

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Form approved
Budget Bureau No. 1004-0136
Expires August 31, 1985

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK:

DRILL ☒ DEEPEN ☐ PLUG BACK ☐

b. TYPE OF WELL:

OIL ☐ GAS ☐ SINGLE ZONE ☐ MULTIPLE ZONE ☒
WELL ☐ WELL ☒ OTHER ☐

2. NAME OF OPERATOR

CAULKINS OIL COMPANY

3. ADDRESS OF OPERATOR

P.O. BOX 340

BLOOMFIELD, NM 87413

Ph. (505) 632-1544

4. LOCATION OF WELL (Report location clearly and include data on existing wells, if any)

At surface

At proposed prod. zone 1879' E.S. 1769' E/E (Unit J)

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POSTOFFICE*

35 miles southeast of Blanco, New Mexico post office

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST PROPERTY
OR LEASE LINE, FT.

(Also to nearest dry well line, if any)

1769'

16. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL DRILLING, COMPLETED,
OR APPLIED FOR ON THIS LEASE, FT.

189'

16. NO. OF ACRES IN LEASE

2400'

17. NO. OF ACRES ASSIGNED TO THIS WELL

East 320

19. PROPOSED DEPTH

7500' —

20. ROTARY OR CABLE TOOLS

ROTARY

21. ELEVATION*

This action is subject to technical and
procedural review pursuant to 43 CFR 3165.3
and appeal pursuant to 43 CFR 3165.4.

6541'

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
12 1/4"	9 5/8"	36#	450'	198 sacks (225 cu. ft.) Live to Surface
7 7/8"	5 1/2"	15.5# & 17#	7500' —	1269 sacks (2035 cu. ft.) Live to Surface

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"

EXHIBITS attached as follows

"A" Location and Elevation Plat

"B" Ten-Point Compliance Program

"C" Blowout Preventer Schematic

"D" Multi-Point Requirements for APD

"E" Vicinity Maps - Access Roads

"F" Drill Rig Layout

"G" Production Facility Schematic

"H" Acreage Dedication Plat

"I" Archaeological Report

"J" Williams Field Services' Pipeline Plat

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

Robert J. Verquer

TITLE

SUPERINTENDENT

DATE

12-18-00

PERMIT NO.

APPROVAL DATE

APPROVED BY

/s/ Jim Lovato

TITLE

DATE

FEB - 6

EXHIBIT "H"

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-10

Revised October 18, 199

Instructions on bac

Submit to Appropriate District Office

State Lease - 4 Copie

Fee Lease - 3 Copie

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

* API Number 30-039-26621		* Pool Code 71599	* Pool Name BASIN DAKOTA
* Property Code 2455	* Property Name BREECH "A"		* Well Number 136-F
* OGRID No. 003824	* Operator Name Caulkins Oil Company		* Elevation 6541 GR

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	10	26N	6W		1879'	South	1769'	East	Rio Arriba

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

* Dedicated Acres 320	* Joint or Infill I	* Consolidation Code	* Order No.
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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

16			17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and Signature <u>Robert L. Verquer</u> Printed Name Robert L. Verquer Title Superintendent Date 12-18-00	
				18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by my supervision, and that the same is true and correct to the best of my knowledge and belief. Date of Survey Signature and Seal of Professional Surveyor:

Certificate Number

EXHIBIT "H"

District I
PO Box 1980, Hobbs, NM 88241-1980
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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-24621		² Pool Code 72319	³ Pool Name BLANCO MESA VERDE
⁴ Property Code 2455	⁵ Property Name BREECH "A"		⁶ Well Number 136-F
⁷ OGRID No. 003824	⁸ Operator Name Caulkins Oil Company		⁹ Elevation 6541 GR

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	10	26N	6W		1879'	South	1769'	East	Rio Arriba

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 320		¹³ Joint or Infill I		¹⁴ Consolidation Code		¹⁵ Order No.			

