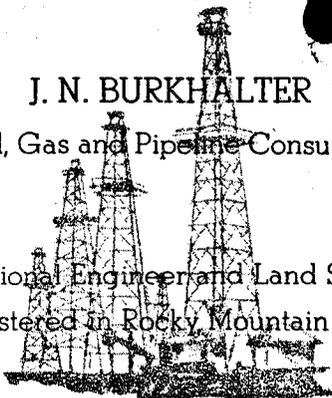


J. N. BURKHALTER

Oil, Gas and Pipeline Consultant

Professional Engineer and Land Surveyor
Registered in Rocky Mountain States



592 25 Road
Grand Junction, Colorado 81501
Telephone 303/242-8555

November 24, 1978

Mr. Edgar W. Guynn
District Engineer
U.S.G.S.
8440 Federal Building
Salt Lake City, Utah 84138



Re: APD for following wells:

- 1). Lansdale - Carmack Well #1-10
NW SW Sec. 10, T20S, R24E, Grand County, Utah
- 2) Anschutz - Carmack Well # 1-21
NW NW Sec. 21, T20S, R24E, Grand County, Utah

Dear Mr. Guynn:

Enclosed are triplicate copies for Application for Permit to Drill for the above referenced wells. All roads are on Federal land. Archeological recommendations are included.

Very truly yours,

J. N. Burkhalter

JNB/sb

enc.

cc: Mr. Jack Feight ✓

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

HWSulgw

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO. U-38365

6. IF INDIAN, ALLOTTEE OR TRIBE NAME ---

7. UNIT AGREEMENT NAME ---

8. FARM OR LEASE NAME ---

9. WELL NO. Lansdale-Carmack Well #1-10

10. FIELD AND POOL, OR WILDCAT Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 10, T20S, R24E, SLM

12. COUNTY OR PARISH --- 13. STATE ---

1a. TYPE OF WORK **DRILL** **DEEPEN** **PLUG BACK**

b. TYPE OF WELL
OIL WELL GAS WELL OTHER SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR Carmack Drilling Company

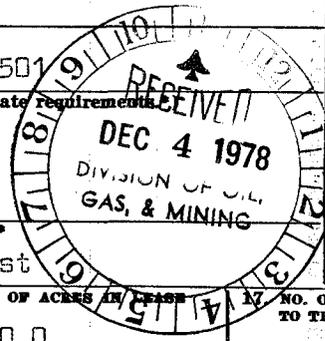
3. ADDRESS OF OPERATOR 592 - 25 Road, Grand Junction, Colorado 81501

4. LOCATION OF WELL (Report location clearly and in accordance with any State Requirements)
At surface 294' FUL, 2193' FSL NESW
At proposed prod. zone same

16. NO. OF ACRES IN LEASE 640.0 17. NO. OF ACRES ASSIGNED TO THIS WELL 160

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 100' 19. PROPOSED DEPTH 1500' 20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 4570 GR 22. APPROX. DATE WORK WILL START* Dec. 1, 1978



23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24 lb. (new)	200 ft.	75 sks Class G-Circulate
6 3/4"	4 1/2"	10.5 lb. (new)	1500 ft.	55 sks Dowell RFC

Propose to Test Salt Wash Member of Morrison Formation.
Surface Use Plan Attached: Note: Water Sands are not anticipated
Surface FMN - Mancos Shale
Estimated Tops:
Dakota: 600 Gas
Buckhorn: 980 Oil
Salt Wash: 1200 Gas
Pressure Control: Schematic attached showing BOP, Kill Lines, Check Valves & Pressure Ratings, Seven Point Plan attached.
Logging: IES & FDC-CNL, No Coring Planned
Hazards: Experience does not indicate that abnormal pressures or Hydrogen Sulfide will be encountered.
Starting Date: December 1, 1978, Ten days Operating Time.

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 Roberj. Carmack TITLE President DATE 11-17-78

(This space for Federal or State office use)
PERMIT NO. 43-019-30479 APPROVAL DATE _____
APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK

b. TYPE OF WELL
 OIL WELL GAS WELL OTHER
 SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
 Carmack Drilling Company

3. ADDRESS OF OPERATOR
 592 - 25 Road, Grand Junction, Colorado 81501

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
 At surface
 294' FUL, 2193' FSL
 At proposed prod. zone
 same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 10 miles by road to Cisco, Utah to Southwest

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 2193

16. NO. OF ACRES IN LEASE 640.0

17. NO. OF ACRES ASSIGNED TO THIS WELL 160

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 100'

19. PROPOSED DEPTH 1500'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 4570 GR

22. APPROX. DATE WORK WILL START*
~~December 1, 1978~~ WHEN PERMIT RECEIVED

5. LEASE DESIGNATION AND SERIAL NO.
 U-38365

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

9. WELL NO.
 Lansdale-Carmack Well #1-10

10. FIELD AND POOL, OR WILDCAT
 Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 Sec. 10, T20S, R24E, SLM

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23. PROPOSED CASING AND CEMENTING PROGRAM

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 Buckhorn: 990 Oil
 Salt Wash: 1200 Gas

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Logging: IES & FDC-CNL, No Coring Planned

Hazards: Experience does not indicate that abnormal pressures or Hydrogen Sulfide will be encountered.

Starting Date: ~~December 1, 1978~~ Ten days Operating Time.

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 Roberj. Carmack TITLE President DATE 11-17-78

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY W.P. Mouton TITLE ACTING DISTRICT ENGINEER DATE JUN 26 1979

CONDITIONS OF APPROVAL, IF ANY:

CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY

NOTICE OF APPROVAL

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

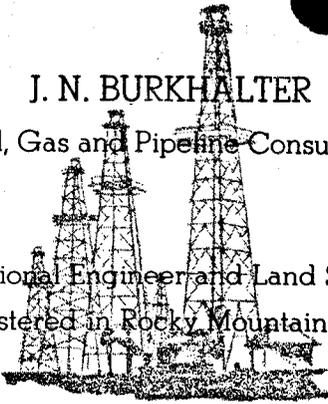
State of G

J. N. BURKHALTER

Oil, Gas and Pipeline Consultant

Professional Engineer and Land Surveyor

Registered in Rocky Mountain States

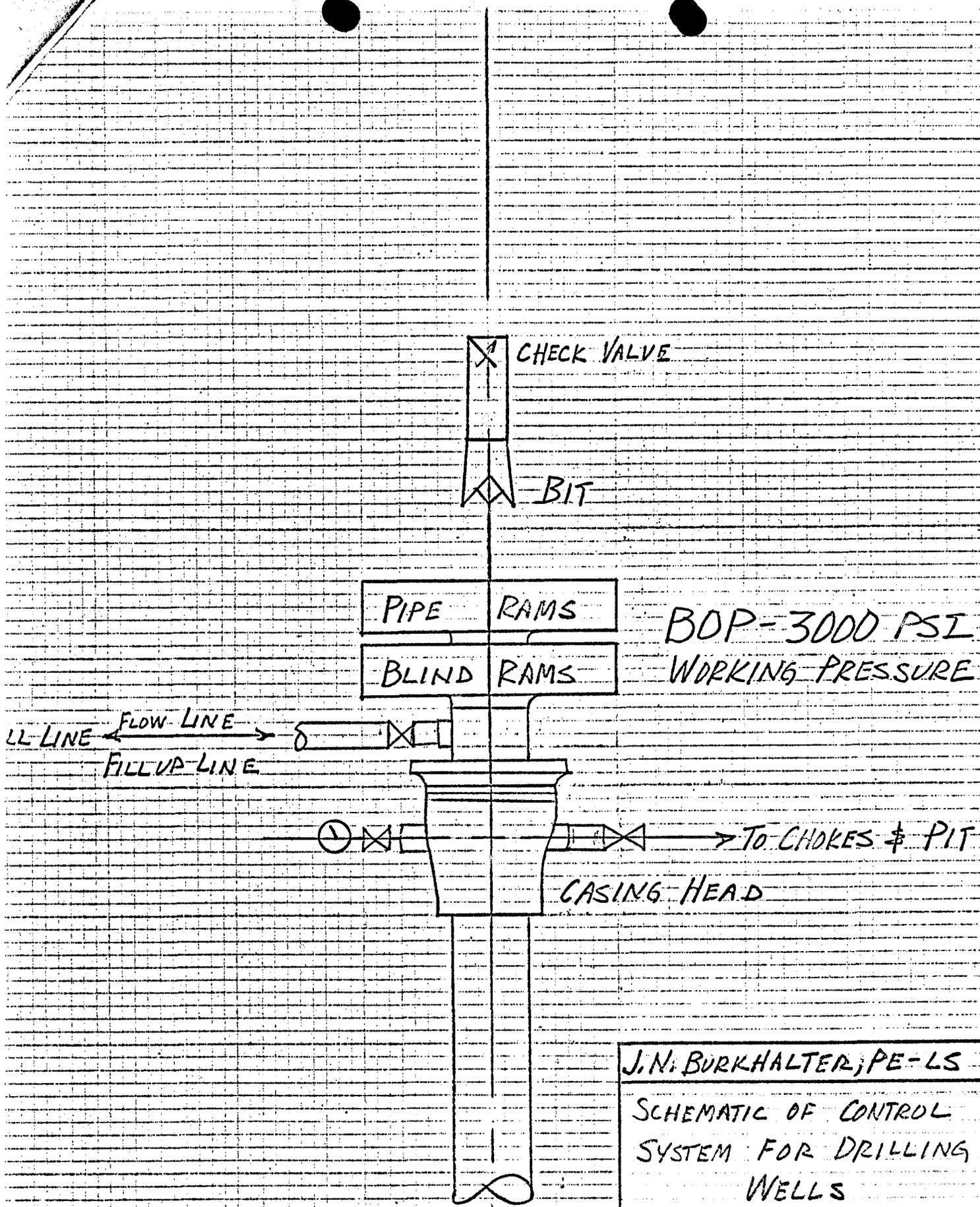


592 25 Road
Grand Junction, Colorado 81501
Telephone 303/242-8555

Re: Lansdale-Carmack
NE NE SW Sec.10, T20S, R24E, SLB&M
Grand County, Utah
Lease: U-38365

PRESSURE MONITORING AND CONTROL DATA
SEVEN POINT PLAN

1. Surface Casing: Set at 200'
Size 8 5/8"
Weight 24#
Length Range 3
Grade J-55 new. Tested to 3000 psig.
2. Casing Heads:
Series 600 - 1500 psi working pressure.
3. Production Casing:
Size 4 1/2"
Weight 10.5#
Length Range 3
Grade J-55, new, tested to 3000 psig.
4. Pressure Control:
BOP RAM Type
Series 600 - tested to 3000 psig
Rams Pipe & Blind
Will use fill, kill and choke lines.
5. Auxiliary Pressure Control:
 - a. Kelly cocks.
 - b. Check valve at bit.
 - c. Monitoring equipment on mud system.
 - d. A sub on floor with a full opening valve to be stabbed into drill pipe when Kelly is out of string.
6. Anticipated Bottom Hole Pressure:
550 psig.
7. The Type of Drilling Fluid:
Air until gas encountered.
Mud up with Polymer mud with NaCl and CaCl₂ as weighting agent -
10.5 to 11.00 lb. per gal. as required.



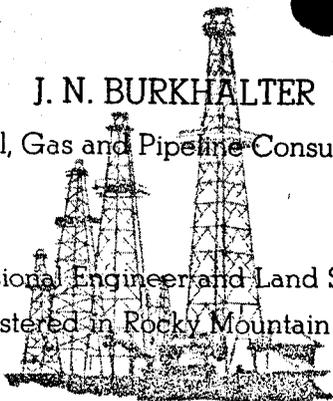
J. N. BURKHALTER, PE-LS
 SCHEMATIC OF CONTROL
 SYSTEM FOR DRILLING
 WELLS

J. N. BURKHALTER

Oil, Gas and Pipeline Consultant

Professional Engineer and Land Surveyor

Registered in Rocky Mountain States



592 25 Road
Grand Junction, Colorado 81501
Telephone 303/242-8555

Lansdale - Carmack Well No. 1-10
NE NE SW Sec. 10, T20S, R24E, SLB&M
Grand County, Utah

SURFACE USE PLAN

Geographical: 10 miles northeast of Cisco, Utah.

Terrain: Low, rolling hills of Mancos shale.

Vegetation: Very sparse.

Surface Water: None. This is dry, desolate, desert country.

1. Existing Roads: Existing roads are 15-18 feet wide, with native ground as surface material. This is primarily Mancos shale with a little Cretaceous gravel in some places.

The included map shows all access roads and roads within a several mile radius of the locations.

There are no immediate plans for improvement of existing roads. If commercial production is found and road improvement is needed, it will be considered at the appropriate time.

2. Planned Access Roads: The map indicates all necessary access roads be constructed which will be to the same physical characteristics as existing roads - 15-18 feet wide with native Mancos shale as surface with maximum grades not to exceed 3-4%. There will be no culverts required and no major cuts and fills required for access to the well applied for. No fence cuts or cattle guards will be required.
3. Location of Existing Wells: As you can see from the map, existing wells have been located upon the map. The status of the wells is generally indicated on the map by the manner in which the well is marked. There are no water wells or disposal wells.

The well applied for in this application has been referenced in two directions with reference stakes set at 150 and 200 feet in four directions.

4. Location of Existing and/or Proposed Facilities:

- a) There are no tank batteries off of well locations within a one mile radius of the proposed location. Gas gathering lines are indicated on the attached map. All lines in the area are surface lines.
- b) If production is found, storage facilities will be located on the location. If gas is discovered in commercial quantities, necessary pipelines will be applied for at that time.

Complete protective measures such as fences will be used to protect livestock and wildlife in the area.

- c) Rehabilitation of all disturbed areas no longer needed after construction is completed will be returned to smooth contour and all debris will be cleaned up. All pits will be covered and cleaned up after drill operations. Those pits required for production will be fenced.

5. Location and Type of Water Supply: Water will be acquired either from Cisco Springs, which is about 9 miles northwest of the proposed well location, or from the Colorado River, which is about 5 miles southwest of Cisco, Utah. Water will be transported by truck. Existing roads will be used to transport water.

No water well will be drilled on the lease.

6. Source of Construction Materials: No construction materials such as sand, gravel, stone and soil will be used other than that found in the native location.

In the event that tanks and production equipment are required, gravel will be hauled from Grand Junction, Colorado or Moab, Utah to set tanks on. This gravel will be purchased from private enterprise.

7. Methods for Hauling Waste Disposal:

- a) Cuttings - The hole will be 90% air drilled and cuttings will be blown into the pit. These cuttings will be buried in the pit.
- b) Drilling Fluids - Will be contained in steel mud tanks. A dirt pit will be dug to contain excess flow out of the well during cementing and completion operations. Of course, these pits will be cleaned up and covered up.
- c) Produced Fluids such as Oil and Water - Will be properly disposed of with oil being stored in tanks and water being diverted to the pit and disposed of as required.
- d) Sewage - A portable chemical toilet will be provided on location during drilling operations.

Surface Use Plan (cont)

- e) Garbage and Other Waste Material - Will be contained in 30 gallon galvanized garbage cans and hauled off the location.
 - f) As stated before, the entire well site area will be properly cleaned up and restored to smooth contour when the rig moves out. Only that part of the location required for production operations will be kept in use. In the event of a dry hole, the only appurtenance left at the location will be the required dry hole marker.
8. Ancillary Facilities: There will be no camps or air strips required for this drilling operation.
9. Well Site Layout: A plat on a scale of 1" = 40' is included with the application showing location and orientation of the drilling rig, mud tanks, reserve pit, pipe racks and other appurtenances to the operation. For the time being pits will be unlined as allowed by present law. The only water introduced into these pits will be fresh water used in the drilling operation.
10. Plans for Restoration of Surface: As stated before, the entire location will be restored to smooth contour. Revegetation will be carried out as directed by BLM.

