21-145-20115

Form 3160-3
(November 1983)
(formerly 9-331C)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL ☐ RE-ENTER ☒ DEEPEN ☐ PLUG BACK ☐

b. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ OTHER — SINGLE ZONE ☐ MULTIPLE ZONE ☒

2. NAME OF OPERATOR: Chuska Energy Company

3. ADDRESS OF OPERATOR: P.O. Box 2118, Farmington, N.M 87499

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1695' FNL & 1980' FEL
At proposed prod. zone

5. LEASE DESIGNATION AND SERIAL NO.: NOG 8702-1116

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Navajo

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Beclabito ~~5~~-13-~~30N21W~~

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: Wildcat - CUTLER

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: G 13-T.30N-R.21W

12. COUNTY OR PARISH: San Juan | 13. STATE: N.M

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

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 50,000

16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED TO THIS WELL: 40

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

19. PROPOSED DEPTH: ~~3700~~ 2200

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 5460 GR

22. APPROX. DATE WORK WILL START*: 11-15-88

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

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

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
Casing in place (see attached)			

This is a re-entry of a plugged and abandoned well.
The well was formally known as Navajo "AD" No. 1

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DIST. 3

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DIST. 3

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.

24.

SIGNED John Alexander TITLE V.P Production DATE 2/26/89

John Alexander
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

"Approval of this action does not warrant that the applicant holds legal or equitable rights or title to this lease."

NMOCC

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes 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.

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section

Operator	Lease	Well No.
~~PAN AMERICAN PETROLEUM CORPORATION~~ CHUSKA ENERGY CO.	Navajo Tribal "AD"	1

Unit Letter	Section	Township	Range	County
G	13	30 North	21 West	San Juan

Actual Footage Location of Well:
1695 feet from the North line and 1980 feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
~~Report later~~ 5460	CUTLER	Wildcat	40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

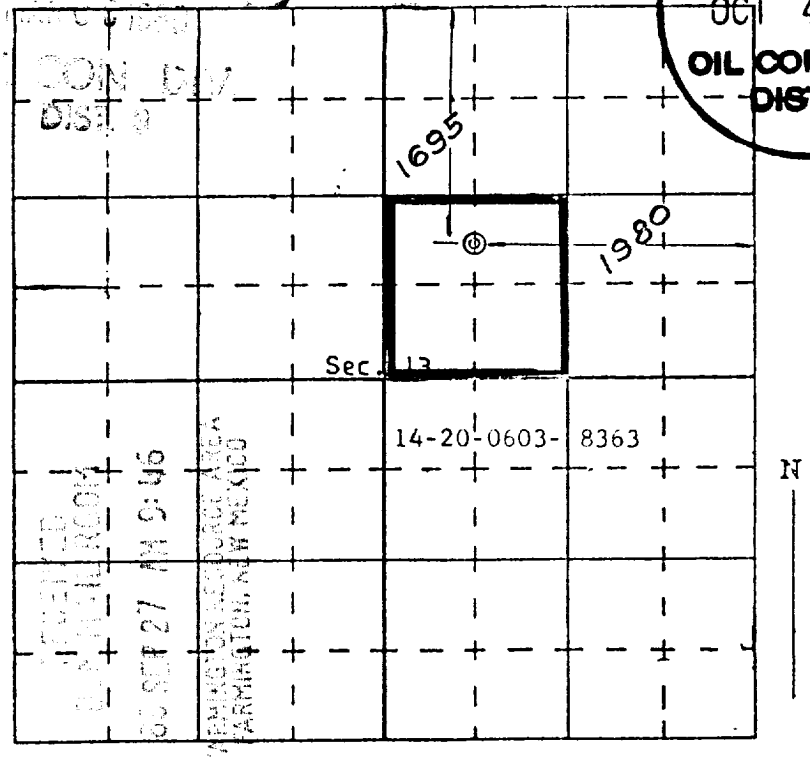
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty),

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?

( ) Yes ( ) No If answer is "yes," type of consolidation .....

If answer is "no," list the owners and tract descriptions which have actually consolidated. (Use reverse side of this form if necessary.) .....

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non standard unit, eliminating such interests, has been approved by the Commission.



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OCT 4 1967
OIL CON. COM.
DIST. 3

RECEIVED
APR 3 - 1989
OIL CON. DIV.
DIST. 3

CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name G. W. Eaton, Jr.

Position Area Engineer

Company PAN AMERICAN PETROLEUM CORP.

