

UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 GEOLOGICAL SURVEY

30-045-23107

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  
 Dugan Production Corp. 6515

3. ADDRESS OF OPERATOR  
 P. O. Box 234, Farmington, NM 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
 At surface F 1400' FNL - 2000' FWL  
 At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 14 miles south of Farmington, NM

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)  
 1031'

16. NO. OF ACRES IN LEASE  
 367.44

17. NO. OF ACRES ASSIGNED TO THIS WELL  
 184.00

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
 approx. 1/2 mi.

19. PROPOSED DEPTH  
 1400'

20. ROTARY OR CABLE TOOLS  
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 6100' GR

22. APPROX. DATE WORK WILL START\*  
 6-1-78

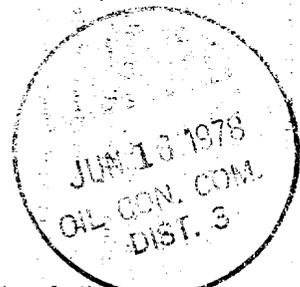
PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
6-1/4"	5-1/2"	14#	30'	5 sx
4-3/4"	2-7/8"	6.4#	1400'	175 cu ft.

Plan to drill 4-3/4" hole with air or minimum mud to 1400' to test Pictured Cliffs Formation.

Do not plan to have blowout preventer on well while drilling. Master valve and stripper head will be installed while completing.

NMERB Requirement: Gas is not dedicated.



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.

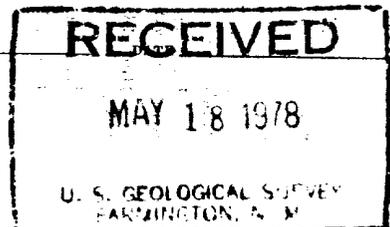
24. SIGNED Thomas A. Dugan TITLE Petroleum Engineer DATE 5-10-78  
 (This space for Federal or State office use)

