

**BERGE EXPLORATION**

53 EAST 4TH SOUTH  
SUITE 210  
SALT LAKE CITY, UTAH 84111  
~~801-531-7153~~

801-531-7153

August 18, 1975

Utah Oil & Gas  
Conservation Division  
1588 West North Temple  
Salt Lake City, Utah

Dear sirs,

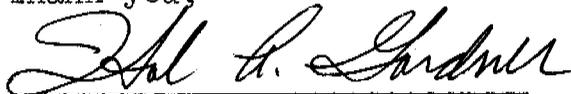
Enclosed are two applications to drill that have recently been filed with the U. S. G. S. Should any questions, etc. need answering, please contact:

Hal A. Gardner  
Berge Exploration Inc.  
53 East 4th South  
Suite 210  
Salt Lake City, Utah 84111

Telephone: 531-7153

We are the consulting firm handling the Utah affairs of Alpha Minerals.

Thank you.



HAL A. GARDNER  
Project Geologist

HAG:jo

**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  
Alpha Minerals

3. ADDRESS OF OPERATOR  
287 Riverside Ave. Westport, Conn. 06880

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*)  
 At surface  
 NE 1/4, NW 1/4 1980'E of West Line, 660'S of North  
 At proposed prod. zone Line Sec. 34, T. 1S., R. 17W, S. L. Mer.

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
16 miles East of Wendover, Utah

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)                      660

16. NO. OF ACRES IN LEASE  
1920

17. NO. OF ACRES ASSIGNED TO THIS WELL  
40

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

19. PROPOSED DEPTH  
2500

20. ROTARY OR CABLE TOOLS  
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
GR 4225

22. APPROX. DATE WORK WILL START\*  
9-1-75

**PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
10"	8 5/8"	20 lb.	300'	50 sacks
7 7/8"	5 1/2"	15.5	2500	Thru Production Zones

A 7 inch hole will be drilled to 2500 feet. If the well is a producer, 5 1/2" - 15.5 lb. production casing will be set and cemented through the production zone.

5. LEASE DESIGNATION AND SERIAL NO.  
U 26153

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

7. UNIT AGREEMENT NAME  
---

8. FARM OR LEASE NAME  
---

9. WELL NO.  
Alpha Minerals No. 1 Gov't

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T., S., M., OR BLK. AND SURVEY OR AREA  
Sec. 34, T. 1S., R. 17W  
S. L. Mer.

12. COUNTY OR PARISH                      13. STATE  
Tooele                      Utah

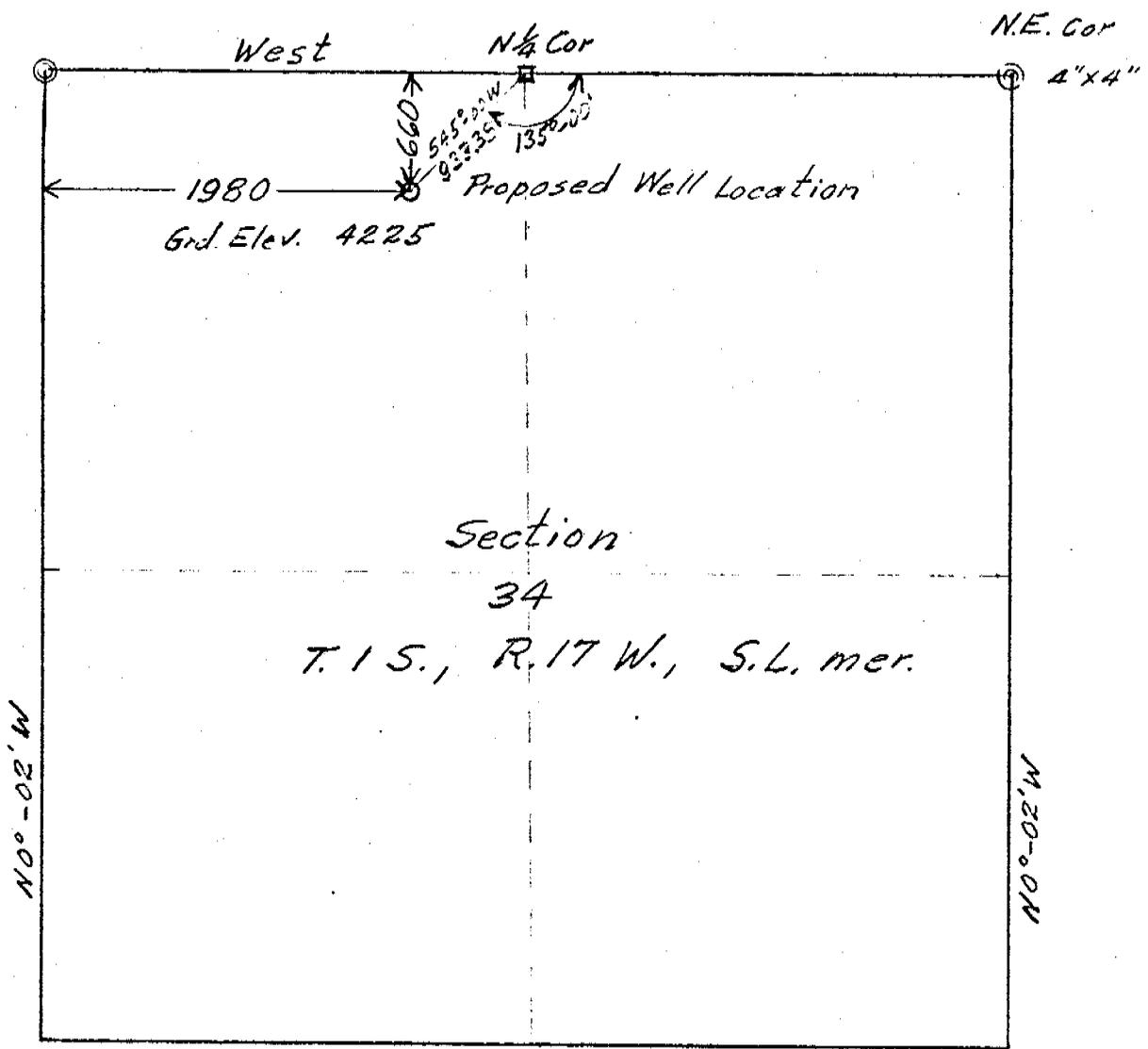
IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer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

24. SIGNED William H. Hotel                      TITLE President                      DATE Aug 4, 1975

(This space for Federal or State office use)  
 PERMIT NO. B-045-30001                      APPROVAL DATE \_\_\_\_\_

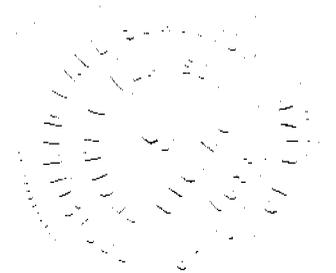
APPROVED BY \_\_\_\_\_                      TITLE \_\_\_\_\_                      DATE \_\_\_\_\_  
 CONDITIONS OF APPROVAL, IF ANY:

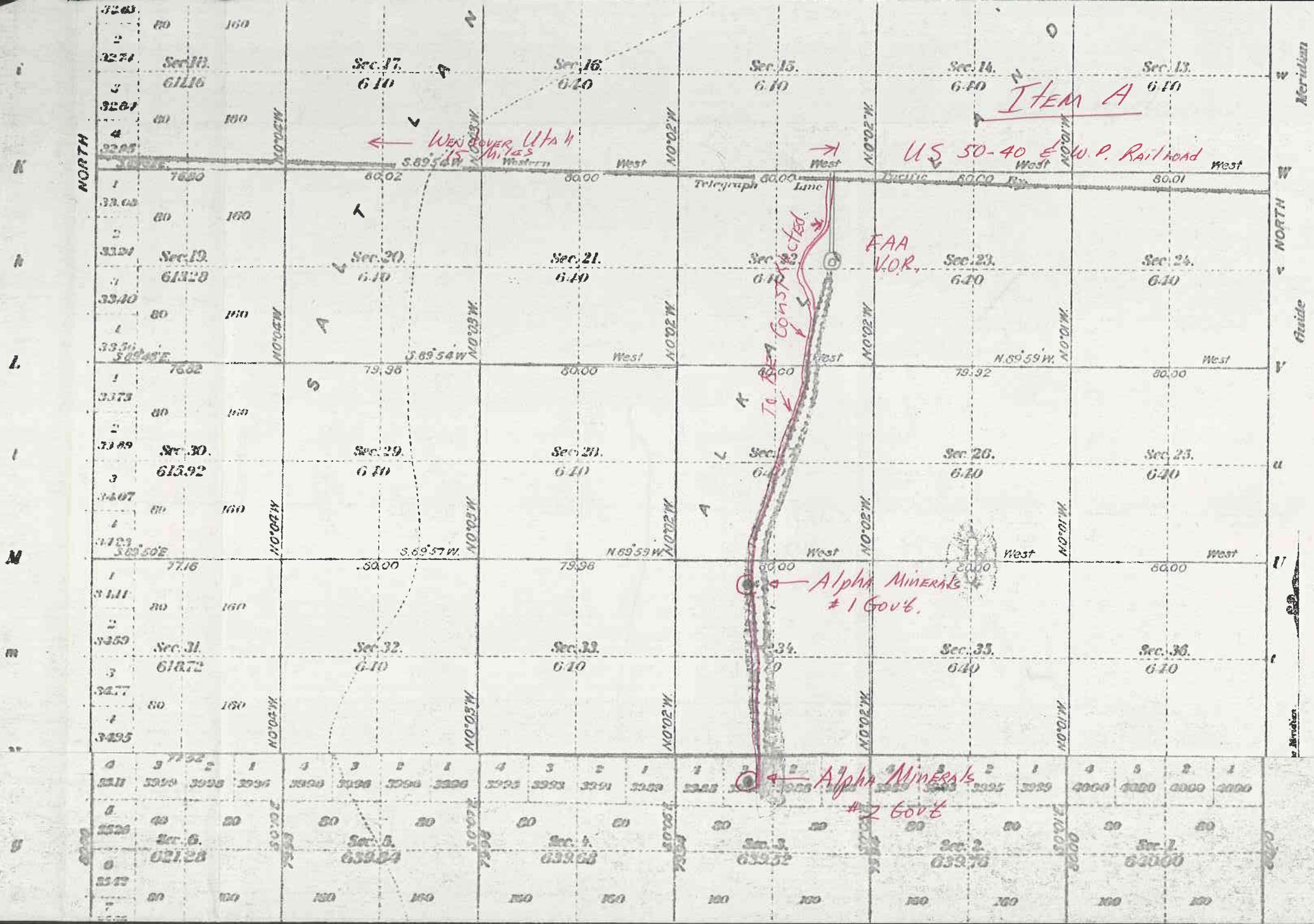
PLAT OF SURVEY OF PROPOSED OIL WELL LOCATION  
TOOELE COUNTY, UTAH  
FOR  
ALPHA MINERALS NO. 1 GOVERNMENT



