If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.

AT50766

Form 3160-3* (August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Mornin - Year MAR 2 2007 MAR 1 Le

.06 3

OMB No. 1004-0136 Expires November 30, 2000

Lease Serial No.

NM-14459

		\	Mr. VKIN	 		
APPLICATION FOR PERMIT TO	DRILL O	R REENTER 🔪	CD-ARIL	6. If Indian, Allottee or		
				Not App		
1a. Type of Work: X DRILL	REENTER			7. If Unit or CA Agreen	nent, Name and No.	
				Not App		
h Town of Walls Digital Con Di	. г	1		8. Lease Name and Wel	^{1No.} /2559	
b. Type of Well: Oil Well Gas Uther Well	`	Single Zone		Mescal SE I	Federal #2	
2. Name of Operator ROSWELL C	ONTROL	LED WATER BAS	The	9. API Well No.	_	
Yates Petroleum Corporation 255 75				30 -015-	35509	
3A. Address 105 South Fourth Street	3b. Phon	e No. (include area cod	e)	10. Field and Pool, or Ex	ploratory	
Artesia, New Mexico 88210		(505) 748-147	<u>'1</u>			
4. Location of Well (Report location clearly and in accordance with	any State req	uirements.*)		11. Sec., T., R., M., or B	lk, and Survey or Area	
At surface 190' FSL and 760' FWL Un	nit N (SES	W) Surface Loca	tion			
At proposed prod. Zone 990' FSL and 660' FWL Uni		V) Bottom Hole L	ocation.	Section 18,	T21S-R22E	
14. Distance in miles and direction from nearest town or post office*				12. County or Parish	13. State	
Approximately forty five miles (45) miles, south	and west	of Artesia, New		Eddy	NM NM	
15. Distance from proposed* location to nearest	16. No.	of Acres in lease	17. Spacing Ur	nit dedicated to this well		
property or lease line, ft. (Also to nearest drig, unit line, if any)		802.88		S/2		
18. Distance from proposed location*	10 Pror	oosed Depth	20 RIM/RIA	/BIA Bond No. on file		
to nearest well, drilling, completed, applied for, on this lease, ft. 990'	4 -	' TVD 8698' MD	20. BLW/BIX	NMB000434		
**						
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. App	roximate date work will	start*	23. Estimated duration		
4515 GL		ASAP		30 D	ays	
	24. <i>A</i>	Attachments				
The following, completed in accordance with the requirements of Ons	shore Oil and	Gas Order No. 1, shall b	e attached to this	form:		
1. Well plat certified by a registered surveyor.		4. Bond to cove	er the operations	unless covered by an exist	ing bond on file (see	
2. A Drilling Plan.		Item 20 abov	•			
3. A Surface Use Plan (if the location is on National Forest System L	ands, the	5. Operator cert	•			
SUPO shall be filed with the appropriate Forest Service Office.	·····	} -		nation and/or plans as may b	ne required by the	
/ / c common		authorized of		and of plants as may		
2. Signature 1 . O C oo	T	Name (Printed/Typed)		Da	te	
Wiebbre a. Callo	i	Debbie L. Caffall		!	1/22/2007	
Title:				_		
Regulatory Agent/Land Department						
Approved by (Signature) /s/ Tony J. Herrell	i	Name (Printed/Typed)		Da	te MAD a a a a a a	
78/ 10hy 3: 11011011	<u></u>	181 Iony	J. Herrell	<u>_</u>	teMAR 0 9 2007►	
Title	19	Office CARI	SBAD FI	ELD OFFICE		
FIELD MANAGER	 					
Application approval does not warrant or certify that the applicant hol	lds legal or eq	uitable title to those righ	its in the subject	lease which would entitle th	ne applicant to conduct	
operations thereon.				ADDDOWAL I	COD 1 VEAD	

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on reverse

C-144 attached

SEE ATTACHED FOR CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED MARTIN YATES, III

FRANK W. YATES



105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210-2118
TELEPHONE (505) 748-1471

S.P. YATES CHAIRMAN EMERITUS

JOHN A. YATES CHAIRMAN OF THE BOARD

PEYTON YATES
PRESIDENT

FRANK YATES, JR. EXECUTIVE VICE PRESIDENT

JOHN A. YATES, JR.

