*Form 9-331 C (May 1963)		. C. C . C(LIT IN TU-	ELICATE	Form approv. Budget Burea	No. 42-R1425
· IIED STATES reverse b							-	72915
	DEPARTMEN	I OF THE	INTERI	OR			5. LEASE DESIGNATION	
	GEOLOGICAL SURVEY							
	APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK							
1a. TYPE OF WORK b. TYPE OF WELL	DRILL 🖾	DEEPEN		PLU	JG BAC	К 🗌	7. UNIT AGREEMENT N	AME
OIL WELL	GAS WELL X OTHER		SING Zone		MULTIPI Zone	. B []	S. FARM OR LEASE NAT	ME
2. NAME OF OPERATOR	/				VE	n	Majorie s Fe	deral
Inexco Oi			RE	ECE			9. WELL NO.	
3. ADDRESS OF OPERAT				•			#Z	
	n Bldg., Suite 19 (Report location clearly and						10. FIELD AND POOL, O Li Laclina	R WILDCAT
At surface			th any Stat	as wegut reme	ots.•)	in	·Morrow	
At proposed prod.	NE-NW Sec. 24-T	21S-R22E		0. C	. C.		11. SEC., T., R., M., OR I AND SURVEY OR AR	31.K. 184
ne proposed prod.	660' FNL & 2280	FWT.		ARTESIA,	OFFICE		24-T21S-R22E	
14. DISTANCE IN MILL	ES AND DIRECTION FROM NEA		T OFFICE*				12. COUNTY OR PARISH	
25 miles v	west of Carlsbad,	New Mexico	٠ ٢				Eddy	New Mexico
15. DISTANCE FROM PE	OPOSED*			F ACRES IN	LEASE		F ACRES ASSIGNED	I NEW PICKLOO
LOCATION TO NEAR PROPERTY OR LEAS (Also to nearest)		660 '		1120			20	
18. DISTANCE FROM P	ROPOSED LOCATION*		19. rrop	DSED DEPTH		20. ROTAI	AY OR CABLE TOOLS	
OR APPLIED FOR, ON	., DRILLING, COMPLETED, THIS LEASE, FT.	1/2 miles		9600 '		Ro	otary	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) May 7, 1979								
23.	I	PROPOSED CASI	NG AND C	EMENTING	PROGRA	M		
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER F	тоот	SETTING D	ЕРТН		QUANTITY OF CEMEN	
17 ½"	13 3/8	48#		± 200']	lo Surface	
12 4"	8 5/8"	24#		<u>+ 2000'</u>		7	To Surface	
8 5/8"	5 1/2	17#		Thru de	epest			
	I	I	1	pay	-		350 sacks	
	(SEE A	ITACHMENT '			Ŋ	APR O	NED CAL SURVEY	
		Gas No,	Foled	icate	d;			

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.

SIGNED R. T. FOSTER	TITLE Drilling Administrator	DATE <u>4/23/79</u>
(This space for Federal or State office use)	APPROVAL DATE 5-8-79	
APPROVED BY CONDITIONS OF APPROVAL, IF ANY :	TITLE	DATE

*See Instructions On Reverse Side

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N. MEXICO OIL CONSERVATION COMMISS. 4 WELL LOCATION AND ACREAGE DEDICATION PLAT