DATE July 25, 1975

SURVEYED BY Eugene W. Pearson  
License No. 1633  
EUGENE W. PEARSON





ITEM A

WEN COVER UTAH 15 Miles Western

U.S. 50-40 E.W.P. RAILROAD

FAA V.O.R.

Alpha Minerals #1 Gov't.

Alpha Minerals #2 Gov't.

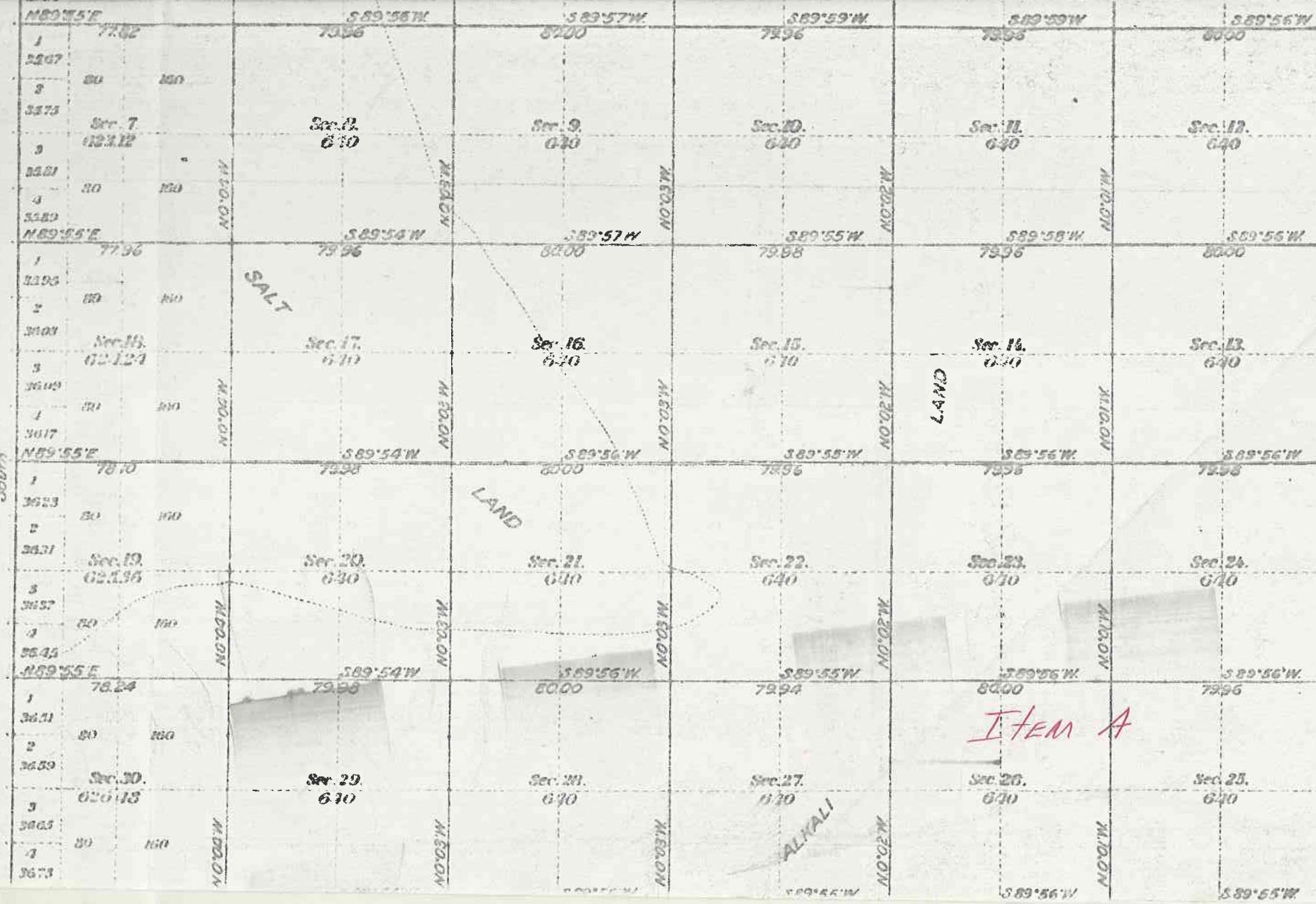
3260  
3271  
3281  
3291  
3301  
3311  
3321  
3331  
3341  
3351  
3361  
3371  
3381  
3391  
3401  
3411  
3421  
3431  
3441  
3451  
3461  
3471  
3481  
3491  
3501  
3511  
3521  
3531  
3541  
3551  
3561  
3571  
3581  
3591  
3601

Sec. 13. 610  
Sec. 14. 610  
Sec. 15. 610  
Sec. 16. 610  
Sec. 17. 610  
Sec. 18. 610  
Sec. 19. 610  
Sec. 20. 610  
Sec. 21. 610  
Sec. 22. 610  
Sec. 23. 610  
Sec. 24. 610  
Sec. 25. 610  
Sec. 26. 610  
Sec. 27. 610  
Sec. 28. 610  
Sec. 29. 610  
Sec. 30. 610  
Sec. 31. 610  
Sec. 32. 610  
Sec. 33. 610  
Sec. 34. 610  
Sec. 35. 610  
Sec. 36. 610

Meridian  
North  
Guide  
u  
v  
w  
x  
y  
z

Scale  
Contours  
Elev.

H  
A  
I  
i  
K  
s  
L  
i



Y  
X  
W  
W  
V  
U  
T

MERIDIAN

GUIDE

ITEM A

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  
 Alpha Minerals

3. ADDRESS OF OPERATOR  
 287 Riverside Ave. Westport, Conn. 06880

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
 At surface  
 NE 1/4, NW 1/4 1980'E of West Line, 660'S of North  
 At proposed prod. zone Line Sec. 34, T.1S., R.17W, S. L. Mer.

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 16 miles East of Wendover, Utah

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 660  
 16. NO. OF ACRES IN LEASE 1920

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. ---  
 19. PROPOSED DEPTH 2500

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 GR 4225

5. LEASE DESIGNATION AND SERIAL NO.  
 U 26153

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

7. UNIT AGREEMENT NAME  
 ---

8. FARM OR LEASE NAME  
 ---

9. WELL NO.  
 Alpha Minerals No. 1 Gov't

10. FIELD AND POOL, OR WILDCAT  
 Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
 Sec. 34, T.1S., R.17W  
 S. L. Mer.

12. COUNTY OR PARISH 13. STATE  
 Tooele Utah

17. NO. OF ACRES ASSIGNED TO THIS WELL 40

20. ROTARY OR CABLE TOOLS  
 Rotary

22. APPROX. DATE WORK WILL START\*  
 9-1-75

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
10"	8 5/8"	20 lb.	300'	50 sacks
7 7/8"	5 1/2"	15.5	2500	Thru Production Zones

A 7 inch hole will be drilled to 2500 feet. If the well is a producer, 5 1/2" - 15.5 lb. production casing will be set and cemented through the production zone.

*See Appendix*

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 William H. Hotal TITLE President DATE Aug 4, 1975

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

\*FILE NOTATIONS\*

Date: Aug. 19 -  
 Operator: Alpha Mineral  
 Well No: Alpha Grit. #1  
 Location: Sec. 34 T. 15 R. 17W County: Boyle

File Prepared  Entered on N.I.D.   
 Card Indexed  Completion Sheet

Checked By:

Administrative Assistant: [Signature]

Remarks: OK - Revised Petition

Petroleum Engineer/Mined Land Coordinator: O.K. Int

Remarks: PLD have operator notify office when 5A-2-in date occurs.

Director: [Signature]

Remarks:

Include Within Approval Letter:

Bond Required

Survey Plat Required

Order No.

Blowout Prevention Equipment

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

O.K. Rule C-3

O.K. In  Unit

Other:

[Signature]  
 Letter Written

August 22, 1975

Alpha Minerals  
287 Riverside Avenue  
Westport, Connecticut 06880

Re: ~~Well~~ No's:  
Alpha Gov't. #1,  
Sec. 34, T. 1 S, R. 17 W,  
Alpha Gov't. #2,  
Sec. 3, T. 2 S, R. 17 W,  
Tooele County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to well is hereby granted in accordance with the General Rules and Regulations and Rules of Practice and Procedure.

