

M-1

Pan Am #1 Navajo-AE  
SE NE 1-35N-29E Apache County 463





## WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

DESIGNATE TYPE OF COMPLETION:

New Well  Work-Over  Deepen  Plug Back  Same Reservoir  Different Reservoir  Oil  Gas  Dry

DESCRIPTION OF WELL AND LEASE

Operator <b>PAN AMERICAN PETROLEUM CORPORATION</b>		Address <b>501 Airport Dr., Farmington, New Mexico</b>			
Federal, State or Indian Lease Number or name of lessor if fee lease <b>Navajo Tribal "AE"</b>		Well Number <b>1</b>	Field & Reservoir <b>Dineh Bi Keyah</b>		
Location <b>1700' FNL &amp; 950' FEL</b>		County <b>Apache</b>			
Sec. TWP-Range or Block & Survey <b>Section 1, T-35-N, R-29-E</b>					
Date spudded <b>6-27-68</b>	Date total depth reached <b>7-28-68</b>	Date completed, ready to produce <b>7-29-68</b>	Elevation (DF, RKB, RT or Gr.) <b>GR 8565</b> feet	Elevation of casing hd. flange <b>8565</b> feet	
Total depth <b>5742'</b>	P.B.T.D. <b>--</b>	Single, dual or triple completion? <b>--</b>	If this is a dual or triple completion, furnish separate report for each completion.		
Producing interval (s) for this completion <b>--</b>		Rotary tools used (interval) <b>29' to TD</b>		Cable tools used (interval) <b>0-29'</b>	
Was this well directionally drilled? <b>No</b>	Was directional survey made? <b>No</b>	Was copy of directional survey filed? <b>--</b>		Date filed <b>--</b>	
Type of electrical or other logs run (check logs filed with the commission)				Date filed	
<b>Induction Electrical (X), Gamma Ray Sonic (X), Sonic Neutron Por. (X)</b>				<b>Not available</b>	

### CASING RECORD

Casing (report all strings set in well—conductor, surface, intermediate, producing, etc.)

Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled
Conductor	24"	16"	65#	29' GL	-	0
Surface	13-3/4"	9-5/8"	40#	952'	785	0
	8-3/4"	None		5742'*	200*	

### TUBING RECORD

### LINER RECORD

Size	Depth set	Packer set at	Size	Top	Bottom	Sacks cement	Screen (ft.)
in.	ft.	ft.	in.	ft.	ft.		
-							

### PERFORATION RECORD

### ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

Number per ft.	Size & type	Depth Interval	Amt. & kind of material used	Depth Interval
-				

### \*Well plugged as per Form No. 10 INITIAL PRODUCTION

Date of first production: **None**      Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump:)

Date of test	Hrs. tested	Choke size	Oil prod. during test	Gas prod. during test	Water prod. during test	Oil gravity
			bbls.	MCF	bbls.	* API (Corr)

Tubing pressure	Casing pressure	Cal'ed rate of Production per 24 hrs.	Oil	Gas	Water	Gas-oil ratio
			bbls.	MCF	bbls.	

Disposition of gas (state whether vented, used for fuel or sold):

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the **Area Engineer** of the **PAN AMERICAN PETROLEUM CORPORATION** (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Date **July 31, 1968**

Signature *[Signature]*

Permit No. **463**

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

Form No. 4

File One Copy



**DETAIL OF FORMATIONS PENETRATED**

Formation	Top	Bottom	Description*
<u>Sample Tops</u>			
Chuska Chinle Fm.	Surface 890'		
<u>Electric Log Tops</u>			
Lower Wingate	1063'		
Chinle Shale	1930'		
Mossback	2404'		
Shinarump	2878'		
DeChelly	3036'		
Cutler	3888'		
Pennsylvanian	5037'		
Ismay	5253'		
Desert Creek	5347'		
Akah	5396'		
Lower Hermosa	5544'		
Molas	5684'		
Mississippian	5746' Est.	5711 AMST (2666)	No core No DST

\* Show all important zones of porosity, detail of all cores, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

**INSTRUCTIONS:**

Attach drillers log or other acceptable log of well.

This Well Completion or Recompletion report and well log shall be filed with the State of Arizona Oil & Gas Conservation Commission not later than thirty days after project completion.



FIELD Dineh Bi Keyah  
OPERATOR Pan American Petroleum Corporation ADDRESS 501 Airport Drive, Farmington, N. Mex.  
Federal, State, or Indian Lease Number  
or Lessor's Name if Fee Lease Navajo Tribal "AE" No. 14-20-0603-1563 WELL NO. 1  
SURVEY T-35-N, R-29-E SECTION SE/4 NE/4 Section 1 COUNTY Apache  
LOCATION 1700' FNL & 950' FEL

TYPE OF WELL Dry Hole TOTAL DEPTH 5742'  
(Oil, Gas or Dry Hole)  
ALLOWABLE (If Assigned) \_\_\_\_\_  
LAST PRODUCTION TEST OIL None (Bbls.) WATER \_\_\_\_\_ (Bbls.)  
GAS \_\_\_\_\_ (MCF) DATE OF TEST \_\_\_\_\_

PRODUCING HORIZON \_\_\_\_\_ PRODUCING FROM \_\_\_\_\_ TO \_\_\_\_\_  
1. COMPLETE CASING RECORD 16" conductor casing set at 29' GL. 9-5/8" surface casing set at 952' RDB with 785 sacks of Type "A" cement.