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

All distances must be from the outer boundaries of the Section								
	Oil Cc t		Le		Hajories	Fed.	Well No.	22
C Ser	24	¹⁷ ownishtp 21 So	uth	22 East	Ed	dy		
A: tual Footage Location	of Well: It from the	North	line and	2280	teet from the	West	line	
Ground Level Elev. 4148.5	Producing Fo			Wwdesign		norised	dinated Anreage: 320	A res
1. Outline th e a c	reage dedic	ated to the sub	oject well	by colored penc	il or hachure n	narks on the p	olat 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 consoli- dated by communitization, unitization, force-pooling.etc?								
Yes	No If a	answer is "yes;	' type of co	onsolidation				
If answer is ** this form if ne		owners and tra	iet descript	ions which hav	e actually been	n consolidate	d (Use revers)	e side of
No allowable w	ill be assig	ned to the well (c) or until a non-						
			R		1 21		ERTIFICATION	
N.M. 8419 WI – Inexco	i I	ny 100% 12.5%		APR 27 19 S. SELVINICA ATTEMA. NO	SLAVEY	tained herein	ify that the inform is true and comp nowledge and belie P. H.	ete to the
RI - USA ORRI - See B	açk — —		·			R. T. Fo	oster	
	l			i		Drilling	administra	ator
-						Inexco (April 23	Dil Company 3. 1979	
							<u> </u>	
e. Pro	ATE OF	SURVEY				shown on this notes of actu under my sup	tify that the we s plat was plotted ual surveys made ervision, and that correct to the b id belief	from field by me or the some
OF A REC	W MEXICO					Date surveyed April 11, Registered Fref and St. L. and St.	essional Enginee	
				 		Lim	W Wee	A
U 330 666 90	1320 1650 1	80 2310 2640	2000	1806 1000	500 0		John W. West Rongld J. Eidar	676 00.3239

ORRI -	Marvin Wolf & wife, Estelle Wolf H. Sanchez Moreno and wife, Alida Moreno Charles W. Thompson and wife, Virginia V. Thompson	5% .2% .2%	
	Richard D. Deets and Annelly B. Deets, his wife; Fred C. Smith, Jr. and Pamela R. Smith, his wife; C. James Tumlin, Jr., and Malone C. Tumlin, his wife; W. Harrison Reeves and Dorothy Q. Reeves, his wife; Morton Majoros and Lucie C. Majoros, his wife; Fernando Dewalde and Pilar Dewalde, his wife; and William Edwin Green, Jr., and Ann Green, his wife	4.1%	

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N.M.O.C.D. COPY United States Department of the Interior

GEOLOGICAL SURVEY P. O. Drawer U Artesia, New Mexico 88210

May 8, 1979

Inexco Oil Company 1100 Milam Building Suite 1900 Houston, Texas 77002

INEXCO OIL COMPANY Arroyo Federal No. 2 660 FNL 2280 FWL Sec. 24, T21S, R22E Eddy County Lease No. NM-8419
Above Data Required on Well Sign

Gentlemen:

Your APPLICATION FOR PERMIT TO DRILL the above-described well to a depth of 9,600 feet to test the Morrow formation is hereby approved subject to compliance with the OIL AND GAS OPERATING REGULATIONS (30 CFR 221) and the following conditions:

- Drilling operations authorized are subject to compliance with the attached General Requirements for Oil and Gas Operations on Federal 1. Leases, dated July 1, 1978.
- 2. Prior to commencing construction of road, pad, or other associated developments, operator will provide the dirt contractor with a copy of the Surface Use Plan and these Conditions of Approval including the attached General Requirements.
- Submit a Daily Report of Operations from spud date until the well is completed and the Well Completion Report (form 9-330) is filed. The report should be not less than 8" x 5" in size and each page 3. should identify the well.
- 4. All permanent above-ground structures and equipment shall be painted in accordance with the attached Painting Guidelines. The color used should simulate sandstone brown (Federal Standard No. 595A, color 20318 or 30318).
- · 5. Before drilling below the 8-5/8" intermediate casing, the blowout preventer assembly will consist of a minimum of one annular type and two ram type preventers.
 - 6. A kelly cock will be installed and maintained in operable condition.
 - 7. After setting the 8-5/8" casing string and before drilling into the Wolfcamp formation, the blowout preventers and related control equip-



ment shall be pressure tested to rated working pressures by an independent service company. Any equipment failing to test satisfactorily shall be repaired or replaced. This office should be notified in sufficient time for a representative to witness the tests and shall be furnished a copy of the pressure test report.

- 8. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before drilling into the Wolfcamp formation and used until production casing is run and cemented. Monitoring equipment shall consist of the following:
 - (1) A recording pit level indicator to determine pit volume gains and losses.
 - (2) A mud volume measuring device for accurately determining mud volume necessary to fill the hole on trips.
 - (3) A flow sensor on the flow-line to warn of any abnormal mud returns from the well.
- 9. Notify the Survey in sufficient time to witness the cementing of the 8-5/8" casing.
- 10. Cement behind the 13-3/8" and 8-5/8" casing must be circulated.