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: 272-5813  
OFFICE: 328-5771

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

The API number assigned to this well(s) is:

#1: 43-045-30001

#2: 43-045-30002

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

CLEON B. FEIGHT  
DIRECTOR

CBF:sw

cc: U.S. Geological Survey

AMENDED

SUBMIT IN TRIPLICATE  
(Other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R1425.

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  
Alpha Minerals Inc.

3. ADDRESS OF OPERATOR  
287 Riverside Ave., Westport, Conn. 06880

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At surface  
NE 1/4, NW 1/4 1847' FWL 1012' FNL Sec. 34 T1S, R17W  
At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
16 Miles East of Wendover, Utah

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)  
1012 Ft.

16. NO. OF ACRES IN LEASE  
1920

17. NO. OF ACRES ASSIGNED TO THIS WELL  
40

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
1275.65 Ft.

19. PROPOSED DEPTH  
2500'

20. ROTARY OR CABLE TOOLS  
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
GR 4222

22. APPROX. DATE WORK WILL START\*  
9-30-75

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8 7/8"	7"	23.57	300'	50 Sacks
6 1/4"	4 1/2"	14.98	2500'	Thru production zones

A 6 1/4 inch hole will be drilled 2500' deep. If the well is a producer, 4 1/2 inch - 14.98 lb. production casing will be set and cemented through the production zone.

APPROVED BY THE DIVISION OF  
OIL, GAS, AND MINING

DATE: 11-10-75

BY: *Clara S. Gault*

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.

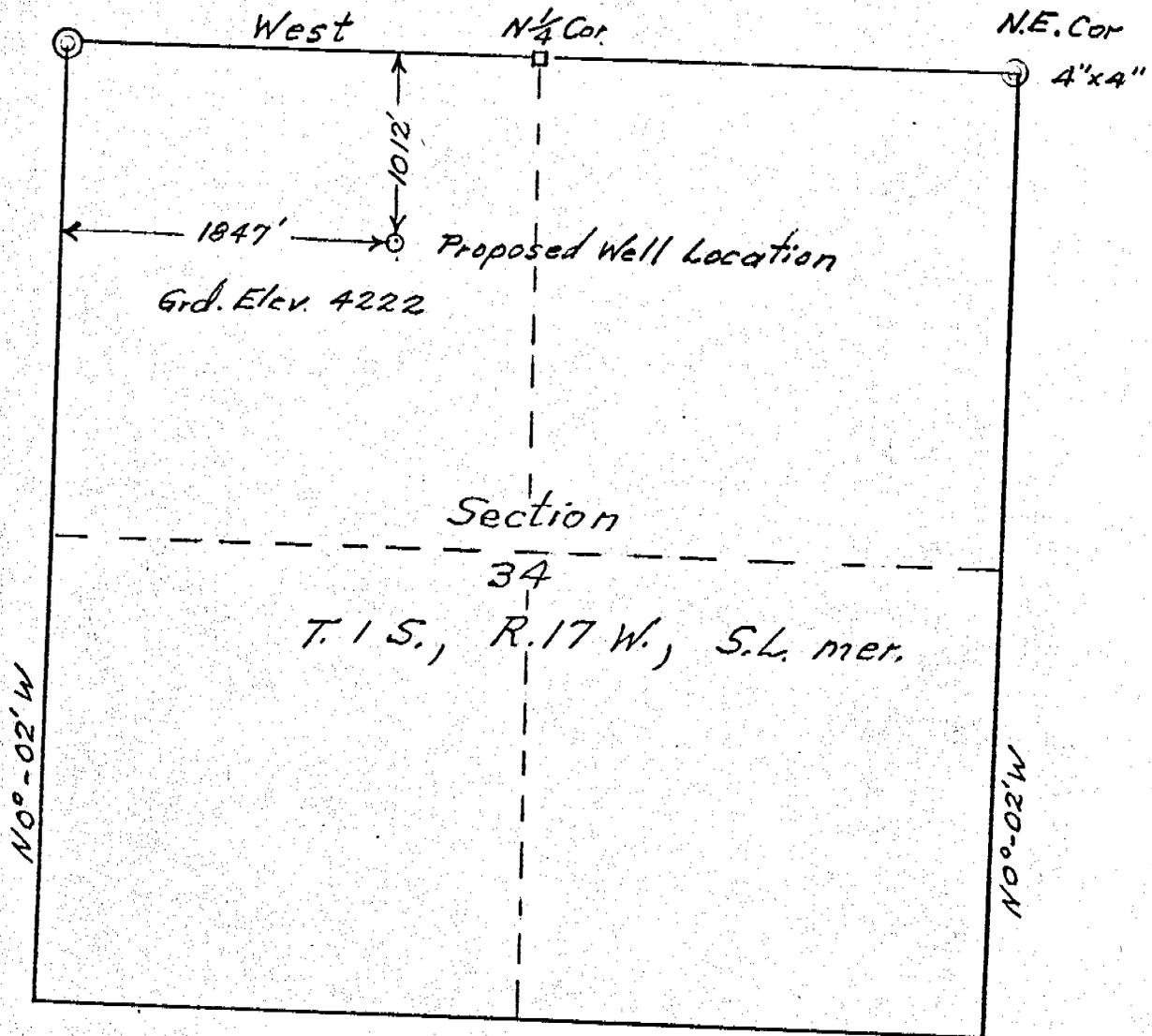
24. SIGNED *Christian D. Purcell* TITLE *W. P. Purcell* DATE *Sept 3, 1975*  
(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

PLAT OF SURVEY OF PROPOSED OIL WELL LOCATION (AMENDED)  
TOOELE COUNTY, UTAH  
FOR  
ALPHA MINERALS NO. 1 FEDERAL

8x33



APPROVED BY THE DIVISION OF  
OIL, GAS, AND MINING

DATE: 11-10-75

BY: Eugene W. Pearson

DATE September 3, 1975

SURVEYED BY

Eugene W. Pearson

EUGENE W. PEARSON

License No. 1633

8/26/75

ALPHA MINERALS

No. 1 GOVT  
NE NW SEC. 34-15-17W  
TOOELE COUNTY, UTAH  
U-26153

ALPHA MINERALS REPRESENTATIVE  
GENE PEARSON  
GARY ROBERTS

H. WILSON  
L. DECKER  
T. HARTSEL  
BLM, SLIC -  
USGS, SLIC - HENRICKS

- NO IMPACT
- ENHANCE
- MINOR IMPACT
- MAJOR IMPACT

	Construction				Pollution				Drilling Production				Transport Operations		Accidents		Others	
	Roads, bridges, airports	Transmission lines, pipelines	Dams & impoundments	Others (pump stations, compressor stations, etc.)	Burning, noise, junk disposal	Liquid effluent discharge	Subsurface disposal	Others (toxic gases, noxious gas, etc.)	Well drilling	Fluid removal (Prod. wells, facilities)	Secondary Recovery	Noise or obstruction of scenic views	Mineral processing (ext. facilities)	Others	Trucks	Pipelines		Others

Forestry																			
Grazing																			
Wilderness																			
Agriculture																			
Residential-Commercial																			
Mineral Extraction																			
Recreation																			
Scenic Views																			
Parks, Reserves, Monuments																			
Historical Sites																			
Unique Physical Features																			
Birds																			
Land Animals																			
Fish																			
Endangered Species																			
Trees, Grass, Etc.																			
Surface Water																			
Underground Water																			
Air Quality																			
Erosion																			
Other																			
Effect On Local Economy																			
Safety & Health																			

Others  
1/4 SW OF FAA VORTEX STATION

will cause NO EFFECT ON EITHER

CC CASPER  
DENVER  
STATE O&G  
FILE  
BLM, SLIC

Well No. & Location No # 1 Govt. NENW SEC. 34 T. 15 R. 17W  
Tooele County, UTAH

ENVIRONMENTAL IMPACT ANALYSIS - ATTACHMENT 2-B

1. Proposed Action

U.S.G.S. APPROVAL OF AN APPLICATION FOR PERMIT TO DRILL WHEREBY ALPHA MINERALS COMPANY PROPOSES TO DRILL A WILDCAT OIL WELL TO THE DEPTH OF 2500 FEET. THEY PLAN TO CONSTRUCT A 2 1/2 MILE NEW ACCESS ROAD FROM A JUNCTION ON ROUTE 50-90 (NENW SEC. 20) TO THE DRILL SITE. ALPHA MINERALS PLANS TO CLEAR AND LEVEL A DRILL SITE 110 FT X 80 FT, AND DIG A RESERVE PIT 50 FT X 50 FT WITH A DEPTH OF 8 FEET.

2. Location and Natural Setting (existing environmental situation)

THE WELL SITE IS IN AN AREA WHERE SANDY (QUARTZ) SOIL WITH SMALL PEBBLES ON THE SURFACE PREVAIL. THE EROSION POTENTIAL IS CLASSIFIED AS MINOR BECAUSE OF THE TYPE OF SOIL AND THE RELATIVE FLATNESS OF THE DRILL SITE AREA. THE VEGETATION CONSISTS OF A SPARSE COLLECTION OF GREASEWOOD, SALT BRUSH AND SAGE BRUSH. THE WILDLIFE CONSISTS OF THE USUAL DESERT FAUNA WITH NO ENDANGERED SPECIES. THERE IS NO GRASSING ON LOCATION OR AREA SURROUNDING. THERE ARE <sup>NO</sup> NATIONAL PARKS, MONUMENTS, OR HISTORICAL SITES IN THIS AREA. THERE ARE NO KNOWN ARCHEOLOGICAL SITES <sup>IN THIS AREA</sup> AROUND OR NEAR THIS WELL SITE. THE AREA, IN WHICH THE WELL IS TO BE DRILLED, IS KNOWN AS THE BONNEYVILLE SALT FLATS. THE SALT FLATS HAVE A DESOLATED APPEARANCE BUT ARE NOT CLASSIFIED AS UNIQUE. THE WATER IN THIS AREA IS KNOWN TO BE OF SALINE CHARACTERISTICS AND WILL BE USED IN DRILLING. THE WELL SITE IS LOCATED 2 3/4 MILES SOUTH OF INTERSTATE 40, 1 3/4 MILES SOUTH WEST OF P.A.A. VORTEX STATION, WEST OF THE WENDOVER BOBWHITE RANGE, AND IN THE AREA ON THE WEST <sup>SIDE</sup> OF A SAND DUNE. THERE IS A POTASH PLANT ABOUT 5 MILES TO THE WEST OF SITE.