Month - Year MAR 2 8 2007 OCD - ARTESIA, NM

March 27, 2007

State of New Mexico Oil Conservation Division 1301 W. Grand Avenue Artesia, NM 88210

RE:

C-102 for Mescal "SE" Federal #2

Bryan:

Enclosed please find updated C-102 per your request via E-mail this date on the above captioned.

If you have questions, please contact Debbie Caffall at (505) 748-4376 or Shirley Pruitt at 748-4356. Thank you.

Sincerely,

YATES PETROLEUM CORPORATION

Shirley Pruitt

Regulatory Technician

/sp

Enclosure(s)

DISTRICT | 1625 N. French Dr., Hobbe, NM 88240 DISTRICT || 1301 W. Grand Avenue, Artesia, NM 88210 DISTRICT |||

State of New Mexico
Energy, Minerals and Natural Resources Department

Revised Oct 12, 25
Submit to Appropriate Distriction State Legal 4 5 s
Fee Legal 3 7 s

OIL CONSERVATION DIVISION

1220 South St. Francis Dr. Santa Fe, New Mexico 87505

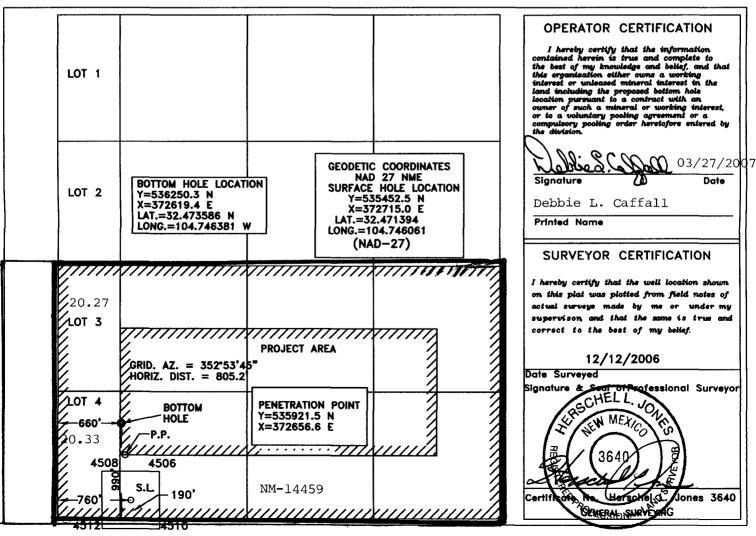
MONTH - YEAR MAR 2 8 2007 OCD - ARTESIA, NIM

☐ AMENDED REPORT

1000 Rio Brazos Rd., Aztec, NM 87410 DISTRICT IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

			WELL LO	CATION	AND ACRE	AGE DEDICAT	ION PLAT	/	
API	Number			Pool Code			Pool-Name		
						Wildrat;	MISS GAS		
Property C	ode				Property Nan	10		Weil Nu	ımber
		İ			MESCAL "SE	" FEDERAL		2	
OGRID No).				Operator Nan	ne		Elevat	lion
025575				YATES P	ETROLEUM CO	RPORATION		4515	
					Surface Loc	ation			
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	18	215	22E	ļ	190	SOUTH	760	WEST	EDDY
	L		Bottom	Hole Loc	ation If Differe	ent From Surface	B		
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	18	215	22E		990	SOUTH	660	WEST	EDDY
Dedicated Acres	Joint o	r Infill (Consolidation C	ode O	rder No.				
280 60 57	2								

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



YATES PETROLEUM CORPORATION Mescal SE Federal #2

190' FSL and 760' FWL, Unit N (SESW) surface hole location 990' FSL and 660' FWL, Unit N (SESW) bottom hole location Section 18.-T21S-R22E Eddy County, New Mexico

1. The estimated tops of geologic markers are as follows:

San Andres	545'
Glorieta	1,975'
Upper Yeso	2,095
Tubb	2,849'
Lower Yeso	2,966'
ABO	3,517'
Wolfcamp	4,973'
Cisco	5,933'
Strawn	7,483'
Atoka	8,003'
Upper Morrow	8,151'
Middle Morrow	8,313'
Lower Morrow	8,383'
Chester Lm	8,593'
TD	8,698'

2. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered:

Water:

150'-200'

Oil or Gas: All potential zones.

Pressure Control Equipment: Rotating Head installed on 13 3/8" casing. 5000 psi BOP 3. system nippled up on 9 5/8" casing, systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout Preventor controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventors will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit B.



