

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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  
Columbia Gas Development Corp. 713/871-3400

3. ADDRESS OF OPERATOR  
P. O. Box 1350 Hou., TX. 77251-1350

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At surface 800' FSL & 1930' FWL of Sec. 19-T26S-R20E  
At proposed prod. zone 2000 FNL & 1350' FEL

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
Approx. 26 miles NW of Moab

10. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)  
800'

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
9779 MD/7451 TVD

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
Ground Elev. Ungraded 5965.1 - Finished Grade elec. 5963.7

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
Set	20"	94#	660'	To Sfc. w/625 sx C1-B
17 1/2"	13 3/8"	61#	4500'	265 Lite + 415 sx C1-B
12 1/4"	9 5/8"	53#	7450'	1400 sx. C1-G
	5 1/2"	20#	9779' (Production liner)	

See attached for additional supplemental info

1. Eight Point Drilling Program
2. Multi-Point Surface Use Program
3. Directional Plan
4. BOPE Digram
5. Certified Surveyor's plat, Cut & Fill Sheet
6. Area Topog

**RECEIVED**

APR 15 1991

DIVISION OF OIL GAS & MINING

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 Alex C. Reese TITLE Regulatory Clerk DATE 4/10/91

(This space for Federal or State office use)  
PERMIT NO. 43-019-31319 APPROVAL DATE \_\_\_\_\_

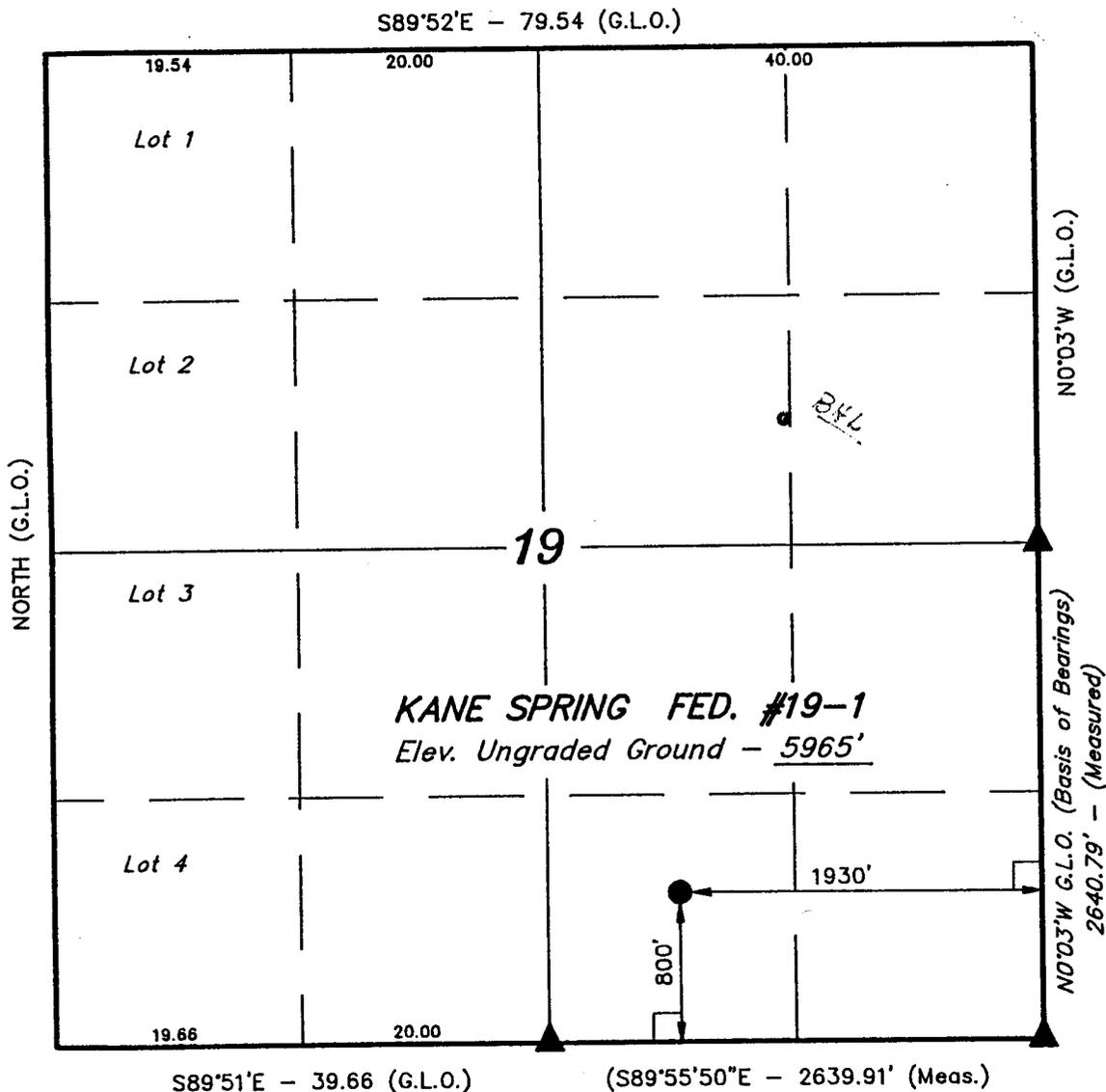
APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE: 5-21-91  
BY: [Signature]  
WELL SPACING: 615-3-2

\*See Instructions On Reverse Side

T26S, R20E, S.L.B.&M.

**COLUMBIA GAS DEVELOPMENT CORP.**

Well location, KANE SPRING FED. #19-1, located as shown in the SW 1/4 SE 1/4 of Section 19, T26S, R20E, S.L.B.&M. Grand County, Utah.



**BASIS OF ELEVATION**

SPOT ELEVATION AT THE SOUTHEAST CORNER OF SECTION 19, T26S, R20E, S.L.B.&M. TAKEN FROM THE GOLD BAR CANYON QUADRANGLE, UTAH, GRAND COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6002 FEET.



**CERTIFICATE**

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.

*Robert L. Kay*  
 REGISTERED LAND SURVEYOR  
 REGISTRATION NO. 5709  
 STATE OF UTAH

**UNTAH ENGINEERING & LAND SURVEYING**  
 85 SOUTH 200 EAST - VERNAL, UTAH 84078  
 (801) 789-1017

SCALE 1" = 1000'	DATE 3-25-91
PARTY J.T.K. H.C. J.R.S.	REFERENCES G.L.O. PLAT
WEATHER COOL	FILE COLUMBIA GAS DEVL. CORP.

▲ = SECTION CORNERS LOCATED. (Brass Caps)

EIGHT-POINT DRILLING PROGRAM

COMPANY: Columbia Gas Development Corporation  
WELL NAME: Kane Springs Federal #19-1  
LOCATION: Sec. 19, T26S, R20E, Grand County, Utah

Onsite Inspection Date: April 3, 1991

**CONFIDENTIAL**

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulation 43 CFR 3100, Onshore Oil & Gas Order No.1, and the approved plan of operations. A copy of these conditions will be furnished to the field representative to insure compliance.

**1. Estimated Geological Markers**

<u>Formation Tops</u>	<u>Depth</u>	<u>Subsea</u>
Wingate	Surface	+5965
Chinle	607	+5383
Moenkopi	1000	+4990
Cutler	1485	+4505
Rico	2225	+3765
Hermosa	2693	+3297
Paradox Salt	4423	+1567
Cane Creek	7355	-1365

**2. Estimated Depths of Anticipated Water, Oil, Gas or Other Minerals**

<u>Formation Tops</u>	<u>Depth</u>	<u>Subsea</u>	<u>Remarks</u>
Wingate	Surface	+5965	Fresh Water
Cane Creek	7355	-1365	Oil

All fresh water and prospectively valuable minerals encountered during drilling, will be recorded by depth and adequately protected.

**3. Operator's Minimum Specifications for Pressure Control Equipment**

The Moab BLM office will be notified, with sufficient lead time, to witness pressure testing of BOPE.

A rotating head and blooey line will be rigged up on the conductor and surface pipe. See Exhibit C-1.

One (1) annular bag-type preventer will be utilized while drilling the surface hole.

One (1) annular bag-type and three (3) ram-type preventers will be utilized while drilling below the intermediate pipe. Ram preventers are to be tested to seventy percent (70%) of the working pressure, or seventy percent (70%) of the burst rating of the intermediate pipe, whichever is lesser. Annular preventer is to be tested to fifty percent (50%) of working pressure. See Exhibit C-2.

Choke manifold will meet or exceed the requirements of the typical 3M manifold as in Onshore Order #2. See Exhibit C-3.

All BOPE and testing procedures will be consistent with API RP-53 and will be conducted before drilling out casing shoe. Preventers will be inspected and operated at least once daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report.

#### 4. Casing Program and Auxiliary Equipment

The Moab BLM office will be notified, with sufficient lead time, to witness the running and cementing of all casing strings.

##### Surface Pipe

<u>Interval</u>	<u>Size</u>	<u>Wt.</u>	<u>Gr.</u>	<u>Conn.</u>	<u>Burst/SF</u>	<u>Cols/SF</u>	<u>Tension/SF</u>
0-660'	20"	94	H40	STC	1530/6.9	520/1.8	581M#/9.36

Set 50' into the Chinle. Cemented to surface with 625sx Class B.

##### Intermediate Pipe

<u>Interval</u>	<u>Size</u>	<u>Wt.</u>	<u>Gr.</u>	<u>Conn.</u>	<u>Burst/SF</u>	<u>Cols/SF</u>	<u>Tension/SF</u>
0-4500'	13-3/8	61	K55	STC	3090/1.14	1540/1.55	633M/2.30

Cemented with 265sx lightweight plus 415sx Class B, with estimated top of cement at 3500'. Pressure test to 2160 psi before drilling out shoe.

Collapse design based on .22 psi/ft gradient. Burst design based on shoe test of 13.5 ppg less .1 psi/ft gas gradient.

##### Production Pipe

<u>Interval</u>	<u>Size</u>	<u>Wt.</u>	<u>Gr.</u>	<u>Conn.</u>	<u>Burst/SF</u>	<u>Cols/SF</u>	<u>Tension/SF</u>
0-7450'	9-5/8	53	S95	LTC	9410/1.92	8850/1.20	1235M/2.29

Cemented with 1400sx Class G, with estimated top of cement at 4100'. Pressure test to 5000 psi before drilling out shoe.

Collapse design based on 1.0 psi/ft overburden gradient. Burst based on max. mud wt in offset wells (17.0 ppg) less .22 psi/ft oil gradient.

### Production Liner

<u>Interval</u>	<u>Size</u>	<u>Wt.</u>	<u>Gr.</u>	<u>Conn.</u>	<u>Burst/SF</u>	<u>Cols/SF</u>	<u>Tension/SF</u>
7000-9779'	5-1/2	20	S95	BTC	10680/NA	10680/1.43	554M/9.96

Bottom 2330' to be pre-drilled with 3/4" holes, 3' apart at 90° phase.

An isolation packer will be run on top of the liner.

Collapse design based max. mud wt in offset wells (17.0 ppg).

### Auxiliary Equipment

A kelly cock will be kept in the string at all times.

A stabbing valve will be kept on the derrick floor at all times.

A float will not be used, other than when air drilling.

### 5. Mud Program

No chromates will be used in this well.

<u>Depth</u>	<u>Mud Wt</u>	<u>Visc.</u>	<u>PV</u>	<u>YP</u>	<u>WL</u>	<u>Mud Type</u>
0-660'	8.4	26-28	1-4	4	NC	FW & Gel
660-4500'	---	---	---	---	---	Air/Mist
4500-7300'TVD	9.6	42-46	18	21	<10	Oil Base
7300-7370'TVD	9.6-12.5	42-46	18	21	<10	Oil Base
7370-7451'TVD	16.5	54-57	35	21	<4	Oil Base

### 6. Testing, Logging and Coring Programs

A. Drill Stem Tests: None planned.

B. Well Logging and Intervals:

Induction/Sonic/GR 4500-6990'TVD

MWD-Induction/GR will be attempted in the horizontal section (6990-9779'MD, 7451'TVD).

C. Cores: A 30' oriented core will be attempted in the Cane Creek formation.

D. Directional Surveys: This well as proposed will be drilled vertically to 6990' and then drilled as a medium radius horizontal well in the direction of N 13° E for a total displacement of 2547'. Inclination test will be taken at 500' and at 1000' maximum intervals until KOP. At KOP a multi-shot will be taken. During the angle build portion, surveys will be taken at 90' maximum intervals. During the horizontal portion of the hole, surveys will be taken at 200' maximum intervals.

- E. Samples: One sample will be taken at 10' intervals from 4500' to TD.
- F. Mud Logger: There will be a mud logger on location 4500' (below intermediate pipe) to TD.
- G. Completion Procedure: To be submitted on Form 5 under "Approval of Subsequent Operations".

Where the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and well all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations will be filled with Form 3160-4.

#### 7. Anticipated Abnormal Pressure, Temperatures or Potential Hazards

Abnormal pressure is anticipated in the Cane Creek formation. The proposed casing program and pressure control equipment has been designed based on the anticipated abnormal pressures of the Cane Creek formation.

Hydrogen Sulfide is not anticipated.

#### 8. Notification of Operations & Other Information

Construction of location is scheduled to start on May 10, 1991.

No Location will be constructed or moved, no well will be plugged and no drilling or workover equipment will be removed from well to be placed in a suspended status without prior approval of the AO.

Spud date is scheduled for May 20, 1991. The spud date will be reported orally to the AO within 48 hours after spudding, or on the next business work day if spud occurs on a weekend.

Spills, blowouts, fires, leaks, accidents or any other unusual occurrences shall be promptly reported in accordance with the requirements of NTL-3A or its revisions.

If a replacement rig is contemplated for completion operations, a "Sundry Notice" to that effect will be filed, for prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.

Should the well be successfully completed for production, the AO will be notified when the well is placed in a production status.

Notification will be made no later than five days following the date on which the well is placed on production.

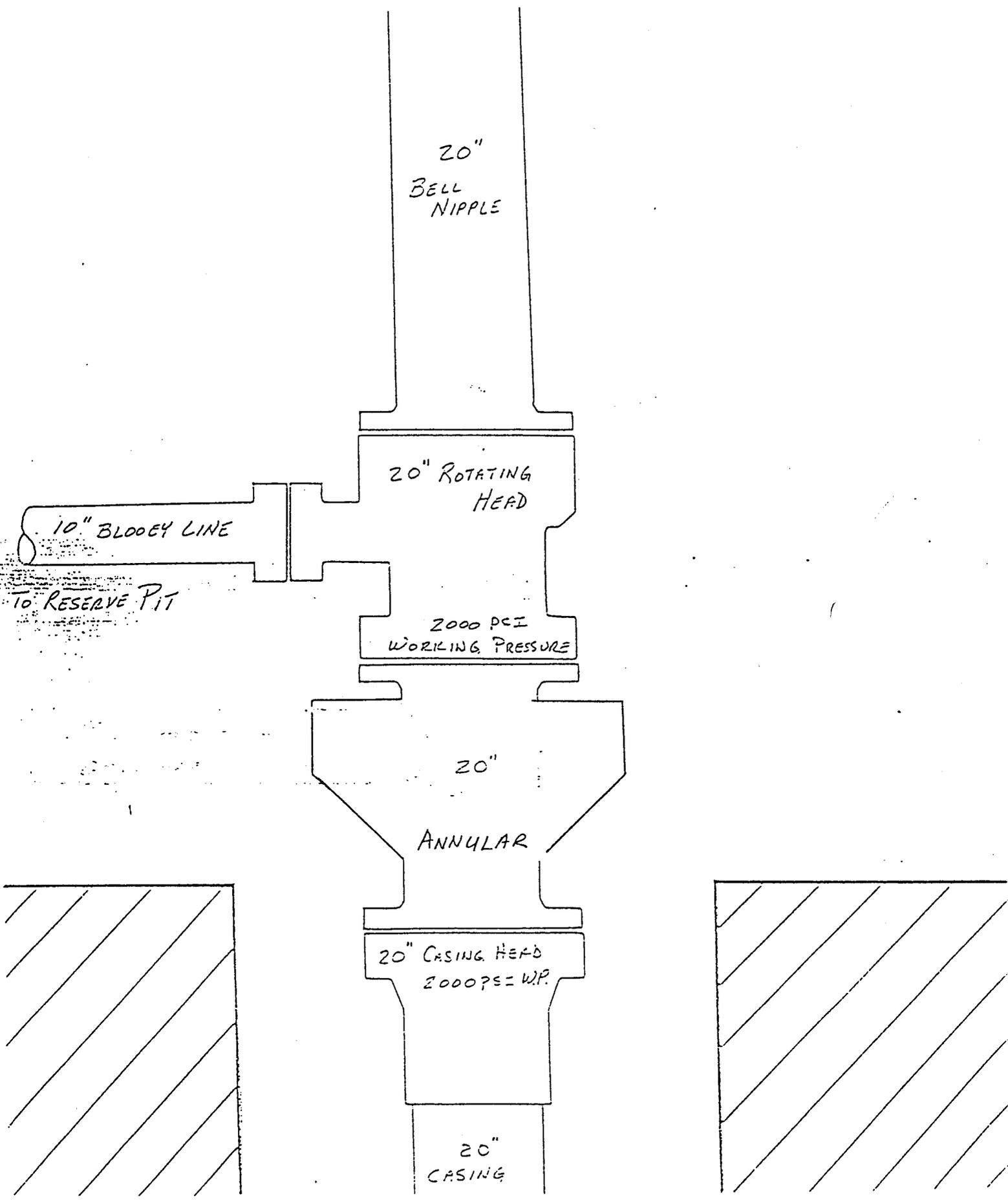
Venting/flaring of gas during initial well evaluation tests will not exceed a period of thirty days or the production of 50 MMcf of gas, whichever occurs first. An application will be filed with the District Engineer and approval received, for any venting or flaring beyond the initial 30 day authorized test period.

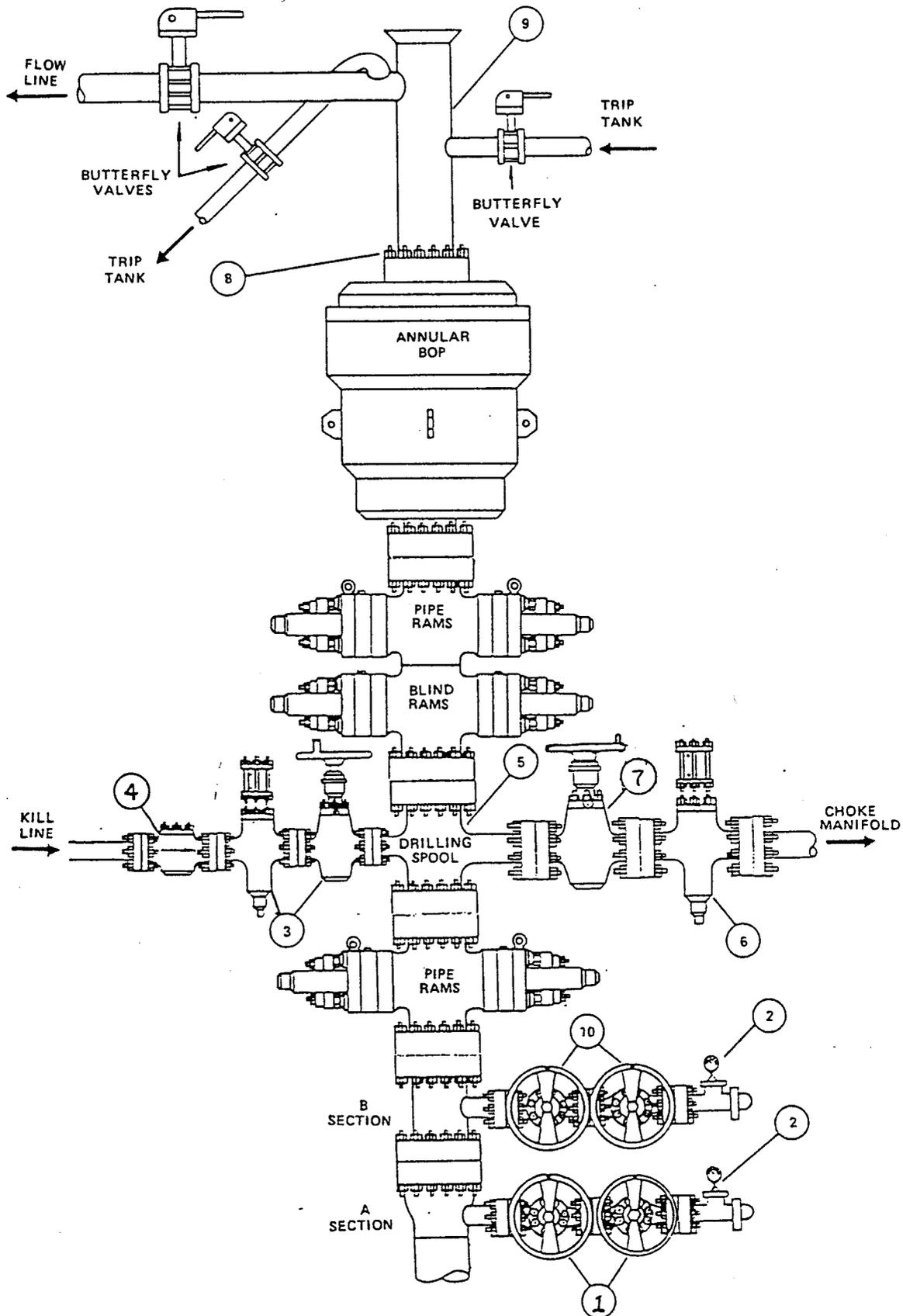
Well abandonment operations will commence only after prior approval has been received from the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the AO. A "Subsequent Report of Abandonment" will be filed with the AO within 30 days following completion of the well abandonment operations.

There will be no deviation from the proposed drilling and/or workover program without prior approval of the AO. Safe drilling and operating practices will be observed.

This well, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.3-2.

EXHIBIT C-1





COMPONENT SPECIFICATIONS

1. Screwed or flanged plug or gate valves — 2" minimum nominal dia. — same working pressure as "A" section.
2. Tee with tapped bullplug, needle valve, and pressure gauge.
3. Flanged plug or gate valve — 2" minimum nominal dia. — same working pressure as BOP stack. Second valve up stream may be hydraulically controlled.
4. Flanged flapper type check valve — 2" minimum nominal dia. — same working pressure as BOP stack.
5. Drilling spool of sufficient height to allow stripping with 2 flanged side outlets — 3" choke and 2" kill line minimum nominal dia. (See Table II-4 and Note D.)
6. Flanged hydraulically controlled gate valve — 3" minimum nominal dia. — same working pressure as BOP stack. (See Note D.)
7. Flanged plug or gate valve — 3" minimum nominal dia. — same working pressure as BOP stack.
8. Top of annular preventer must be equipped with an API flange ring gasket. All flange studs must be in place or holes filled in with screw type plugs.
9. The I.D. of the bell nipple must not be less than the minimum I.D. of the BOP stack.
10. Flanged plug or gate valve — 2" minimum nominal dia. — same working pressure as "B" section.

**NOTE:**

The choke line between the drilling spool and choke manifold should not contain any bend or turn in the pipe body. Any bend or turn required should be made with a running tee with a blind flange or welded bullplug. All connections should be flanged or welded. All fabrications requiring welding must be done by a certified welder. Welds should be stress relieved when required.

Plug valves should be equivalent to the Howco Lo-Torc and gate valves equivalent to the Cameron Type 'F'.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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  
Columbia Gas Development Corp. 713/871-3400

3. ADDRESS OF OPERATOR  
P. O. Box 1350 Hou., TX. 77251-1350

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At surface 800' FSL & 1930' FWL of Sec. 18-T26S-R20E  
At proposed prod. zone 2000 FNL & 1350' FEL<sup>19</sup>

**CONFIDENTIAL**

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
Approx. 26 miles NW of Moab

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 800'

16. NO. OF ACRES IN LEASE 1991.05

17. NO. OF ACRES ASSIGNED TO THIS WELL 640

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

19. PROPOSED DEPTH 9779 MD/7451 TVD

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
Ground Elev. Ungraded 5965.1 - Finished Grade elec. 5963.7

22. APPROX. DATE WORK WILL START\* May 1991

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
--------------	----------------	-----------------	---------------	--------------------



**RECEIVED**

MAY 16 1991

DIVISION OF OIL GAS & MINING

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 Alex C. Reese TITLE Regulatory Clerk DATE 4/10/91

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ ASSISTANT DISTRICT MANAGER  
APPROVED BY /S/ WILLIAM C. STRINGER TITLE for Minerals DATE MAY 14 1991

CONDITIONS OF APPROVAL, IF ANY:

FLARING OR VENTING OF GAS IS SUBJECT TO NTL 4-A  
Dated 1/1/80

CONDITIONS OF APPROVAL ATTACHED

\*See Instructions On Reverse Side

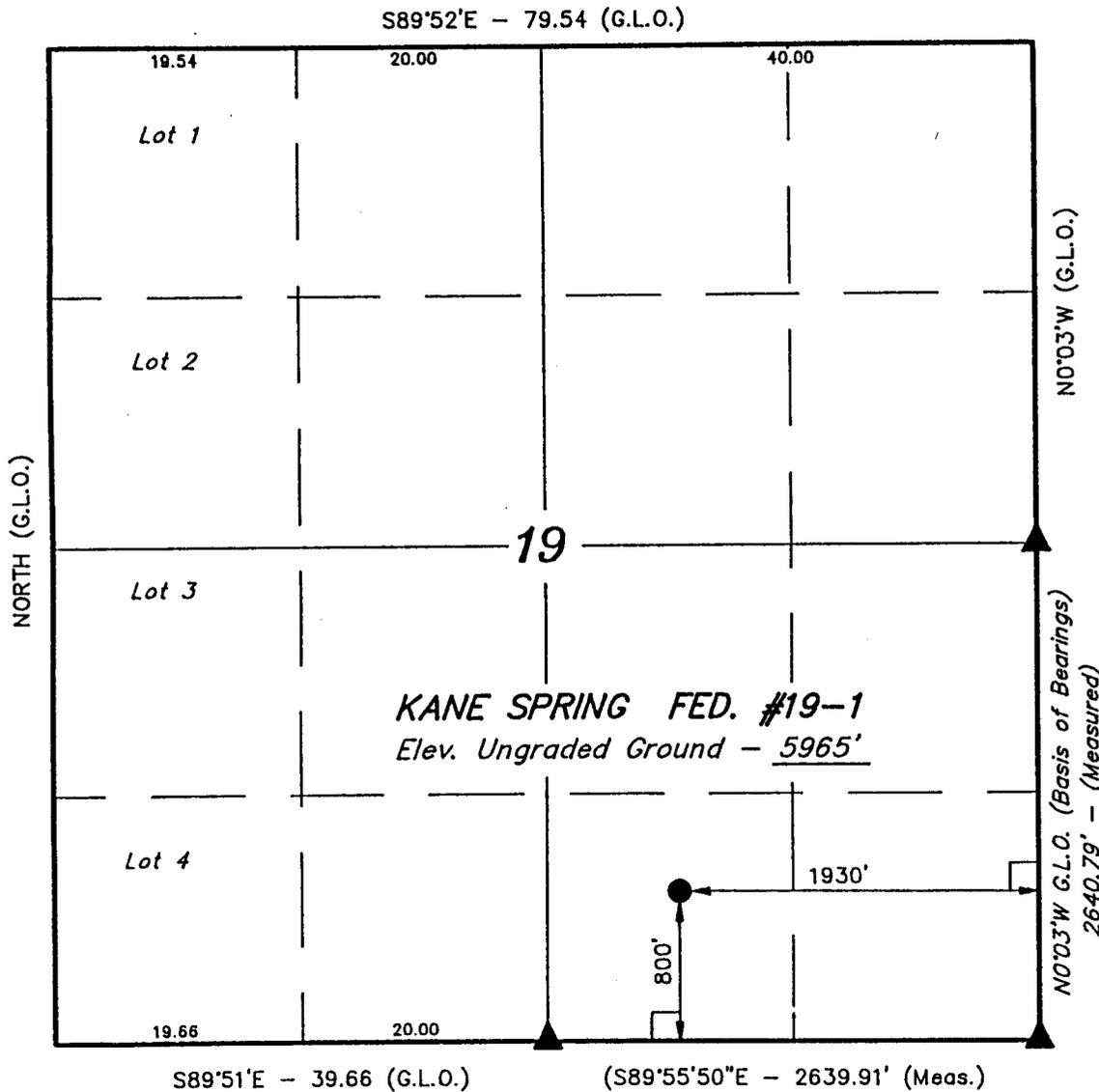
Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

DG/m

# T26S, R20E, S.L.B.&M.

## COLUMBIA GAS DEVELOPMENT CORP.

Well location, KANE SPRING FED. #19-1, located as shown in the SW 1/4 SE 1/4 of Section 19, T26S, R20E, S.L.B.&M. Grand County, Utah.



### BASIS OF ELEVATION

SPOT ELEVATION AT THE SOUTHEAST CORNER OF SECTION 19, T26S, R20E, S.L.B.&M. TAKEN FROM THE GOLD BAR CANYON QUADRANGLE, UTAH, GRAND COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6002 FEET.



### CERTIFICATE

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.

*Robert L. Kay*  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 5709  
STATE OF UTAH

**UNTAH ENGINEERING & LAND SURVEYING**  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(801) 789-1017

SCALE 1" = 1000'	DATE 3-25-91
PARTY J.T.K. H.C. J.R.S.	REFERENCES G.L.O. PLAT
WEATHER CCC	FILE COLUMBIA GAS DEVELOPMENT CORP.

▲ = SECTION CORNERS LOCATED. (Gross Caps)

Columbia Gas Development Corp.  
Well No. Federal 19-1  
SWSE Sec. 19, T. 26 S., R. 20 E.  
Grand County, Utah  
Lease U-53626

#### CONDITIONS OF APPROVAL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be advised that Columbia Gas Development Corp. is considered to be the operator of the above well and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by C00356 (Principal - Columbia Gas Development Corp. ) via surety consent as provided for in 43 CFR 3104.3.

This office will hold the aforementioned operator and bond liable until the provisions of 43 CFR 3106.7-2 continuing responsibility are met.

#### A. DRILLING PROGRAM

~~All lease operations will be conducted in full compliance with~~ applicable regulations (43 CFR 3100), Onshore Oil and Gas Order No. 1 and Onshore Oil and Gas Order No. 2 and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions and the approved plan will be made available to the field representative to insure compliance.

1. If consolidated rock is encountered, conductor shall be set ten (10) feet unto underlying bedrock with cement circulated to surface.
2. Surface casing will be set 50 feet into the Chinle Formation regardless of the depth the Chinle is encountered.
3. Surface casing shall have a centralizer on each of the bottom three joints.
4. A 2000 lb. 20 inch annular preventer shall be installed, tested and in working condition prior to drilling through surface casing shoe according to Onshore Order #2 specifications.
5. Usuable quality water and prospectively valuable minerals shall be isolated and/or protected. Geologic analysis indicates that usable quality water may be in the Cutler Formation at a projected vertical borehole depth of 1485 feet. Geologic analysis also indicates that potash (a prospectively valuable mineral) may be encountered in the Paradox Formation at a projected borehole depth of 4423 feet. If encountered while drilling, these zones shall be isolated and/or protected by bringing the cement level behind the intermediate/production casing to at least 100 feet above the formation occurrence.

6. No hexavalent chromate additives will be used in the mud system in order to protect usable quality water aquifers.
7. Daily drill and completion progress reports shall be submitted to the District Office on a weekly basis.

Company: Columbia Gas Dev.  
Well: 19-1  
Section: 19, T.26S.,R20E.

CONDITIONS OF APPROVAL  
SURFACE USE PLAN

CONSTRUCTION:

1. Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance. Surface material will not be placed on the access road or location without prior BLM approval.
2. If dry soil conditions are encountered, the area should be moistened periodically to reduce fugitive dust.
3. A 60'x 30' asphalt approach will be constructed off Hwy 313 onto Columbia's dirt access.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials that may be required. Otherwise, the operator will be responsible for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

Drilling

1. The access road will occasionally be moistened to keep the road from getting dusty and destroying the road base.
2. Where possible, night lighting will be directed away from the campground.
3. Steps will be taken to reduce noise associated with the drilling activity to reduce impacts to the adjacent campground in Deadhorse Point State Park.

## PRODUCTION

1. If production occurs, the resource area should be notified as soon as possible so that an onsite can be scheduled to discuss the permanent placement and orientation of the production facilities. A paint color will be given at that time (# 4A5, SUP).
2. The access will be to the design of a Class 111 road.

## REHABILITATION

1. The operator or his contractor will contact the Grand Resource Area BLM office in Moab, Utah, phone (801-259-6111), 48 hours prior to starting rehabilitation work that involves earthmoving equipment and completion of restoration measures.
2. All disturbed areas will be recontoured to blend as nearly as possible with the surrounding area.
3. The stockpiled topsoil will be evenly distributed over the disturbed area.
4. All disturbed areas will be scarified with the contour. Do not smooth pads out, leave a roughened surface.
5. Seed will be (broadcast/drilled) sometime between August 1 and March 30 when there is no frost in the ground. A seed mixture will be specified the the BLM. When broadcast seeding, a harrow or some such implement will be dragged over the seeded area to assure seed cover.

C. SURFACE USE PLAN

1. All site security guidelines identified in 43 CFR 3162.7-5 and ONSHORE OIL AND GAS ORDER NO. 3; SITE SECURITY will be adhered to.
2. Gas measurement will be conducted in accordance with the ONSHORE ORDER NO. 5; GAS MEASUREMENT and 43 CFR 3162.7-3.
3. Oil measurement will be conducted in accordance with ONSHORE OIL AND GAS ORDER NO. 4; OIL MEASUREMENT as of the effective date of August 23, 1989 and 43 CFR 3162.7-2.
4. All loading lines and valves will be placed inside the berm surrounding the tank battery.
5. All off-lease storage, off-lease measurement, or commingling on-lease of off-lease will have prior written approval from the Assistant District Manager.
6. Pipeline construction activity is not authorized under this permit.
7. Produced waste water will be confined to an unlined pit for a period not to exceed ninety (90) days after initial production. During the ninety (90) day period, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted for the Assistant District Manager's approval pursuant to Onshore Oil and Gas Order No. 3 (NTL-2B).
8. There will be no deviation from the proposed drilling and/or workover program without prior approval from the Assistant District Manager. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned, will be identified in accordance with 43 CFR 3162.3-6.
9. "Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.
10. The dirt contractor will be provided with an approved copy of the surface use plan of operations.
11. This permit will be valid for a period of one (1) year from the date of approval. After permit termination, a new application will be filed for approval for any future operations.

D. Anticipated Starting Dates and Notifications of Operations:

Required verbal notifications are summarized in Table 1, attached. Written notification in the form of Sundry Notice (Form 3160-5) will be submitted to the District Office within twenty-four (24) hours after spudding. If the spudding occurs on a weekend or holiday, the written report will be submitted on the following regular work day.

Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported to the Resource Area in accordance with requirements of NTL-3A.

Should the well be successfully completed for production, the Assistant District Manager, Minerals Division will be notified when the well is placed in producing status. Such notification will be sent by telegram or other written communication, not later than five (5) business days following the date which the well is placed on production.

A first production conference will be scheduled within fifteen (15) days after receipt of the first production report. The Resource Area Office will coordinate the field conference.

A "Subsequent Report of Abandonment" (Form 3160-5) will be filed with the Assistant District Manager, Minerals Division within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. ~~Final abandonment will not be approved until the surface reclamation work required~~ by the approved APD or approved abandonment notice has been completed to the satisfaction of the Area Manager of his representative, or the appropriate surface managing agency. Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6.

The following minimum information will be permanently placed on the marker with a plate, cap or beaded-on with a welding torch: "Fed" or "Ind", as applicable. "Well number, location by 1/4 1/4 section, township and range". "Lease number".

NOTIFICATIONS

Notify Elmer Duncan of the Grand Resource Area, at  
 (801) 259-8193 for the following:

- 2 days prior to commencement of dirt work, construction or reclamation;
- 1 day prior to spudding;
- 50 feet prior to reaching surface casing depth;
- 3 hours prior to testing BOP's and surface casing.

If the person at the above number cannot be reached, then notify Fred Oneyear in the Moab District Office at (801) 259-6111 or at home (801) 259-5937 (If unsuccessful, then notify one of the following people listed below).

Notify the Moab District Office, Branch of Fluid Minerals at (801) 259-6111 for the following:

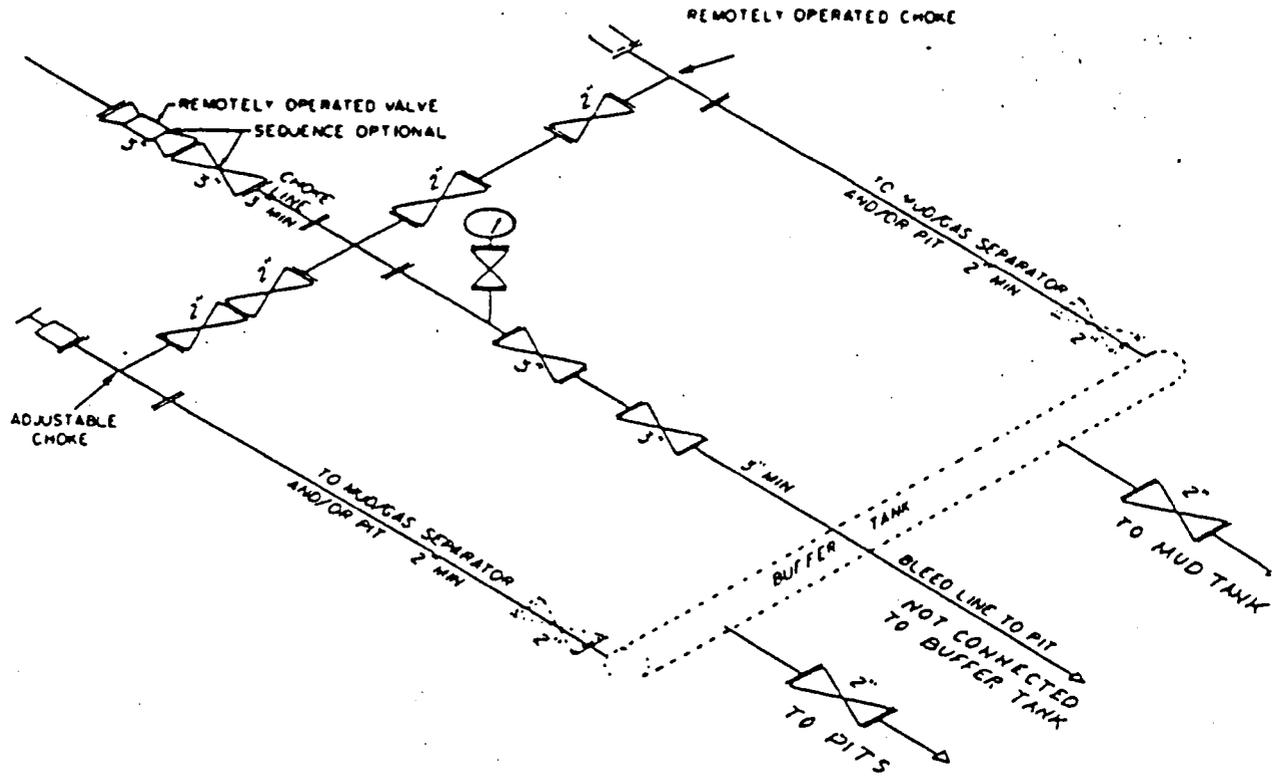
No well abandonment operations will be commenced without the prior approval of the Assistant District Manager, Minerals Division. In the case of newly drilled dry holes, and in emergency situations, verbal approval can be obtained by calling the following individuals, in the order listed.

Dale Manchester, Petroleum Engineer	Office Phone:	(801) 259-6111
	Home Phone:	(801) 259-6239
Eric Jones, Petroleum Engineer	Office Phone:	(801) 259-6111
	Home Phone:	(801) 259-2214

If unable to reach the above individuals including weekends, holidays, or after hours please call the following:

Lynn Jackson, Chief, Branch of Fluid Minerals	Office Phone:	(801) 259-6111
	Home Phone:	(801) 259-7990

24 HOURS ADVANCE NOTICE IS REQUIRED FOR ALL ABANDONMENTS



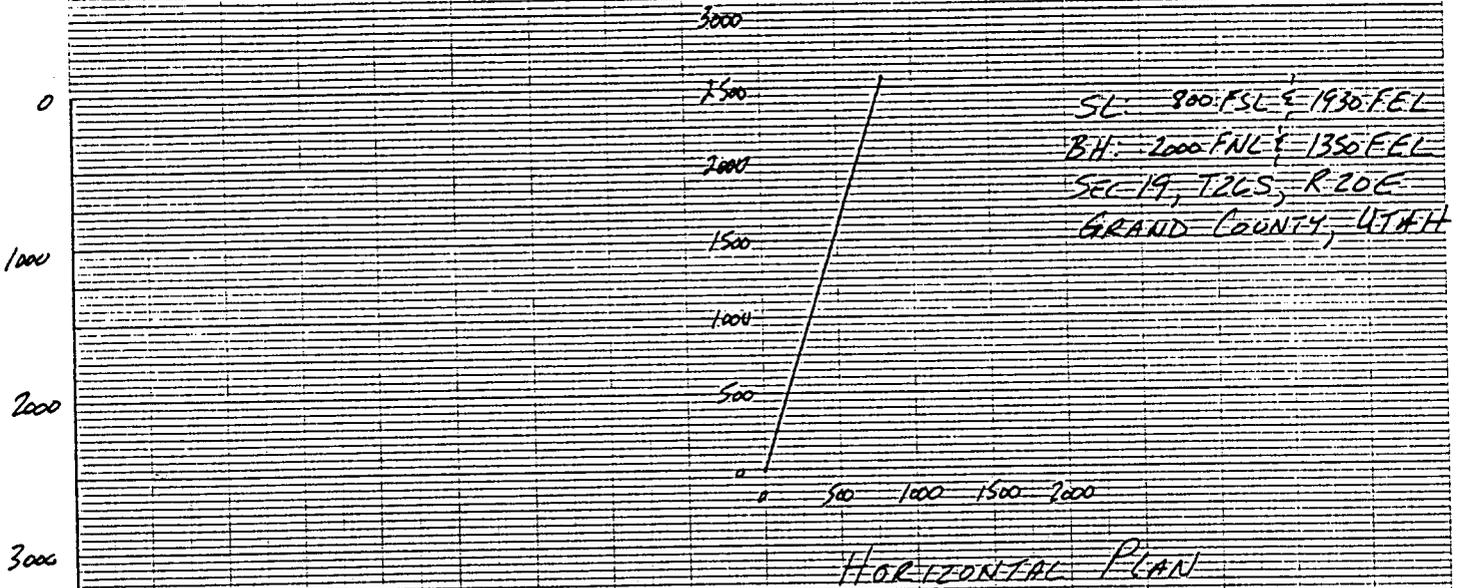
**5M CHOKE MANIFOLD EQUIPMENT — CONFIGURATION MAY VARY**

Although not required for any of the choke manifold systems, buffer tanks are sometimes installed downstream of the choke assemblies for the purpose of manifolding the bleed lines together. When buffer tanks are employed, valves shall be installed upstream to isolate a failure or malfunction without interrupting flow control. Though not shown on 2M, 3M, 10M, or 15M drawings, it would also be applicable to those situations.

[FR Doc. 88-28736 Filed 11-17-88; 8:45 am]  
 BILLING CODE 4310-04-C

# COLUMBIA GAS DEVELOPMENT

## KANE SPRINGS FEDERAL #19-1 DIRECTIONAL PLAN



BUILD RATE 13.5"/100'

TVD @ END OF BUILD: 7414'

TVD @ END OF SECTION: 7451'

0  
1000  
2000  
3000  
4000  
5000  
6000  
7000  
8000

0 500 1000 1500 2000

### VERTICAL SECTION

N-13.16° E

DRAWN BY: ROBERT J. PIER, P.E.

REGISTRATION No 65041

STATE OF TEXAS

Robert J. Pier 4/8/91

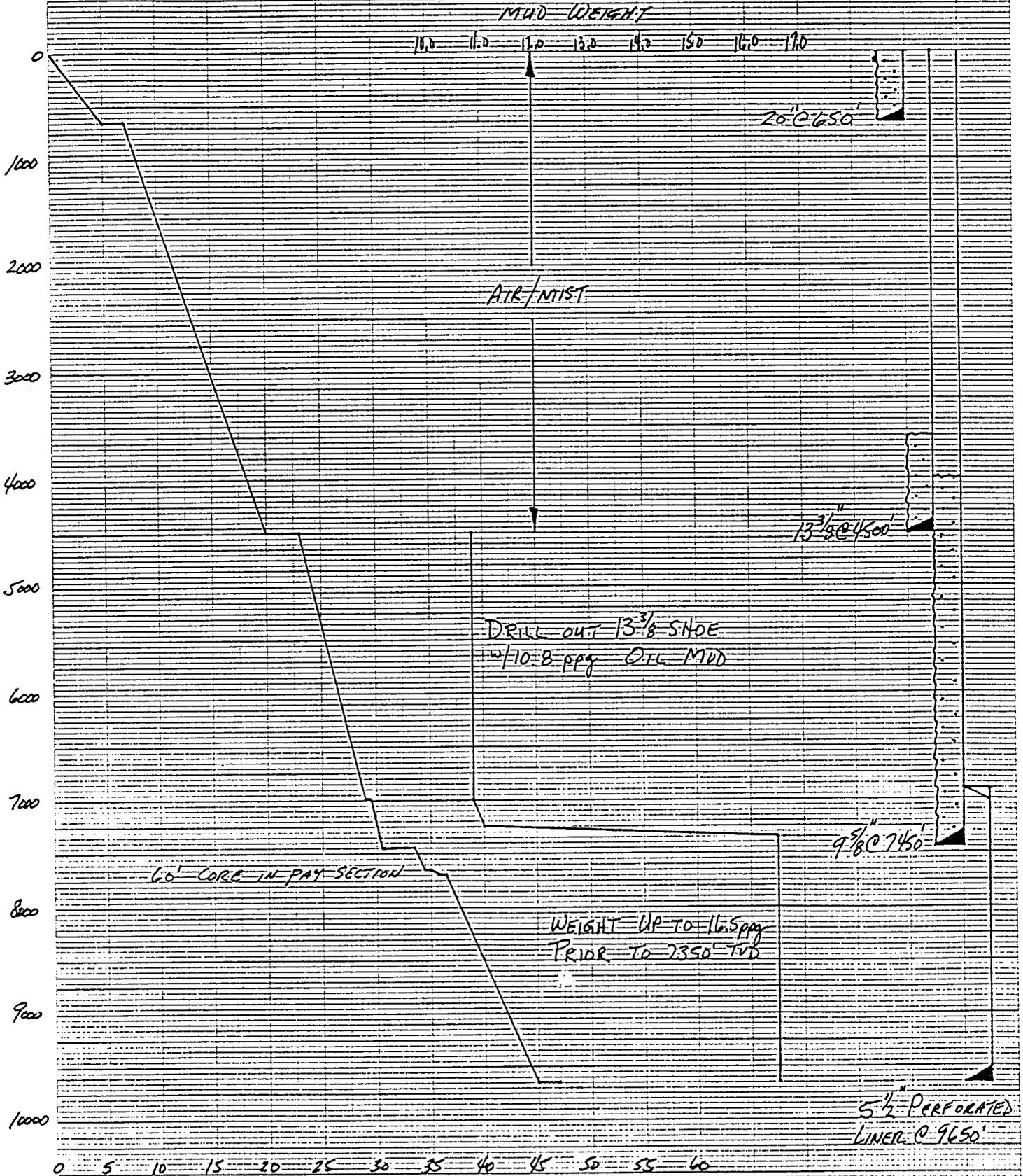
46 1510

1/4" = 10' TO THE CENTIMETER 19 X 25 CM.  
K&L ENGINEERING CO. MADE IN U.S.A.

KANE SPRING FEDERAL #19-1  
 GRAND COUNTY, UTAH

46 1510

10 X 10 TO THE CENTIMETER 10 X 25 CM  
 KODAK SAFETY FILM EASTMAN KODAK CO. MADE IN U.S.A.



CONDITIONS OF APPROVAL  
FOR THE SURFACE USE PROGRAM OF THE  
APPLICATION FOR PERMIT TO DRILL

COMPANY : Columbia Gas Development Corporation  
WELL NAME & NUMBER: Kane Springs Federal #19-1  
LEASE NO.: UTU-53626  
LOCATION: SW/4 SE/4 Sec.19,T26S,R20E  
SURFACE OWNERSHIP: Bureau of Land Management

## NOTIFICATION REQUIREMENTS

Notify Elmer Duncan of the Grand Resource Area, at (801)259-8193 for the following:

2 days prior to commencement of dirt work, construction or reclamation;

1 day prior to spudding;

1 day prior to running and cementing surface casing;

1 day prior to pressure testing of surface casing.

Notify the Moab District Office, Branch of Fluid Minerals at (801)259-6111 for the following:

No well abandonment operations will be commenced without the prior approval of the Assistant District Manager, Minerals Division. In the case of newly drilled dry holes, and in emergency situations, verbal approval can be obtained by calling the following individuals, in the order listed.

Dale Manchester, Petroleum Engineer      Office: (801)259-6111  
Home: (801)259-6239

Eric Jones, Petroleum Engineer            Office: (801)259-6111  
Home: (801)259-2214

If unable to reach the above individuals including weekends, holidays or after hours please call the following:

Lynn Jackson,  
Chief, Branch of Fluid Minerals            Office: (801)259-6111  
Home: (801)259-7990

**24 HOURS ADVANCE NOTICE IS REQUIRED FOR ALL ABANDONMENTS**

ONSITE DATE: 4/3/91

THIRTEEN POINT SURFACE USE PROGRAM

MULTIPOINT REQUIREMENTS TO ACCOMPANY APD

1. EXISTING ROADS

A. Existing road and location in relation to location submitted on Exhibit "A".

B. From Moab, Utah:

Travel North on 191 for approx. 9 miles. At the Dead Horse Point & Canyonlands Park sign turn left onto 313 and travel approx. 16.6 miles, then turn right off 313 onto a two track jeep trail for .6 of a mile, then turn off onto the proposed access road in a westerly direction for approx. .3 of a mile onto the east end of the location.

C. Description of roads in area: All weather asphalt & two trail jeep roads.

2. PLANNED ACCESS ROADS

A. Length: Approx. .3 of mile as staked.

B. Width: Eighteen (18) ft. running surface.

C. Maximum Grades: N/A

D. Turnouts: Do not anticipate any turnouts.

E. Drainage Design: There will be minimum disturbance during drilling phase. If the well is a producer upgrading will be done as required.

F. Location and size of culverts and/or bridges, and brief description of any major cuts and fills: None

G. Surface Material Source: Native materials

H. Necessary gates, cattleguards, or fence cuts and/or modification to existing facilities: None

All travel will be confined to existing access road.

I. Notification will be given to the Bureau of Land Management, District Office, with sufficient lead time, prior to the construction of access road, and drill pad.

Access and location under the jurisdiction of the Bureau of Land Management.

- J. Columbia Gas Development Corporation will provide Dirt Contractor with necessary maps, pad and road construction plans.

3. LOCATION OF EXISTING WELL

Kane Springs Federal #27-1  
Sec.27 - T25S - R19E  
Grand County, Moab.

4. LOCATION OF EXISTING AND PROPOSED FACILITIES

Notification will be given to the Bureau of Land Management, District Office, with sufficient lead time, prior to construction of production facilities.

- A. If well is productive, new on-well pad facilities and lines will be submitted as "as built" under the following guidelines:
1. Tank battery and/or location will be surrounded by a dike of sufficient capacity to contain the contents of the largest vessel within the dike plus one day's production.
  2. Facilities will be placed in cut as much as possible.
  3. A wind-sock will be placed on the Tank battery so it is visible from all parts of the location.
  4. All internal combustion engines associated with production facilities will be equipped with noise reducing mufflers.
  5. All permanent (on site for six months or longer) structures constructed or installed (including pumping units) will be painted a flat non-reflective, earthtone color to match one of the standard environmental colors as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within six months of installation. Facilities required to comply with O.S.H.A. will be excluded.
  6. Fire prevention and suppression requirements for operations on Federal lands will be followed as per Bureau of Land Management guidelines.