2. FULL DETAILS OF PROPOSED PLAN OF WORK Cement plugs spotted as follows: 40 sx 5742-5642'; 40 sx 5070-4970'; 20 sx 4080-40'; 40 sx 3090-2980'; 40 sx 1000-900'; & 20 sx 50'-Surface. Operations completed on 7-29-68 as per oral approval of procedure by Messrs. Jim Scurlock to G. W. Eaton via telecon 7-26-68.

If well is to be abandoned, does proposed work conform with requirements of Rule 202? Yes If not, outline proposed procedure above.

DATE COMMENCING OPERATIONS 7-29-68  
NAME OF PERSON DOING WORK Pan American Petroleum Corp ADDRESS 501 Airport Dr., Farmington, N.M.  
CORRESPONDENCE SHOULD BE SENT TO L. O. Speer, Jr.  
Name  
Area Superintendent  
Title  
501 Airport Drive, Farmington, New Mexico 87401  
Address  
July 31, 1968  
Date

Date Approved X 8-6-68  
STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION  
By John F. Bannister

Permit No. 463

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION  
Application to Abandon and  
File Two Copies  
Form No. 8



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE  
(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

5. LEASE DESIGNATION AND SERIAL NO.  
14-20-0603-1363

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
Navajo Tribal

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Navajo Tribal "A"

9. WELL NO.  
1

10. FIELD AND POOL, OR WILDCAT  
Block B1 Koyah

11. SEC. T. R. M. OR BLOCK AND SURVEY OR AREA  
NE/4 Section 1,  
T-15-N, R-20-W

12. COUNTY OR PARISH  
Apache

13. STATE  
Arizona

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_

b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP EN  PLEG BACK  DIFF. RESV.  Other **Plug**

2. NAME OF OPERATOR  
PAN AMERICAN PETROLEUM CORPORATION

3. ADDRESS OF OPERATOR  
501 Airport Drive, Farmington, New Mexico 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
At surface **1700' FWL & 950' FWL**  
At top, prod. interval reported below **Same**  
At total depth **Same**

14. PERMIT NO. **463** DATE ISSUED **6-14-68**

15. DATE SPUDDED **6-27-68** 16. DATE T.D. REACHED **7-28-68** 17. DATE COMPL. (Ready to prod.) **7-29-68**

18. ELEVATIONS (DP, RER, RT, OR, ETC.)\* **GL 8563', RDB 8578'** 19. ELEV. CASINGHEAD **8565'**

20. TOTAL DEPTH, MD & TVD **3743'** 21. PLUG, BACK T.D., MD & TVD **"** 22. IF MULTIPLE COMPL. HOW MANY\* **"**

23. INTERVALS DRILLED BY **29' - 3743'** ROTARY TOOLS **0 - 29'** CABLE TOOLS **0 - 29'**

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*  
**None**

25. WAS DIRECTIONAL SURVEY MADE **No**

26. TYPE ELECTRIC AND OTHER LOGS RUN  
**Induction Electrical, Gamma Ray Sonic, Sonic Neutron Porosity**

27. WAS WELL CORED **No**

28. CASING RECORD (Report all strings set in well)

29. LINER RECORD

30. TUBING RECORD **40 on 1000-900, 20 on 50-Surf.**

31. PERFORATION RECORD (Interval, size and number)  
**None**

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

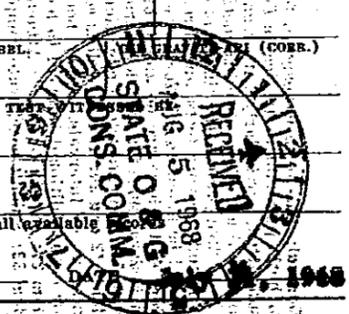
33. PRODUCTION

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available information.

Original signed by  
SIGNED **G. W. EATON, JR.** TITLE **Area Engineer**  
**G. W. Eaton, Jr.**



\*(See Instructions and Spaces for Additional Data on Reverse Side)

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463

# INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 28, below, regarding separate reports for separate completions, sample and core analysis, all types electric, etc., formations and/or State office. This summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formations and/or State office, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form; see item 33.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions. (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. Item 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s), and name(s) (if any) for only the interval reported in item 22. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29: "Seals/ Cement":** Attached supplemental records for this well should show the details of any multiple stage cementing, and the location of the cementing tool.

**Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

## 38. GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	GEOLOGIC MARKERS	
				NAME	MEAS. DEPTH
				<b>Electric Log Logs</b>	
				Lower Sargate	1063'
				Chinle Shale	1930'
				Monkbeck	2400'
				Shinarump	2878'
				DeChelly	3036'
				Catler	3088'
				Pennsylvanian	5037'
				Lenny	5253'
				Desert Creek	5347'
				Almah	5396'
				Lower Permian	5544'
				Molas	5684'
				Mississippian	5746' etc.
				<b>Sample Tops</b>	
				Chuska	Surface
				Chinle Fa.	890'

Form 9-331  
(May 1963)

UNITED STATES DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE  
(Other instructions on reverse side)

Form approved  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

14-20-0401-1563

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo Tribal

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Navajo Tribal 648

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Black Mt. Field

11. SEC. T., R., M., OR BLM, AND SURVEY OR AREA

1/4 Section 1,  
T-21-N, R-27-E

12. COUNTY OR PARISH

Apache

13. STATE

Arizona

SUNDRY NOTICES AND REPORTS ON WELLS  
(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT-" for such proposals.)

1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
PAN AMERICAN PETROLEUM CORPORATION

3. ADDRESS OF OPERATOR  
301 Airport Drive, Farmington, New Mexico 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)  
At surface  
1700' FBL & 930' FBL, Section 1, T-25N, R-29E

14. PERMIT NO.  
Arizona No. 463

15. ELEVATIONS (Show whether DF, RT, CR, etc.)  
61. 8345', 858 8374'

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENTS <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Cement plugs spotted as follows:

- 40 sacks cement 3742-3642'
- 40 sacks cement 3070-4970'
- 20 sacks 4000-40'
- 40 sacks 3000-2000'
- 40 sacks 1000-100'
- 20 sacks 30' - Surface.

Plugging procedure approved per telegram M. L. Sealing to G. W. Eaton July 25, 1968

Operations complete July 29, 1968.

18. I hereby certify that the foregoing is true and correct

SIGNED G. W. EATON, JR. TITLE Area Engineer

(This space for Federal or State office use)

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

\*See Instructions on Reverse Side

RECEIVED  
 STATE OF ARIZONA  
 COM. & COMM.  
 JUL 29 1968  
 PHOENIX, ARIZONA

463

Form 9-331  
(May 1963)

UNITED STATES DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN THIS MANNER (Other instructions on reverse side)

Form approved  
Budget Bureau No. 42-R1421

**SUNDRY NOTICES AND REPORTS ON WELLS**  
(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT" for such proposals.)

1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
**PAN AMERICAN PETROLEUM CORPORATION**

3. ADDRESS OF OPERATOR  
**501 Airport Drive, Farmington, New Mexico 87401**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)  
At surface  
**1700' FWL & 950' FWL, Section 1, T-35N, R-29E**

5. LEASE DESIGNATION AND SERIAL NO.  
**14-20-0603-1563**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
**Navajo Tribal**

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
**Navajo Tribal "AR"**

9. WELL NO.  
**1**

10. FIELD AND POOL, OR WILDCAT  
**Black El Koyah**

11. SEC. T. R. M. OR BLK. AND SURVEY OR AREA  
**SW/4 Section 1, T-35-N, R-29-E**

12. COUNTY OR PARISH  
**Apache**

13. STATE  
**Arizona**

14. PERMIT NO.  
**Arizona No. 463**

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
**GL 8365', RDB 4578'**

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input checked="" type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

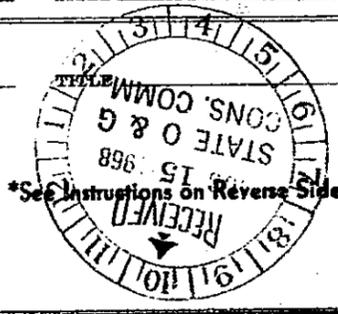
Well was spudded 6-27-68 and 24" hole drilled to 29' where 16" casing was set. Hole was reduced to 13-3/4" and drilled to 952' where 9-5/8" casing was set and cemented with 785 sacks Type "A" cement. Hole was reduced to 8-3/4" and drilled to the total depth of 5742'. As no commercial hydrocarbons were encountered, the well is to be plugged and abandoned using Type "C" cement as follows:

- 40 sacks 5742-5642' to cover Lower Permian formation.
- 40 sacks 5070-4970' to cover Pennsylvanian formation.
- 20 sacks 4080-4040' to cover Cutler formation.
- 40 sacks 3090-2980' to cover Bechally formation.
- 40 sacks 1000-900' to cover base shoe of surface casing.
- 20 sacks 50' to surface to plug surface.

The above procedure approved Messrs. H. L. Seelinger to G. W. Eaton July 26, 1968 via telex. Operations completed July 29, 1968.

