

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG, ELECTRIC LOGS, FILE **X** WATER SANDS, LOCATION INSPECTED, SUB. REPORT/abd

DATE FILED **7-26-90**

LAND: FEE & PATENTED **X** STATE LEASE NO. PUBLIC LEASE NO. INDIAN

DRILLING APPROVED: **8-27-90** (CAUSE NO. 131-81)

SPOUDED IN:

COMPLETED: **2-18-92 LA** PUT TO PRODUCING:

INITIAL PRODUCTION:

GRAVITY A.P.I.

GOR:

PRODUCING ZONES:

TOTAL DEPTH:

WELL ELEVATION:

DATE ABANDONED: **LA'D 2-18-92 APD EXPIRED**

FIELD: **BLUEBELL/U GRRV**

UNIT:

COUNTY: **DUCHESNE**

WELL NO. **DUNCAN 4-1A2** API NO. **43-013-31287**

LOCATION **1097' FSL** FT. FROM (N) (S) LINE. **902' FWL** FT. FROM (E) (W) LINE. **SW SW** 1/4 - 1/4 SEC. **1**

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
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1S	2W	1	LINMAR PETROLEUM CO.				
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STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

5. Lease Designation and Serial No.

Free

6. If Indian, Allottee or Tribe Name

N/A

7. Unit Agreement Name

N/A

8. Farm or Lease Name

Duncan

9. Well No.

4-1A2

10. Field and Pool, or Wildcat

Bluebell/ U GR River 065

11. Sec., T., R., M., or Blk. and Survey or Area

Sec. 1; T1S, R2W

12. County or Parrish 13. State

Duchesne, Utah

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work

DRILL

DEEPEN

RECEIVED
JUL 26 1990
DIVISION OF OIL, GAS & MINING

b. Type of Well

Oil Well

Gas Well

Other

2. Name of Operator

Linmar Petroleum Company

3. Address of Operator

P.O. BOX 1327, Roosevelt, Utah 84066

4. Location of Well (Report location clearly and in accordance with any State requirements.)*

At surface

902' FWL, 1097' FSL (SW1/4SW1/4)

At proposed prod. zone

Same

14. Distance in miles and direction from nearest town or post office*

2 miles West, 3/4 miles South Neola, Utah

15. Distance from proposed* location to nearest property or lease line, ft.

902'

(Also to nearest drlg. line, if any)

16. No. of acres in lease

640

17. No. of acres assigned to this well

640

18. Distance from proposed location* to nearest well, drilling, completed, or applied for, on this lease, ft.

19. Proposed depth

8000 GRRV

20. Rotary or cable tools

Rotary

21. Elevations (Show whether DF, RT, GR, etc.)

Ground Elev. 5990'

22. Approx. date work will start*

23. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
30"	20"	Line Pipe	40'-60'	Cement to Surface
12 1/2"	9 5/8"	36#	2,000'	Cement to Surface
7 7/8"	5 1/2"	15.5 - 23#	8,000'	Cement top above 6500'

Contact Mr. Ed Whicker @ 722-4546 for additional information.

See attached Drilling Prognosis for details.

Water Rights have been approved under Water User Claim No. 43-9940

An administrative spacing exception is being sought for geological and topographical reasons. (See attached).

TECHNICAL REVIEW

Engr. *TRB 8-27-90*

Geol. *8/14/90*

Surface *8/16/90*

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 *D. G. Howard*
D. G. Howard

Title Division Engineer

Date 19 July 90

(This space for Federal or State office use)

Permit No. 43-013-31287

Approval Date

APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING

Approved by
Conditions of approval, if any:

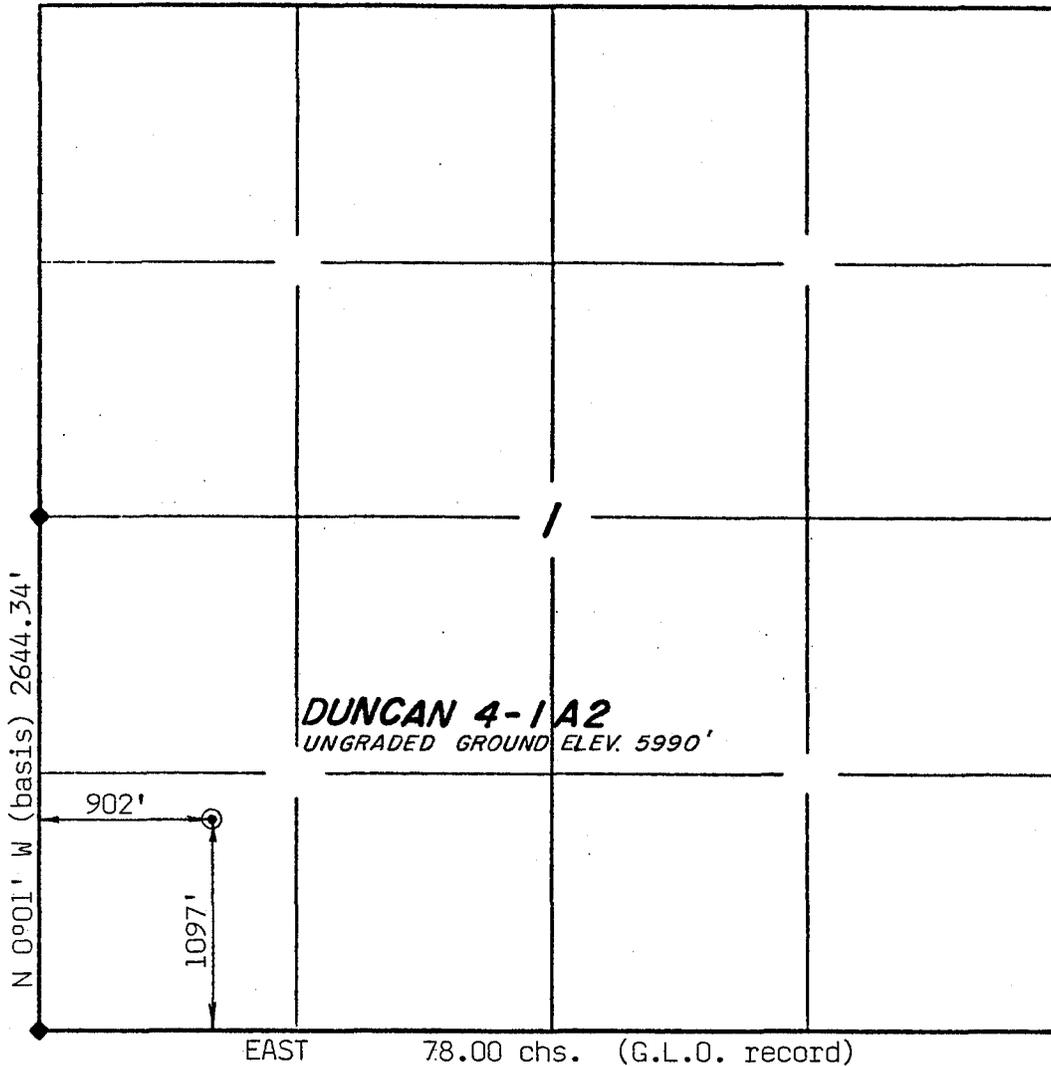
Title

DATE: 8-27-90

John R. Bays

**LINMAR PETROLEUM CO.
WELL LOCATION PLAT
DUNCAN 4-1A2**

LOCATED IN THE SW $\frac{1}{4}$ OF THE SW $\frac{1}{4}$ OF
SECTION 1, T1S, R2W, U.S.B.&M.



SCALE: 1"=1000'

LEGEND & NOTES

- ◆ CORNER MONUMENTS FOUND OR RE-ESTABLISHED AND USED BY THIS SURVEY.

THE GENERAL LAND OFFICE (G.L.O.) PLAT WAS USED FOR REFERENCE AND CALCULATIONS.

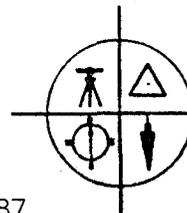
AN ELEVATION OF 6007' AT THE ROAD INTERSECTION AT THE W $\frac{1}{4}$ CORNER AS INDICATED ON THE U.S.G.S. MAP WAS USED FOR THE BASIS OF ELEVATIONS.

SURVEYOR'S CERTIFICATE

I hereby certify that this plat was prepared from field notes of an actual survey performed by me, during which the shown monuments were found or established.

Jerry D. Allred

 Jerry D. Allred, Registered Land Surveyor, Cert. No. 3817 (Utah)



JERRY D. ALLRED & ASSOCIATES
 Surveying & Engineering Consultants

121 North Center Street
 P.O. Drawer C
 DUCHESNE, UTAH 84021
 (801) 738-5352

LINMAR PETROLEUM COMPANY
P.O. Box 1327
Roosevelt, UT 84066
(801) 722-4546

Re: Duncan 4-1A2
Section 1; T1S, R2W
SW1/4SW1/4
Duchesne County, Utah

DRILLING PROGRAM:

1. Surface Formation: Duchesne River Formation

2. Estimated Formation Tops:

Green River Formation 6800'

3. Estimated Depths at which Oil, Gas, or Water are expected to be Encountered.:

Fresh Water	Surface to 500'
Saline Water	500' to TD
Natural Gas	7000' to TD

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected.