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

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

Okal

\*See Instructions On Reverse Side



NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

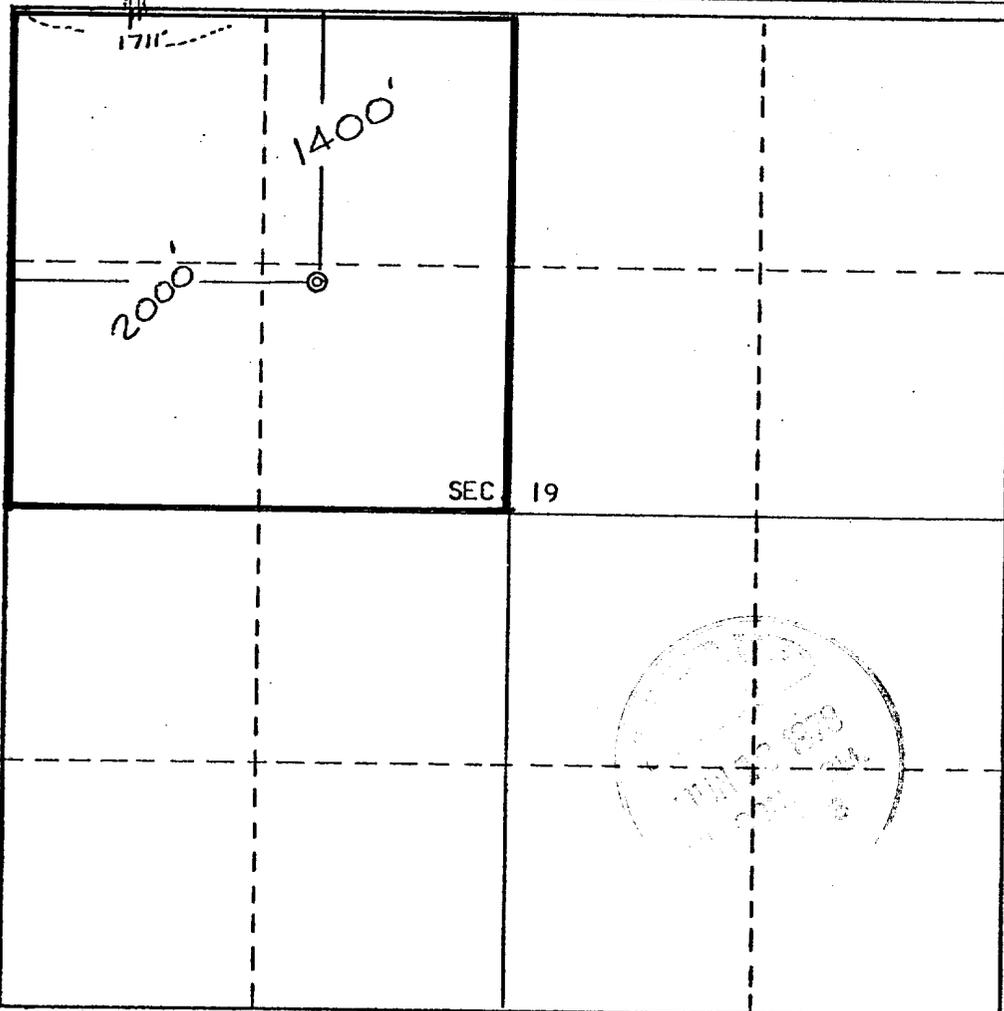
Operator <b>Dugan Production Corporation</b>			Lease <b>Faith</b>			Well No. <b>1</b>		
Unit Letter <b>F</b>	Section <b>19</b>	Township <b>27 North</b>	Range <b>13 West</b>	County <b>San Juan</b>				
Actual Footage Location of Well: <b>1400</b> feet from the <b>North</b> line and <b>2000</b> feet from the <b>West</b> line								
Ground Level Elev. <b>6100</b>	Producing Formation <b>Pictured Cliffs</b>		Pool <b>WAW</b>			Dedicated Acreage: <b>184.00</b> Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes;" type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

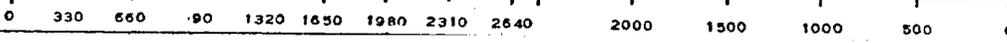
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

*Thomas A. Dugan*

Name	<b>Thomas A. Dugan</b>
Position	<b>Petroleum Engineer</b>
Company	<b>Dugan Production Corp.</b>
Date	<b>5-10-78</b>

REGISTERED LAND SURVEYOR  
STATE OF NEW MEXICO  
I hereby certify that the well location shown on this plat was plotted 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.  
**E. V. ECHOHAWK**

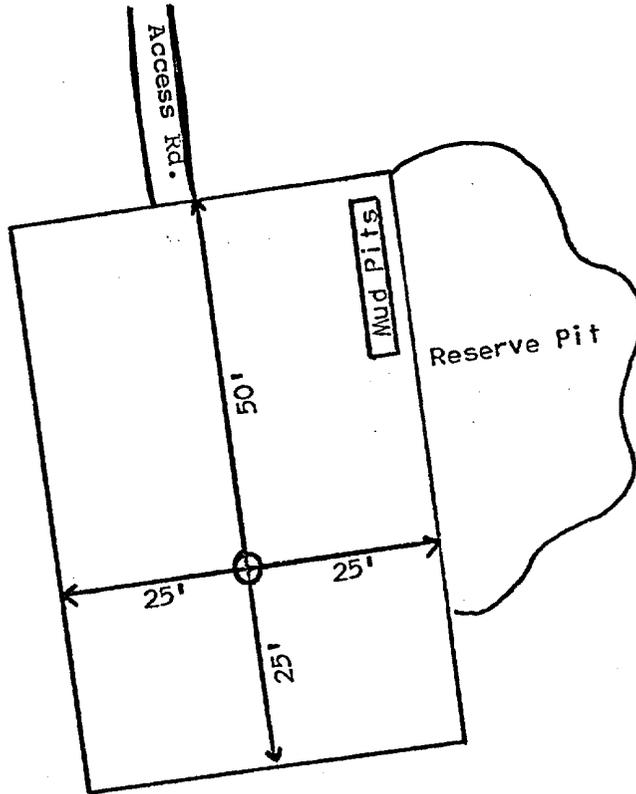
Date Surveyed	<b>March 7, 1978</b>
Registered Professional Engineer and/or Land Surveyor	<i>E. V. Echohawk</i>
Certificate No.	<b>3602</b>
	<b>E. V. Echohawk LS</b>



