

File

Entered in IND File .....  
 Location Map Pinned ..... ✓  
 Card Indexed .....

Checked by Chief ..... *RMB*  
 Approval Letter .....  
 Disapproval Letter .....

COMPLETION DATA:

Date Well Completed *12-15-68* .....

Location Inspected .....

OW..... WW..... TA.....

Bond released

CW..... OS..... PA. ✓

State or Fee Land .....

LOGS FILED

Driller's Log.....

Electric LOGS *2* .....

E. .... GR-N..... Micro.....

I.E. & Dual IND. - LAT. ✓

Borehole Compensated

Sonic Log - Gamma Ray ✓

**BILLY F. LATCH**

**Consulting Geologist**

93 RIVERVIEW DRIVE

DURANGO, COLORADO

July 16, 1968

OFFICE PHONE: CH-7-5050

HOME PHONE: CH-7-3480

Mr. Jack Feight  
Secretary  
Utah Division of Oil & Gas Conservation  
1588 W North Temple  
Salt Lake City, Utah 84116

Re: Application to drill,  
Chambers & Kennedy  
Horn Unit # 1,

Dear Mr. Feight:

Enclosed please find three copies of Federal form 9 - 331 C, and pertinent accompanying information. These are copies of information submitted to the U. S. Geological Survey District Office in Durango, Colorado.

This is our first venture into Utah, and Mr. Jerry Long, has informed me that certain state, as well as federal regulations will have to be complied with in the drilling of this test.

The operator is very desirous of abiding by all regulations and providing you with proper information as required.

We shall greatly appreciate any aid and direction that you can render to us in regard to this matter.

Sincerely yours,

*Billy F. Latch*

Billy F. Latch, CPG - PE

cc: USGS Durango  
Chambers & Kennedy

BILLY F. LATCH

Consulting Geologist

93 RIVERVIEW DRIVE

DURANGO, COLORADO

July 16, 1968

OFFICE PHONE: CH-7-5050

HOME PHONE: CH-7-3480

Mr. Jerry W. Long  
District Engineer  
U. S. Geological Survey  
Oil & Gas Division  
Durango, Colorado

Re: Application to drill,  
CHAMBERS & KENNEDY  
Horn Unit # 1,

Dear Jerry:

Enclosed please find copies of Form 9-331 C, properly filled out ( I trust ) and accompanying information.

Because the operational and casing programs are somewhat lengthy and complex, I am attaching the geologic prognosis and operations program as submitted by myself to Chambers & Kennedy.

The designation of operator forms should be in your office shortly.

You are aware of the progress being made on the approval for the proposed Horn Unit and it should be finalized within the next few days.

We will greatly appreciate your approval and my notification thereof, as soon as it can be legally and properly granted.

We are certainly appreciative of the cooperation and help rendered by you and your office in the pursuit of this matter.

Sincerely yours,

*Billy F. Latch*  
Billy F. Latch, CPG - PE

cc: Utah Oil & Gas Conservation Commission  
Chambers & Kennedy

**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 Wildcat                      SINGLE ZONE                       MULTIPLE ZONE

2. NAME OF OPERATOR  
CHAMBERS & KENNEDY

3. ADDRESS OF OPERATOR  
607 Midland National Bank Bldg.  
Midland, Texas 79701

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
 At surface 690' fnl & 730' fsl ne/ne  
 At proposed prod. zone same                      *SW, NE, NE*

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 drig. unit line, if any) 690' south

16. NO. OF ACRES IN LEASE 2,520

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. none

19. PROPOSED DEPTH 11,500 *MISS 1154*

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 7301 ground level

22. APPROX. DATE WORK WILL START\* Aug. 1, 1968

5. LEASE DESIGNATION AND SERIAL NO.  
Fed. U - 4416

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME  
Horn Unit

8. FARM OR LEASE NAME  
Federal

9. WELL NO.  
Horn Unit # 1

10. FIELD AND POOL, OR WILDCAT  
Wildcat *NE 1/4 16*

11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA  
17 - T. 29 S. B. 26 E. SLM