Auxiliary Equipment:

- Α. Auxiliary Equipment: Kelly cock, pit level indicators, flow sensor equipment and a sub with full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for use when kelly is not in use.
- THE PROPOSED CASING AND CEMENTING PROGRAM: 4.
 - A. Casing Program: (All New)

<u>Hole Size</u>	Casing Size	Wt./Ft	<u>Grade</u>	Coupling	<u>Interval</u>
17 ½"	13 3/8" 9 5/8"	48#	H-40	ST&C	0-400'
12 1/4"	9 5/8****	[™] 3े6#	J-55	ST&C	0-2050'
8 3/4"	5 1/2"	17#	L-80	LT&C	0-5600'
	No. 2 %	Broj Car	HCP- 110	LT&C	5600'-8698'

1. Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, Tensile Strength 1.8

Mescal SE Federal #2 Page 2

A. **CEMENTING PROGRAM:**

Surface Casing: 150 sx C Lite (YLD 1.98 WT 12.50). Tail in with 200 sx C / CaCl2 2%

(YLD 1.34 WT 14.80).

Intermediate Casing: 180 sx Thixotropi (YLD 1.52 WT 14.60) and 400 sx C Lite (YLD 1.98

WT 12.50). Tail in with 200 sx C / CaCl2 2% (YLD 1.34 WT 14.80).

Production Casing: 500 sx C Lite (YLD 2.51 WT 11.50). Tail in with 1375 sx H (15:61:11H

make up) (YLD 1.64 WT 13.20).

5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	Fluid Loss
0-400'	Fresh Water/Air Mist	8.4 - 8.4	28-28	N/C
400'-2050'	Fresh Water/Air Mist	8.4 - 8.4	28-28	N/C
2050'-7948'	Cut Brine/6% KCL @ 3434	' 9.1 9.5	28-28	N/C
7948'-8698'	Salt Water Gel/Starch	9.4 9.6	33-40	>12/cc

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blow out will be available at the well site during drilling operations. Mud will be checked hourly by rig personnel.

6. **EVALUATION PROGRAM:**

Samples: 10' Samples—Surface casing to TD.

Logging: Platform Express: CNL/LDT/NGT from TD to surface casing

HALS/NGT; Possible FMI

CNL/GR from TD to surface.

& Rotary Sidwall Cores DLL-MSFL from TD to surface casing. BHC-Sonic from TD to surface casing.

None Anticipated Corina:

Possible from ABO to TD DST's:

7. ABNORMAL CONDITIONS, BOTTOM HOLE PRESSURE, AND POTENTIAL HAZARDS:

Anticipated BHP:

From: 0 TO: 400' TVD Anticipated Max. BHP: 175 PSI From: 400' TO: 2050' TVD Anticipated Max. BHP: 895 PSI From: 2050' TO: 8550' TVD Anticipated Max. BHP: 4270 PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None.

H2S Zones Anticipated: None Anticipated

Maximum Bottom Hole Temperature: 110 F

ANTICIPATED STARTING DATE: 8.

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 25 days to drill the well with completion taking another 20 days.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN Mescal SE Federal #2

190' FSL and 760' FWL, Unit N (SESW) 990' FSL and 660' FWL, Unit N (SESW) Section 18,-T21S-R22E Eddy County, New Mexico

This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operations.

1. EXISTING ROADS:

Exhibit A is a portion of the BLM map showing the well and roads in the vicinity of the proposed location. The proposed wellsite is located approximately 45 miles Southwest of Artesia, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

Go South of Artesia on Highway 285 for approximately 20.4 miles to Queens Hwy (SR 137), turn west (right) on to Queens Hwy. Travel approximately 8 miles to the Marathon Plant Road (CR 401). Take west (right) fork and travel approximately 8.8 miles to CR 400 (Box Canyon Road) Turn right and go approximately 6.5 miles turn east/northeast and travel approximately .9 of a mile to the edge of the Box Canyon Unit #5 well pad. The new access lease road will start here with a faded two track heading east / northeast .2 of a mile.

2. PLANNED ACCESS ROAD:

- A. The proposed new access will be approximately 689.9 '(section 24, T21S-R21E) 2,497.1' (section 19, T21S-R22E) 63.9' (section 18, T21S-R21E) in length from the point of origin to the south/southwest corner of the drilling pad. The new road will lie in an east/north direction.
- B. The new road will be 14 feet in width (driving surface) and will be adequately drained to control runoff and soil erosion.
- C. Existing roads will be maintained in the same or better condition.