Date October 2, 1967

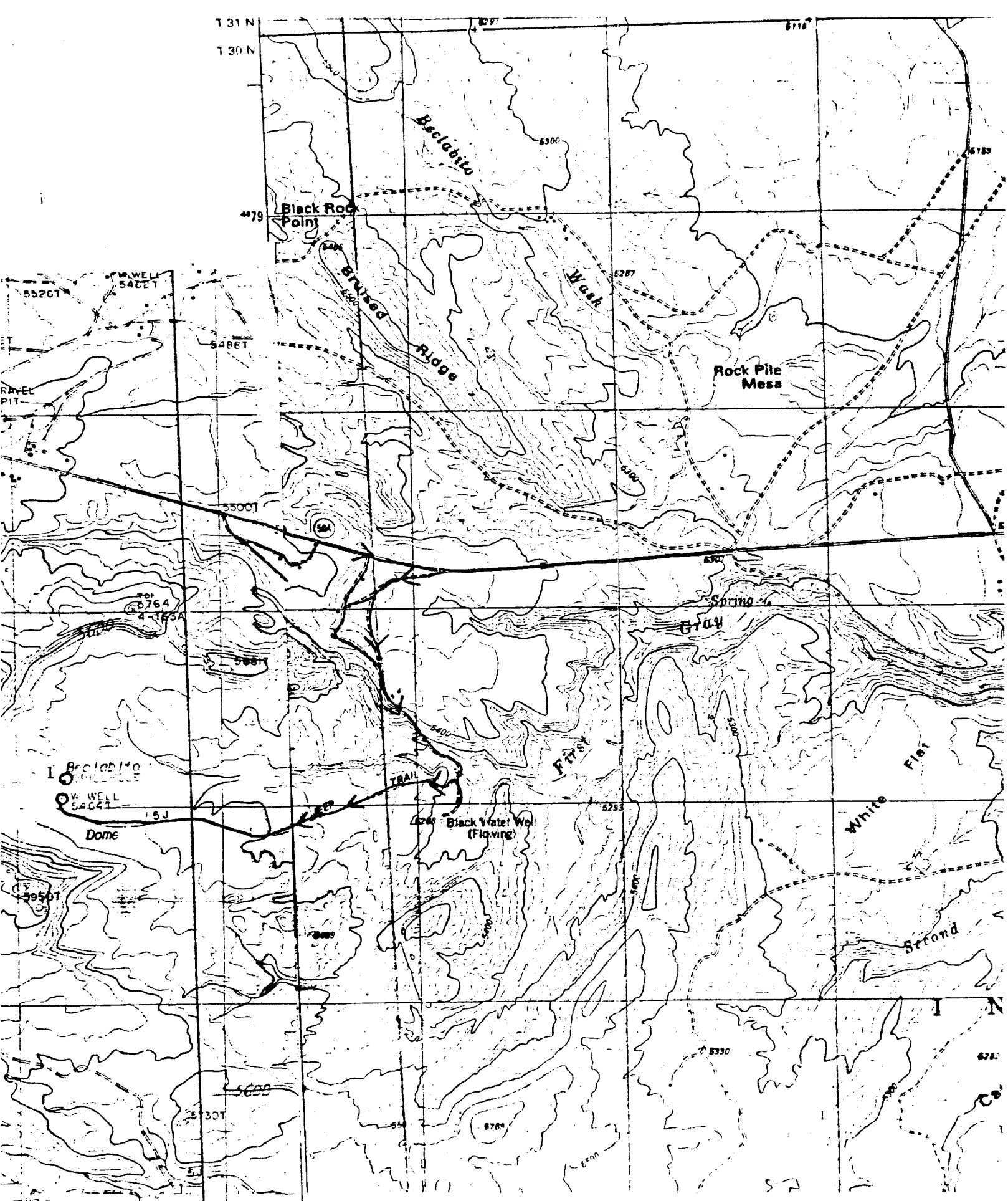
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed September 30, 1967

Registered Professional Engineer and/or Land Surveyor

E. U. Echohawk

Certificate No. 3602



ROADS & LOCATION:

BECLABITO 3-13-30N21W No.1

Sec. 13 T30N R21W

San Juan County, NM

1. Surface Formation: Wingate sandstone

2. Estimated Formation Tops:

DeChelly	1120
Cutler	1295
Hermosa	2820
Ismay	3490
Desert Creek	3594
Akah	3710
Barker Creek	3854
Lower Hermosa	4061
Molas	4316
Mississippian	4441
Ouray	4670
Elbert	4730
McCracken	4926
Aneth	5010
Precambrian	5035
Total Depth	5106