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

16					¹⁷ OPERATOR CERTIFICATION	
					I hereby certify that the information contained herein is true and complete to the best of my knowledge and	
					Signature <u>Robert L. Verquer</u>	
					Printed Name <u>Robert L. Verquer</u>	
					Title <u>Superintendent</u>	
					Date <u>12-18-00</u>	
					¹⁸ SURVEYOR CERTIFICATION	
					I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by my supervision, and that the same is true and correct to the best of my knowledge and belief.	
					Date of Survey	
					Signature and Seal of Professional Surveyor:	
					Certificate Number	

EXHIBIT "E"
CAULKINS OIL COMPANY

BREECH A No. 136F

SE/4 SECTION 10, T-26-N, R-6-W, N.M.P.M.,
RIO ARriba COUNTY, NEW MEXICO
1879' FSL 1769' FEL

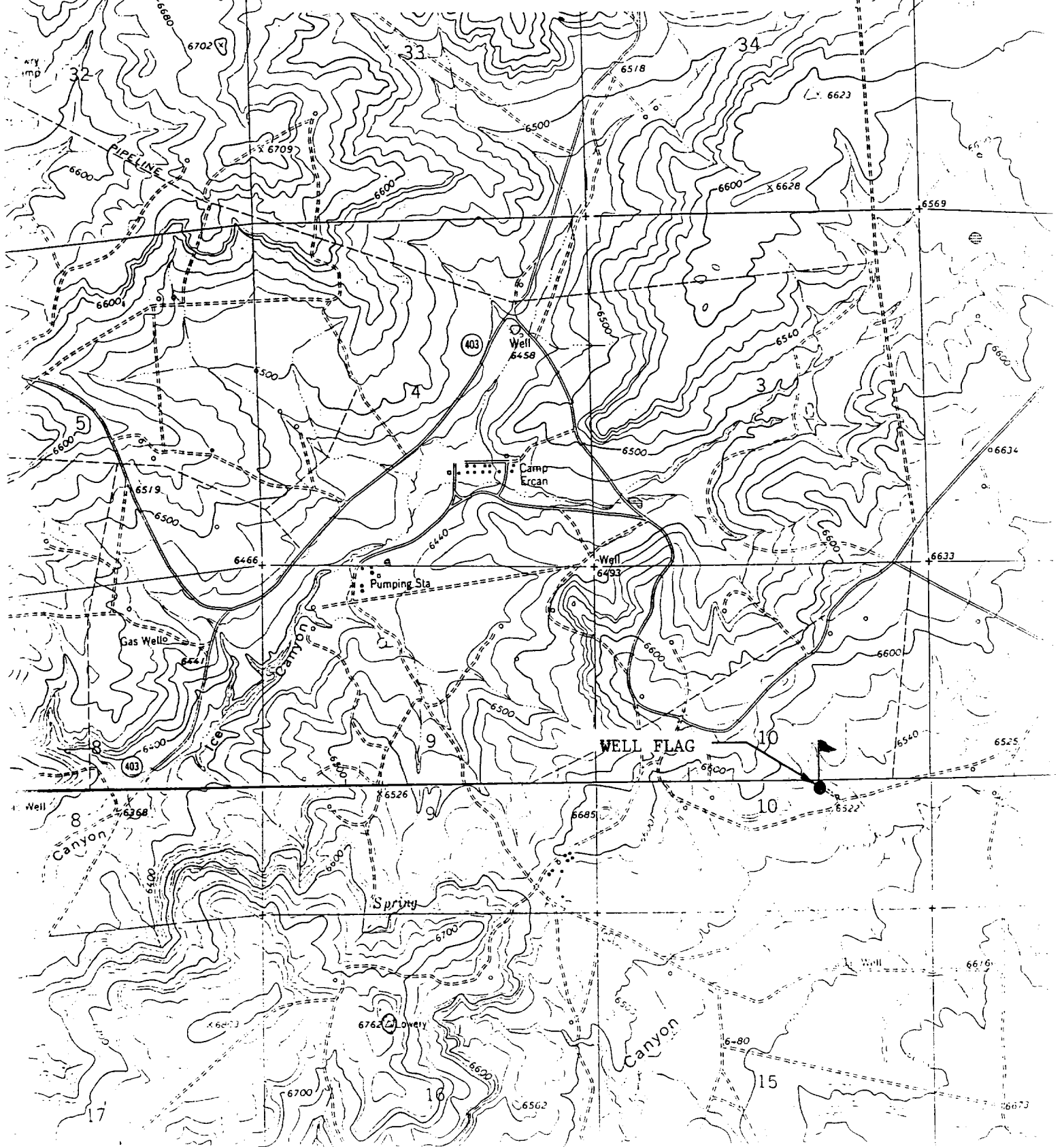


EXHIBIT "C"