12. COUNTY OR PARISH  
San Juan

13. STATE  
Utah

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
(SEE OPERATING DETAIL ATTACHED)				

Propose to drill test to sufficient depth to test the Mississippian rocks, unless commercial production is encountered at lesser depth. ✓

Will attempt air drilling from under surface casing. Plan definitely to try and penetrate Cutler and Hermosa beds with air. ✓

Sufficient blowout prevention equipment, drilling heads and etc. will be utilized as dictated by mode of operation. ✓

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. Billy F. Latch  
 SIGNED Billy F. Latch TITLE Geologist - Engineer DATE July 16, 1968

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

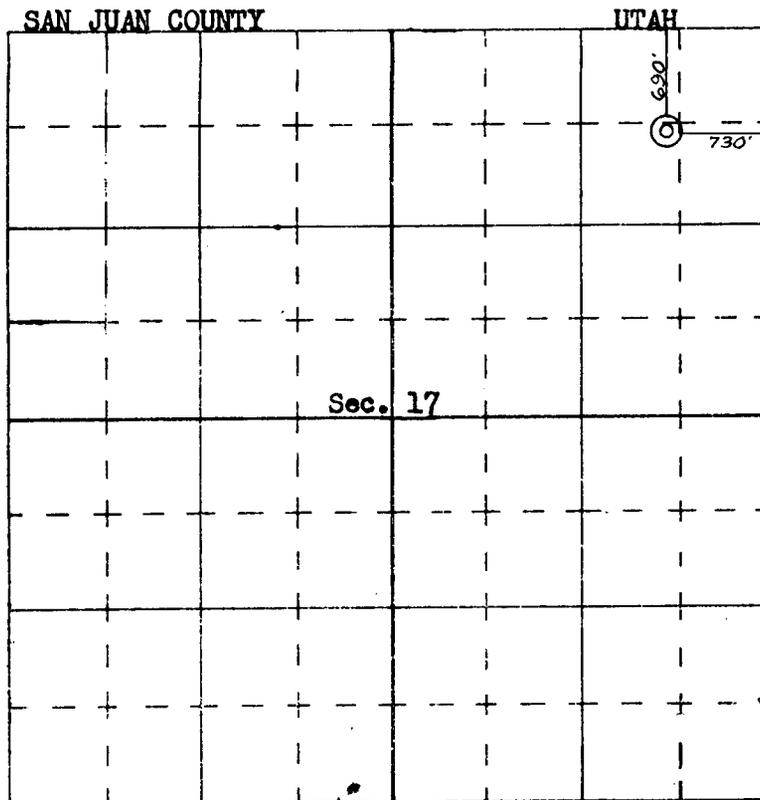
COMPANY CHAMBERS AND KENNEDY

LEASE \_\_\_\_\_ WELL NO. \_\_\_\_\_

SEC. 17, T. 29 SOUTH, R. 26 EAST, SLM

LOCATION 690 feet from the North line and  
730 feet from the East line

ELEVATION 7301.0



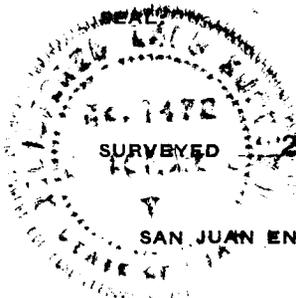
SCALE—4 INCHES EQUALS 1 MILE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTE OF ACTUAL SURVEYS MADE BY ME UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

*James P. Lee*  
Registered Land Surveyor.

JAMES P. LEESE

UTAH REG. NO. 1472



SURVEYED 20 June, 19 68

SAN JUAN ENGINEERING COMPANY, FARMINGTON, N. M.

# CHAMBERS + KENNEDY

Horn Unit # 1,  
ne/ne/ Sec. #17, T-29S, R-26E.  
San Juan Co. Utah  
El. 7301 G.L.