3. LOCATION OF EXISTING WELL:

- A. There is drilling activity within a one-mile radius of the wellsite.
- B. Exhibit D shows existing wells within a one-mile radius of the proposed wellsite.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. There are production facilities on this lease at the present time.
- B. In the event that the well is productive, the necessary production facilities will be installed on the drilling pad. If the well is productive oil, a gas or diesel self-contained unit will be used to provide the necessary power. No power will be required if the well is productive of gas.

Mescal SE Federal #2 Page 2

5. LOCATION AND TYPE OF WATER SUPPLY:

A. It is planned to drill the proposed well with a fresh water system. The water will be obtained from commercial sources and will be hauled to the location by truck over the existing and proposed roads shown in Exhibit A.

6. SOURCE OF CONSTRUCTION MATERIALS:

Dirt contractor will locate nearest pit and obtain any permits and materials needed for construction.

7. METHODS OF HANDLING WASTE DISPOSAL:

A. Drill cuttings will be disposed of in the reserve pits.

B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.

C. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted.

D. Oil produced during operations will be stored in tanks until sold.

E. Current laws and regulations pertaining to the disposal of human waste will be complied with.

F. All trash, junk, and other waste materials will be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary land fill. Burial on site is not approved.

8. ANCILLARY FACILITIES: NONE

9. WELLSITE LAYOUT:

- A. Exhibit C shows the relative location and dimensions of the well pad, the reserve pits, the location of the drilling equipment, rig orientation and access road approach.
- B. The reserve pits will be plastic lined.
- C. A 600' x 600' area has been staked and flagged.

10. PLANS FOR RESTORATION:

- A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleaned of all trash and junk to leave the wellsite in as aesthetically pleasing a condition as possible.
- B. Unguarded pits, if any, containing fluids will be fenced until they have dried and been leveled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled level after they have evaporated and dried.

11. SURFACE OWNERSHIP: U.S.A. – Bureau of Land Management Carlsbad, New Mexico Field Office

#8050 – Texas Hill Allotment Corrales Livestock Corporation P.O. Box 1591 Carlsbad, NM 88220

Minerals: USA - Bureau of Land Management Carlsbad, New Mexico Field Office

12. OTHER INFORMATION:

A. Topography: Refer to the existing archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.

B.

B. The primary surface use is for grazing.

13. OPERATOR'S REPRESENTATIVE:

A. Through A.P.D. Approval:
Debbie L. Caffall, Permit Agent
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471

Through Drilling, Completions & Prod. Pinson McWhorter, Operations Manager Yates Petroleum Corporation 105 South Fourth Street Artesia, New Mexico 88210 Phone (505) 748-1471

14. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site 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 Yates Petroleum Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