4. Pressure Control: Minimum 3000 psi BOPE will be installed prior to drilling surface pipe shoe. Pit volume totalizers, flow sensors, automated choke manifold, gas buster, lower kelly cock, and stabbing valves will be available when drilling below the surface casing. The BOP system will be consistent with API RP53. Pressure tests will be conducted before drilling out from under the surface casing. BOP controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. BOPs will be inspected and operated at least daily to ensure good mechanical working order, and the inspection will be recorded on the daily drilling report. (SEE ATTACHED DIAGRAM).

OIL AND GAS	
DFN	4 RJF
2 JPB ✓	GLH
DIS	SLS
1-TAS	
2-TAS	
5-TAS	
6	MICROFILM ✓
7	FILE

LINMAR PETROLEUM COMPANY
P.O. Box 1327
Roosevelt, UT 84066
(801) 722-4546

Re: Duncan 4-1A2
Section 1;T1S,R2W
SW1/4SW1/4
Duchesne County, Utah

DRILLING PROGRAM continued:

5. Casing Program:

A rat-hole driller will be used to drill a 30" conductor hole to a depth of between 60 and 80 feet. 20" pipe will then be run and cemented to surface.

12-1/4" hole will be drilled to 2000' and 9-5/8" casing will be run and cemented to surface.

BOPE will be installed and tested. 7-7/8" hole will be drilled to 8000 feet. 5-1/2" casing will be run from surface to TD and a minimum of 1500' will be cemented.

Anticipated cement tops will be reported by depth, not the expected number of sacks of cement to be used.

6. Mud Program:

Well to be drilled to surface casing setting depth with fresh water.

After setting the surface casing, the well will be drilled to approximately 6000' using fresh water.

3% KCl water weighted with NaCl as required, will be used from 6000' to TD. Viscous polymer sweeps will be used as necessary clean hole and remove bridges.

LINMAR PETROLEUM COMPANY
P.O. Box 1327
Roosevelt, UT 84066
(801) 722-4546

Re: Duncan 4-1A2
Section 1;T1S,R2W
SW1/4SW1/4
Duchesne County, Utah

DRILLING PROGRAM continued:

7. Formation Evaluation:

No cores or DST's are anticipated. DIL-GR will be run from bottom of surface pipe to TD. CNL-FDC-GR and mud log will be run from 6000' to TD.

8. Abnormal Conditions, Bottom Hole Pressure and Potential Drilling Hazards:

The Duchesne River, Uintah, and Upper Green River Formations are expected to be normal or under-pressured. Lost circulation may be a problem.

Gas producing intervals are expected in the Upper Green River Formation. The maximum bottom hole pressure expected is 3500 psi. Pressure control equipment, drilling fluids, and monitoring as previously outlined will be adequate to maintain control of the well.

No other drilling hazards are anticipated.