11,000' 5 1/2" O.D. Tapered Casing String  
For

Based on API Minimum Values  
Minimum Safety Factors: Collapse 1.00  
Tension 1.60  
Burst 1.10

Use Gradient of 0.50 psi/ft to Determine Hydrostatic Pressure

Depth		Feet	Wgt.	Grade	Thread	Int. Press. At Yield Strength PSI	Weight		Collapse				Tension		
From	To						Section	Cumulative	Rated PSI	For Tension PSI	Hydrost. Press. PSI	Safety Factor	Rated Pounds	Safety Factor	
13 3/8" ✓	600 ✓	0	600	54.5	J	BR/ST+C	2730	32,700	32,700	1,140	—	300	3.8	545,000	High
9 5/8" ✓	6300	5300	1000	43.5	N	BR/LT+C	6330	43,500	43,500	4050	4050	3,350 3,150	1.21/ 1.29	825,000	High
	5300	4300	1000	40.0	N	BR/LT+C	5750	40,000	83,500	3280	3208	2,650 2,150	1.21/ 1.46	737,000	High
	4300	3300	1000	40.0	J	BR/ST+C	3950	40,000	123,500	2760	2580	2,150	1.20	477,000	High
	3300	0	3300	36.0	J	BR/LT+C	3520	118,800	242,300	2220	1980	1,650	1.20	462,000	1.9

### Program:

Set approx 50' of 20" conductor pipe in 26" hole - 70sx. ✓  
Drill 17 1/2" hole + set 13 3/8" csq. @ 600' approx - 700 sx. ✓  
Drill 12 1/4" hole + set 9 5/8" csq @ 6300' approx - 550 sx. ✓  
Drill 7 7/8" hole to T.D. @ 11,500' approx. ✓

Completion string of 5 1/2" csq. will be designed after well is logged. Overdesign will be considered if casing extends thru salt section ✓

Description	Feet		
	Made Up	Screw	Requisition
13 3/8" 54.5 J	600	6	606
9 5/8" LT+C	5300	70	5370
9 5/8" ST+C	1000	9	1009
Total			

By: B. F. Litch, PE

AGE	FORMATION	COMMENT
Jurassic + Cretaceous	Dakota ss + Morrison fm.	Dakota should be at or near surface, may carry small water ±150'± Morrison fm. Var. red, grn, purple shs. lensing ss beds, fm to coarse gr. probably no major water problem / can be mist drilled. ±600'e
	Summerville fm.	Mstly red sh, lensing ss.
	Entrada ss	fm/med gr ss / major aquifer / possibly substantial water
	Carmel sh	red sh w lensing ss
	Nauajo ss	fm/med gr wh ss. excellent $\phi$ + perm. A major aquifer, probably substantial amounts of water
	Wingate ss	fm/med gr red ss. excellent $\phi$ + perm. A major aquifer, probably substantial amts. of water / loosely cemented in Utah well - water + sand flowed / stuck drill pipe
Perm.	Chinle	var sh/sltsta / ss. sands discontinuous / occasionally yields water but can normally be mist drilled.
	Moenkopi	Red + var sh + sltsta. / Occ ls stringers / should present no problems.
	Cutler (upper)	Alternating var shs, ss, sltsta., occ ls stringers + incls. Sands are generally low $\phi$ + perm. tendency to "weep" but no known major water problems. Normally yields readily to air + mist drilling.
	White Rim ss. (member of Cutler)	fm/med gr / wh + gry ss. is poorly consolidated and a major aquifer. Superior test require 13 lb. mud to stop artesian flow. Est. rock pressure ± 3250 psi. Pipe <u>must be set thru this</u> for air drilling of prospective formations
	Cutler (lower)	Alternating var shs, ss, + occ ls. stringers. Carries some anhydrite, is disseminated / no massive. Sands will probably "weep" some water but normally can be air and mist drilled.
		<u>THIS ZONE CONTAINS THE PROSPECTIVE CUTLER SANDS</u>
	Hermosa (upper)	Alternating gry shs, ls, + ss. occ cherty zones. Sands generally low perm - weeping - can usually be mist drilled.
		<u>THESE SANDS + Limes ARE PROSPECTIVE</u>
	Paradox (upper)	blk sh, anhy, dolo + ls. may be prospective.
	Paradox (salf)	soft, blk sh, + anhy. will probably be plastic + flow at this depth + temp. @ out hydro head - should mud up for this.
	Hermosa (lower) / Moho	blk sh, ls, / Moho is red sh / cherty, + some ls.
Miso	Leadville	ls/gry/wh / probably some chert.