Sincerely yours,

(Orig. Sod.) HOR & LARA

Joe G. Lara Acting District Engineer N.M. 9190 Majories Federal #3 Sec 24-T31S-R22E Eddy County, New Mexico

1. Surface Formation: Gregburg

2. Estimated Formation Tops: San Andres 362' (+3861), Glorieta-1848'(+2375), Upr Abo-4523'(-300), Lwr. Abo-4693'(-470), U. Wolfcamp reef-5228'(-1005), M. Wolfcamp reef-6243'(-2020), Lwr. Wolfcamp det-6698'(-2475), basal Wolfcamp det-6850' (2650), Cisco reef-7293-7373'(3070 to 3150), Canyon Stone 7613-7693'(-3390 to 3470), Lwr Strawn-8153-8233' (3930 to -4010), Atoka-8533-8613'(-4310 to -4390), Morrow limestone-8703-8783'(-4480to 4560), Morrow A Zone-8818-8898'(-4595 to-4675), Morrow B limestone-8953-9033'(-4730 to -4810), Morrow C Zone-9048-9128' (-4825 to 4905), TD in Miss. -9600' (-5377')

- 3. Estimated Depths at which oil, water, gas or other mineral bearing formations are expected to be encountered: Fresh Water 0-200', Water Sands 200-TD intermittent, Oil and Gas 200-TD intermittent. Above to be evaluted while drilling.
- 4. Casing Program: Surface Casing in 17½" hole, 0-500', 13 3/8-48#-H40-ST&C Intermediate Casing in 12½" hole, 0-2000', 8 5/8-24#-K55-ST&C Production Casing in 7 7/8" hole, 0-7700', 5½-17#-K55-LT&C 7700-9600', 5½-17#-N80-LT&C
- 5. Pressure Control Equipment: 500-2000', 12"-900 Series. Double Hydraulic BOP Pressure Tested once with daily operational checks. 2000' to TD. 10"-5000 psi WP Double Gate and Hydril. Pressure test will be done to 5000 psi on rams and 2500 psi on annular preventor. A 3" choke manifold will be installed and tested to 5000 psi at intermediate point.
- 6. Drilling Mud Program: 0-4800' Fresh water with minimum weight and viscosity. 4800-TD - Brine water with sufficient viscosity to clean hole. Weight 9.0-9.3 ppg with brine and 2-3% KCL.
- 7. Auxillary Equipment Required: (a) Kelly cocks will be used. (b) No drill pipe floats will be allowed at any time. (c) A full opening floor stabbing valve will be on the floor (d) Mud system will be visually monitored at all times.
- 8. Logging, Testing, and Coring Program: DST's as warranted by drilling time and sample show. Logs: Dual Induction Laterolog 500-TD (2 runs), DHC Acoustic DLL RXO 2000-TD, FR-BHC Density-Neutron 500-TD (2 runs), Dipmeter 2000-TD.
- 9. Abnormal Conditions: No extreme abnormals of temperature, pressure or H2S are expected.
- 10. Anticipated starting date: May 7, 1979, Estimate 45 drilling days and 20 completion days.
- 11. Productive zones will be perforated, treated and tested. Gas will be flared during testing periods. Produced water during testing will be contained in the unlined drilling reserve pit. All possible oil will be stored and sold.

T. Foster R.

Drilling Administrator





DATE: April 23, 1979

WELL NAME: Lease # NM-8419

RECEIVED APR 2 7 1979 U.S. BEULUGICAL SURVEY ARTESIA, NEW MEXICO

LOCATION: 660' FNL & 2280' FWL NE-NW Sec 24-T21S-R22E, Eddy County, New Mexico

- 1. Existing Roads
 - A. Proposed well site as staked. (Actual staking shall include two each 200-foot directional reference stakes)

See Survey Plat

- B. Route and distance from nearest town or locatable reference point to where well access route leaves main road. See Maps A & B (attached). From Carlsbad, New Mexico proceed north on Highway #285 12 miles to junction Highway #137, turn left and proceed 9 3/10 miles to fork in the road. Take the right fork and proceed 9 1/2 miles on oil road. Turn right on lease road and proceed north 2.2 miles, turn left and go 1000' to location.
- C. Access road(s) to location color-coded or labeled.