18. I hereby certify that the foregoing is true and correct  
SIGNED G. W. EATON, JR. TITLE Area Engineer  
G. W. Eaton, Jr.  
(This space for Federal or State office use)

APPROVED BY  
CONDITIONS OF APPROVAL, IF ANY:  
JUL 26 1968  
P. T. McGRATH  
DISTRICT ENGINEER



RECEIVED  
AUG 1968  
U.S. GEOLOGICAL SURVEY

Page 200 AE.1

7-26-68

See notes called:

Give verbal permission to plug.

Location Dr. 7005  
RB 85%

Drilling 5575'  
in PENN. - Have drilled  
about 500' PENN.

Set 9 5/8" casing @ 952  
Depth (sample tops)

End of	1565	} faulted + repeated section	← PLUG
De Chilly	2405		
" "	3045		

Hammer	4915	← PLUG
Miss (Anticipated)	5700	← PLUG

PLAN TO SET  
4 PLUGS HERE

Drilling structurally low -  
have not hit sill.

463

Form 2-231  
(May 1968)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPPLICATE\*  
(Other instructions on re-  
verse side)

Form approved  
Budget Bureau No. 42-R1424

U. LEASE DESIGNATION AND SERIAL NO.

14-20-0603-1563

INDIAN, ALLOTTEE OR TRIBE NAME

Navajo Tribal

UNIT AGREEMENT NAME

Navajo Tribal "AE"

FARM OR LEASE NAME

WELL NO.

FIELD AND POOL, OR WILDCAT

Dineh Bi Keyah

SEC. T. R. M. OR B.L. AND SURVEY OR AREA

NE/4 Section 1,  
T-35-N, R-29-E

COUNTY OR PARISH

Apache

STATE

Arizona

1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
PAN AMERICAN PETROLEUM CORPORATION

3. ADDRESS OF OPERATOR  
501 Airport Drive, Farmington, New Mexico

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)  
At surface 1700' FNL & 950' FEL, Section 1, T-35N, R-39E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, ST, OR, etc.)

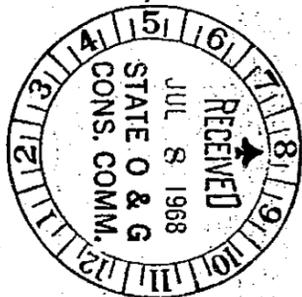
GL 8565 RDB 8578

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF EXEMPTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>	WATER SHUT-OFF	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	FRACTURE TREATMENT	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	SHOOTING OR ACIDIZING	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	(Other)	<input type="checkbox"/>
(Other)	<input type="checkbox"/>	RETAINING WELL	<input type="checkbox"/>
FULL OR ALTER CASING	<input type="checkbox"/>	ALTERING CASING	<input type="checkbox"/>
MULTIPLE COMPLETS	<input type="checkbox"/>	ABANDONMENT	<input checked="" type="checkbox"/>
ABANDON*	<input type="checkbox"/>		
CHANGE PLANS	<input type="checkbox"/>		

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers, and some pertinent to this work.)

On 6-27-68 8" hole was spudded and drilled to 20'. Reamed to and drilled 24" hole. Drilled to 29' where 16" conductor casing was set. Reduced hole to 13-3/4" and drilled to 952' where 9-5/8" 40# casing was set and cemented with 785 sacks Type "A" cement circulated to surface.



18. I hereby certify that the foregoing is true and correct

SIGNED G. W. Eaton, Jr.

TITLE Area Engineer

DATE July 5, 1968

(This space for Federal or State office use)

APPROVED BY  
CONDITIONS OF APPROVAL, IF ANY:

TITLE

\*See Instructions on Reverse Side

463

9

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

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  
**PAN AMERICAN PETROLEUM CORPORATION**

3. ADDRESS OF OPERATOR  
**501 Airport Drive, Farmington, New Mexico**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
 At surface **1700' FNL & 950' FNL, Section 1, T-35N, R-39E**  
 At proposed prod. zone **Same**

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
**45 miles southwest of Shiprock, New Mexico**

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) **950'**

16. NO. OF ACRES IN LEASE **640**

17. NO. OF ACRES ASSIGNED TO THIS WELL **160**

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. **First Well 4700'**

20. ROTARY OR CABLE TOOLS **Rotary**

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
**Will report later**

22. APPROX. DATE WORK WILL START\*  
**June 17, 1968**

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
20"	16"		40'	100 sacks
13-3/4"	9-5/8"		1450'	600 sacks
8-3/4"	7"		4700'	300 sacks

Completion will be determined upon reaching total depth.

Copies of all logs run will be furnished upon completion of well.

Copies of location plat are attached.

Verbal approval to drill the well, subject to archaeological clearance given per telecon G. W. Eaton, Jr. to John Ward on June 13, 1968.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. (See blowout preventer program, if any.)