20" 16" 10 3/4" 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 11000

13 3/8" 9 5/8" 7 5/8"

CASING PROGRAM MAXIMUM MINIMUM

Est. Total Depth = 11,500'

Note: Formation + predicted tops are based on seismic interpretation and correlation @ lithology of nearest control point SUPERIOR OIL CO. Horsethief Canyon #1. Section is operational. Actual setting points etc. should be in hands of competent well site geologist who is thoroughly informed as to operational plans and attendant problems.

July 17, 1968

Chambers & Kennedy  
607 Midland National Bank Building  
Midland, Texas 79701

Re; Well No. Horn Federal #1,  
Sec. 17 T. 29 S. R. 26 E.  
San Juan County, Utah.

Gentlemen:

Insofar as this office is concerned, approval to drill the above mentioned well is hereby granted. However, this approval is conditional upon a Designation of Agent being filed with this office in accordance with Rule A-4, General Rules and Regulations and Rules of Practice and Procedure, State of Utah Division of Oil and Gas Conservation.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

PAUL W. BURCHELL, Chief Petroleum Engineer  
HOME: 277-2890 - Salt Lake City, Utah  
OFFICE: 328-5771

This approval terminates within 90 days if the well has not been spudded-in within said period.

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered while drilling. Your co-operation with respect to completing this form will be greatly appreciated.

Chambers & Kennedy

July 17, 1968

-2-

The API number assigned to this well is 43-037-30018 (see Bulletin D12 published by the American Petroleum Institute).

Very truly yours,

DIVISION OF OIL & GAS CONSERVATION

CLEON B. FEIGHT  
DIRECTOR

CBF:sc

cc: U. S. Geological Survey  
Jerry Long, District Engineer  
Box 1809  
Durango, Colorado

Encl: Form OGC-8-X Water Encountered During Drilling

# Chambers & Kennedy

W. D. KENNEDY  
A. H. HEDDEN  
PHONE MU 3-4643

SUITE 607  
MIDLAND NATIONAL BANK BUILDING  
MIDLAND, TEXAS 79701

C. FRED CHAMBERS  
1701 HOUSTON CLUB BUILDING  
HOUSTON, TEXAS 77002  
PHONE CAPITOL 2-9661

July 17, 1968

1968 JUL 19 AM 10 05

State of Utah  
Division of Oil & Gas Conservation  
1588 West North Temple  
Salt Lake City, Utah 84116

Gentlemen:

Chambers & Kennedy proposes to commence operations to explore for oil and/or gas in the State of Utah at an early date.

We herewith submit for your consideration our "Designation of Operator" which has been duly executed by W. D. Kennedy, partner of Chambers & Kennedy.

If this form is not in order, or if you require further information, please let us know by return mail.

Very truly yours,

CHAMBERS & KENNEDY



G. C. Tompson  
Manager of Production

dml/

cc: Secretary of State  
State Capitol Bldg.  
Salt Lake City, Utah  
cc: Mr. Bill Latch  
93 Riverview Drive  
Durango, Colorado 81301

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL & GAS CONSERVATION 1968 JUL 19 AM 10 05

"DESIGNATION OF AGENT"

The undersigned producer, operator, transporter, refiner, gasoline or initial purchaser who is conducting oil and/or gas operations in the State of Utah, does, pursuant to the Rules and Regulations, and Rules of Practice and Procedure of the Division of Oil and Gas Conservation of the State of Utah, hereby appoint, Secretary of State, whose address is State Capitol Bldg., Salt Lake City, Utah, its designated agent to accept and to be served with notices from said Division, or from other persons authorized under the Oil and Gas Conservation Act of the State of Utah.