1/22/07

Regulatory Agent

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2150	1.25	352.88	2150	0.54	-0.07	2.5	0	HS	
2175	1.88	352.88	2174.99	1.22	-0.15	2.5	0	HS	
2200 2225	2.5	352.88	2199.97	2.16	-0.27	2.5	0	HS	
2250	3.12 3.75	352.88 352.88	2224.94	3.38	-0.42	2.5	0	HS	
2275	4.38	352.88	2249.89 2274.83	4.87	-0.61	2.5	0	HS	
2300	5	352.88	2299.75	6.63 8.65	-0.83 -1.08	2.5	0	HS	
2325	5.63	352.88	2324.64	19.95	-1.06	2.5 2.5	0	HS	
2350	6.25	352.88	2349.5	13.52	-1.69	2.5	0	HS HS	
2375	6.88	352.88	2374.34	16.35	-2.04	2.5	0	HS	
2400	7.5	352.88	2399.14	19.46	-2.43	2.5	0	HS	
2425	8.12	352.88	2423.91	22.83	-2.85	2.5	0	HS	
2450	8.75	352.88	2448.64	26.47	-3.31	2.5	Ō	HS	
2475	9.38	352.88	2473.33	30.37	-3.8	2.5	0	HS	
2500	10	352.88	2497.97	34.55	-4.32	2.5	0	HS	
2525	10.62	352.88	2522.57	38.99	-4.87	2.5	0	HS	
2550	11.25	352.88	2547.11	43.7	-5.46	2.5	0	HS	
2575	11.87	352.88	2571.61	48.67	-6.08	2.5	0	HS	
2600 2625	12.5	352.88	2596.04	53.91	-6.74	2.5	0	HS	
2650	13.12 13.75	352.88 352.88	2620.42 2644.74	59.41 65.17	-7.43 9.15	2.5	0	HS	
2675	14.38	352.88	2668.99	71.2	-8.15 -8.9	2.5	0	HS	
2700	15	352.88	2693,17	77.49	-9.69	2.5 2.5	0	HS HS	
2725	15.63	352.88	2717.28	84.04	-10.51	2.5	0	HS .	
2750	16.25	352.88	2741.32	90.85	-11.36	2.5	0	HS	
2775	16.87	352.88	2765.28	97.92	-12.24	2.5	Ö	HS	
2800	17.5	352.88	2789.17	105.25	-13.16	2.5	0	HS	
2825	18.13	352.88	2812.97	112.84	-14.11	2.5	0	HS	
	19.73	5 × 200	2835.74	120,37	-15.05	25	3 0 T	e AS	TUBB
2850	18.75	352.88	2836.69	120.69	-15.09	2.5	0	HS	
2875	19.37	352.88	2860.31	128.79	-16.1	2.5	0	HS	
2900	20	352.88	2883.85	137.15	-17.14	2.5	0	HS	
2925	20.63	352.88	2907.3	145.76	-18.22	2.5	0	HS	
2950 2966	21.25 21.65	352.88 352.88	2930.65	154.62	-19.33	2.5	0	HS HS	
2975	21.87	352.88	2945.54 2953.9	160.43 163.74	-20:05 -20,47	2.5	0.	HS	. LOWER YESO
3000	22.5	352.88	2977.05	173.11	-21.64	2.5 2.5	0	HS HS	
3025	23.12	352.88	3000.09	182.73	-22.84	2.5	0	HS	
3050	23.75	352.88	3023.03	192.59	-24.07	2.5	0	HS	
3075	24.38	352.88	3045.86	202.71	-25.34	2.5	Ö	HS	
3100	25	352.88	3068.57	213.07	-26.63	2.5	0	HS	
3116.52	25.41	352.88	3083.52	220.05	-27.51	2.5	0	HS	
3516.94	25.41	352,88	3475	404.61	50.58	0	1 1 1 1		ABO
3960.81	25.41	352.88	3846.11	579.57	-72.45	0			
3975	25.06	352.88	3858.87	585.74	-73.22	2.5	180	HS	
4000	24.43	352.88	3881.57	596.12	-74.52 75.70	2.5	180	HS	
4025 4050	23.81 23.18	352.88 352.88	3904.39 3927.32	606.26	-75.78 77.02	2.5	180	HS	
4050	23.18	352.88 352.88	3927.32	616.15 625.79	-77.02 -78.22	2.5 2.5	180 180	HS HS	
4100	21.93	352.88	3973.49	635.18	-79.4	2.5	180	HS	
4125	21.31	352.88	3996.73	644.32	-80.54	2.5	180	HS	
4150	20.68	352.88	4020.07	653.21	-81.65	2.5	180	HS	
4175	20.06	352.88	4043.51	661.85	-82.73	2.5	180	HS	
4200	40.40	352.88	4067.04	670.23	-83.78	2.5	180	HS	
	19.43			070.00	-84.79	2.5	180	HS	
4225	18.8	352.88	4090.66	678.36					
4225 4250	18.8 18.18	352.88 352.88	4114.37	686,23	-85.78	2.5	180	HS	
4225 4250 4275	18.8 18.18 17.55	352.88 352.88 352.88	4114.37 4138.16	686.23 693.84	-85.78 -86.73	2.5 2.5	180 180	HS HS	
4225 4250 4275 4300	18.8 18.18 17.55 16.93	352.88 352.88 352.88 352.88	4114.37 4138.16 4162.04	686.23 693.84 701.19	-85.78 -86.73 -87.65	2.5 2.5 2.5	180 180 180	HS HS HS	
4225 4250 4275 4300 4325	18.8 18.18 17.55 16.93 16.3	352.88 352.88 352.88 352.88 352.88	4114.37 4138.16 4162.04 4186	686.23 693.84 701.19 708.29	-85.78 -86.73 -87.65 -88.54	2.5 2.5 2.5 2.5	180 180 180 180	HS HS HS	
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Yates Petroleum Corporation