Dugan Production Corp.

Faith #1

Proposed Location Layout



DEVELOPMENT PLAN

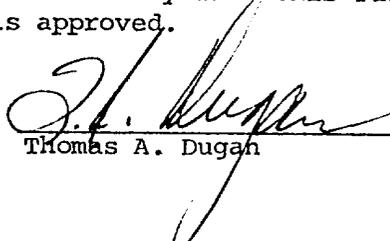
DUGAN PRODUCTION CORP.

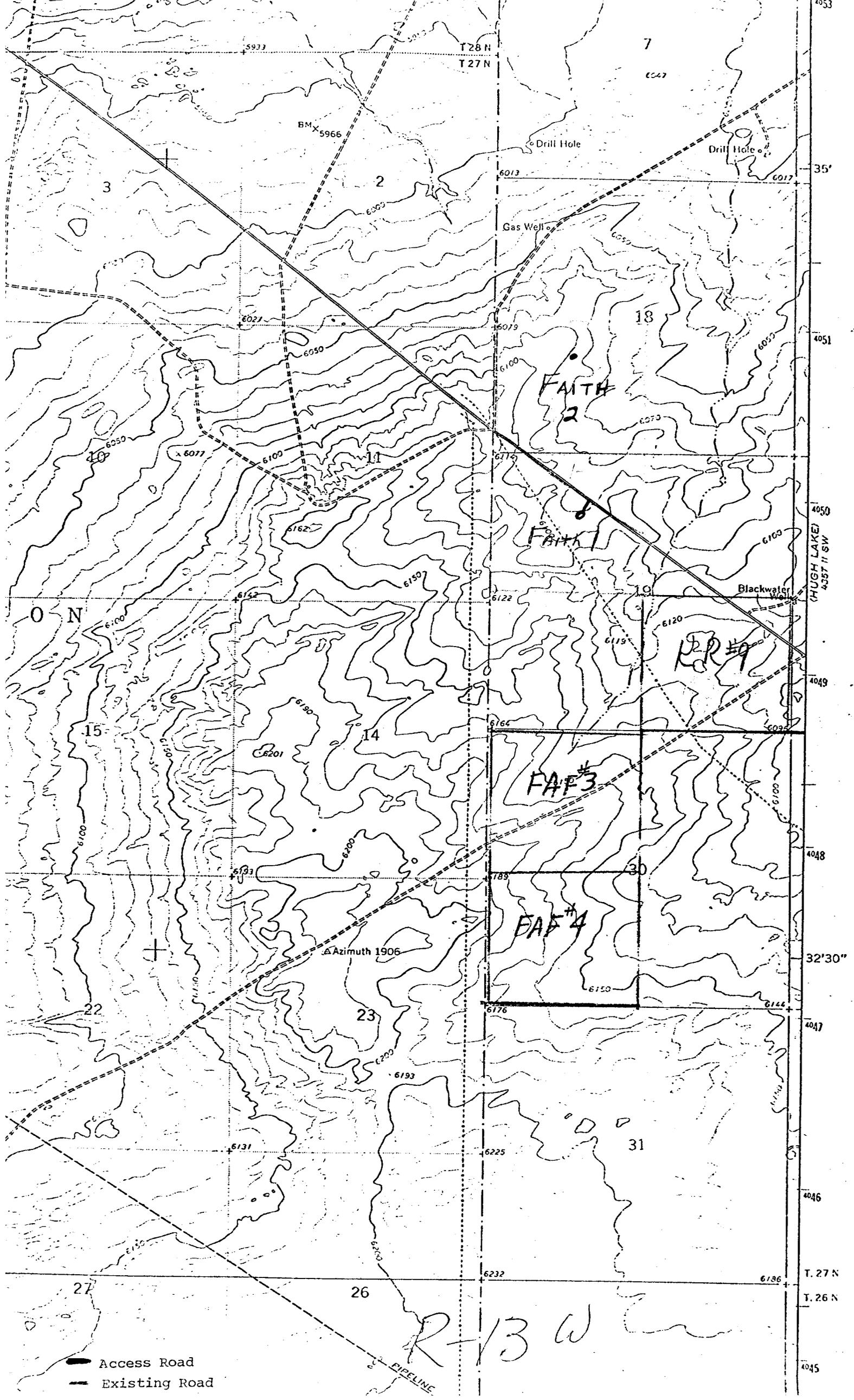
Faith #1

1. Existing roads and existing wells are shown on attached plat.
2. Planned access from existing road approximately 400' to new location. Will leave natural grass and small vegetation on roadway. Will remove large brush or trees from road. Do not plan to make road grade or bar ditches. Will bottom-out any arroyo we cross and not install culverts.
3. Location of well: 1400' FNL - 2000' GWL  
Section 19 T27N R13W  
San Juan County, NM
4. One additional well(s) planned on this lease at this time.
5. Separator and flow line will be located within 50' of wellhead.
6. Water will be secured from San Juan River or Navajo Irrigation System.
7. Waste materials will be buried on location or in reserve pit.
8. No permanent camp is planned; trailer house will be used on location while drilling.
9. Do not plan to build airstrip.
10. See attached plat for proposed location layout.
11. A general description of the topography, soil characteristics, geologic features, flora and fauna; other surface-use activities and surface ownership of involved lands, proximity of water, occupied dwellings, archeological, historical or cultural sites can be found in the archeologist's report.
12. Geologic name of surface formation: Recent Blow Sand
13. Estimated tops of important geologic markers:  