24. SIGNED G. W. Eaton, Jr. TITLE Area Engineer DATE June 13, 1968  
 (This space for Federal or State office use)

PERMIT NO. 468 APPROVAL DATE \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_  
 CONDITIONS OF APPROVAL, IF ANY:



**APPLICATION FOR PERMIT TO DRILL OR RE-ENTER**

APPLICATION TO DRILL

RE-ENTER OLD WELL

**PAN AMERICAN PETROLEUM CORPORATION**

NAME OF COMPANY OR OPERATOR

501 Airport Drive Farmington New Mexico 87401

Address

Loffland Brothers Company

Drilling Contractor

P. O. Box 688, Farmington, New Mexico 87401

Address

**DESCRIPTION OF WELL AND LEASE**

Federal, State or Indian Lease Number, or if fee lease, name of lessor <b>Navajo Tribal "AE"</b>	Well number <b>1</b>	Elevation (ground) <b>8565'</b>
Nearest distance from proposed location to property or lease line:  feet	Distance from proposed location to nearest drilling, completed or applied—for well on the same lease:  feet	
Number of acres in lease:	Number of wells on lease, including this well, completed in or drilling to this reservoir:	
If lease, purchased with one or more wells drilled, from whom purchased:	Name	Address

Well location (give footage from section lines) <b>1700' FNL and 950' FEL</b>	Section—township—range or block and survey <b>Section 1 T35N R29E</b>	Dedication (Comply with Rule 165)
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Field and reservoir (if wildcat, so state) <b>Dinah Bi Keyah</b>	County <b>Apache</b>
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Distance, in miles, and direction from nearest town or post office

Proposed depth:	Rotary or cable tools	Approx. date work will start
-----------------	-----------------------	------------------------------

Bond Status	Organization Report	Filing Fee of \$25.00
Amount	On file Or attached	Attached

Remarks:

To report drilling contractor and elevation.

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Area Engineer of the

Pan American Petroleum Corporation (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Signature G. W. Eaton, Jr.

Date July 3, 1968

Permit Number: 463

Approval Date:

Approved By:

Notice: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.



**STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION**  
Application to Drill or Re-enter  
File Two Copies

Form No. 3

(Complete Reverse Side)



**APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK**

APPLICATION TO DRILL  DEEPEN  PLUG BACK

NAME OF COMPANY OR OPERATOR **PAN AMERICAN PETROLEUM CORPORATION** DATE **June 13, 1968**

**501 Airport Drive** **Farmington** **New Mexico 87401**  
Address City State

**DESCRIPTION OF WELL AND LEASE**

Name of lease <b>Navajo Tribal "AE"</b>	Well number <b>1</b>	Elevation (ground) <b>Report later</b>
Well location <b>1700' FNL and 950' FEL</b>	Section—township—range or block & survey <b>Section 1, T-35-N, R-35-E</b> <i>29E plat</i>	
Field & reservoir (if wildcat, so state) <b>Dinah Bi Keyah</b>	County <b>Apache</b>	
Distance, in miles, and direction from nearest town or post office <b>45 miles southwest of Shiprock, New Mexico</b>		
Nearest distance from proposed location to property or lease line: <b>950</b> feet	Distance from proposed location to nearest drilling completed or applied—for well on the same lease: <b>First Well</b> feet	
Proposed depth: <b>4700'</b>	Rotary or cable tools <b>Rotary</b>	Approx. date work will start <b>June 17, 1968</b>
Number of acres in lease: <b>640</b>	Number of wells on lease, including this well, completed in or drilling to this reservoir: <b>First Well</b>	
If lease, purchased with one or more wells drilled, from whom purchased: <b>Not Applicable</b>		
Status of bond <b>Statewide</b>		

Remarks: (If this is an application to deepen or plug back, briefly describe work to be done, giving present producing zone and expected new producing zone)

**\$25.00 Permit Fee paid to Arizona Oil and Gas Conservation Commission on June 13, 1968 on Draft No. 44606.**

\* Fill in Proposed Casing Program on other side

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the **Area Engineer** of the **Pan American Petroleum Corp.** (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

**June 13, 1968**  
Date

Signature

*G. W. Eaton, Jr.*  
**G. W. Eaton, Jr.**

Permit Number: **463**  
Approval Date: **6-17-68**  
Approved By: *John W. Bunnister*

Notice: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.