Mescal SE Federal #2
190' FSL and 760' FWL Unit N Lot 4 (SL)
990' FSL and 660' FWL, Unit N Lot 4 (BH)
Section 18, T21S-R22E Eddy County, New
Mexico

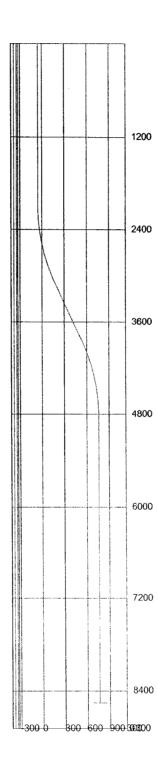
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4600	9.41	352.88	4453.94	769.04	-96.13	2.5	180	HS	
4625	8.79	352.88	4478.62	772.97	-96.62	2.5	180	HS	
4650	8,16	352.88	4503.35	776.64	-97.08	2.5	180	HS	
4675	7.53	352.88	4528.12	780.04	-97.5	2.5	180	HS	
4700	6.9	352.88	4552.92	783.17	-97.9	2.5	180	HS	
4725	6.27	352.88	4577.75	786.03	-98.25	2.5	180	HS	
4750	5.64	352.88	4602.62	788.62	-98.58	2.5	180	HS	
4775	5.01	352.88	4627.51	790.94	-98.87	2.5	180	HS	
4800	4.38	352.88	4652.43	793	-99.12	2.5	180	HS	
4825	3.74	352.88	4677.36	794.78	-99.35	2.5	180	HS	
4850	3.1	352.88	4702.32	796.29	-99.54	2.5	180	HS	
4875	2.46	352.88	4727.29	797.54	-99.69	2.5	180	HS	
4900	1.79	352.88	4752.27	798.51	-99.81	2.5	180	HS	
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Mescal SE Federal #2
190' FSL and 760' FWL Unit N Lot 4 (SL)
990' FSL and 660' FWL, Unit N Lot 4 (BH)
Section 18, T21S-R22E Eddy County, New
Mexico

3D³ Directional Drilling Planner - 3D View

Company: Yates Petroleum Corporation

Well: Mescal SE Federal #2



Yates Petroleum Corporation

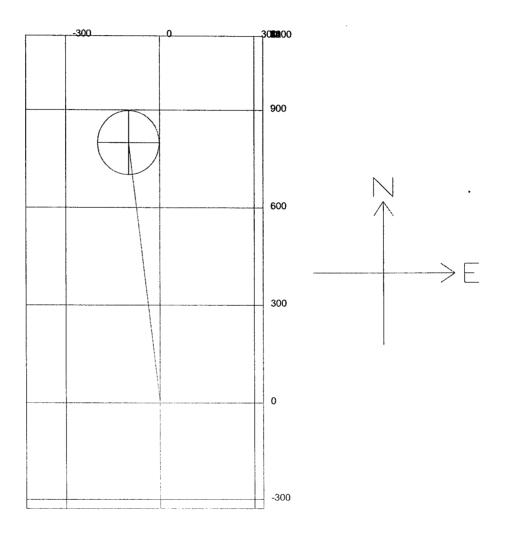
Mescal SE Federal #2
190' FSL and 760' FWL Unit N Lot 4 (SL)
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Section 18, T21S-R22E Eddy County, New

File: C:\Program Files\Drilling Toolbox 2001\Templates\Visual Wellbore\mescal2.wpp Mexico