3. Estimated Depth of Anticipated Oil, Gas, Water or Minerals:

Gas 1295 Oil 3490

4. Casing (In Place):

0-50'	13 3/8", 48 lb.ft., ST&C, J-55 casing; cemented with 71 cu.ft. Class "A". Cement to surface.
0-652'	9 5/8", 36 lb.ft., ST&C, J-55 casing; cemented with 590 cu.ft. Class "A". Cement to surface.
0-2204'	7 5/8", 26.4 lb.ft., ST&C, J-55 casing. Cemented with 354 cu.ft. Class "C". Cement to surface.
2059-4100	4 1/2", 10.5 lb.ft, ST&C J-55 liner. Cemented with 300 cu.ft Class "C". Liner top squeezed with 472 cu.ft Class "C".

5. Pressure Control Equipment - Blow Out Preventer:

The attached schematic shows the type of blow out preventer to be used while drilling. The unit will be tested to 2000 psi prior to drilling out plugs.

6. Drilling Fluids:

Fresh water mud will be used to drill all cement plugs and cement retainers. Properties: Vis. 60 sec.; water loss will not be controlled.

Workover Procedure
Navajo Tribal AD No.1
Sec.13-Twn.30N-Rng.21W
San Juan Co., N.M

Data:See attached sheet for location of cement plugs and perforations.

Procedure:

1. Clean up location and roads. Install anchors. Dig small reserve pit.

2. Inspect surface casing, install and test wellhead welds.

3. Install bop with diverter system and test to 3,000 psi.

4. Pressure test 7 5/8" 26.4 lb./ft. casing to 2,000 psi.

5. Run 6 3/4" short mill tooth bit with 4 - 6 1/4" collars on 3 1/2" drill pipe to cement retainer at 1750'.

6. Use fresh water mud (vis. approximately 60 sec.) to drill the cement retainer and cement. Watch for indication of gas or lost circulation while drilling zone. Continue drilling to top of 4 1/2 liner at 2,059'. Cement was spotted across the liner top to 2,000'.

7. Run casing scraper with one drill collar to top of liner and circulate hole clean.

8. Run packer on 2 3/8" 4.7 lb./ft. EUE tubing to below Cutler perforations at 1868'-1878'. Pressure test casing to 2,000 psi.

9. Run 3 3/4" short mill tooth bit with 6 - 3 1/8" drill collars on 2 3/8" tubing and drill out cement and cast iron bridge plug at 2160' inside of liner. There was no indication that the Ismay perforations at 3546'-3550' were squeezed. Continue in hole to cement retainers at 3700', 3794', 3868', and 3960'. Continue in hole to 4,075'.

10. Pull drilling assembly and run casing scraper on drill collars and tubing to 4,075'.

11. Run the following cased hole logs, NGT, Casing Inspection, and Cement Bond. Examine logs to determine which zones have potential to be productive.

12. Run 4 1/2" treating packer and bridge plug on 2 3/8" tubing and straddle each zone that logs indicate to be possibibly productive. Test each zone and determine if further stimulation is warrented. If stimulation is required, consider large volume (10,000 to 20,000 gal.) 28% HCL acid fracutre treatment.

13. If Ismay is not flowing, run packer and acidize with 1,000 gal. 28% HCL. This type of stimulation has been successful in the Ismay formation in the Aneth area. If Ismay is trying to flow after drilling out cast iron bridge plug, run packer and begin test.

14. Test Ismay to atmosphere. A separator may be required to separate water if large amounts are recovered during initial test period. Length of test period will depend on results.

15. If Ismay test successful, set retrievable bridge plug near top of liner. If test is unsuccessful, run cement retainer and squeeze perforations.

16. Run 7 5/8" packer on tubing and set above Cutler perforations at 1868'-1878'. Acidize with 1,000 gal. 15% HCL to remove cement debris. This formation was previously fractured with 30,000 lb. of sand at 71 bpm. This stimulation is designed to clear debris from the perforations so that the zone can be tested properly. Further stimulation will depend on results of test.

17. Test Cutler to atmosphere. Length of test will depend on results.

18. If Culter test successful, prepare well for production. If test unsuccessful, run cement retainer and squeeze perforations.

19. Downhole production configuration will consist of Ismay producing through tubing below a packer with Culter being produced up the annulus. If only the Culter is productive, a tubing string and packer will be used.