The undersigned further agrees to immediately report in writing, all changes of address of the agent, and any termination of the agent's authority, and in the latter case, the designation of a new agent or agents shall be immediately made. This designation of agent, however, shall remain in full force and effect until and unless a new designated agent is filed in accordance with said statute and said regulations.

Effective Date of Designation July 17, 1968

Company Chambers & Kennedy Address 607 Midland National Bank Bldg.  
Midland, Texas 79701

By  Title partner  
(Signature) W. D. Kennedy

NOTE: AGENT MUST BE A RESIDENT OF UTAH.

FROM  
THE OFFICE OF THE UTAH SECRETARY OF STATE

Date 7/22/68

To Department

- \_\_\_\_\_ Adult Probation and Parole
- \_\_\_\_\_ Aeronautics
- \_\_\_\_\_ Aging - Council
- \_\_\_\_\_ Agriculture Department
- \_\_\_\_\_ Attorney General
- \_\_\_\_\_ Auditor, State
- \_\_\_\_\_ Budget - Audit Committee
- \_\_\_\_\_ Banking Department
- \_\_\_\_\_ Building Board
- \_\_\_\_\_ Business Regulations
- \_\_\_\_\_ Contractors - Department
- \_\_\_\_\_ Corrections - Board
- \_\_\_\_\_ Development Services
- \_\_\_\_\_ Economic Opportunity - Office
- \_\_\_\_\_ Engineer, State
- \_\_\_\_\_ Expositions - STATE FAIR
- \_\_\_\_\_ Finance Department
- \_\_\_\_\_ Fire Marshall
- \_\_\_\_\_ Fish and Game Department
- \_\_\_\_\_ Forestry and Fire Control
- \_\_\_\_\_ Governor
- \_\_\_\_\_ Health Department
- \_\_\_\_\_ Historical Society
- \_\_\_\_\_ Industrial Commission
- \_\_\_\_\_ Industrial Promotion Commission
- \_\_\_\_\_ Institute of Fine Arts
- \_\_\_\_\_ Insurance Department
- \_\_\_\_\_ Insurance Fund
- \_\_\_\_\_ Juvenile Court
- \_\_\_\_\_ Land Board
- \_\_\_\_\_ Legislative Council
- \_\_\_\_\_ Legislative Legal Services
- \_\_\_\_\_ Liquor Control Commission
- \_\_\_\_\_ Oil and Gas Conservation Commission
- \_\_\_\_\_ Parks and Recreation
- \_\_\_\_\_ Personnel Department
- \_\_\_\_\_ Planning Coordinator
- \_\_\_\_\_ Prison
- \_\_\_\_\_ Public Safety
- \_\_\_\_\_ Public Instruction - Department
- \_\_\_\_\_ Retirement Board
- \_\_\_\_\_ Road Commission
- \_\_\_\_\_ Supreme Court
- \_\_\_\_\_ Tax Commission
- \_\_\_\_\_ State Treasurer
- \_\_\_\_\_ Travel Council
- \_\_\_\_\_ Water Resources
- \_\_\_\_\_ Welfare Department
- \_\_\_\_\_ Other \_\_\_\_\_

Att: \_\_\_\_\_

Remarks: \_\_\_\_\_

*Sharon*

10  
PE  
PMB

Form 5-531  
(May 1963)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

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

Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.  
Fed. U - 4416

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME  
Horn Unit

8. FARM OR LEASE NAME  
Fed. Horn Unit

9. WELL NO.  
1

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
17-T 29 S - R 26 E  
SIM

12. COUNTY OR PARISH  
San Juan

13. STATE  
Utah

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  Wildcat

2. NAME OF OPERATOR  
Chambers & Kennedy

3. ADDRESS OF OPERATOR  
607 Midland National Bank Bldg. Midland, Texas

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\* See also space 17 below.)  
At surface 690' fnl & 730' fel ne/ne