### 3. Effects on Environment by Proposed Action (potential impact)

THE DRILLING AND COMPLETION OF A DRY HOLE OR FAILURE WOULD HAVE LITTLE LONGTERM EFFECT ON THE ENVIRONMENT. DISCOVERY OF A OIL FIELD WOULD HAVE A MAJOR EFFECT IN THAT THE CHARACTER OF THE AREA WOULD BE CHANGED. IF A DISCOVERY IS MADE, PLANNING WOULD BE REQUIRED TO AVOID SERIOUS DEGRADATION.

THE CONSTRUCTION OF THE ACCESS ROAD WOULD NOT BENEFIT THE AREA, AND WOULD CAUSE A VISUAL SCARE BECAUSE THE ROAD WILL HAVE TO BE BUILT UP FROM THE TOP OF THE SAND.

THERE WOULD BE MODERATE SCARRING OF THE NOW NEARLY NATURAL AREA WHICH WOULD REQUIRE 2-3 YEARS TO ORBLITERATE NATURALLY.\* PLANTING OR ANY OTHER ACTIVITY OF THIS SORT WOULD BE INEFFECTIVE.

THE DRILLING AND ASSOCIATED TRAFFIC WILL ADD A NEGLIGIBLE AMOUNT OF POLLUTION TO THE NOW PRESENT AIR, AS WELL AS TEMPORARILY DISTURBING THE FAUNA.

INCREASED OR ACCELERATED EROSION WOULD BE NEGLIGIBLE BECAUSE OF THE TERRAIN OF THE AREA.

AN UNCONTROLLED BLOWOUT COULD CAUSE ENVIRONMENTAL PROBLEMS BUT COULD BE EASILY CLEANED UP.

RESEARCH OF DRILLING RIG (TRUCK MOUNTED) COULD CAUSE MINOR IRRITATION TO THE SCENIC VIEWING OF THIS AREA.

\* DRIFTING SAND DUNES WOULD BE THE NATURAL CAUSE THAT WOULD ORBLITERATE ANY SCARRING CAUSED BY DRILLING.

### 4. Alternatives to the Proposed Action

DENY APPROVAL OF APPLICATION FOR PERMIT TO DRILL.

DENYING THE PROPOSED PERMIT AND SUGGESTING AN ALTERNATE LOCATION WHERE ENVIRONMENTAL IMPACT WOULD BE LESSONED.

5. Adverse Environmental Effects Which Cannot Be Avoided

MINOR AIR POLLUTION DUE TO DRILLING AND ASSOCIATED TRAFFIC

TEMPORARY DISTURBANCE OF WILDLIFE

TEMPORARY MESS DUE TO DRILLING ACTIVITY FOR ABOUT 6 MONTHS  
AND REQUIRING 2-3 YEARS TO OBLITERATE ALL SCARS.

SHORT TERM VISUAL INTRUSION OF LANDSCAPE BY DRILLING STRUCTURE

LOSS OF SOME NATURAL VEGETATION.

6. Determination

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

Date Inspected

8/20/75

Inspector

Robert Hennrich

James W. Shelton (WPM)

U.S. Geological Survey,  
Conservation Division  
Salt Lake City District  
Salt Lake City, Utah

U.S. GEOLOGICAL SURVEY, CONSERVATION DIVISION

FROM: DISTRICT GEOLOGIST, SALT LAKE CITY, UTAH

TO: DISTRICT ENGINEER, SALT LAKE CITY, UTAH

Well	Location	Lease No.
Alpha Minerals #1 Gov't.	1980 FWL, 660 FNL, sec. 34, T. 1 S., R. 17 W., SLM, Tooele Co. Gr. El. 4225'	U-26153
<p>1. Stratigraphy and Potential Oil and Gas Horizons. The Shell Oil Co.-Bonneville Ltd. #1 (sec. 4, T. 2 S., R. 18 W.) Saldero (Fee) reported tops: Surface-Alluvium, Tertiary-1375', Volcanic Breccia-1600', Volcanic Tuff-1792', Volcanic Ss.-1840'-60', Breccia-1860', Andesite-2640', Basalt-2740'. (See remarks.)</p> <p>2. Fresh Water Sands. Several brine zones may be encountered from surface to base of Lacustrine deposits.</p> <p>3. Other Mineral Bearing Formations. (Coal, Oil Shale, Potash, Etc.) Prospectively valuable for sodium and potash. Within Known Leasing area for sodium and potash.</p> <p>4. Possible Lost Circulation Zones. Shallow lacustrine zones may take in water.</p> <p>5. Other Horizons Which May Need Special Mud, Casing, or Cementing Programs. Unknown.</p> <p>6. Possible Abnormal Pressure Zones and Temperature Gradients. Unknown.</p> <p>7. Competency of Beds at Proposed Casing Setting Points. Unknown.</p> <p>8. Additional Logs or Samples Needed. Temp. log, Resistivity, brine samples, etc. DST's of brine zones would be very useful.</p> <p>9. References and Remarks Remote from KGS. There is a distinct possibility that this test is exploratory for potassium rich brines being drilled on O&amp;G lease. Please contact WRD (Greg Lines) as soon as spud date is known.</p>		
Date: August 21, 1975		Signed: <i>B R Acte State</i>

FEDERAL OIL AND GAS LEASE  
12-POINT DEVELOPMENT PLAN FOR SURFACE USE.  
ALPHA MINERALS NO. 1 AND NO. 2 GOVERNMENT

---

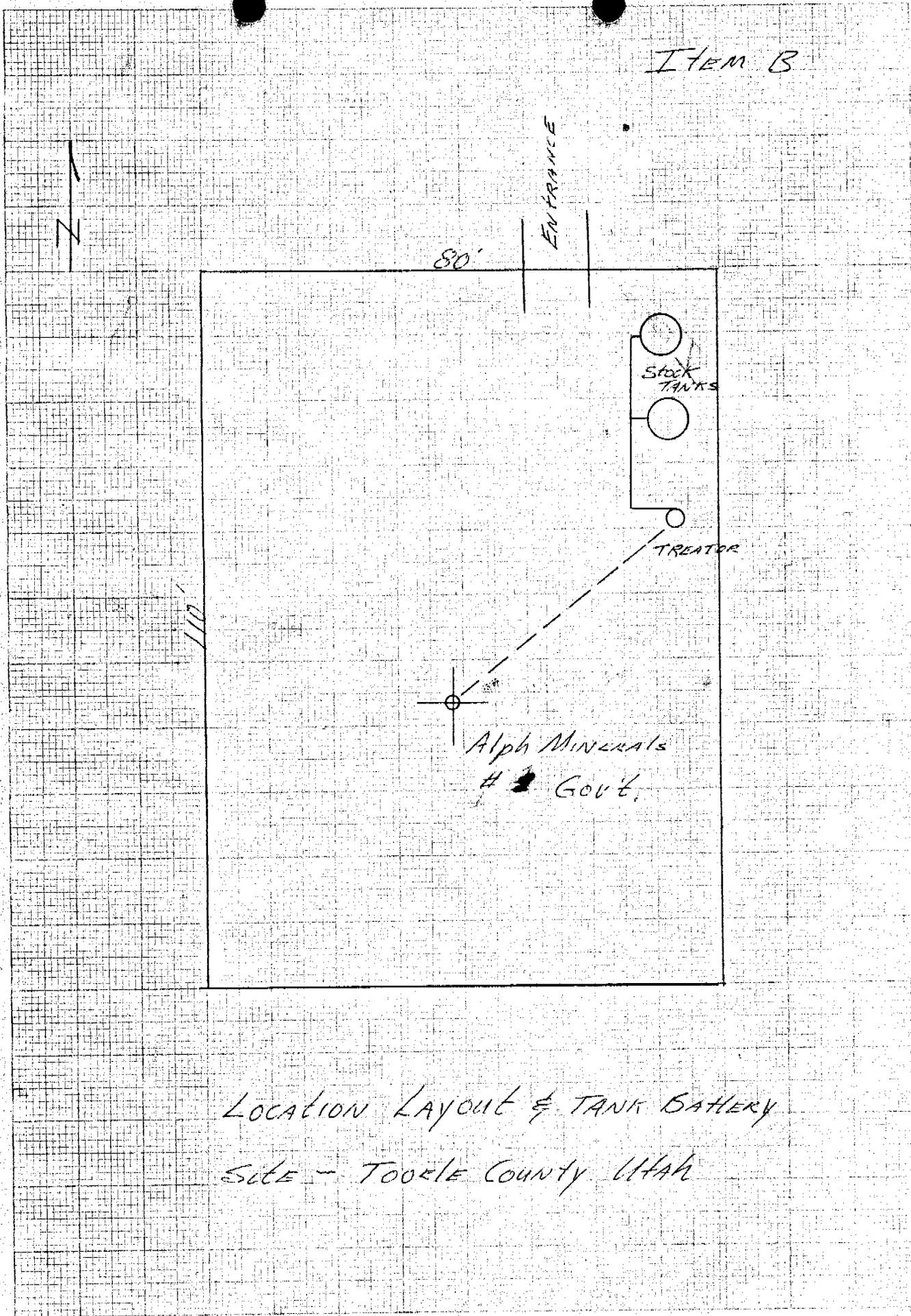
1. Existing roads include Interstate-80 and Route 50-40 access road which extend eastward from Wendover. The exit from route 50-40 will be an existing road which crosses the railroad and extends about 3 thousand feet south to a VOR Station operated by the FAA. This crossing is situated about 1/4 mile west of mile post 821 on the W. P. Railroad. (See Item A.)
2. Planned access roads - Because the VOR Station must be protected against vibrations, the access road must not be nearer than 1000 feet from the VOR Station. The access road will be built around the VOR Station to give this clearance as indicated on the accompanying map. (See Item A.)