7. No permanent above ground pipelines will be installed between the wellhead and treater or between the treater and flare pit.
8. All spills (production water or oil) or pipeline breaks outside the diked area will be reported within the 24 hours to the District office.
9. All facilities will be painted a nonreflective, earth-tone color to match the Standard Environmental Colors, as determined by the Rocky Mountain Five State Inter-agency Committee, within six (6) months of installation.

#### 5. LOCATION AND TYPE OF WATER SUPPLY

The necessary permits will be obtained by the operator from the appropriate State Water Rights Division office for the use of water at the drillsite.

Fresh water & salt water will be trucked by a local trucking company.

#### 6. SOURCE OF CONSTRUCTION MATERIALS

No construction materials will be used other than native materials. Soil from cuts will be used in fills. No outside materials will be brought in.

#### 7. METHODS FOR HANDLING WASTE DISPOSAL

- A. Methods and location of proposed safe containment and disposal of each type of waste material:
  1. Cuttings will be deposited in the reserve pit.
  2. Drilling fluids will be deposited in the reserve pit.
  3. Produced Water: While testing the well, all produced water will be contained in a storage tank. If well is a producer, a saltwater storage tank will be installed with tank battery.
  4. Sewage will be disposed of according to county and state requirements in a portable chemical toilet or in a hole at least 15 deep excavated in the cut portion of the well pad.
  5. Portable dumpsters will be used for all trash. All trash will be hauled offsite.

- B. The Reserve pit shall be constructed so as not to leak, break, or allow discharge. The Reserve pit shall not be lined unless post construction inspection indicates a need to do so.
- C. After first production, produced waste water will be confined to a lined pit or storage tank for a period not to exceed ninety (90) days. During the ninety day period, in accordance with NTL-2B, an application for approval of permanent disposal method and location, along with required water analysis, shall be submitted for the authorized officer's approval.

#### 8. ANCILLARY FACILITIES

No camp, airstrip or other facility will be built during the drilling of this well.

#### 9. WELL SITE LAYOUT

A. See attachment for the Well Site Layout showing the following: Substructure, Engine, Mud pumps, Mud tanks, Diesel tank, Water Tank, Boiler, Light plant, Dog house, Bunk house, Pipe racks, Catwalk, Choke manifold, Accumulator, Derrick stand, Wireline, Mud mixer, Change house, Trailers, Trash bin, parts house, Mud manifold, Mud storage, Desander/Desilter, Winterizing or parts tub.

Also attached is a cross section diagram showing cuts & fills in relation to existing topography.

The location will be constructed large enough to accommodate the drilling rig and associated equipment with allowance made for future completion and production equipment.

No topsoil stripping will be done when soils are moisture saturated to a depth of 3 inches, or frozen below stripping depth.

B. Fencing requirements - All pits will be fenced according to the following minimum standards:

1. 30-inch net wire shall be used with at least one strand of barbed wire on top of the net wire (barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence).
2. The net wire shall be no more than 2-inches above the ground. The barbed wire shall be 3-inches above the net wire. Total height of fence shall be 42-inches.

3. Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
4. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16 feet.
5. All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

The reserve pit fencing will be on three sides during drilling operations and on the fourth side when the rig moves off the location. Pits will be fenced and maintained until clean-up.

## 10. PLANS FOR RESTORATION OF SURFACE

### A. Production location

1. Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, materials, trash, and junk not required for production.
2. Immediately upon well completion, any hydrocarbons on the pit shall be removed in accordance with 43 CFR 3162.7-1
3. The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within ninety (90) days from the date of well completion. Before any dirt work takes place, the reserve pit must be completely dry and all cans, barrels, pipe, etc., will be removed.
4. Seed mixtures to be used in rehabilitation will be provided by the BLM District Office. Seed mixtures will be certified weed free and seeding will be accomplished during the spring or fall.

Seed tags will be submitted to the area manager within 30 days of seeding.

5. Site rehabilitation will be completed within six (6) months, weather permitting. Before any production facilities are constructed, a site reclamation plan will be submitted to the District Office for all areas not required for production

facilities.

B. Dry Hole/Abandoned Location

1. At such time as well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and the BLM will attach the appropriate surface rehabilitation conditions of approval.
2. The location will be rehabilitated within six (6) months, weather permitting, from the date the well is plugged.

11. SURFACE OWNERSHIP

Surface location and access roads are owned by the United States of American under jurisdiction of the Bureau of Land Management.

12. OTHER INFORMATION

The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archeological sites, or for collecting artifacts. If historic or archeological materials are uncovered during construction, the operator will immediately stop work that further disturb such materials, and contact the authorized officer. Columbia Gas Development Corporation will comply with the requirements set forth by the BLM Surface Use Stipulations.

- A. Columbia Gas Development Corporation has a One Hundred and Fifty Thousand (150,000) dollar Nationwide Bond - copy attached.
- B. Drilling rigs and/or equipment used during drilling operations on this wellsite will not be stacked or stored on Federal Lands after the conclusion of drilling operations or at any other time without BLM authorization. However, if BLM authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial facilities.
- C. The closest town is Moab, located approx. 26 miles to the SE of the proposed location.
- D. There will be no deviation from the proposed drilling program without prior approval from the District.

- E. Sundry Notice & Report on wells (Form 3160-5) will be filed for approval of all changes of plans and other operations in accordance with 43 CFR 3164.
- F. Dirt Contractor will be provided with an approved copy of the Surface Use plan.

13. LESSEE'S OR OPERATOR REPRESENTATIVE AND CERTIFICATION

Columbia Gas Development Corporation  
P. O. Box 1350  
Houston, Texas 77251-1350  
713/871-3400

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved plan of operations, and any applicable Notice to Lessees. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to insure compliance.

A complete study of the approved APD and ROW grant, if applicable, shall be on location during construction activities.

The operator or his/her contractor shall contact the BLM Office @ 801/259-8193 forty-eight (48) hours prior to construction activities.

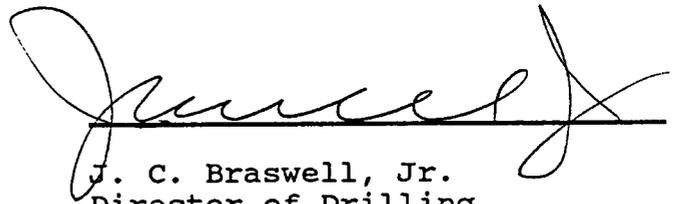
The BLM shall be notified upon site completion prior to moving on the drilling rig.

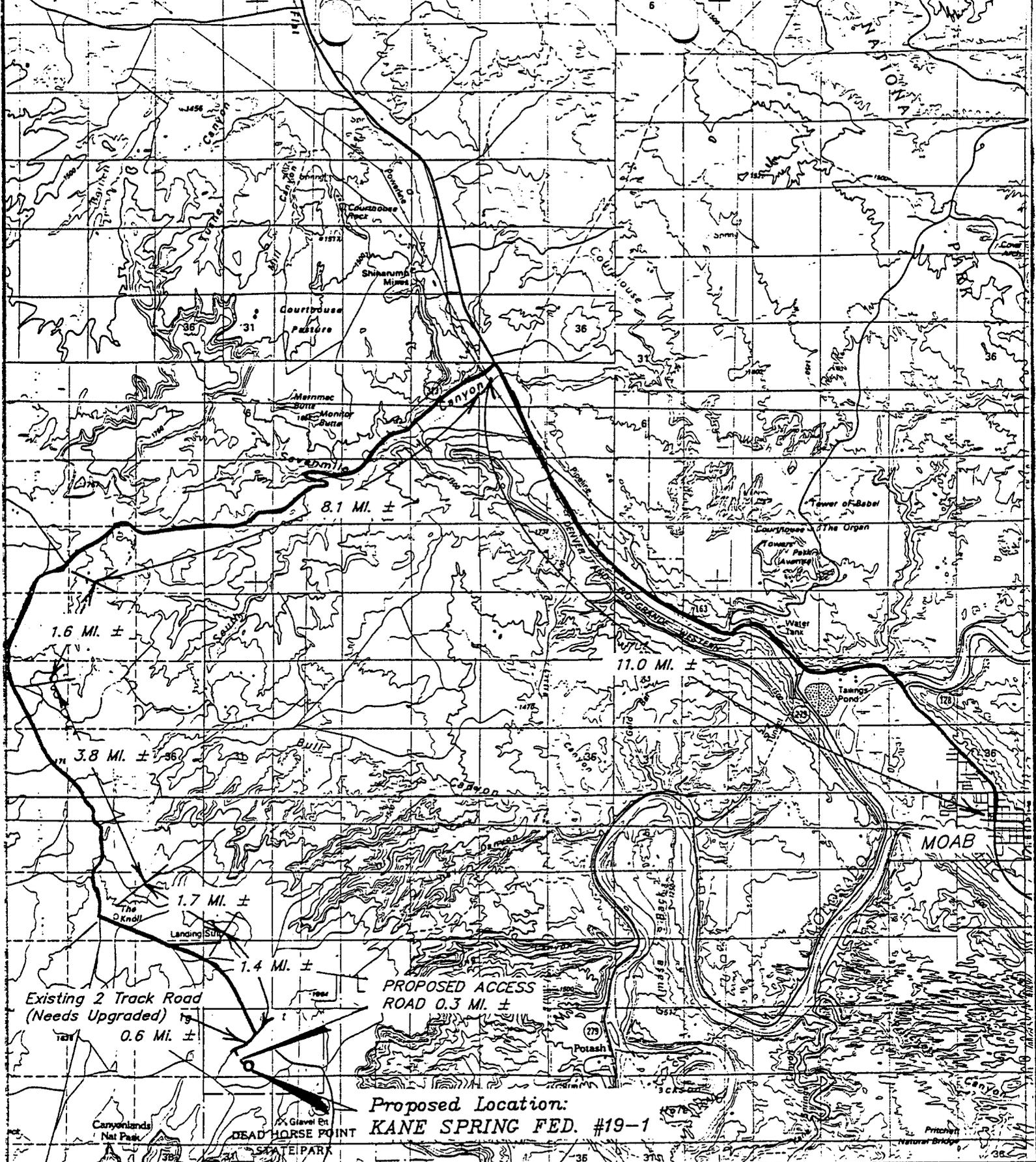
Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and , that the work associated with the operations proposed here will be performed by Columbia Gas Development Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

9/9/91

DATE

  
\_\_\_\_\_  
J. C. Braswell, Jr.  
Director of Drilling



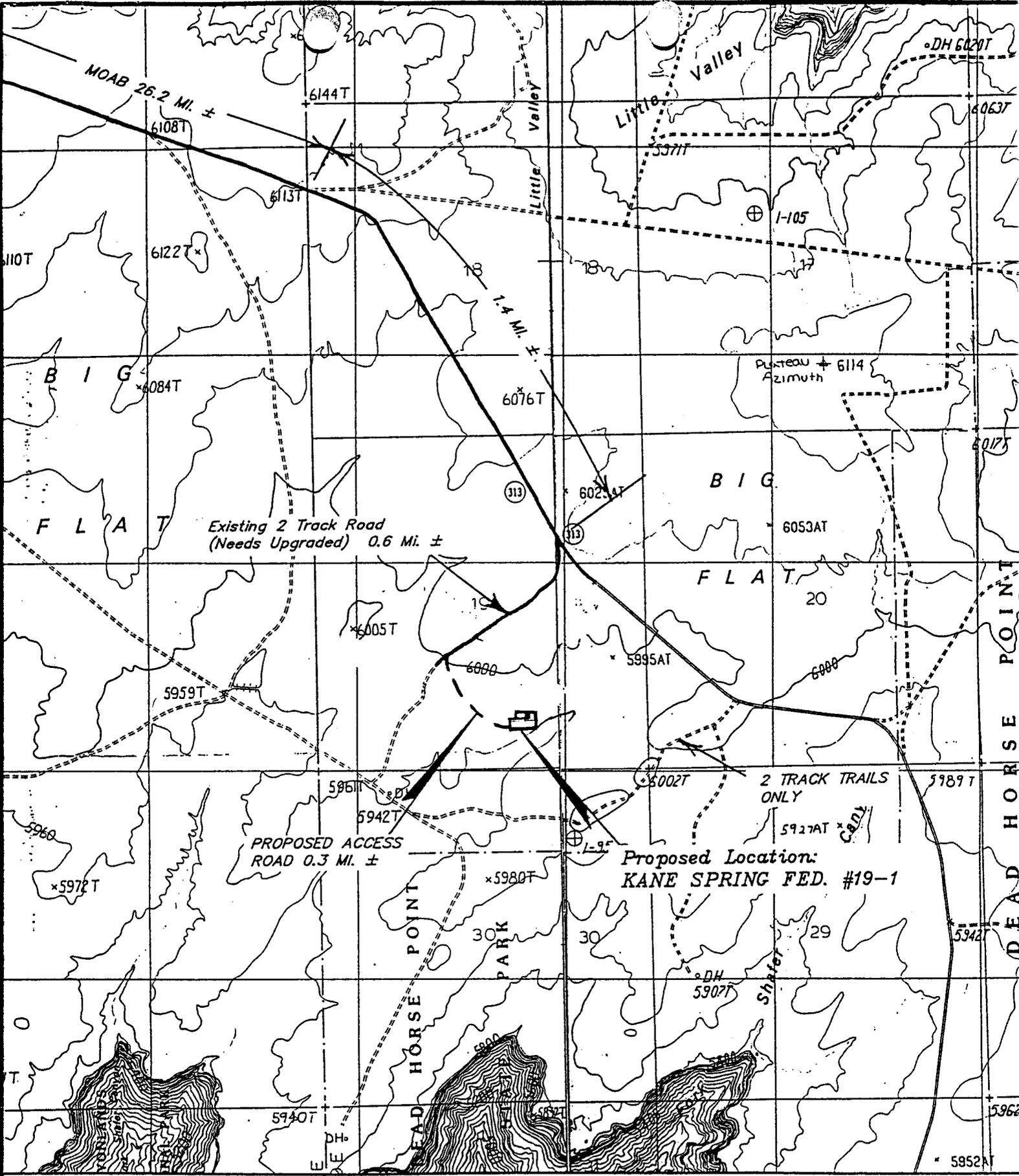
TOPOGRAPHIC  
MAP "A"

DATE 3-25-91



**COLUMBIA GAS DEVELOPMENT CORP.**

KANE SPRING FED. #19-1  
SECTION 19, T26S, R20E, S.L.B.&M.



TOPOGRAPHIC  
 MAP "B"  
 SCALE: 1" = 2000'  
 DATE 3-25-91



**COLUMBIA GAS DEVELOPMENT CORP.**

KANE SPRING FED. #19-1  
 SECTION 19, T26S, R20E, S.L.B.&M.

Environmental Assessment  
UT-068-91-042  
Columbia Gas Development

INTRODUCTION

The Grand Resource Area, Moab District of the Bureau of Land Management (BLM) received an Application for Permit to Drill (APD) from Columbia Gas Development of Houston, Texas. The proposed drilling location is in Sec. 19, T26S., R20E., of Grand County, Utah.

The proposed wildcat well would be located on oil and gas lease U-53626, assigned to Exxon Corp. The lease was issued by the BLM subject to provisions of the lease, and regulations in 43 CFR 3160, BLM Onshore Order No. 1, 1983, and other appropriate orders and Notices to Lessees (NTL).

This environmental assessment tiers to the Grand Resource Area Resource Management Plan which directs decision making for the affected area, and to the Environmental Analysis Record (EAR) for Proposed Oil and Gas Leasing in the Grand Resource Area (1976), and the RMP Supplemental Environmental Assessment #UT-060-89-025 (12/88), on file at the Grand Resource Area office, which documents in greater detail the impacts to the resources affected by the proposed action.

PROPOSED ACTION

Columbia Gas Development submitted an APD, 8 point Drilling plan and 13 point surface use plan (SUP) to the BLM with the intention of drilling a second exploratory well to further test the Cane Creek formation in Sec. 19, T26S., R20E. following their recent discovery well in section 27, T.25 S., R.19 E.. The proposed well would be located on oil and gas lease U-53626 (see Map 1,). Columbia is scheduled to begin construction on May 15th and scheduled to spud by May 25th, 1991 (#8, Drilling plan). The 8 point drilling plan and the 13 point surface use plan are standardized stipulations, regulations, and policy which are part of every APD package. These contain measures that provide mitigation for many of the impacts that can be expected to occur from such actions. These documents may be found in oil and gas well file 19-1.

Columbia proposes to construct 0.3 miles of new access with an 18 foot driving surface, a 100 X 200 foot reserve pit, and a 450 X 200 foot drilling pad (plat #1). Topsoil will be stripped and saved for use in reclamation. The drilling program should take upwards of 46 days. The reserve pit and any portion of the location not needed for production facilities/operations will be reclaimed. If production occurs, a vertical separator, two or more cylindrical storage tanks, an emergency pit, and associated piping will be positioned, oriented, and painted to lessen visual intrusions. The access road will be upgraded with additional drainage designs if needed. If a dry hole is encountered, the access road and drill pad will be rehabilitated.

NO ACTION ALTERNATIVE

BLM would deny the APD. No surface disturbance nor drilling would occur within the lease boundaries.

AFFECTED ENVIRONMENT AND ENVIRONMENTAL IMPACTS

NATURAL ENVIRONMENT

Regional Setting

Approximately 26 miles NW of Moab, Utah in an area known as Big Flat.

Geology

Potential source of hydrocarbons may occur in the Cane Creek formation.

Impacts of the Proposed Action

If hydrocarbons were found, there would be an irreversible loss of unknown volumes from this formation.

Impacts of No Action

No hydrocarbons would be explored for or removed.

Vegetation and Soil

The major soil type in the area is semi-desert sandy loam. The dominant vegetation is bunchgrasses ( indian ricegrass, galleta) and low profile shrubs (ephedra, sage).

Impacts of the Proposed Action

Approximately 17,000 cubic yards of soil will be reconstructed into a drilling and production pad (Plat #1). Maximum cuts will be 6 feet on the northwest edge. Maximum fills will be 4.4 feet on the southeast edge (Plat #1). Two and a half acres of vegetation (15% cover) will be removed by the reconstruction. Topsoil and seed will be replaced during the abandonment procedures which may be as temporary as 90 days or up to ten years.

Impacts of No Action

There will be no vegetative loss due to construction or drilling activities. Only natural soil loss from wind and water erosion would occur.

Mineral Lease

Lease U-53626 was issued on May 1, 1984. It is subject to terms and conditions that were in existence at the issuance date. There are 1991.05 acres within the boundaries of this lease.

Impacts of the Proposed Action

The lease will remain in effect beyond its primary term so long thereafter as hydrocarbons are produced in paying quantities (3141.5-2, 43 CFR). Local economics would be favorably impacted. A domestic energy source of unknown potential would be developed.

Impacts of No Action

If the lessee made prior financial or business commitments or and arrangements, economic hardships may ensue. The terms and conditions of the lease would have been misleading and the lessee's rights would have been denied. Local economics could be unfavorably impacted. Fewer barrels of oil and cubic feet of gas would be available nationally for a domestic source of energy.

Audible Impacts

There is noise associated with the drilling activity. This noise may come from the rig's diesel engines, mud pumps, drawworks, and other various activities around the drill rig. Within DeaChorse State Park there is a campground 2.5 miles south and west of this proposed location. The prevailing winds come from a west northwesterly direction. In January of 1991, Columbia Gas drilled a well (27-1) 6.5 miles to the northwest of this proposed location. During this time, when the air mass is more dense, associated rig noise from the 27-1 location was no longer audible past one mile and at most times less than a mile in any direction (personal contact). Two summers previous, there was a drilling rig approximately 1/4 mile west of this proposal. DeaChorse Point officials indicated that sometimes a dull sound from that drilling activity was audible from their campground. If production is attained and pumpjacks are used to lift the oil, there may be some pumping noise (metallic squeaking) and engine noise depending on the energy source to move the pumpjack. If the energy used is electricity then there would be no engine noise.

Impacts of the Proposed Action

Some visitors anticipating to experience solitude may be impacted in this campground.

Impacts of No Action

No artificial noise generated from drilling activity would be audible in the area.

## Particulate Impacts

If the soils are dry, drill pad construction activity, heavy truck traffic, and frequent traffic on dirt surfaces will cause temporary, local dusty conditions. These conditions would be aggravated and magnified with winds.

### Impacts of the Proposed Action

Strong winds over the area could foreseeably carry fugitive dust from the drilling pad towards the campground within the State Park and be a temporary nuisance to campers.

### Impacts to No Action

No additional particulates would be borne by the winds.

### Recreation

Access to the drilling location is along Highway (Hwy) 313 which is the access to Island in the Sky (Canyonlands National Park) and Deadhorse Point State Park. In 1990, the Island in the Sky District had 151,000 visits and Deadhorse Point State Park had 119,600 visits. The drilling location is about 1/2 mile from the State Park entrance. There will be approximately 44 semi-truckloads of drilling equipment transported to the proposed location over a period of five days. During the drilling activity, ten employee vehicles, two water trucks, and an occasional semi-truck will be travelling on Hwy 313. Upon completion of drilling, another 44 equipment loads will be removed from the proposed location. During the set-up production phase, four employee vehicles, one flat-bed semi-truck will be on Hwy 313 for a period of three weeks. During the production phase, one employee vehicle and up to three oil transport trucks will be on Hwy 313 on a daily basis.

### Impacts to the Proposed Action

The increased traffic associated with the drilling activity could present an increased safety risk for recreational users (biking and driving for pleasure) although there is a 12 foot wide bike lane. The drilling activity will be visible for a couple of mile segments on Hwy 313 during the day and a longer segment during the night. The production facilities would be visible from less than a mile off Hwy 313. To some recreational users the presence of the facilities would detract from their experience.

### Impacts to No Action

None

### Visual Impacts

The drilling activity will be running 24 hours a day for approximately 46 days. There are white lights on the rig floor and white & red lights on the derrick. These lights are for safety, mandated by the Occupation & Safety Health Act and by the Federal Aviation Administration.

### Impacts to the Proposed Action

At night, lights from the upper portions of the derrick may be visible from the Deadhorse State Park campground and be an intrusion to the campers night-time experience.

### Impacts to No Action

There will be no night-time lighting to the north of the campground beyond highway traffic.

### Cultural Resources

The exploration site was surveyed by an independent archaeological firm. No sites were identified.

### Impacts of the Proposed Action

Unidentified cultural resources at depth may be impacted.

### Impacts of No Action

No cultural resources would be impacted.

### Description of Mitigation Measures

To reduce engine noise, the winterizing shields could be left up in the direction of the campground.

Occasional wetting of the dirt surfaces will reduce fugitive particulates.

Lighting will be directed away from the campground and some lights may be shielded in the direction of the campground if it will not pose a safety hazard.

If production occurs, facilities will be sited, oriented, and painted in ways to best reduce longterm visual impacts.

PUBLIC CONTACTS

Sam Cunningham, Grand County Commissioner  
Max Jensen, Utah State Parks  
Columbia Gas Development  
Knut & Son Contractors  
Bette Stanton, Grand Economic Development Commission  
Rock Smith, Manager, Deadhorse Point

REFERENCES

Grand Resource Area Resource Management Plan  
Grand Resource Area Environmental Impact Statement  
ELII SVII soil survey data  
RMP supplemental Environmental Assessment # UT-060-89-025  
Checklist for Environmental Assessment

APPENDICES

1. Site pictures
2. Pit and pad layout
3. Surface Use Plan

MAPS

General Topo

\*\*\*\*\*

Environmental Impacts:

<u>Critical Element</u>	<u>Affected</u>		<u>Date</u>
	<u>Yes</u>	<u>No</u>	
Air Quality	___	<u>Yes</u>	<u>4/5/91</u>
T & E Plants	___	<u>Yes</u>	<u>4/5/91</u>
Floodplains	___	<u>Yes</u>	<u>4/5/91</u>
Farmlands	___	<u>Yes</u>	<u>4/5/91</u>
Water Quality	___	<u>Yes</u>	<u>4/5/91</u>
Cultural (surface)	___	<u>AH</u>	<u>4/30-91</u>
Paleontology	___	<u>AH</u>	<u>4/30-91</u>
T & E Animals	___	<u>SA</u>	<u>4-15-91</u>
Wetlands/Riparian	___	<u>SA</u>	<u>4-15-91</u>
ACECs	___	<u>AUT</u>	<u>4-2-91</u>
Wilderness	___	<u>AUT</u>	<u>4-2-91</u>
Wild & Scenic Rivers	___	<u>AUT</u>	<u>4-2-91</u>
V R M CLASS III	___	<u>AUT</u>	<u>4-2-91</u>
Waste Hazardous/Solid	___	<u>R</u>	<u>4-30-91</u>

Appendix

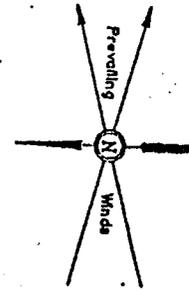


*Dew*



COLUMBIA GAS DEVELOPMENT CORP.

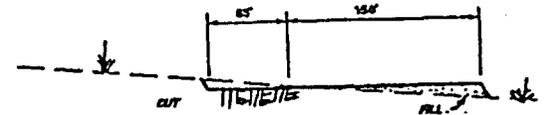
LOCATION LAYOUT FOR  
KANE SPRING FED. #19-1  
SECTION 19, T26S, R20E, S.L.B. 844



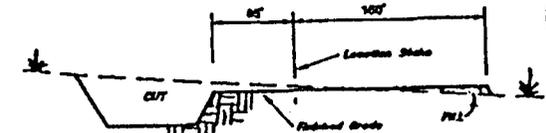
SCALE: 1" = 50'  
DATE: 3-25-81  
Drawn By: J.R.S.  
REVISED: 3-28-81 R.E.H.

X-Section  
Scale  
1" = 100'

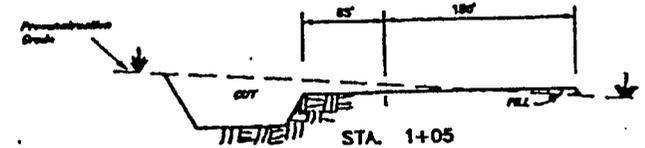
TYP. CROSS  
SECTION  
LAYOUT



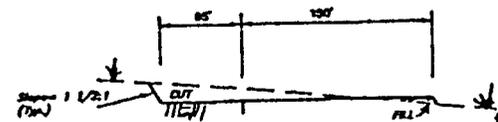
STA. 4+50



STA. 2+50



STA. 1+05



STA. 0+00

APPROXIMATE YARDAGES

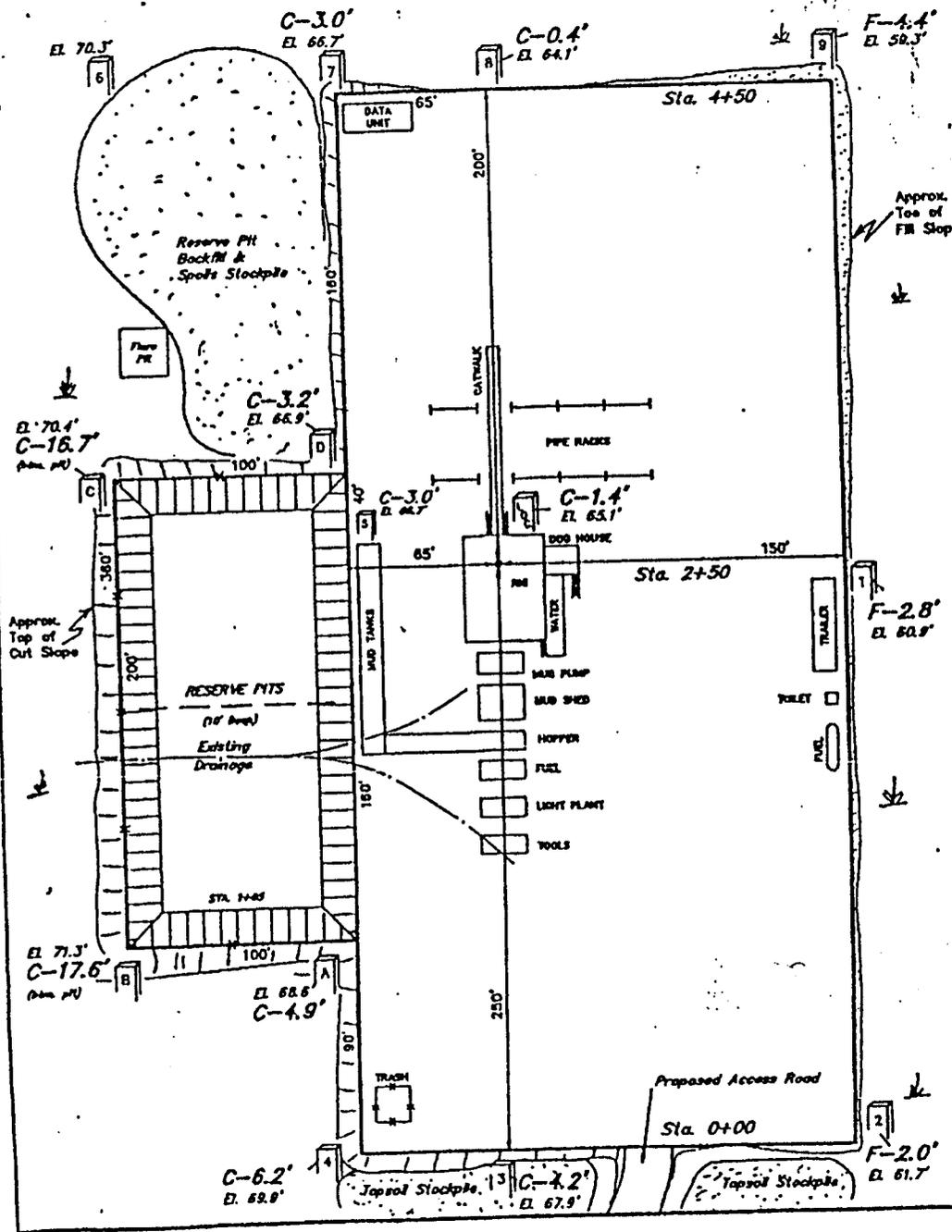
CUT	
(6") Topsoil Stripping	= 2,200 Cu. Yds.
PH Volume (Below Grade)	= 5,820 Cu. Yds.
Remaining Location	= 8,670 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 16,990 CU.YDS.</b>
<b>FILL</b>	<b>= 3,480 CU.YDS.</b>

EXCESS MATERIAL AFTER 5% COMPACTION	= 11,200 Cu. Yds.
Topsoil & PH Backfill (1/2 PH Vol.)	= 5,170 Cu. Yds.
EXCESS UNBALANCE (After Rehabilitation)	= 6,030 Cu. Yds.

NOTES:

Dev. Ungraded Ground At Loc. Stake = 5965.1'  
FINISHED GRADE ELEV. AT LOC. STAKE = 5963.7'

UNITAR ENGINEERING & LAND SURVEYING  
84 South 200 West, Farming, Utah





# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Norman H. Bangertter  
Governor

Dee C. Hansen  
Executive Director

Dianne R. Nielson, Ph.D.  
Division Director

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340



May 21, 1991

Columbia Gas Development Corporation  
P.O. Box 1350  
Houston, Texas 77251-1350

Gentlemen:

Re: Kane Springs Federal #19-1 Well, Surface Location: 800' FSL and 1930' FEL, B.H. location: 2000' FNL and 1350' FEL, SW SE, Section 19, Township 26 South, Range 20 East, Grand County, Utah

Approval to drill the referenced well is hereby granted in accordance with Utah Admin. R. 615-3-2, subject to the following stipulations:

1. Prior to commencement of drilling, receipt by the Division of evidence providing assurance of an adequate and approved supply of water as required by Utah Code Ann. § 73-3, Appropriation.
2. Special attention is directed to compliance with Utah Admin. R. 615-3-31, which prescribes drilling procedures for designated potash areas.

In addition, the following actions are necessary to fully comply with this approval:

1. Spudding notification within 24 hours after drilling operations commence.
2. Submittal of Entity Action Form 6, within five working days following spudding and whenever a change in operations or interests necessitates an entity status change.
3. Submittal of the Report of Water Encountered During Drilling, Form 7.

4. Prompt notification in the event it is necessary to plug and abandon the well. Notify R. J. Firth, Associate Director, (Office) (801) 538-5340, (Home) 571-6068, or F. R. Matthews, Petroleum Engineer, (Office) (801) 538-5340.
5. Compliance with the requirements of Utah Admin. R. 615-3-20, Gas Flaring or Venting.
6. Prior to commencement of the proposed drilling operations, plans for facilities for disposal of sanitary wastes at the drill site shall be submitted to the local health department. These drilling operations and any subsequent well operations must be conducted in accordance with applicable state and local health department regulations. A list of local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of Drinking Water/Sanitation, telephone (801) 538-6159.
7. The derrick lighting on the drilling rig should be directed away from the campground area in Deadhorse State Park in order to reduce visual impacts.
8. Dust from the access road should be controlled by periodic watering of the road.
9. Effort should be made to reduce the noise associated with the actual drilling operation.
10. Any pits associated with this operation which create potential hazards to birds, should be covered by suitable netting to prevent the entry of birds to the pits.
11. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

Page 3  
Columbia Gas Development Corporation  
Kane Springs #19-1  
May 21, 1991

The API number assigned to this well is 43-019-31319.

Best regards,



Dianne R. Nielson  
Director

lsj  
Enclosures  
cc: Bureau of Land Management  
R. J. Firth  
F. R. Matthews  
J. L. Thompson  
RJF4

RECEIVED

File Code 3160

MAY 22 1991

DIVISION OF  
OIL GAS & MINING

DECISION RECORD AND  
FINDING OF NO SIGNIFICANT IMPACT

EA Log No. UT-068-91-042

Lease No. U53626

Project Application for Permit to Drill Oil Exploration Well 19-1

Applicant Columbia Gas Development Address Houston, TX

Project Location Sec. 19, T.26R., R.20E., SLM County Grand

BLM Office Grand Resource Area

Phone No. (301) 259-8193

DECISION RECORD: The following is the decision of the Bureau:

To approve the Application(s) for Permit to Drill subject to the terms and provisions of the lease and the subsequent Conditions of Approval.

CONDITIONS OF APPROVAL: Refer to attached sheet.

Rationale:

The Application for Permit to Drill and the attached conditions will prevent significant impacts to the environment. The APD is in conformance with management actions provided for in the Grand Resource Area RMP, consistent with BLM objectives of 43 CFR 3160, and National Minerals Management Policy.

Renneth V Rhea  
Acting District Manager

5/14/91  
Date

FINDING OF NO SIGNIFICANT IMPACT

Based on the analysis of potential environmental impacts contained in the accompanying environmental assessment, referenced above, I have determined that impacts are not expected to be significant. Therefore an environmental impact statement is not required.

B. O. B.  
Area Manager

5/10/91  
Date



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF WILDLIFE RESOURCES

Norman H. Bangerter  
Governor  
Dee C. Hansen  
Executive Director  
Timothy H. Provan  
Division Director

1596 West North Temple  
Salt Lake City, Utah 84116-3195  
801-538-4700  
801-538-4709 Fax

RECEIVED

MAY 22 1991

DIVISION OF  
OIL GAS & MINING

FAX REC'D 5/21/91

May 20, 1991

Dr. Dianne R. Nielson, Director  
Utah Division of Oil, Gas and Mining  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

Dear Dianne:

I am responding to a wildcat well drilling permit request on federal lease UTU-53626 by Columbia Gas Development Corporation. This item was listed as state action UT910506-070 in the Resource Development Coordinating Committee (RDCC) agenda items. The Division of Wildlife Resources has some specific concerns with this project and its potential impacts to wildlife and wildlife habitat.

Impacts will be associated with short and long-term activities generated by the company. Although the activities associated with just the wildcat well will most likely be for only 30 days, long-term impacts associated with increased access, increased road densities and petroleum products associated with these activities can result in long-term impacts. The species that could potentially be impacted include mule deer, bighorn sheep, reptilian species and birds, which includes waterfowl, passerine birds and peregrine falcons.

The waste pits associated with the drilling operation create a hazard for birds. Waste pits appear as inviting water holes and the petroleum products they contain are fatal for the birds. These pits should be covered by netting to prevent birds from becoming trapped. Causing the death of waterfowl or passerine birds would be a violation of the Migratory Bird Treaty Act. A peregrine falcon eyrie is located just off Dead Horse Point. These birds likely use the sagebrush flats to hunt. White-throated swift, mourning doves, western meadowlarks and other passerine birds are their primary prey. Impacts that would reduce these populations will have an effect on the peregrines in this area.

Another point of concern is the source of water for these wells. If water is obtained by developing springs or depleting available surface water in the project vicinity, then this will impact the local wildlife species. If water is obtained from the Colorado River, the impacts to threatened and endangered Colorado River species must be considered.

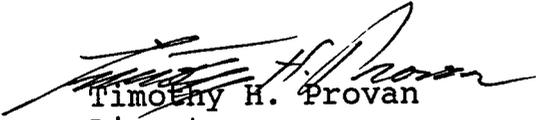
Dr. Dianne R. Nielson, Director  
May 20, 1991  
Page 2

Increasing oil and gas development in southeast Utah without proper planning concerns us. Wildlife impacts associated with these activities can be extremely damaging to many species. Of primary concern are the cumulative impacts these activities will have on wildlife habitat and wildlife directly. We would like to see a responsible action taken to help develop guidelines for protecting wildlife and wildlife habitat in the area. We understand your agency is not the primary leader when these wells are on Bureau of Land Management land; but as an involved agency, I am soliciting your help. We would like to see a delay in these activities until a plan or an EIS can be prepared. DWR would prefer an EIS be developed.

We appreciate the opportunity to provide comments. Your personnel should direct any response you have to our requests to:

Ken Phippen, Habitat Manager  
Southeastern Region  
455 West Railroad Avenue  
Price, Utah 84501  
Phone: 637-3310

Sincerely,

  
Timothy H. Provan  
Director

APPLICATION FOR WATER IN THE

MAY 20 1991 STATE OF UTAH MAY 13 1991

APPLICATION TO APPROPRIATE WATER RIGHTS PRICE

RECEIVED Rec. by [Signature] Fee Rec. 30 10 Receipt # 30919 Microfilmed Roll #

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements to Title 73, Chapter 3 of the Utah Code Annotated (1953, as amended).

\*WATER RIGHT NO. 01 - 1081 \*APPLICATION NO. A T65376

1. \*PRIORITY OF RIGHT: May 13, 1991 \*FILING DATE: May 13, 1991

2. OWNER INFORMATION Name(s): Columbia Gas Development Corporation \*Interest: % Address: P.O. Box 1350 City: Houston State: Texas Zip Code: 77251-1350 Is the land owned by the applicant? Yes No X (If "No", please explain in EXPLANATORY section.)

3. QUANTITY OF WATER: cfs and/or 15.0 ac-ft.

4. SOURCE: Colorado River \*DRAINAGE: which is tributary to which is tributary to

POINT(S) OF DIVERSION: COUNTY: Grand S. 1300 ft. & E. 1230 ft. from NW Cor. Sec. 26, T25S, R21E, SLB&M

Description of Diverting Works: Tank trucks from diversion point to well site \*COMMON DESCRIPTION: Approx. 2 miles west of Moab Moab Quad

5. POINT(S) OF REDIVERSION The water will be rediverted from at a point:

Description of Diverting Works:

6. POINT(S) OF RETURN The amount of water consumed will be cfs or 15.0 ac-ft. The amount of water returned will be cfs or ac-ft. The water will be returned to the natural stream/source at a point(s):

7. STORAGE Reservoir Name: Storage Period: from to Capacity: ac-ft. Inundated Area: acres. Height of dam: feet Legal description of inundated area by 40 acre tract(s):

RECEIVED

JUN 20 1991

TEMPORARY

\* These items are to be completed by the Division of Water Rights

Appropriate

8. List any other water rights which will supplement this application \_\_\_\_\_

9. NATURE AND PERIOD OF USE

Irrigation:	From _____	to _____
Stockwatering:	From _____	to _____
Domestic:	From _____	to _____
Municipal:	From _____	to _____
Mining:	From _____	to _____
Power:	From _____	to _____
Other:	From <u>May 7, 1991</u>	to <u>May 6, 1992</u>

10. PURPOSE AND EXTENT OF USE

Irrigation: \_\_\_\_\_ acres. Sole supply of \_\_\_\_\_ acres.  
 Stockwatering (number and kind): \_\_\_\_\_  
 Domestic: \_\_\_\_\_ Families and/or \_\_\_\_\_ Persons.  
 Municipal (name): \_\_\_\_\_  
 Mining: \_\_\_\_\_ Mining District in the \_\_\_\_\_ Mine.  
 Ores mined: \_\_\_\_\_  
 Power: Plant name: \_\_\_\_\_ Type: \_\_\_\_\_ Capacity: \_\_\_\_\_  
 Other (describe): Dust suppression and drilling fluids for oil/gas exploration

11. PLACE OF USE

Legal description of place of use by 40 acre tract(s): \_\_\_\_\_

Bartlett Flat Field:

- 1) Kane Springs Federal #19-1: SW $\frac{1}{4}$ SE $\frac{1}{4}$  Sec. 19, T25S, R20E, SLB&M
- 2) Kane Springs Federal #10-1:  
N 500 ft. & E. 1000 ft. from SW Cor. Sec. 10, T25S, R18E, SLB&M (SW $\frac{1}{4}$ SW $\frac{1}{4}$ ).
- 3) Kane Springs Federal #14-1:  
N. 1000 ft. & W. 1000 ft. from SE Cor. Sec. 14, T26S, R19E, SLB&M (SE $\frac{1}{4}$ SE $\frac{1}{4}$ ).

12. EXPLANATORY

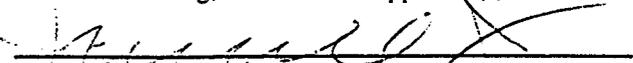
The following is set forth to define more clearly the full purpose of this application. (Use additional pages of the same size if necessary): \_\_\_\_\_

Surface is owned by U.S. Government under the jurisdiction of the BLM.

- 4) Kane Springs Federal #20-1:  
N. 1000 ft. & E. 2500 ft. from SW Cor. Sec. 20, T26S, R19E, SLB&M (SE $\frac{1}{4}$ SW $\frac{1}{4}$ ).
- 5) Kane Springs Federal #28-1:  
N. 2000 ft. & W. 800 ft. from SE Cor. Sec. 28, T25S, R19E, SLB&M (NE $\frac{1}{4}$ SE $\frac{1}{4}$ ).
- 6) Kane Springs State #36-1:  
N. 800 ft. & W. 1400 ft. from SE Cor. Sec. 36, T25S, R19E, SLB&M (SW $\frac{1}{4}$ SE $\frac{1}{4}$ ).

\*\*\*\*\*

The applicant(s) hereby acknowledges that he/she/they are a citizen(s) of the United States of America or intends to become such a citizen(s). The quantity of water sought to be appropriated is limited to that which can be beneficially used for the purposes herein described. The undersigned hereby acknowledges that even though he/she/they may have been assisted in the preparation of the above-numbered application through the courtesy of the employees of the Division of Water Rights, all responsibility for the accuracy of the information contained herein, at the time of filing, rests with the applicant(s).

  
 \_\_\_\_\_  
 Signature of Applicant(s)\*  
 J. C. Braswell, Jr. - Director of

\*If applicant is a corporation or other organization, signature must be the name of such corporation or Drilling organization by its authorized agent, or in the name of the partnership by one of the partners.

\_\_\_\_\_  
 Authorized Agent (please print)  
 \_\_\_\_\_  
 Authorized Agent (signature)

TEMPORARY

STATE ENGINEER'S ENDORSEMENT

WATER RIGHT NUMBER: 01 - 1081

APPLICATION NO. T65376

1. May 13, 1991            Application received by MP.
2. June 18, 1991        Application designated for APPROVAL by MP and KLJ.

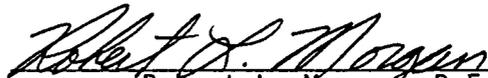
3. Comments:  
Please advertise this Temporary Appl. for one week, with a one week protest  
period.

---

---

Conditions:

This application is hereby APPROVED, dated June 19, 1991, subject to prior rights and this application will expire on June 19, 1992.



Robert L. Morgan, P.E.  
State Engineer



July 8, 1991

STATE OF UTAH NATURAL RESOURCES OIL, GAS  
& MINING  
355 W. NORTH TEMPLE, 3 TRIAD CENTER, STE.#350  
SALT LAKE CITY, UTAH 84180-1203

Attention: Mr. R. J. Firth

Reference: COLUMBIA GAS DEVELOPMENT CORPORATION  
KANE SPRINGS FEDERAL 19-1A  
SEC.19-T26S-R19E  
GRAND COUNTY, UTAH  
API NO. 43-019-31319

Dear Mr. Firth:

Please find enclosed Columbia's Sundry Notice, in triplicate, regarding the skidding of the rig approx. twelve (12') ft. forward.

If you have any questions, or require any additional information, do not hesitate to contact me at 713/871-3482.

Sincerely,

COLUMBIA GAS DEVELOPMENT CORPORATION

A handwritten signature in cursive script that reads "Aline A. Reese".

Aline A. Reese  
Regulatory Clerk

AAR  
Encl.

A rectangular stamp with the word "RECEIVED" in a bold, outlined, sans-serif font.

JUL 09 1991

DIVISION OF  
OIL GAS & MINING

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

SUBMIT IN TRIPPLICATE  
(07 instructions on reverse)

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> <small>(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.)</small>		5. LEASE DESIGNATION AND SERIAL NO. <b>UTU 53626</b>
1. <b>OIL WELL</b> <input checked="" type="checkbox"/> <b>GAS WELL</b> <input type="checkbox"/> <b>OTHER</b> <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME <b>N/A</b>
2. NAME OF OPERATOR <b>Columbia Gas Development Corporation 713/871-3400</b>		7. UNIT AGREEMENT NAME <b>Kane Springs Fed. Unit</b>
3. ADDRESS OF OPERATOR <b>P. O. Box 1350 Hou., TX. 77251-1350</b>		8. FARM OR LEASE NAME <b>Kane Springs Federal</b>
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) <b>At surface</b>  <b>800' FSL &amp; 1930 FWL of Sec.19-T26S-R19E</b>		9. WELL NO. <b>#19-1A</b>
14. PERMIT NO. <b>43-019-31319</b>		10. FIELD AND POOL, OR WILDCAT <b>Wildcat</b>
15. ELEVATIONS (Show whether OF, RT, OR, etc.) <b>Ground 5965</b>		11. SEC., T., R., M., OR BLK. AND SUBST. OR AREA <b>Sec.19-T26S-R20E</b>
12. COUNTY OR PARISH <b>Grand</b>		13. STATE <b>Utah</b>

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"/>	FULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACURE 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>Skidding the Rig</u> <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.)

Verbal approval was received from the BLM on 6/28/91 to **skid the rig** approx. 12' forward.

Rig has been moved approx. 12' forward.

RECEIVED

JUL 09 1991

DIVISION OF  
OIL GAS & MINING

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

SIGNED Aline A. Reese TITLE Regulatory Clerk DATE 7/8/91

(This space for Federal or State office use)

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

CONDITIONS OF APPROVAL, IF ANY:

STATE ACTIONS

Mail to:  
RDCC Coordinator  
116 State Capitol  
Salt Lake City, Utah 84114

1. ADMINISTERING STATE AGENCY  
OIL, GAS AND MINING  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203
2. STATE APPLICATION IDENTIFIER NUMBER:  
(assigned by State Clearinghouse)
3. APPROXIMATE DATE PROJECT WILL START:  
May 1991
4. AREAWIDE CLEARING HOUSE(S) RECEIVING STATE ACTIONS:  
(to be sent out by agency in block 1)  
Southeastern Utah Association of Governments
5. TYPE OF ACTION:  Lease  Permit  License  Land Acquisition  
 Land Sale  Land Exchange  Other \_\_\_\_\_
6. TITLE OF PROPOSED ACTION:  
Application for Permit to Drill
7. DESCRIPTION:  
Columbia Gas Development Corporation proposes to drill the #19-1 well (wildcat) on federal lease UTU-53626, Grand County, Utah. This action is being presented to RDCC for consideration of resource issues affecting state interests. The U.S Bureau of Land Management is the primary administrative agency in this action and must issue approval before operations commence.
8. LAND AFFECTED (site location map required) (indicate county)  
SW/4, SE/4, Section 19, Township 26 South, Range 20 East, Grand County, Utah
9. HAS THE LOCAL GOVERNMENT(S) BEEN CONTACTED?
10. POSSIBLE SIGNIFICANT IMPACTS LIKELY TO OCCUR:  
See Attachment
11. NAME AND PHONE NUMBER OF DISTRICT REPRESENTATIVE FROM YOUR AGENCY NEAR PROJECT SITE, IF APPLICABLE:
12. FOR FURTHER INFORMATION, CONTACT: Dianne R. Nielson  
PHONE: 538-5340
13. SIGNATURE AND TITLE OF AUTHORIZED OFFICIAL  
*Dianne R. Nielson*  
DATE: 4-30-91 Director

WOI187

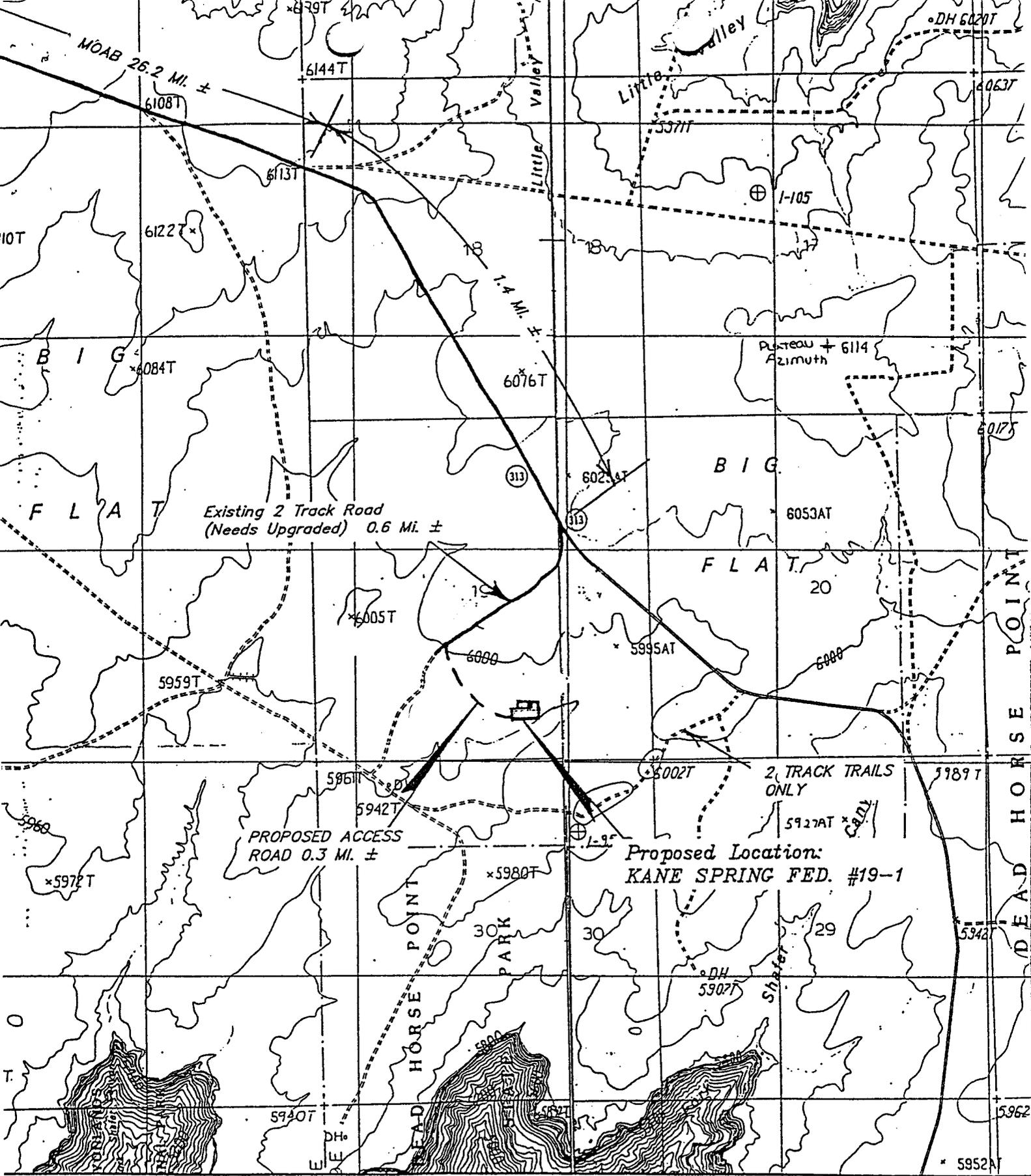
**Attachment to State Action Form Dated 4-30-91  
for the Columbia Gas Development Corporation #19-1 Well**

---

The final approval issued by DOGM will incorporate necessary stipulations to assure compliance with Utah Code Ann. 40-6-1 et seq (1953, as amended); Utah Admin. R. 615-1 et seq, Oil and Gas General Rules; and in accordance with the proposed drilling and surface use programs submitted by Columbia.