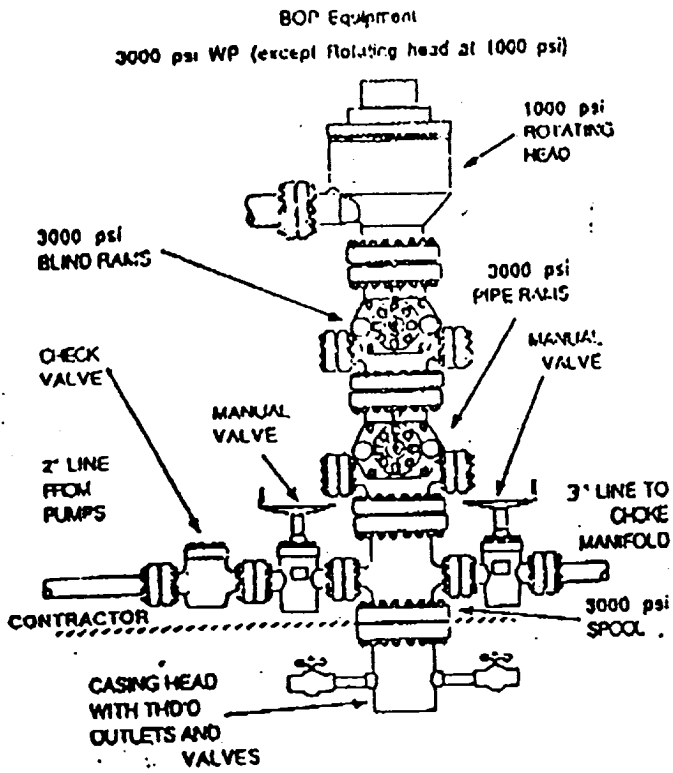


EXHIBIT "B" CHOKE MANIFOLD

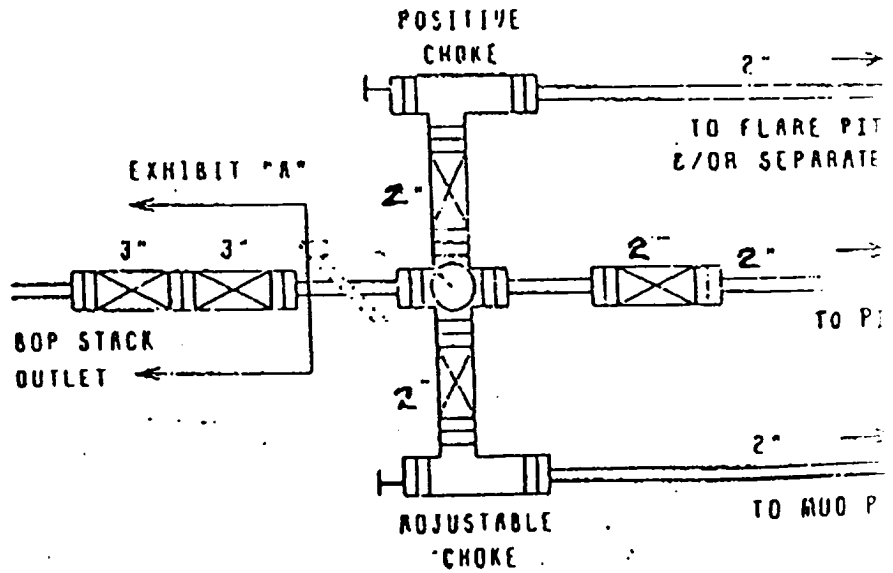


EXHIBIT "B"

TEN POINT COMPLIANCE PROGRAM

Caulkins Oil Company
Breach "A" 136-F
1879' FSL & 1769' FEL, Sec. 10, 26N, 6W
Rio Arriba County, New Mexico
Lease No. NM - 079035-A

1. The Geological Surface Formation is : San Jose.
2. The Estimated Tops of Important Geological Markers:

Ojo Alamo	2301'
Picture Cliffs	2975'
Cliff House	4655'
Tocito	6702'
Greenhorn	7106'
Dakota	7324'
TD	7500'

3. Estimated Depths and pressures of Anticipated Water, Oil, Gas or Minerals:

Substance	Formation	Depth	Pressure
Water	Alamo	2475'	0
Gas	Pictured Cliffs	3082'	450
Gas	Cliff House	4772'	800
Gas	Tocito	6729'	1200
Gas	Dakota	7462'	1400

4. The proposed casing program will be as follows:

Depth	Hole Size	O.D.	Weight	Grade	Type	New/Used
0-450	12-1/4	9-5/8	36.00#	J55	LT&C	NEW
0-1000	7-7/8	5-1/2	17.00#	K55	LT&C	NEW
1000-6500	7-7/8	5-1/2	15.50#	K55	LT&C	NEW
6500-7500	7-7/8	5-1/2	17.00#	K55	LT&C	NEW

The proposed cement program will be as follows:

Surface: 198 sacks class H with 1% CaCl
and 1/4# per sack cellophane flake.