See Map "B" (attached)

D. If exploratory well, all existing roads with a 3 miles radius (including type of surface, condition, etc.)

Not Applicable

E. If development well, all existing roads within a 1-mile radius of well site.

See Map "B" (attached)

F. Plans for improvement and/or maintenance of existing roads.

None required

2. Planned Access Roads:

Map showing all necessary access roads to be constructed or reconstructed, showing:

See Map "B" (attached)

- (1) Width 12'
- (2) Maximum grades 3/1
- (3) Turnouts None
- (4) Drainage Design: No special drainage design required, access road follow topography.
- (5) Location and site of culverts and brief description of any major cuts and fills.

None

- (6) Surfacing material Caliche
- (7) Necessary gates, cattle guards, or fence cuts: None
- (8) (New or reconstructed roads are to center-lined flagged at time of location staking.

1000' of new road

3. Location of Existing Wells:

Two-mile radius map if exploratory, or 1-mile radius map if development well, showing and identifying existing:

(1)	Water wells	None
(2)	Abandoned wells	See Map "B" (attached)
(3)	Temporarily Abandon	ed Wells None
(4)	Disposal Wells	None
(5)	Drilling Wells	None
(6)	Producing Wells	See Map "B" (attached)

- 3. Location of Existing Wells (cond'd)
 - (7) Shut-in wells None
 - (8) Injection wells None
 - (9) Monitoring or observation well for other resources None
- 4. Location of Existing and/or Prosposed Facilities:
 - A. Within 1-mile radius of location show the following exisiting facilities owned or controlled by lessee/operator:
 - (1) Tank Batteries See Map "B" (attached)
 - (2) Production Facilities- See Map "B" (attached)
 - (3) Oil Gathering Lines None
 - (4) Gas Gathering Lines None
 - (5) Injection Lines None
 - (6) Disposal Lines None
 - B. If new facilities are contemplated, in the event of production show:
 - (1) Proposed location and attendent lines by flagging if off well pad:

Adjacent to well pad

- (2) Dimensions of facilities See Diagram "E" (attached)
- (3) Construction methods and materials:

A tank battery pad will be constructed. There will be two 400 bbl. condensate production tanks, one 400 bbl. water reserve tank erected with fire guard constructed around the tank area, according to U. S. G. S. specifications. One multi-stage gas unit will be installed. These will be properly connected by an Oil Field Service Company.

(4) Protective measures and devices to protect livestock and wildlife.

Woven wire fences and flagging of the pits

C. Plan for rehabilitation of disturbed areas no longer needed for operations after construction completed.

Restoration of the drill site and tank battery area will be reshaped to conform with the topography. The top soil will be redistributed at the proper time. The sites will be reseeded as per the recommended seed mixture.

5. Location and Type of Water Supply:

A. Show location and type of water supply either on map or by written description.

The fresh water system will be used to drill, the water will be obtained from a commerical source.

B. State method of transporting water, and show any roads or pipelines needed.

The water will be transported by tank truck to the drill site.

C. If water well is to be drilled on lease, so state. (No APD for water well necessary, however, unless it will penetrate potential hydrocarbon horizons).

None

- 6. Source of Construction Materials:
 - A. Show information either on map or by written description.