Additionally, stipulations may be necessary to mitigate other potential impacts and minimize environmental consequences of this particular drilling location, including but not limited to:

1. Air quality impacts (exhaust pollution)
2. Water quality impacts
3. Dust abatement
4. Odor mitigation (noxious gases)
5. Health, safety and noise impacts
6. Visual impacts
7. Impacts to recreation
8. Wildlife habitat impacts
9. Land use impacts
10. Cultural, historical and archaeological impacts.



TOPOGRAPHIC  
 MAP "B"  
 SCALE: 1" = 2000'  
 DATE 3-25-91



**COLUMBIA GAS DEVELOPMENT CORP.**  
 KANE SPRING FED. #19-1  
 SECTION 19, T26S, R20E, S.L.B.&M.

COLUMBIA GAS DEVELOPMENT CORPORATION

KANE SPRINGS FEDERAL #19-1A  
SEC.19-T26S-R20E  
GRAND COUNTY, UTAH

DAILY ACTIVIITY REPORT

CONFIDENTIAL

6/24/91 MILLING ON JUNK @ 513'.

6/25/91 MILLING TO 520', POH, TIH W/REAMER, UNABLE TO WORK REAMER, POH & LD SAME, TIH.

6/26/91 UNABLE TO DRILL OR ROTATE W/REAMERS, POH, TIH W/METAL MUNCHER & WORK SAME, POH, MM WORN OUT. MILLING TO 523', POH & LD SAME, ROUND TRIP W/ MAGNET - NO RECOVERY, CONT MILLING.

6/27/91 MILLING - TFN/MILL

6/28/91 MILLING - POH & L/D MILL, TIH W/BASKET, POH - NO RECOVERY. L/D DC.

6/29/91 FIN L/D DC. M&P 900 SX CL-B CMT F:525'-10'. PREPARING TO RIG DOWN TO SKID RIG.

6/30/91 PREPARING TO SKID RIG 12' FORWARD

7/1/91 DIGGING CONDUCTOR HOLE 12' AHEAD OF OLD HOLE.

7/2/91 SKID RIG AT 7:00 AM

7/3/91 RIGGING UP

7/4/91 SPUD WELL, SET 30" @ 56' & DRL TO 77'

7/5/91 DRL TO 145', SURVEY @ 125' 1/4 DEG.  
6 COMPRESSORS & MIST PUMP 240# W/4500 SCFM

7/6/91 DRL TO 367', REPAIR MIST PUMP & TWO COMPRESSORS,  
SURVEY @ 186' 1/4 DEG. & @ 302' 1/4 DEG.  
6 COMPRESSORS & MIST PUMP 275# W/4500 SCFM

7/7/91 DRL TO 560', SURVEY @ 427' 1/2 DEG., CIRC. MISTING HOLE.

7/8/91 CIRC, POH, RUN 20" 94# K-55 TO 560', CMT W/940 SX CL-B, TIH & TAG UP @ 516', CMT WITH ADD'L 166 SX CL-B, POH.

RECEIVED

JUL 12 1991

DIVISION OF  
OIL GAS & MINING

COLUMBIA GAS DEVELOPMENT CORPORATION

KANE SPRINGS FEDERAL #19-1A  
SEC.19-T26S-R20E  
GRAND COUNTY, UTAH

DAILY ACTIVIITY REPORT

CONFIDENTIAL

7/8/91 CIRC, POH, RUN 20" 94# CSG TO 560', CMT W/940 SX  
CL-B, CIRC, TFBIT, UNABLE TO ROTATE, POH, CMT Annulus  
W/166 SX CL-B, CIRC, TIH W/BIT, TORQUING UP, POH.

7/9/91 NU BOP, & CHOKE LINE

7/10/91 TEST BOPE, REBUILD CHOKE LINE & TEST. TIH & DRL  
OUT CMT 524-555, TFBIT, BIT TORQUING, POH & WAIT  
ON TAPER MILL.

7/11/91 TIH, MILLING @ 531.

7/12/91 MILLING INSIDE CSG @ 535'.

7/13/91 MILL TO 557, POH & L/D MILL, TIH & DRL TO 567',  
TF/MAGNET & WORK SAME, TFBIT, DRL TO 669'.

7/14/91 TFBIT, DRL TO 1200', SURVEY @ 1005 1DEG.

COLUMBIA GAS DEVELOPMENT CORPORATION

KANE SPRINGS FEDERAL #19-1A  
SEC.19-T26S-R20E  
GRAND COUNTY, UTAH

DAILY ACTIVIITY REPORT

7/15/91 DRL TO 1860', SURVEY @ 1501 1/2 DEG.

7/16/91 DRL TO 2350', SURVEY @ 1975 1/2 DEG.  
6 COMPRESSORS, 2 BOOSTERS, MIST PUMP ON HOLE  
4300 SCFM

7/17/91 DRL TO 2710', SURVEY @ 2500 1-1/4 DEG., TFBIT.

7/18/91 POH, CHANGE OUT 3 PT.REAMER, TIH, 10' FILL, UN-  
LOAD HOLE, DRL TO 2900'.

7/19/91 DRL TO 3075', SURVEY @ 2970' 1/2 DEG.

7/20/91 TFBIT, DRL TO 3120'.

7/21/91 DRL TO 3865', SRUVEY @ 3465' 1/2 DEG.

COLUMBIA GAS DEVELOPMENT CORPORATION

KANE SPRINGS FEDERAL #19-1A  
SEC.19-T26S-R20E  
GRAND COUNTY, UTAH

DAILY ACTIVIITY REPORT

**CONFIDENTIAL**

7/22/91 DRL TO 4021, TFN/BIT, DRL TO 4100'  
7 COMPRESSORS, 2 BOOSTERS, 1 MIST PUMP 480 PSI,  
4300 SCFM  
LS @ 3960' 3/4 DEG.

7/23/91 DRL TO 4518, LS @ 4496' 1/2 DEG.

7/24/91 DRL TO 4521, R/U & RUN 13-3/8" 61# K-55 CSG TO  
4521.

7/25/91 CMT W/670 SX CL-B @ 12.5 PPG FOLLOWED BY 415 SX  
@ 15.6 PPG, CUT CSG & TEST TO 1150 PSI. NU BOP'S.

7/26/91 TEST BOPE, NU ROTATING HEADS.

7/27/91 DRL CMT & SHOE TO 4525, TEST SHOE TO 905# FOR A  
14.0 EMW. DRL TO 4531, TF/BIT & BHA.

7/28/91 DRL TO 4942, WORK ON PUMP #1.

7/29/91 DRL TO 5480, LS @ 5015 1/2 DEG., WORK ON CATCH TANK  
SCREENS.

COLUMBIA GAS DEVELOPMENT CORPORATION

KANE SPRINGS FEDERAL #19-1A  
SEC.19-T26S-R20E  
GRAND COUNTY, UTAH

DAILY ACTIVIITY REPORT

**CONFIDENTIAL**

7/30/91 DRL TO 5900', ST 11 STDS, LS @ 5485' 2-3/4 DEG.  
MW 10.2

7/31/91 DRL TO 6260', SURVEY @ 6066 4 DEG., WORK ON PUMP  
#1, MW 10.4

8/1/91 DRL TO 6391, CIRC OUT GAS & INCR MW TO 12.2 PPG.

8/2/91 CIRC OUT GAS - INCR MW TO 13.3, SHUT WELL IN, 0#  
SIDP & 200# SICP, INCR MW IN PITS TO 16.6

8/3/91 INCR MW TO 16.7, CIRC, POH TO 4520', TIH TO BTM,  
SPOT PILL, POH TO 4520', SHUT WELL IN.

8/4/91 OPEN WELL, CCM TO 15.0 PPG, TIH TO 5800', SPOT PILL,  
POH 6 STDS TO 5300', CCM, DRL TO 6420', MW 14.9 PPG.

COLUMBIA GAS DEVELOPMENT CORPORATION

KANE SPRINGS FEDERAL #19-1A  
SEC.19-T26S-R20E  
GRAND COUNTY, UTAH

DAILY ACTIVIITY REPORT

8/5/91 DRL TO 6750', ST TO SHOE TO LOG, LS @ 6605'  
4 DEG.

8/6/91 C&C, LOGGING.

8/7/91 P/U KICK OFF TOOLS & GIH

8/8/91 FIH, TEST MM, SLIDE W/MOTOR F:6781'-6838'. SURVEY  
@ 6758'-7DEG 15.0 AZIMUTH

8/9/91 CIRC, M&P, TFBHA, TIH TO 6750', REAM 6750'-6838',  
SLIDE TO 6858'.

8/10/91 SLIDING W/MOTOR TO 6950', LS @ 6884' 23.8 DEG.

8/11/91 SLIDING W/MOTOR TO 7130', LS @ 7072' 43.2 DEG.

COLUMBIA GAS DEVELOPMENT CORPORATION

KANE SPRINGS FEDERAL #19-1A  
SEC.19-T26S-R20E  
GRAND COUNTY, UTAH

DAILY ACTIVIITY REPORT

CONFIDENTIAL

8/12/91 SLIDE TO 7143', TFN/BHA, REAM F:7116'-7143', DRL TO 7186'.  
LS @ 7131' 48.8 DEG. MW 15.0

8/13/91 CIRC, TFN/BHA & DOUBLE BENT MOTOR, SLIDE F:7286'-7330', REPAIR SUCTION LINE ON PUMP.  
LS @ 7249' 53.4 DEG. MW 15.0

8/14/91 SLIDE TO 7467', CIRC, TFN/BHA.  
LS @ 7417' 69.6 DEG. MW 15.1

8/15/91 REAM 7090'-7467', DRL 7571'-7579'.  
LS @ 7503' 74.9 DEG. MW 15.1

8/16/91 DRL TO 7596', CIRC, POH, RIG REPAIR, TIH & TEST MM, FIH & ORIENT MWD, WASH 30' TO BTM, SLIDE & DRL TO 7636'.  
LS @ 7571' 73.6 DEG. MW 15.3

8/17/91 SLIDE & DRL TO 7813'.  
LS @ 7753' 74.1 DEG. MW 15.0

8/18/91 SLIDE & DRIL TO 7824', CBU, POH, TIH & CUT DL, FIH TO 7584', REAM 7584'-7824', CBU, WORK TIGHT SPOTS @ 7814'-7824', POH TO RUN 9-5/8" CSG. MW 15.1  
LS @ 7768' 74 DEG.

**COLUMBIA GAS**  
Development



July 16, 1991

STATE OF UTAH NATURAL RESOURCES OIL,  
GAS & MINING  
355 W. NORTH TEMPLE, 3 TRIAD CENTER, STE.#350  
SALT LAKE CITY, UTAH 84180-1203

Attention: Ms. Tammy Searin

Reference: **COLUMBIA GAS DEVELOPMENT CORPORATION**  
**KANE SPRINGS FEDERAL #19-1A**  
**SEC.19-T268-R20E**  
**GRAND COUNTY, UTAH**

Dear Ms. Searin:

As per our conversation of 7/15/91, please find enclosed Columbia's Application for Permit to Drill to be processed regarding the above referenced location.

If you have any questions, or require any additional information, do not hesitate to contact me at 713/871-3482.

Sincerely,

**COLUMBIA GAS DEVELOPMENT CORPORATION**

A handwritten signature in cursive script that reads "Aline A. Reese".

Aline A. Reese  
Regulatory Clerk

AAR  
Encl.

**RECEIVED**

JUL 17 1991

DIVISION OF  
OIL GAS & MINING

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

(Other instructions on reverse side)

**CONFIDENTIAL**

5. Lease Designation and Serial No.

UTU-53626

6. If Indian, Allottee or Tribe Name

N/A

7. Unit Agreement Name

Kane Springs Fed. Unit

8. Farm or Lease Name

Kane Springs Federal

9. Well No.

#19-1A

10. Field and Pool, or Wildcat

Wildcat 001

11. Sec., T., R., M., or Blk. and Survey or Area

Sec. 19-T26S-R20E

12. County or Parrish

Grand

13. State

Utah

**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

Horizontal

Single Zone

Multiple Zone

2. Name of Operator

Columbia Gas Development Corporation 713/871-3400

3. Address of Operator

P. O. Box 1350 Hou., TX. 77251-1350

4. Location of Well (Report location clearly and in accordance with any State requirements.)\*

At surface

800' FSL & 1918' FEL of Sec. 19-T26S-R20E SWSE 1/4

At proposed prod. zone

2000 FNL & 1350 FEL of Sec. 19-T26S, R20E SWNE

14. Distance in miles and direction from nearest town or post office\*

Approx. 26 miles west of Moab

15. Distance from proposed\* location to nearest property or lease line, ft. (Also to nearest drig. line, if any)

800'

16. No. of acres in lease

1991.05

17. No. of acres assigned to this well

640

18. Distance from proposed location\* to nearest well, drilling, completed, or applied for, on this lease, ft.

N/A

19. Proposed depth

9779 MD/7451 TVD

20. Rotary or cable tools

Rotary

21. Elevations (Show whether DF, RT, GR, etc.)

Ground Elevation ungraded 5965.1 - Finished Grade 5963.7

22. Approx. date work will start\*

July 1991

23. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
Set	20"	94#	560	950 sx C1-B
17 1/2"	13 3/8"	61#	4500	265 Lite + 415 C1-B
12 1/4"	9 5/8"	53#	7450	1400 sx C1-G
	5 1/2"	20#	9779	(production liner)

**RIG SKID**

See attached for additional supplemental info:

1. Eight Point Drilling program
2. Multi Point Surface Use Plan
3. BOPE Diagram
4. Surveyor's Plat, Area Topog & Cut & Fill sheet.

**RECEIVED**

JUL 17 1991

DIVISION OF OIL GAS & MINING

**CONFIDENTIAL**

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: Aline A. Reese  
Aline A. Reese

Title: Regulatory Clerk

Date: 7/16/91

(This space for Federal or State office use)

Permit No. 43-019-31304

Approval Date

APPROVED BY THE STATE

OF UTAH DIVISION OF OIL, GAS, AND MINING

Approved by.....  
Conditions of approval, if any:

Title.....

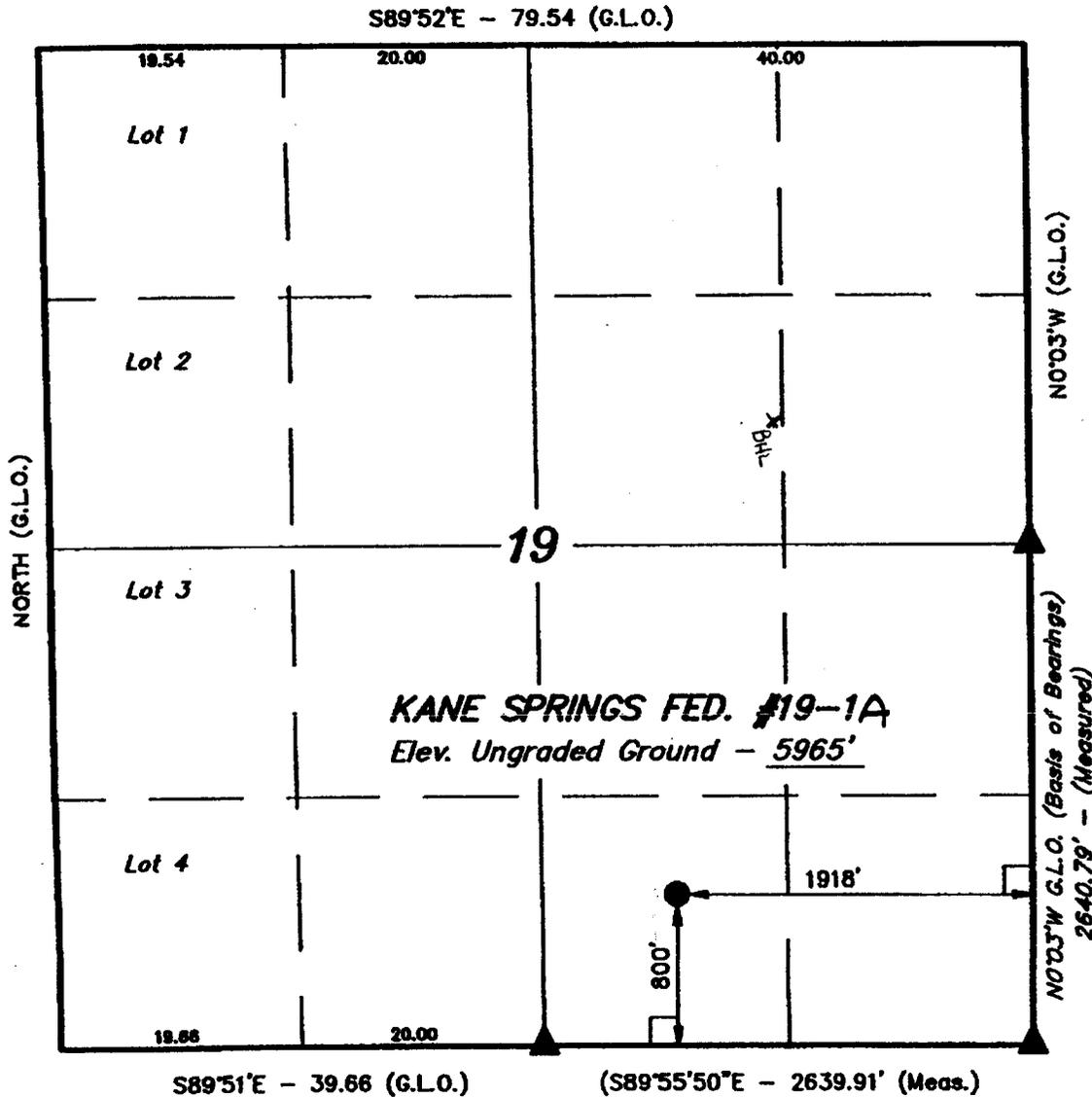
DATE: [Signature]  
BY: [Signature]  
WELL SPACING: R. 615-7-3

\*See Instructions On Reverse Side

# T26S, R20E, S.L.B.&M.

## COLUMBIA GAS DEVELOPMENT CORP.

Well location, KANE SPRINGS FED. #19-1A located as shown in the SW 1/4 SE 1/4 of Section 19, T26S, R20E, S.L.B.&M. Grand County, Utah.



### BASIS OF ELEVATION

SPOT ELEVATION AT THE SOUTHEAST CORNER OF SECTION 19, T26S, R20E, S.L.B.&M. TAKEN FROM THE GOLD BAR CANYON QUADRANGLE, UTAH, GRAND COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6002 FEET.

#### NOTE:

REVISED FOOTAGES WERE NOT MEASURED BY U.E.L.S. COLUMBIA MOVED THE WELL 12' EAST TOWARDS LOCATION CORNER #7.



### CERTIFICATE

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.

*Robert L. Key*

REGISTERED LAND SURVEYOR  
REGISTRATION NO. 5709  
STATE OF UTAH

REVISED: 7-15-91 R.E.H.

**UINTAH ENGINEERING & LAND SURVEYING**  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(801) 789-1017

SCALE 1" = 1000'	DATE 3-25-91
PARTY J.T.K. H.C. J.R.S.	REFERENCES G.L.O. PLAT
WEATHER COOL	FILE COLUMBIA GAS DEVL.P. CORP.

▲ = SECTION CORNERS LOCATED. (Gross Caps)

U.E.L.S., INC. VERNAL 84078

7891813

P. 02

EIGHT-POINT DRILLING PROGRAM

COMPANY: Columbia Gas Development Corporation  
WELL NAME: Kane Springs Federal #19-1  
LOCATION: Sec. 19, T26S, R20E, Grand County, Utah

**CONFIDENTIAL**

Onsite Inspection Date: April 3, 1991

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulation 43 CFR 3100, Onshore Oil & Gas Order No.1, and the approved plan of operations. A copy of these conditions will be furnished to the field representative to insure compliance.

**CONFIDENTIAL**

1. Estimated Geological Markers

<u>Formation Tops</u>	<u>Depth</u>	<u>Subsea</u>
Wingate	Surface	+5965
Chinle	607	+5383
Moenkopi	1000	+4990
Cutler	1485	+4505
Rico	2225	+3765
Hermosa	2693	+3297
Paradox Salt	4423	+1567
Cane Creek	7355	-1365

2. Estimated Depths of Anticipated Water, Oil, Gas or Other Minerals

<u>Formation Tops</u>	<u>Depth</u>	<u>Subsea</u>	<u>Remarks</u>
Wingate	Surface	+5965	Fresh Water
Cane Creek	7355	-1365	Oil

All fresh water and prospectively valuable minerals encountered during drilling, will be recorded by depth and adequately protected.

3. Operator's Minimum Specifications for Pressure Control Equipment

The Moab BLM office will be notified, with sufficient lead time, to witness pressure testing of BOPE.

A rotating head and blooey line will be rigged up on the conductor and surface pipe. See Exhibit C-1.

One (1) annular bag-type preventer will be utilized while drilling the surface hole.

One (1) annular bag-type and three (3) ram-type preventers will be utilized while drilling below the intermediate pipe. Ram preventers are to be tested to seventy percent (70%) of the working pressure, or seventy percent (70%) of the burst rating of the intermediate pipe, whichever is lesser. Annular preventer is to be tested to fifty percent (50%) of working pressure. See Exhibit C-2.

Choke manifold will meet or exceed the requirements of the typical 3M manifold as in Onshore Order #2. See Exhibit C-3.

All BOPE and testing procedures will be consistent with API RP-53 and will be conducted before drilling out casing shoe. Preventers will be inspected and operated at least once daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report.

**4. Casing Program and Auxiliary Equipment**

The Moab BLM office will be notified, with sufficient lead time, to witness the running and cementing of all casing strings.

Surface Pipe

<u>Interval</u>	<u>Size</u>	<u>Wt.</u>	<u>Gr.</u>	<u>Conn.</u>	<u>Burst/SF</u>	<u>Cols/SF</u>	<u>Tension/SF</u>
0-660'	20"	94	H40	STC	1530/6.9	520/1.8	581M#/9.36

Set 50' into the Chinle. Cemented to surface with 950sx Class B.

Intermediate Pipe

<u>Interval</u>	<u>Size</u>	<u>Wt.</u>	<u>Gr.</u>	<u>Conn.</u>	<u>Burst/SF</u>	<u>Cols/SF</u>	<u>Tension/SF</u>
0-4500'	13-3/8	61	K55	STC	3090/1.14	1540/1.55	633M/2.30

Cemented with 265sx lightweight plus 415sx Class B, with estimated top of cement at 3500'. Pressure test to 2160 psi before drilling out shoe.

Collapse design based on .22 psi/ft gradient. Burst design based on shoe test of 13.5 ppg less .1 psi/ft gas gradient.

Production Pipe

<u>Interval</u>	<u>Size</u>	<u>Wt.</u>	<u>Gr.</u>	<u>Conn.</u>	<u>Burst/SF</u>	<u>Cols/SF</u>	<u>Tension/SF</u>
0-7450'	9-5/8	53	S95	LTC	9410/1.92	8850/1.20	1235M/2.29

Cemented with 1400sx Class G, with estimated top of cement at 4100'. Pressure test to 5000 psi before drilling out shoe.

Collapse design based on 1.0 psi/ft overburden gradient. Burst based on max. mud wt in offset wells (17.0 ppg) less .22 psi/ft oil gradient.

### Production Liner

<u>Interval</u>	<u>Size</u>	<u>Wt.</u>	<u>Gr.</u>	<u>Conn.</u>	<u>Burst/SF</u>	<u>Cols/SF</u>	<u>Tension/SF</u>
7000-9779'	5-1/2	20	S95	BTC	10680/NA	10680/1.43	554M/9.96

Bottom 2330' to be pre-drilled with 3/4" holes, 3' apart at 90° phase.

An isolation packer will be run on top of the liner.

Collapse design based max. mud wt in offset wells (17.0 ppg).

### Auxiliary Equipment

A kelly cock will be kept in the string at all times.

A stabbing valve will be kept on the derrick floor at all times.

A float will not be used, other than when air drilling.

### 5. Mud Program

No chromates will be used in this well.

<u>Depth</u>	<u>Mud Wt</u>	<u>Visc.</u>	<u>PV</u>	<u>YP</u>	<u>WL</u>	<u>Mud Type</u>
0-660'	8.4	26-28	1-4	4	NC	Air / Mist
660-4500'	---	---	---	---	---	Air/Mist
4500-7300'TVD	9.6	42-46	18	21	<10	Oil Base
7300-7370'TVD	9.6-12.5	42-46	18	21	<10	Oil Base
7370-7451'TVD	16.5	54-57	35	21	<4	Oil Base

### 6. Testing, Logging and Coring Programs

A. Drill Stem Tests: None planned.

B. Well Logging and Intervals:

Induction/Sonic/GR 4500-6990'TVD

MWD-Induction/GR will be attempted in the horizontal section (6990-9779'MD, 7451'TVD).

C. Cores: A 30' oriented core will be attempted in the Cane Creek formation.

D. Directional Surveys: This well as proposed will be drilled vertically to 6990' and then drilled as a medium radius horizontal well in the direction of N 13° E for a total displacement of 2547'. Inclination test will be taken at 500' and at 1000' maximum intervals until KOP. At KOP a multi-shot will be taken. During the angle build portion, surveys will be taken at 90' maximum intervals. During the horizontal portion of the hole, surveys will be taken at 200' maximum intervals.

- E. Samples: One sample will be taken at 10' intervals from 4500' to TD.
- F. Mud Logger: There will be a mud logger on location 4500' (below intermediate pipe) to TD.
- G. Completion Procedure: To be submitted on Form 5 under "Approval of Subsequent Operations".

Where the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and ~~well~~ all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations will be filled with Form 3160-4.

7. Anticipated Abnormal Pressure, Temperatures or Potential Hazards

Abnormal pressure is anticipated in the Cane Creek formation. The proposed casing program and pressure control equipment has been designed based on the anticipated abnormal pressures of the Cane Creek formation.

Hydrogen Sulfide is not anticipated.

8. Notification of Operations & Other Information

Construction of location is scheduled to start on May 10, 1991.

No Location will be constructed or moved, no well will be plugged and no drilling or workover equipment will be removed from well to be placed in a suspended status without prior approval of the AO.

Spud date is scheduled for May 20, 1991. The spud date will be reported orally to the AO within 48 hours after spudding, or on the next business work day if spud occurs on a weekend.

Spills, blowouts, fires, leaks, accidents or any other unusual occurrences shall be promptly reported in accordance with the requirements of NTL-3A or its revisions.

If a replacement rig is contemplated for completion operations, a "Sundry Notice" to that effect will be filed, for prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.

Should the well be successfully completed for production, the AO will be notified when the well is placed in a production status.

Notification will be made no later than five days following the date on which the well is placed on production.

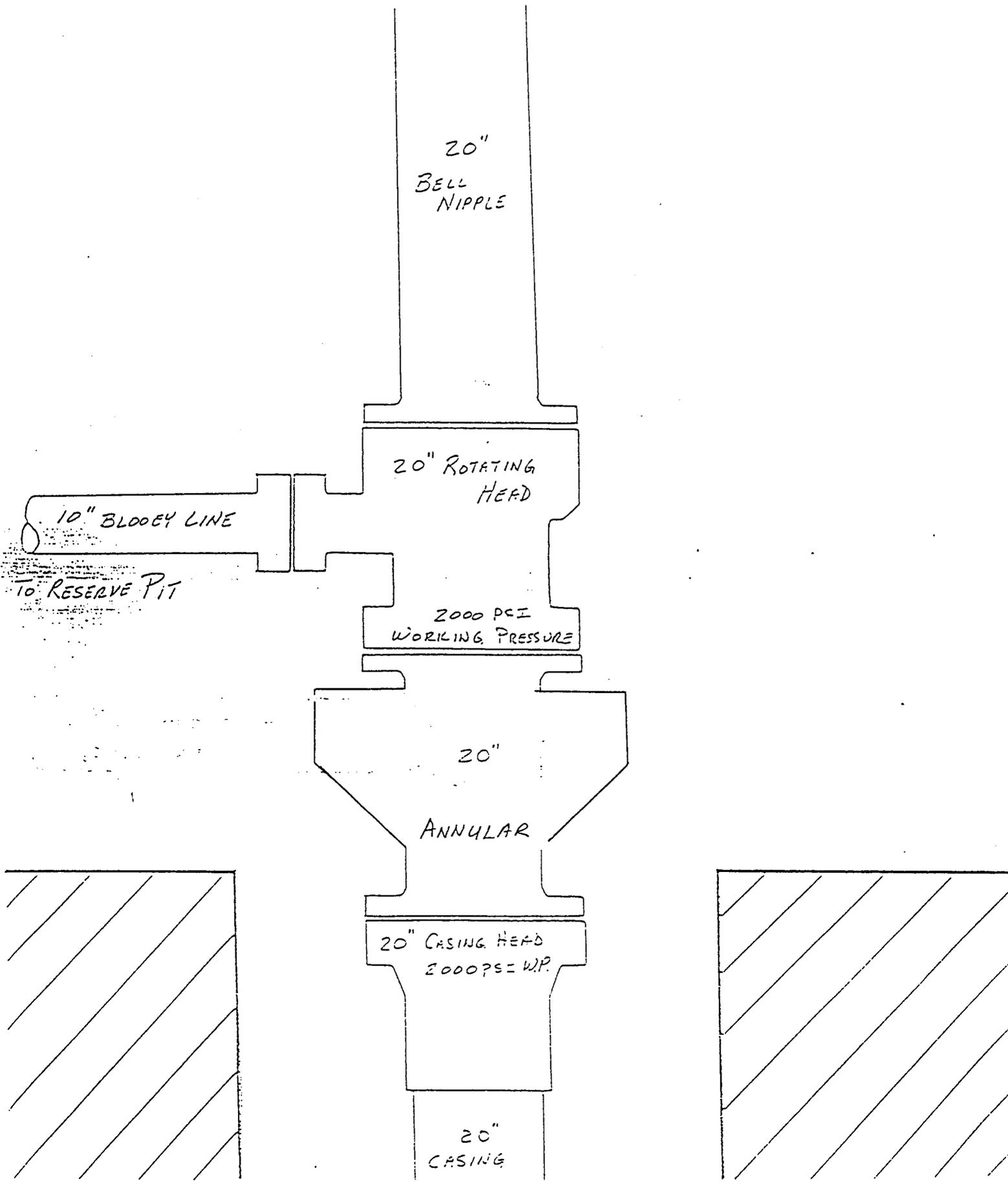
Venting/flaring of gas during initial well evaluation tests will not exceed a period of thirty days or the production of 50 MMcf of gas, whichever occurs first. An application will be filed with the District Engineer and approval received, for any venting or flaring beyond the initial 30 day authorized test period.

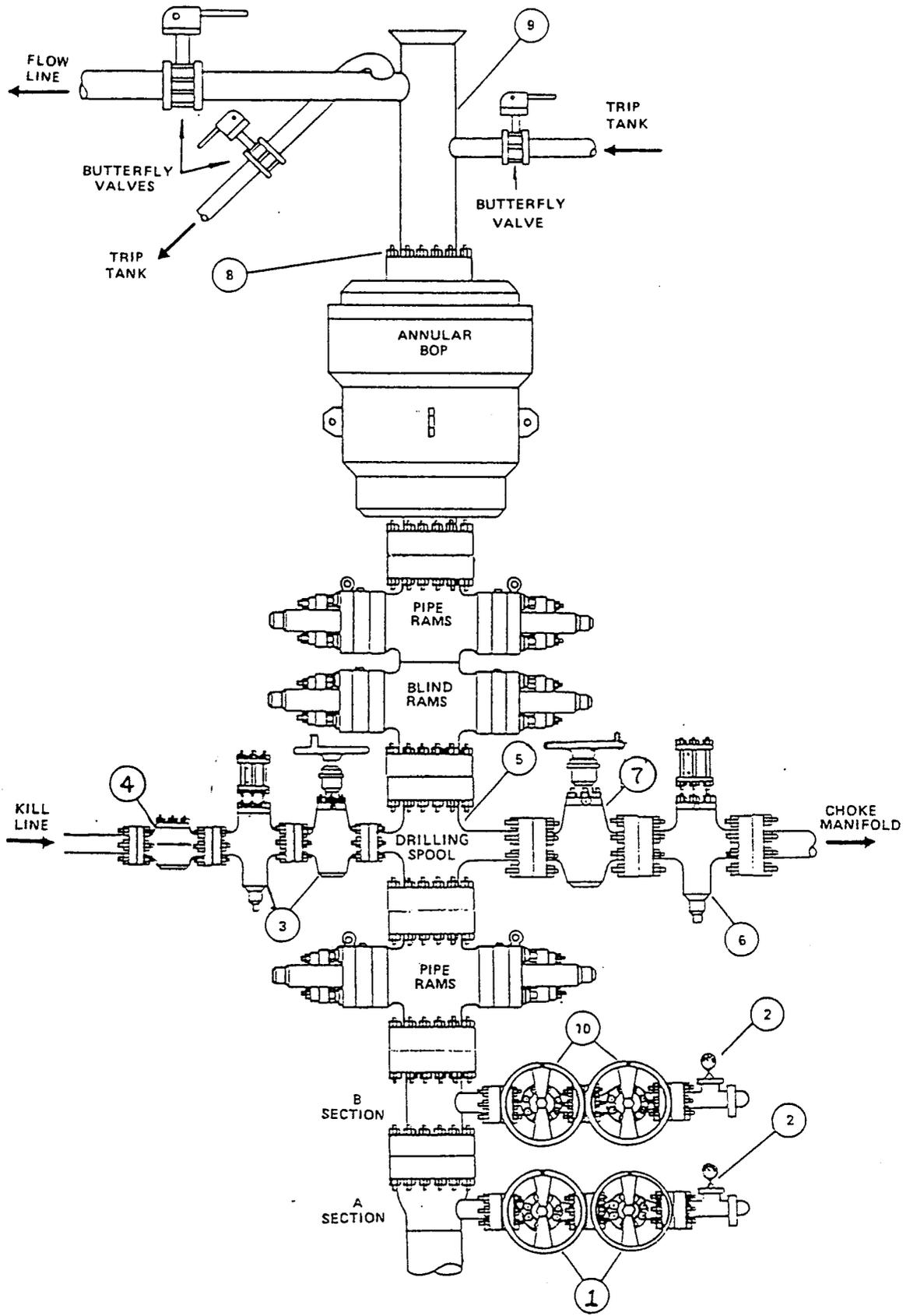
Well abandonment operations will commence only after prior approval has been received from the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the AO. A "Subsequent Report of Abandonment" will be filed with the AO within 30 days following completion of the well abandonment operations.

There will be no deviation from the proposed drilling and/or workover program without prior approval of the AO. Safe drilling and operating practices will be observed.

This well, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.3-2.

EXHIBIT C-1





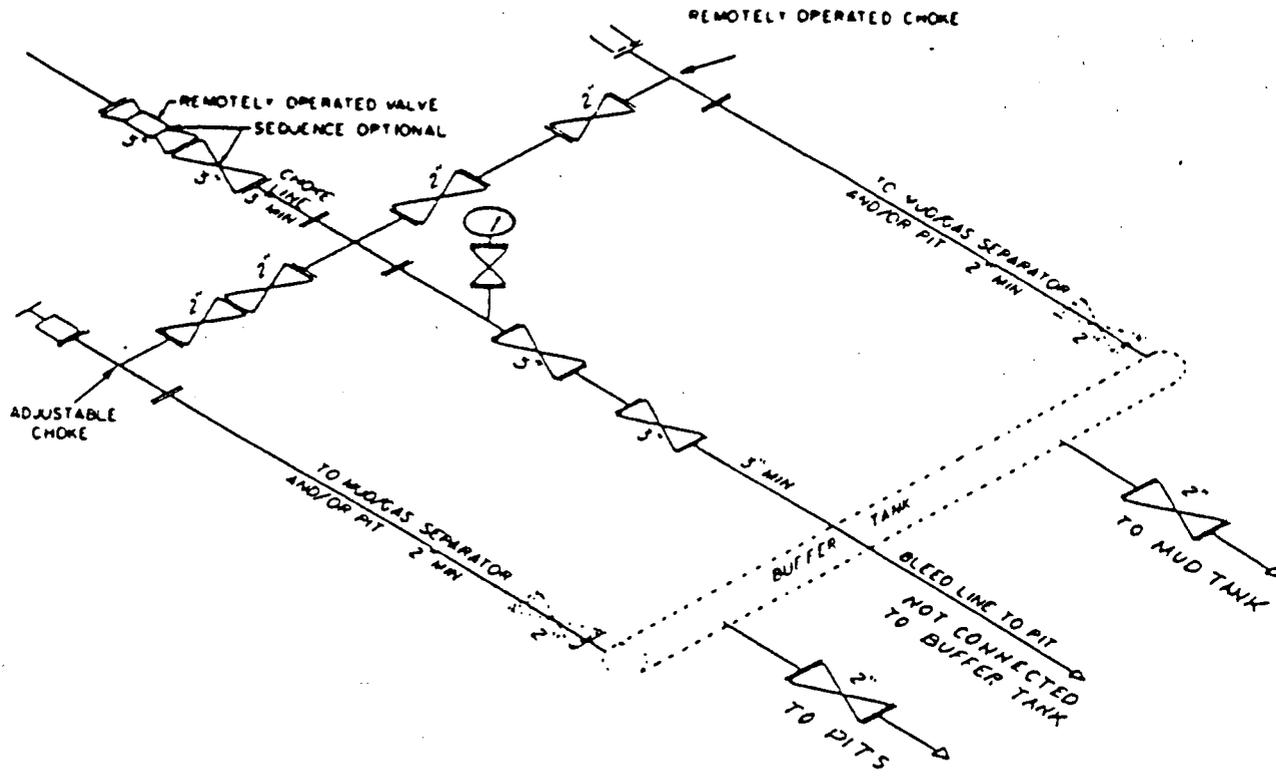
COMPONENT SPECIFICATIONS

1. Screwed or flanged plug or gate valves — 2" minimum nominal dia. — same working pressure as "A" section.
2. Tee with tapped bullplug, needle valve, and pressure gauge.
3. Flanged plug or gate valve — 2" minimum nominal dia. — same working pressure as BOP stack. Second valve up stream may be hydraulically controlled.
4. Flanged flapper type check valve — 2" minimum nominal dia. — same working pressure as BOP stack.
5. Drilling spool of sufficient height to allow stripping with 2 flanged side outlets — 3" choke and 2" kill line minimum nominal dia. (See Table II-4 and Note D.)
6. Flanged hydraulically controlled gate valve — 3" minimum nominal dia. — same working pressure as BOP stack. (See Note D.)
7. Flanged plug or gate valve — 3" minimum nominal dia. — same working pressure as BOP stack.
8. Top of annular preventer must be equipped with an API flange ring gasket. All flange studs must be in place or holes filled in with screw type plugs.
9. The I.D. of the bell nipple must not be less than the minimum I.D. of the BOP stack.
10. Flanged plug or gate valve — 2" minimum nominal dia. — same working pressure as "B" section.

**NOTE:**

The choke line between the drilling spool and choke manifold should not contain any bend or turn in the pipe body. Any bend or turn required should be made with a running tee with a blind flange or welded bullplug. All connections should be flanged or welded. All fabrications requiring welding must be done by a certified welder. Welds should be stress relieved when required.

Plug valves should be equivalent to the Howco Lo-Torc and gate valves equivalent to the Cameron Type 'F'.



**5M CHOKE MANIFOLD EQUIPMENT — CONFIGURATION MAY VARY**

Although not required for any of the choke manifold systems, buffer tanks are sometimes installed downstream of the choke assemblies for the purpose of manifolding the bleed lines together. When buffer tanks are employed, valves shall be installed upstream to isolate a failure or malfunction without interrupting flow control. Though not shown on 2M, 3M, 10M, or 15M drawings, it would also be applicable to those situations.

[FR Doc. 88-28738 Filed 11-17-88; 8:45 am]  
 BILLING CODE 4310-04-C

**CONFIDENTIAL**

CONDITIONS OF APPROVAL  
FOR THE SURFACE USE PROGRAM OF THE  
APPLICATION FOR PERMIT TO DRILL

COMPANY : Columbia Gas Development Corporation  
WELL NAME & NUMBER: Kane Springs Federal #19-1A  
LEASE NO.: UTU-53626  
LOCATION: SW/4 SE/4 Sec.19,T26S,R20E  
SURFACE OWNERSHIP: Bureau of Land Management

ONSITE DATE: 4/3/91

THIRTEEN POINT SURFACE USE PROGRAM

MULTIPOINT REQUIREMENTS TO ACCOMPANY APD

1. EXISTING ROADS

A. Existing road and location in relation to location submitted on Exhibit "A".

B. From Moab, Utah:

Travel North on 191 for approx. 9 miles. At the Dead Horse Point & Canyonlands Park sign turn left onto 313 and travel approx. 16.6 miles, then turn right off 313 onto a two track jeep trail for .6 of a mile, then turn off onto the proposed access road in a westerly direction for approx. .3 of a mile onto the east end of the location.

C. Description of roads in area: All weather asphalt & two trail jeep roads.

2. PLANNED ACCESS ROADS

A. Length: Approx. .3 of mile as staked.

B. Width: Eighteen (18) ft. running surface.

C. Maximum Grades: N/A

D. Turnouts: Do not anticipate any turnouts.

E. Drainage Design: There will be minimum disturbance during drilling phase. If the well is a producer upgrading will be done as required.

F. Location and size of culverts and/or bridges, and brief description of any major cuts and fills: None

G. Surface Material Source: Native materials

H. Necessary gates, cattleguards, or fence cuts and/or modification to existing facilities: None

All travel will be confined to existing access road.

I. Notification will be given to the Bureau of Land Management, District Office, with sufficient lead time, prior to the construction of access road, and drill pad.

Access and location under the jurisdiction of the Bureau of Land Management.

J. Columbia Gas Development Corporation will provide Dirt Contractor with necessary maps, pad and road construction plans.

3. LOCATION OF EXISTING WELL

Kane Springs Federal #27-1  
Sec.27 - T25S - R19E  
Grand County, Moab.

4. LOCATION OF EXISTING AND PROPOSED FACILITIES

Notification will be given to the Bureau of Land Management, District Office, with sufficient lead time, prior to construction of production facilities.

A. If well is productive, new on-well pad facilities and lines will be submitted as "as built" under the following guidelines:

1. Tank battery and/or location will be surrounded by a dike of sufficient capacity to contain the contents of the largest vessel within the dike plus one day's production.
2. Facilities will be placed in cut as much as possible.
3. A wind-sock will be placed on the Tank battery so it is visible from all parts of the location.
4. All internal combustion engines associated with production facilities will be equipped with noise reducing mufflers.
5. All permanent (on site for six months or longer) structures constructed or installed (including pumping units) will be painted a flat non-reflective, earthtone color to match one of the standard environmental colors as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within six months of installation. Facilities required to comply with O.S.H.A. will be excluded.
6. Fire prevention and suppression requirements for operations on Federal lands will be followed as per Bureau of Land Management guidelines.

7. No permanent above ground pipelines will be installed between the wellhead and treater or between the treater and flare pit.
8. All spills (production water or oil) or pipeline breaks outside the diked area will be reported within the 24 hours to the District office.
9. All facilities will be painted a nonreflective, earth-tone color to match the Standard Environmental Colors, as determined by the Rocky Mountain Five State Inter-agency Committee, within six (6) months of installation.

5. LOCATION AND TYPE OF WATER SUPPLY

The necessary permits will be obtained by the operator from the appropriate State Water Rights Division office for the use of water at the drillsite.

Fresh water & salt water will be trucked by a local trucking company.

6. SOURCE OF CONSTRUCTION MATERIALS

No construction materials will be used other than native materials. Soil from cuts will be used in fills. No outside materials will be brought in.

7. METHODS FOR HANDLING WASTE DISPOSAL

- A. Methods and location of proposed safe containment and disposal of each type of waste material:
  1. Cuttings will be deposited in the reserve pit.
  2. Drilling fluids will be deposited in the reserve pit.
  3. Produced Water: While testing the well, all produced water will be contained in a storage tank. If well is a producer, a saltwater storage tank will be installed with tank battery.
  4. Sewage will be disposed of according to county and state requirements in a portable chemical toilet or in a hole at least 15 deep excavated in the cut portion of the well pad.
  5. Portable dumpsters will be used for all trash. All trash will be hauled offsite.

- B. The Reserve pit shall be constructed so as not to leak, break, or allow discharge. The Reserve pit shall not be lined unless post construction inspection indicates a need to do so.
- C. After first production, produced waste water will be confined to a lined pit or storage tank for a period not to exceed ninety (90) days. During the ninety day period, in accordance with NTL-2B, an application for approval of permanent disposal method and location, along with required water analysis, shall be submitted for the authorized officer's approval.

## 8. ANCILLARY FACILITIES

No camp, airstrip or other facility will be built during the drilling of this well.

## 9. WELL SITE LAYOUT

A. See attachment for the Well Site Layout showing the following: Substructure, Engine, Mud pumps, Mud tanks, Diesel tank, Water Tank, Boiler, Light plant, Dog house, Bunk house, Pipe racks, Catwalk, Choke manifold, Accumulator, Derrick stand, Wireline, Mud mixer, Change house, Trailers, Trash bin, parts house, Mud manifold, Mud storage, Desander/Desilter, Winterizing or parts tub.

Also attached is a cross section diagram showing cuts & fills in relation to existing topography.

The location will be constructed large enough to accommodate the drilling rig and associated equipment with allowance made for future completion and production equipment.

No topsoil stripping will be done when soils are moisture saturated to a depth of 3 inches, or frozen below stripping depth.

- B. Fencing requirements - All pits will be fenced according to the following minimum standards:
  - 1. 30-inch net wire shall be used with at least one strand of barbed wire on top of the net wire (barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence).
  - 2. The net wire shall be no more than 2-inches above the ground. The barbed wire shall be 3-inches above the net wire. Total height of fence shall be 42-inches.

3. Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
4. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16 feet.
5. All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

The reserve pit fencing will be on three sides during drilling operations and on the fourth side when the rig moves off the location. Pits will be fenced and maintained until clean-up.

#### 10. PLANS FOR RESTORATION OF SURFACE

##### A. Production location

1. Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, materials, trash, and junk not required for production.
2. Immediately upon well completion, any hydrocarbons on the pit shall be removed in accordance with 43 CFR 3162.7-1
3. The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within ninety (90) days from the date of well completion. Before any dirt work takes place, the reserve pit must be completely dry and all cans, barrels, pipe, etc., will be removed.
4. Seed mixtures to be used in rehabilitation will be provided by the BLM District Office. Seed mixtures will be certified weed free and seeding will be accomplished during the spring or fall.

Seed tags will be submitted to the area manager within 30 days of seeding.

5. Site rehabilitation will be completed within six (6) months, weather permitting. Before any production facilities are constructed, a site reclamation plan will be submitted to the District Office for all areas not required for production

facilities.

B. Dry Hole/Abandoned Location

1. At such time as well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and the BLM will attach the appropriate surface rehabilitation conditions of approval.
2. The location will be rehabilitated within six (6) months, weather permitting, from the date the well is plugged.

11. SURFACE OWNERSHIP

Surface location and access roads are owned by the United States of American under jurisdiction of the Bureau of Land Management.

12. OTHER INFORMATION

The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archeological sites, or for collecting artifacts. If historic or archeological materials are uncovered during construction, the operator will immediately stop work that further disturb such materials, and contact the authorized officer. Columbia Gas Development Corporation will comply with the requirements set forth by the BLM Surface Use Stipulations.

- A. Columbia Gas Development Corporation has a One Hundred and Fifty Thousand (150,000) dollar Nationwide Bond - copy attached.
- B. Drilling rigs and/or equipment used during drilling operations on this wellsite will not be stacked or stored on Federal Lands after the conclusion of drilling operations or at any other time without BLM authorization. However, if BLM authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial facilities.
- C. The closest town is Moab, located approx. 26 miles to the SE of the proposed location.
- D. There will be no deviation from the proposed drilling program without prior approval from the District.

- E. Sundry Notice & Report on wells (Form 3160-5) will be filed for approval of all changes of plans and other operations in accordance with 43 CFR 3164.
- F. Dirt Contractor will be provided with an approved copy of the Surface Use plan.

13. LESSEE'S OR OPERATOR REPRESENTATIVE AND CERTIFICATION

Columbia Gas Development Corporation  
P. O. Box 1350  
Houston, Texas 77251-1350  
713/871-3400

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved plan of operations, and any applicable Notice to Lessees. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to insure compliance.

A complete study of the approved APD and ROW grant, if applicable, shall be on location during construction activities.

The operator or his/her contractor shall contact the BLM Office @ 801/259-8193 forty-eight (48) hours prior to construction activities.

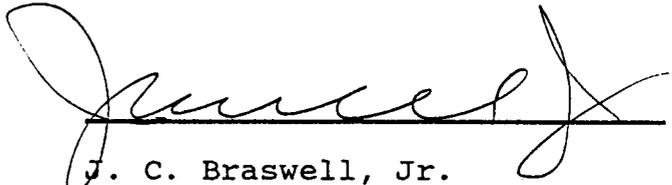
The BLM shall be notified upon site completion prior to moving on the drilling rig.

Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and , that the work associated with the operations proposed here will be performed by Columbia Gas Development Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

9/9/91

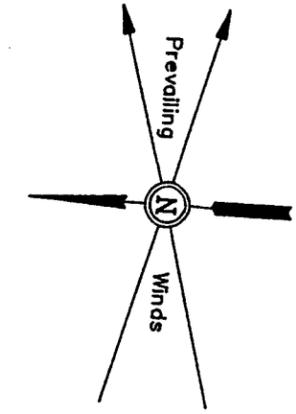
DATE



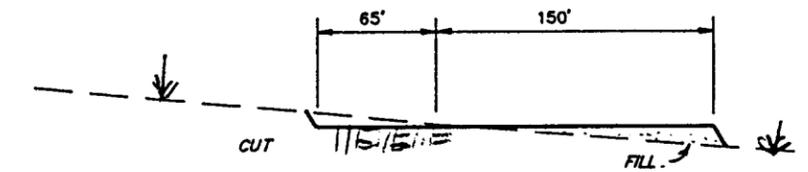
J. C. Braswell, Jr.  
Director of Drilling

COLUMBIA GAS DEVELOPMENT CORP.

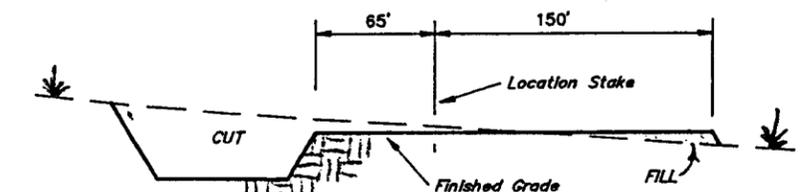
LOCATION LAYOUT FOR  
KANE SPRING FED. #19-1A  
SECTION 19, T26S, R20E, S.L.B.&M.



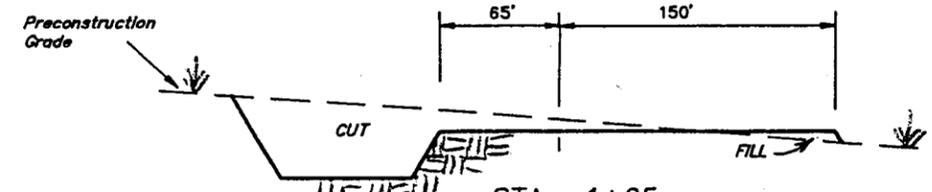
SCALE: 1" = 50'  
DATE: 3-25-91  
Drawn By: J.R.S.  
REVISED: 3-26-91 R.E.H.