3D³ Directional Drilling Planner - 3D View

Company: Yates Petroleum Corporation

Well: Mescal SE Federal #2



Yates Petroleum Corporation

Mescal SE Federal #2
190' FSL and 760' FWL Unit N Lot 4 (SL)
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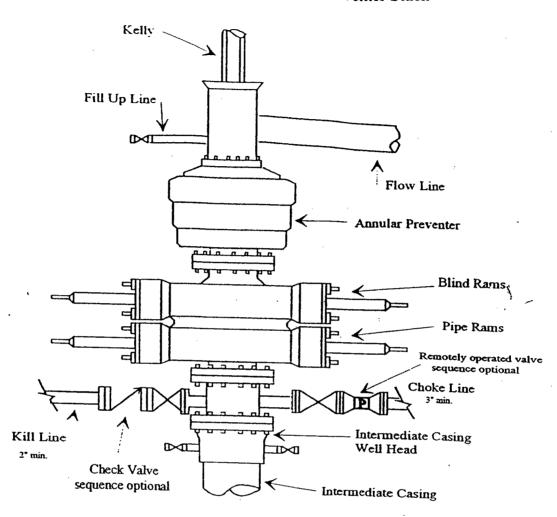
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Yates Petroleum Corporation Mescal SE Federal #2 TEXAS HILL QUADRANGLE Cawley Drawa 190' FSL and 760' FWL Unit N Lot 4 (SL) NEW MEXICO 990' FSL and 660' FWL, Unit N Lot 4 (BH) MINUTE SERIES (TOPOGRAPHIC)DEI Section 18, T21S-R22E Eddy County, New Mexico Exhibit "A" NE/4 TEXAS HILL IS QUADRANGLE 104°45' 524000mE 370 000 FEET (EAST) R 21 Big Tank 4310 12 4659 13 18 17 13 BH Mescal SE Federal #2 FEMIC New Access Lease Road .Water Tank Gravel Pit BM 4537 Faded Two Track Canyon 20 Indian Burro Existing Lease Road Box Canyon Road **CR 400** -,Burro -29

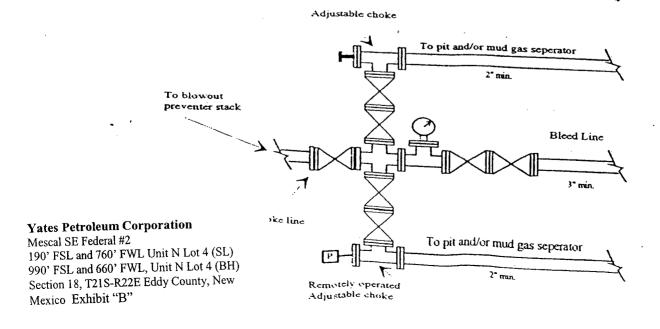


Yates Petroleum Corporation

Typical 5,000 psi Pressure System
Schematic
Annular with Double Ram Preventer Stack



Typical 5,000 psi choke manifold assembly with at least these minimun features



CONDITIONS OF APPROVAL - DRILLING

Operator's Name:

Yates Petroleum Corp. Mescal SE Federal # 2

Well Name & No. Location:

190'FSL, 760'FWL, SEC18, T21S, R22E, Eddy County, NM 990'FSL, 660'FWL, SEC18, T21S, R22E, Eddy County, NM

BHL: Lease:

NM-14459

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 - for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

A. Spudding

- B. Cementing casing: 13.375 inch 9.625 inch 5.5 inch
- C. BOP tests
- 2. A Hydrogen Sulfide (H2S) Drilling Plan should be activated prior to drilling into the <u>N/A</u> Formation. A copy of the plan shall be posted at the drilling site.
- 3 Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
- 4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.
- 5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.
- 6. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.
- 7. Gamma-Ray/Neutron logs shall be run from the base of the Salado Formation to the surface; cable speed not to exceed 30 feet per minute.

II. CASING:

- 1. The 13.375 inch surface casing shall be set at APPROXIMATELY 400 TO 545 feet, below usable water and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string. Potential for lost circulation in the Artesia Group formations may warrant setting surface casing in the deeper range.
- 2. The minimum required fill of cement behind the <u>9.625</u> inch intermediate casing is <u>circulate cement to</u> the surface.
- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is <u>cement shall extend</u> upward a minimum of 200 feet above the base of the intermediate casing string.
- 4. Whenever a casing string is cemented in the R-111-P Potash Area, cement shall be allowed to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before drilling the plug or initiating tests.

III. PRESSURE CONTROL:

- 1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 13.375 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
- 2. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling the surface and intermediate casing shall be <u>2000</u> psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the <u>9.625</u> inch casing shall be <u>3000</u> psi.
- 3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
- A variance to test the_____ to the reduced pressure of ___psi with the rig pumps is approved.
- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.
- BOPE must be tested prior to drilling into the Wolfcamp Formation by an independent service company.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** Formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

- 1. Recording pit level indicator to indicate volume gains and losses.
- 2. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
- 3. Flow-sensor on the flow line to warn of abnormal mud returns from the well.

Engineering may be contacted at 505-706-2779 for variances if necessary.

Fwright 2/2/07