Approximately 2 1/2 miles of blading to smooth the top portion of an existing dune area will be undertaken with the possible addition of broken rock fill to be added to boggy areas.

3. There are no existing wells within a two mile radius.
4. Covered by 1 and 2 above. (See Item A)
5. (See Item B)
6. All the known ground water and surface water in the area is saline or becomes saline. Water for drilling will be obtained from an open saline canal located on the south border near the center of Sec. 15, T1S-R17W.
7. Cuttings will go into the reserve pit and covered after completion and garbage and trash will go into a burn pit and later buried.
8. No camps are contemplated.
9. No airstrips are contemplated.
10. See Item C.
11. Pits will be covered with dune sand from the area and returned to approximate original contour.
12. The general area is very flat with the exception of sand dunes that extend from the middle of Section 22, T. 1S., R17W, southward across Sections 27 and 34 of T.1S., R17W., and it extends about 1/3 mile into Section 3, T.2S., R17W. S. L. mer. The

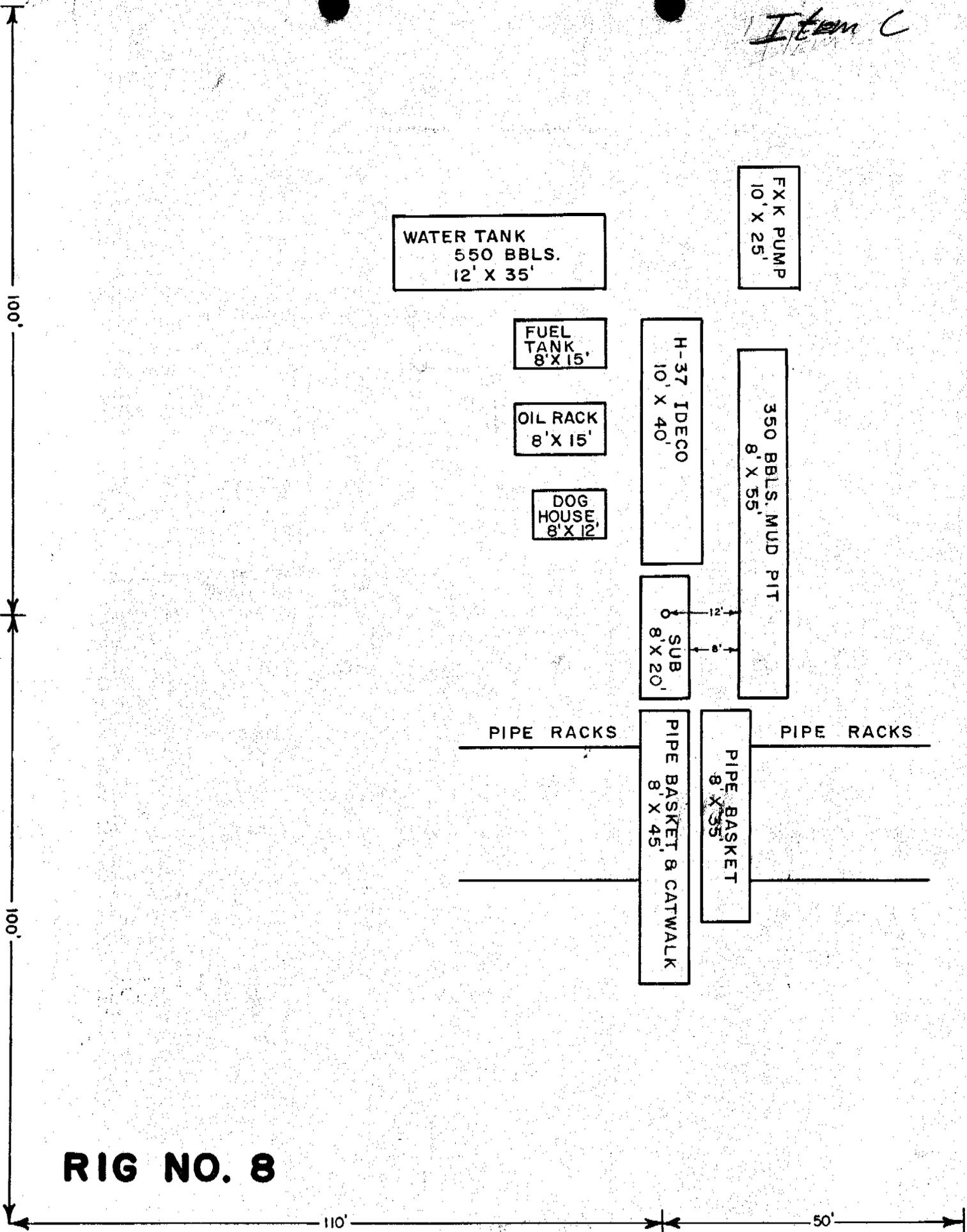
46 1023

K&E 10 X 10 TO 1/4 INCH 7 X 10 INCHES  
NEWARK & LESLER CO. MADE IN U.S.A.



LOCATION LAYOUT & TANK BATTERY  
SITE - TOOLE COUNTY UTAH

*Item C*



**RIG NO. 8**

SCALE : 1" = 20'

7- POINT DRILLING SAFETY PLAN

1. Surface casing:

<u>Hole Diameter</u>	<u>Casing</u>	<u>Per/ft#</u>	<u>Amount</u>
10"	8 5/8"	20 Lb/ft	300 Feet

2. Double ram pipe and blind rams with spherical close on top with flange to attach BOP. See item A.
3. No intermediate case will be set.
4. Blowout preventer: See Item A.
5. A float will be used with the bit and the mud system will be checked periodically by a mud engineer.
6. Anticipated bottom hole pressure: 1500 lbs. maximum.
7. Drilling fluid: salt saturated water base mud.

# BLOWOUT PREVENTERS

TYPE LWS—6" AND 10"

## RUCKER Shaffer

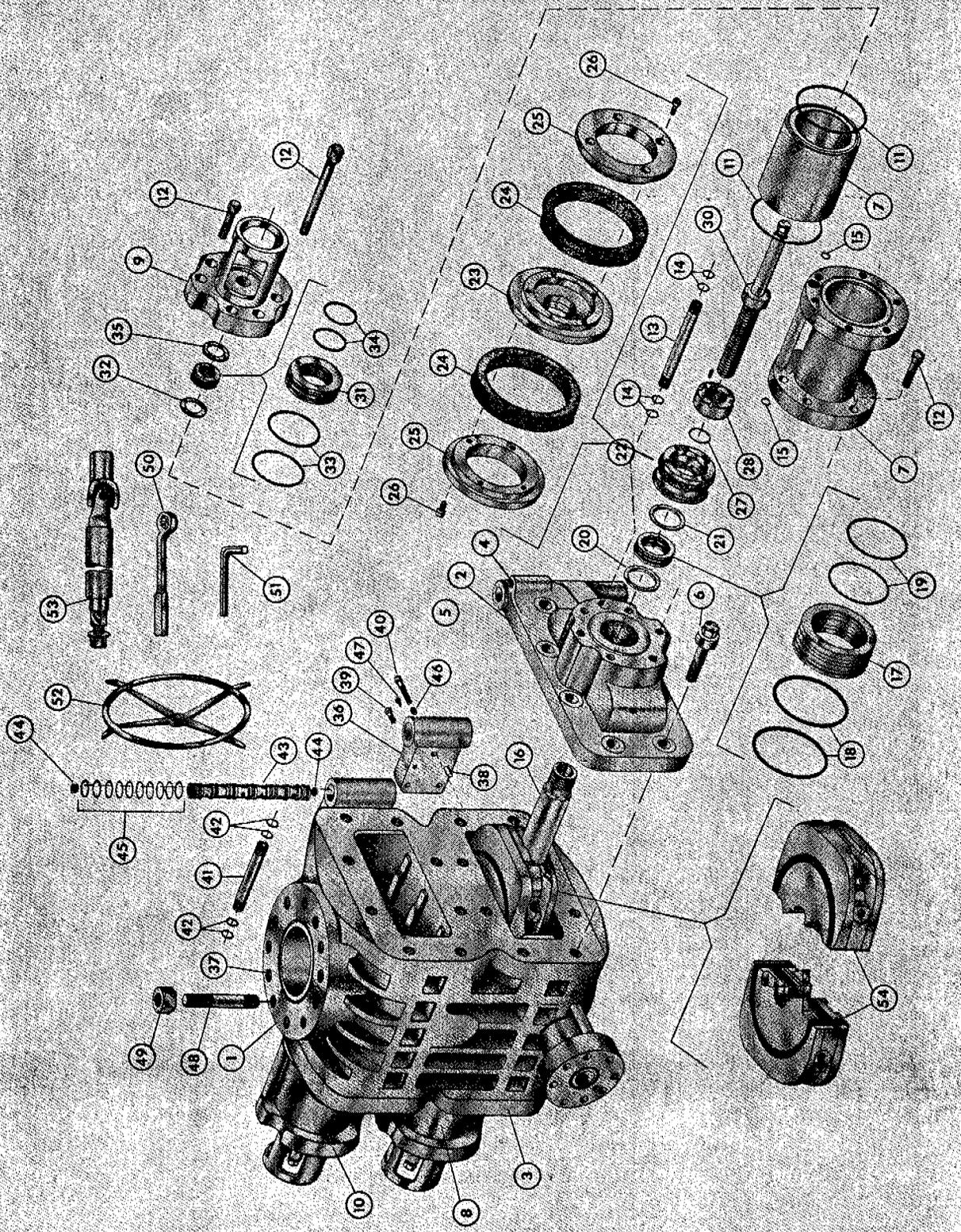
1850 MELLIE ESPERSON BUILDING • HOUSTON, TEXAS 77002 • (713) 228-7401 • TELEX: 762-811