LINMAR PETROLEUM COMPANY
P.O. Box 1327
Roosevelt, UT 84066
(801) 722-4546

Re: Duncan 4-1A2
Section 1;T1S,R2W
SW1/4SW1/4
Duchesne County, Utah

Request for Spacing Exception

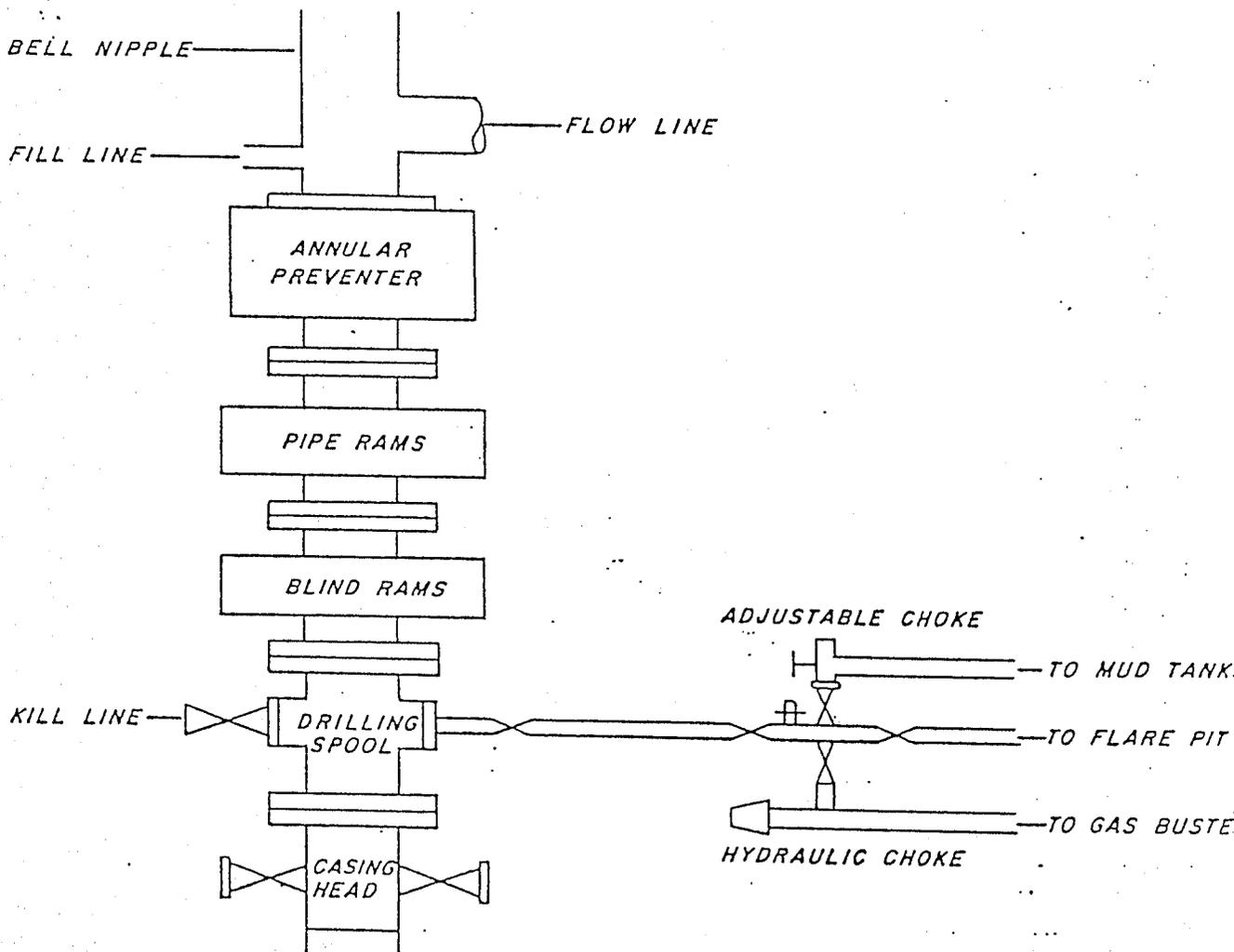
Linmar Petroleum Company respectfully requests an administrative spacing exception per Cause 131-81, paragraph 2, for geologic and topographic reasons.

The proposed drilling location is less than 3,960' from the Duncan 4-12A2. Drilling the well farther north is not geologically feasible and decreases the chances of an economically successful well.

The proposed location will also minimize the impact on surface landowners, because most of the proposed location is on an existing oil well location owned by Linmar Petroleum Company.

Granting the exception will prevent the waste of gas, will avoid the drilling of an uneconomic well, will protect correlative rights, and will keep surface disturbance impact to a minimum.

LOW OUT PREVENTION EQUIPMENT



Minimum 3,000 PSI BOPE is to be installed after setting surface pipe.

