUVELIN
THADIS W. BOX
CONSTANCE K. LUNDBERG
EDWARD T. BECK
E. STEELE McINTYRE

December 4, 1979

George W. Graham
400-1st-Wichita National Bank Bldg.
Wichita Falls, Texas 76301

RE: Well No. Federal #1-420
Sec. 17, T. 20S, R. 24E,
Grand County, Utah

Gentlemen:

In reference to above mentioned well(s), considerable time has gone by since approval was obtained from this office.

This office has not received any notification of spudding. If you do not intend to drill this well (these wells), please notify this Division. If spudding or any other activity has taken place, please send necessary forms.* If we do not hear from your company within fifteen (15) days, we will assume you do not intend to drill this well, and action will be taken to terminate the application. If you plan on drilling this well at a later date, please notify as such.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

Debbie Beauregard
DEBBIE BEAUREGARD
CLERK-TYPIST

GEORGE W. GRAHAM
400 FIRST-WICHITA NATIONAL BANK BUILDING
WICHITA FALLS, TEXAS
76301

RECEIVED

FEB 25 1980

DIVISION OF
OIL, GAS & MINING

February 20, 1980

State of Utah
Department of Natural Resources
Division of Oil, Gas, and Mining
1588 West North Temple
Salt Lake City, Utah 84116

Re: Well No. Federal #1-420
Sec. 17, T. 20S, R. 24E
Grand County, Utah

Well No. Federal #1-360
Sec. 17, T. 20S, R. 24E
Grand County, Texas

Well No. Federal #2-360
Sec. 17, T. 20S, R. 24E
Grand County, Utah

Gentlemen:

I request that an extension of time be granted until May 15, 1980 for the drilling of the captioned wells because no rigs are available until that time.

Yours very truly



George W. Graham

es

November 5, 1980

George W. Graham
400 1st-Wichita National Bank Bldg.
Wichita Falls, Texas 76301

RE: Well No. Federal 1-360
Sec. 17, T. 20S, R. 24E,
GRAND COUNTY, UTAH

Well No. Federal 2-360
Sec. 17, T. 20S, R. 24E,
Grand County, Utah

Well No. Federal 1-420
Sec. 17, T. 20S, R. 24E,
Grand County, Utah

Gentlemen:

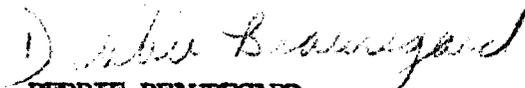
In reference to above mentioned well(s), considerable time has gone by since approval was obtained from this office.

This office has not received any notification of spudding. If you do not intend to drill this well (these wells), please notify this Division. If spudding ~~has~~ any other activity has taken place send necessary forms. (If we do not hear from your company within fifteen (15) days, we will assume you do not intend to drill this (these wells) and action will be taken to terminate the application.) If you plan on drilling this location at a later date, please notify as such.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING


DEBBIE BEAUREGARD
CLERK TYPIST

GEORGE W. GRAHAM
400 FIRST-WICHITA NATIONAL BANK BUILDING
WICHITA FALLS, TEXAS
76301

November 20, 1980

State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
1588 West North Temple
Salt Lake City, Utah 84116

Re: Well No. Federal #1-420
Sec. 17, T. 20S, R. 24E
Grand County, Utah

Well No. Federal #1-360
Sec. 17, T. 20S, R. 24E
Grand County, Texas

Well No. Federal #2-360
Sec. 17, T. 20S, R. 24E
Grand County, Utah

Gentlemen:

In reference to your letter of November 5, 1980, we still plan to drill Well No. Federal #1-360 and Well No. Federal #2-360.

We do not plan to drill Well No. Federal #1-420.

Yours very truly

GEORGE W. GRAHAM



R. A. Moran

RAM/es

RECEIVED

NOV 24 1980

DIVISION OF
OIL, GAS & MINING



STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

January 12, 1982

George W. Graham
400 1st Wichita National Bank Bldg.
Wichita Falls, Texas 76301

Re: Well No. Federal 1-420
Sec. 17, T. 20S, R. 24E
Grand County, Utah

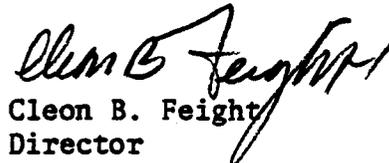
Gentlemen:

Approval to drill the above mentioned well, which was granted in our letter of September 11, 1978 is hereby terminated for failure to spud it within a reasonable period of time.

If and when you should decide to drill this well, it will be necessary for you to again obtain the approval of this Division.

Very truly yours,

DIVISION OF OIL, GAS AND MINING


Cleon B. Feight
Director