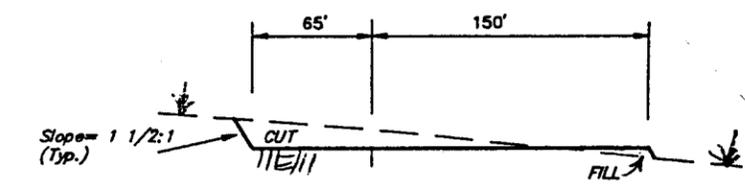
STA. 4+50



STA. 2+50



STA. 1+05



STA. 0+00

X-Section Scale  
1" = 40'  
1" = 100'

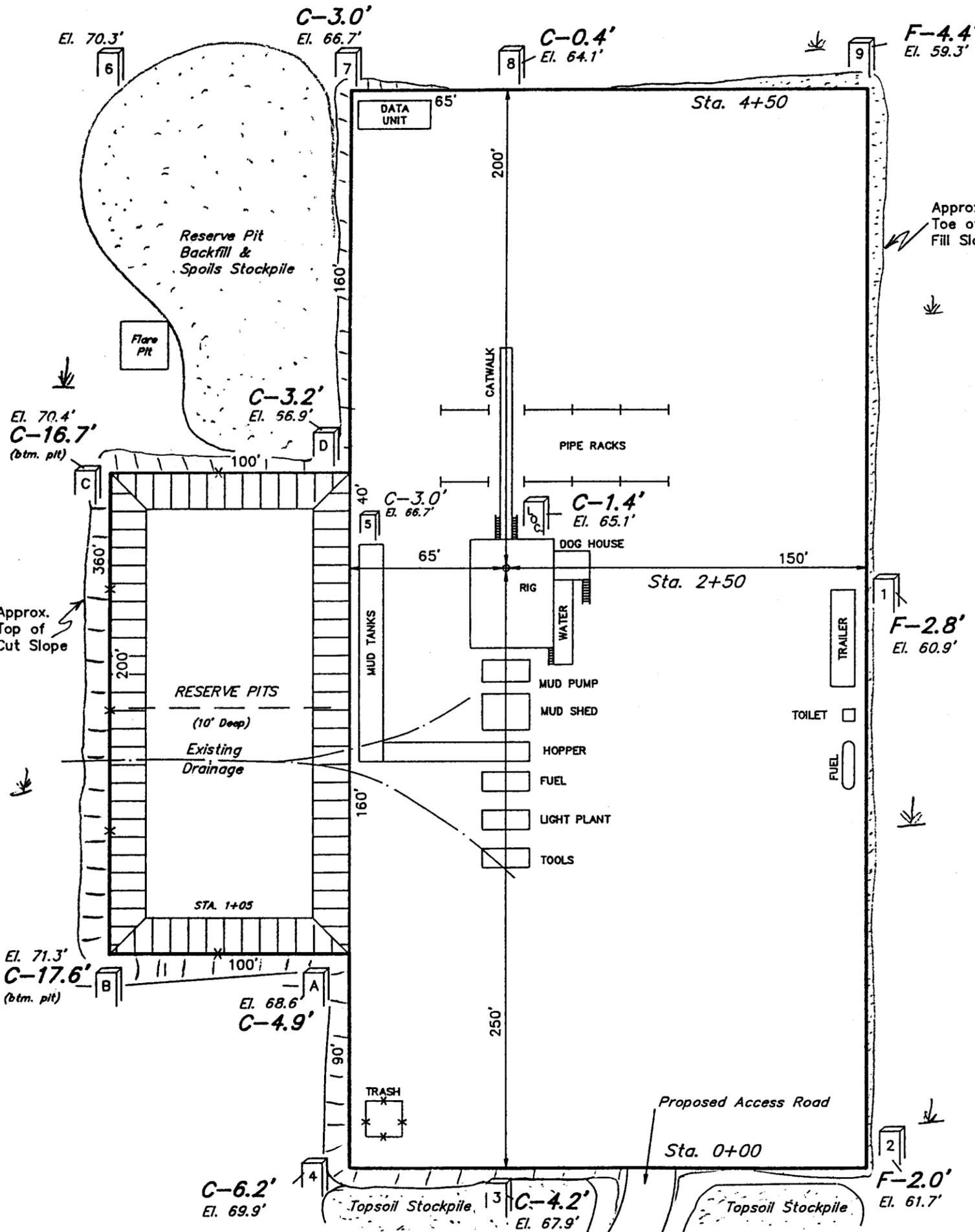
TYP. LOCATION LAYOUT  
TYP. CROSS SECTIONS

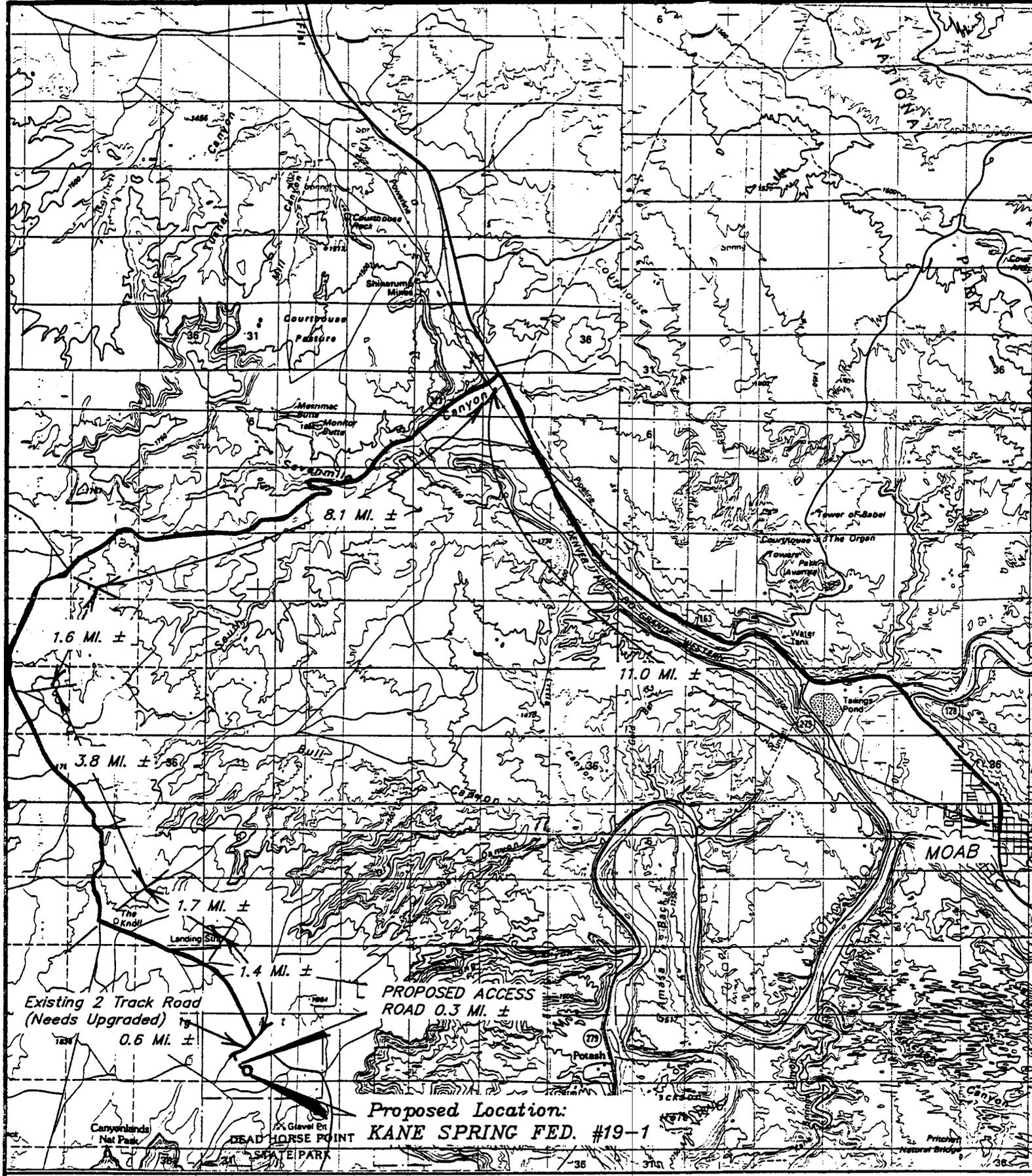
APPROXIMATE YARDAGES

CUT			
(6") Topsoil Stripping	=	2,200 Cu. Yds.	
Pit Volume (Below Grade)	=	5,820 Cu. Yds.	
Remaining Location	=	8,670 Cu. Yds.	
<b>TOTAL CUT</b>	<b>=</b>	<b>16,990 CU.YDS.</b>	
<b>FILL</b>	<b>=</b>	<b>3,480 CU.YDS.</b>	
			<b>EXCESS MATERIAL AFTER 5% COMPACTION = 11,200 Cu. Yds.</b>
			<b>Topsoil &amp; Pit Backfill (1/2 Pit Vol.) = 5,110 Cu. Yds.</b>
			<b>EXCESS UNBALANCE (After Rehabilitation) = 6,090 Cu. Yds.</b>

NOTES:

Elev. Ungraded Ground At Loc. Stake = 5965.1'  
FINISHED GRADE ELEV. AT LOC. STAKE = 5963.7'





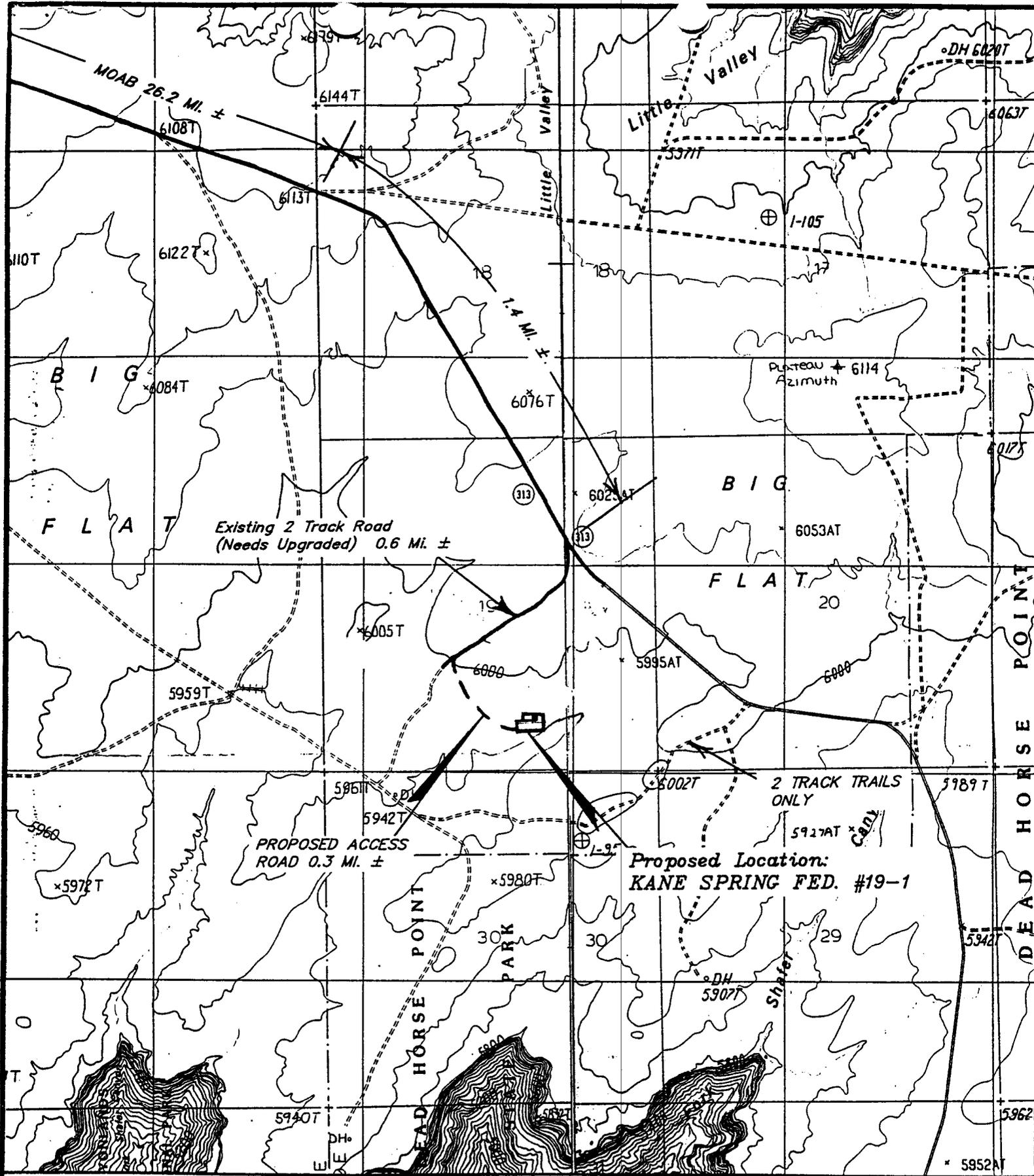
TOPOGRAPHIC  
MAP "A"

DATE 3-25-91



**COLUMBIA GAS DEVELOPMENT CORP.**

KANE SPRING FED. #19-1A  
SECTION 19, T26S, R20E, S.L.B.&M.



TOPOGRAPHIC  
 MAP "B"  
 SCALE: 1" = 2000'  
 DATE 3-25-91



**COLUMBIA GAS DEVELOPMENT CORP.**

KANE SPRING FED. #19-1A  
 SECTION 19, T26S, R20E, S.L.B.&M.

RIG SKID

CONFIDENTIAL

OPERATOR Columbia Gas Development 1-5035 DATE 7-22-91

WELL NAME Kane Springs Federal 19-1A

SEC SWNE 19 T 01S R 00E COUNTY Grand

43-019-31304  
API NUMBER

Federal (1)  
TYPE OF LEASE

CHECK OFF:

PLAT.

BOND

NEAREST WELL

LEASE

FIELD SLBM

POTASH OR OIL SHALE

PROCESSING COMMENTS:

One well in 19 from Rig Skid 19-1 SWSE. 800' FSL - 1930' FEL. Water Permit 01-1081 (T05376)

ROCC 7-22-91

Rig Skid from Federal 19-1

APPROVAL LETTER:

SPACING:

R615-2-3

Kane Springs  
UNIT

R615-3-2

N/A  
CAUSE NO. & DATE

R615-3-3

STIPULATIONS:

1. Potash area

CONFIDENTIAL

PERIOD EXPIRED

ON 12-13-92



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Norman H. Bangertter  
Governor

Dee C. Hansen  
Executive Director

Dianne R. Nielson, Ph.D.  
Division Director

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340

July 22, 1991

Columbia Gas Development Corporation  
P. O. Box 1350  
Houston, Texas 77251-1350

Gentlemen:

Re: Kane Springs Federal 19-1A Well  
Surface location- 800' FSL and 1918' FEL, SW SE  
Bottom hole location - 2000' FNL and 1350' FEL, SW NE  
Sec. 19, T. 26S, R. 20 E., Grand County, Utah

Approval to drill the referenced well is hereby granted in accordance with Utah Code Ann. Section 40-6-18, et seq. (1953, as amended), and Utah Admin. R.615-2-3, subject to the following stipulations:

1. Special attention is directed to compliance with Utah Admin. R.615-3-3I, which prescribes drilling procedures for designated potash areas.

In addition, the following actions are necessary to fully comply with this approval:

1. Spudding notification within 24 hours after drilling operations commence.
2. Submittal of Entity Action Form 6, within five working days following spudding and whenever a change in operations or interests necessitates an entity status change.
3. Submittal of the Report of Water Encountered During Drilling, Form 7.
4. Prompt notification in the event it is necessary to plug and abandon the well. Notify R. J. Firth, Associate Director, (Office) (801) 538-5340, (Home) 571-6068, or J. L. Thompson, Lead Inspector, (Home) 298-9318.
5. Compliance with the requirements of Utah Admin. R.615-3-20, Gas Flaring or Venting.

Page 2  
Columbia Gas Development Corporation  
Kane Springs Federal 19-1A  
July 22, 1991

6. Prior to commencement of the proposed drilling operations, plans for facilities for disposal of sanitary wastes at the drill site shall be submitted to the local health department. These drilling operations and any subsequent well operations must be conducted in accordance with applicable state and local health department regulations. A list of local health departments and copies of applicable regulations are available from the Department of Environmental Quality, Division of Drinking Water/Sanitation, telephone (801) 538-6159.
7. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-019-31324.

Sincerely,



R. J. Firth  
Associate Director, Oil & Gas

tas  
Enclosures  
cc: Bureau of Land Management  
J. L. Thompson  
we14/1-26

UTU-53626

N/A

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  
Columbia Gas Development Corporation

3. ADDRESS OF OPERATOR  
P. O. Box 1350 Hou., TX. 77251-1350

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.  
See also space 17 below.)  
At surface  
800' FSL & 1918' FEL of Sec.19-T26S-R20E

14. PERMIT NO. 31324  
43-019-~~31319~~

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
Ground 5965

7. UNIT AGREEMENT NAME  
Kane Springs Fed. Unit

8. FARM OR LEASE NAME  
Kane Springs Federal

9. WELL NO.  
#19-1A

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Sec.19-26S-R20E

12. COUNTY OR PARISH  
Grand

13. STATE  
Utah

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)

RELL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON\*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other) Revision to BOPE

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

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

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.)

Notification of BOPE revision was given to Fred Oneyear on 7/18/91

The BOP equipment used will be 13-5/8" 10M# which is an upgrade from the previous equipment of 13-5/8" 5M# shown in the APD submitted.

Consequently the cross will not be used due to lack of sufficient height. Kill line & choke line will be nipped up to side outlets below blind rams and above lower pipe rams.

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS AND MINING  
DATE: 8-7-91  
BY: JAN Matthews

RECEIVED

AUG 05 1991

DIVISION OF OIL GAS & MINING

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

SIGNED Aline A. Reese  
Aline A. Reese

TITLE Regulatory Clerk

DATE 7/31/91

(This space for Federal or State office use)

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

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

\*See Instructions on Reverse Side

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.)

UTU-53626

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

N/A

7. UNIT AGREEMENT NAME

Kane Springs Fed. Unit

8. FARM OR LEASE NAME

Kane Springs Federal

9. WELL NO.

#19-1A

10. FIELD AND POOL, OR WILDCAT

Wildcat

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

Sec.19-T26S-R20E

12. COUNTY OR PARISH 13. STATE

Grand

Utah

1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR

Columbia Gas Development Corp. 713/871-3400

3. ADDRESS OF OPERATOR

P. O. Box 1350 Hou., TX. 77251-1350

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

At surface

800' FSL & 1918' FEL of Sec.19-26S-R20E

AUG 26 1991

DIVISION OF

OIL GAS & MINING

14. PERMIT NO.

43-019-31324

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

Ground 5965

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF

Vertical box for Test Water Shut-off

RELL OR ALTER CASING

Vertical box for Rell or Alter Casing

WATER SHUT-OFF

Vertical box for Water Shut-off

REPAIRING WELL

Vertical box for Repairing Well

FRACTURE TREAT

MULTIPLE COMPLETE

FRACTURE TREATMENT

ALTERING CASING

SHOOT OR ACIDIZE

ABANDON\*

SHOOTING OR ACIDIZING

ABANDONMENT\*

REPAIR WELL

CHANGE PLANE

(Other) Annular Disposal Procedure

(Other)

(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.)

CONFIDENTIAL

See attached for procedure & schematic.

\* APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING DATE: 8-7-91 BY: [Signature]

\* SEE ATTACHED CONDITIONS

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

SIGNED

[Signature] Aline A. Reese

TITLE

Regulatory Clerk

DATE

8/23/91

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

Federal Approval of this Action is Necessary

\*See Instructions on Reverse Side

**COLUMBIA GAS DEVELOPMENT CORPORATION  
APPROVAL FOR ANNULAR INJECTION OF DRILLING FLUIDS**

**KANE SPRINGS FEDERAL #19-1A ST  
SEC. 19, T26S, R20E, GRAND CO., UTAH  
43-019-31324**

The proposal is to allow drilling fluid (primarily salt water) to free fall down the annulus between the 20" and 13 3/8" casing strings. The hole was drilled with air and mist to a depth of 4521'. This indicates that no prolific water aquifers or fracture systems were encountered. Some salt water was encountered at 2700' (22,000 ppm chlorides). The fact that several lost circulation zones were encountered between 2700' and 4521', and that excess volumes of cement were pumped while trying to cement the 13 3/8" casing which resulted in only 279' of cement above the casing shoe (to 4242'), indicates that any fluid falling down the annulus would most likely exit the well bore between 2700' and 4242'.

Study indicates that ground-water flow in the area is controlled primarily by extensional faulting. These faults appear to be limited to the crest area of the Cane Creek anticline near the potash mine. Wells and mine shafts in areas void of extensional faulting encountered little ground water. While those located near faults (Texasgulf Cane Creek No. 7 Well) encountered prolific water zones. These zones are charged with hydrogen sulfide brines.

Due to the lack of faulting near the #19-1A well it is likely that injection of a small volume of fluid under little or no surface pressure would not be transmitted very far from the well bore. It is also expected that due to the inability of the formation near 4242' depth to hold a hydrostatic head greater than 230 psi, that fluid entry would be at or near this depth. Since the water which now exists in this interval is saline, the addition of a small volume of drilling fluid (primarily salt water) at low pressure would have no adverse affects on the ground water system or other resources in the area.

**CONDITIONS OF APPROVAL:**

1. Surface injection pressure shall not exceed 100 psig during injection operations.
2. A temperature or tracer log shall be run to verify that the interval at which the fluid leaves the well bore is not above 2700'. If a temperature log is used the injection fluid shall be cooled or heated to the point which allows adequate temperature differential between it and the formation to show departure. During the disposal operations if logging shows the fluid is not going below 2700' for any reason, injection operations shall cease immediately and an alternative disposal method used.
3. This is a one time approval for disposal of not more than 2000 barrels of fluid.

COLUMBIA GAS DEVELOPMENT CORPORATION

KANE SPRINGS FEDERAL #19-1A  
SEC.19-T26S-R20E  
GRAND COUNTY, UTAH

API NO.: 43-019-31324

**CONFIDENTIAL**

ANNULAR DISPOSAL

1) PROCEDURE:

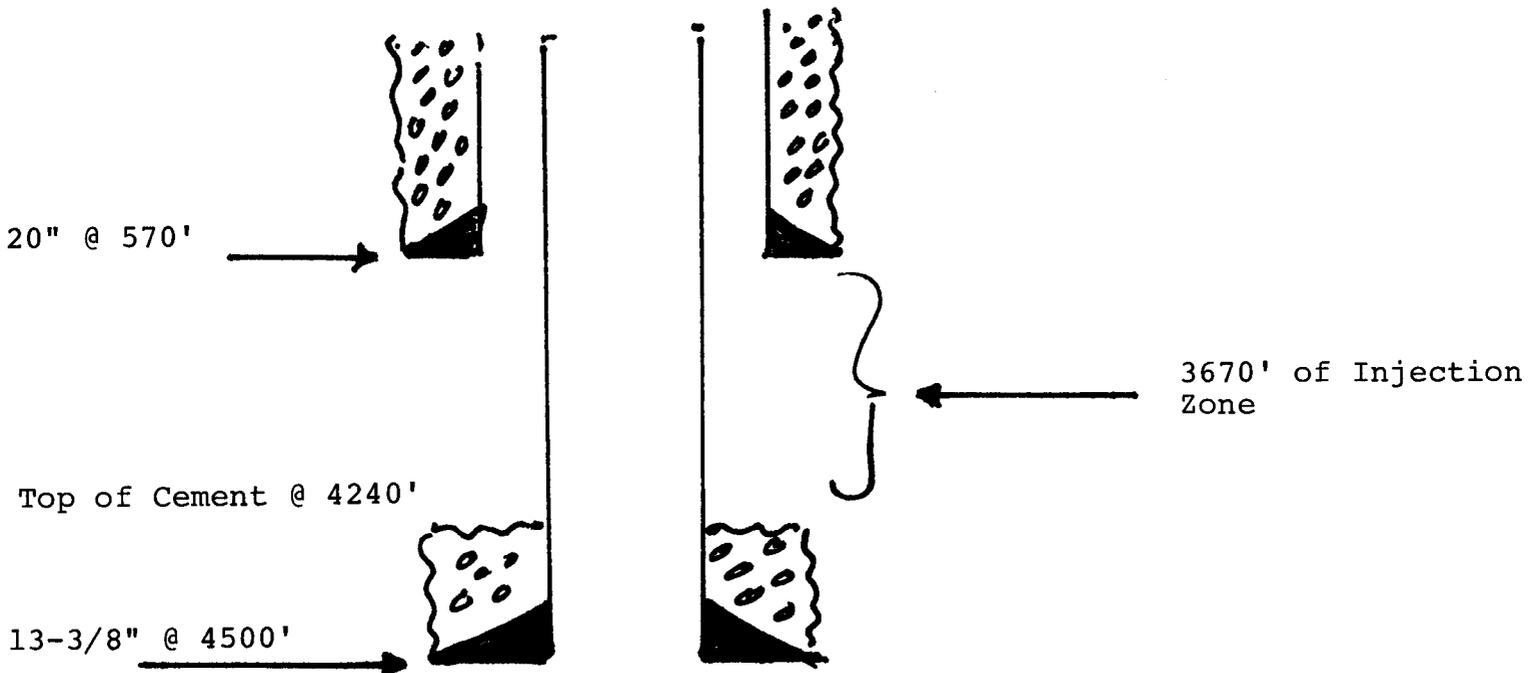
- A. Pump oil base mud off of pit and reclaim for storage and reuse.
- B. Skim free oil off top of reserve pit fluid.
- C. Pump remaining fluid down 13-3/8"X20" annulus. Fluid type to be pumped will be rainwater, saltwater and saltwater with residual oil & grease.

2) Formation exposed for receiving injected fluids are:

- A. Lower Chinle
- B. Moenkopi
- C. Cutler
- D. Rico
- E. Hermosa

Anticipated receiving formation is the Hermosa and Rico.

3) Wellbore Sketch:



COLUMBIA GAS DEVELOPMENT CORPORATION

KANE SPRINGS FEDERAL #19-1A  
SEC.19-T26S-R20E  
GRAND COUNTY, UTAH

DAILY ACTIVIITY REPORT

**CONFIDENTIAL**

8/19/91 FOH, RU & RUN 9-5/8" CSG TO 7824', CMT W/1430 SX  
CL-G, MW 15.0

8/20/91 WOC, NU BOP'S  
MW 15.0

8/21/91 TEST BOP'S, TIH W/BIT  
MW 15.1

8/22/91 FIH, CIRC & INCR MW TO 16.2, TEST CSG TO 5000#, DRL  
CMT, CIRC, TEST SHOE TO 17.0 EMW W/370#.

8/23/91 TF/ANGLE BUILDING ASSY., SLIDE F:7826'-7853'  
MW 16.2

8/24/91 SLIDE TO 7905', TF/BHA.  
LS @ 7854' 79 DEG. N-16-E  
MW

8/25/91 TIH, W&R F:7824'-7905', SLIDE TO 7921', DRL TO  
7951', CBU, POH, TIH W/CORE BARREL.  
LS @ 7897' 85.3 DEG. N-18.1-E  
MW 16.5

**RECEIVED**

**AUG 29 1991**

**DIVISION OF  
OIL GAS & MINING**

COLUMBIA GAS DEVELOPMENT CORPORATION

KANE SPRINGS FEDERAL #19-1A  
SEC.19-T26S-R20E  
GRAND COUNTY, UTAH

DAILY ACTIVIITY REPORT

CONFIDENTIAL

8/26/91      FIH, CORING, TFBHA & MOTOR, REAM F:7929'-7982',  
DRL TO 7988', MW 16.4  
LS @ 7912' 87 DEG.

8/27/81      DRL TO 8012', CBU, TIH & CUT CORE #2, MW 16.4  
LS @ 7942' 87.10 DEG.

8/28/91      CBU, TF/MOTOR, REAM F:7928'-8038', DRL TO 8073',  
CBU, POH, MW 16.4  
LS @ 8004' 85.3 DEG.

8/29/91      FOH, PU & TIH W/FISHING TOOLS, CBU, WASH TO FISH  
@ 8070' & LATCH ONTO SAME, POH - RECOVERED FISH,  
L/D TOOLS.

8/30/91      TIH, DRL TO 8136', SLIDE TO 8153', MW 16.4  
LS @ 8067' 86.7 DEG.

8/31/91      DRL & SLIDE TO 8279', MW 16.4  
LS @ 8193' 87.5 DEG

9/1/91        SLIDE TO 8291', ST TO CASING SHOE, DRL & SLIDE TO  
8398', CBU, POH, MW 16.2  
LS @ 8320' 90.0 DEG.

9/2/91        TIH, DRL & SLIDE TO 8568', MW 16.1  
LS @ 8509' 90.4 DEG.

RECEIVED

SEP 06 1991

DIVISION OF  
OIL GAS & MINING

COLUMBIA GAS DEVELOPMENT CORPORATION

KANE SPRINGS FEDERAL #19-1A  
SEC.19-T26S-R20E  
GRAND COUNTY, UTAH

DAILY ACTIVIITY REPORT

9/3/91 SLIDING & DRLNG TO 8653'.  
LS @ 8572' 88.9 DEG. MW 16.0

9/4/91 DRL TO 8658', TF/BHA, REAM F:8575'-8658', SLIDE TO  
8667'.  
LS @ 8604' 89.5 DEG. MW 16.0

9/5/91 SLIDE TO 8675', CBU, SLIDING & DRLNG TO 8747'.  
LS @ 8661' 88.6 DEG.

9/6/91 DRL & SLIDE TO 8802', TF/BIT.  
LS @ 8724' 84.7 DEG.

9/7/91 DRL & SLIDE TO 8846', POH, LEFT BIT & MOTOR BIT IN  
HOLE, L/D MOTOR & BHA. TIH W/PONY COLLAR & RR BIT,  
CONDITION HOLE FOR PLUG BACK.  
LS @ 8787' 87.3 DEG. MW 16.0

9/8/91 CMT'D W/280 SX CL-B MIXED @ 16.1 PPG F:7500'-8354'.  
POH 10 STDS, WOC.

PROCEDURE WITNESSED BY HOMER SANCHEZ (SP) W/BLM.

COLUMBIA GAS DEVELOPMENT CORPORATION

KANE SPRINGS FEDERAL #19-1A  
SEC.19-T26S-R20E  
GRAND COUNTY, UTAH

DAILY ACTIVITY REPORT

CONFIDENTIAL

9/9/91           FIH TO 6400', WOC, TAG HARD CMT @ 7490', DRL  
CMT @ 7700', MW 16.3

9/10/91           DRL CMT TO 7832', CBU, TFBHA, DRL CMT TO 7878',  
REAM F:7878'-8045', MW 15.8

9/11/91           DRL CMT TO 8088, CBU, POH, TIH W/MM TO 8039',  
REAM F:8039'-8055', MW 15.8

9/12/91           UNABLE TO KICK OFF, PLUG WASHING OUT, TF/BHA &  
ADJUST LOWER BEND, ORIENT TOOL & DRILL, MW 15.5

9/13/91           STILL UNABLE TO KICK OFF, POH, L/D MM, TIH & CUT  
DL, CMT W/100 SX CL-G @ 17.5 PPG, POH 5 STDS, CIRC,  
WOC, POH.

9/14/91           WOC, DRL CMT STRINGERS 7606'-7686', TIH TO 8139',  
CCM.

9/15/91           CIRC, M&P 250 SX CL-G @ 17.5 PPG, POH 15 STDS, CIRC,  
WOC, TIH TO 7360' WASH STRINGERS TO 7490'.

COLUMBIA GAS DEVELOPMENT CORPORATION

KANE SPRINGS FEDERAL #19-1A ST

SUPPLEMENTAL INFORMATION

CONFIDENTIAL

<u>DATE</u>	<u>DEPTH</u>	<u>DEGREE</u>	<u>DIRECTION</u>
8-12-91	7131	48.8	N-15.0-E
8-13-91	7249	53.4	N-14.6-E
8-14-91	7417	69.6	N-15.0-E
8-15-91	7503	74.9	N-14.6-E
8-16-91	7571	73.6	N-14.6-E
8-17-91	7753	74.1	N-14.6-E
8-24-91	7854	79.0	N-16.0-E
8-25-91	7880	82.9	N-17.4-E
8-26-91	7912	87.0	N-18.5-E
8-27-91	7942	87.1	N-17.8-E
8-28-91	8004	85.3	N-16.4-E
8-30-91	8067	86.7	N-17.1-E
8-31-91	8193	87.5	N-17.4-E
9-1-91	8320	90.0	N-15.7-E
9-2-91	8509	90.4	N-14.3-E
9-3-91	8572	88.9	N-13.9-E
9-4-91	8604	89.5	N-13.2-E
9-5-91	8661	88.6	N-13.2-E
9-6-91	8724	84.7	N-12.9-E
9-7-91	8787	87.3	N-12.9-E

SUNDRY NOTICE 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 <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A	
2. NAME OF OPERATOR Columbia Gas Development Corporation 713/871-3400		7. UNIT AGREEMENT NAME Kane Springs Federal Unit	
3. ADDRESS OF OPERATOR P. O. Box 1350 Hou., TX. 77251-1350		8. FARM OR LEASE NAME Kane Springs Federal	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface  800' FSL & 1918' FEL of Sec.19-T26S-R20E		9. WELL NO. #19-1A	
14. PERMIT NO. 43-019-31324		10. FIELD AND POOL, OR WILDCAT Wildcat	
16. ELEVATIONS (Show whether DT, RT, GA, etc.) Ground 5965'		11. SEC., T., R., M., OR B.L. AND SURVEY OR AREA Sec.19-T26S-R20E	
		12. COUNTY OR PARISH Grand	13. STATE Utah

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"/>	FILL 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>Plug-Back to Sidetrack procedure</u>	
(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.)

Procedure to plug-back & sidetrack:

1. M&P cnt plug f:7500'-8354' w/280 sx Cl-B @ 16.1 ppg.
2. KOP @ 8035 MD
3. Revised proposed TD @: 10,315 MD/7474'TVD.

**RECEIVED**  
 SEP 12 1991  
 DIVISION OF  
 OIL GAS & MINING

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

SIGNED Aline A. Reese TITLE Regulatory Clerk DATE 9/9/91  
 (This space for Federal or State office use)

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

\*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.

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

**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.)

<p>1. <input checked="" type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER</p> <p>2. NAME OF OPERATOR Columbia Gas Development Corporation 713/871-3400</p> <p>3. ADDRESS OF OPERATOR P. O. Box 1350 Hou., TX. 77251-1350</p> <p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface  800' FSL &amp; 1918' FEL of Sec.19-T26S-R20E</p> <p>14. PERMIT NO. 43-019-31324 01</p>		<p>5. LEASE DESIGNATION AND SERIAL NO. UTU-53626</p> <p>6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A</p> <p>7. UNIT AGREEMENT NAME Kane Springs Federal Unit</p> <p>8. FARM OR LEASE NAME Kane Springs Federal</p> <p>9. WELL NO. #19-1A ST</p> <p>10. FIELD AND POOL, OR WILDCAT Wildcat</p> <p>11. SEC., T., R., M., OR BLE. AND SUBVY OR ABBA Sec.19-T26S-R20E</p> <p>12. COUNTY OR PARISH 13. STATE Grand Utah</p>
<p>15. ELEVATIONS (Show whether OF, ST, OR, etc.) Ground 5965'</p>		

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"/>	FULL 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>Annular disposal procedure</u>	
(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.)\*

\* Attached please find the additional information requested for the approval of the annular disposal of the drilling fluids at the above captioned location.

**RECEIVED**  
SEP 20 1991  
DIVISION OF  
OIL GAS & MINING

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

SIGNED Aline A. Reese - TITLE Regulatory Clerk DATE 9/19/91

(This space for Federal or State office use)

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

CONDITIONS OF APPROVAL, IF ANY:

## ANNULAR INJECTION - ADDITIONAL INFORMATION

### INTERVAL

The surface pipe was run and cemented back to surface from 560'.

The 17-1/2" hole was drilled with air and mist to 4521'. During the drilling of this hole, salt water was encountered at 2700'. The salinity of the water was measured at 22,000 ppm chlorides. Returns were lost several times while drilling with mist below 2700'.

In cementing the 13-3/8", the amount of cement pumped was calculated to fill the annulus from the shoe to 2700' plus 37% excess. The required amount of cement to fill to 2700' was 1263 CFT and the amount actually pumped was 1735 CFT. A cement bond log was not run on the 13-3/8" string of pipe. The sonic log was run up inside the 13-3/8" until free pipe was identified by 57 microseconds. The top of cement was found to be 4242'.

The possible receiving interval is from 4242' to 560'. This interval includes the Chinle, Moenkopi, Cutler, Rico, and Hermosa formations.

The anticipated receiving formation are the Hermosa and the Rico. It is evident by 1) the identified top of cement and 2) the noted lost returns while mist drilling that these formation will not hold much of a hydrostatic head. Based on the top of cement, the maximum hydrostatic head is 230 psi before the formation fails. This low failure pressure may be due to the first classic zone of the Paradox. The noted loses and history of lost returns while mist drilling before the reaching the Paradox, indicates the same magnitude of low failure pressure exists below 2700'.

### INJECTION FLUID

The injection fluid will be a salt water with dispersed cutting and some residual oil. On September 16, 1991, this water test at 46,000 ppm chlorides and weighted 9.4 ppg. This concentration and weight will change from day to day due to rain run-in and evaporation. Free oil will be skimmed off the top prior to injection. The oil mud will be pumped off the bottom for reuse prior to injection.

### ESTIMATED INJECTION PRESSURE

The injection pressure is estimated to be 0 psi, but a maximum of 100 psi. There is evidence the maximum hydrostatic head that lower formations will hold is around 230 psi (injection or formation parting pressure). The hydrostatic head at a depth of 4242' of fresh water is 1830 psi and 2073 psi for the salt water as checked on September 16, 1991.

### ANTICIPATED VOLUME INJECTED

The anticipated volume to be injected is 10,000 CFT or 1780 bbl. This may vary due to rain run-in or evaporation.

## GEOLOGICAL INFORMATION

Below injection zone: The second salt interval of the Paradox salt will be the containment strata below the injection interval. This interval was tested upon drilling out the 13-3/8" shoe to 14.0 ppge. The Paradox salt increases in geopressure with depth. The chance of penetrating this strata is slim.

Injection zone: Based on the information above the anticipated receiving formations are the Hermosa (2582-4242') and the Rico (2100-2582'). Both the Rico and the Hermosa are interbedded cherty limestone, light gray sandstone, siltstone with minor amounts of dark gray shale. Sandstones are lenticular and generally tight (6% porosity) but isolated sands are porous and permeable. The lateral extent of these formation is continuous throughout the Paradox fault and fold fairway. There is some local outcropping of the Rico and upper Hermosa in the canyons of the area. The closest outcrop is the Rico is approximately two miles away to the south. The highest part of the receiving interval that outcrops is the Chinle and outcrops approximately one mile away.

The storage capacity of the Hermosa (459,360,564 bbl) is well in excess of the proposed injection volume (1,780 bbl). The storage volume is based on the closest outcrop distance for the total injection interval, the height from the top of cement to where water was first noted, and a porosity of 6%. Due to the lamination, fractures and volume between 2700' and 560', the storage capacity of the injection zone is grossly under estimated.

Above injection zone: The containment strata above the injection zone is the upper Chinle and the Wingate. The dehydrated shale bed seventeen feet into the Chinle will be the primary containment strata. Based on the noted loses and history of lost returns, the above containment strata should not have to be employed.

## TRACER OR OTHER LOG

Tracer logs are general run to verify the injection interval. The uncertainty of the injection interval is usually a result of excessive injection pressures. With excessive injection pressure the weakest formation or cement job will break down. Thus a tracer log is run to verify the injection zone.

It is anticipated that the fluid will gravity feed into the annulus and an injection pressure will not be required. If an injection pressure is not required, then a tracer or other log will not be run unless required by the state. If an injection pressure is required, then a tracer or other log (temperature log) will be run to identify the injection interval.

RJP/memo/injectio.wrl

COLUMBIA GAS DEVELOPMENT CORPORATION

KANE SPRINGS FEDERAL #19-1A ST  
SEC.19-T26S-R20E  
GRAND COUNTY, UTAH

DAILY ACTIVIITY REPORT

**CONFIDENTIAL**

9/16/91 WOC, DRL CMT TO 7880', CRIC, REAM F:7890'-7880',  
POH. MW 15.5

9/17/91 TIH & ORIENT TOOL FACE, DRL & SLIDE TO 7890',  
MW 15.6+

9/18/91 SLIDE & DRL TO 7923'. MW 15.5+

9/19/91 DRL TO 8004', CIRC, POH FOR BOPE TEST.  
LS @ 7948' 77.8 DEG. N-16.4-E MW 15.5+

9/20/91 TESTED BOPE, TIH & DRL TO 8038'.  
LS @ 7974' 79.2 DEG. N-16.0-E MW 15.5+

9/21/91 DRL TO 8106', REAM F:7967'-8066'.  
LS @ 8043' 85.0 DEG. N-17.4-E MW 15.8

9/22/91 DRL TO 8128, TF/BHA, SLIP HANDLE BROKE & FELL  
INTO HOLE, ND BOPE - P/U SAME & RECOVERED HANDLE,  
LS @ 8074' 88.2 DEG. N-19.2-E

**RECEIVED**

SEP 25 1991

DIVISION OF  
OIL GAS & MINING

COLUMBIA GAS DEVELOPMENT CORPORATION

KANE SPRINGS FEDERAL #19-1A ST  
SEC.19-T26S-R20E  
GRAND COUNTY, UTAH

DAILY ACTIVIITY REPORT

CONFIDENTIAL

9/23/91 TEST BOPE, TIH & DRL TO 8184'.  
LS @ 8105' 88.9 DEG. N-19.5-E  
MW 15.9

9/24/91 DRL TO 8210', CBU, HAD 1000-1050 UNITS OF GAS,  
SHUT WELL IN, INCR. MW TO 16.5 PPG, OPEN WELL,  
CIRC, GAS @ 120 UNITS, TF/BHA.  
LS @ 8136' 87.9 DEG. N-18.8-E  
MW 16.5

9/25/91 FIH @ 8101', CBU, DRL TO 8298'.  
LS @ 8232' 81.2 DEG. N-18.1-E

9/26/91 DRL TO 8391', CHECK BOP'S.  
LS @ 8324' 83.6 DEG. N-18.1-E

9/27/91 ORIENT DRL TO 8391', CBU, INCR. MW TO 16.7+, CCM,  
TF/BHA.  
LS @ 8355' 84.1 DEG. N-18.1-E

9/28/91 FIH TO 8412', DRL TO 8473'.  
LS @ 8419' 87.1 DEG. N-19.2-E  
MW 16.9+

9/29/91 DRL TO 8513', CBU, ORIENT DRL TO 8522'.  
LS @ 8451' 89.7 DEG. N-19.2-E  
MW 16.9

RECEIVED

OCT 03 1991

DIVISION OF  
OIL GAS & MINING

COLUMBIA GAS DEVELOPMENT CORPORATION

KANE SPRINGS FEDERAL #19-1A ST  
SEC.19-T26S-R20E  
GRAND COUNTY, UTAH

DAILY ACTIVIITY REPORT

9/30/91 DRL TO 8529', CBU, TFN/BHA, REAM F:8412'-8529', DRL  
TO 8538', MW 16.9  
LS @ 8474' 91.8 DEG. N-19.2-E

10/1/91 DRL TO 8541', CBU, TFN/MWD TOOL, DRL TO 8602',  
MW 16.9  
LS @ 8546' 93.2 DEG. N-18.8-E

10/2/91 DRL TO 8712', MW 16.9+  
LS @ 8639' 89.8 DEG. N-18.8-E

10/3/91 DRL TO 8740', CBU, TFN/BHA, DRL TO 8755', CBU  
LS @ 8702' 90.7 DEG N-19.5-E

10/4/91 TFBHA, DRL TO 8832', MW 16.8+  
LS @ 8764' 92.1 DEG N-19.9-E

10/5/91 DRL TO 8932', CBU, TFN/BHA, MW 16.8+  
LS @ 8858' 89.2 DEG N-19.9-E

10/6/91 FIH TO 8932', SLIDING TO 9008', MW 16.9  
LS @ 8922' 88.9 DEG N-19.9-E

**CONFIDENTIAL**

**COLUMBIA GAS**  
Development



October 4, 1991

STATE OF UTAH DEPT. OF NATURAL RESOURCES  
OIL, GAS & MINING  
355 W. NORTH TEMPLE, 3 TRIAD CENTER, STE. #350  
SALT LAKE CITY, UTAH 84180-1203

Attention: Mr. Gil Hunt

Reference: **COLUMBIA GAS DEVELOPMENT CORPORATION**  
**KANE SPRINGS FEDERAL #19-1A ST**  
**SEC. 19-T26S-R20E**  
**GRAND COUNTY, UTAH** 43-019-31324

Dear Mr. Hunt:

Please find enclosed some additional information to be included with the previously submitted request for approval to dispose of fluids down the annulus at the above captioned location. A copy of the attached was faxed to Mr. Frank Mathews on 10/4/91.

If you have any questions, or require any additional information, please contact me at 713/871-3482.

Sincerely,

**COLUMBIA GAS DEVELOPMENT CORPORATION**

A handwritten signature in cursive script that reads "Aline A. Reese".

Aline A. Reese  
Regulatory Clerk

AAR  
Encl.

A rectangular stamp with the word "RECEIVED" in a bold, blocky font, slanted slightly upwards to the right.

OCT 07 1991

DIVISION OF  
OIL GAS & MINING



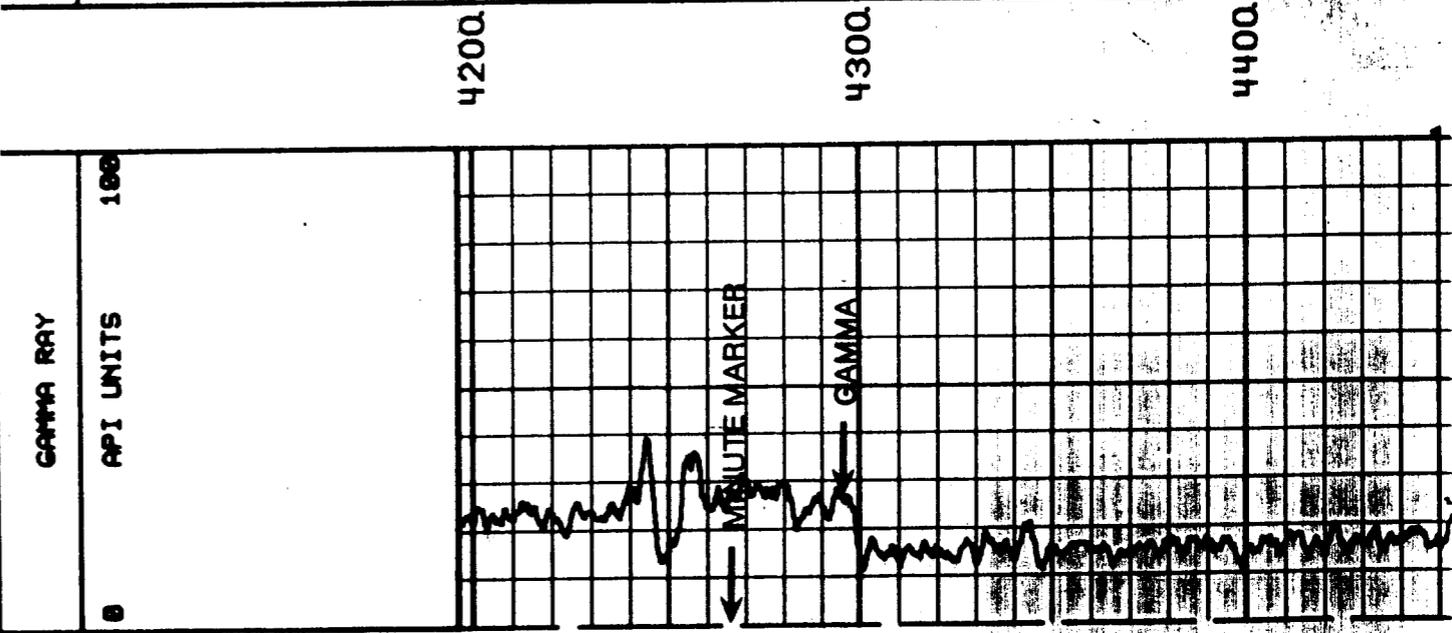
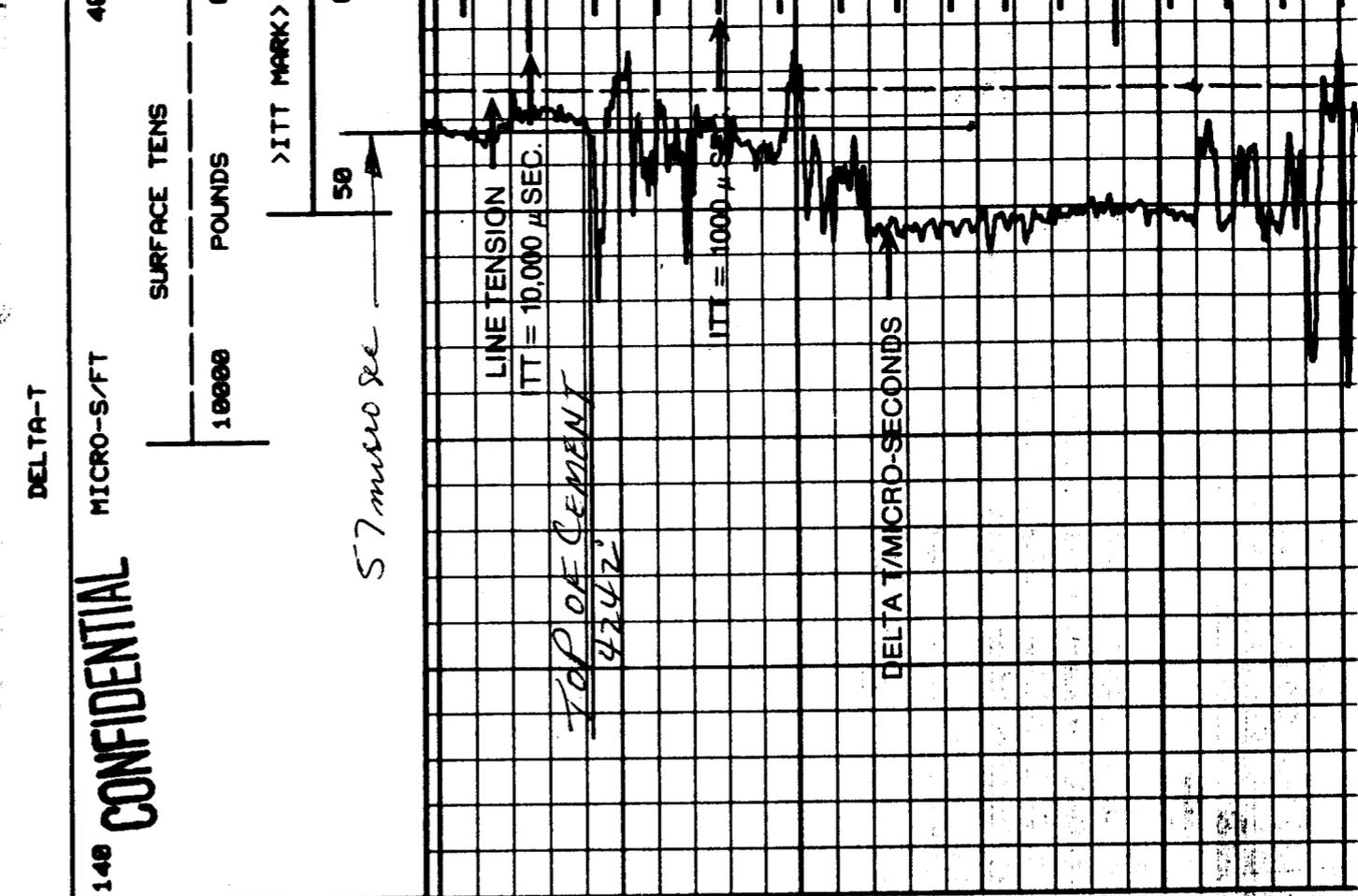
# LONG SPACED SONIC LOG

COMPANY COL IA GAS DEVELO  
 WELL KANE SPRINGS FED. 19  
 FIELD WILDCAT  
 COUNTY GRAND STATE UT

COMPANY COLUMBIA GAS DEVELOPMENT CORP.  
 WELL KANE SPRINGS FED. 19-1  
 FIELD WILDCAT  
 DIVISION OF OIL GAS & MINING  
 COUNTY GRAND STATE UT  
 API NO 43-019-31324  
 LOCATION 900 FSL 1930 FML  
 OTHER SERVICES  
 LS  
 FMS  
 DICL

RECT 19 TWP 26S RGE 20E  
 PERM DATUM @ ELEV. 5963.7  
 LOG MEASURED FROM KB 26 FT. ABOVE PERM DATUM  
 DRILLING MEASURED FROM KB ELEV.: K.B. 5990  
 D.F. 5989  
 G.L. 5963.7

DATE	8/6/91		
RUN NO.	ONE		
DEPTH-DRILLER	6751		
DEPTH-LOGGER	6749		
BTH. LOC INTER	6747		
TOP LOC INTER	4200		
DRILLER	13.38-4518		
CASING-LOGGER	4481		
BIT SIZE	12.25		
TYPE FLUID IN HOLE	OIL BASE		
DENS. & VISC.	15.0 & 133		
PH & FLUID LOSS	5.5 & 1.8		
SOURCE OF SAMPLE	PIT		
RH @ HEAS. TEMP.	N/A @N/A		
RHF @ HEAS. TEMP.	N/A @N/A		
RHC @ HEAS. TEMP.	N/A @N/A		
SOURCE RH-F/RHC	N/A /N/A		
RH @BHT	N/A @N/A		
TIME SINCE CIRC.	3 HRS.		
TIME ON BOTTON	18:17 8/6		
MAX. REC TEMP.	133 @TD		
EQUIP. & LOCATION	S25-61VERNAL		
RECORDED BY	P. CINDOTTO		



RECEIVED  
 PRODUCTION

COLUMBIA GAS DEVELOPMENT CORPORATION

KANE SPRINGS FEDERAL #19-1A ST  
SEC.19-T26S-R20E  
GRAND COUNTY, UTAH

DAILY ACTIVIITY REPORT

**CONFIDENTIAL**

10/7/91 SLIDE & DRL TO 9011', TFN/MM, DRL & SLIDE TO  
9057', MW 16.9,  
LS @ 9057' 95 DEG. N-13.1-E

10/8/91 SLIDE DRLNG TO9079', TFN/MM, REAM F:8932'-  
9079', SLIDE DRLNG TO 9114', MW 16.8  
LS @ 9111' 93.2 DEG. N-13.6-E

10/9/91 SLIDING & DRLNG TO 9296', MW 16.9  
LS @ 9259' 89.5 DEB. N-12.9-E

10/10/91 DRL TO 9326', ST TO CSG, DRLG & SLIDE TO 9477',  
MW 16.8,  
LS @ 9393' 88.1 DEG. N-13.6-E

10/11/91 DRL TO 9669', MW 16.8  
LS @ 9584' 86.9 DEG. N-13.9-E

10/12/91 DRL TO 9825', CBU, ST INTO 9-5/8" CSG., TIH TO  
9824', CBU, POH & PREPARE TO RUN 5-1/2" LINER.  
MW 16.8,  
LS @ 9825' 89.2 DEG. N-14.3-E

10/13/91 SET 5-1/2" CSG @ 9825' W/TOP @ 7452', CBU & POH WITH  
SETTING TOOLS, UNABLE TO GO THRU WELLHEAD WITH RET-  
RIEVABLE BRIDGE PLUG.  
MW 17.0

**RECEIVED**

OCT 16 1991

DIVISION OF  
OIL GAS & MINING

COLUMBIA GAS DEVELOPMENT CORPORATION

KANE SPRINGS FEDERAL #19-1A ST  
SEC.19-T26S-R20E  
GRAND COUNTY, UTAH

**CONFIDENTIAL**

DAILY ACTIVIITY REPORT

10/14/91            TIH WITH 9-5/8" 53.3# BP & SET @ 6750', TEST  
SAME TO 500 PSI, CBU, RD & L/D MACHINE, ND  
BOP'S.