It is intended to have all locations cleaned up within 30 days after operations are concluded.

11. Other Information:

- a) The topography of these locations near Cisco, Utah is a very gentle rolling, flat characteristic. The soil is raw Mancos shale with extremely sparse vegetation. A few coyotes, prairie dogs and cottontail rabbits occupy the entire area.
- b) The only other surface use activities other than petroleum exploration in the area is in spring grazing of the sparse vegetation by cattle and sheep.
- c) The proximity of water has been described at Cisco Springs, (about 9 miles northwest at the Colorado River which is about 5 miles southwest of Cisco, Utah. The only occupied dwellings are at Cisco, Utah, which has been located already. There will be no disturbance to archeological, historical or cultural sites by drilling the applied-for well in the present application. The land is under the jurisdiction of the Bureau of Land Management.

12. Operator's Representative:

J. N. Burkhalter
592 - 25 Road
Grand Junction, Colorado 81501
(303) 242-8555
Mobile (303) 245-3660, Unit 472

Surface Use Plan (con't)

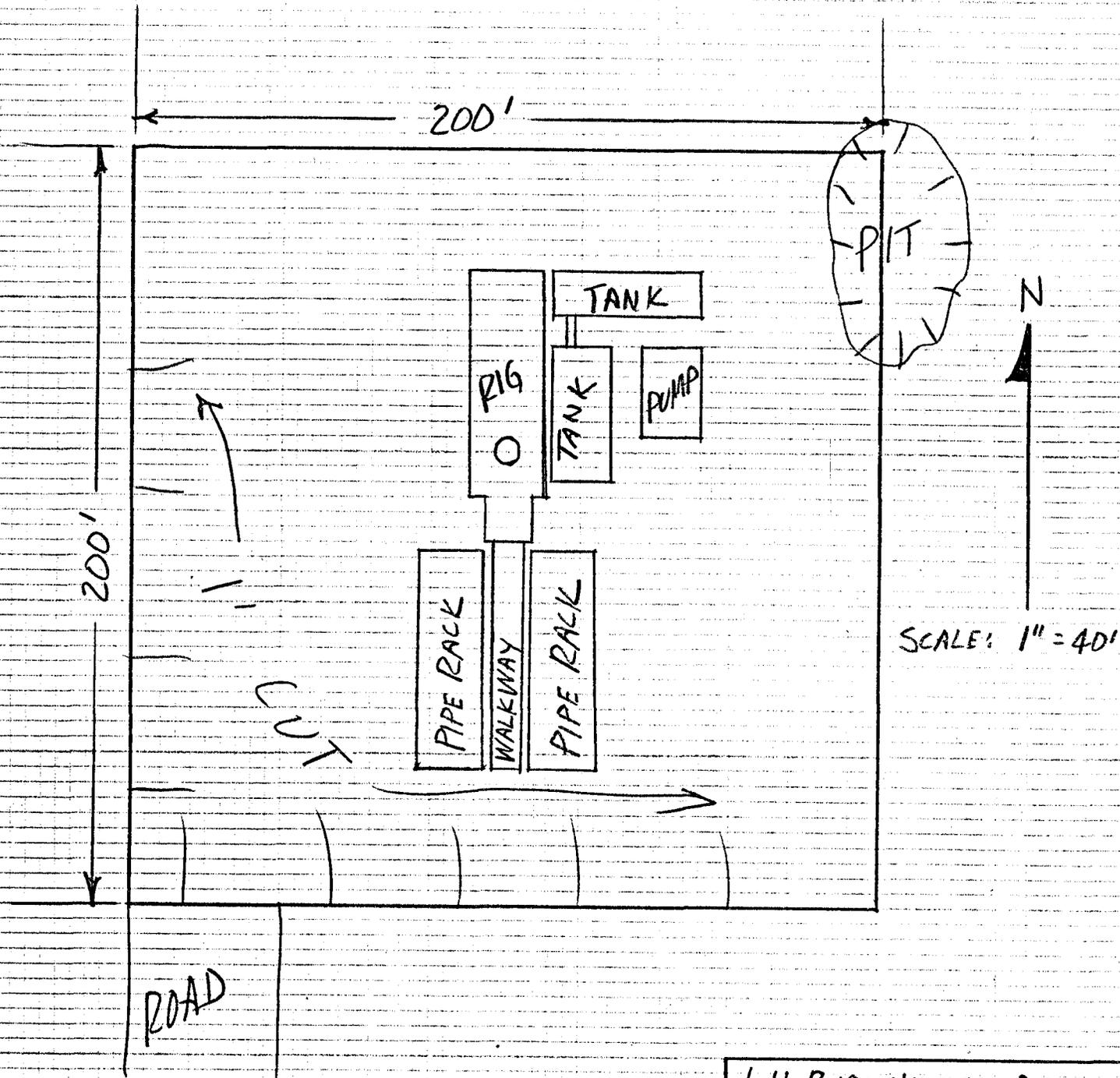
13. I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated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

11-17-78

Date

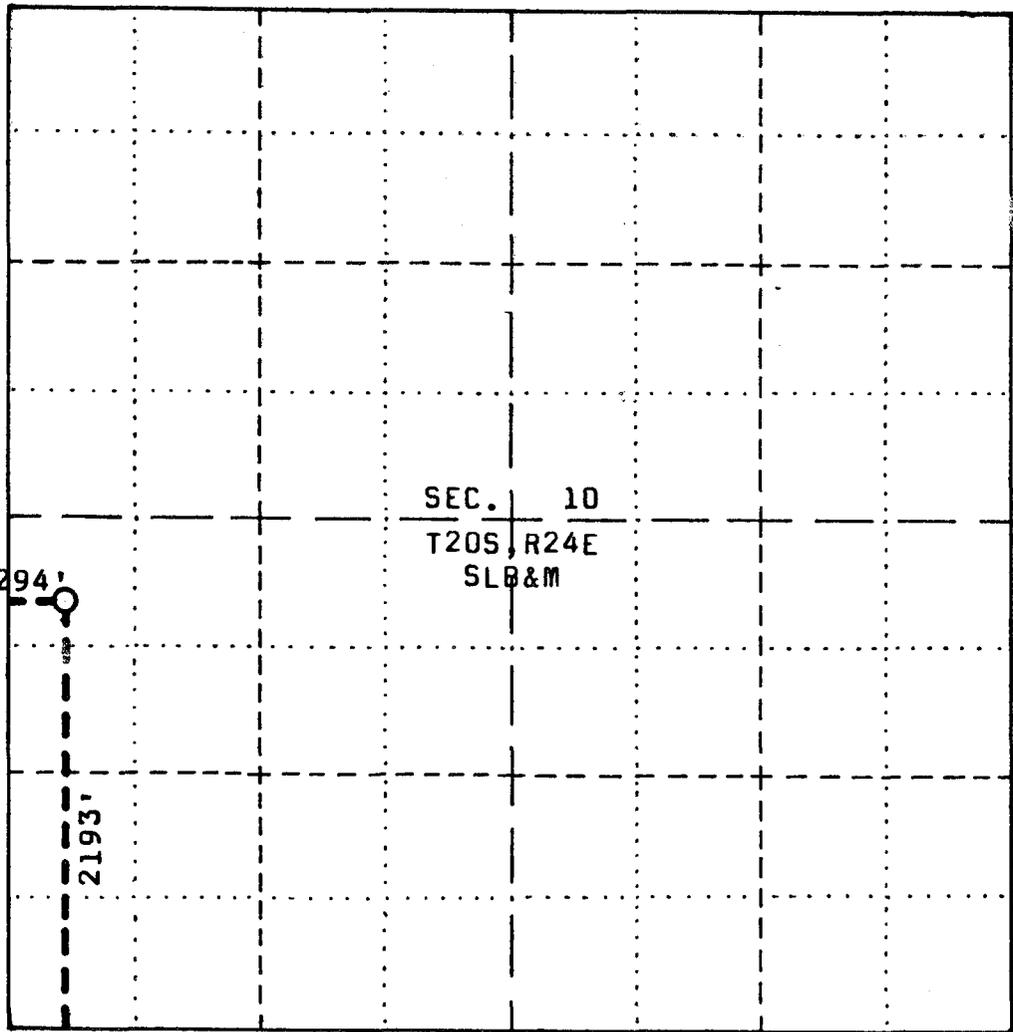
Robert Carmack

Robert Carmack
President



NW SW SEC 10
 T20S, R 24 E, SLB & M
 GRAND COUNTY, UTAH

J. N. BURKHALTER, PE-LS
 PROPOSED ROAD LOCATION
 &
 SITE LAYOUT
 LANSDALE-CARMACK WELL
 No. 1-10



SEC. 10
T20S, R24E
SLB&M

294'
2193'