RU

1850 M

R

RUCKER-SHAFFER TYPE LWS PREVENTERS—6", 3000 & 5000 PSI W.P.—10", 3000 PSI W.P.  
EXPLODED VIEW PARTS ILLUSTRATION



Item Num	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	

\* Not a  
NOTE:  
pressure

**RUCKER Shaffer****BLOWOUT PREVENTERS**  
TYPE LWS—6" AND 10"

1850 MELLIE ESPERSON BUILDING • HOUSTON, TEXAS 77002 • (713) 228-7401 • TELEX: 762-811

**RUCKER-SHAFFER TYPE LWS PREVENTERS—6", 3000 & 5000 PSI W.P.—10", 3000 PSI W.P.****PARTS AND SPECIFICATION DATA**

Refer to Illus. P. 3864

Item Number	NAME OF PART	Number Required		7 1/4" Bore		11" Bore
		Single	Double	Single & Double		Single & Double
				6"	6"	10"
				3000 PSI W.P.	5000 PSI W.P.	3000 PSI W.P.
1	Body	1	1			
2	Door, Right Hand	1	2	133002	133002	132402
3	Door, Left Hand	1 (1)**	2 (1)**	133003	133003	132403
4	Plug	6	12	65001	65001	65001
5	O-Ring, Door	2 (2)	4 (4)	30030	30030	30106
6	Cap Screw, Door	12 (4)	24 (4)			133012
7	Cylinder, Right Hand	16	32	133012	133012	
8	Cylinder, Left Hand	1	2	133004	133004	132404
9	Cylinder Head, Right Hand	1	2	133004	133004	132405
				133005	133005	132406
10	Cylinder Head, Left Hand	1	2	133006	133006	132407
11	O-Ring, Cylinder & Cylinder Head	4 (4)	8 (8)	30141	30141	30141
12	Cap Screw, Cylinder & Cylinder Head	12 (4)	24 (4)	133011	133011	
		24	48			10606
13	Manifold, Cylinder	2	4	133007	133007	
14	O-Ring, Cylinder Manifold	8 (8)	16 (16)	30056	30056	
15	O-Ring, Cylinder Manifold Port	4 (4)	8 (8)			30058
16	Ram Shaft	2	4	133008	133008	132408
17	Packing Adapter, Ram Shaft	2	4	132415	132415	132415
18	O-Ring, Packing Adapter—Outer	4 (4)	8 (8)	30077	30077	30077
19	O-Ring, Packing Adapter—Inner	4 (4)	8 (8)	30000	30000	30000
20	Retainer, Packing Adapter	2	4	40952	40952	40952
21	Scraper Ring, Ram Shaft	2	4	40395	40395	40395
22	Piston Assembly	2	4	132413	132413	132413
23	Body	2	4	132420	132420	132420
24	Rubber	4 (4)	8 (8)	132422	132422	132422
25	Retainer, Rubber	4	8	132421	132421	132421
26	Cap Screw, Rubber Retainer	16 (4)	32 (8)	132423	132423	132423
27	O-Ring	2 (2)	4 (4)	30071	30071	30071
28	Locknut, Piston	2	4	132414	132414	132414
29	Set Screw	NON	4	10015	10015	10015
30	Locking Shaft	NON	4	133009	133009	132409
31	Thrust Bushing, Locking Shaft	NON	4	130014	130014	130014
32	Retainer, Thrust Bushing	NON	4	40146	40146	40146
33	O-Ring, Thrust Bushing—Outer	4 (4)	8 (8)	30011	30011	30011
34	O-Ring, Thrust Bushing—Inner	4 (4)	8 (8)	30065	30065	30065
35	Scraper Ring, Locking Shaft	2	4	40384	40384	40384
36	Hinge Bracket, Right Hand	1	2	132410	132410	132428
37	Hinge Bracket, Left Hand (Not shown)	1	2	132411	132411	132429
38	Dowel Pin	4	8	50080	50080	50080
39	Cap Screw, Hinge Bracket—Short	4	8	10691	10691	10691
40	Cap Screw, Hinge Bracket—Long	8	16	10622	10622	
41	Manifold, Hinge—Straight	2	4	132427	132427	132430
42	O-Ring, Hinge Manifold	8 (8)	16 (16)	30054	30054	30054
43	Hinge Pin	2	4	133010	133010	132417
44	Plug	4	8	65001	65001	65001
45	O-Ring, Hinge Pin	20 (20)	40 (40)	30061	30061	30061
46	Retainer, Hinge Pin	2	4	132424	132424	132424
47	Plug, Thread Protector	4	8	66327	66327	66327
48	Stud, Body	24	24	10593	10592	
		32	32			10598
49	Nut, Body Stud	24	24	20003	20011	20011
		32	32			20011
50	Wrench, Door	1	1	50363	50363	50363
51	Wrench, Cylinder & Cylinder Head	1	1	50133	50133	50133
52	Handwheel	2	4	131107	131107	131107
53	Universal Joint—2"	2	2	202011	202011	202011
*54	Ring Gasket	2	2	50201	50202	50205
55	Ram Assembly	1	2			

\* Not a Standard Accessory. \*\* All numbers in ( ) parentheses indicate spare parts recommended for remote locations.

**NOTE:** Certain Preventers with multiple outlets require offset manifold piping. When ordering such offset manifold piping, be sure to state size and pressure rating of Preventer—and size of outlets in the body.

SEE TABLES—PAGE 3880-81

WELL SUMMARY

Operator: Alpha Minerals, Inc.  
Well: #1 Federal  
Location: NE NW Section 34, T.1S-R.17W  
Tooele County, Utah  
Field: Wildcat  
Elevation: 4,222 Gl. 4,231 K.B.  
Spudded: December 23, 1975  
Completed: January 12, 1976  
Casing: 9 5/8", 42.6# Casing set at 500.64 K.B.  
Cores: None  
Drill Stem Tests: None  
Total Depth: 4,260' Driller  
4,270' Schlumberger  
Logs: Drill time log - 500 to 4,260'  
Sample log - 0 to 4,260'  
Schlumberger:  
Dual Induction - Laterolog - Surface Casing to 4,270'.  
Borehole compensated sonic - Surface casing to 4,270'.  
Formation Density - Selected intervals.  
Contractor: Willard Pease Drilling Company - Rig #2  
Russell Morris - Pusher  
Equipment: Meyhew Rig  
Engines - Cummins V-12, 600 H.P.  
Pumps - National C-250  
Derrick - Lee C. Moore 96'  
Drill Pipe - 3 1/2"  
Drill Collars - 5 3/4"  
Status: Plugged and abandoned, January 12, 1976.

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  
 Alpha Minerals Inc.

3. ADDRESS OF OPERATOR  
 287 Riverside Ave., Westport, Conn. 06880

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
 At surface NE  $\frac{1}{4}$ , NW  $\frac{1}{4}$  1847' FWL 1012' FNL Sec. 34 T1S, R17W  
 At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 16 Miles east of Wendover, Utah

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1012 Ft.

16. NO. OF ACRES IN LEASE 1920

17. NO. OF ACRES ASSIGNED TO THIS WELL 40

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1275.65 Ft.

19. PROPOSED DEPTH 2500'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) GR 4222

22. APPROX. DATE WORK WILL START\* 9-30-75

5. LEASE DESIGNATION AND SERIAL NO.  
 U 26153

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
 -

7. UNIT AGREEMENT NAME  
 -

8. FARM OR LEASE NAME  
 -

9. WELL NO.  
 Alpha Minerals #1 Fe

10. FIELD AND POOL, OR WILDCAT  
 Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
 Sec. 34 T1S, R17W  
 S. L. Mer

12. COUNTY OR PARISH  
 Tooele

13. STATE  
 Utah

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8 7/8"	7"	23.57	300'	50 Sacks
6 1/4"	4 1/2"	14.98	2500'	Thru production zones

A 6  $\frac{1}{4}$  inch hole will be drilled 2500' deep. If the well is a producer, 4  $\frac{1}{2}$  inch - 14.98 lb. production casing will be set and cemented through the production zone.



*Geological Section*  
*Writing*  
*copy*  
*2/29/75*  
*226-11451*  
*(203)*  
*617-965-1974*  
*4241*

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 [Signature] TITLE [Title] DATE Sept 3 1975

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY James W. Shelton TITLE ACTING DISTRICT ENGINEER DATE OCT 17 1975

CONDITIONS OF APPROVAL, IF ANY:

*Appears via Notice*  
*SG ARE OTC*

**BERGE EXPLORATION**

53 EAST 4TH SOUTH  
SUITE 210  
SALT LAKE CITY, UTAH 84111  
801-531-7153

801-531-7153

*OK  
Page  
Location to be  
checked*

October 29, 1975

Mr. Cleone Feight, Director  
State of Utah  
Division of Oil, Gas & Minerals  
1588 West North Temple

RE: Alpha Minerals #1 Federal  
Application to drill

Dear Mr. Feight,

As to your inquiry about the amended change on the proposed well site of Alpha Minerals #1 Federal drill site - the amended well site was changed from the original site to place the drilling area on the sand dunes. The original site on survey was discovered to be in a salt mud flat with little or no stable footing. The amended site can then be cleaned up and restored where the original site could not be.