20. Install production facilities and proceed with pipeline connection.

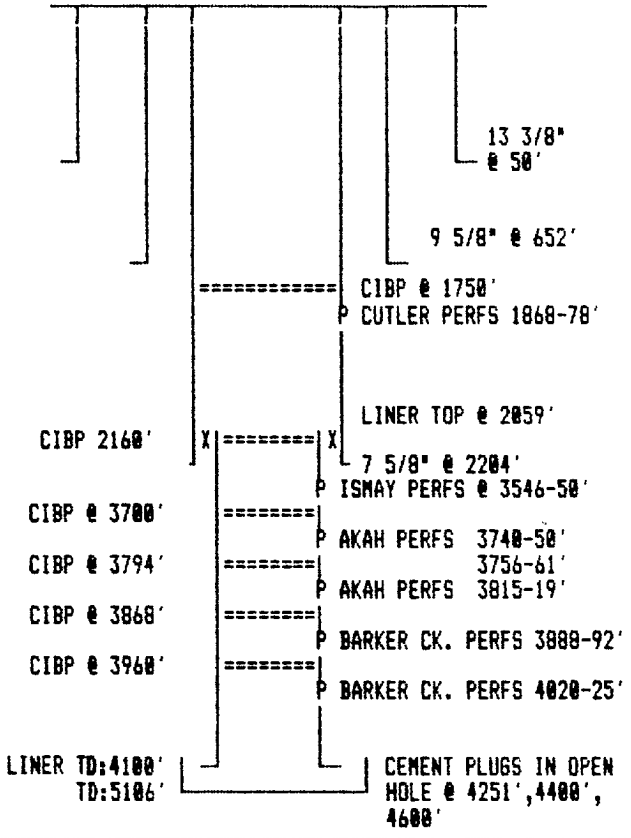
OPERATOR: CHUSKA ENERGY COMPANY | COUNTY/STATE: SAN JUAN, N.M.

LEASE DESIGNATION #: | TRIBE NAME: NAVAJO | UNIT NAME:

LEASE NAME: NAVAJO TRIBAL AD | WELL #: 1 | FIELD: BECLABITO | SURVEY: 1695' FNL & 1980' FEL

SECTION: 13 | TOWNSHIP: 30N | RANGE: 21W | ELEVATION: 5460 | TD: 5106 | PBTD:

WELL SCHEMATIC



CASING DATA

SIZE	WEIGHT	TYPE	BOTTOM	SACKS CMT	TOP OF CMT
13 3/8	48#		50	60	SURFACE
9 5/8	36#		652	500	SURFACE
7 5/8	26.4#		2204	300	SURFACE
4 1/2	10.5#	2059 TO 4100		254	2000'

LOGGING DATA

COMPANY	TYPE	INTERVAL	DATE
SCHLUMBERGER	IES	653-5106	10/19/67
SCHLUMBERGER	SNP	652-2206	11/12/67
SCHLUMBERGER	GR-SONIC	652-5106	
	DIPMETER		

FORMATION LOG TOPS

CUTLER 1295'	ELBERT 4730'
ISMAY 3490'	McCRACKEN 4926'
DESERT CK. 3594'	ANETH 5010'
AKAH 3710'	PRECAMBRIAN 5035'
BARKER CK. 3854'	
MISSISSIPPIAN 4441'	

COMPLETION RECORD

TUBING RECORD

SIZE	WEIGHT	TYPE	LENGTH	SEAT NIPPLES
NO TUBING SET AT THIS TIME				

PACKER DATA

TYPE	SETTING DEPTHS

REMARKS

CURRENT STATUS: PLUGGED AND ABANDONED

BARKER CK. DST-SMALL GAS W/150' SALT WATER

AKAH DST-GAS TSTM,152' GAS CUT MUD

ISMAY DST-FLOW 1236 MCFD,735' GAS CUT SALT WTR

DURING DST "HEAVY SPRAY OF SALT WATER" REPORTED

PERFORATIONS

FORMATION	DEPTHS	DEN & SIZE	DATE
CUTLER	1868-78'	4 PER FOOT	
ISMAY	3546-50'	4 PER FOOT	
AKAH	3740-50',3756-61' 3815-19'	4 PER FOOT	
BARKER CREEK	3888-92',4020-25	4 PER FOOT	