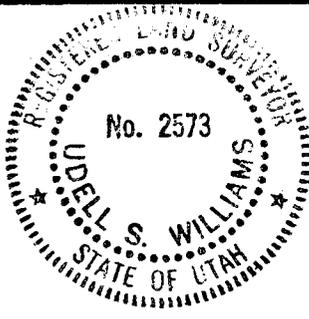
SCALE: 1" = 1000'

**LANSDALE-CARMACK
WELL 1-10**

Located North 2193 feet from the South boundary and East 294 feet from the West boundary of Section 10, T20S, R24E, SLB&M.

Elev. 4570

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

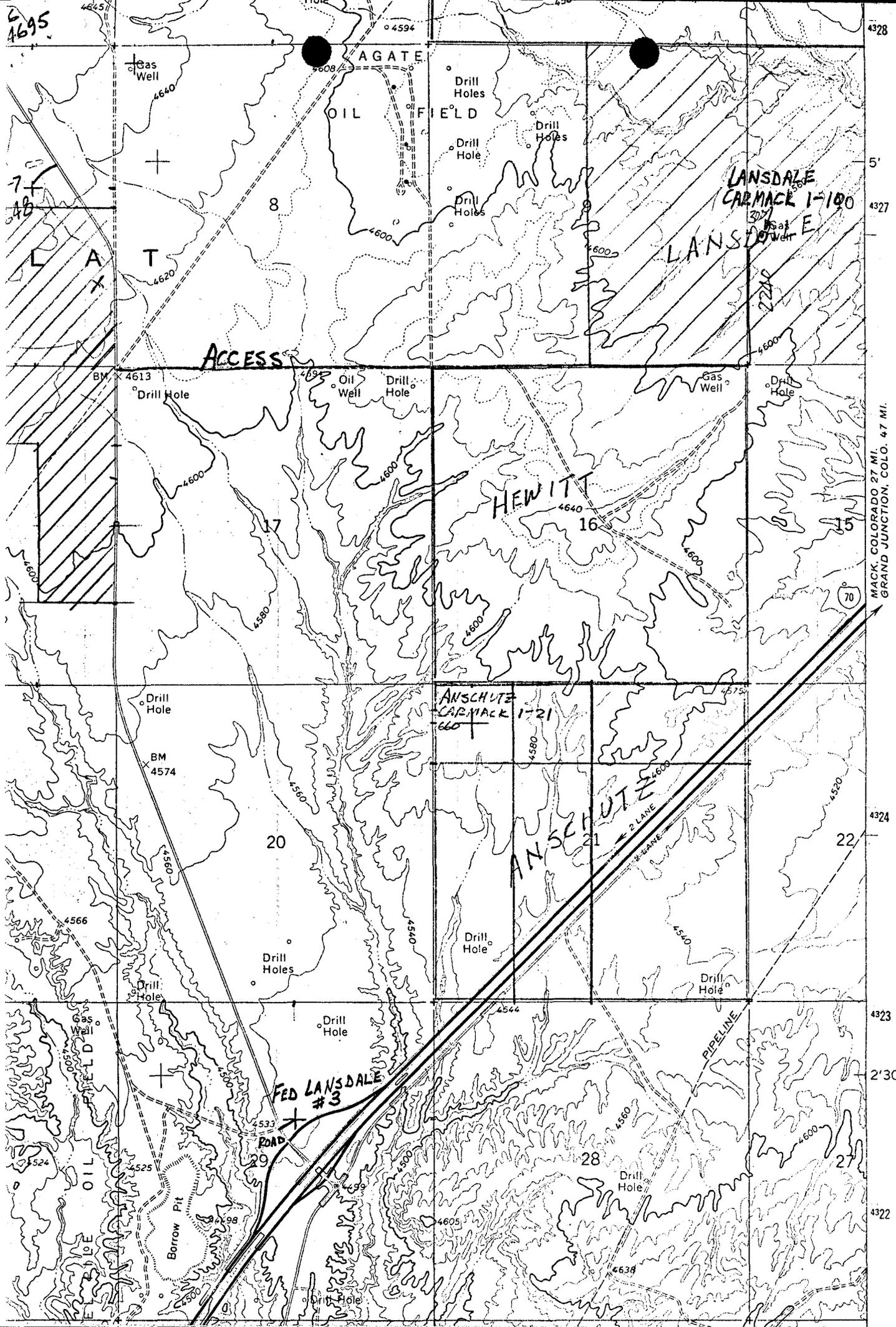
Udell S. Williams
UTAH R. L. S. NO. 2573



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

PLAT OF
PROPOSED LOCATION
**LANSDALE-CARMACK
WELL 1-10
SEC. 10, T20S, R24E, SLB&M**

SURVEYED BY: USW DATE: 9/23/78
DRAWN BY: USW DATE: 9/25/78



70
MACK, COLORADO 27 MI.
GRAND JUNCTION, COLO. 47 MI.

U. S. GEOLOGICAL SURVEY - CONSERVATION DIVISION

FROM: DISTRICT GEOLOGIST, SALT LAKE CITY, UTAH

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

SUBJECT: APD MINERAL EVALUATION REPORT

LEASE NO. 438365

OPERATOR: Carmack Drilling

WELL NO. 1-10

LOCATION: 1/4 NW 1/4 SW 1/4 sec. 10, T. 20S, R. 24E, 56M
Grand County, Utah

1. Stratigraphy: operator guesses are poor.

- Mancos - Surface
- Dakota - 950
- Cedar Mtn - 1055
- Backhorn - 1100
- Morrison 1135
- Salt Wash 1375

2. Fresh Water:

none probable

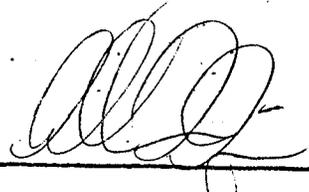
3. Leasable Minerals:

possible oil/gas in Dakota, Cedar Mtn, Salt Wash

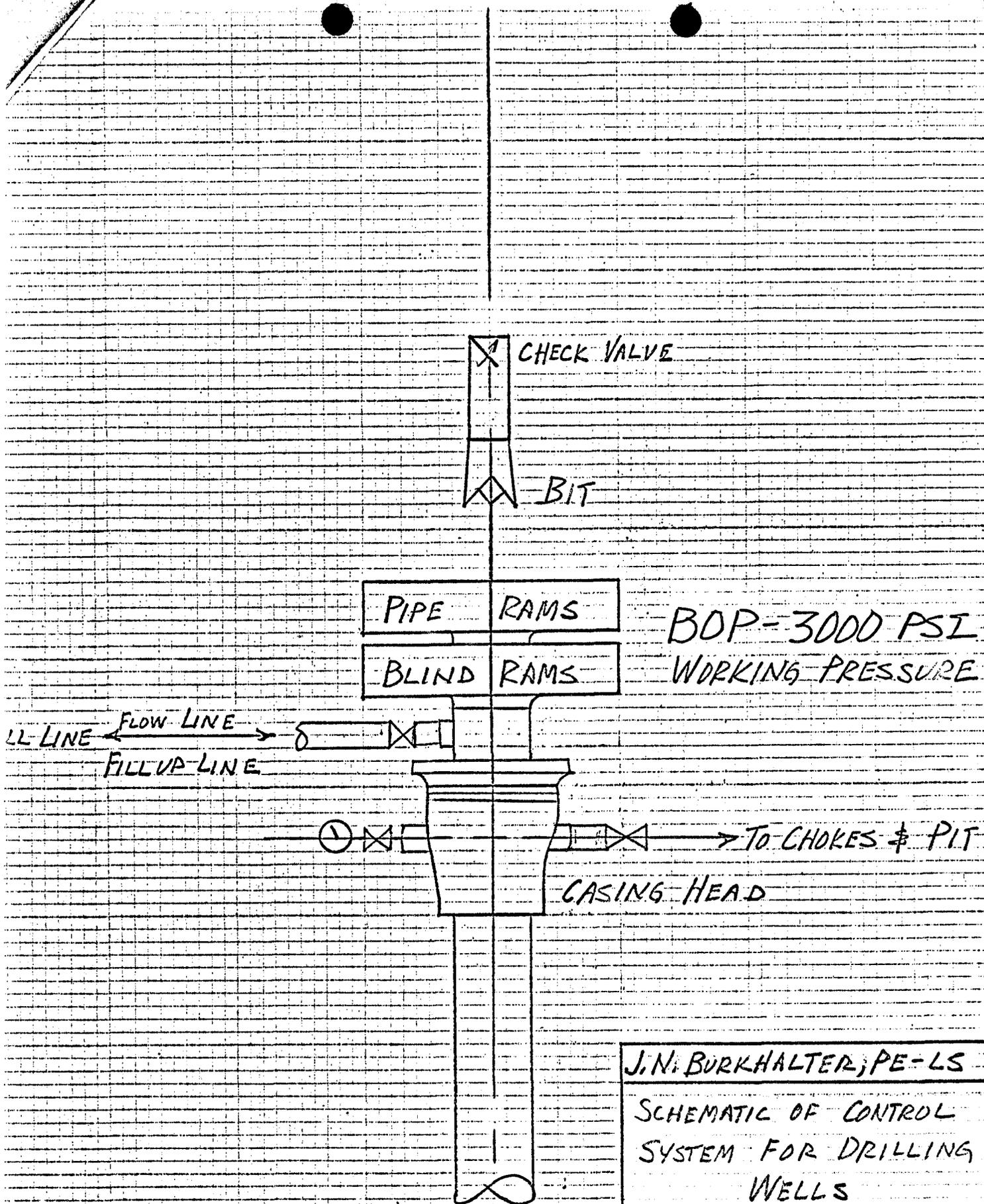
4. Additional Logs Needed: none

5. Potential Geologic Hazards: none expected

6. References and Remarks:

Signature: 

Date: 12 - 27 - 78



J. N. BURKHALTER, PE-LS

SCHEMATIC OF CONTROL
SYSTEM FOR DRILLING
WELLS

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

Unusual Environmental Analysis

Lease No. U-38365

Operator Carmack Drilling Company

Well 1-10

Location 294' FWL & 2193' FSL NW 1/4 SW 1/4 Sec.10, T20S, R24E

County Grand

State Utah

Field Agate

Status: Surface Ownership public

Minerals Federal

Participants and Organizations

George Diwachak

USGS - SLC

Bob Kershaw

BLM, Moab

Jeff Williams

BLM, Moab

Hart Gleason

Burkhalter Engineering,
Consultant

Related Environmental Analyses and References:

- (1) Unit Resource Analysis, Book Mountain Planning Unit, BLM, Moab

Analysis Prepared by:

George Diwachak
Environmental Scientist
Salt Lake City, Utah 84148

Date: May 30, 1979

Noted - G. Diwachak

→ Drill pad & diked
 pad 200x200
 Pit 30x80
 No new access
 2 grades exist 18' wide road
 Flow line not incl
 1 ac
 4.00 acres
 Pg 8
 (3) (a)-(k)

Proposed Action:

On April 18, 1979, Carmack Drilling Company filed an Application for Permit to Drill the No. 1-10 development well, a 1500-foot gas test of the Salt Wash Member of the Morrison Formation; located at an elevation of 4570 ft. in the NW 1/4 SW 1/4 of Section 10, T. 20S., R. 24E. on Federal mineral lands and Public surface; lease No. U-38365. As an objection was raised to the wellsite it was adjusted, by cutting 25 ft. from the east side of the pad and adding it to the west side, to allow for a 125 ft. blooey line. This did not change the hole location. There was no objection raised 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.G.S. District Office in Salt Lake City, Utah, and the U.S.G.S. 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. long and a reserve pit 30 ft. x 80 ft. No new access road would be constructed. An existing 18 ft. wide road would be graded lightly from a maintained road. The operator proposes to construct production facilities on a disturbed area of the proposed drill pad. If production is established, plans for a gas flow line would be submitted to the appropriate agencies for approval. The anticipated starting date after approved by USGS is when approved and duration of drilling activities would be about 10 days.

Location and Natural Setting:

The proposed drillsite is approximately 10 miles NE of Cisco, Utah the nearest town. A road runs to the location. This well is in the Agate field. fair

Topography

Area topography is flat to gently undulating. The location is situated on a gently northwest sloping area requiring a maximum 10 ft. cut on the southeast corner and 6 ft. fill on the west side of the drill pad.

Geology

The surface geology is Mancos Shale. The soil is sandy clay. No Geologic hazards are 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 would 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 blowout 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. The operator plans to use air drilling methods which would reduce the potential for lost circulation.

Soils:

No detailed soil survey has been made of the project area. The top soils in the area are a sandy clay with high salt content. The soils are alkaline and support the salt-desert shrub community.

Air:

No specific data on air quality is available at the proposed location. 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 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 are not anticipated.

Precipitation:

Annual rainfall should range from about 6 to 10 inches 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 7 inches.

Winds are medium and gusty, occurring predominately from southwest to northeast. Air mass inversions are rare. The climate is semiarid with abundant sunshine, hot summers and cold winters, with temperature variations on a daily and seasonal basis.

Surface Water Hydrology:

Drainage from the location would be toward Cottonwood Wash, a non-perennial tributary of the Colorado River.

Some additional erosion 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 proposed project should have minor impact on the surface-water systems. There is no variance to leaks or spills for this operation.

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 commingling 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 basic information as all shows of fresh water would be reported. Water production with the gas would require disposal of produced water per the requirements of NTL-2B. Any fluids produced will be collected and disposed of elsewhere (no pits). The depths of fresh-water formations are listed in the 10 Point Subsurface Protection Plan. 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:

Shadscale, sagebrush, Astragalus (milkvetch), cacti and grasses are present at the site.

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

Proposed action would remove about 1 acre 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.

Wildlife

EA #120-79

The fauna of the area consists predominately of pronghorn antelope, mule deer, coyotes, rabbits, foxes, and varieties of small ground squirrels and other types of rodents and various types of reptiles. The area is used by man for primary purpose of grazing domestic livestock and sheep. The birds of the area are raptors, finches, ground sparrows, magpies, crows and jays.

An animal and plant inventory has been made by the Bureau of Land Management. No endangered plants or animals are known to inhabit the project area.

Social-Economic Effect:

An on the ground surface archaeological reconnaissance has been performed. Appropriate clearances must be obtained from the surface managing agency. If an 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 and other facilities of this nature in the general area. Minor distractions from aesthetics would occur over the lifetime of the project and are judged to be minor. All permanent facilities placed on the location should be painted a light sand color 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 predrilling levels.