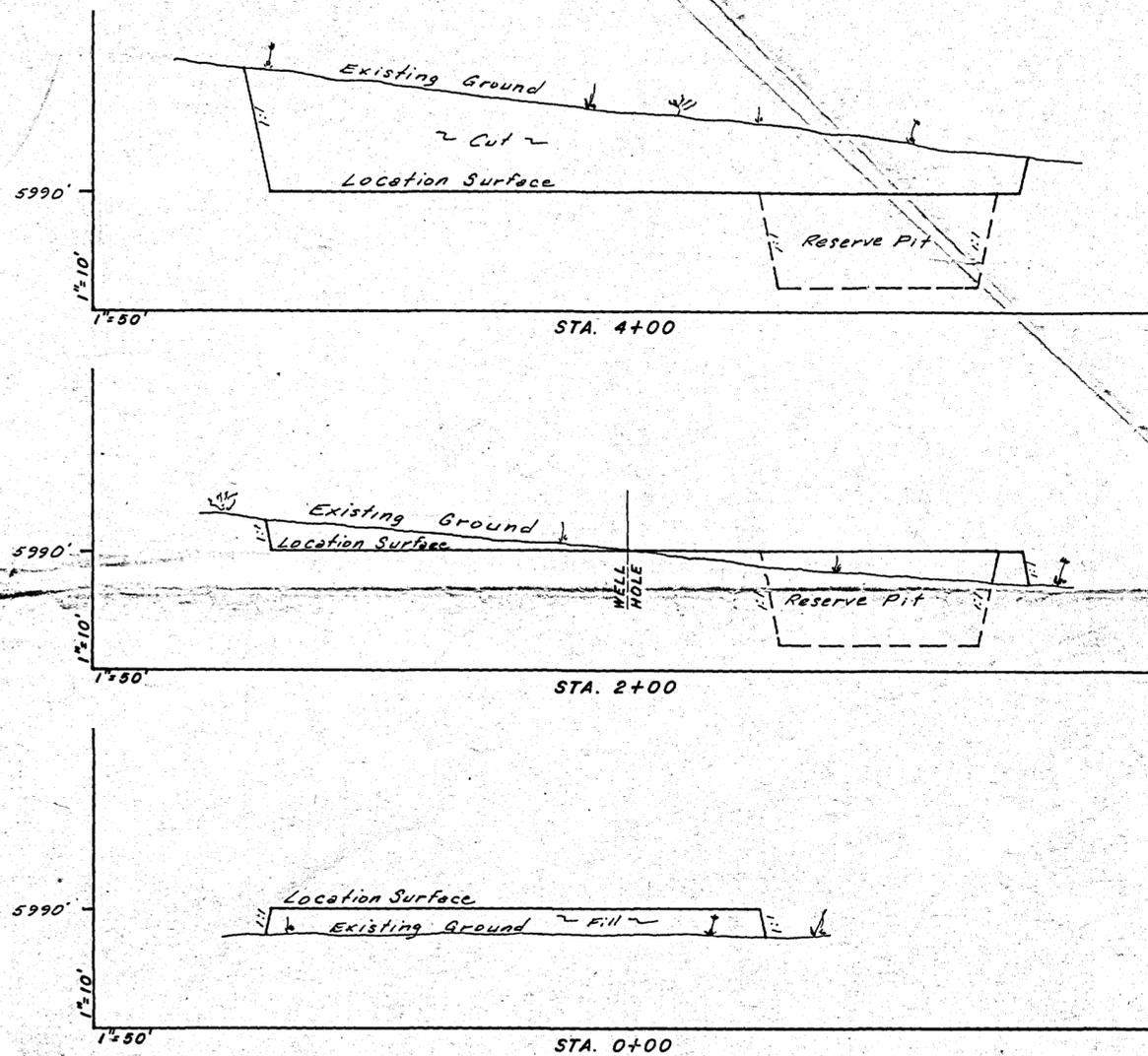
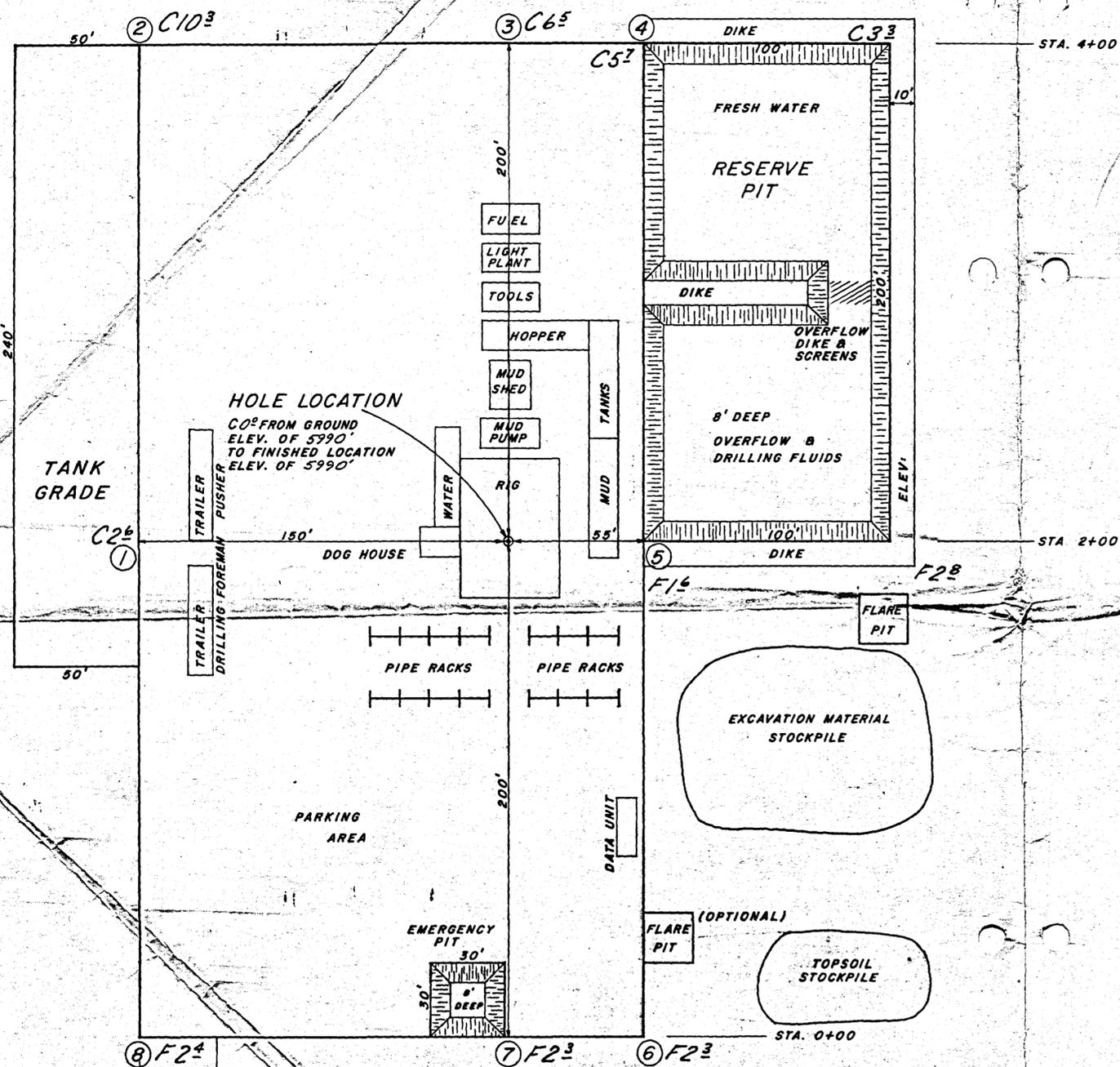
All preventers are to be tested to 2000 PSI (80% of burst strength IYP for surface) prior to drilling out casing shoe.