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
7301 gr. 7319 KB

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"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <u>Surface casing</u>	

(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.)\*

Surface Casing set in 17-1/2" hole  
13-3/8" - 61 lb. - J55 \* ST & C - set at 570' rotary depth  
552' ground

Baker cement guide shoe -  
3 Larkin centralizers @ 536' rotary depths  
471'  
378'

Cemented with 700 sx Class A plus 14 sx CaCl (2% CaCl)  
Circulated cement - excess of 20 bbls.  
Plug down at 3:45 PM 9/1/68

9/2/68 8:00 AM pressure up to 500 psi. held for 30 mins. no pressure loss, cut off 1' below ground level, commence nipping up.

*Note: Well was spudded 7/31/68 @ cable tools.  
Drilled @ cable tools to depth of 315'.  
Rotary Operations Commenced 8/29/68  
Loffland Bros. Rig # 237*

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

SIGNED B. F. Latch, B. F. Latch TITLE Geologist - Engineer DATE 9/3/68

(This space for Federal or State office use)

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

### Cement Program - Surface Casing

Chambers + Kennedy  
Horn Unit #1  
17-295-26E  
San Juan Co. Utah

**PROPOSED**

Use Class A - 2% Ca CO<sub>3</sub>

$$15.6 \text{ lbs gal} - 1 \text{ sx} = 1.18 \text{ ft}^3$$

Calculation Factors:

$$\begin{aligned} \text{Depth} &= 600' \\ \text{Csg size} &= 13\frac{3}{8}'' \\ \text{Hole size} &= 17\frac{1}{2}'' \end{aligned}$$

$$\text{Annulus vol} = .6946 \text{ ft}^3 \text{ per lin ft.}$$

$$\text{Casing vol} = .8543 \text{ ft}^3 \text{ per lin ft.}$$

$$\begin{aligned} 600 \times .6946 &= 416 \text{ ft}^3 \text{ Ann vol.} & 416 / 1.18 &= 353 \text{ sx cement} \\ 30 \times .8543 &= 25.6 \text{ ft}^3 \text{ csg vol left.} & 25.6 / 1.18 &= 22 \text{ sx cement} \\ & \underline{441.6 \text{ ft}^3 \text{ req.}} & 442 / 1.18 &= 375 \text{ sx cement} \end{aligned}$$

$$353 \times 2 = 706 + 22 = 728 \text{ sx cement @ 100\% SF}$$

**ORDER 700 sx + 2% Ca CO<sub>3</sub>**

**ACTUAL**

Depth = 552' Gr. (570' Rotary)

USED - 714 sx Class A 2% Ca CO<sub>3</sub>

$$714 \times 1.18 = 844 \text{ ft}^3 \text{ cement}$$

$$\begin{aligned} \text{Cement req} &= 552 \times .6946 = 383 \text{ ft}^3 / 1.18 = 325 \text{ sx} \\ 30 \times .8543 &= 25.6 \text{ ft}^3 / 1.18 = 22 \text{ sx} \end{aligned}$$

$$\text{Circ. 20 bbls (excess) } \times 5.6 = 112.0 \text{ ft}^3$$

$$\begin{aligned} &844 \text{ ft}^3 \\ &\underline{-26 \text{ (in csg)}} \\ &818 \\ &\underline{-112 \text{ (excess circulated)}} \\ &706 \text{ Cement in annulus} \end{aligned}$$

$$\frac{706}{383} = 184\% \text{ of theoretical required for annulus}$$

3 Larkin Centralizers Rotary Depth of 536'  
1st - 3rd - 6th collars 471'  
378'

Job opl - 3:45 PM 9/11/68 Halliburton # 410394

B. F. Latch

September 16, 1968

Chambers & Kennedy  
607 Midland National Bank Building  
Midland, Texas 79701

Re: Well No. Horn Federal # 1,  
Sec. 17, T. 29 S., R. 26 E.,  
San Juan County, Utah

For the month of August.