10/15/91            FIN ND BOP'S, NU TREE, CLEAN PITS.

10/16/91            RIG RELEASE @ 12:00 HRS

10/16 THRU 10/22/91    RIGGING DOWN - FINAL DRILLING REPORT.

10/27/91            STARTED MI & RU COMPLETION RIG, SDFN.

10/28/91            FIN MIRU, PREP. TO NU BOP, NOTIFIED BLM OF  
BOP TEST, SDFN.

COLUMBIA GAS DEVELOPMENT CORPORATION

KANE SPRINGS FEDERAL #19-1A ST  
SEC.19-T26S-R20E  
GRAND COUNTY, UTAH

DAILY ACTIVIITY REPORT

CONFIDENTIAL

10/29/91           PREP TO RUN TEMPERATURE LOG.

10/30/91           RUN TEMPERATURE LOG, RIH W/BRIDGE PLUG RETRIEVABLE  
TOOL, C&C, SDFN

10/31/91           P/U TBG., CBU, LATCH RBP, POH & L/D BP, SDFN

11/1/91            RIH W/BIT, CIRC., POH FILLING CSG W/HEAVY MUD,  
SDFN.

11/2/91            RIH W/BIT, CBU, SD PUMP, INCREASE MUD WEIGHT TO  
16.8 #/GAL. SDFN.

11/3/91            RIH, CIRC, RIH TO 7420', RESET RBP & TESTED , CIRC.



October 28, 1991

BUREAU OF LAND MANAGEMENT  
MOAB DISTRICT OFFICE  
P. O. BOX 970  
MOAB, UTAH 84532

Attention: Mr. Dale Manchester

Reference: COLUMBIA GAS DEVELOPMENT CORPORATION  
KANE SPRINGS FEDERAL #19-1A ST  
SEC.19-T26S-R20E  
GRAND COUNTY, UTAH  
API NO. 43-019-31324 01

Dear Mr. Manchester:

Pursuant to our conversation of 10/25/91, please find enclosed an original and two copies of Columbia's Sundry Notice regarding the above captioned location.

If you have any questions, or require any additional information, please call me at 713/871-3482.

Sincerely,

COLUMBIA GAS DEVELOPMENT CORPORATION

A handwritten signature in cursive script that reads "Aline A. Reese".

Aline A. Reese  
Regulatory Clerk

AAR  
Enclosures

✓ cc: State of Utah Ofc. of Natural Resources  
Oil, Gas & Mining  
Mr. R. J. Firth

**RECEIVED**

OCT 31 1991

DIVISION OF  
OIL GAS & MINING

SUNDRY NOTICE 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 <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A
2. NAME OF OPERATOR Columbia Gas Development Corporation		7. UNIT AGREEMENT NAME Kane Springs Federal Unit
3. ADDRESS OF OPERATOR P. O. Box 1350 Hou., TX. 77251-1350		8. FARM OR LEASE NAME Kane Springs Federal
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 800' FSL & 1918' FEL of Sec.19-T26S-R20E		9. WELL NO. #19-1A ST
14. PERMIT NO. 43-019-31324 01		10. FIELD AND POOL, OR WILDCAT Wildcat
15. ELEVATIONS (Show whether DT, RT, CA, etc.) Ground 5965'		11. SEC., T., R., M., OR B.L. AND SURVEY OR AREA Sec. 19-T26S-R20E
		12. COUNTY OR PARISH Grand
		13. STATE Utah

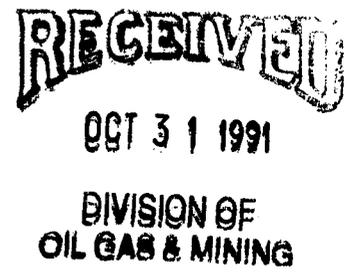
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

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) _____	(Other) _____
(Other) <u>Rig Movement</u>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report; add 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.)

A completion rig is scheduled to move on to the above captioned location to complete the well the week of 10/28/91.

Verbal approval was granted by Dale Manchester on 10/25/91.



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

SIGNED Aline A. Reese TITLE Regulatory Clerk DATE 10/28/91  
 Aline A. Reese

(This space for Federal or State office use)

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

\*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.

ENTITY ACTION FORM - DOGM FORM 8

OPERATOR Columbia Gas Development Corp.  
ADDRESS P. O. Box 1350  
Hou., TX. 77251-1350

OPERATOR CODE N5035  
PHONE NO. 713, 871-3400

OPERATORS MUST COMPLETE FORM UPON SPUDDING NEW WELL OR WHEN CHANGE IN OPERATIONS OR INTERESTS NECESSITATES CHANGE IN EXISTING ENTITY NUMBER ASSIGNMENT.

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
B	11180 →		43-019-31324	Kane Springs Federal #19-1A	SW/SE	19	26S	20E	Grand	7/4/91	
COMMENTS: Federal-Lease Prop.Zone CNCR Field-Wildcat (Entity 11180 added 11-12-91) fcp Unit-Kane Springs											
COMMENTS:											
COMMENTS:											
COMMENTS:											
COMMENTS:											
COMMENTS:											

**RECEIVED**

NOV 07 1991

- ACTION CODES: A - ESTABLISH NEW ENTITY FOR NEW WELL  
B - ADD NEW WELL TO EXISTING ENTITY  
C - RE-ASSIGN WELL FROM ONE EXISTING ENTITY TO ANOTHER EXISTING ENTITY  
D - RE-ASSIGN WELL FROM ONE EXISTING ENTITY TO A NEW ENTITY  
E - OTHER (EXPLAIN IN COMMENTS SECTION)

(SEE INSTRUCTIONS ON BACK OF FORM)

DIVISION OF  
OIL GAS & MINING

*A. A. Reese*  
A. A. Reese  
SIGNATURE  
Regulatory Clerk  
TITLE  
11/5/91  
DATE

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or reworked or plugged back to a different reservoir. Use "APPLICATION FOR PERMIT TO DRILL" for such proposals.)

IF INDIAN, ALLOTTEE OR TRIBE NAME

I/A

OIL WELL  GAS WELL  OTHER

UNIT AGREEMENT NAME

Kane Springs Federal Unit

NAME OF OPERATOR  
Columbia Gas Development Corporation 713/871-3400

FARM OR LEASE NAME

Kane Springs Federal

ADDRESS OF OPERATOR  
P. O. Box 1350 Hou., TX. 77251-1350

WELL NO.

#19-1A ST

LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also above 17 below.) At surface

FIELD AND POOL, OR WILDCAT

Wildcat

800' FSL & 1918' FEL of Sec.26S-R20E

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

Sec.19-T26S-R20E

PERMIT NO.  
43-019-31324 01

ELEVATIONS (Show whether DT, RT, GR, etc.)  
Ground 5965

COUNTY OR PARISH

Grand

STATE

Utah

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

NOTICE OF INTENTION TO:

- TEST WATER SHUT-OFF
- FRACURE TREAT
- SHOOT OR ACIDIZE
- REPAIR WELL
- (Other)
- PULL OR ALTER CASING
- MULTIPLE COMPLETE
- ABANDON\*
- CHANGE PLANS

SUBSEQUENT REPORT OF:

- WATER SHUT-OFF
- FRACURE TREATMENT
- SHOOTING OR ACIDIZING
- (Other) Report of First Oil Sale
- REPAIRING WELL
- ALTERING CASING
- ABANDONMENT\*

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

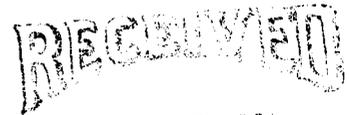
DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and routes pertinent to this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

Date of First Oil Sale: 11/15/91

Amount of Oil Sold: 1077 BO

Transporter: Basin Transport Inc.

Purchaser: Scurlock-Permian Corporation



NOV 25 1991

DIVISION OF OIL GAS & MINING

I hereby certify that the foregoing is true and correct:

SIGNED Aline A. Reese

TITLE Regulatory Clerk

DATE 11/20/91

(This space for Federal or State office use)

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

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

\*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.



December 4, 1991

**RECEIVED**

DEC 09 1991

BUREAU OF LAND MANAGEMENT  
MOAB DISTRICT OFFICE  
P. O. BOX 970  
MOAB, UTAH 84532

DIVISION OF  
OIL GAS & MINING

Attention: Mr. Dale Manchester

Reference: **COLUMBIA GAS DEVELOPMENT CORPORATION**  
**KANE SPRINGS FEDERAL #19-1A ST**  
**SEC. 19-T268-R20E**  
**GRAND COUNTY, UTAH**

Dear Mr. Manchester:

Please find enclosed an original and two copies of Columbia's Completion report regarding the above referenced location.

The Directional Surveys submitted represent both original borehole which was sidetracked to drill the currently completed well. Additionally, the logs will be forwarded to your attention upon receipt of the final copies.

Columbia Gas Development Corporation respectfully requests that the information being submitted be kept confidential for the maximum amount of time available.

If you have any questions, or require any additional information, please contact me at 713/871-3482.

Sincerely,

**COLUMBIA GAS DEVELOPMENT CORPORATION**

A handwritten signature in cursive script, appearing to read 'Aline A. Reese'.

Aline A. Reese  
Regulatory Clerk

AAR  
Enclosures

cc: State of Utah Ofc. of Natural Resources  
Division of Oil, Gas & Mining - Mr. R. J. Firth

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 1004-0137  
Expires August 31, 1985

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. SERV.  Other \_\_\_\_\_

2. NAME OF OPERATOR  
Columbia Gas Development Corporation

3. ADDRESS OF OPERATOR  
P. O. Box 1350 Hou., TX. 77251-1350

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
At surface 800' FSL & 1918' FEL of Sec. 19-T26S-R19E

At top prod. interval reported below 1710' FSL & 1713' FEL of Sec. 19

At total depth 3618' FSL & 1147 FEL of Sec. 19

14. PERMIT NO. 43-019-31324 01 DATE ISSUED 7/22/91

15. DATE SPUDDED 7/4/91 16. DATE T.D. REACHED 10/12/91 17. DATE COMPL. (Ready to prod.) 11/13/91 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* Gr: 5965 RB: 5989.5 19. ELEV. CASINGHEAD \_\_\_\_\_

20. TOTAL DEPTH, MD & TVD 9825 MD/ 7420 TVD 21. PLUG, BACK T.D., MD & TVD 9825 MD/ 7420 TVD 22. IF MULTIPLE COMPL., HOW MANY\* N/A 23. INTERVALS DRILLED BY \_\_\_\_\_ ROTARY TOOLS XX CABLE TOOLS \_\_\_\_\_

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*  
From: 7824 MD/ 7340 TVD TO: 9825 MD/ 7420 TVD 25. WAS DIRECTIONAL SURVEY MADE Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN SEE LETTER DATED 3-23-92 27. WAS WELL CORED Yes  
Logs will be provided under separate cover upon receipt.

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
30"	conductor	56'	Driven	-----	None
20"	94# K-55	560'	26"	166 sx Cl-B	None
13-3/8"	61# K-55	4521'	17-1/2"	670"B"Neat & 415sx @ 12.5	ppg None
9-5/8"	53.5# S-95	7824	---	1430 sx Cl-G	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
5-1/2"	7450'	9825'	Pkr @ 7450'	--	2-7/8"	7380'	7380

31. PERFORATION RECORD (Interval, size and number)  
Preperfed pipe every 3' @ 90 Degree intervals.

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
N/A	

DEC 09 1991

33. PRODUCTION

DATE FIRST PRODUCTION 11/13/91 PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing WELL STATUS (Producing or Shut-in) Shut-in

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
11/13/91	24	11	→	1158	234	0	202
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
2526	406	→	1158	234	0	40.6	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Scurlock Permian Corp. (Purchaser)/Basin Transport, Inc. (Transporter) TEST WITNESSED BY Herman Middlebrooks

35. LIST OF ATTACHMENTS  
Directional Survey - Logs will be forwarded under separate cover.

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

SIGNED Aline A. Reese TITLE Regulatory Clerk DATE 12/4/91

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

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

38. GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
Chinle	500'		Red Brown Shale - Fine grain sand	Chinle	500'	
Cutler	1349'		Red arkose sands, conglomerates, limestone	Cutler	1349	
Hermosa	2582'		Grey fossiliferous limes, mixed arkose sands	Hermosa	2582	
Paradox Salt	4319'		Salt with interbedded shale, anhydrite, dolomite	Paradox Salt	4319	7337
Cane Creek	7815 MD 7337 TVD		Anhydrite, Shale, Dolomite	Cane Creek	7815	

Date 10/16/91

TELECO OILFIELD SERVICES  
SURVEY CALCULATIONS

\*\*\*\*\*

RECEIVED

DEC 09 1991

DIVISION OF  
OIL GAS & MINING

Company: COLUMBIA GAS  
Well: KANE SPRINGS FEDERAL #19-1A  
Location: GRAND COUNTY, UTAH  
Rig: GRACE #269

We hereby certify that the surveys contained herein, are to the best of our knowledge a true and accurate account of the well



*Thomas M. Claus*  
FIELD SUPERVISOR

TELECO Job # TRM 373  
Correction: 0.0°  
Magnetic Declination: 0.0°  
Total grid correction: 0.0°  
Proposed Direction: 13.2°

MINIMUM CURVATURE CALCULATION

\*\*\*\*\*

Meas	Course			True	Vertical	Coordinates		Closure		Dog Leg
Depth	Length	Incl	Azi	Vert.	Section	N/S	E/W	Distance	Angle	Severity
feet	feet	deg	deg	feet	feet	feet	feet	feet	deg	deg/100'

\*\*\*\*\*

TELECO TIE IN TO EASTMAN-CHRISTENSEN GYRO MULTI-SHOT

0	0	4.5	17.5	6695.73	115.06	117.85N	1.35E	117.86	N 0.66E	0.00
---	---	-----	------	---------	--------	---------	-------	--------	---------	------

TELECO MWD SURVEYS

6726	26	4.8	19.5	6721.64	117.15	119.85N	2.02E	119.86	N 0.97E	1.34
6758	32	7.0	15.0	6753.47	120.43	122.99N	2.97E	123.03	N 1.38E	7.02
6789	31	12.3	11.4	6784.02	125.63	128.06N	4.11E	128.12	N 1.84E	17.20
6820	31	17.9	9.7	6813.94	133.69	136.00N	5.57E	136.11	N 2.35E	18.12

RECEIVED

DEC 09 1991

Company: COLUMBIA GAS, Well: KANE SPRINGS FEDERAL #19-1A, Location: GRAND COUNTY, UTAH, REGRACE #269

OIL GAS & MINING

Meas Depth feet	Course Length feet	Incl deg	Azi deg	True Vert. feet	Dp. feet	Vertical Section feet	Coordinates N/S feet	E/W feet	Closure Distance feet	Angle deg	Dog Leg Severity deg/100'
6852	32	21.6	10.0	6844.05		144.48	146.65N	7.42E	146.84	N 2.90E	11.57
6884	32	23.8	11.4	6873.57		156.82	158.78N	9.72E	159.08	N 3.50E	7.08
6915	31	26.5	12.5	6901.63		169.99	171.67N	12.46E	172.12	N 4.15E	8.84
6947	32	30.2	12.9	6929.79		185.18	186.49N	15.80E	187.15	N 4.84E	11.58
6978	31	33.9	13.9	6956.06		201.63	202.48N	19.62E	203.43	N 5.53E	12.06
7008	30	37.6	14.3	6980.40		219.15	219.48N	23.89E	220.78	N 6.21E	12.36
7041	33	41.1	14.3	7005.92		240.07	239.75N	29.06E	241.51	N 6.91E	10.61
7072	31	43.2	13.9	7028.90		260.86	259.93N	34.12E	262.16	N 7.48E	6.83
7101	29	46.6	15.0	7049.44		281.33	279.74N	39.24E	282.48	N 7.98E	12.03
7132	31	48.8	15.0	7070.30		304.24	301.89N	45.17E	305.25	N 8.51E	7.10
7161	29	50.1	15.3	7089.15		326.26	323.16N	50.93E	327.15	N 8.96E	4.55
7191	30	51.2	15.0	7108.18		349.45	345.55N	56.99E	350.22	N 9.37E	3.75
7223	32	52.5	15.0	7127.94		374.60	369.86N	63.50E	375.27	N 9.74E	4.06
7249	26	53.4	14.6	7143.61		395.34	389.92N	68.80E	395.94	N 10.01E	3.67

DEC 09 1991

DIVISION OF OIL GAS & MINING

Company: COLUMBIA GAS, Well: KANE SPRINGS FEDERAL #19-1A, Location: GRAND COUNTY, UTAH, Rig: GRACE #269

Meas Depth feet	Course		True Vert. feet	Dp. feet	Vertical Section feet	Coordinates		Closure		Dog Leg Severity deg/100'
	Length feet	Incl deg				Azi deg	N/S feet	E/W feet	Distance feet	
7287	38	55.1	14.6	7165.81	426.17	419.76N	76.58E	426.69	N 10.34E	4.47
7319	32	58.1	14.6	7183.42	452.87	445.61N	83.31E	453.33	N 10.59E	9.38
7350	31	61.8	15.0	7198.94	479.69	471.55N	90.17E	480.09	N 10.82E	11.99
7381	31	65.0	15.0	7212.82	507.39	498.32N	97.34E	507.74	N 11.05E	10.32
7417	36	69.6	15.0	7226.71	540.58	530.39N	105.93E	540.87	N 11.29E	12.78
7472	55	75.0	15.0	7243.43	592.93	580.98N	119.49E	593.15	N 11.62E	9.82
7503	31	74.9	14.6	7251.48	622.85	609.93N	127.14E	623.04	N 11.77E	1.29
7533	30	74.5	14.6	7259.39	651.78	637.93N	134.43E	651.94	N 11.90E	1.33
7571	38	73.6	15.3	7269.83	688.30	673.23N	143.86E	688.43	N 12.06E	2.96
7602	31	73.8	14.6	7278.53	718.04	701.98N	151.53E	718.15	N 12.18E	2.26
7633	31	73.7	15.3	7287.21	747.79	730.73N	159.21E	747.87	N 12.29E	2.19
7664	31	73.8	14.6	7295.88	777.53	759.49N	166.89E	777.60	N 12.39E	2.19
7693	29	74.0	14.6	7303.93	805.39	786.45N	173.91E	805.45	N 12.47E	0.69

RECEIVED

DEC 09 1991

DIVISION OF  
OIL GAS & MINING

Company: COLUMBIA GAS, Well: KANE SPRINGS FEDERAL #19-1A, Location: GRAND COUNTY, UTAH, Rig: GRACE #269

Meas Depth feet	Course Length feet	Incl deg	Azi deg	True Vert. feet	Dp.	Vertical Section feet	Coordinates N/S feet	E/W feet	Closure Distance feet	Angle deg	Dog Leg Severity deg/100'
7323	30	74.1	14.6	7312.17		834.22	814.36N	181.18E	834.27	N 12.54E	0.34
7753	30	74.1	14.6	7320.39		863.07	842.28N	188.45E	863.11	N 12.61E	0.00
7826	73	75.1	13.9	7339.77		933.43	910.49N	205.78E	933.46	N 12.74E	1.65
7880	54	82.9	17.4	7350.07		986.34	961.48N	220.08E	986.35	N 12.89E	15.78
7912	32	87.0	18.5	7352.89		1018.10	991.80N	229.90E	1018.10	N 13.05E	13.26
7942	30	87.1	17.8	7354.43		1047.94	1020.27N	239.24E	1047.94	N 13.20E	2.35
7974	32	86.0	17.4	7356.36		1079.79	1050.72N	248.90E	1079.79	N 13.33E	3.66
8004	30	85.3	16.4	7358.64		1109.64	1079.34N	257.59E	1109.65	N 13.42E	4.06
8035	31	85.2	16.4	7361.20		1140.48	1108.97N	266.31E	1140.50	N 13.50E	0.33
8067	32	86.7	17.1	7363.46		1172.34	1139.54N	275.51E	1172.37	N 13.59E	5.17
8100	33	88.0	17.4	7364.99		1205.22	1171.02N	285.29E	1205.27	N 13.69E	4.04
8130	30	87.6	17.4	7366.14		1235.12	1199.63N	294.25E	1235.19	N 13.78E	1.33
8163	33	87.7	17.1	7367.49		1268.01	1231.12N	304.03E	1268.10	N 13.87E	0.96

PAGE 4

RECEIVED

DEC 09 1991

DIVISION OF  
OIL GAS & MINING

Company: COLUMBIA GAS, Well: KANE SPRINGS FEDERAL #19-1A, Location: GRAND COUNTY, UTAH, Rig: GRACE #269

Meas Depth feet	Course Length feet	Incl deg	Azi deg	True Vert. feet	Dp. feet	Vertical Section feet	Coordinates N/S feet	E/W feet	Closure Distance feet	Angle deg	Dog Leg Severity deg/100'
8225	30	87.5	17.4	7368.75		1297.90	1259.74N	312.92E	1298.02	N 13.95E	1.20
8257	32	88.6	16.7	7369.84		1329.81	1290.32N	322.30E	1329.96	N 14.02E	4.07
8288	32	89.6	16.7	7370.34		1361.75	1320.96N	331.49E	1361.92	N 14.09E	3.13
8320	31	89.7	16.0	7370.53		1392.70	1350.71N	340.22E	1392.90	N 14.14E	2.28
8345	32	90.0	15.7	7370.61		1424.66	1381.49N	348.96E	1424.88	N 14.18E	1.33
8384	25	90.3	15.3	7370.55		1449.64	1405.58N	355.64E	1449.87	N 14.20E	2.00
8414	39	90.0	15.3	7370.45		1488.61	1443.20N	365.93E	1488.87	N 14.23E	0.77
8446	30	90.1	15.0	7370.42		1518.60	1472.16N	373.77E	1518.86	N 14.25E	1.06
8478	32	88.2	14.3	7370.90		1550.58	1503.11N	381.86E	1550.86	N 14.25E	6.33
8509	32	88.4	13.9	7371.84		1582.56	1534.13N	389.65E	1582.84	N 14.25E	1.40
8540	31	90.4	14.3	7372.17		1613.55	1564.20N	397.20E	1613.84	N 14.25E	6.58
8572	31	89.2	14.3	7372.28		1644.55	1594.23N	404.86E	1644.84	N 14.25E	3.87
	32	88.9	13.9	7372.81		1676.54	1625.27N	412.66E	1676.83	N 14.25E	1.56

RECEIVED

DEC 09 1991

DIVISION OF  
OIL GAS & MINING

Company: COLUMBIA GAS, Well: KANE SPRINGS FEDERAL #19-1A, Location: GRAND COUNTY, UTAH, Rig: GRACE #269

Meas Depth feet	Course Length feet	Incl deg	Azi deg	True Vert. feet	Dp.	Vertical Section feet	Coordinates N/S feet	E/W feet	Closure Distance feet	Angle deg	Dog Leg Severity deg/100
8628	32	89.5	13.2	7373.25		1708.53	1656.37N	420.15E	1708.83	N 14.23E	2.88
8628	24	90.2	13.6	7373.32		1732.53	1679.72N	425.71E	1732.83	N 14.22E	3.36
8661	33	88.6	13.2	7373.66		1765.53	1711.82N	433.36E	1765.82	N 14.21E	5.00
8692	31	86.0	13.6	7375.12		1796.49	1741.94N	440.54E	1796.78	N 14.19E	8.49
8724	32	84.7	12.9	7377.72		1828.39	1772.98N	447.85E	1828.67	N 14.18E	4.61
8756	32	84.9	12.9	7380.62		1860.26	1804.05N	454.96E	1860.53	N 14.15E	0.62
8787	31	87.3	12.9	7382.73		1891.18	1834.19N	461.87E	1891.45	N 14.13E	7.74
PROJECTED BOTTOM HOLE LOCATION											
8845	58	87.3	12.9	7385.46		1949.12	1890.66N	474.80E	1949.37	N 14.10E	0.00

RECEIVED

DEC 09 1991

DIVISION OF  
OIL GAS & MINING

Date 10/16/91

TELECO OILFIELD SERVICES  
SURVEY CALCULATIONS

\*\*\*\*\*

Company: COLUMBIA GAS  
Well: KANE SPRINGS FED. #19-1A, ST-1  
Location: GRAND COUNTY, UTAH  
Rig: GRACE 269

We hereby certify that the surveys contained herein, are to the best of our knowledge a true and accurate account of the well



*Thomas M. Claus*  
FIELD SUPERVISOR



DEC 09 1991

DIVISION OF  
OIL GAS & MINING

TELECO Job # TRM 373.1  
Correction: 0.0°  
Magnetic Declination: 0.0°  
Total grid correction: 0.0°  
Proposed Direction: 13.2°

MINIMUM CURVATURE CALCULATION

\*\*\*\*\*

Meas	Course	True	Vertical	Coordinates	Closure	Dog Leg
Depth	Length Incl Azi	Vert. Dp.	Section	N/S E/W	Distance Angle	Severity
feet	feet deg deg	feet	feet	feet feet	feet deg	deg/100'

\*\*\*\*\*

TELECO TIE IN TO EASTMAN CHRISTENSEN GYRO MULTI-SHOT

7844	0	77.7	16.0	7343.54	951.07	927.44N	210.78E	951.09	N 12.80E	0.00
------	---	------	------	---------	--------	---------	---------	--------	----------	------

TELECO MWD SURVEYS

7880	36	80.2	16.7	7350.44	986.35	961.34N	220.73E	986.35	N 12.93E	7.20
7918	38	77.5	16.0	7357.79	1023.57	997.11N	231.22E	1023.57	N 13.06E	7.33
7948	30	77.8	16.4	7364.20	1052.83	1025.25N	239.40E	1052.83	N 13.14E	1.64
7979	31	79.2	16.0	7370.38	1083.17	1054.42N	247.87E	1083.17	N 13.23E	4.69

Company: COLUMBIA GAS, Well: KANE SPRINGS FED. #19-1A, ST-1, Location: GRAND COUNTY, UTAH, Rig: GRACE 269

Meas Depth feet	Course Length feet	Incl deg	Azi deg	True Vert. feet	Dp.	Vertical Section feet	Coordinates N/S feet	E/W feet	Closure Distance feet	Angle deg	Dog Leg Severity deg/100'
8010	31	81.3	16.4	7375.63		1113.67	1083.76N	256.40E	1113.68	N 13.31E	6.89
8073	33	85.0	17.8	7379.57		1146.36	1115.07N	266.03E	1146.37	N 13.42E	11.98
8074	31	88.2	19.2	7381.41		1177.16	1144.41N	275.85E	1177.19	N 13.55E	11.26
8105	31	88.9	19.5	7382.19		1207.97	1173.65N	286.12E	1208.02	N 13.70E	2.46
8136	31	87.9	18.8	7383.06		1238.79	1202.92N	296.28E	1238.87	N 13.84E	3.94
8166	30	85.1	18.5	7384.89		1268.59	1231.29N	305.86E	1268.71	N 13.95E	9.39
8201	35	81.7	18.5	7388.91		1303.21	1264.26N	316.89E	1303.37	N 14.07E	9.71
8232	31	81.2	18.1	7393.52		1333.74	1293.36N	326.51E	1333.94	N 14.17E	2.06
8263	31	82.0	18.5	7398.05		1364.28	1322.48N	336.14E	1364.53	N 14.26E	2.88
8304	31	82.4	18.5	7402.25		1394.86	1351.61N	345.89E	1395.16	N 14.35E	1.29
8324	30	83.6	18.1	7405.91		1424.52	1379.88N	355.24E	1424.87	N 14.44E	4.21
8355	31	84.1	18.1	7409.23		1455.23	1409.17N	364.81E	1455.63	N 14.51E	1.61
8388	33	86.3	19.2	7411.99		1487.96	1440.33N	375.33E	1488.43	N 14.61E	7.45
8419	31	87.1	19.2	7413.78		1518.74	1469.55N	385.50E	1519.28	N 14.70E	2.58

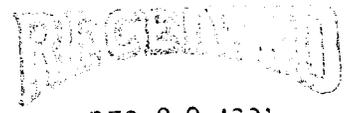
RECEIVED

DEC 09 1991

DIVISION OF  
OIL GAS & MINING

Company: COLUMBIA GAS, Well: KANE SPRINGS FED. #19-1A, ST-1, Location: GRAND COUNTY, UTAH, Rig: GRACE 269

Meas Depth feet	Course Length feet	Incl deg	Azi deg	True Vert. feet	Dp. feet	Vertical Section feet	Coordinates N/S feet	E/W feet	Closure Distance feet	Angle deg	Dog Leg Severity deg/100
8451	32	89.7	19.2	7414.67		1550.54	1499.76N	396.02E	1551.17	N 14.79E	8.13
8452	36	92.8	19.5	7413.89		1586.32	1533.71N	407.95E	1587.04	N 14.90E	8.65
8515	28	93.9	18.8	7412.25		1614.12	1560.12N	417.12E	1614.92	N 14.97E	4.66
8546	31	93.2	18.8	7410.33		1644.91	1589.41N	427.09E	1645.79	N 15.04E	2.26
8578	32	91.8	19.2	7408.94		1676.72	1619.64N	437.50E	1677.68	N 15.12E	4.55
8609	31	90.5	18.8	7408.31		1707.55	1648.94N	447.59E	1708.61	N 15.19E	4.39
8639	30	89.8	18.8	7408.23		1737.40	1677.34N	457.25E	1738.55	N 15.25E	2.33
8670	31	90.3	19.2	7408.21		1768.24	1706.65N	467.35E	1769.48	N 15.31E	2.07
8702	32	90.7	19.5	7407.93		1800.06	1736.84N	477.95E	1801.40	N 15.39E	1.56
8764	31	91.5	19.9	7407.33		1830.85	1766.02N	488.40E	1832.31	N 15.46E	2.89
8764	31	92.1	19.9	7406.36		1861.62	1795.16N	498.94E	1863.20	N 15.53E	1.94
8796	32	90.9	19.9	7405.52		1893.39	1825.23N	509.83E	1895.10	N 15.61E	3.75
8826	30	89.4	19.9	7405.44		1923.18	1853.44N	520.04E	1925.02	N 15.67E	5.00



DEC 09 1991

DIVISION OF  
OIL GAS & MINING

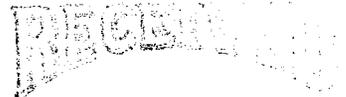
Company: COLUMBIA GAS, Well: KANE SPRINGS FED. #19-1A, ST-1, Location: GRAND COUNTY, UTAH, Rig: GRACE 269

Meas Depth feet	Course Length feet	Incl deg	Azi deg	True Vert. feet	Dp.	Vertical Section feet	Coordinates N/S feet	E/W feet	Closure Distance feet	Angle deg	Dog Leg Severity deg/100'
8858	32	89.2	19.9	7405.83		1954.96	1883.53N	530.93E	1956.93	N 15.74E	0.62
8900	32	89.0	19.9	7406.34		1986.73	1913.61N	541.82E	1988.84	N 15.81E	0.62
8922	32	88.9	19.9	7406.92		2018.51	1943.70N	552.72E	2020.76	N 15.87E	0.32
8954	32	90.2	18.5	7407.17		2050.33	1973.92N	563.24E	2052.70	N 15.93E	5.97
8985	31	92.1	17.4	7406.55		2081.21	2003.40N	572.79E	2083.67	N 15.96E	7.08
9017	32	94.0	15.3	7404.85		2113.11	2034.06N	581.78E	2115.63	N 15.96E	8.84
9049	32	94.7	13.9	7402.42		2145.01	2064.94N	589.83E	2147.52	N 15.94E	4.88
9080	31	93.3	13.2	7400.26		2175.93	2095.00N	597.07E	2178.42	N 15.91E	5.05
9111	31	93.2	13.6	7398.50		2206.88	2125.11N	604.24E	2209.34	N 15.87E	1.33
9150	31	92.0	13.6	7397.10		2237.85	2155.20N	611.53E	2240.28	N 15.84E	3.87
9174	32	90.0	12.9	7396.54		2269.84	2186.35N	618.86E	2272.25	N 15.80E	6.62
9205	31	88.5	12.9	7396.94		2300.84	2216.56N	625.78E	2303.20	N 15.77E	4.84
9237	32	89.0	13.2	7397.64		2332.83	2247.73N	633.00E	2335.16	N 15.73E	1.82

DEC 09 1991  
 DIVISION OF  
 OIL GAS & MINING

Company: COLUMBIA GAS, Well: KANE SPRINGS FED. #19-1A, ST-1, Location: GRAND COUNTY, UTAH, Rig: GRACE 269

Meas Depth feet	Course Length feet	Incl deg	Azi deg	True Vert. feet	Dp.	Vertical Section feet	Coordinates N/S feet	E/W feet	Closure Distance feet	Angle deg	Dog Leg Severity deg/100
9268	31	89.6	13.2	7398.02		2363.83	2277.91N	640.08E	2366.13	N 15.70E	1.94
9300	32	89.1	13.6	7398.38		2395.83	2309.03N	647.50E	2398.10	N 15.66E	2.00
9331	31	89.1	13.2	7398.87		2426.82	2339.18N	654.68E	2429.07	N 15.64E	1.29
9362	31	90.6	13.6	7398.95		2457.82	2369.34N	661.86E	2460.05	N 15.61E	5.01
9393	31	89.7	13.9	7398.87		2488.82	2399.45N	669.23E	2491.03	N 15.58E	3.06
9425	32	87.4	13.6	7399.68		2520.81	2430.52N	676.84E	2523.00	N 15.56E	7.25
9457	32	85.6	12.9	7401.63		2552.74	2461.61N	684.16E	2554.92	N 15.53E	6.03
9489	32	86.9	13.2	7403.73		2584.67	2492.72N	691.37E	2586.82	N 15.50E	4.17
9521	32	88.2	13.6	7405.09		2616.64	2523.82N	698.78E	2618.77	N 15.48E	4.25
9553	31	88.8	13.9	7405.91		2647.63	2553.92N	706.14E	2649.74	N 15.46E	2.16
9584	32	86.9	13.9	7407.11		2679.61	2584.96N	713.82E	2681.70	N 15.44E	5.94
9615	31	84.8	13.6	7409.35		2710.52	2614.99N	721.17E	2712.61	N 15.42E	6.84
9647	32	84.9	13.2	7412.22		2742.39	2645.99N	728.56E	2744.46	N 15.39E	1.28



DEC 09 1991

DIVISION OF  
OIL GAS & MINING

Company: COLUMBIA GAS, Well: KANE SPRINGS FED, #19-1A, ST-1, Location: GRAND COUNTY, UTAH, Rig: GRACE 269

Meas Depth feet	Course		True Vert. feet	Vertical Section feet	Coordinates		Closure		Dog Leg Severity deg/100'	
	Length feet	Incl deg			Azi deg	Dp. feet	N/S feet	E/W feet		Distance feet
909	32	85.0	13.2	7415.04	2774.27	2677.02N	735.84E	2776.31	N 15.37E	0.32
9711	32	86.7	13.6	7417.35	2806.18	2708.07N	743.23E	2808.21	N 15.35E	5.46
9742	31	88.6	14.3	7418.63	2837.15	2738.13N	750.70E	2839.17	N 15.33E	6.53
9771	29	88.8	14.6	7419.28	2866.14	2766.20N	757.93E	2868.16	N 15.32E	1.24
PROJECTED BOTTOM HOLE LOCATION										
9825	54	88.8	14.6	7420.41	2920.11	2818.45N	771.54E	2922.15	N 15.31E	0.00

  
 DEC 09 1991  
 COLUMBIA GAS

TELECO OILFIELD SERVICES  
SURVEY CALCULATIONS

\*\*\*\*\*

RECEIVED

DEC 09 1991

DIVISION OF  
OIL GAS & MINING

Company: COLUMBIA GAS  
Well: KANE SPRINGS FEDERAL #19-1A  
Location: GRAND COUNTY, UTAH  
Rig: GRACE #269

We hereby certify that the surveys contained herein, are to the best of our knowledge a true and accurate account of the well



*Thomas McClaus*  
FIELD SUPERVISOR

TELECO Job # TRM 373  
G Correction: 0.0°  
Magnetic Declination: 0.0°  
Total grid correction: 0.0°  
Proposed Direction: 13.2°

MINIMUM CURVATURE CALCULATION

\*\*\*\*\*

Meas	Course	True	Vertical	Coordinates	Closure	Dog Leg
Depth	Length Incl Azi	Vert. Dp.	Section	N/S E/W	Distance Angle	Severity
feet	feet deg deg	feet	feet	feet feet	feet deg	deg/100'

TELECO TIE IN TO EASTMAN-CHRISTENSEN GYRO MULTI-SHOT

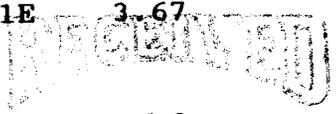
6700	0	4.5	17.5	6695.73	115.06	117.85N	1.35E	117.86	N	0.66E	0.00
------	---	-----	------	---------	--------	---------	-------	--------	---	-------	------

TELECO MWD SURVEYS

6726	26	4.8	19.5	6721.64	117.15	119.85N	2.02E	119.86	N	0.97E	1.34
6758	32	7.0	15.0	6753.47	120.43	122.99N	2.97E	123.03	N	1.38E	7.02
6789	31	12.3	11.4	6784.02	125.63	128.06N	4.11E	128.12	N	1.84E	17.20
6820	31	17.9	9.7	6813.94	133.69	136.00N	5.57E	136.11	N	2.35E	18.12

Company: COLUMBIA GAS, Well: KANE SPRINGS FEDERAL #19-1A, Location: GRAND COUNTY, UTAH, Rig: GRACE #269

Meas Depth feet	Course Length feet	Incl deg	Azi deg	True Vert. feet	Dp. feet	Vertical Section feet	Coordinates N/S feet	E/W feet	Closure Distance feet	Angle deg	Dog Leg Severity deg/100'
6884	32	21.6	10.0	6844.05		144.48	146.65N	7.42E	146.84	N 2.90E	11.57
6915	32	23.8	11.4	6873.57		156.82	158.78N	9.72E	159.08	N 3.50E	7.08
6947	31	26.5	12.5	6901.63		169.99	171.67N	12.46E	172.12	N 4.15E	8.84
6978	32	30.2	12.9	6929.79		185.18	186.49N	15.80E	187.15	N 4.84E	11.58
7008	31	33.9	13.9	6956.06		201.63	202.48N	19.62E	203.43	N 5.53E	12.06
7041	30	37.6	14.3	6980.40		219.15	219.48N	23.89E	220.78	N 6.21E	12.36
7072	33	41.1	14.3	7005.92		240.07	239.75N	29.06E	241.51	N 6.91E	10.61
7101	31	43.2	13.9	7028.90		260.86	259.93N	34.12E	262.16	N 7.48E	6.83
7132	29	46.6	15.0	7049.44		281.33	279.74N	39.24E	282.48	N 7.98E	12.03
7161	31	48.8	15.0	7070.30		304.24	301.89N	45.17E	305.25	N 8.51E	7.10
7191	29	50.1	15.3	7089.15		326.26	323.16N	50.93E	327.15	N 8.96E	4.55
7223	30	51.2	15.0	7108.18		349.45	345.55N	56.99E	350.22	N 9.37E	3.75
7249	32	52.5	15.0	7127.94		374.60	369.86N	63.50E	375.27	N 9.74E	4.06
	26	53.4	14.6	7143.61		395.34	389.92N	68.80E	395.94	N 10.01E	3.67

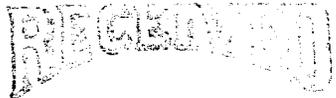


DEC 09 1991

DIVISION OF  
OIL GAS & MINING

Company: COLUMBIA GAS, Well: KANE SPRINGS FEDERAL #19-1A, Location: GRAND COUNTY, UTAH, Rig: GRACE #269

Meas Depth feet	Course		True Vert. feet	Dp. feet	Vertical Section feet	Coordinates		Closure		Dog Leg Severity deg/100'
	Length feet	Incl deg				Azi deg	N/S feet	E/W feet	Distance feet	
7287	38	55.1	14.6	7165.81	426.17	419.76N	76.58E	426.69	N 10.34E	4.47
7319	32	58.1	14.6	7183.42	452.87	445.61N	83.31E	453.33	N 10.59E	9.38
7350	31	61.8	15.0	7198.94	479.69	471.55N	90.17E	480.09	N 10.82E	11.99
7381	31	65.0	15.0	7212.82	507.39	498.32N	97.34E	507.74	N 11.05E	10.32
7417	36	69.6	15.0	7226.71	540.58	530.39N	105.93E	540.87	N 11.29E	12.78
7472	55	75.0	15.0	7243.43	592.93	580.98N	119.49E	593.15	N 11.62E	9.82
7503	31	74.9	14.6	7251.48	622.85	609.93N	127.14E	623.04	N 11.77E	1.29
7533	30	74.5	14.6	7259.39	651.78	637.93N	134.43E	651.94	N 11.90E	1.33
7571	38	73.6	15.3	7269.83	688.30	673.23N	143.86E	688.43	N 12.06E	2.96
7602	31	73.8	14.6	7278.53	718.04	701.98N	151.53E	718.15	N 12.18E	2.26
7633	31	73.7	15.3	7287.21	747.79	730.73N	159.21E	747.87	N 12.29E	2.19
7664	31	73.8	14.6	7295.88	777.53	759.49N	166.89E	777.60	N 12.39E	2.19
7693	29	74.0	14.6	7303.93	805.39	786.45N	173.91E	805.45	N 12.47E	0.69



DEC 09 1991

DIVISION OF  
OIL GAS & MINING

Company: COLUMBIA GAS, Well: KANE SPRINGS FEDERAL #19-1A, Location: GRAND COUNTY, UTAH, Rig: GRACE #269

Meas Depth feet	Course Length feet	Incl deg	Azi deg	True Vert. feet	Dp. feet	Vertical Section feet	Coordinates N/S feet	E/W feet	Closure Distance feet	Angle deg	Dog Leg Severity deg/100'
77	30	74.1	14.6	7312.17		834.22	814.36N	181.18E	834.27	N 12.54E	0.34
7753	30	74.1	14.6	7320.39		863.07	842.28N	188.45E	863.11	N 12.61E	0.00
7826	73	75.1	13.9	7339.77		933.43	910.49N	205.78E	933.46	N 12.74E	1.65
7880	54	82.9	17.4	7350.07		986.34	961.48N	220.08E	986.35	N 12.89E	15.78
7912	32	87.0	18.5	7352.89		1018.10	991.80N	229.90E	1018.10	N 13.05E	13.26
7942	30	87.1	17.8	7354.43		1047.94	1020.27N	239.24E	1047.94	N 13.20E	2.35
7974	32	86.0	17.4	7356.36		1079.79	1050.72N	248.90E	1079.79	N 13.33E	3.66
8004	30	85.3	16.4	7358.64		1109.64	1079.34N	257.59E	1109.65	N 13.42E	4.06
8035	31	85.2	16.4	7361.20		1140.48	1108.97N	266.31E	1140.50	N 13.50E	0.33
8067	32	86.7	17.1	7363.46		1172.34	1139.54N	275.51E	1172.37	N 13.59E	5.17
8100	33	88.0	17.4	7364.99		1205.22	1171.02N	285.29E	1205.27	N 13.69E	4.04
8130	30	87.6	17.4	7366.14		1235.12	1199.63N	294.25E	1235.19	N 13.78E	1.33
8163	33	87.7	17.1	7367.49		1268.01	1231.12N	304.03E	1268.10	N 13.87E	0.96

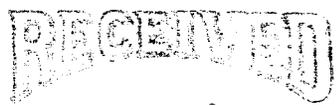
RECEIVED

DEC 09 1991

DIVISION OF  
OIL GAS & MINING

Company: COLUMBIA GAS, Well: KANE SPRINGS FEDERAL #19-1A, Location: GRAND COUNTY, UTAH, Rig: GRACE #269

Meas Depth feet	Course Length feet	Incl deg	Azi deg	True Vert. feet	Dp. feet	Vertical Section feet	Coordinates N/S feet	E/W feet	Closure Distance feet	Angle deg	Dog Leg Severity deg/100'
8193	30	87.5	17.4	7368.75		1297.90	1259.74N	312.92E	1298.02	N 13.95E	1.20
8225	32	88.6	16.7	7369.84		1329.81	1290.32N	322.30E	1329.96	N 14.02E	4.07
8257	32	89.6	16.7	7370.34		1361.75	1320.96N	331.49E	1361.92	N 14.09E	3.13
8288	31	89.7	16.0	7370.53		1392.70	1350.71N	340.22E	1392.90	N 14.14E	2.28
8320	32	90.0	15.7	7370.61		1424.66	1381.49N	348.96E	1424.88	N 14.18E	1.33
8345	25	90.3	15.3	7370.55		1449.64	1405.58N	355.64E	1449.87	N 14.20E	2.00
8384	39	90.0	15.3	7370.45		1488.61	1443.20N	365.93E	1488.87	N 14.23E	0.77
8414	30	90.1	15.0	7370.42		1518.60	1472.16N	373.77E	1518.86	N 14.25E	1.06
8446	32	88.2	14.3	7370.90		1550.58	1503.11N	381.86E	1550.86	N 14.25E	6.33
8478	32	88.4	13.9	7371.84		1582.56	1534.13N	389.65E	1582.84	N 14.25E	1.40
8509	31	90.4	14.3	7372.17		1613.55	1564.20N	397.20E	1613.84	N 14.25E	6.58
8540	31	89.2	14.3	7372.28		1644.55	1594.23N	404.86E	1644.84	N 14.25E	3.87
8572	32	88.9	13.9	7372.81		1676.54	1625.27N	412.66E	1676.83	N 14.25E	1.56



DEC 09 1991

DIVISION OF  
OIL GAS & MINING

Company: COLUMBIA GAS, Well: KANE SPRINGS FEDERAL #19-1A, Location: GRAND COUNTY, UTAH, Rig: GRACE #269

Meas Depth feet	Course Length feet	Incl deg	Azi deg	True Vert. feet	Dp. feet	Vertical Section feet	Coordinates N/S feet	E/W feet	Closure Distance feet	Angle deg	Dog Leg Severity deg/100'
86	32	89.5	13.2	7373.25		1708.53	1656.37N	420.15E	1708.83	N 14.23E	2.88
8628	24	90.2	13.6	7373.32		1732.53	1679.72N	425.71E	1732.83	N 14.22E	3.36
8661	33	88.6	13.2	7373.66		1765.53	1711.82N	433.36E	1765.82	N 14.21E	5.00
8692	31	86.0	13.6	7375.12		1796.49	1741.94N	440.54E	1796.78	N 14.19E	8.49
8724	32	84.7	12.9	7377.72		1828.39	1772.98N	447.85E	1828.67	N 14.18E	4.61
8756	32	84.9	12.9	7380.62		1860.26	1804.05N	454.96E	1860.53	N 14.15E	0.62
8787	31	87.3	12.9	7382.73		1891.18	1834.19N	461.87E	1891.45	N 14.13E	7.74
PROJECTED BOTTOM HOLE LOCATION											
8845	58	87.3	12.9	7385.46		1949.12	1890.66N	474.80E	1949.37	N 14.10E	0.00

RECEIVED

DEC 09 1991

DIVISION OF  
OIL GAS & MINING

TELECO OILFIELD SERVICES  
SURVEY CALCULATIONS

\*\*\*\*\*

Company: COLUMBIA GAS  
Well: KANE SPRINGS FED. #19-1A, ST-1  
Location: GRAND COUNTY, UTAH  
Rig: GRACE 269

We hereby certify that the surveys contained herein, are to the best of our knowledge a true and accurate account of the well

RECEIVED

DEC 09 1991



*Thomas M. Claus*  
FIELD SUPERVISOR

DIVISION OF OIL GAS & MINING

TELECO Job # TRM 373.1  
Grid Correction: 0.0°  
Magnetic Declination: 0.0°  
Total grid correction: 0.0°  
Proposed Direction: 13.2°