All auxillary BOPE will be tested to appropriate pressures when BOP'S are tested. (Manifold, upper and lower Kelly cocks, valves, and inside BOP).

LINMAR PETROLEUM COMPANY

WELL LAYOUT PLAT DUNCAN 4-1A2

LOCATED IN THE SW $\frac{1}{4}$ OF THE SW $\frac{1}{4}$ OF
SECTION 1, T1S, R2W, U.S.B.&M.



RECEIVED
JUL 26 1990
DIVISION OF
OIL, GAS & MINING

JERRY D. ALLRED & ASSOCIATES
Surveying & Engineering Consultants
121 North Center Street
P.O. Drawer C
DUCESNE, UTAH 84021
(801) 738-5352

18 July '90

82-121-087

DRILLING LOCATION ASSESSMENT

State of Utah
Division of Oil, Gas and Mining

OPERATOR: LINMAR PETROLEUM COMPANY WELL NAME: DUNCAN 4-1A2
SECTION: 1 TWP: 1S RNG: 2W LOC: 902 FWL 1067 FSL
QTR/QTR SW/SW COUNTY: DUCHESNE FIELD: BLUEBELL (U.GR.)
SURFACE OWNER: McNEAL DUNCAN and Linmar Petroleum
SPACING: 660 F SECTION LINE 3960 F ANOTHER WELL
INSPECTOR: BRAD HILL DATE AND TIME: 8/3/90 10:00

PARTICIPANTS: Ed Whicker, Doug Howard-Linmar, Bart Bennion-BIA,
McNeal Duncan-Landowner

REGIONAL SETTING/TOPOGRAPHY: The proposed location is in the
central Uinta Basin on a terrace surface above the surrounding
topography. The ground slopes slightly to the west.

LAND USE:

CURRENT SURFACE USE: The proposed site lies partly on the location
of the Linmar 3-1A2 and partly on a grass-hay field owned by Mr.
Duncan.

PROPOSED SURFACE DISTURBANCE: A rectangular pad will be constructed
approximately 400'X 205' with a 200'X 100' extension for the
reserve pit. Access will be from the 3-1A2 location.

AFFECTED FLOODPLAINS AND/OR WETLANDS: None

FLORA/FAUNA: Pasture grass, clover, thistles, rushes/Frogs, birds,
insects

ENVIRONMENTAL PARAMETERS

SURFACE GEOLOGY

SOIL TYPE AND CHARACTERISTICS: Sandy-silt matrix with gravel
and cobbles.

SURFACE FORMATION & CHARACTERISTICS: Quaternary Alluvium.

EROSION/SEDIMENTATION/STABILITY: No active erosion or
sedimentation. Site should be stable.

PALEONTOLOGICAL POTENTIAL: None observed.