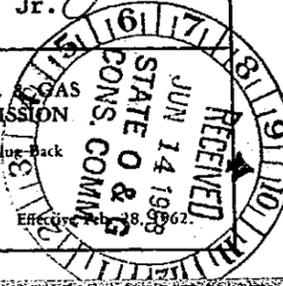
See Instruction on Reverse Side of Form

STATE OF ARIZONA OIL AND GAS CONSERVATION COMMISSION

Application to Drill, Deepen or Plug Back

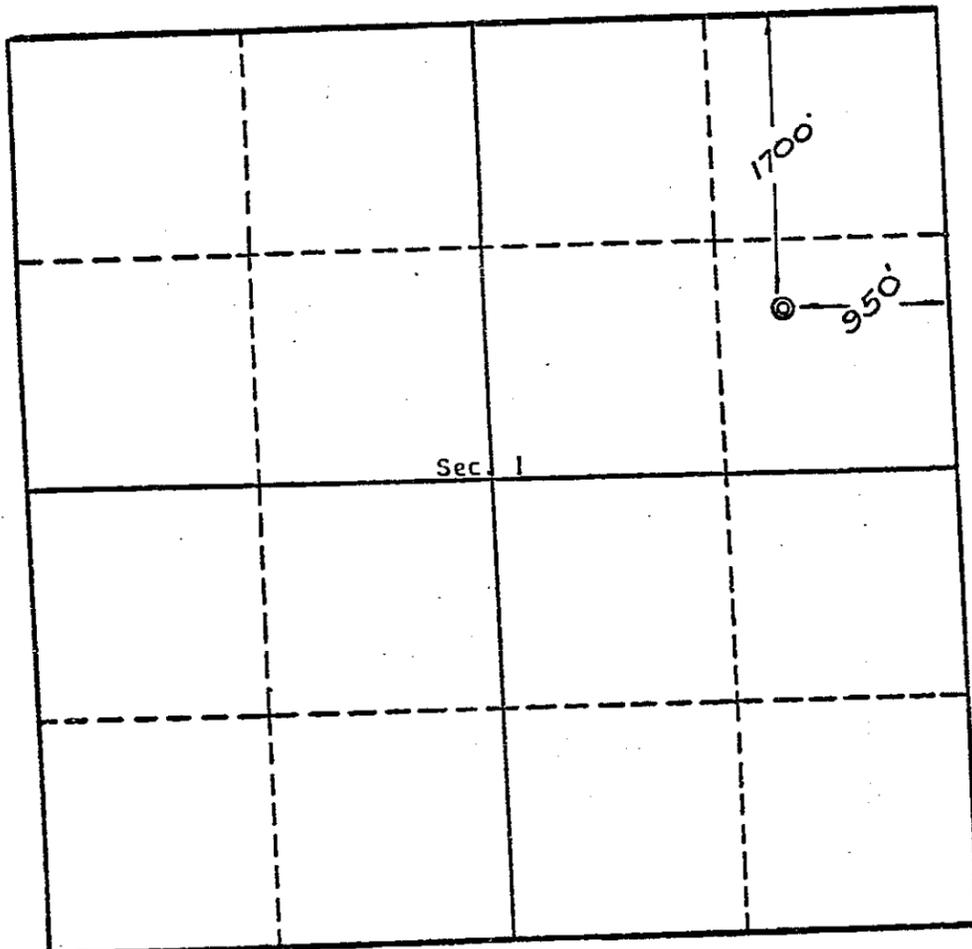
Form No. P-1

File two copies



**API 02-001-20079**

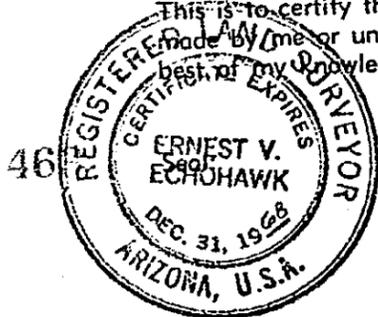
Company PAN AMERICAN PETROLEUM CORPORATION  
Well Name & No. Navajo Tribal "AE" #1  
Location 1700 feet from the North line and 950 feet from the East line.  
Sec. 1, T. 35 N., R. 29 E., G. & S. R. M., County Apache, Arizona  
Ground Elevation Report Later



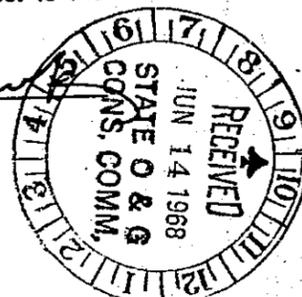
Scale, 1 inch = 1,000 feet

Surveyed March 28, 1968

This is to certify that the above plat was prepared 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*  
Ernest V. Echohawk  
Registered Land Surveyor  
Arizona Registration No. 2311



**APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK**

APPLICATION TO DRILL  DEEPEN  PLUG BACK

NAME OF COMPANY OR OPERATOR **PAN AMERICAN PETROLEUM CORPORATION** DATE **June 13, 1968**

**501 Airport Drive** **Farmington** **New Mexico 87401**  
Address City State

**DESCRIPTION OF WELL AND LEASE**

Name of lease <b>Navajo Tribal "AE"</b>	Well number <b>1</b>	Elevation (ground) <b>Report later</b>
Well location <b>1700' FNL and 950' FEL</b>	Section—township—range or block & survey <b>Section 1, T-35-N, R-39-E</b> <i>29E plat</i>	
Field & reservoir (if wildcat, so state) <b>Dinah Bi Keyah</b>	County <b>Apache</b>	
Distance, in miles, and direction from nearest town or post office <b>45 miles southwest of Shiprock, New Mexico</b>		
Nearest distance from proposed location to property or lease line: <b>950</b> feet	Distance from proposed location to nearest drilling, completed or applied—for well on the same lease: <b>First Well</b> feet	
Proposed depth: <b>4700'</b>	Rotary or cable tools <b>Rotary</b>	Approx. date work will start <b>June 17, 1968</b>
Number of acres in lease: <b>640</b>	Number of wells on lease, including this well, completed in or drilling to this reservoir: <b>First Well</b>	
If lease, purchased with one or more wells drilled, from whom purchased: <b>Not Applicable</b>		
Status of bond <b>Statewide</b>		

Remarks: (If this is an application to deepen or plug back, briefly describe work to be done, giving present producing zone and expected new producing zone)

**\$25.00 Permit Fee paid to Arizona Oil and Gas Conservation Commission on June 13, 1968 on Draft No. 44606.**

\* Fill in Proposed Casing Program on other side

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the **Area Engineer** of the **Pan American Petroleum Corp.** (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

**June 13, 1968**  
Date

*G. W. Eaton, Jr.*  
Signature **G. W. Eaton, Jr.**

Permit Number: **463**  
Approval Date: **6-14-68**  
Approved By: *John R. Binnister*

Notice: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.

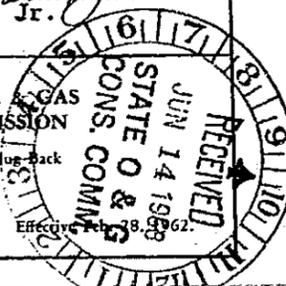
See Instruction on Reverse Side of Form

STATE OF ARIZONA OIL & GAS  
CONSERVATION COMMISSION

Application to Drill, Deepen or Plug-back

Form No. P-1

File two copies



API 02-001-20079

INSTRUCTIONS

READ CAREFULLY AND COMPLY FULLY

For the purpose of this determination attach hereto a neat, accurate plat, map or sketch of this lease, section, block or lot locating thereon the proposed site for this location. Plat shall be drawn to a scale which will permit the facile observation of all pertinent data. Show distances of the proposed well from the two nearest lease and section lines, and from the nearest wells on the same lease completed in or drilling to the same reservoir. If the location requested is not in conformance with the applicable well-spacing rules, show all off-setting wells to the proposed well, and the names and addresses of all adjoining lease or property owners.

In event plat is filed for the purpose of designating the drilling and producing unit, or proration unit, on which the proposed well is to be drilled, the boundaries of such unit shall be shown, also the boundaries of all other such units attributed to other wells on the same lease completed in or drilling to the same reservoir. The acreage contained within each unit shall also be shown.

Do not confuse survey lines with lease lines. The sketch or plat should show your entire lease if possible. If it is not practical to show the entire lease and the plat shows only a section, block or lot out of your lease, you should clearly show that same is only a part of the lease.

Designate scale to which plat or sketch is drawn. Also designate northerly direction on the sketch or plat.

PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
16"			Surf.	40'	40'	100
9-5/8"			Surf.	1450'	1450'	600
7"			Surf.	4700'	4700'	300

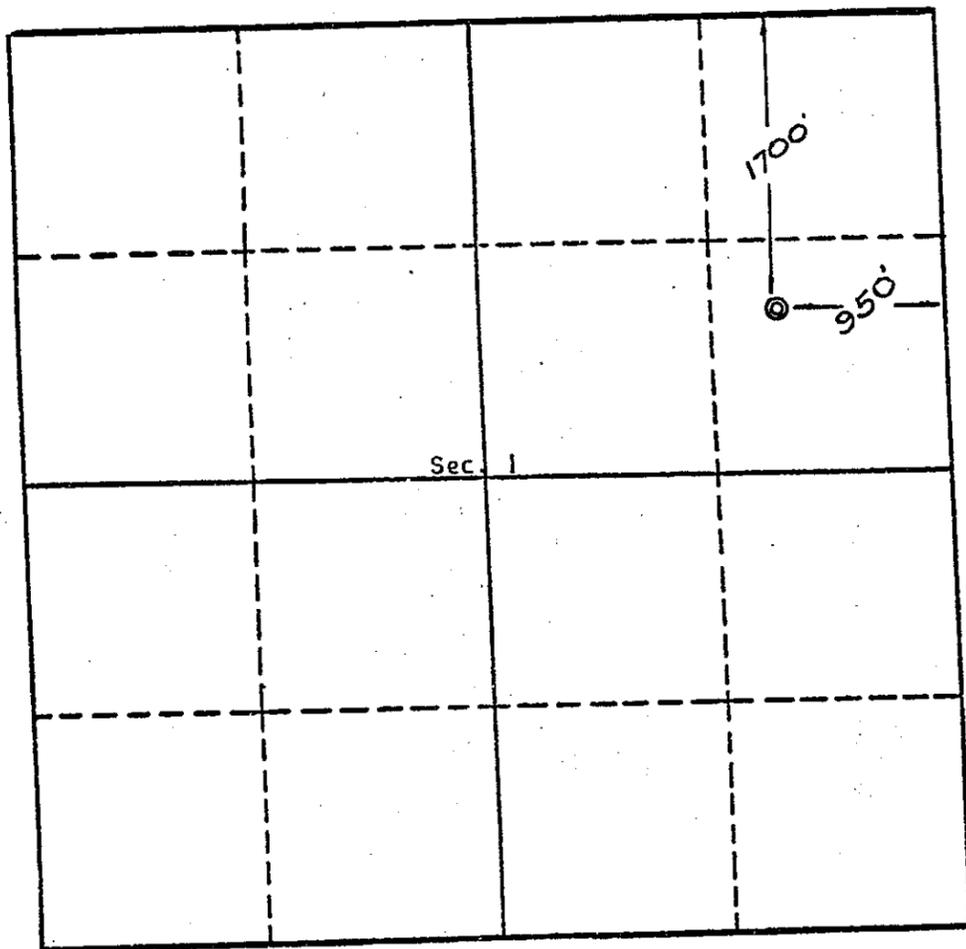
Company PAN AMERICAN PETROLEUM CORPORATION