Caliche for the surfacing of the drill pad and rebuilt access road will be obtained from an existing caliche pit located on fee surface 1 1/2 miles east of location

B. Identify if from Federal or Indian Land:

None

C. Describe where materials, such as sand, gravel, stone and soil material are to be obtained and used:

NW NE Sec 19-21S-23E, Eddy County, New Mexico

D. Show any needed access roads crossing Federal or Indian Lands under Item 2.

1000' of new road crossing Section 13 and 24 are Federal Public Surface

7. Method of Handling Disposal:

Describe methods and location of proposed containment and disposal of waste material, including:

- (1) Cuttings Reserve pit
- (2) Drilling Fluids Reserve pit
- (3) Production Fluids (oil, water) Frac Tanks
- (4) Sewage Porta Potty
- (5) Garbage and other waste material (trash pits should be fenced with small mesh wire to prevent wind scattering trash before being burned or buried).

There is a 2' X 2' steel trash pit with the drill rig. A trash pit is dug and the trash is buried.

(6) Statement regarding proper cleanup of well site area when rig moves out.

At the completion of drilling, the site and surrounding area will be cleaned up and all burnable material will be put in the burn pit and burned. All foreign material will be buried.

- 8. Ancillary Facilities:
 - Identify all proposed camps and air strips on a map as to their location, area required and construction methods. (Camp center and air strip center lines to be staked on the ground).

None Planned

9. Well Site Layout:

A plat (not less than 1" = 50') showing:

(1) Cross section of drill pad with cuts and fills.

See Diagram "D" (attached)

(2) Location of mud tanks, reserve, burn and trash pits, pipe racks, living facilities and soil material stockpiles.

See Diagram "C" (attached)

- 9. <u>Well site layout (cont'd)</u>
 - (3) Rig orientation, parking areas, and access roads:

See Diagram "C" (attached)

(4) Statement as to whether pits are to be lined or unlined. (Approval as used in this section means field approval of location. All necessary staking of facilities may be done at the time of field inspection.) A registered surveyor is not mandatory for such operations.

Drilling reserve pits will be lined for drilling.

10. Plans for Restoration of Surfaces:

State restoration program upon completion of operations, including:

(1) Backfilling, leveling, contouring, and waste disposal; segregation of spoils materials as needed.

The drill site will be cleaned and waster material will be put in the trash burn pit, which will be covered at the finish of the drilling operation. The reserve pit will be backfilled as soon as it is dry enough.

(2) Revegeation and rehabilitation - including access roads (normally per BLM recommendations).

The top soil will be re-distributed and at the proper season the proper seed mixture per BLM requirements.

(3) Prior to rig release, pits will be fenced and so maintained until cleanup.

At completion of the drilling, all pits will be fenced.

(4) If oil on pit, remove oil and install overhead flagging.

If there is oil on the reserve pit, it will be removed and flagged with overhead flagging.

(5) Timetable for commencement and completion of rehabilitation operations.

Depending upon climatic conditions, restoration should be completed from six months to one year after spud date.

11. Other Information:

General description of:

(1) Topography, soil characteristics, geologic features, flora and funa.

The drill site is on a very gentle sloping area to the south - very sand alluvial fill area. Very sparce Sand Love Grass and Mesquite.

(2) Other surface use activities and surface ownership of all involved lands:

Cattle grazing United States Public Surface

(3) Proximity of water, occupied dwellings, archeological, historical or cultural sites.

None.

12. Lessee's or Operator's Representative:

Include the name, address and phone number of the lessee's or operator's field representative who is responsible for assuring compliance with the approved surface use and operations plan.

Inexco Oil Company 1100 Milam Building Attention: Mr. R. T. Foster: Phone: Suite 1900 AC 713-651-3452 Houston, Texas 77002

13. Certificates:

The following statement is to be incorporated in the plan and must be signed by the lessee's or operator's field representative who is identified in Item No. 12 of the plan.

I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access roads; that I am familiar with the conditions which presently exist; and 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 the Inexco Oil Company and its contractors under which it is approved.

R. T. Foster, Drilling Administrator

4-23-79. Date





- Producing Wells
- **O** Dry Holes
 - Existing Roads
 - Proposed Drill Site and New Access Road

Majoroes Fed. 3 Lease No. 8419 NE NW Sec 24-T21S-R22E Eddy County New Mexico



Cat S Dril *ر* لا rod 11 ~ 20 AGRAN EProposed Drill Site Reserve K.T