SUBSURFACE GEOLOGY

OBJECTIVES/DEPTHS: UPPER GREEN RIVER-7000'

ABNORMAL PRESSURES-HIGH AND LOW: Possible underpressured zones in the Upper Green River.

CULTURAL RESOURCES/ARCHAEOLOGY: NA

CONSTRUCTION MATERIALS: Onsite materials will be used for construction.

SITE RECLAMATION: As per landowner instructions.

RESERVE PIT

CHARACTERISTICS: The reserve pit will be located on the southeast side of the location. Reserve pit dimensions will be approximately 200'X 100'X 10'.

LINING: Pit is to be lined with at least 12 mil thickness synthetic liner.

MUD PROGRAM: Surface hole to 6000'/fresh water; 6000'-T.D./ 3% KCl water with NaCl added as needed for weight.

DRILLING WATER SUPPLY: Water will be pumped from a gathering pond on the west side of the 3-1A2 location.

OTHER OBSERVATIONS

A BIA irrigation ditch crosses the proposed location on the east side and will probably be replaced by a pipe under the location. An agreement has not yet been reached with the landowner but it appears that an agreement will be reached. Linmar has asked for an exception location for geological and topographic reasons. There is no topographic reason other than to minimize the impact on current agricultural areas. Linmar feels that a bentonite liner will be sufficient to seal the reserve pit. Actual surface seeps, on the proposed location, indicate the presence of ground-water near the surface. This combined with the proximity to agricultural activities and residences dictate the need for a properly installed synthetic liner.

STIPULATIONS FOR APD APPROVAL

Reserve pit should be lined with synthetic liner.
Diversion should be placed around uphill side of location to redirect surface seepage and runoff.

Division. Participating and representing the Bureau of Land Management (BLM) were Assad Raffoul (Utah State Office) and Jerry Kenczka (Vernal District Office). Appearing on behalf of Pennzoil Exploration & Development Company were Ralph A. Williams, Supervising Engineer, Gary L. Kornegay, Senior Geologist and Robert G. Pruitt, Jr. of Pruitt, Gushee & Fletcher, their Attorney. No other parties appeared or participated in the hearing.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

1. Due and regular notice of the time, place and purpose of the hearing was given to all interested parties in the form and manner and within the time required by law and the rules of the Board.

2. The Board has jurisdiction over the matter covered by said Petition and over all parties interested therein, and has jurisdiction to make and promulgate the order hereinafter set forth.

3. In order to prevent waste of gas, oil and associated hydrocarbons, to avoid the drilling of unnecessary wells, and to protect correlative rights, 640-acre drilling units should be established for the production of gas, Oil and associated hydrocarbons from the Upper Green River formation underlying the described lands. This action will require modification of the Board's previous Order in Cause No. 131-2 as to such lands.

4. The Upper Green River formation should be defined as the interval from the top of the Green River formation down to the TGR₃ marker bed, a marker bed recognizable throughout the area, which is encountered at a depth of 9,748 feet in the Boren 3-11-A2 well situated in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 11, T. 1 S., R. 2 W., USM.

5. One well for each 640-acre tract will efficiently and economically produce the recoverable gas, oil and associated hydrocarbons from the Upper Green River formation underlying the described lands.

ORDER

The Board of Oil, Gas and Mining, having heard the testimony and comments of all participants, and having considered the testimony, evidence and exhibits submitted at the hearing, hereby enters the following Order:

1. Drilling units containing 640 acres, more or less, for the production of gas, oil and related hydrocarbons from the Upper Green River formation, as described herein, are established for the following lands in the Bluebell-Altamont Field:

Township 1 South, Range 2 West, USM

Sections 1 and 2: All

Section 3: All, except N $\frac{1}{2}$ NW $\frac{1}{4}$

Section 4: All

Sections 9 thru 12: All

Each designated drilling unit shall comprise the full surveyed government section, containing approximately 640 acres, except in the case of Section 3, which shall comprise 560 acres consisting of all of said Section 3 but excluding the N $\frac{1}{2}$ NW $\frac{1}{4}$ of said section.

2. The permitted well for each drilling unit shall be no closer than 660 feet from any quarter section boundary and not less than 3,960 feet from an existing well completed in the Upper Green River formation, with a variance of up to 150 feet for topographic purposes without prior approval, or otherwise as may be permitted by administrative action for topographic or geological reasons without the necessity of a formal Board hearing.

3. The "Upper Green River formation" is defined as comprising the interval from the top of the Green River formation, as encountered at a depth of 6,540 feet in the Boren 3-11-A2 well situated in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 11, T. 1 S., R. 2 W., USM, down to the base of the TGR₃ marker bed, encountered at a depth of 9,748 feet in the Boren 3-11-A2 well.