MINIMUM CURVATURE CALCULATION

\*\*\*\*\*

Meas	Course	True	Vertical	Coordinates	Closure	Dog Leg
Depth	Length Incl Azi	Vert. Dp.	Section	N/S E/W	Distance Angle	Severity
feet	feet deg deg	feet	feet	feet	feet deg	deg/100'

TELECO TIE IN TO EASTMAN CHRISTENSEN GYRO MULTI-SHOT

0	77.7	16.0	7343.54	951.07	927.44N	210.78E	951.09	N 12.80E	0.00
---	------	------	---------	--------	---------	---------	--------	----------	------

TELECO MWD SURVEYS

7880	36	80.2	16.7	7350.44	986.35	961.34N	220.73E	986.35	N 12.93E	7.20
7918	38	77.5	16.0	7357.79	1023.57	997.11N	231.22E	1023.57	N 13.06E	7.33
7948	30	77.8	16.4	7364.20	1052.83	1025.25N	239.40E	1052.83	N 13.14E	1.64
7979	31	79.2	16.0	7370.38	1083.17	1054.42N	247.87E	1083.17	N 13.23E	4.69

Company: COLUMBIA GAS, Well: KANE SPRINGS FED. #19-1A, ST-1, Location: GRAND COUNTY, UTAH, Rig: GRACE 269

Meas Depth feet	Course Length feet	Incl deg	Azi deg	True Vert. feet	Dp. feet	Vertical Section feet	Coordinates N/S feet	E/W feet	Closure Distance feet	Angle deg	Dog Leg Severity deg/100'
8010	31	81.3	16.4	7375.63		1113.67	1083.76N	256.40E	1113.68	N 13.31E	6.89
8043	33	85.0	17.8	7379.57		1146.36	1115.07N	266.03E	1146.37	N 13.42E	11.98
8074	31	88.2	19.2	7381.41		1177.16	1144.41N	275.85E	1177.19	N 13.55E	11.26
8105	31	88.9	19.5	7382.19		1207.97	1173.65N	286.12E	1208.02	N 13.70E	2.46
8136	31	87.9	18.8	7383.06		1238.79	1202.92N	296.28E	1238.87	N 13.84E	3.94
8166	30	85.1	18.5	7384.89		1268.59	1231.29N	305.86E	1268.71	N 13.95E	9.39
8201	35	81.7	18.5	7388.91		1303.21	1264.26N	316.89E	1303.37	N 14.07E	9.71
8232	31	81.2	18.1	7393.52		1333.74	1293.36N	326.51E	1333.94	N 14.17E	2.06
8263	31	82.0	18.5	7398.05		1364.28	1322.48N	336.14E	1364.53	N 14.26E	2.88
294	31	82.4	18.5	7402.25		1394.86	1351.61N	345.89E	1395.16	N 14.35E	1.29
8324	30	83.6	18.1	7405.91		1424.52	1379.88N	355.24E	1424.87	N 14.44E	4.21
8355	31	84.1	18.1	7409.23		1455.23	1409.17N	364.81E	1455.63	N 14.51E	1.61
8388	33	86.3	19.2	7411.99		1487.96	1440.33N	375.33E	1488.43	N 14.61E	7.45
8419	31	87.1	19.2	7413.78		1518.74	1469.55N	385.50E	1519.28	N 14.70E	2.58

RECEIVED

DEC 09 1991

DIVISION OF  
OIL GAS & MINING

Company: COLUMBIA GAS, Well: KANE SPRINGS FED. #19-1A, ST-1, Location: GRAND COUNTY, UTAH, Rig: GRACE 269

Meas Depth feet	Course Length feet	Incl deg	Azi deg	True Vert. feet	Dp. feet	Vertical Section feet	Coordinates N/S feet	E/W feet	Closure Distance feet	Angle deg	Dog Leg Severity deg/100'
8451	32	89.7	19.2	7414.67		1550.54	1499.76N	396.02E	1551.17	N 14.79E	8.13
8467	36	92.8	19.5	7413.89		1586.32	1533.71N	407.95E	1587.04	N 14.90E	8.65
8515	28	93.9	18.8	7412.25		1614.12	1560.12N	417.12E	1614.92	N 14.97E	4.66
8546	31	93.2	18.8	7410.33		1644.91	1589.41N	427.09E	1645.79	N 15.04E	2.26
8578	32	91.8	19.2	7408.94		1676.72	1619.64N	437.50E	1677.68	N 15.12E	4.55
8609	31	90.5	18.8	7408.31		1707.55	1648.94N	447.59E	1708.61	N 15.19E	4.39
8639	30	89.8	18.8	7408.23		1737.40	1677.34N	457.25E	1738.55	N 15.25E	2.33
8670	31	90.3	19.2	7408.21		1768.24	1706.65N	467.35E	1769.48	N 15.31E	2.07
8702	32	90.7	19.5	7407.93		1800.06	1736.84N	477.95E	1801.40	N 15.39E	1.56
8764	31	91.5	19.9	7407.33		1830.85	1766.02N	488.40E	1832.31	N 15.46E	2.89
8796	32	90.9	19.9	7405.52		1893.39	1795.16N	498.94E	1863.20	N 15.53E	1.94
8826	30	89.4	19.9	7405.44		1923.18	1825.23N	509.83E	1895.10	N 15.61E	3.75
							1853.44N	520.04E	1925.02	N 15.67E	5.00

PAGE 3

RECEIVED

DEC 09 1991

DIVISION OF  
OIL GAS & MINING

Company: COLUMBIA GAS, Well: KANE SPRINGS FED. #19-1A, ST-1, Location: GRAND COUNTY, UTAH, Rig: GRACE 269

Meas Depth feet	Course Length feet	Incl deg	Azi deg	True Vert. feet	Dp.	Vertical Section feet	Coordinates N/S feet	E/W feet	Closure Distance feet	Angle deg	Dog Leg Severity deg/100'
8858	32	89.2	19.9	7405.83		1954.96	1883.53N	530.93E	1956.93	N 15.74E	0.62
8890	32	89.0	19.9	7406.34		1986.73	1913.61N	541.82E	1988.84	N 15.81E	0.62
8922	32	88.9	19.9	7406.92		2018.51	1943.70N	552.72E	2020.76	N 15.87E	0.32
8954	32	90.2	18.5	7407.17		2050.33	1973.92N	563.24E	2052.70	N 15.93E	5.97
8985	31	92.1	17.4	7406.55		2081.21	2003.40N	572.79E	2083.67	N 15.96E	7.08
9017	32	94.0	15.3	7404.85		2113.11	2034.06N	581.78E	2115.63	N 15.96E	8.84
9049	32	94.7	13.9	7402.42		2145.01	2064.94N	589.83E	2147.52	N 15.94E	4.88
9080	31	93.3	13.2	7400.26		2175.93	2095.00N	597.07E	2178.42	N 15.91E	5.05
9111	31	93.2	13.6	7398.50		2206.88	2125.11N	604.24E	2209.34	N 15.87E	1.33
9142	31	92.0	13.6	7397.10		2237.85	2155.20N	611.53E	2240.28	N 15.84E	3.87
9174	32	90.0	12.9	7396.54		2269.84	2186.35N	618.86E	2272.25	N 15.80E	6.62
9205	31	88.5	12.9	7396.94		2300.84	2216.56N	625.78E	2303.20	N 15.77E	4.84
9237	32	89.0	13.2	7397.64		2332.83	2247.73N	633.00E	2335.16	N 15.73E	1.82

RECEIVED

DEC 09 1991

DIVISION OF  
OIL GAS & MINING

Company: COLUMBIA GAS, Well: KANE SPRINGS FED. #19-1A, ST-1, Location: GRAND COUNTY, UTAH, Rig: GRACE 269

Meas Depth feet	Course Length feet	Incl deg	Azi deg	True Vert. feet	Dp.	Vertical Section feet	Coordinates N/S feet	E/W feet	Closure Distance feet	Angle deg	Dog Leg Severity deg/100
9268	31	89.6	13.2	7398.02		2363.83	2277.91N	640.08E	2366.13	N 15.70E	1.94
9300	32	89.1	13.6	7398.38		2395.83	2309.03N	647.50E	2398.10	N 15.66E	2.00
9331	31	89.1	13.2	7398.87		2426.82	2339.18N	654.68E	2429.07	N 15.64E	1.29
9362	31	90.6	13.6	7398.95		2457.82	2369.34N	661.86E	2460.05	N 15.61E	5.01
9393	31	89.7	13.9	7398.87		2488.82	2399.45N	669.23E	2491.03	N 15.58E	3.06
9425	32	87.4	13.6	7399.68		2520.81	2430.52N	676.84E	2523.00	N 15.56E	7.25
9457	32	85.6	12.9	7401.63		2552.74	2461.61N	684.16E	2554.92	N 15.53E	6.03
9489	32	86.9	13.2	7403.73		2584.67	2492.72N	691.37E	2586.82	N 15.50E	4.17
9521	32	88.2	13.6	7405.09		2616.64	2523.82N	698.78E	2618.77	N 15.48E	4.25
9552	31	88.8	13.9	7405.91		2647.63	2553.92N	706.14E	2649.74	N 15.46E	2.16
9584	32	86.9	13.9	7407.11		2679.61	2584.96N	713.82E	2681.70	N 15.44E	5.94
9615	31	84.8	13.6	7409.35		2710.52	2614.99N	721.17E	2712.61	N 15.42E	6.84
9647	32	84.9	13.2	7412.22		2742.39	2645.99N	728.56E	2744.46	N 15.39E	1.28

RECEIVED

DEC 09 1991

DIVISION OF  
OIL GAS & MINING

Company: COLUMBIA GAS, Well: KANE SPRINGS FED. #19-1A, ST-1, Location: GRAND COUNTY, UTAH, Rig: GRACE 269

Meas Depth feet	Course Length feet	Incl deg	Azi deg	True Vert. feet	Dp. feet	Vertical Section feet	Coordinates N/S feet	E/W feet	Closure Distance feet	Angle deg	Dog Leg Severity deg/100
9679	32	85.0	13.2	7415.04		2774.27	2677.02N	735.84E	2776.31	N 15.37E	0.32
9742	32	86.7	13.6	7417.35		2806.18	2708.07N	743.23E	2808.21	N 15.35E	5.46
9771	31	88.6	14.3	7418.63		2837.15	2738.13N	750.70E	2839.17	N 15.33E	6.53
9771	29	88.8	14.6	7419.28		2866.14	2766.20N	757.93E	2868.16	N 15.32E	1.24
PROJECTED BOTTOM HOLE LOCATION											
9825	54	88.8	14.6	7420.41		2920.11	2818.45N	771.54E	2922.15	N 15.31E	0.00

  
 DEC 09 1991  
 DIVISION OF  
 OIL GAS & MINING

**SUNDRY NOTICE AND REPORTS ON WELLS**

(Do not use this form for proposals, drill or in depth or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

<p>1. <input type="checkbox"/> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER</p>		<p>6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A</p>	
<p>2. NAME OF OPERATOR Columbia Gas Development Corporation</p>		<p>7. UNIT AGREEMENT NAME Kane Springs Federal Unit</p>	
<p>3. ADDRESS OF OPERATOR P. O. Box 1350 Hou., TX. 77251-1350</p>		<p>8. FARM OR LEASE NAME Kane Springs Federal</p>	
<p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 800' FSL &amp; 1918' FEL of Sec. 19-T26S-R20E</p>		<p>9. WELL NO. #19-1A ST</p>	
<p>11. ELEVATIONS (Show whether of, RT, GL, etc.) Ground 5965</p>		<p>10. FIELD AND POOL, OR WILDCAT Wildcat</p>	
<p>14. PERMIT NO. 43-019-31324 01</p>		<p>11. SEC., T., R., M., OR B.L. AND SURVEY OR AREA Sec. 19-T26S-R20E</p>	
<p>15. COUNTY OR PARISH Grand</p>		<p>13. STATE Utah</p>	

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"/>	FILL 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>First date of production</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.)

The above captioned well brought on line on 12/8/91.  
Verbal notification was made to Eric Jones on 12/9/91.

**RECEIVED**  
DEC 12 1991  
DIVISION OF  
OIL GAS & MINING

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

SIGNED Aline A. Reese - TITLE Regulatory Clerk DATE 12/9/91

(This space for Federal or State use)

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

CONDITIONS OF APPROVAL, IF ANY:

\*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.

TE: 12/18/91

TO: Dianne Nielson - COMPANY/LOCATION: State of Utah

TEL NO. (801) 359-3940

FROM: Aline Reese - COMPANY/LOCATION: Columbia Gas

TEL NO. (713) 841-3482

FOR MESSAGE CENTER USE:

MESSAGE NUMBER: \_\_\_\_\_

DATE: 12/18

TIME SENT: 4:00

Total Number of Pages 2 (including cover sheet)

ANY PROBLEMS CONCERNING THIS TRANSMITTAL, PLEASE CALL: (713) 841-3482

WRITE OR TYPE MESSAGE BELOW

Attention: Ms. Dianne Nielson & Mr. R. J. Firth

Reference: Kane Springs Federal #19-1A ST

The following is a written request to extend the testing period at the above referenced well for a period of thirty days (30) to coincide with the NTL-4A (III-C.) authorization by the BLM.

If you have any questions, please do not hesitate to call.

Thank you,

*Aline A. Reese*

Aline A. Reese

**RECEIVED**

DEC 18 1991

DIVISION OF OIL, GAS & MINING



*dg  
12/26/91  
cc - ~~ing~~ Board file  
~~00610~~  
cc R Fifth*

December 18, 1991

**RECEIVED**  
DEC 23 1991

DIVISION OF  
OIL GAS & MINING

**VIA FAX**

STATE OF UTAH NATURAL RESOURCES OIL, GAS & MINING  
355 W. NORTH TEMPLE, 3 TRIAD CENTER, STE. #350  
SALT LAKE CITY, UT. 84180-1203

Attention: Ms. Dianne Nielson

Reference: **KANE SPRINGS FEDERAL #19-1A ST  
REQUEST FOR R615-3-19(3) EXTENSION**

Dear Ms. Nielson:

Pursuant to the above referenced rule Columbia Gas Development Corporation respectfully requests an additional fifteen (15) days to test the above referenced well. Columbia's request for testing and simultaneously flaring for a total of thirty (30) days will coincide with the BLM's NTL-4A (III c.) authorization.

If you have any questions, or require any additional information, please contact me at 713/871-3482.

Sincerely,

**COLUMBIA GAS DEVELOPMENT CORPORATION**

Aline A. Reese  
Regulatory Clerk

AAR

RECEIVED

JAN 03 1992

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING  
3 TRIAD CENTER, SUITE 350  
SALT LAKE CITY, UT 84180-1203

DIVISION OF  
OIL GAS & MINING

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name & Number 43-019-31319 Kane Springs Federal #19-1A ST

Operator Columbia Gas Development Address P.O.Box 1350, Houston, TX 77251

Contractor Grace Drilling Company Address P.O.Box 51716, Lafayette, LA 70505

Location SW 1/4 SE 1/4 Sec. 19 T. 26S R. 20E County Grand

Water Sands

	<u>Depth</u>		<u>Volume</u>	<u>Quality</u>
	From	To	Flow Rate or Head	Fresh or Salty
1.	500	- 567	TSTM	
2.	2100	- 2185	11 Bbls/Day	Salty - 30,000 PPM
3.				
4.				
5.				

(Continue on reverse side if necessary)

Formation Tops

Remarks

- NOTE: (a) Report on this form as provided for in Rule 806, Oil and Gas Conservation General Rules.
- (b) If a water analysis has been made of the above reported zone, please forward a copy along with this form.

RECEIVED

JAN 15 1992

3160  
(U-065)

DIVISION OF  
OIL GAS & MINING

Moab District  
P.O. Box 970  
Moab, Utah 84532

JAN 13 1992

Ms. Aline A. Reese  
Columbia Gas Development Corporation  
One Riverway  
P. O. Box 1350  
Houston, Texas 77251-1350

Re: Gas Flaring *Sec. 19 T265, R 20E*  
*43-019-31224*  
Kane Springs Federal No. 19-1A ST

Dear Ms. Reese:

We have received your request for six months of unrestricted gas flaring from the above captioned well. As you are aware, we are preparing to conduct an analysis on the economic viability of constructing a gas pipeline. We are holding final review pending submission of further information regarding verification of pipeline costs; however, after a preliminary review of the information that has been provided, it appears that the production, from the two wells currently on line, does not justify the cost of a pipeline.

Additional production data from the area will add to the information necessary to compile a thorough economic analysis. Therefore, we are willing to grant gas flaring approval for a period of 92 production days. This approval is designed to be contemporaneous with the flaring approval for the 27-1 well. Assuming production is continuous, both approvals will expire on April 11, 1992. This will allow you to earn revenue from the well while we are conducting the economic analysis. Provided we receive all of the information necessary to conduct the analysis in a timely manner, we anticipate having the analysis completed prior to the expiration of this approval.

Should you have any questions regarding this approval, please call Eric Jones at (801) 259-6111.

Sincerely yours,

/S/ WILLIAM G. STRINGER

Assistant District Manager  
Mineral Resources

cc:  
U-068, Grand Resource Area  
State of Utah, DOGM ✓



**CONFIDENTIAL**

March 23, 1992

**RECEIVED**

MAR 24 1992

State of Utah  
Division of Oil, Gas & Mining  
355 W. N. Temple  
3 Triad Center, Ste. 350  
Salt Lake City, Utah 84180-1203

DIVISION OF  
OIL GAS & MINING

Attention: Vicky Carney

Reference: **Columbia Gas Development Corporation**  
**Kane Springs Federal 19-1A**  
**Grand County, Utah**

Dear Ms. Carney:

As you requested, enclosed are the logs conducted on the above referenced well. A Drill Stem Test was not performed. Instead of a standard core analysis, a fracture analysis was performed. Please advise if you require a copy of the fracture analysis.

Columbia Gas Development Corporation respectfully requests that the information being submitted be kept confidential for the maximum amount of time allowed.

Should you have any questions or require any additional information, please contact me at 713/871-3482.

Sincerely,

**COLUMBIA GAS DEVELOPMENT CORPORATION**

A handwritten signature in cursive script that reads "Wendy G. DesOrmeaux".

Wendy G. DesOrmeaux  
Regulatory Coordinator

*SEE ATTACHED*

WGD  
Enclosures

ENTITY ACTION FORM - FORM 6

ADDRESS \_\_\_\_\_

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION				COUNTY	SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG			
A	11180	11180	43-019-31310	KANE SPRINGS FED. 27-1	NWSE	27	25S	19E	GRAND	12-28-90	1-18-91
WELL 1 COMMENTS: KANE SPRINGS UNIT/CANE CREEK PA "A"											
	11180	11353	<del>43-019-31324</del>	KANE SPRINGS FED. #19-1A	SWNE	19	26S	20E	GRAND	7-04-91	11-12-91
WELL 2 COMMENTS: KANE SPRINGS UNIT/NON PA											
D	11180	11354	43-019-31325	KANE SPRINGS FED. #28-1	NWSE	28	25S	19E	GRAND	10-27-91	11-4-91
WELL 3 COMMENTS: KANE SPRINGS UNIT/NON PA											
WELL 4 COMMENTS:											
WELL 5 COMMENTS:											

- ACTION CODES (See instructions on back of form)
- A - Establish new entity for new well (single well only)
  - B - Add new well to existing entity (group or unit well)
  - C - Re-assign well from one existing entity to another existing entity
  - D - Re-assign well from one existing entity to a new entity
  - E - Other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected.

L. ROMERO (DOGM)  
Signature  
ADMIN. ANALYST Title 3-24-92 Date  
Phone No. ( ) \_\_\_\_\_

## LOGS RECEIVED

API # 43 019 31324 DATE 3-25-92  
OPERATOR COLUMBIA GAS DEVELOPMENT CORP  
WELL NAME KANE SPRINGS FEDERAL 19-1  
SECTION 19 TOWNSHIP 26S RANGE 20E  
COUNTY GRAND CORED? \_\_\_\_\_ DST? \_\_\_\_\_ STATUS POW

DUAL INDUCTION GUARD LOG	DATE	<u>3-24-92</u>
FULL WAVE ACOUSTIC LOG	DATE	<u>3-24-92</u>
LONG SPACED SONIC LOG	DATE	<u>3-24-92</u>
1:600 MEASURED DEPTH DUAL PROPAGATION RESISTIVITY GAMMA + DIRECTIONAL	DATE	<u>3-24-92</u>
1:600 TRUE VERTICAL DEPTH LOG DUAL PROPAGATION RESISTIVITY GAMMA + DIRECTIONAL	DATE	<u>3-24-92</u>
1:600 TRUE VERTICAL DEPTH LOG BOREHOLE CORRECTED DUAL PROPAGATION RESISTIVITY GAMMA + DIRECTIONAL	DATE	<u>3-24-92</u>
1:600 MEASURED DEPTH BOREHOLE CORRECTED SIDETRACK DUAL PROPAGATION RESISTIVITY GAMMA PLUS DIRECTIONAL	DATE	<u>3-24-92</u>
1:240 MEASURED DEPTH DUAL PROPAGATION RESISTIVITY GAMMA + DIRECTIONAL	DATE	<u>3-24-92</u>
1:240 MEASURED DEPTH BOREHOLE CORRECTED SIDETRACK DUAL PROPAGATION RESISTIVITY GAMMA + DIRECTIONAL	DATE	<u>3-24-92</u>
1:240 TRUE VERTICAL DEPTH LOG DUAL PROPAGATION RESISTIVITY GAMMA + DIRECTIONAL	DATE	<u>3-24-92</u>
1:240 TRUE VERTICAL DEPTH LOG BOREHOLE CORRECTED SIDETRACK DUAL PROPAGATION RESISTIVITY GAMMA + DIRECTIONAL	DATE	<u>3-24-92</u>
_____	DATE	_____

DATE 03/24/92

PRODUCTION INQUIRY SCREEN

MENU: OPTION 00

TWNSHP RANGE SC SPOT MD. API ZONE STATUS

25.0 S 19.0 E 27 NWSE S 43-019-31310 CNCR POW

OPERATOR: N5035 : COLUMBIA GAS DEVELOPMENT

WELL NAME: KANE SPRINGS FED. 27-1

ENTITY: 11180 : KANE SPRINGS UNIT

ACCT	ENTY	DAYS	OIL PROD	GAS PROD	WATER PROD	PERIOD
CUM THRU 12/31/90			0.00	0.00	0.00	
N5035	11180	4	2282.00	735.00	0.00	91-04
N5035	11180	17	12583.00	9427.00	0.00	91-05
N5035	11180	13	8812.00	6658.00	0.00	91-06
N5035	11180	14	6717.00	7244.00	0.00	91-07
N5035	11180	31	16154.00	17247.00	0.00	91-08
N5035	11180	30	14999.00	14612.00	0.00	91-09
N5035	11180	31	13727.00	11870.00	0.00	91-10
N5035	11180	30	10583.00	10775.00	0.00	91-11
N5035	11180	31	10707.00	11074.00	0.00	91-12
YTD			96,564	89,642	0	

OPT: 13 API: 4301931310 ZONE: CNCR PERIOD(YMM): 9100 ENTY: 0 ACCT:

DATE 03/24/92

PRODUCTION INQUIRY SCREEN

MENU: OPTION 00

TWNSHP RANGE SC SPOT MD. API ZONE STATUS  
26.0 S 20.0 E 19 SWNE S 43-019-31324 CNCR POW

OPERATOR: N5035 : COLUMBIA GAS DEVELOPMENT

WELL NAME: KANE SPRINGS FED. #19-1A

ENTITY: 11180 : KANE SPRINGS UNIT

ACCT	ENTY	DAYS	OIL PROD	GAS PROD	WATER PROD	PERIOD
CUM THRU 12/31/90			0.00	0.00	0.00	
N5035	11180	1	1060.00	228.00	0.00	91-11
N5035	11180	31	10862.00	9763.00	0.00	91-12
		YTD	11,922	9,991	0	

OPT: 13 API: 4301931324 ZONE: CNCR PERIOD(Yymm): 9100 ENTY: 0 ACCT:

03/24/92

DISPOSITION INQUIRY SCREEN

MENU: OPTION 00

ENTITY: 11180 : KANE SPRINGS UNIT

OPERATOR: N5035 : COLUMBIA GAS DEVELOPMENT

MNTH	ACCT	PRODUCT	PRODUCED	TRANSPORT	USED ON LSE	FLARED	OTHER
9100		GS	NO DATA FOUND				
9100		OL	NO DATA FOUND				
9100		NL	NO DATA FOUND				
9101		GS	NO DATA FOUND				
9101		OL	NO DATA FOUND				
9101		NL	NO DATA FOUND				
9102		GS	NO DATA FOUND				
9102		OL	NO DATA FOUND				
9102		NL	NO DATA FOUND				
9103		GS	NO DATA FOUND				
9103		OL	NO DATA FOUND				
9103		NL	NO DATA FOUND				
9104	N5035	GS	735	0	0	735	0
	N5035	OL	2,282	2,282	0	0	0
	N5035	NL	0	0	0	0	0
9105	N5035	GS	9,427	0	113	9,314	0
	N5035	OL	12,583	11,171	0	0	0
	N5035	NL	0	0	0	0	0

OPT: 18 API: 4301931310 ZONE: CNCR PERIOD(YYMM): 9106 ENTY: 11180 ACCT:

03/24/92

DISPOSITION INQUIRY SCREEN

MENU: OPTION 00

ENTITY: 11180 : KANE SPRINGS UNIT

OPERATOR: N5035 : COLUMBIA GAS DEVELOPMENT

MNTH	ACCT	PRODUCT	PRODUCED	TRANSPORT USED	ON LSE	FLARED	OTHER
9106	N5035	GS	6,658	0	79	6,579	0
	N5035	OL	8,812	10,199	0	0	0
	N5035	NL	0	0	0	0	0
9107	N5035	GS	7,244	0	200	7,044	0
	N5035	OL	6,717	5,741	0	0	0
	N5035	NL	0	0	0	0	0
9108	N5035	GS	17,247	0	455	16,792	0
	N5035	OL	16,154	16,225	0	0	0
	N5035	NL	0	0	0	0	0
9109	N5035	GS	14,612	0	435	14,177	0
	N5035	OL	14,999	15,189	0	0	0
	N5035	NL	0	0	0	0	0
9110	N5035	GS	11,870	0	434	11,436	0
	N5035	OL	13,727	13,808	0	0	0
	N5035	NL	0	0	0	0	0
9111	N5035	GS	11,003	0	395	10,608	0
	N5035	OL	11,643	11,602	0	0	0
	N5035	NL	0	0	0	0	0

OPT: 18 API: 4301931310 ZONE: CNCR PERIOD(YMM): 9112 ENTY: 11180 ACCT:

03/24/92

DISPOSITION INQUIRY SCREEN

MENU: OPTION 00

ENTITY: 11180 : KANE SPRINGS UNIT  
OPERATOR: N5035 : COLUMBIA GAS DEVELOPMENT

MNTH	ACCT	PRODUCT	PRODUCED	TRANSPORT	USED	ON LSE	FLARED	OTHER
9112	N5035	GS	20,837	0		814	20,023	0
	N5035	OL	21,569	21,036		0	0	0
	N5035	NL	0	0		0	0	0

9201 GS NO DATA FOUND  
 9201 OL NO DATA FOUND  
 9201 NL NO DATA FOUND  
 9202 GS NO DATA FOUND  
 9202 OL NO DATA FOUND  
 9202 NL NO DATA FOUND  
 9203 GS NO DATA FOUND  
 9203 OL NO DATA FOUND  
 9203 NL NO DATA FOUND  
 9204 GS NO DATA FOUND  
 9204 OL NO DATA FOUND  
 9204 NL NO DATA FOUND  
 9205 GS NO DATA FOUND  
 9205 OL NO DATA FOUND  
 9205 NL NO DATA FOUND

OPT: 18 API: 4301931310 ZONE: CNCR PERIOD(YMM): 9206 ENTY: 11180 ACCT:



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Norman H. Bangarter  
Governor  
Dee C. Hansen  
Executive Director  
Dianne R. Nielson, Ph.D.  
Division Director

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340

March 25, 1992

Ms. Wendy G. DesOrmeaux  
Regulatory Coordinator  
Columbia Gas Development Corporation  
One Riverway  
P. O. Box 1350  
Houston, Texas 77251-1350

Dear Ms. DesOrmeaux:

Re: Kane Springs Fed. 19-1A, Sec. 19, T. 26S, R. 20E,  
API No. 43-019-31324, Grand County, Utah

Thank you for submitting the logs for the above referenced well. You mentioned a standard core analysis was not performed, but a fracture analysis was.

Would you please send a copy of the fracture analysis for our records? All information will be held in a CONFIDENTIAL status for the maximum amount of time allowed.

I appreciate your assistance in this matter.

Sincerely,

A handwritten signature in cursive script that reads "Vicky Carney".

Vicky Carney  
Production Group Supervisor

cc: R. J. Firth  
D. T. Staley  
L. D. Clement  
Well File

Division of Oil, Gas and Mining  
**PHONE CONVERSATION DOCUMENTATION FORM**

Route original/copy to:

Well File \_\_\_\_\_  Suspense \_\_\_\_\_  Other \_\_\_\_\_  
(Return Date) \_\_\_\_\_  
(Location) Sec \_\_\_\_\_ Twp \_\_\_\_\_ Rng \_\_\_\_\_ (To - Initials) \_\_\_\_\_  
(API No.) \_\_\_\_\_

1. Date of Phone Call: 4-6-92 Time: \_\_\_\_\_

2. DOGM Employee (name) Vicky *DJC* (Initiated Call )  
Talked to:  
Name Richard Spell  
Wendy DesOrmeaux (Initiated Call ) - Phone No. (713) 871-3400  
of (Company/Organization) Columbia Gas Development Corporation

3. Topic of Conversation: KANE SPRINGS 19-1A  
API # 43-019-31324  
T26S R20E Sec 19

4. Highlights of Conversation: Columbia Gas has expressed great concern over my request for a FRACTURE ANALYSIS they ran instead of a Core Analysis . They called several times to verify CONFIDENTIALITY of this analysis. They stated that this type of analysis is very interpretive and they would have to request "LIFELONG CONFIDENTIALITY" for the analysis. They also stated they did not send this type of information to other states, nor is it required in our Rules and Regulations. Taking all of this into consideration and considering that Columbia Gas has always been willing to submit everything that we request, I told them not to send the Fracture Analysis to us and I would make a note to this affect and would not request this type of information from them again.

This was a conference call where the officers were all expressing great reluctance to allow the interpretation of the fracture analysis out of the office.

cc: RJS  
DTS  
FILE  
LOGSILE



**VIA AIRBORNE EXPRESS**

JULY 7, 1992

State of Utah  
Attn: Frank Matthews  
355 W. N. Temple  
3 Triad Center, Ste. 350  
Salt Lake City, UT 84180-1203

**Reference: Columbia Gas Development Corporation  
Kane Springs #19-1A  
Sec.  
Grand County, Utah**

Dear Mr. Matthews:

Attached is a Sundry Notice detailing a small spill which occurred near the wellhead of the above referenced well.

Should you have any questions or require any additional information, please contact me at 713/871-3482.

Sincerely,

Wendy G. DesOrmeaux  
Regulatory Coordinator

WGD  
Attachment

**RECEIVED**

JUL 08 1992

DIVISION OF  
OIL GAS & MINING

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

6. Lease Designation and Serial Number  
UTU-53626

7. Indian Allottee or Tribe Name

N/A

8. Unit or Communitization Agreement  
Kane Springs Federal  
Unit

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.  
Use APPLICATION FOR PERMIT— for such proposals

1. Type of Well  
 Oil Well     Gas Well     Other (specify)

9. Well Name and Number  
Kane Springs Fed. 19-1A5

2. Name of Operator  
Columbia Gas Development Corporation

10. API Well Number  
43-019-31324 01

3. Address of Operator  
P.O. Box 1350, Houston, TX 77251-1350

4. Telephone Number  
713/871-3400

11. Field and Pool, or Wildcat  
Wildcat

5. Location of Well  
Footage : 800' FSL & 1918' FEL    County : Grand  
QQ, Sec. T., R., M. : Sec. 19-T26S-R20E T255    State : UTAH

12. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

NOTICE OF INTENT  
(Submit in Duplicate)

- Abandonment
- Casing Repair
- Change of Plans
- Conversion to Injection
- Fracture Treat
- Multiple Completion
- Other \_\_\_\_\_
- New Construction
- Pull or Alter Casing
- Recompletion
- Shoot or Acidize
- Vent or Flare
- Water Shut-Off

Approximate Date Work Will Start \_\_\_\_\_

SUBSEQUENT REPORT  
(Submit Original Form Only)

- Abandonment \*
- Casing Repair
- Change of Plans
- Conversion to Injection
- Fracture Treat
- Other Spill Report
- New Construction
- Pull or Alter Casing
- Shoot or Acidize
- Vent or Flare
- Water Shut-Off

Date of Work Completion \_\_\_\_\_

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.

\* Must be accompanied by a cement verification report.

13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

DATE OF SPILL: July 5, 1992

Amount Spilled: 14 bbls oil

Location of Spill: 5 foot area surrounding wellhead - contained in firewall.

Cause of Spill: Auto paraffin cutter lubricator packing failed.

Remedial Action: Had roustabout crew clean up and haul off.

Repaired packing.

**RECEIVED**

JUL 08 1992

DIVISION OF  
OIL GAS & MINING

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

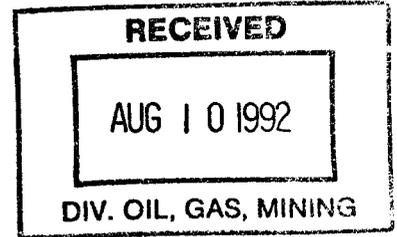
Wendy G. DesOrmeaux

Name & Signature

*Wendy G. DesOrmeaux*

Title Regulatory Coord. Date 7/7/92

(State Use Only)



August 6, 1992

Bureau of Land Management  
Attn: Dale Manchester  
82 E. Dogwood  
Moab, UT 84532

State of Utah  
Attn: R. J. Firth  
355 W. N. Temple  
3 Triad Center, Ste. 350  
Salt Lake City, UT 84180-1203

**Reference:** Columbia Gas Development Corporation  
Kane Springs #19-1A  
Sec. 19-T258-R20E T265  
Grand County, Utah

Gentlemen:

Please find enclosed a revised Site Security Diagram for the above referenced well.

Should you have any questions or require additional information, please contact me at 713/871-3400.

Very truly yours,

COLUMBIA GAS DEVELOPMENT CORPORATION

Wendy G. DesOrmeaux  
Regulatory Coordinator

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

5. Lease Designation and Serial No.  
U-53626

6. If Indian, Allottee or Tribe Name  
N/A

7. If Unit or CA, Agreement Designation  
Kane Springs Federal Unit

8. Well Name and No.  
Kane Springs

9. API Well No.  
43-019-31324

10. Field and Pool, or Exploratory Area  
Wildcat

11. County or Parish, State  
Grand, Utah

**SUBMIT IN TRIPLICATE**

1. Type of Well  
 Oil Well     Gas Well     Other

2. Name of Operator  
Columbia Gas Development Corporation

3. Address and Telephone No.  
P. O. Box 1350, Houston, TX 77251-1350 713/871-3482

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
800' FSL & 1918' FEL of Sec. 19-T26S-R20E

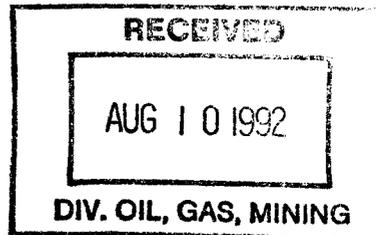
12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other <u>Revised diagram</u>
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

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

13. 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.)\*

Attached please find a revised Site Security Diagram for the above-referenced well.



14. I hereby certify that the foregoing is true and correct  
Signed Wendy G. DeLimesey Title Regulatory Coordinator Date 8/6/92

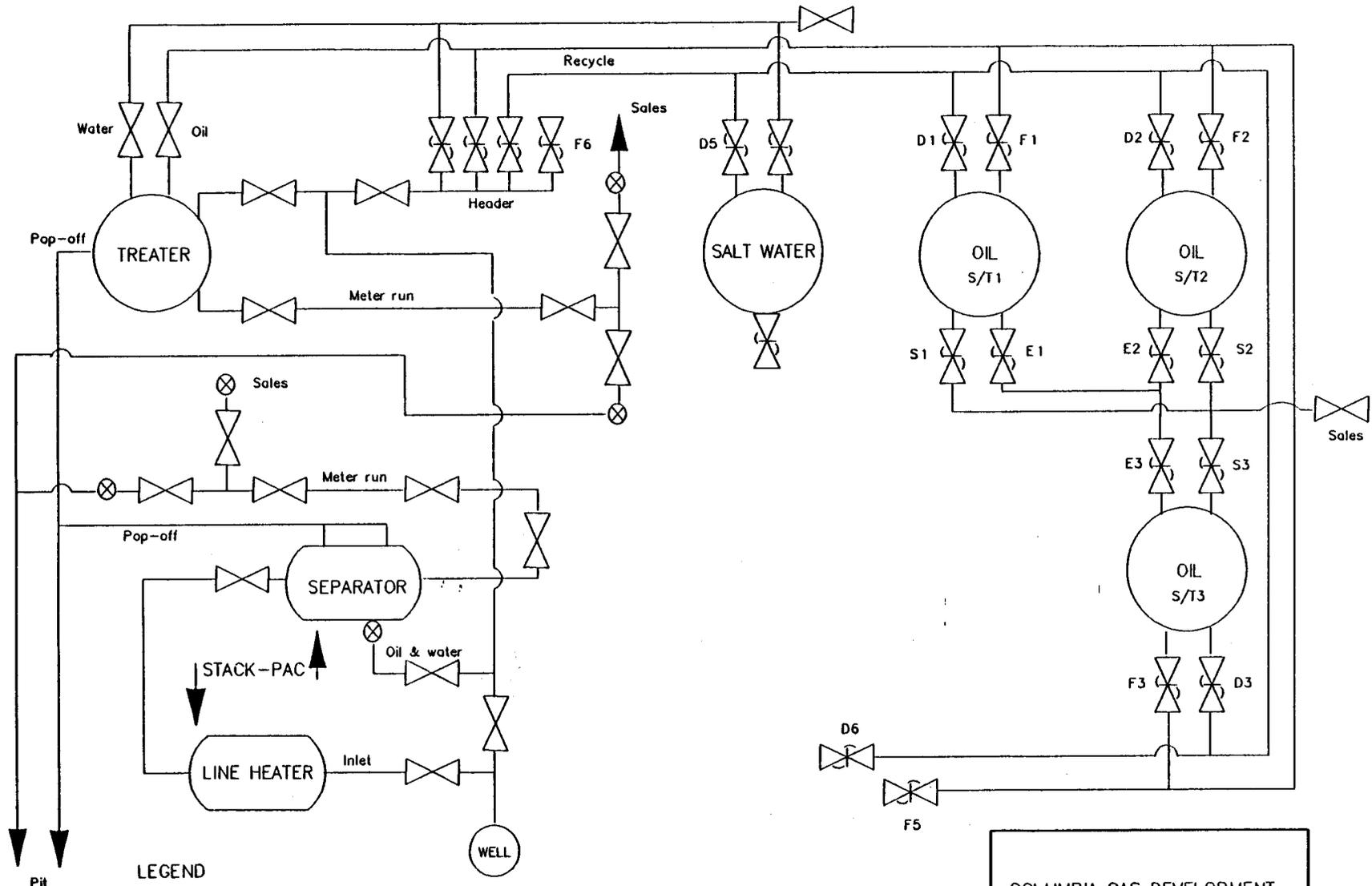
(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
Conditions of approval, if any:

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.

\*See Instruction on Reverse Side

# SITE SECURITY DIAGRAM



- LEGEND**
-  Sealable valve
  -  Sealed valve
  -  Back pressure valve

COLUMBIA GAS DEVELOPMENT  
KANE SPRINGS FEDERAL 19-1  
GRAND COUNTY, UTAH



**VIA AIRBORNE EXPRESS**

November 4, 1992

State of Utah  
355 W. N. Temple  
3 Triad Center, Ste. 350  
Salt Lake City, Utah 84180-1203

Attention: Mr. Frank Matthews

Reference: Corrected Spill Report  
Kane Springs Fed. 19-1AST  
Sec. 19-T26S-R20E  
Grand County, Utah

Dear Mr. Matthews:

Please find attached a corrected Sundry Notice to replace the one I submitted on July 7, 1992 reporting a spill at the above referenced location. I incorrectly interpreted our lease operator's handwriting and reported the spill amount as 14 bbls when it should have been 1/4 bbl.

Should you have any questions or require any additional information, please contact me at 713/871-3482.

Sincerely,

Wendy G. DesOrmeaux  
Regulatory Coordinator

WGD  
Attachment

**RECEIVED**

NOV 05 1992

DIVISION OF  
OIL GAS & MINING

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

6. Lease Designation and Serial Number  
UTU-53626

7. Indian Allottee or Tribe Name  
N/A

8. Unit or Communitization Agreement  
Kane Springs Federal Unit

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.  
Use APPLICATION FOR PERMIT— for such proposals

1. Type of Well  
 Oil Well     Gas Well     Other (specify)

2. Name of Operator  
Columbia Gas Development Corporation

3. Address of Operator  
P.O. Box 1350, Houston, TX 77251-1350

4. Telephone Number  
713/871-3400

5. Location of Well  
Footage : 800' FSL & 1918' FEL  
County : Grand  
QQ, Sec. T., R., M. : Sec. 19-T26S-R20E  
State : UTAH

9. Well Name and Number  
Kane Springs Fed. 19-1AS

10. API Well Number  
43-019-31324 01

11. Field and Pool, or Wildcat  
Wildcat

12. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

**NOTICE OF INTENT**  
(Submit in Duplicate)

Abandonment     New Construction  
 Casing Repair     Pull or Alter Casing  
 Change of Plans     Recompletion  
 Conversion to Injection     Shoot or Acidize  
 Fracture Treat     Vent or Flare  
 Multiple Completion     Water Shut-Off  
 Other \_\_\_\_\_

Approximate Date Work Will Start \_\_\_\_\_

**SUBSEQUENT REPORT**  
(Submit Original Form Only)

Abandonment \*     New Construction  
 Casing Repair     Pull or Alter Casing  
 Change of Plans     Shoot or Acidize  
 Conversion to Injection     Vent or Flare  
 Fracture Treat     Water Shut-Off  
 Other Corrected Spill Report

Date of Work Completion \_\_\_\_\_

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.  
\* Must be accompanied by a cement verification report.

13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

DATE OF SPILL: July 5, 1992  
Amount Spilled: 1/4 bbls oil  
Location of Spill: 5 foot area surrounding wellhead- contained in firewall.  
Cause of Spill: Auto paraffin cutter lubricator packing failed.

Remedial Action: Roustabout crew cleaned up and hauled off. Repaired packing.

**RECEIVED**  
NOV 05 1992  
DIVISION OF  
OIL GAS & MINING

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

Name & Signature Wendy G. DesOrmeaux *Wendy G. DesOrmeaux* Title Regulatory Coord. Date 11/4/92

(State Use Only)



November 6, 1992

**RECEIVED**  
NOV 07 1992

State of Utah  
Attn: Mr. Roland Hanson  
355 W. North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

**DIVISION OF  
OIL, GAS & MINING**

Re: Columbia Gas Development Corporation  
Kane Springs Federal #19-1A  
Grand County, Utah  
Entity No. 11353

Dear Mr. Hanson:

Enclosed please find a copy of the original and the corrected Sundry Notices pertaining to the oil spill in July on the aboved referenced lease.

It was originally reported as a 14 barrel spill when it should have been reported as a 1/4 barrel spill.

I will leave my production and disposition reports as they are unless I hear from you. If you have any questions, please call me.

Sincerely,

COLUMBIA GAS DEVELOPMENT CORP.

Carol A. Pruitt

Enclosures

/cp



STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

6. Lease Designation and Serial Number  
UTU-53626

7. Indian Allottee or Tribe Name

N/A

8. Unit or Communitization Agreement  
Kane Springs Federal  
Unit

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.  
Use APPLICATION FOR PERMIT for such proposals.

1. Type of Well  
 Oil Well     Gas Well     Other (specify)

9. Well Name and Number  
Kane Springs Fed. <sup>19-1A</sup> ~~18~~

2. Name of Operator  
Columbia Gas Development Corporation

10. API Well Number  
43-019-31324 01

3. Address of Operator  
P.O. Box 1350, Houston, TX 77251-1350

4. Telephone Number  
713/871-3400

11. Field and Pool, or Wildcat  
Wildcat

5. Location of Well  
Footage : 800' FSL & 1918' FEL  
OO. Sec. T., R., M. : Sec. 19-T26S-R20E

County : Grand  
State : UTAH

12. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

NOTICE OF INTENT  
(Submit in Duplicate)

- Abandonment
- Casing Repair
- Change of Plans
- Conversion to Injection
- Fracture Treat
- Multiple Completion
- Other
- New Construction
- Pull or Alter Casing
- Recompletion
- Shoot or Acidize
- Vent or Flare
- Water Shut-Off

SUBSEQUENT REPORT  
(Submit Original Form Only)

- Abandonment \*
- Casing Repair
- Change of Plans
- Conversion to Injection
- Fracture Treat
- Other Spill Report
- New Construction
- Pull or Alter Casing
- Shoot or Acidize
- Vent or Flare
- Water Shut-Off

Date of Work Completion \_\_\_\_\_

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.

\* Must be accompanied by a cement verification report.

Approximate Date Work Will Start \_\_\_\_\_

13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

DATE OF SPILL: July 5, 1992

Amount Spilled: 14 bbls oil

Location of Spill: 5 foot area surrounding wellhead - contained in firewall

Cause of Spill: Auto paraffin cutter lubricator packing failed.

Remedial Action: Had roustabout crew clean up and haul off.

Repaired packing.

**RECEIVED**

NOV 09 1992

DIVISION OF  
OIL, GAS & MINING

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

Name & Signature Wendy G. Desormeaux

Title Regulatory Coord. Date 7/7/92

(State Use Only)



# United States Department of the Interior

BUREAU OF LAND MANAGEMENT



IN REPLY REFER TO:

Moab District  
P. O. Box 970  
Moab, Utah 84532

**RECEIVED**

APR 26 1993

DIVISION OF  
OIL GAS & MINING

APR 26 1993

3160  
(U-67755A)  
(U-65971)  
(U-53626)  
(U-47858)  
(UT-065)

Mr. Richard Spell  
Columbia Gas Development Corporation  
P. O. Box 1350  
Houston, Texas 77251-1350

Re: Authorization to Flare Gas Under the Authority of NTL-4A  
Kane Springs Federal Wells 27-1, 19-1A ST and 10-1

Dear Mr. Spell:

*43-019-31324  
Sec 19 T265, R20E*

This letter is in response to your April 1, 1993, request for continuation of approval to flare gas from the above captioned wells pursuant to NTL-4A. We have incorporated recent changes (e.g., costs and production of the 10-1 well and increase in market gas price) into the economic analysis we did in January of 1992. These changes do not appreciably alter the economic scenario. Our analysis concurs that to capture the gas from these wells remains a negative economic pursuit.

Therefore, we hereby grant a six month extension, through October 11, 1993, to the NTL-4A approval for the subject wells with the following conditions:

1. Should economic conditions substantially change favoring marketing of the gas during the term of this approval, the BLM will revise its position authorizing gas flaring. Such conditions affecting economics could include gas price increase, reduction in costs to drill wells, revising the gas pipeline route, or any other circumstance that would act to lessen gas marketing costs or reduce operating costs.

If Columbia perceives that a gas sales contract will not be negotiated and a pipeline will not be constructed by October 11, 1993, a new application for gas flaring shall be submitted prior to the expiration of this approval.

2. As additional wells are brought on line, they will be automatically approved to flare during the initial thirty day test period. However, Columbia will be required to submit a request to continue extended flaring in accordance with NTL-4A.

3. All gas produced shall be measured in accordance with Onshore Oil and Gas Order No. 5.

4. All gas not being used on the lease shall be flared in a pit designed to reduce the flare from sight of the general public.
5. BLM shall be kept apprised of negotiations regarding the gas pipeline.
6. BLM shall be kept apprised of feasibility studies to reinject the gas or re-route the proposed pipeline that could significantly change the economics favoring the conservation of the natural gas.

If you have any questions regarding these conditions of approval, please contact Eric Jones at (801) 259-6111.

Sincerely,

**/S/ WILLIAM C. STRINGER**

Assistant District Manager  
Mineral Resources

cc: UT-068, Grand Resource Area  
UT-922, Utah State Office  
Mr. R. J. Firth ✓  
State of Utah  
Division of Oil, Gas and Mining  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180



April 29, 1993

Bureau of Land Management  
Attn: Eric Jones  
82 E. Dogwood  
Moab, UT 84532

State of Utah  
Attn: R. J. Firth  
355 W. N. Temple  
3 Triad Center, Ste. 350  
Salt Lake City, UT 84180-1203

**Reference: Columbia Gas Development Corporation  
Kane Springs Federal #19-1A ST  
Kane Springs Federal #10-1  
Grand County, Utah**

Gentlemen:

Pursuant to NTL- 2B, please find attached Sundry Notices detailing produced water disposal information on the Kane Springs Federal #19-1A ST and proposed water disposal plans for the Kane Springs Federal #10-1.

Should you have any questions or require additional information, please contact me at 713/871-3400.

Very truly yours,

COLUMBIA GAS DEVELOPMENT CORPORATION

A handwritten signature in cursive script that reads "Wendy G. DesOrmeaux".

Wendy G. DesOrmeaux  
Regulatory Coordinator

**RECEIVED**

MAY 03 1993

DIVISION OF  
OIL GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

5. Lease Designation and Serial No.  
UTU-53626

6. If Indian, Allottee or Tribe Name  
N/A

7. If Unit or CA, Agreement Designation

**SUBMIT IN TRIPLICATE**

Kane Springs Federal Unit

1. Type of Well  
 Oil Well  Gas Well  Other

8. Well Name and No.

2. Name of Operator  
Columbia Gas Development Corporation

Kane Springs Fed.#19-1A S

3. Address and Telephone No.  
P. U. Box 1350, Houston, TX 77251-1350 (713) 871-3482

9. API Well No.  
43-019-31324 01

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
800' FSL & 1918' FEL of Sec.19-T26S-R20E

10. Field and Pool, or Exploratory Area  
Wildcat

11. County or Parish, State  
Grand County, Utah

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Other _____	<input checked="" type="checkbox"/> Dispose Water NTL 2B

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

13. 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.)\*

Disposal of produced water from the above-referenced well is maintained in a welded steel tank (400 bbl) located in a bermed area on location. Upon storing 80 bbls of produced water the water is hauled to West Hazmat's disposal well, a state approved facility, located in Section 20 - T30S - R25E, San Juan County, Utah.

Water production for the well is measured at approximately 6 bbls of water per day.

See attached Water Analysis.