Well Name & No. Navajo Tribal "AE" #1

Location 1700 feet from the North line and 950 feet from the East line.

Sec. 1, T. 35 N., R. 29 E., G. & S. R. M., County Apache, Arizona

Ground Elevation Report Later



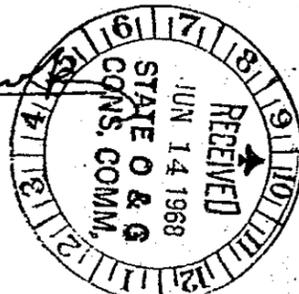
Scale, 1 inch = 1,000 feet

Surveyed March 28, 19 68

This is to certify that the above plot was prepared 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.



*Ernest V. Echohawk*  
Ernest V. Echohawk  
Registered Land Surveyor  
Arizona Registration No. 2311





# PERMIT TO DRILL

This constitutes the permission and authority from the  
OIL AND GAS CONSERVATION COMMISSION,  
STATE OF ARIZONA,

**PAN AMERICAN PETROLEUM CORPORATION**

To: \_\_\_\_\_ (OPERATOR)

to drill a well to be known as

**PAN AM #1 Navajo AE**

(WELL NAME)

located **1700' FNL and 950' FEL (SE/4NE/4)**

Section **1** Township **35N** Range **29E**, **Apache** County, Arizona.

The **NE/4** of said

Section, Township and Range is dedicated to this well.

Said well is to be drilled substantially as outlined in the attached Application and must be drilled in full compliance with all applicable laws, statutes, rules and regulations of the State of Arizona.

Issued this **15th** day of **June**, 19 **68**.

OIL AND GAS CONSERVATION COMMISSION

By

*John C. Cunningham*  
EXECUTIVE SECRETARY

PERMIT No. 463

RECEIPT NO. 9547  
API No. 02-001-20079

State of Arizona  
Oil & Gas Conservation Commission  
Permit to Drill

FORM NO. 27

SAMPLES REQUIRED. D-1-68 and 1tr attached.

August 6, 1968

Mr. G. W. Eaton, Jr.  
Pan American Petroleum Corporation  
501 Airport Drive  
Farmington, New Mexico 87401

Re: Pan Am #1 Navajo AE  
SE NE 1-35N-29E, Apache County  
Permit #463

Dear Mr. Eaton:

We acknowledge receipt of our forms No. 4, 9, and 10 and thank you for your prompt compliance with the regulations. Please furnish us copies of logs and the Drill Stem Tests.

We remind you that samples from the well must be furnished the Bureau of Mines in Tucson and Museum of Northern Arizona in Flagstaff. Please furnish us the Directional Surveys which were run on this well.

Yours truly,

James A. Lambert  
Administrative Assistant

JL:jf

7/28/68  
Rec'd 9/4/68  
Confidential  
1/27/69

June 17, 1968

Pan American Petroleum Corporation  
501 Airport Drive  
Farmington, New Mexico 87401

Attention: Mr. G.W. Eaton, Jr.

Re: Pan Am #1 Navajo AE  
SE NE 1-35N-29E, Apache County  
Permit 463

Gentlemen:

Enclosed is a supply of the current Form 3, Application to Drill.  
Please destroy all of the stock you have on hand of the obsolete  
form. In the future we will not accept the obsolete form.

Will you please furnish at your earliest convenience the name  
and address of your drilling contractor.

Very truly yours,

John Bannister  
Executive Secretary  
mr

enc: Form 3 (supply)  
Permit to drill with attachments