The site is not visible from any major roads. After drilling operations, completion equipment would not 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 significant in Grand County, Utah.

But should this well discover a significant new hydrocarbon source, local, State, and possibly National economies might be improved. In this instance, other development wells would be anticipated with substantially greater environmental and economic impacts.

Should the wellsite be abandoned, surface rehabilitation would be done according to the surface agency's requirements and U.S. Geological Survey'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.

The proposed location is within the Book Mountain Planning Unit. This Environmental Assessment Record was compiled by the Bureau of Land Management, the surface managing agency of the Federal surface in the area. The study includes additional information on the environmental impact of oil and gas operations in this area and gives land use recommendations. The E.A.R. is on file in the agency's State office and is incorporated herein by reference.

Waste Disposal:

The portable tanks will contain all fluids used during the operations. A trash pit would be utilized for any solid wastes generated at the site. All trash and refuse will be hauled away. Sewage would be handled according to State sanitary codes. For further information, see the 13-Point Surface Plan.

Alternative 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 subsurface would be prevented as much as possible under the U.S. Geological Survey and other controlling agencies' supervision with rehabilitation planning reversing almost all effects. Additionally, the growing scarcity of oil and 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 wellsites 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 vegetation, 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.

(3) Drilling should be allowed provided the following mitigative measures are incorporated into the proposed APD and adhered to by the operator. 

- (a) The drilling pad should be adjusted by removing 25 ft. from the east edge and adding it to the west edge to allow for a 125 ft. blooey line to the reserve pit.
- (b) The blooey line should be misted with water to suppress dust.
- (c) Topsoil should be stockpiled on the northeast corner of the pad.

Adverse Environmental Effects Which Cannot Be Avoided

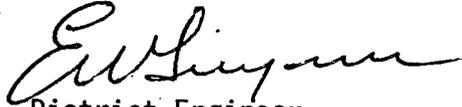
Surface disturbance and removal of vegetation from approximately 1 acre of land surface for the lifetime of the project which would result in increased and accelerated erosional potential. Grazing would be eliminated in the disturbed areas and there would be a minor and temporary disturbance of wildlife 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, gas leaks, and spills of oil and 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 geological 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 Cottonwood Wash would exist through leaks and spills.

Determination

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

Date

6/22/79



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

↑
NW

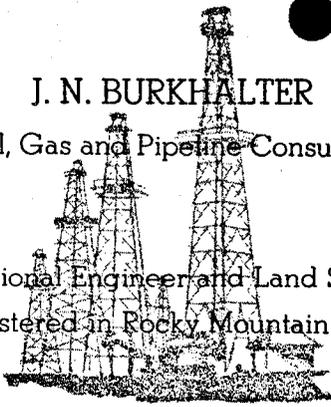


J. N. BURKHALTER

Oil, Gas and Pipeline Consultant

Professional Engineer and Land Surveyor

Registered in Rocky Mountain States



592 25 Road
Grand Junction, Colorado 81501
Telephone 303/242-8555

Re: Lansdale-Carmack
NE NE SW Sec. 10, T20S, R24E, SLB&M
Grand County, Utah
Lease: U-38365

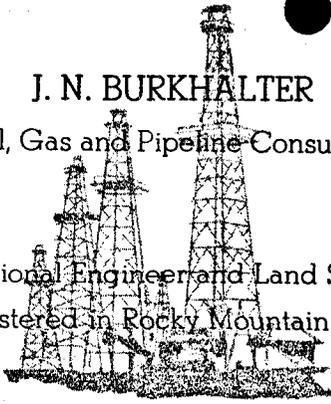
PRESSURE MONITORING AND CONTROL DATA
SEVEN POINT PLAN

1. Surface Casing: Set at 200'
Size 8 5/8"
Weight 24#
Length Range 3
Grade J-55 new. Tested to 3000 psig.
2. Casing Heads:
Series 600 - 1500 psi working pressure.
3. Production Casing:
Size 4 1/2"
Weight 10.5#
Length Range 3
Grade J-55, new, tested to 3000 psig.
4. Pressure Control:
BOP RAM Type
Series 600 - tested to 3000 psig
Rams Pipe & Blind
Will use fill, kill and choke lines.
5. Auxiliary Pressure Control:
 - a. Kelly cocks.
 - b. Check valve at bit.
 - c. Monitoring equipment on mud system.
 - d. A sub on floor with a full opening valve to be stabbed into drill pipe when Kelly is out of string.
6. Anticipated Bottom Hole Pressure:
550 psig.
7. The Type of Drilling Fluid:
Air until gas encountered.
Mud up with Polymer mud with NaCl and CaCl₂ as weighting agent -
10.5 to 11.00 lb. per gal. as required.

J. N. BURKHALTER

Oil, Gas and Pipeline Consultant

Professional Engineer and Land Surveyor
Registered in Rocky Mountain States



592 25 Road
Grand Junction, Colorado 81501
Telephone 303/242-8555

Lansdale - Carmack Well No. 1-10
NE NE SW Sec.10, T20S, R24E, SLB&M
Grand County, Utah

SURFACE USE PLAN

Geographical: 10 miles northeast of Cisco, Utah.

Terrain: Low, rolling hills of Mancos shale.

Vegetation: Very sparse.

Surface Water: None. This is dry, desolate, desert country.

1. Existing Roads: Existing roads are 15-18 feet wide, with native ground as surface material. This is primarily Mancos shale with a little Cretaceous gravel in some places.

The included map shows all access roads and roads within a several mile radius of the locations.

There are no immediate plans for improvement of existing roads. If commercial production is found and road improvement is needed, it will be considered at the appropriate time.

2. Planned Access Roads: The map indicates all necessary access roads be constructed which will be to the same physical characteristics as existing roads - 15-18 feet wide with native Mancos shale as surface with maximum grades not to exceed 3-4%. There will be no culverts required and no major cuts and fills required for access to the well applied for. No fence cuts or cattle guards will be required.
3. Location of Existing Wells: As you can see from the map, existing wells have been located upon the map. The status of the wells is generally indicated on the map by the manner in which the well is marked. There are no water wells or disposal wells.

The well applied for in this application has been referenced in two directions with reference stakes set at 150 and 200 feet in four directions.

4. Location of Existing and/or Proposed Facilities:

- a) There are no tank batteries off of well locations within a one mile radius of the proposed location. Gas gathering lines are indicated on the attached map. All lines in the area are surface lines.
- b) If production is found, storage facilities will be located on the location. If gas is discovered in commercial quantities, necessary pipelines will be applied for at that time.

Complete protective measures such as fences will be used to protect livestock and wildlife in the area.

- c) Rehabilitation of all disturbed areas no longer needed after construction is completed will be returned to smooth contour and all debris will be cleaned up. All pits will be covered and cleaned up after drill operations. Those pits required for production will be fenced.

5. Location and Type of Water Supply: Water will be acquired either from Cisco Springs, which is about 9 miles northwest of the proposed well location, or from the Colorado River, which is about 5 miles southwest of Cisco, Utah. Water will be transported by truck. Existing roads will be used to transport water.

No water well will be drilled on the lease.

6. Source of Construction Materials: No construction materials such as sand, gravel, stone and soil will be used other than that found in the native location.

In the event that tanks and production equipment are required, gravel will be hauled from Grand Junction, Colorado or Moab, Utah to set tanks on. This gravel will be purchased from private enterprise.

7. Methods for Hauling Waste Disposal:

- a) Cuttings - The hole will be 90% air drilled and cuttings will be blown into the pit. These cuttings will be buried in the pit.
- b) Drilling Fluids - Will be contained in steel mud tanks. A dirt pit will be dug to contain excess flow out of the well during cementing and completion operations. Of course, these pits will be cleaned up and covered up.
- c) Produced Fluids such as Oil and Water - Will be properly disposed of with oil being stored in tanks and water being diverted to the pit and disposed of as required.
- d) Sewage - A portable chemical toilet will be provided on location during drilling operations.