STIMULATION

DATE	INTERVAL	SIZE & TYPE	AIR	BEFORE	AFTER
2/68	4020-25'	2000 15% HCL	4	NO TEST REPORTED	
2/68	3888-92'	500 15% HCL	4	NO TEST REPORTED	
2/68	3815-19'	500 15% HCL	4	NO TEST REPORTED	
2/68	3740-61'	1500 15% HCL	4	NO TEST REPORTED	
2/68	3546-50'	1000 15% HCL	4	NO TEST REPORTED	
2/68	1868-78	30,000/SAND	71	1520 MCF	3620 MCF

ORIGINAL POTENTIAL TEST

DATE OF TEST: 2/68 (CUTLER)

PUMP: YES [ ] NO [X] | TBG PRESS:420

___ BO ___ BW 3620 MCF P/D

DATA AVAILABLE

	YES	NO
1. ELECTRIC LOGS	[X]	[ ]
2. DST RESULTS	[X]	[ ]
3. CORE DATA	[ ]	[X]
4. PVT RESULTS	[ ]	[X]
5. BHP RECORDS	[ ]	[X]

Information On Stimulation and Testing
AMOCO Navajo Tribal AD No. 1
1695' FNL & 1980' FEL
Sec. 13-Twn.30N-Rng.21W
San Juan Co., N.M

Perforations: Notes:

4020-25': BARKER CREEK - Perforated with 4 shots/ft. Spot 500 gal. 15% HCL, broke down at 1800 psi, achieved 4 bpm at 2700 psi, isip 1200 psi, 30 min. si 600 psi. Acidized with 1500 gal. 15% HCL, achieved 4 bpm at 2000 psi, isip 1100 psi, 30 min. si 600 psi. DST opened with weak blow, increased to fair blow, then decreased to weak blow. Recovered 1050' flammable gas in pipe, 120' slightly gas cut mud, 150' salt water and gas cut mud. Flow pressures 114-171 psi, shut in pressures 1881-1781 psi. Set cement retainer at 3960' and squeezed with 100 sk. class "C" at 2600 psi.

3888-92': BARKER CREEK - Perforated with 4 shots/ft. Spot 500 gal. 15% HCL, broke down at 2100 psi, achieved 4 bpm at 1800 psi, isip 1100 psi, 30 min. si 700 psi. Set cement retainer at 3868' and squeezed with 100 sk. class "C" at 3000 psi.

3815-19': AKAH - Perforated with 4 shots/ft. Spot 500 gal. 15% HCL, pumped in at 4 bpm at 2000 psi, isip 1050 psi, 30 min. si 700 psi. Set cement retainer at 3794' and squeezed with 100 sk. class "C" at 3000 psi.

3740-50'; 3756-61: AKAH - Perforated with 4 shots/ft. Spot 1500 gal. 15% HCL, broke down at 2600 psi, achieved 4 bpm at 1850 psi, isip 1050 psi, 30 min. si 800 psi. DST showed good gas blow initially decreasing to TSTM (flammable gas). Recovery was 152' gas cut mud, flow pressures 114-157-143 psi, shut in pressures 1487-1597 psi. Set cement retainer at 3700' and squeezed with 100 sk. class "C" at 3000 psi.

3546-50': ISMAY - Perforated 4 shots/ft. Acidized with 1000 gal 15% HCL, broke to 0 psi with acid on formation, achieved 4 bpm at 250 psi, isip 175 psi, 30 min. si 100 psi. DST showed gas to surface in 2 minutes with "heavy salt water spray". Recovered 735' gas cut salt water with trace of oil. Flow pressures 641-428 psi, shut in pressures 1731-1464 psi. After 180 flow time, gas was measured at 1236 MCFD. Set bridge plug at 2160'. Spotted cement to 2000', with liner top at 2059'.

1868-78': CUTLER - Perforated with 4 shots/ft. Broke down with water at 1700 psi, pump 300 gal. MCA at 70 bpm and 1400 psi, fractured with 30,450 gal. water carrying 20,000 lb. 20/40 sand and 10,000 lb. 10/20 sand at 71 bpm, average pressure 2000 psi, isip 1400 psi, 5 min. si 1300 psi, 30 min. si 1020 psi, 1 hr. si 790 psi. Tested zone at 3620 MCFD with tubing at 1875'. DST showed strong blow with maximum gage of 1520 MCFD on 1 1/8" choke at 100 psi flowing pressure. A cement retainer was set at 1750' and the perforations squeezed with 100 sk., a 10 sk. plug was set at the surface to abondon the well.