OIL WELL DEAD WELL DAME OF OPERATOR  Damson Oil Corpora  ADDRESS OF OPERATOR  3300 N. A, Bldg. 8  LOCATION OF WELL (Report See also space 17 below.)  At surface  1980' FSL & 1980'  PERNIT NO.  N/A  Ch	or proposals to drill or t "APPLICATION FOR PER  other  ation  3, Suite 100, Mi  location clearly and in accordance  FEL	REPORTS Condependent of the such property of the su	BS. NEW MEXICO 60-240  N. WELLS  ack to a different reservoir.  opossis.)	7. UNIT AGREEMENT NA  8. FARM OR LEASE NAM  Southern Cal:  9. WBLL NO.  5	ifornia Fede
OIL WELL WELL  NAME OF OPERATOR  Damson Oil Corpora  ADDRESS OF OPERATOR  3300 N. A, Bldg. 8  LOCATION OF WELL (Report See also space 17 below.)  At surface  1980' FSL & 1980'  PERMIT NO.  N/A  Ch	S, Suite 100, Milocation clearly and in acc	ordance with any i	s 79705 State requirements.•	8. PARM OR LEABE NAM Southern Cal: 9. WELL NO. 5	ifornia Fede
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1980' FSL & 1980'  I. PERNIT NO.  N/A  Ch	15. BLEVATIONS			Lione Tarely D. 1	
I. PERMIT NO. N/A Ch	15. BLEVATIONS			West Lusk Delaware	
N/A Ch				11. SEC., T., E., M., OE B SURVEY OR AREA	
Ch		(Show whether or.	RT CR etc.)	Sec. 29, T19S,	R32E
		,556' GR	,,,	12. COUNTY OR PARISE	
	ack Appropriate Rem		(1)	Lea	I NM
	or intention to:	io indicate IN	ature of Notice, Report, or (		
TEST WATER SHUT-OFF	PULL OR ALTER CA		L	DENT REPORT OF:	
PRACTURE TREAT	MULTIPLE COMPLE		WATER SHUT-OFF PRACTURE TREATMENT	REPAIRING W	· []
SHOOT OR ACIDIZE	ABANDON®		SBOOTING OR ACIDIZING	ALTERING CA	<del></del>
(Other)	CHANGE PLANS		(Other)	Drilling of multiple completion of	X
<ul><li>Drilled to 880'</li><li>Ran centralized</li><li>Cemented 13-3/8'</li></ul>	17-1/2" hole on 13-3/8" 61# J-5 " casing with 52 210sx Class "C"	12/6/87.  5 Buttress of Ssx Howco Law/2% CaCl.	casing and landed it ite Class "C" cement Cmt circulated to su		sx
				DE CO PER CONTROL OF THE CONTROL OF	RECEIVE
I hereby certify that the foreg	oing is true and correct		SJS	177 77 1 1 142 15 22	ED 87
SIGNED C. M. Bloodworth TITLEDistrict Engineer				_ DATE 12/10	187
(This space for Federal or Sta					
APPROVED BY	THE ADDRESS OF THE PERSON OF T	TITLE		_ DATE	

Fcrm 3160-3 (November 1983)