**RECEIVED**

MAY 03 1993

DIVISION OF  
OIL GAS & MINING

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

Signed Wendy A. DeChamery Title Regulatory Coordinator Date 4/29/93

(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
Conditions of approval, if any:



**UNICHEM**  
INTERNATIONAL  
INCORPORATED

P.O. Box 217  
Roosevelt, Utah 84066

Office (801) 722-5066  
Fax (801) 722-5727

# WATER ANALYSIS REPORT

COMPANY COLUMBIA GAS DEVELOPMENT ADDRESS \_\_\_\_\_ DATE: 4-14-93  
SOURCE Fed. 19-1A Kane Springs, Grand County Utah ANALYSIS NO. \_\_\_\_\_  
DATE SAMPLED \_\_\_\_\_

Analyte	Mg/l (ppm)	Meg/l
1. PH	4.9	
2. H <sub>2</sub> S (Qualitative)	0	
3. Specific Gravity	1.266	
4. Dissolved Solids	330,017	
5. Suspended Solids		
6. Anaerobic Bacterial Count	CI	C/MI
7. Methyl Orange Alkalinity (CaCO <sub>3</sub> )		
8. Bicarbonate (HCO <sub>3</sub> )	HCO <sub>3</sub> 200	+61 3 HCO <sub>3</sub>
9. Chlorides (Cl)	Cl 208,860	+35.5 5883 Cl
10. Sulfates (SO <sub>4</sub> )	SO <sub>4</sub> 0	+48 0 SO <sub>4</sub>
1. Calcium (Ca)	Ca 84,000	+20 4200 Ca
2. Magnesium (Mg)	Mg 1,944	+12.2 159 Mg
3. Total Hardness (CaCO <sub>3</sub> )	218,000	
4. Total Iron (Fe)	48.	
5. Barium (Qualitative)		
6. Phosphate Residuals		

\*Milli equivalents per liter

## PROBABLE MINERAL COMPOSITION

4200	Ca	←	HCO <sub>3</sub>	3	Compound	Equiv. Wt.	X	Mg/l	=	Mg/l
159	Mg	→	SO <sub>4</sub>	0	Ca (HCO <sub>3</sub> ) <sub>2</sub>	81.04		2		243
1527	Na	→	Cl	5883	Ca SO <sub>4</sub>	68.07		4197		232,934
					Ca Cl <sub>2</sub>	95.50				
					Mg (HCO <sub>3</sub> ) <sub>2</sub>	73.17				
					Mg SO <sub>4</sub>	60.19				
					Mg Cl <sub>2</sub>	47.82		159		7,572
					Na HCO <sub>3</sub>	84.00				
					Na <sub>2</sub> SO <sub>4</sub>	71.03				
					Na Cl	58.44		1527		89,268

<b>Saturation Values</b>	<b>Distilled Water 20°C</b>
Ca CO <sub>3</sub>	13 Mg/l
Ca SO <sub>4</sub> · 2H <sub>2</sub> O	2,090 Mg/l
Mg CO <sub>3</sub>	103 Mg/l

REMARKS \_\_\_\_\_

**COLUMBIA GAS**  
Development



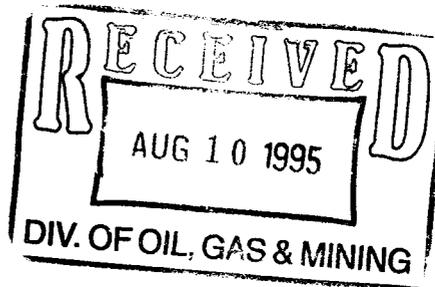
August 7, 1995

VIA AIRBORNE EXPRESS

Bureau of Land Management  
82 E. Dogwood  
Moab, Utah 84532

Attention: Eric Jones

Reference: NTL-4A Flaring Extension  
Columbia Gas Development Corporation  
Kane Springs Federal Unit  
Wells No. 25-19-34-1, 27-1, 19-1A ST, 16-1 and  
10-1  
Grand County, Utah



42-019-31324  
Sec 19, T26S, R20E

Dear Mr. Jones:

Columbia Gas Development Corporation (CGDC) respectfully requests an additional one year extension under NTL-4A to flare or vent associated gas produced from the above-referenced wells.

Currently, the five wells on federal land within the Unit are producing a total of approximately 293 BOPD and 202 MCF of gas per day. A graph displaying the cumulative production curves through July 1, 1995, for the five wells is attached. We anticipate that the production from the wells will continue to decline. CGDC will continue to periodically perform well work which will result in temporary increases in the oil and gas production rates, as evidenced by the graph.

During the period of the one year extension, CGDC does not anticipate drilling any additional wells or attempting any redrilling or recompletion of the non-producing wells within the Unit.

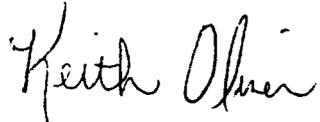
Since it is the goal of the BLM, the Utah Board of Oil, Gas, and Mining, and CGDC to have both the BLM's and State of Utah's flaring authorizations be concurrent and essentially identical, we request that you communicate your decision to Mr. R. J. Firth of the Utah Division of Oil, Gas and Mining prior to September 1, 1995, so that the staff may advise the Board of your decision at their September meeting.

Should you have any questions, or require additional information, please contact either myself, at 713/871-3338, Wendy DesOrmeaux at 713/871-3482.

Columbia Gas Development Corporation, One Riverway, P.O. Box 1350  
Houston, Texas 77251-1350, Tel. (713) 871-3400

Very truly yours,

COLUMBIA GAS DEVELOPMENT CORPORATION

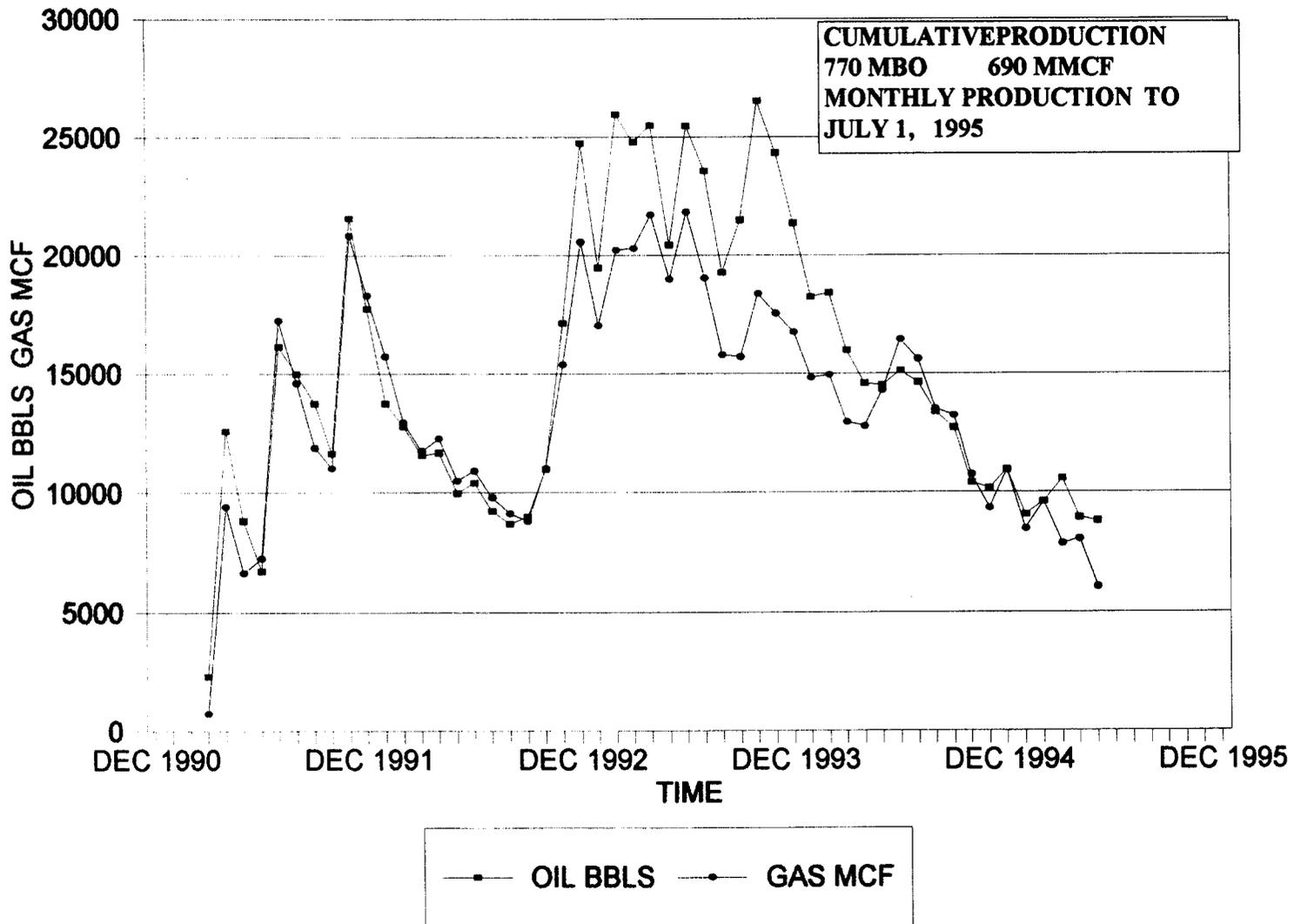
A handwritten signature in cursive script that reads "Keith Oliver".

Keith Oliver  
Regulatory Clerk

KTO  
Attachments

cc: R. J. Firth; Division of Oil, Gas & Mining  
Bob Pruitt; Pruitt, Gushee & Bachtell

# KANE SPRINGS TOTAL PRODUCTION GRAND COUNTY, UTAH



STATE OF DELAWARE  
SECRETARY OF STATE  
DIVISION OF CORPORATIONS  
FILED 01:15 PM 04/30/1996  
960124621 - 735923

CERTIFICATE OF AMENDMENT  
OF  
CERTIFICATE OF INCORPORATION  
OF  
COLUMBIA GAS DEVELOPMENT CORPORATION

Columbia Gas Development Corporation (the "Corporation"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware,

DOES HEREBY CERTIFY:

FIRST: That the Certificate of Incorporation of Columbia Gas Development Corporation is amended by amending Article First thereof to read in its entirety as follows:

"FIRST: The name of the corporation (hereinafter called "the Corporation") is Aviana Energy Corporation."

SECOND: That said amendment was duly adopted in accordance with the provisions of §242 of the General Corporation Law of the State of Delaware and has been consented to in writing by the sole stockholder in accordance with §228 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF, said Columbia Gas Development Corporation has caused this Certificate to be signed by Larry J. Bainter, its Treasurer this 29th day of April 1996.

*Vice-President*  
*[Signature]*

COLUMBIA GAS DEVELOPMENT CORPORATION

*[Signature]*  
By: \_\_\_\_\_  
Name: Larry J. Bainter

## MONTHLY OIL AND GAS PRODUCTION REPORT

OPERATOR NAME AND ADDRESS:

SONJA ROLFES  
 COLUMBIA GAS DEVELOPMENT  
 PO BOX 1350  
 HOUSTON TX 77251

UTAH ACCOUNT NUMBER: N5035

REPORT PERIOD (MONTH/YEAR): 6 / 96

AMENDED REPORT  (Highlight Changes)

Well Name			Producing Zone	Well Status	Days Oper	Production Volumes		
API Number	Entity	Location				OIL(BBL)	GAS(MCF)	WATER(BBL)
✓	GOVT EVELYN CHAMBERS #1							
4303730572	07100 31S 24E 6		ISMV			426467		
✓	GOVT EVELYN CHAMBERS #2							
4303730612	07100 31S 24E 5		ISMV			426467		
✓	FEDERAL 33-8-N							
4304731787	10760 06S 21E 33		GRRV			437116		
✓	COWDEN 31-3-C							
4304731768	10761 06S 21E 31		GRRV			431736		
✓	ALTA #5-1-B							
4304731776	10771 07S 21E 5		GRRV			FEE	(Bond OK)	
✓	FEDERAL 33-6-F							
4304731769	10779 06S 21E 33		SE NW GRRV			428212		
✓	FEDERAL 33-3-J							
4304731804	10787 06S 21E 33		NW SE GRRV			428212		
✓	FEDERAL 33-7-L							
4304731844	10915 06S 21E 33		NW SW GRRV			450687	C.A. KTK60783	
✓	ALTA 5-2-C							
4304731843	10916 07S 21E 5		GRRV			FEE	(Bond OK)	
✓	KANE SPRINGS FEDERAL 27-1							
4301931310	11180 25S 19E 27		CNCR			465971	Kane Springs Unit	
✓	KANE SPRINGS FEDERAL 19-1A							
4301931324	11353 26S 20E 19		CNCR			4TK53626	Kane Springs Unit	
✓	KANE SPRINGS FEDERAL 28-1							
4301931325	11354 25S 19E 28		CNCR			450678	20% Kane Springs Unit / Non PA	
✓	KANE SPRINGS FEDERAL 10-1							
4301931331	11414 25S 18E 10		CNCR			4TK47858	Kane Springs Unit	
<b>TOTALS</b>								

COMMENTS: \_\_\_\_\_

I hereby certify that this report is true and complete to the best of my knowledge.

Date: \_\_\_\_\_

Name and Signature: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

STATE OF TEXAS           §  
  §  
COUNTY OF HARRIS       §

STATEMENT OF AVIARA ENERGY CORPORATION

The undersigned, Robert C. Sylvester, Assistant Secretary of Aviara Energy Corporation, being first duly sworn on his oath, states that the following is correct to the best of his knowledge.

1. State of Incorporation. Aviara Energy Corporation is incorporated in the State of Delaware.
2. Authorization to hold oil and gas leases on OCS and other federal lands. Aviara Energy Corporation is authorized to hold oil and gas leases on the Outer Continental Shelf, on other federal lands, including onshore lands, and on tribal lands administered by the Bureau of Indian Affairs or other agency.

Dated this 5<sup>th</sup> day of July, 1996.

AVIARA ENERGY CORPORATION

By Robert C. Sylvester  
Robert C. Sylvester  
Assistant Secretary

CORPORATE SEAL

SUBSCRIBED AND SWORN TO before me this 5<sup>th</sup> day of July, 1996.

Carolyn Oliver  
Notary Public, State of Texas



CAROLYN OLIVER  
NOTARY PUBLIC, STATE OF TEX.  
MY COMMISSION EXPIRES  
JULY 19, 1997

## CERTIFICATE

The undersigned hereby certifies that he is Assistant Secretary of Aviara Energy Corporation, a Delaware corporation (the "Corporation"), that on the 19th day of June, 1996 by Unanimous Consent of the Board of Directors of the Corporation in Lieu of Special Meeting, pursuant to Section 141(f) of the Delaware Corporation Law, the following resolutions were adopted, with the same force and effect as though adopted at a Special Meeting of the Board of Directors of the Corporation duly called and held, that such resolutions are now in full force and effect, and that said resolutions have not been amended or rescinded:

RESOLVED, that, the Chairman and Chief Executive Officer, the President and Chief Operating Officer, the Vice Presidents and the Secretary of the Corporation, be and each of them is hereby authorized and empowered, without the joinder of any other officer of the Corporation, to execute for and on behalf of the Corporation, any and all bids for leases from the United States of America, through the Minerals Management Service (Department of Interior), of any tract or tracts owned by the United States of America, located in either onshore or offshore areas, including tracts in the Outer Continental Shelf, as may at any time, and from time to time, heretofore have been offered or hereafter may be offered for lease by the United States of America, all on such terms and conditions as may be specified in any such offer to lease and on such terms and conditions and for such consideration as the aforementioned officers of the corporation, or any one of them, may deem proper and advisable; and to further execute on behalf of the Corporation all agreements and other instruments (including, without limitation, applications, bids, leases, bonds, assignments, relinquishments, prospecting permits, division and transfer orders, guarantees, indemnities, designations of operator, unitization agreements, operating agreements, liquids commingling agreements, general correspondence and any other documents) which may be necessary, useful or expedient at any time in carrying on the business of the Corporation involving any such lease or asset with the United States of America or any agency, bureau or department thereof; and

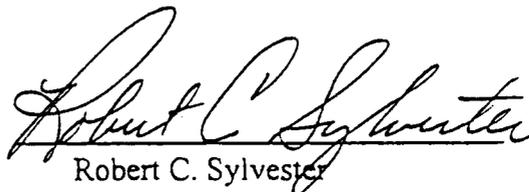
RESOLVED, that, any of such officers is further authorized and empowered to sell, assign, transfer, convey and deliver, in the name and on behalf of the Corporation any or all right, title and interest of any character in any lease or asset now owned or hereafter acquired by the Corporation covering any tract or tracts owned by the United States of America, or obtained or used in connection therewith, wherever located, for such prices and upon such terms and conditions as shall be approved by the Board of Directors; and

RESOLVED, that, the Chairman and Chief Executive Officer, the President and Chief Operating Officer, the Vice Presidents and the Secretary of the Corporation, be, and each of them is, hereby authorized and empowered, without the joinder of any other officer of the Corporation, to execute for and on behalf of the Corporation, any and all agreements and other instruments (including without limitation assignments of mining leases, prospecting permits, letter agreements,

consent forms, applications and approval letters) with the Tribe(s) of the Fort Peck Reservation and the Three Affiliated Tribes of the Fort Berthold Indian Reservation or any agency, bureau or department thereof, or any agency, bureau or department of the United States of America concerning same on such terms and conditions as may be specified and for such consideration as he may deem proper and advisable which may be necessary, useful or expedient at any time in carrying on the business of the Corporation upon the aforementioned Reservations; and

RESOLVED, that, the foregoing resolutions be deemed, and are effective, for all purposes as of April 30, 1996.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed the seal of the Corporation this 5<sup>th</sup> day of July, 1996.

  
Robert C. Sylvester  
Assistant Secretary

CORPORATE SEAL

CERTIFICATE OF INCUMBENCY

I, Robert C. Sylvester, Assistant Secretary of Aviaara Energy Corporation, a Delaware corporation (the "Company"), do hereby certify that the following named persons now are, and at all times on and subsequent to April 30, 1996, have been duly elected or appointed, qualified and acting officers of the Company holding the offices set after their respective names as follows:

Tracy W. Krohn	Chairman and Chief Executive Officer
James L. Parker	President and Chief Operating Officer
David M. McCubbin	Vice President
Gary J. Mabie	Vice President
Ken Fagan	Vice President
Robert C. Sylvester	Treasurer and Assistant Secretary
Ivan Irwin, Jr.	Secretary
Jere F. Freel	Assistant Secretary

IN WITNESS WHEREOF, I have executed this Certificate and affixed the seal of the Company this 3rd day of July, 1996.

  
Robert C. Sylvester, Assistant Secretary

CORPORATE SEAL

CERTIFICATE

I, Robert C. Sylvester, on behalf of Aviara Energy Corporation, (hereinafter called the "Company"), hereby certify that I am an Assistant Secretary of the Company and that:

The following officers and employees are authorized to execute leases, bids for leases, offers to lease, subleases, permits, licenses, applications therefor, assignments thereof, and requests for approval thereof, and other similar documents and to act on behalf of the Company in such matters.

<u>Name</u>	<u>Office/Title</u>
Tracy W. Krohn	Chairman and Chief Executive Officer
James L. Parker	President and Chief Operating Officer
Gary J. Mabie	Vice President
David M. McCubbin	Vice President
Ken Fagan	Vice President
Ivan Irwin, Jr.	Secretary

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal of the Company  
this 5<sup>th</sup> day of July, 1996.

  
Assistant Secretary

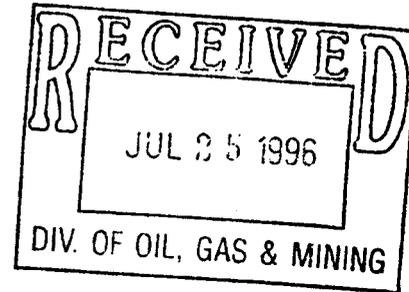
CORPORATE SEAL



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, UT 84145-0155



IN REPLY REFER TO  
3100  
U-968 et al  
(UT-932)

JUL 23 1996

### NOTICE

Aviara Energy Corporation : Oil and Gas  
P.O. Box 1350 : U-968 et al  
Houston, Texas 77251-1350 :

### Name Change Recognized

Acceptable evidence has been received in this office concerning the change of name of Columbia Gas Development Corporation to Aviara Energy Corporation on Federal oil and gas leases.

For our purposes, the name change is recognized effective May 1, 1996 (Secretary of State's approval date).

The oil and gas lease files identified on the enclosed exhibit have been noted as to the name change. We are notifying the Minerals Management Service and all applicable Bureau of Land Management offices of the name change by a copy of this notice. If additional documentation for changes of operator is required by our Field Offices, you will be contacted by them.

Due to the name change, the name of the principal on the bond is required to be changed from Columbia Gas Development Corporation to Aviara Energy Corporation on Bond No. U-391050-16RR (BLM No. CO0356). A rider effecting this change has been submitted to the Colorado State Office of the BLM, which holds this nationwide bond.

**ROBERT LOPEZ**

Group Leader,  
Minerals Adjudication Group

Enclosure  
Exhibit (1 p.)

bc: Lisha Cordova, State of Utah, Division of Oil, Gas and Mining, P.O. Box 145801, Salt Lake City, Utah 84114-5801  
MMS-Data Management Division, MS 3113, P.O. Box 5860, Denver, CO 80217  
Moab District Office  
Vernal District Office  
Teresa Thompson (UT-931)  
Irene Anderson (UT-932)

Exhibit of Leases

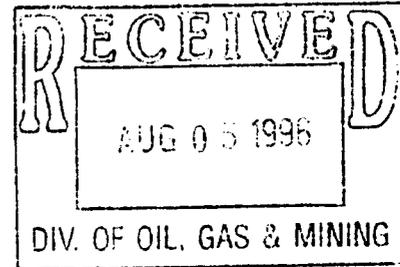
U-968	U-52277	UTU-65329
U-6911	U-52641	UTU-65795
U-15051	U-53624	UTU-65971
U-26467	U-53626	UTU-65972
U-28212	U-54037	UTU-65973
U-31736	U-55510	UTU-66020
U-34023	U-58517	UTU-66025
U-37116	U-60530	UTU-66849
U-46693	U-61182	UTU-67132
U-46697	U-61588	UTU-67552
U-47858	U-62181	UTU-67558
U-49964	U-62679	UTU-67854
U-50393	U-62832	UTU-68116
U-50678	U-62833	UTU-68117
U-50683	U-62906	UTU-68118
U-50687	U-63127	UTU-68122
U-51239	U-63128	UTU-68232
U-51636	UTU-64538	UTU-68342
U-51826	UTU-64927	UTU-69029
U-60780 (CA)	U-60783 (CA)	UTU-73405
UTU-67755X (Kane Springs Unit)		

# *Aviara Energy Corporation*

VIA AIRBORNE EXPRESS

2 August 1996

State of Utah - Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Salt Lake City, Utah 84114



**Re: Notification of Name Change from "Columbia Gas Development Corporation" to "Aviara Energy Corporation".**

Dear Sirs;

Attached please find documents relating to our company name change from "Columbia Gas Development Corporation" to "Aviara Energy Corporation". I have attached our surety bond rider showing the name change of the principal as well as documents relating to the Corporate name change. These Corporate name change documents contain a Certificate of Corporate Resolution, a Certificate of Amendment of Certificate of Incorporation by the Secretary of State of the State of Delaware evidencing a change of name effective April 30, 1996 from "Columbia Gas Development Corporation" to "Aviara Energy Corporation" and an amended Certificate of Incumbency in accordance with the regulations concerning qualifications of corporations holding Federal leases. I have also attached a list of wells and their locations that will be affected by the name change.

We hereby formally request your acceptance of this rider, and thus, our name change. Please sign the rider and return the appropriate copies to Aviara Energy Corporation (attn: Mr. Dean Roy). Also, please have your office make the necessary changes in your records to reflect this name change at this time.

Should you have questions or require additional information, please feel free to call me at (713) 871-3631. Thank you.

Respectfully,

  
Donny W. Worthington  
Manager, Environmental, Safety & Regulatory

DWW/  
attachments:

*One Riverway, P.O. Box 1350, Houston, Texas 77251-1350 Telephone (713) 871-3400*

UTAH

GRAND COUNTY

KANE SPRINGS FIELD

LOCATION

Kane Springs Federal #10-1	10-25S-18E
Kane Springs Federal Unit #16-1	16-25S-18E
Kane Springs Federal #19-1A	19-26S-20E
Kane Springs Federal #27-1	27-25S-19E
Kane Springs Federal #34-1	34-25S-19E
<i>Kane Springs Fed. 28-1</i>	<i>28-25S-19E</i>
<i>Kane Springs Fed. 20-1</i>	<i>20-26S-19E</i>

SAN JUAN COUNTY

LISBON FIELD

Government Evelyn Chambers #1 (T&Ad)  
Government Evelyn Chambers #2 (T&Ad)

UINTAH COUNTY

HORSESHOE BEND FIELD

WELL

LOCATION

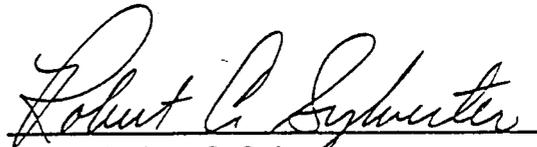
Alta 5-1-B	5-7S-21E
Alta 5-2-C	5-7S-21E
Cowden 31-3-C	31-6S-21E
Federal 33-3-J	33-6S-21E
Federal 33-6-F	33-6S-21E
Federal 33-7-L	33-6S-21E
Federal 33-8-N	33-6S-21E

CERTIFICATE

I, Robert C. Sylvester, Assistant Secretary of Aviara Energy Corporation, a corporation organized and existing under the laws of the State of Delaware, do hereby certify that the attached document titled Certificate of Amendment of Certificate of Incorporation is a true and correct copy of the Certificate of Amendment of Certificate of Incorporation filed in the Secretary of State of the State of Delaware's office on April 30, 1996.

IN WITNESS WHEREOF, I have hereunto set my hand and the seal of said Corporation this

5<sup>th</sup> day of July, 1996.



Robert C. Sylvester  
Assistant Secretary

CORPORATE SEAL

Office of the Secretary of State

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "COLUMBIA GAS DEVELOPMENT CORPORATION", CHANGING ITS NAME FROM "COLUMBIA GAS DEVELOPMENT CORPORATION" TO "AVIARA ENERGY CORPORATION", FILED IN THIS OFFICE ON THE THIRTIETH DAY OF APRIL, A.D. 1996, AT 1:15 O'CLOCK P.M.



A handwritten signature in cursive script, reading "Edward J. Freel".

Edward J. Freel, Secretary of State

0735923 8100

960125685

AUTHENTICATION:

DATE:

7928485

05-01-96

**OPERATOR CHANGE WORKSHEET**

Routing	
1-MEC ✓	6-DEC ✓
2-CHH/FYE ✓	7-KDR ✓
3-DPS ✓	8-SJ ✓
4-VLD ✓	9-FILE
5-RJF ✓	

Attach all documentation received by the division regarding this change.  
Initial each listed item when completed. Write N/A if item is not applicable.

- Change of Operator (~~well sold~~)       Designation of Agent  
 Designation of Operator       Operator Name ~~Change Only~~

The operator of the well(s) listed below has changed, effective: 5-1-96

TO: (new operator)	<u>AVIARA ENERGY CORPORATION</u>	FROM: (old operator)	<u>COLUMBIA GAS DEVELOPMENT</u>
(address)	<u>PO BOX 1350</u>	(address)	<u>PO BOX 1350</u>
	<u>HOUSTON TX 77251</u>		<u>HOUSTON TX 77251</u>
	<u>Phone: (713)871-3400</u>		<u>Phone: (713)871-3400</u>
	<u>Account no. N5500 (8-6-96)</u>		<u>Account no. N5035</u>

WELL(S) attach additional page if needed: **\*KANE SPRINGS UNIT**  
**C.A. UTU60783**

Name: <b>**SEE ATTACHED**</b>	API: <u>43-019-31324</u>	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____

**OPERATOR CHANGE DOCUMENTATION**

- N/A 1. (r649-8-10) Sundry or other legal documentation has been received from the **FORMER** operator (attach to this form).
- Y 2. (r649-8-10) Sundry or other legal documentation has been received from the **NEW** operator (Attach to this form). (Reg. 7-25-96) (Leid 8-5-96)
- Y 3. The **Department of Commerce** has been contacted if the new operator above is not currently operating any wells in Utah. Is the company registered with the state? (yes/no) yes If yes, show company file number: 02-081180. (11-5-8-96)
- Y 4. **FOR INDIAN AND FEDERAL WELLS ONLY.** The BLM has been contacted regarding this change. Make note of BLM status in comments section of this form. BLM approval of **Federal** and **Indian** well operator changes should ordinarily take place prior to the division's approval, and before the completion of steps 5 through 9 below.
- Y 5. Changes have been entered in the Oil and Gas Information System (3270) for each well listed above. (8-6-96)
- Y 6. **Cardex** file has been updated for each well listed above. (8-6-96)
- Y 7. Well file labels have been updated for each well listed above. (8-6-96)
- Y 8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to Trust Lands, Sovereign Lands, UGS, Tax Commission, etc. (8-6-96)
- Y 9. A folder has been set up for the **Operator Change** file, and a copy of this page has been placed there for reference during routing and processing of the original documents.

**ENTITY REVIEW**

- JCC 1. (r649-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) (no) \_\_\_\_ If entity assignments were changed, attach copies of Form 6, Entity Action Form.
- N/H 2. Trust Lands, Sovereign Lands, Tax Commission, etc., have been notified through normal procedures of entity changes.

**BOND VERIFICATION - (FEE WELLS ONLY)**

*Trust Lands/Rec'd Bond Rider "Columbia to Aviare"  
\*Rec'd "Rider" 8-5-96; bond no. chgd to U274145L  
\$0,000 Aviare Energy Corporation, United Pacific Ins.*

- JCC 1. (r649-3-1) The NEW operator of any fee lease well listed above has furnished a proper bond.
- \_\_\_\_ 2. A copy of this form has been placed in the new and former operator's bond files. *\* Upon Compl. of routing.*
- N/A 3. The FORMER operator has requested a release of liability from their bond (yes/no) \_\_\_\_\_, as of today's date \_\_\_\_\_. If yes, division response was made to this request by letter dated \_\_\_\_\_.

**LEASE INTEREST OWNER NOTIFICATION OF RESPONSIBILITY**

- \_\_\_\_ 1. Copies of documents have been sent on \_\_\_\_\_ to \_\_\_\_\_ at Trust Lands for changes involving State leases, in order to remind that agency of their responsibility to review for proper bonding.

**FILMING**

UDP 1. All attachments to this form have been microfilmed. Today's date: August 21, 1996

**FILING**

- \_\_\_\_ 1. Copies of all attachments to this form have been filed in each well file.
- \_\_\_\_ 2. The original of this form, and the original attachments are now being filed in the Operator Change file.

**COMMENTS**

960725 BLM/SL Aprv. rff. 5-1-96.

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.  
Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.

5. Lease Designation and Serial Number:  
UTU-53626

6. If Indian, Allottee or Tribe Name:  
N/A

7. Unit Agreement Name:  
Kane Springs Federal Unit

8. Well Name and Number:  
Kane Springs Federal 19-1A

9. API Well Number:  
43-019-31324-01

10. Field and Pool, or Wildcat:  
Park Road

1. Type of Well: OIL  GAS  OTHER:

2. Name of Operator:  
Aviara Energy Corporation

3. Address and Telephone Number:  
P. O. Box 1350, Houston, TX 77251-1350  
713-871-3444

4. Location of Well  
Footages: 800' FSL & 1918' FEL  
OO, Sec., T., R., M.: SWSE Sec. 19-T26S-R20E

County: Grand  
State: Utah

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

NOTICE OF INTENT (Submit in Duplicate)	SUBSEQUENT REPORT (Submit Original Form Only)
<input type="checkbox"/> Abandon <input type="checkbox"/> Repair Casing <input type="checkbox"/> Change of Plans <input type="checkbox"/> Convert to Injection <input type="checkbox"/> Fracture Treat or Acidize <input type="checkbox"/> Multiple Completion <input checked="" type="checkbox"/> Other <u>Workover to enhance production</u>	<input type="checkbox"/> Abandon <input type="checkbox"/> Repair Casing <input type="checkbox"/> Change of Plans <input type="checkbox"/> Convert to Injection <input type="checkbox"/> Fracture Treat or Acidize <input checked="" type="checkbox"/> Other <u>Workover to enhance production</u>
<input type="checkbox"/> New Construction <input type="checkbox"/> Pull or Alter Casing <input type="checkbox"/> Recomplete <input type="checkbox"/> Reperforate <input type="checkbox"/> Vent or Flare <input type="checkbox"/> Water Shut-Off	<input type="checkbox"/> New Construction <input type="checkbox"/> Pull or Alter Casing <input type="checkbox"/> Reperforate <input type="checkbox"/> Vent or Flare <input type="checkbox"/> Water Shut-Off
Approximate date work will start _____	Date of work completion _____

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form.  
\* Must be accompanied by a cement verification report.

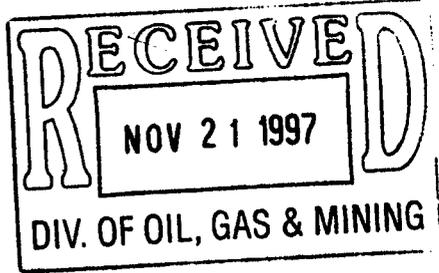
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

1. Milled out packer @ 7380'.
2. Ran bit in hole to clean out well to 9825'.
3. Ran 2825' of 2-3/8" tbg into horizontal section of well, tbg anchor, SN, and TIH with 7000' of 2-7/8" tbg.
4. Put well back on production.

NOTE: Production before workover was approx. 50 BOPD, 50 MCFPD, 0 BWPD on pump.  
After workover production is approx.: 100 BOPD, 70 MCFPD, 5 BWPD on pump.

13. Name & Signature: Victoria Guidry Title: Prod/Regulatory Coord. Date: 11/14/97

(This space for State use only)



NO tax credit 3/98



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Moab District  
82 East Dogwood  
Moab, Utah 84532

cc: JKB  
RJK  
SLS  
orig: route

RECEIVED  
APR 27 1998  
DIV. OF OIL, GAS & MINERAL

3160  
(Kane Springs Unit)  
(U-53624)  
(UT-065)

APR 23 1998

Mr. Donnie Worthington  
Aviara Energy Corporation  
P.O. Box 1350  
Houston, Texas 77251-1350

Re: Gas Flaring Request (NTL-4A)  
Kane Springs Unit  
Wells No. 27-1, ~~19-1A~~, 10-1 and 34-1  
Grand County, Utah

Dear Mr. Worthington:

We have reviewed your March 6th request to continue flaring produced gas from the above captioned wells. After reviewing our original economic analysis and the production histories for the wells, we agree that production from these four wells cannot offset the cost of constructing gas sales facilities under present conditions.

We first conducted a thorough economic analysis of the feasibility of constructing a gasline and associated sales facilities in 1992. Using the parameters set forth in relevant guidance documents (Conservation Division Manual 644.5, Washington Office Instruction Memorandum 87-652 and Notice to Lessees 4A), we found that the cost of gas facility construction would impose an undue economic burden on the operator. Our annual reviews have confirmed these findings.

The economic scenario today is certainly different than it was when we performed our initial 1992 analysis. At that time the field was new and initial production was high. In the intervening six years the wells have exhibited rapid production decline as is typical of horizontal completions. Aviara's most recent reservoir calculations, which we believe are reasonable, indicate that only 17% of original recoverable oil remains in place, and 20% of recoverable gas remains.

Considering this, we conclude that capturing the gas from the four subject wells remains uneconomic. Therefore, you are approved to continue to flare gas from these wells pursuant to NTL-4A. This approval is effective immediately. No expiration date has been specified; however, if new information reveals a viable alternative to gas flaring, the Bureau of Land Management (BLM) will issue a revised decision on this matter. As with all previous approvals, the following conditions apply:

1. Should economic conditions substantially change in favor of marketing the gas, the Bureau of Land Management will revise its position authorizing gas flaring. Such conditions affecting economics could include gas price increase, revising the gas pipeline design, or any other circumstances that would act to lessen gas marketing or operating costs.
2. All produced gas shall be measured in accordance with Onshore Oil and Gas Order No. 5.
3. All gas not being used on the lease shall be flared in a pit designed to reduce the flare from sight of the general public (the pits currently being used accomplish this).
4. BLM shall be kept apprised of any negotiations regarding gas marketing.
5. BLM shall be kept apprised of any feasibility studies to inject the gas or redesign the proposed pipeline that could significantly change the economics favoring conservation of the natural gas.

Should you have any questions regarding this matter, please call Eric Jones at (435) 259-2117.

Sincerely,

/s/ Brad D Palmer

Assistant District Manager  
Resource Management

cc: UT-931, Utah State Office  
State of Utah, Division of Oil, Gas and Mining ✓  
ATTN: Mr. John Baza  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

***Aviara Energy  
Corporation***

October 4, 1999

State of Utah  
Division of Oil, Gas, & Mining  
1594 West North Temple, Suite 1210  
Salt Lake City, UT 84114-5801

Reference: Kane Springs Federal #19-1A ST

Dear Sirs:

Enclosed please find three copies of the Sundry Notice of the proposed workover for the above referenced well. This Sundry Notice was also submitted to the Bureau of Land Management, Moab office, for approval on October 4, 1999.

Aviara currently has workover operations on other wells in the area and would like to begin this work on or about October 11, 1999. Your attention to this matter is greatly appreciated. If you require additional information or have any questions please contact Mark Swisher, Production Engineer, or myself at 713-871-3400.

Very truly yours,

AVIARA ENERGY CORPORATION

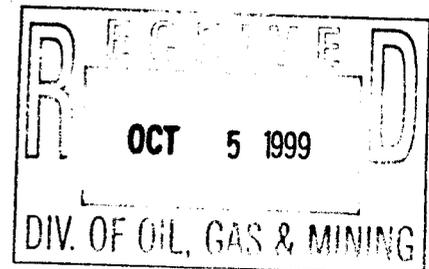


Victoria Guidry  
Production/Regulatory Coordinator

/v/jg

Enclosures

U:\user\...\reg\053a



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires July 31, 1996

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.  
**UTU-53626**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.  
**Kane Springs Federal Unit**

8. Well Name and No.  
**Kane Springs Fed.  
#19-1A ST**

9. API Well No.  
**43-019-31324-01**

10. Field and Pool, or Exploratory Area  
**Park Road**

11. County or Parish, State  
**Grand County, UT**

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well  
 Oil Well     Gas Well     Other

2. Name of Operator  
**Aviara Energy Corporation**

3a. Address  
**P.O. Box 1350, Houston TX 77251-1350**

3b. Phone No. (include area code)  
**713-871-3400**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**800' FSL & 1918' FEL  
SWSE Sec. 19, T26S, R20E**

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize <input type="checkbox"/> Deepen <input type="checkbox"/> Production (Start/Resume) <input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing <input type="checkbox"/> Fracture Treat <input type="checkbox"/> Reclamation <input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair <input type="checkbox"/> New Construction <input type="checkbox"/> Recomplete <input checked="" type="checkbox"/> Other <u>Workover</u>
	<input type="checkbox"/> Change Plans <input type="checkbox"/> Plug and Abandon <input type="checkbox"/> Temporarily Abandon <b>to add</b>
	<input type="checkbox"/> Convert to Injection <input type="checkbox"/> Plug Back <input type="checkbox"/> Water Disposal <b>perforations</b>

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

Aviara Energy Corporation proposes to workover the above referenced well on or about October 11, 1999 as per the attached procedures.

**COPY SENT TO OPERATOR**  
Date: 10-9-99  
Initials: CHD

**RECEIVED**  
OCT 5 1999  
DIV. OF OIL, GAS & MINING  
Federal Approval of this action is Necessary

14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed) **Victoria Guidry** Title **Production/Regulatory Coordinator**

*Victoria Guidry* Date **10/04/99**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by \_\_\_\_\_ Title **Accepted by the Utah Division of Oil, Gas and Mining** Date \_\_\_\_\_

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Office \_\_\_\_\_

**FOR RECORD ONLY**

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.

## FEDERAL #19-1A PROCEDURE

1. Have safety meeting and RU.
2. POOH w/ rods and pump, circulate oil out of casing w/ hot lease water.
3. NU BOPs.
4. Pull tbg OOH, LD 2-3/8" tail pipe.
5. PU 4-5/8" tapered mill, 2-7/8" WS, and TIH to PBTD @ 9825'.
6. RU PWR swivel and mill out 5-1/2" float shoe.
7. TOH collecting T&D data every 500', LD WS.
8. RU Schlumberger and run UIS casing inspection log.
9. PU 9-5/8" RBP & PKR, TIH w/ 2-7/8" production tbg.
10. Set RBP @ 6500' and test same to 4500#.
11. PU hole and set PKR @ 5800', test down tbg to 4500#, down csg to 3000#.
12. ND BOPs and NU 5000# tree.
13. RU wireline lubricator, RIH and perforate 6461-66'.
14. Pump into perfs to breakdown if needed.
15. RIH and perforate 5871-79'.
16. Pump into perfs to breakdown if needed.
17. If well will not flow, ND tree, NU BOPs.
18. TOH w/ RBP & PKR, LD same.
19. PU 2-3/8" tail pipe, tbg anchor, TIH w/ tbg and set anchor.
20. ND BOPs, NU pumping flange.
21. Run rods and pump, put well to pumping.

43.019.31324

**Aviara Energy  
Corporation**

November 11, 1999

State of Utah  
Division of Oil, Gas, & Mining  
1594 West North Temple, Suite 1210  
Salt Lake City, UT 84114-5801

Reference: Kane Springs Federal #19-1A

Dear Sirs:

Enclosed please find three copies of the Sundry Notice of the workover operations performed on the above referenced well. This Sundry Notice was also submitted to the Bureau of Land Management, Moab office.

If you require additional information or have any questions please contact Mark Swisher, Production Engineer, or myself at 713-871-3400.

Very truly yours,

AVIARA ENERGY CORPORATION

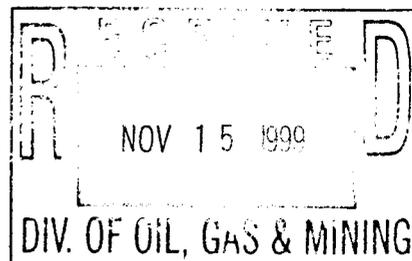


Victoria Guidry  
Production/Regulatory Coordinator

/vlg

Enclosures

H:\...veg\053c



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires July 31, 1996

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.

**UTU-53626**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.  
**Kane Springs Federal Unit**

8. Well Name and No.  
**Kane Springs Fed.  
#19-1A ST**

9. API Well No.  
**43-019-31324-01**

10. Field and Pool, or Exploratory Area  
**Park Road**

11. County or Parish, State  
**Grand County, UT**

*SUBMIT IN TRIPLICATE - Other instructions on reverse side*

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
**Aviara Energy Corporation**

3a. Address  
**P.O. Box 1350, Houston TX 77251-1350**

3b. Phone No. (include area code)  
**713-871-3400**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**800' FSL & 1918' FEL  
SWSE Sec. 19, T26S, R20E**

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal
			<input type="checkbox"/> Water Shut-Off
			<input type="checkbox"/> Well Integrity
			<input checked="" type="checkbox"/> Other <u>Workover</u>
			<u>to add</u>
			<u>performations</u>

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompletes horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletes in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

SEE THE ATTACHED SUMMARY OF THE WORKOVER OPERATIONS PERFORMED

COPY SENT TO OPERATOR  
Date: 11/17/99  
Initials: EHJ

**Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY**

RECEIVED  
NOV 15 1999  
DIV. OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct.  
Name (Printed/Typed)

**Victoria Guidry**

*Victoria Guidry*

Title

**Production/Regulatory Coordinator**

Date

**11/11/99**

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

Federal Approval of this  
Date  
Action is Necessary

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

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.

(Instructions on reverse)

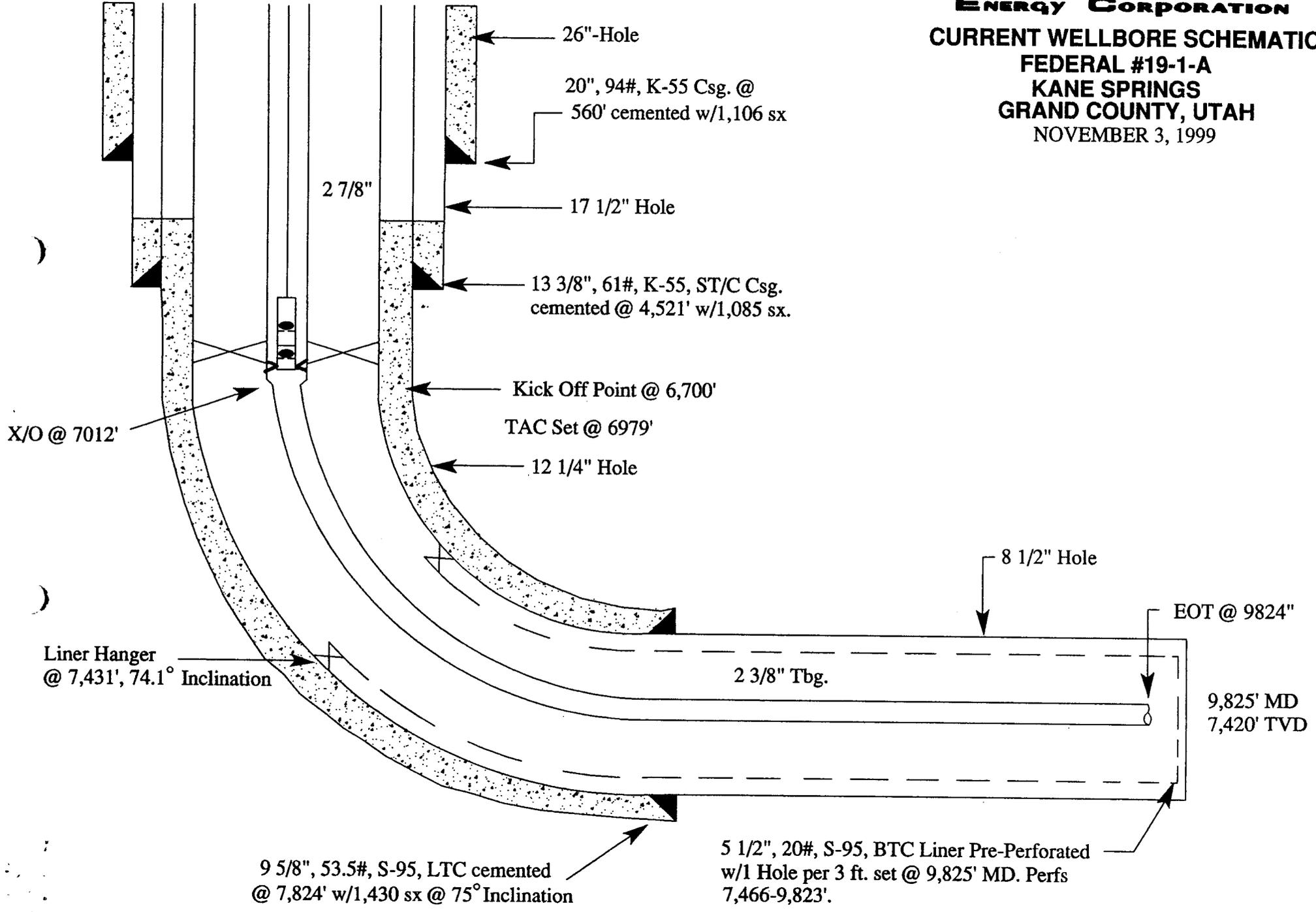
# FEDERAL #19-1A OPERATIONS PERFORMED

1. Had safety meeting and RU.
2. POOH w/ rods and pump, circulate oil out of casing w/ hot lease water.
3. NU BOPs.
4. Pull tbg OOH, LD 2-3/8" tail pipe.
5. PU 4-5/8" tapered mill, 2-7/8" WS, RU PWR swivel, and TIH collecting T&D data every 1000' to 7000', then every 500' to PBTD @ 9825'.
6. Mill out 5-1/2" float shoe.
7. TOH while LD WS.
8. RU Schlumberger and ran UIS casing inspection log.
9. PU 9-5/8" RBP & PKR, TIH w/ 2-7/8" production tbg.
10. Set RBP @ 6500' and test same to 4500#. Dump sand.
11. LD 2-7/8" tbg from derrick.
12. PU hole and set PKR @ 5800', test down tbg to 4500#, down csg to 3000#.
13. ND BOPs and NU 5000# tree.
14. RU wireline lubricator, RIH and perforate 6461-66'.
15. Pump into perfs to breakdown.
16. RIH and perforate 5871-79'.
17. Pump into perfs to breakdown.
18. ND tree, NU BOPs.
19. TOH w/ RBP & PKR, LD same.
20. PU 2-3/8" tail pipe, tbg anchor, TIH w/ tbg and set anchor.
21. ND BOPs, NU pumping flange.
22. Ran rods and pump, put well to pumping.

# AVIARA

ENERGY CORPORATION

CURRENT WELLBORE SCHEMATIC  
FEDERAL #19-1-A  
KANE SPRINGS  
GRAND COUNTY, UTAH  
NOVEMBER 3, 1999



**HUNT PETROLEUM (AEC), INC.**  
1601 Elm Street, Suite 3400  
Dallas, Texas 75201

July 11, 2002

State of Utah  
Department of Oil, Gas & Minerals  
1594 West N. Temple, Suite 1210  
Salt Lake City, Utah 84114-5801

Attn: Mr. Jim Hamilton

Re: Travelers Bond No. 103860066

Dear Sir:

This is to advise you that Aviara Energy Corporation has changed its name to Hunt Petroleum (AEC), Inc., effective July 1, 2002. Attached is a Surety Rider to Travelers Bond #103860066 (which replaced CNA Bond No. 159209096) and a copy of the Surety Bond on State of Utah Form 4A currently on file with the State of Utah, Department of Natural Resources.

If you have any questions please give me a call at (214) 880-8916.

Yours very truly,

*Mary Melvin*  
Mary Melvin  
Legal Assistant

attachments

cc: Max Gardner (w/enc.)  
Donny Worthington (w/enc.)  
Gerald Phillips (w/enc.)

Receipt acknowledged this \_\_\_ day of July 2002.

STATE OF UTAH, Department of Oil, Gas & Minerals

By: \_\_\_\_\_

Title: \_\_\_\_\_

**RECEIVED**  
JUL 15 2002  
DIVISION OF  
OIL, GAS AND MINING



# United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
Colorado State Office  
2850 Youngfield Street  
Lakewood, Colorado 80215-7076

IN REPLY REFER TO:  
3106 (MM)

July 22, 2002

## NOTICE

Hunt Petroleum (AEC), Inc. :  
1601 Elm Street, Suite 3400 : Oil and Gas  
Dallas, TX 75201 :

### Name Change Recognized

Acceptable evidence was filed and accepted by this office concerning the name change of Aviara Energy Corporation to Hunt Petroleum (AEC), Inc. with Hunt Petroleum (AEC), Inc. being the surviving entity. For our purposes, the name change was recognized effective July 1, 2002 the date of acceptance by the Secretary of the State of Delaware.

A rider changing the name of the principal on Nationwide bond number 159209244 (BLM Bond CO-1274) previously held by Aviara and issued by Continental Casualty Company, was changed to Hunt Petroleum (AEC), Inc. effective July 12, 2002.

The oil and gas lease files identified on the enclosed Exhibit A, supplied by Hunt Petroleum (AEC), Inc. were updated to reflect the new name. We have not abstracted the lease files to determine if the entities affected by the name change hold an interest in the leases identified nor have we attempted to identify leases where the entity is the operator on the ground maintaining no vested record title or operating rights interests. We are notifying the Mineral Management Services (MMS) and applicable Bureau of Land Management (BLM) Field Offices of the name change by copy of this notice. If our field offices require additional documentation for changes of operator, they will contact you.

If you identify additional leases where the affected parties maintain an interest, please contact this office and we will document the files under our jurisdiction with a copy of this Notice. If the leases are under the jurisdiction of another State Office, we will notify them.

If you have any questions concerning this correspondence, please call Martha Maxwell at (303)239-3768.

*Milada Krasovic*  
FOR Beverly Derringer  
Chief, Fluid Minerals Adjudication

Exhibit A sent to Eastern SO, New Mexico SO, Montana SO, Utah SO, Wyoming SO &  
MMS-MRM, MS357B1, PO Box 5760, Denver, CO 80217  
Decision Letter sent to All State Offices via BLM\_Fluids\_Forum



---

**7. Federal and Indian Units:**

The BLM or BIA has approved the successor of unit operator for wells listed on: 07/01/2002

---

**8. Federal and Indian Communization Agreements ("CA"):**

The BLM or BIA has approved the operator for all wells listed within a CA on: N/A

---

**9. Underground Injection Control ("UIC")**

The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 07/08/2002

---

**DATA ENTRY:**

1. Changes entered in the Oil and Gas Database on: 08/07/2002
2. Changes have been entered on the Monthly Operator Change Spread Sheet on: 08/07/2002
3. Bond information entered in RBDMS on: N/A
4. Fee wells attached to bond in RBDMS on: N/A

---

**STATE WELL(S) BOND VERIFICATION:**

1. State well(s) covered by Bond Number: N/A

---

**FEDERAL WELL(S) BOND VERIFICATION:**

1. Federal well(s) covered by Bond Number: CO-1274

---

**INDIAN WELL(S) BOND VERIFICATION:**

1. Indian well(s) covered by Bond Number: N/A

---

**FEE WELL(S) BOND VERIFICATION:**

1. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number N/A
2. The **FORMER** operator has requested a release of liability from their bond on: N/A  
The Division sent response by letter on: N/A

---

**LEASE INTEREST OWNER NOTIFICATION:**

3. (R649-2-10) The **FORMER** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: N/A

---

**COMMENTS:**

---

---

---

---

---

---

---

---

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>See attachment</u>		5. LEASE DESIGNATION AND SERIAL NUMBER:
2. NAME OF OPERATOR: Hunt Petroleum (AEC), Inc.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: 1601 Elm Street, Suite 3400 Dallas, TX 75201		7. UNIT or CA AGREEMENT NAME:
PHONE NUMBER: 214-880-8855		8. WELL NAME and NUMBER:
4. LOCATION OF WELL FOOTAGES AT SURFACE:		9. API NUMBER:
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:		10. FIELD AND POOL, OR WILDCAT:
		COUNTY:
		STATE: <b>UTAH</b>

**11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> <b>NOTICE OF INTENT</b> (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Change of company from Aviara Energy Inc. to Hunt Petroleum (AEC), Inc. effective July 1, 2002.