Surface Use Plan (cont)

- e) Garbage and Other Waste Material - Will be contained in 30 gallon galvanized garbage cans and hauled off the location.
 - f) As stated before, the entire well site area will be properly cleaned up and restored to smooth contour when the rig moves out. Only that part of the location required for production operations will be kept in use. In the event of a dry hole, the only appurtenance left at the location will be the required dry hole marker.
8. Ancillary Facilities: There will be no camps or air strips required for this drilling operation.
9. Well Site Layout: A plat on a scale of 1" = 40' is included with the application showing location and orientation of the drilling rig, mud tanks, reserve pit, pipe racks and other appurtenances to the operation. For the time being pits will be unlined as allowed by present law. The only water introduced into these pits will be fresh water used in the drilling operation.
10. Plans for Restoration of Surface: As stated before, the entire location will be restored to smooth contour. Revegetation will be carried out as directed by BLM.

It is intended to have all locations cleaned up within 30 days after operations are concluded.

11. Other Information:

- a) The topography of these locations near Cisco, Utah is a very gentle rolling, flat characteristic. The soil is raw Mancos shale with extremely sparse vegetation. A few coyotes, prairie dogs and cottontail rabbits occupy the entire area.
- b) The only other surface use activities other than petroleum exploration in the area is in spring grazing of the sparse vegetation by cattle and sheep.
- c) The proximity of water has been described at Cisco Springs, (about 9 miles northwest at the Colorado River which is about 5 miles southwest of Cisco, Utah. The only occupied dwellings are at Cisco, Utah, which has been located already. There will be no disturbance to archeological, historical or cultural sites by drilling the applied-for well in the present application. The land is under the jurisdiction of the Bureau of Land Management.

12. Operator's Representative:

J. N. Burkhalter
592 - 25 Road
Grand Junction, Colorado 81501
(303) 242-8555
Mobile (303) 245-3660, Unit 472

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 Carmack Drilling Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

11-17-78

Date

Robert Carmack

Robert Carmack
President

STATE OF UTAH
DIVISION OF OIL, GAS, AND MINING

** FILE NOTATIONS **

Date: Dec. 5, 1978

Operator: Carnual Drilling Co.

Well No: Lunsdale - Carnual #1-10

Location: Sec. 10 T. 20S R. 24E County: Grand

File Prepared:

Entered on N.I.D.:

Card Indexed:

Completion Sheet:

API Number: 43-019-30479

CHECKED BY:

Administrative Assistant: JW

Remarks: GW - MUSEW - Sec. 10

Petroleum Engineer: _____

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

I. DANIEL STEWART
Chairman

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

CLEON B. FEIGHT
Director

December 7, 1978

Carmack Drilling Company
592 - 25 Road
Grand Junction, Colorado 81501

Re: Well No:
Anschutz-Carmack #1-21,
Sec 21, T. 20 S, R. 24 E,
Kansdale-Carmack #1-10,
Sec. 10, 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 - Consultant
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 #1-21 - 43-019-30480 and #1-10 - 43-019-30479.

Very truly yours,

DIVISION OF OIL, GAS AND MINING

CLEON B. FEIGHT
Director

cc: U.S. Geological Survey

DIVISION OF OIL, GAS AND MINING

PLUGGING PROGRAM

NAME OF COMPANY: Carmack Drilling (Newt)

WELL NAME: Lansdale-Carmack 1-10

SECTION 10 NW SW TOWNSHIP 20S RANGE 24E COUNTY Grand

VERBAL APPROVAL GIVEN TO PLUG THE ABOVE REFERRED TO WELL IN THE FOLLOWING MANNER:

TOTAL DEPTH: 1853'

CASING PROGRAM:

7 5/8" @ 214'

6 3/4" openhole TD

FORMATION TOPS:

Dakota 953'

Morrison 1124'

Salt Wash 1304'

Summerville 1700'

Entrada 1750'

PLUGS SET AS FOLLOWS:

#1	1750'-1650'	25 sacks
#2	1300'-1200'	"
#3	950'-850'	"
#4	260'-160'	25

Small quantity of H₂O at 1450'

DATE July 9, 1979 10:30 p.m.

SIGNED M.S. Minder

100
45675



SCOTT M. MATHESON
Governor

OIL, GAS, AND MINING BOARD

GORDON E. HARMSTON
Executive Director,
NATURAL RESOURCES

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES

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1588 West North Temple
Salt Lake City, Utah 84116
(801) 533-5771

I. DANIEL STEWART
Chairman

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

CLEON B. FEIGHT
Director

November 15, 1979

Carmack Drilling Co.
592-25 Road
Grand Junction, Colo.

81501

RE: Well NO. Lansdale-Carmack 1-10
Sec. 10, T. 20S, R. 24E,
Grand County, Utah

Gentlemen:

This letter is to advise you that the Well Completion or Recompletion Report and Log for the above referred to well is due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3, in duplicate, and forward them to this office as soon as possible.

Thank you for your cooperation relative to the above.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

Debbie Beauregard
DEBBIE BEAUREGARD
CLERK-TYPIST



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

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

February 5, 1980

Carmack Drilling Co.
592 - 25 Rd.
Grand Junction, Colo. 81501

RE: SEE ATTACHED SHEET FOR FURTHER
INFORMATION ON WELLS INVOLVED.
SECOND NOTICES

Gentlemen:

This letter is to advise you that the Well Completion or Recompletion Report and Log for the above mentioned wells are due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3, in duplicate, and forward them to this office as soon as possible.

Thank you for your cooperation relative to the above.

Very truly yours,
DIVISION OF OIL, GAS, AND MINING

CLEON B. FEIGHT
DIRECTOR

SHEET ATTACHMENT

Well No. Lansdale-Carmack #1-10
Sec. 10, T. 20S, R. 24E,
Grand County, Utah
SECOND NOTICE

Well No. State # 1-16
Sec. 16, T. 21S, R. 20E,
Grand County, Utah
THIRD NOTICE

Well No. Dunlap Federal #1
Sec. 8, T. 6S, R. 24E,
Uintah County, Utah

Well No. Dunlap Federal #2
Sec. 7, T. 6S, R. 24E,
Uintah County, Utah

Well No. Dunlap Federal #3
Sec. 7, T. 6S, R. 24E,
Uintah County, Utah

Well No. Dunlap Federal #4
Sec. 18, T. 6S, R. 24E,
Uintah County, Utah

Well No. Dunlap Federal #5
Sec. 17, T. 6S, R. 24E,
Uintah County, Utah

Well No. Dunlap Federal #6
Sec. 17, T. 6S, R. 24E,
Uintah County, Utah

Well No. Dunlap Federal #7
Sec. 17, T. 6S, R. 24E,
Uintah County, Utah

Well No. Dunlap Federal #8
Sec. 17, T. 6S, R. 24E,
Uintah County, Utah



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
March 7-80

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

Carmack Drilling Co.
592-25 Road
Grand Junction, Colorado 81501

Re: See enclosed sheet for wells

Gentlemen:

This letter is to advise you that the Well Completion or Recompletion Report and Log for the above mentioned wells, is due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3, in duplicate, and forward them to this office as soon as possible.

Thank you for your cooperation relative to the above.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

JANICE TABISH
CLERK TYPIST

(1) Well No. Toledo Fed. #2A
Sec. 3, T.22S, R.21E.
Grand County, Utah

(2) Well No. Lansdale-Carmack 1-10
Sec. 10, T. 20S, R. 24E.
Grand County, Utah

(3) Well No. State 1-16
Sec. 16, T.21S,R. 20E.
Grand County, Utah



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

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

CLEON B. FEIGHT
Director

October 7, 1980

Carmack Drilling Company
592 - 25 Road
Grand Junction, Colorado 81501

RE: SEE ATTACHED SHEET FOR FURTHER
INFORMATION ON WELLS INVOLVED.