Gentlemen:

Our records indicate that you have not filed a Monthly Report of Operations for the month(s) mentioned above for the subject well. Rule C-22 (1), General Rules and Regulations and Rules of Practice and Procedure, Utah State Division of Oil and Gas Conservation requires that said reports be filed on or before the sixteenth (16) day of the succeeding month. This report may be filed on Form OGC-1b, (U. S. Geological Survey 9-331, "Sundry Notices and Reports on Wells"), or on company forms containing substantially the same information. We are enclosing forms for your convenience.

Your cooperation with respect to this request is greatly appreciated.

Very truly yours,

DIVISION OF OIL & GAS CONSERVATION

SHARON CAMERON  
RECORDS CLERK

sc/sr

Enclosure: Form OGC-1b

15

PLUGGING PROGRAM FORM

Name of Company Chambers Kennedy Verbal Approval Given To: \_\_\_\_\_

Well Name: Nanlund #1 Sec. 17 T. 29S R. 26E County: San Juan

Verbal Approval Was given to plug the above mentioned well in the following manner:

Received plugging program from Jerry Long:

7.D. 12, 256'

#1 10,320'-10,320' (gas show)

#2 8,425'-8,525' across top of Nemasa

#3 7,350'-7,450' bottom of line to be left in hole

#4 100' plug top of cutoff - 4500' (intermediate string)

#5 1700'-1800' across top of Chinle

#6 1100'-1200' across top of Navajo

#7 520'-620' bottom of surface casing

#8 15 sack plug with Markey

? Canyon - Surface

Marion 110'

Entrada 915'

Navajo 1157'

Chinle 1700'

top of white lime ss 5028'

top of Lower Cutler 5607'

top of Nemasa 8422'

Date Verbally Approved: 12/6/68 Signed: Charles A. [Signature]

no Sacks

1588 West North Temple  
Salt Lake City, Utah 84116  
328-5771  
March 13, 1969

Chambers & Kennedy  
607 Midland National Bank Bldg.  
Midland, Texas

Re: Horn Unit #1  
Sec. 17, T. 29 S, R. 26 E,  
San Juan County, Utah

Gentlemen:

This letter is to advise you that the "Well Completion or Recompletion Report and Log" for the above mentioned well is due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Forms OGC-3, "Well Completion or Recompletion Report and Log", in duplicate and forward them to this office as soon as possible.

Thank you for your cooperation in this request.

Sincerely,

DIVISION OF OIL & GAS CONSERVATION

SHARON CAMERON  
RECORDS CLERK

sc

STATE OF UTAH  
OIL & GAS CONSERVATION COMMISSION

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_  
 b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESVR.  Other \_\_\_\_\_

2. NAME OF OPERATOR  
**Chambers & Kennedy**

3. ADDRESS OF OPERATOR  
**607 Midland National Bank Bldg., Midland, Texas**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
 At surface **690' fnl & 730' fel ne/ne**  
 At top prod. interval reported below  
 At total depth

14. PERMIT NO. \_\_\_\_\_ DATE ISSUED \_\_\_\_\_

5. LEASE DESIGNATION AND SERIAL NO.  
**Fed. U-4416**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME  
**Horn Unit**

8. FARM OR LEASE NAME  
**Fed. Horn Unit**

9. WELL NO.  
**1**

10. FIELD AND POOL, OR WILDCAT  
**Wildcat**

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA  
**17, T29S - R26E**

12. COUNTY OR PARISH  
**San Juan**

13. STATE  
**Utah**

15. DATE SPUNDED **7/31/68** 16. DATE T.D. REACHED **12/15/68** 17. DATE COMPL. (Ready to prod.) \_\_\_\_\_ 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* \_\_\_\_\_ 19. ELEV. CASINGHEAD **7301**