VOLUME CALCULATIONS

YIELD 1.14 450 ft x 0.3132 cu-ft/ft with 60% excess = 225 cu-ft

PRODUCTION:

Cement will be run in three stages with stage tools set at approximately 3500' and 5500'.

1st stage Cement through shoe at approx. 7500' with 221 sacks class B 35/65 poz + 6% gel (bentonite) + 1/4# /sk cellophane flake followed by 120 sacks class H + 1% CaCl + 1/4# /sk cellophane flake.

VOLUME CALCULATIONS

YIELD 1.79 1342 ft x 0.1732 cu-ft/ft with 70% excess = 395 cu-ft
YIELD 1.14 658 ft x 0.1732 cu-ft/ft with 20% excess = 137 cu-ft

2nd stage Cement through tool at approx. 5500' with 221 sacks class B 35/65 poz + 6% gel (bentonite) + 1/4# /sk cellophane flake followed by 120 sacks class H + 1% CaCl + 1/4# /sk cellophane flake.

VOLUME CALCULATIONS

YIELD 1.79 1342 ft x 0.1732 cu-ft/ft with 70% excess = 395 cu-ft
YIELD 1.14 658 ft x 0.1732 cu-ft/ft with 20% excess = 137 cu-ft

EXHIBIT "B"

TEN POINT COMPLIANCE PROGRAM

Caulkins Oil Company
Breach "A" 136-F
1879' FSL & 1769' FEL, Sec. 10, 26N, 6W
Rio Arriba County, New Mexico
Lease No. NM - 079035-A

3rd stage Cement through tool at approx. 3500' with 467 sacks class B 35/65 poz + 6% gel (bentonite) + 1/4# /sk cellophane flake followed by 120 sacks class H + 1% CaCl + 1/4# /sk cellophane flake.

VOLUME CALCULATIONS

YIELD 1.79 2842 ft x 0.1732 cu-ft/ft with 70% excess = 837 cu-ft
YIELD 1.14 658 ft x 0.1732 cu-ft/ft with 20% excess = 137 cu-ft

5. Operator's Minimum Specifications for Pressure Control:

EXHIBIT "C" is a schematic of a 2M blowout preventer system. The BOP's will be hydraulically tested prior to drilling out from under surface and operational checks will be made daily thereafter and recorded in the drilling tour report.

Accessories to BOP will include following:

- A. 2" minimum kill line and valve.
- B. Choke line and valve.
- C. 2 chokes
- D. Upper kelly cock valve with handle available.
- E. Safety valve and subs to fit all drill strings.
- F. Pressure gauge on choke manifold.
- G. 2" minimum choke line.
- H. Fill-up line above the uppermost preventer.

6. The type and Characteristics of the Proposed Circulating Mud's:

Mud system will be gel-chemical with adequate stocks of absorbent agents on location to handle possible spills of fuel and oil on the surface. Heavier mud's will be on location to be added if pressure requires.

Interval	Mud Wt	Vis	Fluid Loss	Ph	Additives
0- 450	9.0	50	----	9	Lime
450-TD	9.0	34-60	8cc	9	Chemicals

7. Auxiliary equipment to be used is as follows:

- a. Float valve above bit.
- b. Monitoring of mud system will be visual.
- c. A sub with a full opening valve will be on the floor when the kelly is not in use.

8. Testing, logging and coring will be as follows:

- a. Cores - none will be taken.
- b. Drill stem tests - none anticipated.
- c. Logging - IEG and FDC from surface pipe to TD.

9. Anticipated Abnormal Pressures and Temperatures:

No abnormal pressure, temperatures or hydrogen sulfide gases are anticipated during the course of drilling to TD. The maximum bottom hole pressure to be expected is 1500 psi.

10. Anticipated Starting Date and Duration of the Operations:

The anticipated starting date is set for March 20, 2001, or as soon as possible after examination and approval of drilling requirements. Operations should be completed within 25 days.