We appreciate your consideration in this matter.

Very truly yours,

  
DE FORREST SMOUSE  
Project Geologist

DS:jo

BERGE EXPLORATION

*Alpha Minerals owns all the 640 contiguous acres in the section.*

*De Forrest Smouse*

CIRCULATE TO:

DIRECTOR  
PETROLEUM ENGINEER  
MINE COORDINATOR  
ADMINISTRATIVE ASSISTANT  
ALL

RETURN TO Kachy  
FOR FILING

December 9, 1975

MEMO FOR FILING

Re: Alpha Minerals  
Alpha Gov't #1  
Sec. 24, T. 1 S., R. 17 W.  
Tooele County, Utah

On December 8, 1975, a complaint was received from the B.L.M. regarding the Government #1 well, Sec. 34, T. 1 S., R. 17 W., Tooele County, Utah. Specifically, Alpha Minerals did not build the lease road exactly where the representatives of Birch Exploration (Eugene Pearson, 54 East 4th South, S.L.C. ph: 531-7153), The B.L.M. and the U.S.G.S. had agreed upon.

Furthermore, Birch did not notify the B.L.M. of the spud date, and they are uncooperative in making progress reports and, per B.L.M., by not strictly adhering to the 12 point program as filed with the U.S.G.S.

The B.L.M. also thought the State rules were being violated, as Alpha (Birch Expl.) dug two water wells without State permits. During the conversation, it was noted that no wells were dug, but that a back hoe dug into the water table and they were using the water which was seeping into the pit.

It was agreed upon to look into Alpha's operations by the State Division of Oil, Gas, and Mining, but it was also relayed to the B.L.M., that there was probably little we could do, as the access road and the location was on B.L.M. administered land.

PATRICK L. DRISCOLL  
CHIEF PETROLEUM ENGINEER

PLD:tb

cc: U. S. GEOLOGICAL SURVEY

K

CIRCULATE TO:  
DIRECTOR  
PETROLEUM ENGINEER  
MINE COORDINATOR  
ADMINISTRATIVE ASSISTANT  
ALL

RETURN TO Lathy  
FOR FILING

January 12, 1976

MEMO FOR FILING

Re: Alpha Minerals Inc.  
Alpha Gov't #1  
Sec. 34, T. 1 S., R. 17 W.  
Tooele County, Utah

On January 12, 1975, verbal permission was given to plug this well.  
The pertinent data is as follows:

9 5/8" casing set at 500' and cemented to surface.

Total Depth: 4260' K.B.

Tertiary Volcanics	500' to 1128'
Tertiary Shale	1128' to 2980'
Paleozoic limestone & dolomite	2980' to 4260'

Plug #1 100 sacks across Tertiary and Paleozoic interface.

Plug #2 100 sacks - half in and half out of the base of surface casing at 500'.

Plug #3 10 sacks at the surface.

Regulation marker will be installed and marked.

PATRICK L. DRISCOLL  
CHIEF PETROLEUM ENGINEER

PLD:tb

cc: U. S. GEOLOGICAL SURVEY

STATE OF UTAH  
OIL & GAS CONSERVATION COMMISSION

SUBMIT IN TRIPLICATE\*  
(Other instructions on reverse side)

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> Wildcat		5. LEASE DESIGNATION AND SERIAL NO. U-26153
2. NAME OF OPERATOR Alpha Minerals Inc.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR 287 Riverside Ave., Westport, Conn. 06880		7. UNIT AGREEMENT NAME
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 1012 So. of North Line and 1847' East of the West Line Sec. 34, T.1S., R. 17W, S. L. Mer.		8. FARM OR LEASE NAME
14. PERMIT NO. 43-045-30001	15. ELEVATIONS (Show whether DF, RT, OR, etc.)	9. WELL NO. Alpha Minerals No. 1 Federal
		10. FIELD AND POOL, OR WILDCAT Wildcat
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA NE 1/4 NE 1/4, Sec. 34, T1S., R. 17W. S. L. Mer.
		12. COUNTY OR PARISH Tooele
		13. STATE Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
(Other) <input type="checkbox"/>	

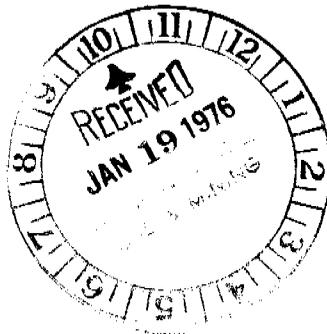
SUBSEQUENT REPORT OF:

WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
(Other) <input type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

No productive zones nor oil, gas, water or mineral zones.  
 100' Plug set at 2880 to 2980  
 100' Plug at 450 to 550 across surface casing  
 10' Plug at Surface with a marker 1/12/76  
 Surface casing left in hole 15 joints. 9 5/8", 42.6 lb. surface casing  
 Total length 500.64'  
 TD - 4260



APPROVED BY THE DIVISION OF OIL, GAS, AND MINING

DATE: Jan. 19, 1976

BY: P. H. Ansell

18. I hereby certify that the foregoing is true and correct

SIGNED: P. H. Ansell TITLE: Engineer DATE: 1/14/76

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
 CONDITIONS OF APPROVAL, IF ANY:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN THIS SPACE  
(Other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

U-26153

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Federal

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

W. C.

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

Sec. 34, T.1S-R.17W

12. COUNTY OR PARISH 13. STATE

Tooele Utah

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT" for such proposals.)

1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
Alpha Minerals, Inc.

3. ADDRESS OF OPERATOR  
21 Wilton Road East, Ridgefield, Connecticut 06877

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\* See also space 17 below.)  
At surface

NE NW (1847' fWL x 1012' fNL)  
Section 34, T.1S-R.17W S.L.M.  
Tooele County, Utah

14. PERMIT NO.  
43-045-30001

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
Ground 4222' K.B. 4231'

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF   
FRACTURE TREAT   
SHOOT OR ACIDIZE   
REPAIR WELL   
(Other)

FULL OR ALTER CASING   
MULTIPLE COMPLETE   
ABANDON\*   
CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF   
FRACTURE TREATMENT   
SHOOTING OR ACIDIZING   
(Other)

REPAIRING WELL   
ALTERING CASING   
ABANDONMENT\*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Propose to abandon well. Cement plugs will be set as follows:  
100 foot plug from 2880' to 2980' at top of Paleozoic limestone;  
100 foot plug across bottom of surface casing, and 10 foot plug  
at top of surface casing with marker. Verbal permission to plug  
was obtained on January 12, 1976 and plugging was completed that date.  
There were no productive zones in the well and no water or mineral  
zones observed.

Casing left in hole was: 15 Joints of 9 5/8" - 42.6# (500.64 ft.)  
Casing set at 500.64' K.B. cemented to surface.



APPROVED BY THE DIVISION OF  
OIL, GAS, AND MINING

DATE: 1-29-76

BY: P. Ansel

**Confidential**

18. I hereby certify that the foregoing is true and correct

SIGNED Theron R. Blizzard  
Theron R. Blizzard

TITLE Vice President-Berge Expl.

DATE 1-15-76

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

*Conf*

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R355.6

3

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_  
 b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. BEVER.  Other \_\_\_\_\_

2. NAME OF OPERATOR  
Alpha Minerals, Inc.

3. ADDRESS OF OPERATOR  
21 Wilton Road East, Ridgefield, Connecticut 06877

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
 At surface NE NW (1847' fWL x 1012' fNL)  
 At top prod. interval reported below  
 At total depth

14. PERMIT NO. 43-045-30001 DATE ISSUED \_\_\_\_\_

5. LEASE DESIGNATION AND SERIAL NO.  
U-26153  
 6. IF INDIAN, ALLOTTEE OR TRIBE NAME \_\_\_\_\_  
 7. UNIT AGREEMENT NAME \_\_\_\_\_  
 8. FARM OR LEASE NAME  
Federal  
 9. WELL NO.  
1  
 10. FIELD AND POOL, OR WILDCAT  
W. C.  
 11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA  
Sec. 34, T.15-R.17W

12. COUNTY OR PARISH Tooele 13. STATE Utah

15. DATE SPUNDED Dec. 23, 1975 16. DATE T.D. REACHED Jan. 12, 1976 17. DATE COMPL. (Ready to prod.) 1-12-76 18. ELEVATIONS (DF, REB, RT, OR, ETC.)\* 4231 K.B. 19. ELEV. CASINGHEAD \_\_\_\_\_

20. TOTAL DEPTH, MD & TVD 4260' Drlr 21. PLUG, BACK T.D., MD & TVD \_\_\_\_\_ 22. IF MULTIPLE COMPL., HOW MANY\* \_\_\_\_\_ 23. INTERVALS DRILLED BY ROTARY TOOLS 0-4260 CABLE TOOLS \_\_\_\_\_

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*  
None 25. WAS DIRECTIONAL SURVEY MADE No

26. TYPE ELECTRIC AND OTHER LOGS RUN Dual Induction-Laterolog, Bore hole comp. sonic, Formation, Density 27. WAS WELL CORED No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8	42.6	500.46	12 1/4	200 Sacks	0

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) 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.  
 DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED



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

DATE OF TEST	CHOKER USED	CHOKER SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

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 Theron R. Blazzard TITLE Vice President, Berge Expl. DATE 1-22-76

\*(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 33, 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

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Volcanics	698	724	Conglomerate; volcanic pebbles and sand porosity 27%, water saturated, no shows.
Conglomerate	1638	1683	Conglomerate; volcanic pebbles and sand, porosity 45%, water saturated, no show.
Paleozoic	2970	3000	Dolomite; yellow to tan, micro xtln, with trace of pin point porosity, no shows.
No Drill Stem Tests.			