N. H. M. COM SERVICE 38240

30-025-30093 Form approved. Budget Burean No. 1004-0126

ormerly 9-331C)	HOBES, NEW TUN	NT OF THE I		e side)	Expires August 31,	1985
					5. LEASE DESIGNATION AND	SERIAL NO.
		F LAND MANA			LC 063586	
	ON FOR PERMIT	TO DRILL, I	DEEPEN, OR PLUG	BACK	6. IF INDIAN, ALLOTTER OR	TRIBE NAME
TYPE OF WORK DITTPE OF WELL	RILL 🛛	DEEPEN (	PLUG BA	ACK []	7. UNIT AGREEMENT NAME	
WELL LA	WELL OTHER		SINGLE MULT	CIPLE []	8. FARM OR LEASE NAME	
NAME OF OPERATOR					Southern Californ	nia Fede
mson Oil Cor				·	9. WELL NO.	
	-	0 M:11 - 1 (	m - 3070 <i>c</i>		5 .	
LOCATION OF WELL (	ig. 8, Suite 10	nd In aggardance mile	N 04.4		10. FIELD AND POOL, OR W.	
ar Buitace		»/ ,	4/		West Lusk Dela	ware
At proposed prod. so	' FSL & 1980' F ' FSL & 1980' F	3.10	, ,		11. SEC., T., R., M., OR BLE. AND SURVEY OR ARBA	
	AND DIRECTION FROM NE		C OFFICE®		Sec. 29, T19S, R. 12. COUNTY OR PARISH   18.	32E
	ljamar 16 miles				_	
DISTANCE FROM PROI	PUSED*		16. NO. OF ACRES IN LEASE	17. 80. 0	P ACRES ASSIGNED	NM
PROPERTY OR LEASE		660'	560 acres	10 21	HIS WELL	
DISTANCE FROM PRO	POSED LOCATION®		19. PROPOSED DEPTH 20. EOTARY OR CABLE TOOLS			
TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1867			7,200'	NOT NOT THE CABBLE TOOLS		
ELEVATIONS (Show w	hether DF, RT, GR, etc.)	1007	7,200	ı Ko	22. APPROX. DATE WORK W	ILL START®
Est. 3,554'	CI				1	
D3C. 3,334	GL				As Soon As Poss:	ible
<u> </u>	GL	PROPOSED CASI	NG AND CEMENTING PROGR	AM	As Soon As Poss	ible
SIZE OF HOLE	SIZE OF CASING	PROPOSED CASI		АМ	AS SOON AS POSS:	ible
812E OF HOLE 17-1/2		<del></del>				
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FO	OT SETTING DEPTH		QUANTITY OF CEMENT	E
812E OF HOLE 17-1/2	BIZE OF CABING	WEIGHT PER FO	OT SETTING DEPTH		QUANTITY OF CEMENT	E
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81ZE OF HOLE 17-1/2 12-1/4	13-3/8 8-5/8	48# 24# & 32#	900 ' 4,500 '		QUANTITY OF CEMENT	E
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17-1/2 12-1/4 7-7/8	812E OF CABING 13-3/8 8-5/8 5-1/2	48# 24# & 32# 15.50#	900 ' 4,500 '		QUANTITY OF CEMENT	E
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81ZE OF HOLE 17-1/2 12-1/4 7-7/8 MUD PROGRAM	13-3/8 8-5/8 5-1/2 1: SEE EXHIBIT	WEIGHT PER FO 48# 24# & 32# 15.50#	900 ' 4,500 '		QUANTITY OF CEMENT Reverse CIRCULAT CIRCULAT	REC
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81ZE OF HOLE 17-1/2 12-1/4 7-7/8 MUD PROGRAM	13-3/8 8-5/8 5-1/2 1: SEE EXHIBIT	WEIGHT PER FO 48# 24# & 32# 15.50#	900 ' 4,500 '		QUANTITY OF CEMENT Reverse CIRCULAT CIRCULAT	REC
81ZE OF HOLE 17-1/2 12-1/4 7-7/8 MUD PROGRAM	13-3/8 8-5/8 5-1/2 1: SEE EXHIBIT	WEIGHT PER FO 48# 24# & 32# 15.50#	900 ' 4,500 '		QUANTITY OF CEMENT Reverse CIRCULAT CIRCULAT	REC
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preventer program, if any. 24. b

BIGNED Brent J. Jonery	Production Technician	DATE 9/25/87
(This space for Federal or State office use)		
PERMIT NO.	APPROVAL DATE	
APPROVED BY	TITLE	DATE 10-7-87

## STATE OF NEW MEXICO

#### OIL CONSERVATION DIVISION

## P. O. BOX 2084

Form C-102 ENERGY AND MINERALS DEPARTMENT SANTA FE, NEW MEXICO 07501 All distances must be from the outer boundaries of the Section. Overalor Well No. Damson Oil Corporation Southern California Federal 5 Unit Letter Township Section County T-19-S R-32-E Lea Actual l'ostage Location of Well: 1980 feet from the South 1980 feet from the East Producing Formation Poul Dedicated Acreege: West Lusk Delawore Delawore 3556 Acres 1. Outline the acrenge 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 consoliduted by communitization, unitization, force-pooling, etc? 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 Division. CERTIFICATION I hereby certify that the Information contained herein is true and complete to The best of my knowledge and belief. T-19-S R-32-F Compon William D. WATER I hereby certify that the well is quijon shown on this plat was platted from field 1980 notes of octual surveys made by me or under my supervision, and that the some is true and correct to the best of my knowledge and belief. September 18. 1980 and/or Land Surveyor W. D. Watson, Jr. Certificate No.

1500

3959

#### APPLICATION TO DRILL

### DAMSON OIL CORPORATION

SOUTHERN CALIFORNIA FEDERAL WELL #5
1980' FSL and 1980' FEL
Section 29, T19S, R32E
Lea County, New Mexico

In conjunction with Form 3160-3, Application for Permit to Drill, Damson Oil Corporation submits the following ten items of pertinent information to drill the subject well in accordance with Bureau of Land Management requirements.

- 1. The geologic surface formation is cretaceous.
- 2. The estimated tops of geologic markers are:

Rustler 850
 Tansill 2380
 Yates 2535
 Seven Rivers 2746

5. San Andres 42856. Delaware 4645

7. Bone Springs 7180

3. The estimated depths at which water, oil or gas-bearing formation are expected:

Water: 300 feet

Oil & Gas: Delaware 4700'-6700'

- 4. Proposed casing program: See Form 3160-3
- 5. Pressure control equipment: See exhibit E
- 6. Mud Program: See Exhibit F
- 7. Anticipated bottom-hole pressure: 3118 psig at a total depth of 7200 feet. No abnormal pressures are expected. Hydrogen sulphide gas may be encountered in the Capitan Reef, although none is expected. Appropriate safety precautions will be taken.
- 8. Testing, logging and coring programs:

Drill Stem tests:
No DST's will be taken

Logging:

Mud loggers will be used from 4500' to TD

Wireline Logging program: Compensated neutron, formation density, long spaced sonic, dual laterolog/MSFL

9. Anticipated starting date: As soon as possible.

The state of the s

#### EXHIBIT F

#### DRILLING PROGNOSIS

## SOUTHERN CALIFORNIA FEDERAL #5

LOCATION:

1980' FEL & 1980' FSL, Section 29, T19S, R32E

Lea County, New Mexico

PROPOSED DEPTH AND OBJECTIVE:

7200' Delaware Test

CASING PROGRAM:

Surface: 13 3/8" 48# H-40 ST&C Set at 900' in 17 1/2" hole

Intermediate: Tapered string of 8 5/8" 24# J-55 ST&C from

0 to 2400 ft and 8 5/8" 32# J-55 ST&C from 2400 ft to 4500 in 12 1/4" hole. DV tool

is to be run at ± 2800 ft.

Production:

5 1/2" 15.50# K55 ST&C from surface to 7200 ft in 7 7/8" hole. Sufficient cement will be used to bring the top above the base of the

intermediate casing.

LOGGING PROGRAM:

A compensated neutron/formation density, with gamma ray, caliper and photoelectric measurements and a long spaced sonic for lithology. A dual laterolog/MSFL log will be run for water saturation analysis. All logs will be run from the base of intermediate casing to TD.

MUD LOGGING:

Samples will be taken every 10 ft from 4500 ft to TD.

MUD PROGRAM:

0 - 900'

Spud 17 1/2" hole with fresh water containing gel and lime, if necessary for hole cleaning. Mud weight should be 8.5-8.7 lb/gal with a viscosity of 33-35 sec/1000 cc.

900 - 4500'

Drill out below surface pipe using 12 1/4" bit with 10 1b/gal brine for drilling the native salt section. Lime will be added to maintain a pH of 9.5-10.0. Partial or total lost circulation is expected in the top of the Capitan Reef at  $\pm$  2850 ft. If total loss does occur, the remainder of the intermediate hole will be dry drilled with sweeps

to 4500 ft.

4500 - 7200'

Drill out below intermediate casing with 9.0 lb/gal brine. Mud weight should not exceed 9.3 lb/gal with a viscosity of 26-30 sec/1000 cc. and a chloride concentration of 100,000 ppm. A Drispac-type system should be used to limit fluid loss to 15-18 cc. pH should be maintained to 9.0-9.5 using additions of caustic soda and soda ash as necessary. Any seepage should be controlled with drilling paper.

WECEWED TO OCO PRICE

## SURFACE PIPE - 900' of 13 3/8" in 17 1/2" HOLE:

Attempt to circulate 425 sx of 65% Class "C" cement and 35% poz mix w/6% bentonite and 1/4 lb/sack cellophane flakes followed by 210 sx Class "C" cement containing 2% calcium cholride and 1/4 lb/sack cellophane flakes. A "Texas" pattern guide shoe and insert float valve will be run, along with 3 centralizers on bottom 300 ft of string. Thread socking compound should be used on bottom two joints of casing.

## INTERMEDIATE CASING - 4500 ft 8 5/8" in 12 1/4" HOLE:

The intermediate casing will have to be cemented in two stages. A DV tool will be run at ± 2800 ft. The first stage will consist of 800 sx 65% Class "C" and 35% poz mix with 5 lb/sack salt and 1/4 lb/sack cellophane flakes followed by 200 sx Class "C" with 1/4 lb/sack cellophane flakes. The second stage will consist of 1600 sx 65% Class "C" and 35% poz mix with 15 lb/sx salt followed by 200 sx Class "C" with 4 lb/sx salt and 1/4 lb cellophane flakes. A float shoe and collar along with 5 centralizers will be run on the bottom 600 ft of casing. The stage cementing tool will be run at ± 2800 ft with centralizers above and below. 3 cement baskets will also be run between the stage cementer and the top of the lost circulation zone. Thread locking compound will be used on the bottom joint of casing and on the stage cementer.

## PRODUCTION CASING - 7200' of 5 1/2" in 7 7/8" HOLE:

Production casing will be cemented with 400 sx Class "C" with 5 lb/sack salt and some fluid loss additive. This should be sufficient to bring the top of cement above the base of the intermediate casing. A float collar and shoe will be run. In addition, Centralizers will be placed on the bottom 4 joints of casign and across each potential zone of interest. Thread locking compound will be used on the bottom 4 joints of casing.

# EXHIBIT .

# PRESSURE CONTROL

## EQUIPMENT

B.O.P. ARRANGEMENT

3000 LB. W.P. B.O.P.

10" CAMERON TYPE-SS HYDRAULIC B.O.P. 3000 P.S.I.

10" G.K. HYDRILL 3000 W.P.

80 GALLON- STATION KOOMEY ACCUMULATOR

3000 LB. W.P. CHOKE MANIFOLD