Kirtland 67'      Fruitland 900'      Pictured Cliffs 1338'
14. Estimated depths of anticipated water, oil, gas, or other mineral bearing formations which are expected to be encountered;  
Pictured Cliffs - gas - 1338'
15. We do not anticipate to encounter any abnormal pressures or temperatures or any potential hazards such as those associated with hydrogen sulfide.
16. Will clean up location, fill and level pits, level ruts in road, reseed location and road with Seed Mixture #2 and paint equipment with Sandstone Brown.
17. Operator's Representative:  
Thomas A. Dugan  
Box 234  
Farmington, NM 87401
18. Certification: The following statement must be signed by the lessee's or operator's field representative who is identified in Item #17 of the Plan:

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 Dugan Production Corp. and its contractors and subcontractors in conformity with this Plan and the terms and conditions under which it is approved.

Date: 5-10-78

  
\_\_\_\_\_  
Thomas A. Dugan



-  Access Road
-  Existing Road

R-13 W

PIPELINE

4053  
35'  
4051  
4050  
4049  
4048  
32'30"  
4047  
4046  
T. 27 N  
T. 26 N  
4045

(HUGH LAKE)  
4387 II SW

7

18

19

30

31

26

23

15

14

11

2

3

FAITH #2

FAITH #1

FAITH #3

FAITH #4

R-13 W

Drill Hole

Drill Hole

Gas Well

Blackwater Well

Δ Azimuth 1906

BM X 5966

T.28 N  
T.27 N

5933

6013

6017

6079

6021

6050

6059

x 6077

6162

6150

6122

6120

6115

6100

6100

6150

6164

6039

6131

6185

6150

6144

6131

6225

6193

6232

6186

27

4045