**38. GEOLOGIC MARKERS**

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
Tertiary Volcanics	500'	
Tertiary Shale	1128'	
Paleozoics	2980'	



*conf*

WELL REPORT

ALPHA MINERALS, INC.  
#1 FEDERAL  
NE NW SECTION 34, T.1S-R.17W  
TOOELE COUNTY, UTAH



prepared by  
Theron R. Blazzard  
BERGE EXPLORATION, INC.  
January, 1976

## WELL REPORT

ALPHA MINERALS, INC.  
#1 FEDERAL  
NE NW SECTION 34, T.1S-R.17W  
TOOELE COUNTY, UTAH

### INTRODUCTION

The Alpha Minerals #1 Federal was drilled to test various anomalies thought to exist at this location.

The well was spudded on December 23, 1975 and was plugged on January 12, 1976, for a total of 21 days. Five days drilling were lost because of the Christmas holiday and fishing for bit cores and drill collars. An average of 266 feet per day was drilled. Only minor lost time was caused by lost circulation.

### GEOLOGY

The rocks drilled in the well ranged from soft lake bottom sediments to hard Paleozoic dolomites and limestones. A thick section of volcanics, interbedded with volcanic conglomerates, was also drilled.

A detailed description and lithologic log of the rocks penetrated is included with this report. A general description follows.

Lake Sediments. - Soft mudstone, gypsum, and limestone believed to be deposited in Lake Bonneville, were drilled from the surface to about 450 feet. They consisted of soft gray to white bentonitic mudstone with clear crystals and grains of gypsum interbedded with light gray to buff very finely pelletal limestone. These sediments were soft and only slightly indurated, except the limestone, which was more firm.

From 450 to 500 feet, there was an alluvial deposit of pebble conglomerate consisting of volcanic rocks in a matrix of mudstone.

Volcanic Rocks. - A thick section of volcanics and conglomerates were drilled from 500 to 1,128 feet. The volcanics are probably andesite prophyry, and have a red, gray, yellow, orange and black aphanitic groundmass with quartz phenocrysts. A conglomerate of volcanic and limestone pebbles was cut from 700 to 740 feet.

Tertiary Shale. - The interval from 1,128 feet to 1,570 feet consisted of soft light to medium gray, buff and light green mudstone. The mudstone is interbedded with conglomerate and thin sandstones. The conglomerates consist of gray, green and brown volcanic pebbles in a sand or mudstone matrix. The sands are white to light green, fine to coarse grained limey to shaley. There were no shows in the conglomerates or sands.

From 1,570 feet to 2,970 feet the section is more indurated and is made up of green, tan and gray shale that is waxy and soft to firm. There are a few streaks of brown to gray shale that is slightly carbonaceous. A thick volcanic pebble conglomerate occupies the interval from 1,640 feet to 1,685 feet that was porous, but had no shows.

The formation name or age of the above rocks are not known, but a Tertiary Age for the shales and conglomerates seems likely.

Paleozoic Rocks. - A thick section of dolomite and limestone was topped at 2,970 feet. This section was drilled to total depth of 4,270 feet.

The dolomites were tan, white, buff, and gray and micro crystalline to very finely sucrosic. Most were very hard and had no porosity except at the top of the section where a little fine, vuggy porosity was observed. There was no show.

The limestones were white, tan and gray, dense to micro crystalline and sucrosic, with no porosity or shows. A few fusulinids and coral fossils were observed, but no formation or age assignment can be made.

#### SHOWS

There were no shows or gas seen in any of the drill cuttings, and no gas reading recorded on the hot wire detector. The only porosity of significance was in the conglomerates within the Tertiary shales and they calculated 100% water saturation.

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY**

SUBMIT IN TRIPLICATE\*  
(Other instructions on re-  
verse side)

Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.  
**U-26153**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
**Federal**

9. WELL NO.  
**1**

10. FIELD AND POOL, OR WILDCAT  
**W. C.**

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
**Sec. 34, T.1S-R.17W**

12. COUNTY OR PARISH  
**Tooele**

13. STATE  
**Utah**

**SUNDRY NOTICES AND REPORTS ON WELLS**  
(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT" for such proposals.)

1.  OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
**Alpha Minerals, Inc.**

3. ADDRESS OF OPERATOR  
**21 Wilton Road East, Ridgefield, Connecticut 06877**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)  
At surface  
**NE NW (1847' fNL x 1012' fNL)**

14. PERMIT NO.  
**43-045-30001**

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
**4231' K.B.**

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	(Other) <input type="checkbox"/>

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Abandoned well on Jan. 12, 1976. Cement plugs as follows:  
 100 foot plug 2880' to 2980' at top of Paleozoic limestone;  
 100 foot plug across bottom of surface casing (50 feet inside and 50 feet below) and 10 foot plug at top of surface casing with marker.

All materials have been removed and the location has been cleaned up and rehabilitated according to B. L. M. instructions.

*Confidential*



18. I hereby certify that the foregoing is true and correct

SIGNED Theron B. Blazard TITLE Vice President, Berge Expl. DATE 1-30-76  
Theron R. Blazard

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
 CONDITIONS OF APPROVAL, IF ANY:

## WELL HISTORY

### 1975

- Dec. 22 Rig up
- Dec. 23 Finish rigging up. Drilled rat hole and mouse hole. Spud 12 $\frac{1}{4}$ " surface hole at 4:00 P. M.
- Dec. 24 Drilling surface. Ran 517.64' of 9 5/8" 42.6# casing at 500.64' K.B., and cemented with 200 sacks class G cement. Plug down at 12:15 A. M. 12-25-75.
- Dec. 25 Off for Christmas
- Dec. 26 Geologist at location
- Dec. 27 Dug cellar. Nipple up and cut off casing and set B.O.P. Lay down 8" drill collars.
- Dec. 28 Drilled plug at 1:00 A. M. Losing circulation at 1,035 feet. Mixing mud.
- Dec. 29 PTD 1,035'. Mixing mud and regained circulation. Trip for bit #3 at 1,110 feet.
- Dec. 30 Drilling at 1,729'. Trip for bit #4 at 1,893 feet. Mudding up for better samples.
- Dec. 31 Trip for bit #5 at 2,098 feet. Bit balled up.

### 1976

- Jan. 1 Trip for bit #6 at 2,409'.
- Jan. 2 Drilling at 2,740'. Trip for bit #7 at 2,804'.
- Jan. 3 Drilling at 2,896'. Trip out at 2,900' for bit #8.
- Jan. 4 Drilling at 3,120'.
- Jan. 5 Drilling at 3,371'. Trip for bit at 3,375'. Found cones lost off bit. Called for magnet and junk-sub to Vernal, Utah. Tools delayed by storm in mountains.
- Jan. 6 PTD 3,375'. Waiting on tools. Arrived at 11:15 A. M. Fishing. Recovered one core and part of another.
- Jan. 7 PTD 3,375'. Recovered remaining cores and metal particles. Trip in with bit #9. Drilled up remaining junk and drill ahead.
- Jan. 8 PTD 3,459. Trip for bit #10.
- Jan. 9 Drilling at 3,743'. Trip out at 3,960' for bit #11

1976

- Jan. 10 PTD 3,960'. Reaming tight spot at 1,000'. Bit tourqued up and backed off 11 drill collars. Trip in and screwed into fish and recovered same.  
Tripped in with bit #12 and hit tight spot at 1,000' again. Reamed and tourqued up again and back off drill collars again. Continued in hole and screwed into collars. Cleaned out to bottom and started drilling.
- Jan. 11 Drilling at 4,058'.
- Jan. 12 Total depth of 4,260' at 4:00 A. M.  
Condition hole and run logs.  
Plugged hole.
- Jan. 13 Lay down drill pipe and remove cellar. Rig released at 8:00 A. M.

BIT RECORD

<u>Run</u>	<u>Size</u>	<u>Make</u>	<u>Type</u>	<u>Depth Run</u>	<u>Feet</u>	<u>Hours</u>
1	12 1/4	Security	S4TJ	0' - 500'	500	16
2	6 3/4	Security	S4J	500' - 1110'	610	23 1/2
3	6 3/4	Security	S4J	1110' - 1893'	783	19 1/2
4	6 3/4	Security	M4NJ	1893' - 2098'	205	9 1/2
5	6 3/4	Security	M4NJ	2098' - 2409'	311	19 1/2
6	6 3/4	Security	S4J	2409' - 2804'	395	24 1/2
7	6 3/4	Security	S4J	2804' - 2900'	96	12 1/2
8	6 3/4	Security	S86	2900' - 3375'	475	39
9	6 3/4	Security	H7T	3375' - 3459'	84	13 1/4
10	6 3/4	Security	S88J	3459' - 3960'	501	33 1/4
11	6 3/4	Security	M88J	0-Dropped	0	--
12	6 3/4	Security	S8J	3960' - 4260'	300	28 1/4

HOLE DEVIATION

2100 feet	.....	4 <sup>0</sup>
2800 feet	.....	5 <sup>0</sup>
2900 feet	.....	6 <sup>0</sup>
3375 feet	.....	6 <sup>0</sup>
4260 feet	.....	2 1/4 <sup>0</sup>