4. The Board retains continuing jurisdiction of all matters covered by this Order.

Entered this 27th day of March, 1989.

STATE OF UTAH BOARD OF OIL,
GAS AND MINING

By: 
Gregory P. Williams, Chairman

OPERATOR Inman Petroleum Company DATE 8-1-90

WELL NAME Duncan 4-1A

SEC SWSW 1 T 15 R 0W COUNTY Duchesne

43-013-31087
API NUMBER

see (4)
TYPE OF LEASE

CHECK OFF:

PLAT

BOND

NEAREST WELL

LEASE

FIELD

POTASH OR OIL SHALE

PROCESSING COMMENTS:

Water Permit 43-9940 (A1003W)

Permit 8-1-90 / (Geology review) 8-14-90

Eruption Location

APPROVAL LETTER:

SPACING:

R615-2-3

N/A
UNIT

R615-3-2

131-81 3-07-89
CAUSE NO. & DATE

R615-3-3

STIPULATIONS:

1- see stipulation

2- A review of the drilling program by Division Staff indicates that ~~fresh~~ water flows may be encountered at depths greater than 2000'. The operator will be required to adequately protect and seal off aquifers encountered after setting 9-5/8" casing at 2000'.

0218T 3. The reserve pit shall be lined with a synthetic tear resistant liner of at least 12 mil thickness.

4. An earthen diversion shall be placed around the uphill side of the location to redirect surface seepage and runoff.



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangertter
Governor
Dee C. Hansen
Executive Director
Dianne R. Nielson, Ph.D.
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

August 27, 1990

Linmar Petroleum Company
P. O. Box 1327
Roosevelt, Utah 84066

Gentlemen:

Re: Duncan 4-1A2 - SW SW Sec. 1, T. 1S, R. 2W - Duchesne County, Utah
1097' FSL, 902' FWL

Approval to drill the referenced well is hereby granted in accordance with the Order of Cause No. 131-81 dated March 27, 1989 subject to the following stipulations:

1. Linmar Petroleum Company, as designated operator, is the bonded principal in reference to this Application for Permit to Drill. Should this designation change or a transfer of ownership occur, liability will remain with the designated operator until the Division is notified by letter of a new bonded principal.
2. A review of the drilling program by Division staff indicates that water flows may be encountered at depths greater than 2000'. The operator will be required to adequately protect and seal off aquifers encountered after setting 9-5/8" casing at 2000'.
3. The reserve pit shall be lined with a synthetic tear-resistant liner of at least 12 mil. thickness.
4. An earthen diversion shall be placed around the uphill side of the location to redirect surface seepage and runoff.

In addition, the following actions are necessary to fully comply with this approval:

1. Spudding notification within 24 hours after drilling operations commence.
2. Submittal of an Entity Action Form within five working days following spudding and whenever a change in operations or interests necessitates an entity status change.

Page 2
Linmar Petroleum Company
Duncan 4-1A2
August 27, 1990

3. Submittal of the Report of Water Encountered During Drilling, Form 7.
4. Prompt notification if it is necessary to plug and abandon the well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695, or Jim Thompson, Lead Inspector, (Home) 298-9318.
5. Compliance with the requirements of Rule R615-3-20, Gas Flaring or Venting, Oil and Gas Conservation General Rules.
6. Prior to commencement of the proposed drilling operations, plans for facilities for disposal of sanitary wastes at the drill site shall be submitted to the local health department. These drilling operations and any subsequent well operations must be conducted in accordance with applicable state and local health department regulations. A list of local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of General Sanitation, telephone (801) 538-6121.
7. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-013-31287.

Sincerely,



R. J. Firth
Associate Director, Oil & Gas

tas
Enclosures
cc: Bureau of Land Management
J. L. Thompson
WE14/1-4



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangertor

Governor

Dee C. Hansen

Executive Director

Dianne R. Nielson, Ph.D.

Division Director

355 West North Temple

3 Triad Center, Suite 350

Salt Lake City, Utah 84180-1203

801-538-5340

February 18, 1992

Linmar Petroleum Company
P.O. Box 1327
Roosevelt, Utah 84066

Gentlemen:

Re: Duncan 4-1A2, Sec. 1, T. 1S, R. 2W, Duchesne County, Utah
API No. 43-013-31287

Due to excessive time delay in commencing drilling operations, approval to drill the subject well is hereby rescinded, effective immediately.

Please note that a new Application for Permit to Drill must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division of Oil, Gas and Mining immediately.

Sincerely,

Don Staley
Administrative Supervisor
Oil and Gas

DME

cc: R.J. Firth
Well file

WOI219