Gentlemen:

This letter is to advise you that the Well Completion or Recompletion Report and Log for the above mentioned wells are due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3, in duplicate, and forward them to this office as soon as possible.

Thank you for your cooperation relative to the above.

Very truly yours,

DIVISION OF OIL, GAS AND MINING

Barbara Hill

BARBARA HILL
CLERK TYPIST

/bjh

Enclosures: Forms

*Will send "Well Completion Report"
as Wes Dunlap stated (over phone call on 4/8/81)*

12

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

5. LEASE DESIGNATION AND SERIAL NO.

U-38365

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

9. WELL NO.

Landsdale-Carmack #1-10

10. FIELD AND POOL, OR WILDCAT

WILDCAT

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

Sec. 10, T20S, R24E, SLM

12. COUNTY OR PARISH

GRAND

13. STATE

UTAH

1a. TYPE OF WELL: OIL WELL GAS WELL DRY Other _____

b. TYPE OF COMPLETION: NEW WELL WORK OVER DEEP-EN PLUG BACK DIFF. RESVR. Other _____

2. NAME OF OPERATOR
CARMACK DRILLING COMPANY

3. ADDRESS OF OPERATOR
592 - 25 Road, Grand Junction, CO 81501

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface 294' FWL, 2193 FSL *NEWSW*
At top prod. interval reported below
At total depth

14. PERMIT NO. 43-dg-30479 | DATE ISSUED 12-7-78

15. DATE SPUNDED 7-5-79 | 16. DATE T.D. REACHED 7-9-79 | 17. DATE COMPL. (Ready to prod.) | 18. ELEVATIONS (DF, RKE, RT, GR, ETC.)* 4570 GR | 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 1853 MD | 21. PLUG, BACK T.D., MD & TVD | 22. IF MULTIPLE COMPL., HOW MANY* | 23. INTERVALS DRILLED BY Rotary TOOLS | 24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* -NA-

25. WAS DIRECTIONAL SURVEY MADE NO

26. TYPE ELECTRIC AND OTHER LOGS RUN IES and FDC-CNL | 27. WAS WELL CORRED NO

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8"	24 lbs	200'	12 1/2"	75 sx class G circulate	
4 1/2"	10.5 lbs	1500'	6 3/4"	55 sx Dowell RFC	

29. LINER RECORD | 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number) plugging record:
Plugs: #1 1650 - 1750; 20 SX
#2 1200 - 1300; 20 SX
#3 850 - 950; 20 SX
#4 160 - 260; 20 SX
#5 Surface plug; 10 SX

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
-NA-	

33. PRODUCTION
DATE FIRST PRODUCTION -NA- | PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) | WELL STATUS (Producing or shut-in)

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) | TEST WITNESSED BY

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records
SIGNED *J. H. Burkhardt* | TITLE Consulting Engineer | DATE 9-15-81

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 38, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES		38. GEOLOGIC MARKERS	
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Dakota	953		
Salt Wash	1304		
Entrada	1750		
			TOP
			NEAR. DEPTH
			TRUE VERT. DEPTH
			Dakota
			Morrison
			Salt Wash
			Summerville
			Entrada
			953
			1124
			1304
			1700
			1750

WELL COMPLETION REPORT DUE
THIRD REQUEST

- (1) Well No. Dunlap Federal #1
Sec. 8, T. 6S, R. 24E.,
Uintah County, Utah
- (2) Well No. Dunlap Federal #2
Sec. 7, T. 6S, R. 24E.,
Uintah County, Utah
- (3) Well No. Dunlap Federal #3
Sec. 7, T. 6S, R. 24E.,
Uintah County, Utah
- (4) Well No. Dunlap Federal #4
Sec. 18, T. 6S, R. 24E.,
Uintah County, Utah
- (5) Well No. Dunlap Federal #5
Sec. 17, T. 6S, R. 24E.,
Uintah County, Utah
- (6) Well No. Dunlap Federal #6
Sec. 17, T. 6S, R. 24E.,
Uintah County, Utah
- (7) Well No. Dunlap Federal #7
Sec. 17, T. 6S, R. 24E.,
Uintah County, Utah
- (8) Well No. Dunlap Federal #8
Sec. 17, T. 6S, R. 24E.,
Uintah County, Utah

FOURTH REQUEST - WELL COMPLETION REPORT DUE

Well No. Lansdale-Carmack 1-10
Sec. 10, T. 20S, R. 24E.,
Grand County, Utah

FIFTH REQUEST - WELL COMPLETION REPORT DUE

Well No. State 1-16
Sec. 16, T. 21S, R. 20E.,
Grand County, Utah



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

December 22, 1981

Carmack Drilling Company
592- 25 Road
Grand Junction, Colorado 81501

Re: Well No. Lansdale-Carmack 1-10
Sec. 10, T. 20S, R. 24E
Grand County, Utah

Well No. Toledo Federal #2A
Sec. 3, T. 22S, R. 21E
Grand County, Utah

FINAL NOTICE

Gentlemen:

This letter is to advise you that the Well Completion or Recompletion Report and Log for the above mentioned well is due and has not been filed with this office as required by our rules and regulations.

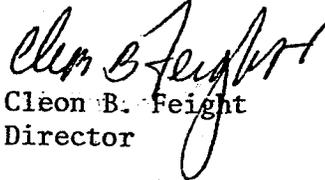
Please complete the enclosed Form OGC-3, in duplicate, and forward them to this office as soon as possible.

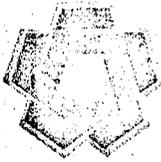
** If we do not hear from your office within fourteen days, this file will be turned over to the attorney at the Division of Oil, Gas and Mining for legal action.

Thank you for your cooperation relative to the above.

Very truly yours,

DIVISION OF OIL, GAS AND MINING


Cleon B. Feight
Director



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

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

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

RECEIVED

MAY 06 1982

April 23, 1982

DIVISION OF
OIL, GAS & MINING

Carmack Drilling Company
592 - 25 Road
Grand Junction, Colorado 81501

RE: Failure to comply with the General
Rules and Regulations and Rules of
Practice of the Division of Oil,
Gas, and Mining.

Gentlemen:

Records maintained by the Division of Oil, Gas, and Mining indicate that you have failed to respond to numerous requests for information on the Lonsdale-Carmack 1-10, Toledo-Federal 1-A, and Toledo-Federal 2A wells located in Grand County, Utah.

Please be advised that if accurate information regarding production and activities on the aforementioned wells is not received by May 3, 1982, I shall schedule an Order to Show Cause before the Board of Oil, Gas, and Mining. Among the measures I shall request the Board to approve is a moratorium on all your future drilling applications and operations.

Perhaps up to this point you have not realized the serious possible consequences of your failure to comply with the Division's regulations. The situation is serious and unwarranted. Furthermore, it will not be allowed to persist.

It is my wish that this matter be resolved without compelling you to appear before the Board of Oil, Gas, and Mining. Therefore, if I can be of any assistance please do not hesitate to contact me.

Very truly yours,

CAROLYN DRISCOLL
SPECIAL ASSISTANT ATTORNEY GENERAL

CD/tr

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

Joseph W. Bletcher, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

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

July 14, 1982

Carmack Drilling Company
- 592- 25 Road
Grand Junction, Colorado 81501

Re: Well No. Landsdale-Carmack
#1-10
Sec. 10, T. 20S, R. 24E.
Grand County, Utah

Gentlemen:

According to our records, a "Well Completion Report" filed with this office September 15, 1981, from above referred to well, indicates the following electric logs were run: IES & FDC-CNL. As of today's date, this office has not received these logs.

Rule C-5, General Rules and Regulations and Rules of Practice and Procedure, requires that a well log shall be filed with the Commission together with a copy of the electric and radioactivity logs.

Your prompt attention to the above will be greatly appreciated.

Sincerely,

DIVISION OF OIL, GAS AND MINING



Cari Furse
Clerk Typist