20. TOTAL DEPTH, MD & TVD **11,565** 21. PLUG, BACK T.D., MD & TVD \_\_\_\_\_ 22. IF MULTIPLE COMPL., HOW MANY\* \_\_\_\_\_ 23. INTERVALS DRILLED BY \_\_\_\_\_ ROTARY TOOLS **315 - TD** CABLE TOOLS **0 - 315**

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* \_\_\_\_\_ 25. WAS DIRECTIONAL SURVEY MADE  
**no**

26. TYPE ELECTRIC AND OTHER LOGS RUN  
**IES GRS** 27. WAS WELL CORED  
**no**

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8"	61.0	552	17 1/4"	700 sx	none
9 5/8"	multi	6273	12 1/2"	550 sx	none

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
7 5/8"	6168	7398	250sx	

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.\* PRODUCTION

DATE FIRST PRODUCTION \_\_\_\_\_ PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) \_\_\_\_\_ WELL STATUS (Producing or shut-in) \_\_\_\_\_

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) \_\_\_\_\_ TEST WITNESSED BY \_\_\_\_\_

35. LIST OF ATTACHMENTS \_\_\_\_\_

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

SIGNED *SC Thompson* TITLE Manager of Production DATE 3/18/69

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

# 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 38, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, 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 35.

**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.

**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.

**Items 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 33. 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:** "Sacks 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.)

FORMATION		TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH	TOP	TRUE VERT. DEPTH
Entrada	915	1040	Water	DST #1, 10,269-10,335 T.O. 5' preflow - 60' isi - 120' flow- 120' fsi GTS 5' steady - for 90' stabile @714mcf Recover 112' GC drlg mud IHP 5372 - Isip 3780 - IFP 198 FHP 5372 - fsip 3564 - FFP 482	J	110		
Navajo	1158	1460	Water					
White rim	5028	5607	Water					
Paradox (?)	10312	10312	Gas					
					-			
					R	1702		
					P	2880		
						8473		
					M	11355		

MAR 20 1969

Jerry Long - USGS

Pat Peterson Plugging from  
intermediate casing up on  
Chambers & Kennedy well  
Nan Fed # 1

sec 17 T 29 S R 26 E - San Juan Co.

Pat Doering work for "J J" salvaging out of  
Farrington.

USGS will keep  
us informed -

CMB

2/5/70

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TR  
(Other Instructive  
verse side)

FE  
re

Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

Fed. U-4416

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

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  Dry

2. NAME OF OPERATOR

Chambers & Kennedy

3. ADDRESS OF OPERATOR

607 Midland National Bank Bldg. - Midland, Texas

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)

At surface

690 FNL & 730 FEL NE/NE

7. UNIT AGREEMENT NAME

Horn

8. FARM OR LEASE NAME

Fed. Horn Unit

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Wildcat

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

17, T-29-S, R-26-E

SLM

12. COUNTY OR PARISH

13. STATE

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

7301 G.L.

16.

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON\*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

(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.)\*

On February 14, 1970 moved in J & J Casing Pullers, Inc. and Plugged and Abandoned the above referenced well in the following manner:

1. Found Casing stuck in Navajo Sand at 1100 feet.
2. Shot 9-5/8" Casing off at 1037 ft. and recovered 1036.43 feet.
3. Spotted 100 ft. plug 6300 - 6400 with 25 sacks cement.  
Spotted 100 ft. plug 4650 - 4750 with 30 sacks cement.  
Spotted 100 ft. plug 2700 - 2800 with 30 sacks cement.  
Spotted 100 ft. plug 1650 - 1750 with 30 sacks cement.
4. XSpotted 100 ft. plug with 30 sacks accross casing stub, Half in and half out.
5. Spotted 30 sacks cement at 600 ft. up accross surface casing.
6. Rigged down, moved off and spotted 15 sack surface plug at top of 13-3/8" Casing and erected Dry Hole Marker.
7. Cleaned up Loaction. ✓

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

SIGNED

*B. Miller Agent*

TITLE

DATE

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

JERRY W. LONG  
DISTRICT ENGINEER

\*See Instructions on Reverse Side