NAME (PLEASE PRINT) Lisa Augustine TITLE Agent  
SIGNATURE *Lisa Augustine* DATE August 6, 2002

(This space for State use only)

**RECEIVED**  
AUG 07 2002  
DIVISION OF  
OIL, GAS AND MINING

api	well_name	section	township	range	ll_status_m
4301931310	KANE SPRINGS FED 27-1	27	250S	190E	P
4301931324	KANE SPRINGS FED 19-1A	19	260S	200E	P
4301931325	KANE SPRINGS FED 28-1	28	250S	190E	S
4301931331	KANE SPRINGS FED 10-1	10	250S	180E	P
4301931332	KANE SPRINGS FED 20-1	20	260S	190E	S
4301931334	KANE SPRINGS FED 25-19-34-1	34	250S	190E	P
4301931363	CANE CREEK FEDERAL 7-1	07	250S	190E	DRL
4301931364	CANE CREEK FED 11-1	11	260S	190E	DRL
4301931365	CANE CREEK 30-1	30	260S	200E	APD
4301931379	KANE SPRINGS FED 3-1	03	260S	190E	APD
4303730572	GOVT EVELYN CHAMBERS 1	06	310S	240E	S
4303730612	GOVT EVELYN CHAMBERS 2	05	310S	240E	S
4304731768	COWDEN 31-3-C	31	060S	210E	S
4304731769	FEDERAL 33-6-F	33	060S	210E	P
4304731787	FEDERAL 33-8-N	33	060S	210E	P
4304731804	FEDERAL 33-3-J	33	060S	210E	S
4304731844	FEDERAL 33-7-L	33	060S	210E	P
4301931341	KANE SPRINGS 16-1	16	250S	180E	A
4304731776	ALTA 5-1-B	05	070S	210E	P
4304731843	ALTA 5-2-C	05	070S	210E	P



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, UT 84145-0155

IN REPLY REFER TO  
UT-922

April 28, 2003

Intrepid Oil & Gas, L.L.C.  
Attn: Jan Podoll  
700 17<sup>th</sup> Street, Suite 1700  
Denver, Colorado

Re: Kane Springs Unit  
Grand & San Juan Counties, Utah

Gentlemen:

On April 25, 2003, we received an indenture dated April 23, 2003, whereby Hunt Petroleum (AEC), Inc. resigned as Unit Operator and Intrepid Oil & Gas, L.L.C. was designated as Successor Unit Operator for the Kane Springs Unit, Grand and San Juan Counties, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective April 28, 2003. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Kane Springs Unit Agreement.

Your statewide (Utah) oil and gas bond No. UTB000029 will be used to cover all operations within the Kane Springs Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Robert A. Henricks

Robert A. Henricks  
Chief, Branch of Fluid Minerals

Enclosure

bcc: Field Manager - Moab (w/enclosure)  
SITLA  
Division of Oil, Gas & Mining  
Minerals Adjudication Group  
File - Kane Springs Unit (w/enclosure)  
Agr. Sec. Chron  
Fluid Chron

UT922:TAThompson:tt:4/28/03

## Results of query for MMS Account Number UTU67755

Production	API Number	Operator	Well Name	Well Status	Lease or CA Number	Inspection Item	Township	Range	Section	Quarter/Quarter	
Production	4301931310	HUNT PETROLEUM (AEC) INC	27-1 KANE SPRING-FED	POW	UTU65971	UTU67755A	25S	19E	27	NWSE	E F
Production	4301931334	HUNT PETROLEUM (AEC) INC	25-19-34-1 KANE SPRG	POW	UTU53624	UTU67755A	25S	19E	34	NWNE	E F
Production	4301931319	HUNT PETROLEUM (AEC) INC	19-1 KANE SPRINGS	P+A	UTU53626	UTU67755B	26S	20E	19	SWSE	F F
Production	4301931324	HUNT PETROLEUM (AEC) INC	19-1A KANE SPRINGS	POW	UTU53626	UTU67755B	26S	20E	19	SESW	F F
Production	4301931331	HUNT PETROLEUM (AEC) INC	10-1 KANE SPRINGS	POW	UTU47858	UTU67755C	25S	18E	10	NWSE	F F

*DISCLAIMER for online data: No warranty is made by the BLM for use of the data for purposes not intended by the BLM.*

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

5. LEASE DESIGNATION AND SERIAL NUMBER: U-53626
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT or CA AGREEMENT NAME: Kane Springs Federal Unit
8. WELL NAME and NUMBER: Kane Springs Federal #19-1A
9. API NUMBER: 43-019-31324-01
10. FIELD AND POOL, OR WILDCAT: Park Road

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____	
2. NAME OF OPERATOR: Hunt Petroleum (AEC), Inc.	
3. ADDRESS OF OPERATOR: P. O. Box 1350 CITY Houston STATE TX ZIP 77251	
PHONE NUMBER: 713-871-3400	

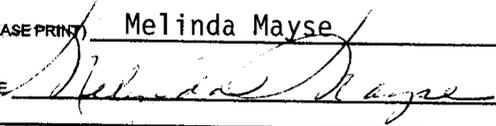
4. LOCATION OF WELL	COUNTY:
FOOTAGES AT SURFACE: 800' FSL & 1918' FEL	
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWSE 19 26S 20E	STATE: UTAH

**11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

On April 28, 2003, Hunt Petroleum (AEC), Inc. resigned as Operator of the Kane Springs Federal Unit and Intrepid Oil & Gas, LLC was designated successor Unit Operator. Concurrent with this action, Hunt Petroleum (AEC), Inc. resigns as Operator of this well and names Intrepid Oil & Gas, LLC as successor Operator.

NAME (PLEASE PRINT) <u>Melinda Mayse</u>	TITLE <u>Regulatory Coordinator Agent</u>
SIGNATURE 	DATE <u>June 24, 2003</u>

(This space for State use only)

**RECEIVED**  
**JUN 25 2003**

**OPERATOR CHANGE WORKSHEET**

**ROUTING**

1. GLH
2. CDW
3. FILE

**X Change of Operator (Well Sold)**

Designation of Agent/Operator

Operator Name Change

Merger

The operator of the well(s) listed below has changed, effective: **04/28/2003**

<b>FROM:</b> (Old Operator): HUNT PETROLEUM CORPORATION 1601 Elm Street, Suite 3400 Dallas, TX 75201 Phone: 1-(214) 880-8914 Account No. N 2180	<b>TO:</b> ( New Operator): Intrepid Oil & Gas, LLC 700 17th Street, Suite 1700 Denver, CO 80202 Phone: 1-(303) 296-3006 Account No. N6810
--	---

**CA No.** \_\_\_\_\_ **Unit:** Kane Springs & Cane Creek

**WELL(S)**

NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
<b>Kane Springs Unit</b>								
KANE SPRINGS FED 27-1	27	250S	190E	4301931310	11180	Federal	OW	P
KANE SPRINGS FED 19-1A	19	260S	200E	4301931324	11353	Federal	OW	P
KANE SPRINGS FED 28-1	28	250S	190E	4301931325	11354	Federal	OW	S
KANE SPRINGS FED 10-1	10	250S	180E	4301931331	11414	Federal	OW	P
KANE SPRINGS FED 20-1	20	260S	190E	4301931332	11670	Federal	OW	S
KANE SPRINGS FED 25-19-34-1	34	250S	190E	4301931334	11521	Federal	OW	P
<b>Cane Creek Unit</b>								
CANE CREEK FED 11-1	11	260S	190E	4301931364	13477	Federal	OW	P

**OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 06/25/2003
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 06/27/2003
- The new company has been checked through the **Department of Commerce, Division of Corporations Database** on: 06/30/2003
- Is the new operator registered in the State of Utah: YES Business Number: 2029416-0161
- If **NO**, the operator was contacted on: \_\_\_\_\_

6. (R649-9-2)Waste Management Plan has been received on: IN PLACE

7. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM 04/28/2003 BIA n/a

8. **Federal and Indian Units:**  
The BLM or BIA has approved the successor of unit operator for wells listed on: 04/28/2003

9. **Federal and Indian Communization Agreements ("CA"):**  
The BLM or BIA has approved the operator for all wells listed within a CA on: n/a

10. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: N/A

**DATA ENTRY:**

1. Changes entered in the Oil and Gas Database on: 07/16/2003
2. Changes have been entered on the Monthly Operator Change Spread Sheet on: 07/16/2003
3. Bond information entered in RBDMS on: N/A
4. Fee wells attached to bond in RBDMS on: N/A

**STATE WELL(S) BOND VERIFICATION:**

1. State well(s) covered by Bond Number: N/A

**FEDERAL WELL(S) BOND VERIFICATION:**

1. Federal well(s) covered by Bond Number: UTB000029

**INDIAN WELL(S) BOND VERIFICATION:**

1. Indian well(s) covered by Bond Number: N/A

**FEE WELL(S) BOND VERIFICATION:**

1. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number N/A
2. The **FORMER** operator has requested a release of liability from their bond on: N/A  
The Division sent response by letter on: N/A

**LEASE INTEREST OWNER NOTIFICATION:**

3. (R649-2-10) The **FORMER** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: N/A

**COMMENTS:**

---

---

---

---

---

---

---

---

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER See List below
2. NAME OF OPERATOR Intrepid Oil & Gas, LLC		6. INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR 700 17th Street City Denver STATE CO ZIP 80202		7. UNIT or OIA AGREEMENT NAME
4. LOCATION OF WELL FOOTAGES AT SURFACE: _____ CONTR. SECTION TOWNSHIP RANGE MERIDIAN: _____		8. WELL NAME and NUMBER See List below
PHONE NUMBER (303) 296-3006		9. API NUMBER See List
COUNTY: Grand		10. FIELD AND POOL, OR WILDCAT See List below
STATE: UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

On April 28, 2003, Intrepid Oil & Gas, LLC accepted designation as successor operator for the Kane Springs Federal Unit and became operator for the following wells:

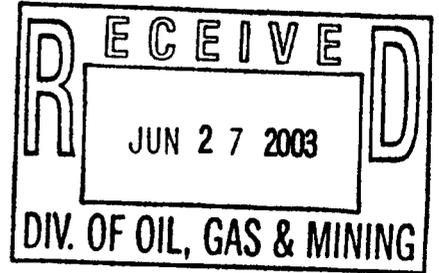
- ✓ Kane Springs Federal #19-1A - UTU-53626 - API 4301931324 - 800' FSL, 1918' FEL, 19-26S-20E
- Kane Springs Federal #25-19-34-1 - UTU-53624 - API 4301931334 - 934' FNL, 1678' FEL, 34-26S-19E
- Kane Springs Federal #27-1 - UTU-65971 - API 4301931310 - 1700' FEL, 1650' FSL, 27-25S-19E
- Kane Springs Federal #10-1 - UTU-47858 - API 4301931331 - 2333' FSL, 2112' FEL, 10-26S-18E
- Cane Creek #11-1 - UTU-65972 - API 4301931364 - 2220' FNL, 2060' FWL, 22-26S-19E
- Kane Springs Federal #28-1 - UTU-50678 - API 4301331325 - 1900' FSL, 1900' FEL, 28-25S-19E
- Kane Springs Federal #20-1 - UTU-54037 - API 4301931332 - 1000' FSL, 2400' FWL, 20-26S-19E

NAME (PLEASE PRINT) H. Richard Miller TITLE Special Projects Manager

SIGNATURE H. Richard Miller DATE 6/27/2003

(This space for State use only)

(See Instructions on Reverse Side)



**ENTITY ACTION FORM**

Operator: Intrepid Oil & Gas LLC Operator Account Number: N 6810  
 Address: 700 17th St, Suite 1700  
city Denver  
state CO zip 80202 Phone Number: (303) 296-3006

**Well 1**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301931324	Kane Springs Fed 19-1A		SWNE	19	<del>20E</del>	20E	Grand
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
D	11353	14507	<i>205 265</i>		1/18/2005		
<b>Comments:</b> Correction requested by operator due to unit change. Please correct reports effective 5/18/2004.							

**Well 2**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301931325	Kane Springs Fed 28-1		NWSE	28	25S	19E	Grand
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
D	11354	14508			1/18/2005		
<b>Comments:</b> Correction requested by operator due to unit change. Please correct reports effective 5/18/2004.							

**Well 3**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301931331	Kane Springs Fed 10-1		NWSE	10	25S	18E	Grand
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
D	11414	14509			1/18/2005		
<b>Comments:</b> Correction requested by operator due to unit change. Please correct reports effective 5/18/2004.							

**ACTION CODES:**

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

Earlene Russell For DOGM

Name (Please Print)

*ER*

Signature

Engineering Tech

1/18/2005

Title

Date

Division of Oil, Gas and Mining  
**OPERATOR CHANGE WORKSHEET**

**ROUTING**

1. DJJ
2. CDW

**X - Change of Operator (Well Sold)**

Operator Name Change/Merger

The operator of the well(s) listed below has changed, effective: 10/1/2006

<b>FROM:</b> (Old Operator): N6810-Intrepid Oil & Gas, LLC 700 17th St, Suite 1700 Denver, CO 80202 Phone: 1 (303) 296-3006	<b>TO:</b> ( New Operator): N3135-Babcock & Brown Energy, Inc. 1512 Larimer St, Suite 550 Denver, CO 80202 Phone: 1 (303) 460-1132	
<b>CA No.</b>	<b>Unit:</b>	<b>CANE CREEK</b>

**OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 12/18/2006
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 12/18/2006
3. The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 12/28/2006
- 4a. Is the new operator registered in the State of Utah: YES Business Number: 6404096-0143
- 5a. (R649-9-2)Waste Management Plan has been received on: REQUESTED
- 5b. Inspections of LA PA state/fee well sites complete on: n/a
- 5c. Reports current for Production/Disposition & Sundries on: OK
6. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM 12/19/2006 BIA
7. **Federal and Indian Units:**  
 The BLM or BIA has approved the successor of unit operator for wells listed on: 12/19/2006
8. **Federal and Indian Communization Agreements ("CA"):**  
 The BLM or BIA has approved the operator for all wells listed within a CA on: n/a
9. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: n/a

**DATA ENTRY:**

1. Changes entered in the **Oil and Gas Database** on: 12/28/2006
2. Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 12/26/2006
3. Bond information entered in RBDMS on: 12/28/2006
4. Fee/State wells attached to bond in RBDMS on: 12/28/2006
5. Injection Projects to new operator in RBDMS on: n/a
6. Receipt of Acceptance of Drilling Procedures for APD/New on: 12/28/2006

**BOND VERIFICATION:**

1. Federal well(s) covered by Bond Number: UTB000240
- 3a. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number 8785513659
- 3b. The **FORMER** operator has requested a release of liability from their bond on: not yet

**LEASE INTEREST OWNER NOTIFICATION:**

4. (R649-2-10) The **FORMER** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		5. LEASE DESIGNATION AND SERIAL NUMBER: See attached Exhibit
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		7. UNIT or CA AGREEMENT NAME: See attached Exhibit
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		8. WELL NAME and NUMBER: See attached Exhibit
2. NAME OF OPERATOR: Babcock & Brown Energy Inc.	<i>N3135</i>	9. API NUMBER: See attach
3. ADDRESS OF OPERATOR: 1512 Lanimer St, Suite 550 CITY Denver STATE CO ZIP 80202	PHONE NUMBER: (303) 460-1205	10. FIELD AND POOL, OR WILDCAT: See attached Exhibit
4. LOCATION OF WELL FOOTAGES AT SURFACE: SEE ATTACHED EXHIBIT FOR ALL WELLS & DETAILS	<i>1132</i>	COUNTY:
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:		STATE: <b>UTAH</b>

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____  <input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Effective October 1, 2006, Intrepid Oil & Gas LLC resigned as Operator of the wells listed on the attached Exhibit and Babcock & Brown Energy Inc. has been designated as successor Operator. Concurrent with this action, Intrepid Oil & Gas LLC resigns as Operator of this well and names Babcock & Brown Energy Inc. as successor Operator. Bond Number 8785513659 will be used to cover operations by Babcock & Brown Energy Inc.

(BLM Statewide Bond UTB-00240)

Intrepid Oil & Gas LLC  
By: Intrepid Mining, LLC, its Sole Member

*[Signature]*  
\_\_\_\_\_  
Robert P. Jorjanyax, Manager

*N6810*

NAME (PLEASE PRINT) <u>Van Z. Spence</u>	TITLE <u>President</u>
SIGNATURE <i>[Signature]</i>	DATE <u>11/15/2006</u>

(This space for State Use Only) **APPROVED** 1111107=41C  
*Earlene Russell*  
Division of Oil, Gas and Mining  
Earlene Russell, Engineering Technician

*12/28/06*  
*all other wells*

**RECEIVED**  
**DEC 18 2006**  
DIV. OF OIL, GAS & MINING

**EXHIBIT "A"**

Attached to Form 9, Change of Operator, from Intrepid Oil & Gas LLC to Babcock & Brown Energy Inc., effective October 1, 2006

LEASE	UNIT	WELL NAME/NUMBER	API NO.	FIELD	LOCATION							TYPE
					Footage	QrtQrt	Sec.	Twp	Rge	County		
UTU 047858	N/A	Long Canyon No. 1	43-019-15925	Long Canyon	2,339' FNL	2,473' FWL	SENW	9	26S	20E	Grand	Oil Well
UTU 065971	Kane Springs	Kane Springs Federal No. 27-1	43-019-31310	Big Flat	1,650' FSL	1,700' FEL	NWSE	27	25S	19E	Grand	Oil Well
UTU 053626	Kane Springs	Kane Springs Federal No. 19-1A	43-019-31324	Park Road	800' FSL	1,918' FEL	SWNE	19	26S	20E	Grand	Oil Well
ML-40761	Cane Creek	Cane Creek No. 2-1	43-019-31396	Big Flat	2,289' FNL	518' FEL	SENE	2	26S	19E	Grand	Oil Well
UTU 047858	Kane Springs	Kane Springs Federal No. 10-1	43-019-31331	Hell Roaring	2,333' FSL	2,112' FEL	NWSE	10	25S	18E	Grand	Oil Well
UTU 053624	Kane Springs	Kane Springs Federal No. 25-19-34-1	43-019-31334	Big Flat	934' FNL	1,678' FEL	NWNE	34	25S	19E	Grand	Oil Well
ML 44333	Kane Springs	Kane Springs Federal No. 16-1	43-019-31341	Wildcat	960' FSL	1,960' FWL	SESW	16	25S	18E	Grand	Water Disposal
UTU 065972	Cane Creek	Cane Creek No. 1-1 (Permit)	43-019-31446	Wildcat	2,240' FSL	1,317' FWL	NWSW	1	26S	19E	Grand	Oil Well
UTU 068122	Cane Creek	Cane Creek No.8-1 (Permit)	43-019-31449	Wildcat	2,563' FNL	1,429' FWL	SENW	8	26S	20E	Grand	Oil Well
UTU 046693	Cane Creek	Cane Creek 24-1 (Permit)	43-019-31447	Wildcat	682' FNL	2,829' FEL	NENW	24	26S	19E	Grand	Oil Well



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, UT 84145-0155



IN REPLY REFER TO  
3180  
UT-922

DEC 19 2006

Babcock & Brown Energy Inc.  
1512 Larimer, Suite 550  
Denver, CO 80202

Re: Cane Creek Unit  
Grand & San Juan Counties,

Gentlemen:

On December 18, 2006, we received an indenture dated October 1, 2006, whereby Intrepid Oil & Gas LLC resigned as Unit Operator and Babcock & Brown Energy Inc. was designated as Successor Unit Operator for the Cane Creek Unit, Grand and San Juan Counties, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective December 19, 2006. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Cane Creek Unit Agreement.

Your statewide (Utah) oil and gas Bond No. UTB000240 will be used to cover all operations within the Cane Creek Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

*/s/ Douglas Cook*

Douglas Cook  
Chief, Branch of Fluid Minerals

Enclosure

bcc: Field Manager -Moab (w/enclosure)  
SITLA  
Division of Oil, Gas & Mining  
Dockets  
File -Cane Creek Unit (w/enclosure)  
Agr. Sec. Chron  
Reading File  
Central Files

CSeare:cs12/19/06Babcock

RECEIVED  
DEC 21 2006  
DIV. OF OIL, GAS & MINING

Division of Oil, Gas and Mining  
**OPERATOR CHANGE WORKSHEET**

**ROUTING**

1. DJJ
2. CDW

**X - Change of Operator (Well Sold)**

Operator Name Change/Merger

The operator of the well(s) listed below has changed, effective:

**1/1/2008**

<b>FROM:</b> (Old Operator): N3135-Babcock & Brown Energy, Inc. 1512 Larimer St, Suite 550 Denver, CO 80202 Phone: 1 (303) 460-1132	<b>TO:</b> ( New Operator): N3155-Fidelity Exploration & Production Co 1700 Broadway, Suite 2800 Denver, CO 80203 Phone: 1 (303) 893-3133
---	---

CA No.		Unit:		CANE CREEK				
WELL NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
KANE SPRINGS FED 27-1	27	250S	190E	4301931310	14506	FEDERAL	OW	P
KANE SPRINGS FED 19-1A	19	260S	200E	4301931324	14507	FEDERAL	OW	P
KANE SPRINGS FED 10-1	10	250S	180E	4301931331	14509	FEDERAL	OW	P
KANE SPRINGS FED 25-19-34-1	34	250S	190E	4301931334	14511	FEDERAL	OW	P
KANE SPRINGS 16-1	16	250S	180E	4301931341	11484	STATE	WD	A
CANE CREEK 2-1	02	260S	190E	4301931396	14505	STATE	OW	P

**OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 1/11/2008
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 1/11/2008
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 1/28/2008
- Is the new operator registered in the State of Utah: yes Business Number: 4917099-0143
- (R649-9-2)Waste Management Plan has been received on: IN PLACE
- Inspections of LA PA state/fee well sites complete on: n/a
- Reports current for Production/Disposition & Sundries on: \_\_\_\_\_
- Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM not yet BIA
- Federal and Indian Units:**  
The BLM or BIA has approved the successor of unit operator for wells listed on: not yet
- Federal and Indian Communization Agreements ("CA"):**  
The BLM or BIA has approved the operator for all wells listed within a CA on: n/a
- Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 1/29/2008

**DATA ENTRY:**

- Changes entered in the **Oil and Gas Database** on: 1/31/2008
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 1/31/2008
- Bond information entered in RBDMS on: 1/31/2008
- Fee/State wells attached to bond in RBDMS on: 1/31/2008
- Injection Projects to new operator in RBDMS on: 1/31/2008
- Receipt of Acceptance of Drilling Procedures for APD/New on: n/a

**BOND VERIFICATION:**

- Federal well(s) covered by Bond Number: CO1345
- (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number 190017646
- The **FORMER** operator has requested a release of liability from their bond on: not yet

**LEASE INTEREST OWNER NOTIFICATION:**

- (R649-2-10) The **FORMER** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

**COMMENTS:** 3 Wells on list were previously moved due to Designation of Agent

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

5. LEASE DESIGNATION AND SERIAL NUMBER:

See Attached Exhibit

**SUNDRY NOTICES AND REPORTS ON WELLS**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

7. UNIT or CA AGREEMENT NAME:

See Attached Exhibit

1. TYPE OF WELL

OIL WELL  GAS WELL  OTHER \_\_\_\_\_

8. WELL NAME and NUMBER:

See Attached Exhibit

2. NAME OF OPERATOR:

Fidelity Exploration & Production Company *N3/55*

9. API NUMBER:

See Attach

3. ADDRESS OF OPERATOR:

1700 Broadway, Suite 2800 CITY Denver STATE CO ZIP 80203

PHONE NUMBER:

(303) 893-3133

10. FIELD AND POOL, OR WILDCAT:

See Attached Exhibit

4. LOCATION OF WELL

FOOTAGES AT SURFACE: SEE ATTACHED EXHIBIT FOR ALL WELLS AND DETAILS

COUNTY:

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:

STATE:

UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

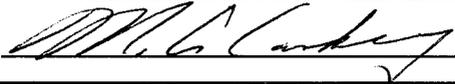
Effective January 1, 2008, Babcock & Brown Energy Inc. resigned as Operator of the wells listed on the attached Exhibit and Fidelity Exploration & Production Company has been designated as successor Operator. Concurrent with this action, Babcock & Brown Energy Inc. resigns as Operator of these wells and names Fidelity Exploration & Production Company as successor Operator. BLM Blanket Bond Number CO1345 and Utah OGCC Blanket Bond Number 190017646 will be used to cover operations by Fidelity Exploration & Production Company.

BABCOCK & BROWN ENERGY INC. *N3/35*

By   
Van Z. Spence, Resident  
*1512 Larimer St., Suite 550*  
*Denver Co 80202*  
*(303) 460-1132*

NAME (PLEASE PRINT) Michael C. Caskey

TITLE Executive Vice President & Chief Operating Officer

SIGNATURE 

DATE January 1, 2008

(This space for State use only)

APPROVED *1/31/2008*

*Earlene Russell*  
Division of Oil, Gas and Mining  
Earlene Russell, Engineering Technician

(See Instructions on Reverse Side)

RECEIVED

JAN 11 2008

DIV. OF OIL, GAS & MINING

**EXHIBIT "A"**

Attached to Form 9, Change of Operator, from Babcock & Brown Energy Inc. to Fidelity Exploration & Production Company, effective January 1, 2008

LEASE	UNIT	WELL NAME/NUMBER	API NO.	FIELD	LOCATION							TYPE
					Footage	QrtQrt	Sec.	Twp	Rge	County		
UTU 010529	N/A	Long Canyon No. 1	43-019-15925	Long Canyon	2,339' FNL	2,473' FWL	SEnw	9	26S	20E	Grand	Oil Well
UTU 065971	Cane Creek	Kane Springs Federal No. 27-1	43-019-31310	Big Flat	1,650' FSL	1,700' FEL	NWSE	27	25S	19E	Grand	Oil Well
UTU 053626	Cane Creek	Kane Springs Federal No. 19-1A ST	43-019-31324	Park Road	800' FSL	1,918' FEL	SWSE	19	26S	20E	Grand	Oil Well
ML-40761 / UTU 065972	Cane Creek	Cane Creek No. 2-1	43-019-31396	Big Flat	2,289' FNL	518' FEL	SENE	2	26S	19E	Grand	Oil Well
UTU 047858	Cane Creek	Kane Springs Federal No. 10-1	43-019-31331	Hell Roaring	2,333' FSL	2,112' FEL	NWSE	10	25S	18E	Grand	Oil Well
UTU 053624	Cane Creek	Kane Springs Federal No. 25-19-34-1	43-019-31334	Big Flat	934' FNL	1,678' FEL	NWNE	34	25S	19E	Grand	Oil Well
ML-44333	Cane Creek	Kane Springs Federal No. 16-1	43-019-31341	Wildcat	960' FSL	1,960' FWL	SESW	16	25S	18E	Grand	Water Disposal
UTU 065972	Cane Creek	Cane Creek No. 1-1* (Permit)	43-019-31446	Wildcat	2,240' FSL	1,317' FWL	NWSW	1	26S	19E	Grand	
UTU 068122	Cane Creek	Cane Creek No. 8-1* (Drilling)	43-019-31449	Wildcat	2,563' FNL	1,429' FWL	SEnw	8	26S	20E	Grand	
UTU 065973	Cane Creek	Cane Creek No. 24-1* (Drilling)	43-019-31447	Big Flat	682' FNL	2,829' FEL	NENw	24	26S	19E	Grand	

\* previously changed by Designation of Operator

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-53626
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>7. UNIT or CA AGREEMENT NAME:</b> CANE CREEK
<b>1. TYPE OF WELL</b> Oil Well		<b>8. WELL NAME and NUMBER:</b> KANE SPRINGS FED 19-1A
<b>2. NAME OF OPERATOR:</b> FIDELITY E&P COMPANY		<b>9. API NUMBER:</b> 43019313240000
<b>3. ADDRESS OF OPERATOR:</b> 2585 Heartland Drive , Sheridan, WY, 82801 8543	<b>PHONE NUMBER:</b> 303 893-3133 Ext	<b>9. FIELD and POOL or WILDCAT:</b> PARK ROAD
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0800 FSL 1918 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWNE Section: 19 Township: 26.0S Range: 20.0E Meridian: S		<b>COUNTY:</b> GRAND
		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:  <input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 7/3/2012  <input type="checkbox"/> SPUD REPORT Date of Spud:  <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> WILDCAT WELL DETERMINATION <input checked="" type="checkbox"/> OTHER	
	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input type="text" value="Undesirable Event"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
<p>A leak occurred at Fidelity's Kane Springs Federal 19-1A location around 12:00 pm on 7/02/2012. Approximately 6 barrels of liquid leaked from the pumping unit due to the failure and blow-out of stuffing box rubbers. The spill was immediately identified and confined to a small area immediately adjacent to the pumping unit. Spill notification to BLM (Eric Jones and Rock Smith) and the State of Utah (Dustin Doucet) was given at approximately 3:30 pm on 7/2/2012. The well was immediately shut in and clean up began right away. A Vac truck was used to remove all of the liquid contamination. On 7/3/12, the spill area was pressure washed with soapy water and the vacuum unit remained on site to remove the remaining slurry of contaminated soil. The well was put back on production on 7/3/12 with approximately 98% of the contamination cleaned up.</p>		<p><b>Accepted by the Utah Division of Oil, Gas and Mining</b></p> <p><b>FOR RECORD ONLY</b></p> <p>July 17, 2012</p>
<b>NAME (PLEASE PRINT)</b> Stephanie Masters	<b>PHONE NUMBER</b> 307 675-4924	<b>TITLE</b> Operations Tech
<b>SIGNATURE</b> N/A		<b>DATE</b> 7/11/2012

RECEIVED

SEP 04 2013

DIV. OF OIL, GAS & MINING



# United States Department of the Interior



BUREAU OF LAND MANAGEMENT

Utah State Office

440 West 200 South, Suite 500

Salt Lake City, UT 84101

<http://www.blm.gov/ut/st/en.html>

IN REPLY REFER TO:  
3180 (UTU80000X)  
UT922000

**AUG 29 2013**

Ms. Barbara Hinman  
Fidelity Exploration & Production Co.  
1700 Lincoln Street, Suite 2800  
Denver, Colorado 80203

Re: Consolidated Paradox Formation PA  
Cane Creek Unit  
Grand and San Juan Counties, Utah

Dear Ms. Hinman:

The Consolidated Paradox Formation PA, Cane Creek Unit, UTU80000E, is hereby approved effective as of March 1, 2013, pursuant to Section 11 of the Cane Creek Unit Agreement, located in Grand and San Juan Counties, Utah.

The Consolidated Paradox Formation PA results in an initial consolidated participating area of 4,783.68 acres and is based upon the completion of the following well as capable of producing unitized substances in paying quantities:

WELL NO.	API NO.	SURFACE LOCATION	LEASE NO.
Cane Creek 18-1H	43-019-50012	NE $\frac{1}{4}$ NE $\frac{1}{4}$ , 18-26S-20E	UTU53626

The request for the consolidated participating area is based on the completion of the following well which is producing from clastic 18-19 of the Paradox Formation:

WELL NO.	API NO.	SURFACE LOCATION	LEASE NO.
Cane Creek 1-1	43-019-31446	NW $\frac{1}{4}$ SW $\frac{1}{4}$ , 1-26S-19E	UTU65972

Copies of the approved request are being distributed to the appropriate agencies and one copy is returned herewith. Please advise all interested parties of the approval of the Consolidated Paradox Formation PA, Cane Creek Unit, and the effective date.

If you have any questions, please contact Judy Nordstrom at (801) 539-4108.

Sincerely,

A handwritten signature in black ink, appearing to read "Roger L. Bankert". The signature is written in a cursive style with a large initial 'R'.

Roger L. Bankert  
Chief, Branch of Minerals

Enclosure

cc: BLM FOM - Moab w/enclosure  
UDOGM  
SITLA

RECEIVED

SEP 04 2013

DIV. OF OIL, GAS & MINING

United States Department of the Interior



BUREAU OF LAND MANAGEMENT

Utah State Office

440 West 200 South, Suite 500

Salt Lake City, UT 84101

<http://www.blm.gov/ut/st/en.html>

IN REPLY REFER TO:  
3180 (UTU80000X)  
UT922000

AUG 29 2013

Ms. Barbara Hinman  
Fidelity Exploration & Production Co.  
1700 Lincoln Street, Suite 2800  
Denver, Colorado 80203

Re: Consolidated Paradox Formation PA  
Cane Creek Unit  
Grand and San Juan Counties, Utah

Dear Ms. Hinman:

The Consolidated Paradox Formation PA, Cane Creek Unit, UTU80000E, is hereby approved effective as of March 1, 2013, pursuant to Section 11 of the Cane Creek Unit Agreement, located in Grand and San Juan Counties, Utah.

The Consolidated Paradox Formation PA results in an initial consolidated participating area of 4,783.68 acres and is based upon the completion of the following well as capable of producing unitized substances in paying quantities:

WELL NO.	API NO.	SURFACE LOCATION	LEASE NO.
Cane Creek 18-1H	43-019-50012	NE $\frac{1}{4}$ NE $\frac{1}{4}$ , 18-26S-20E	UTU53626

The request for the consolidated participating area is based on the completion of the following well which is producing from clastic 18-19 of the Paradox Formation:

WELL NO.	API NO.	SURFACE LOCATION	LEASE NO.
Cane Creek 1-1	43-019-31446	NW $\frac{1}{4}$ SW $\frac{1}{4}$ , 1-26S-19E	UTU65972

Copies of the approved request are being distributed to the appropriate agencies and one copy is returned herewith. Please advise all interested parties of the approval of the Consolidated Paradox Formation PA, Cane Creek Unit, and the effective date.

If you have any questions, please contact Judy Nordstrom at (801) 539-4108.

Sincerely,

A handwritten signature in black ink that reads "Roger L. Bankert". The signature is written in a cursive style with a large, stylized initial 'R'.

Roger L. Bankert  
Chief, Branch of Minerals

Enclosure

cc: BLM FOM - Moab w/enclosure  
UDOGM  
SITLA

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 6

**ENTITY ACTION FORM**

Operator: Fidelity Exploration & Production Company Operator Account Number: N 3155  
 Address: 1700 Lincoln St  
city Denver  
state CO zip 80203 Phone Number: (303) 893-3133

**Well 1**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301931324	Kane Springs Fed 19-1A		SWSE	19	26S	20E	Grand
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
C	14507	14505	7/4/1991		3/1/2013		
Comments: <span style="float: right;">10/17/13</span>							

**Well 2**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301931447	Cane Creek Unit 24-1		NEWN	24	26S	19E	Grand
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
C	14507	14505	7/1/2007		3/1/2013		
Comments: <span style="float: right;">10/17/13</span>							

**Well 3**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301950014	Cane Creek Unit 13-1		SENE	13	26S	19E	Grand
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
C	14507	14505	6/29/2012		3/1/2013		
Comments: <span style="float: right;">10/17/13</span>							

**ACTION CODES:**

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to new entity
- E - Other (Explain in 'comments' section)

Joy Gardner

Name (Please Print)

*Joy Gardner*  
Signature

Sr. Engineering Tech

10/10/2013

Title

Date

RECEIVED  
OCT 10 2013

Div. of Oil, Gas & Mining

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9	
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-53626	
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>	
<b>1. TYPE OF WELL</b> Oil Well		<b>7. UNIT or CA AGREEMENT NAME:</b> CANE CREEK	
<b>2. NAME OF OPERATOR:</b> FIDELITY E&P COMPANY		<b>8. WELL NAME and NUMBER:</b> KANE SPRINGS FED 19-1A	
<b>3. ADDRESS OF OPERATOR:</b> 1801 California St. Ste 2500 , Denver, CO, 80202		<b>9. API NUMBER:</b> 43019313240000	
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0800 FSL 1918 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWSE Section: 19 Township: 26.0S Range: 20.0E Meridian: S		<b>9. FIELD and POOL or WILDCAT:</b> PARK ROAD	
		<b>COUNTY:</b> GRAND	
		<b>STATE:</b> UTAH	
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:  <input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 10/27/2014  <input type="checkbox"/> SPUD REPORT Date of Spud:  <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input checked="" type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION  OTHER: <input style="width: 100px;" type="text"/>
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.			
<p>Produced water generated from this well is disposed of either at the Fidelity-operated Kane Springs 16-1 injection well or the commercial Danish Flats facility in Grand County, Utah.</p>			
<p><b>Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY October 29, 2014</b></p>			
<b>NAME (PLEASE PRINT)</b> Sandi Stocker		<b>PHONE NUMBER</b> 720 931-9637	<b>TITLE</b> Engineering Tech
<b>SIGNATURE</b> N/A		<b>DATE</b> 10/27/2014	

Division of Oil, Gas and Mining  
 Operator Change/Name Change Worksheet-for State use only

Effective Date: 3/1/2016

<b>FORMER OPERATOR:</b> Fidelity E&P Company N3155 1801 Californa Street, Suite 2500 Denver, CO 80202	<b>NEW OPERATOR:</b> Wesco Operating, Inc. N4030 PO Box 1650 Casper, WY 82602
<b>CA Number(s):</b>	<b>Unit(s):</b> Cane Creek Threemile

**WELL INFORMATION:**

Well Name	Sec	TWN	RNG	API	Entity	Mineral	Surface	Type	Status
See Attached List									

**OPERATOR CHANGES DOCUMENTATION:**

- Sundry or legal documentation was received from the **FORMER** operator on: 4/12/2016
- Sundry or legal documentation was received from the **NEW** operator on: 4/12/2016
- New operator Division of Corporations Business Number: 8742016-0143

**REVIEW:**

- Surface Agreement Sundry from **NEW** operator on Fee Surface wells received on: 4/12/2016
- Receipt of Acceptance of Drilling Procedures for APD on: 4/12/2016
- Reports current for Production/Disposition & Sundries: 4/19/2016
- OPS/SI/TA well(s) reviewed for full cost bonding: 4/19/2016
- UIC5 on all disposal/injection/storage well(s) approved on: 4/13/2016
- Surface Facility(s) included in operator change: Blue Hills Gas Plant  
Dead House Lateral Pipeline  
Dubinky Booster Station  
Long Canyon Facility
- Inspections of PA state/fee well sites complete on (only upon operators request): N/A

**NEW OPERATOR BOND VERIFICATION:**

- Federal well(s) covered by Bond Number: UTB0000685
- Indian well(s) covered by Bond Number: N/A
- State/fee well(s) covered by Bond Number(s): RLB0016443

**DATA ENTRY:**

- Well(s) update in the **OGIS** on: 4/21/2016 ✓
- Entity Number(s) updated in **OGIS** on: 4/21/2016
- Unit(s) operator number update in **OGIS** on: 4/21/2016
- Surface Facilities update in **OGIS** on: 4/21/2016
- State/Fee well(s) attached to bond(s) in **RBDMS** on: 4/21/2016
- Surface Facilities update in **RBDMS** on: 4/21/2016

**LEASE INTEREST OWNER NOTIFICATION:**

- The **NEW** operator of the Fee (Mineral) wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: N/A

**COMMENTS:**

From: Fidelity Exploration Production Comany N3155

To: Wesco Operating, Inc. N4030

Effective: 3/1/2016

Well Name	Section	TWN	RNG	API Numner	Entity	Mineral	Surface	Type	Status	Unit
KANE SPRINGS 16-1	16	250S	180E	4301931341	11484	State	State	WD	A	CANE CREEK
CANE CREEK UNIT 2-2-25-18	2	250S	180E	4301950044		State	State	OW	APD	CANE CREEK
Cane Creek Unit 25-1-25-19	25	250S	190E	4301950048		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 6-1-25-19	6	250S	190E	4301950052		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 29-1-25-19	29	250S	190E	4301950053		Federal	Federal	OW	APD	CANE CREEK
Cane Creek 10-1-25-19	10	250S	190E	4301950054		Federal	Federal	OW	APD	
Cane Creek Unit 30-1-25-19	30	250S	190E	4301950055		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 19-2-26-20	19	260S	200E	4301950056		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 14-1-25-19	14	250S	190E	4301950057		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 2-3-25-18	2	250S	180E	4301950058		Federal	State	OW	APD	CANE CREEK
Cane Creek Unit 16-3-25-18	16	250S	180E	4301950059		Federal	State	OW	APD	CANE CREEK
Cane Creek Unit 19-1-25-19	19	250S	190E	4301950060		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 32-2-25-19	32	250S	190E	4301950061		State	State	OW	APD	CANE CREEK
Cane Creek Unit 17-1-25-19	17	250S	190E	4301950062		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 16-4-25-18	16	250S	180E	4301950063		Federal	State	OW	APD	CANE CREEK
Cane Creek Unit 2-4-25-18	2	250S	180E	4301950064		Federal	State	OW	APD	CANE CREEK
Cane Creek Unit 5-1-25-18	5	250S	180E	4301950065		Federal	Federal	OW	APD	CANE CREEK
8-2-26-20	8	260S	200E	4301950068		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 19-3-26-20	19	260S	200E	4301950069		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 21-1-25-19	21	250S	190E	4301950070		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 12-2-26-19	12	260S	190E	4301950071		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 26-4-25-19	26	250S	190E	4301950072		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 21-1-25-18	21	250S	180E	4301950073		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 9-1-25-18	9	250S	180E	4301950074		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 7-1-25-19	7	250S	190E	4301950075		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 5-2-25-18	5	250S	180E	4301950076		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 7-1-25-18	7	250S	180E	4301950077		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 13-1-25-18	13	250S	180E	4301950078		Federal	Federal	OW	APD	CANE CREEK
Three Mile Unti 12-3-29-21	12	290S	210E	4303750070		Federal	Federal	OW	APD	THREEMILE
Three Mile Unit 16-2-29-22	16	290S	220E	4303750071		Federal	State	OW	APD	THREEMILE
Cane Creek Unit 7-2-26-20	7	260S	200E	4301950051	19706	Federal	Federal	OW	OPS	CANE CREEK
THREEMILE 16-17	16	290S	220E	4303750003	17984	State	State	OW	OPS	THREEMILE
Three Mile Unit 12-2-29-21	12	290S	210E	4303750069	19646	Federal	Federal	OW	OPS	THREEMILE
KANE SPRINGS FED 27-1	27	250S	190E	4301931310	14505	Federal	Federal	OW	P	CANE CREEK
KANE SPRINGS FED 19-1A	19	260S	200E	4301931324	14505	Federal	Federal	OW	P	CANE CREEK
KANE SPRINGS FED 10-1	10	250S	180E	4301931331	14509	Federal	Federal	OW	P	CANE CREEK
KANE SPRINGS FED 25-19-34-1	34	250S	190E	4301931334	14505	Federal	Federal	OW	P	CANE CREEK
CANE CREEK 2-1	2	260S	190E	4301931396	14505	State	State	OW	P	CANE CREEK
CANE CREEK UNIT 12-1	12	260S	190E	4301950009	14505	Federal	Federal	OW	P	CANE CREEK
CANE CREEK UNIT 7-1	7	260S	200E	4301950010	18923	Federal	Federal	OW	P	CANE CREEK
CANE CREEK UNIT# 26-2	26	250S	190E	4301950011	14505	Federal	Federal	OW	P	CANE CREEK
CANE CREEK UNIT #18-1	18	260S	200E	4301950012	14505	Federal	Federal	OW	P	CANE CREEK
CANE CREEK U #13-1	13	260S	190E	4301950014	14505	Federal	Federal	OW	P	CANE CREEK
CANE CREEK UNIT 26-3	26	250S	190E	4301950019	14505	Federal	Federal	OW	P	CANE CREEK
CANE CREEK UNIT 28-2	28	250S	190E	4301950020	18681	Federal	Federal	OW	P	
Cane Creek Unit 17-1	17	260S	200E	4301950028	18980	Federal	Federal	OW	P	CANE CREEK
Cane Creek Unit 36-1	36	250S	190E	4301950030	14505	State	State	OW	P	CANE CREEK
Cane Creek Unit 36-2H	36	250S	190E	4301950033	14505	State	State	OW	P	CANE CREEK
Cane Creek Unit 24-2H	24	260S	190E	4301950034	19342	Federal	Federal	OW	P	CANE CREEK
Cane Creek Unit 36-3H	36	250S	190E	4301950035	19528	State	State	OW	P	CANE CREEK
CANE CREEK UNIT 2-1-25-18	2	250S	180E	4301950036	19343	Federal	State	OW	P	CANE CREEK
Cane Creek Unit 32-1-25-19	32	250S	190E	4301950037	19396	State	State	OW	P	
Cane Creek Unit 28-3	28	250S	190E	4301950045	19767	Federal	Federal	OW	P	CANE CREEK
Cane Creek 32-1-25-20	32	250S	200E	4301950049	19588	State	State	OW	P	
HATCH POINT 1	14	290S	210E	4303731658	11356	Federal	Federal	OW	P	
THREEMILE 43-18H	18	290S	220E	4303731857	17276	Federal	Federal	OW	P	
LONG CANYON 1	9	260S	200E	4301915925	674	Federal	Federal	OW	S	
CANE CREEK 1-1	1	260S	190E	4301931446	14505	Federal	Federal	OW	S	CANE CREEK

From: Fidelity Exploration Production Company N3155

To: Wesco Operating, Inc. N4030

Effective: 3/1/2016

CANE CREEK 24-1	24	260S	190E	4301931447	14505	Federal	Federal	OW	S	CANE CREEK
CANE CREEK 8-1	8	260S	200E	4301931449	16464	Federal	Federal	OW	S	CANE CREEK
Cane Creek Unit 18-2	18	260S	200E	4301950027	14505	Federal	Federal	OW	S	CANE CREEK
Cane Creek Unit 17-2	17	260S	200E	4301950032	14505	Federal	Federal	OW	S	CANE CREEK
Cane Creek 36-1-25-18	36	250S	180E	4301950038	19440	State	State	OW	S	
CHEVRON FED 1	24	290S	230E	4303730005	975	Federal	Federal	OW	S	
Threemile 12-7	12	290S	210E	4303750001	17837	Federal	Federal	OW	S	THREEMILE
LA SAL 29-28	29	290S	230E	4303750002	17920	Federal	Federal	OW	S	
CANE CREEK UNIT 16-2-25-18	16	250S	180E	4301950046	19512	State	State	OW	TA	CANE CREEK

# WESCO OPERATING, INC.

O I L & G A S O P E R A T I O N S

April 8, 2016

John Rogers  
Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210 Box 145801  
Salt Lake City, Utah 84114

RECEIVED  
APR 12 2016  
DIV. OF OIL, GAS & MINING

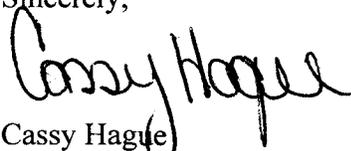
RE: Change of Operator

- A) Wells
  - B) APD'S
  - C) Dubinky Booster Station
  - D) Blue Hills Gas Plant
  - E) Dead Horse Lateral Pipeline
  - F) Authority to Inject
- Sundry Notices

Dear John Rodgers,

Please find enclosed the following documents from Fidelity Exploration & Production Company to Wesco Operating, Inc for your further handing. If you have any further questions please contact us..

Sincerely,



Cassy Hague  
307-577-5337

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: See Attached Exhibit
2. NAME OF OPERATOR: Fidelity Exploration & Production Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: See Attached Exhibit
3. ADDRESS OF OPERATOR: 1801 California St., STE 250 CITY Denver STATE CO ZIP 80202		7. UNIT or CA AGREEMENT NAME: See Attached Exhibit
4. LOCATION OF WELL FOOTAGES AT SURFACE: See attached exhibit for all wells and details		8. WELL NAME and NUMBER: See Attached Exhibit
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: _____		9. API NUMBER:
COUNTY: Grand		10. FIELD AND POOL, OR WILDCAT: See Attached Exhibit
STATE: UTAH		

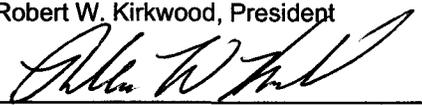
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will start: <u>3/1/2016</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of work completion: _____	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
Effective March 1, 2016, Fidelity Exploration & Production Company (Operator Number N1355) resigns as Operator of the wells listed on the attached exhibit and Wesco Operating, Inc. has been designated as successor Operator.

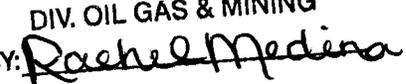
Wesco Operating, Inc.  
P.O. Box 1650  
Casper, Wyoming 82602  
Phone 307-265-5178

Fidelity Exploration & Production Company  
1801 California Street, Suite 2500  
Denver, Colorado 80202  
Phone 303-893-3133

Wesco Operating, Inc.  
Robert W. Kirkwood, President  
  
Signature

NAME (PLEASE PRINT) <u>Darwin Subart</u>	TITLE <u>Chief Financial Officer</u>
SIGNATURE 	DATE <u>4/4/2016</u>

(This space for State use only) **BLM:**

**APPROVED**  
**APR 21 2016**  
DIV. OIL GAS & MINING  
BY: 

**Fidelity Exploration & Production Company Paradox Well & APD List**

<u>Entity #</u>	<u>API #</u>	<u>Permitted Well Name</u>	<u>AKA Well Name</u>	<u>Township</u>	<u>Range</u>	<u>Section(s)</u>	<u>County</u>	<u>State</u>	<u>Mineral</u>	<u>Surface</u>	<u>Well Type</u>	<u>Well Status</u>
14506	4301931310	KANE SPRINGS FED 27-1	KANE SPRINGS FED 27-1-25-19	25S	19E	27	GRAND	UT	Federal	Federal	OW	P ✓
14505	4301931324	KANE SPRINGS FED 19-1A	KANE SPRINGS FED 19-1A-ST-26-20	26S	20E	19	GRAND	UT	Federal	Federal	OW	P ✓
14509	4301931331	KANE SPRINGS FED 10-1	KANE SPRINGS FED 10-1-25-18	25S	18E	10	GRAND	UT	Federal	Federal	OW	P ✓
14506	4301931334	KANE SPRINGS FED 25-19-34-1	KANE SPRINGS FED 25-19-34-1	25S	19E	34	GRAND	UT	Federal	Federal	OW	P ✓
	4301931341	KANE SPRINGS 16-1-25-18	Disposal Well	25S	18E	16	GRAND	UT	State	State	SWD	P ✓
14505	4301931396	CANE CREEK 2-1	CANE CREEK UNIT 2-1-26-19	26S	19E	2	GRAND	UT	State	State	OW	P ✓
14505	4301931446	CANE CREEK 1-1	CANE CREEK UNIT 1-1-26-19	26S	19E	1	GRAND	UT	Federal	Federal	OW	P ✓
14505	4301950009	CANE CREEK UNIT 12-1	CANE CREEK UNIT 12-1-26-19	26S	19E	12	GRAND	UT	Federal	Federal	OW	P ✓
18923	4301950010	CANE CREEK UNIT 7-1	CANE CREEK UNIT 7-1-26-20	26S	20E	7	GRAND	UT	Federal	Federal	OW	P ✓
14506	4301950011	CANE CREEK UNIT# 26-2	CANE CREEK UNIT 26-2-25-19	25S	19E	26	GRAND	UT	Federal	Federal	OW	P ✓
14505	4301950012	CANE CREEK UNIT #18-1	CANE CREEK UNIT 18-1-26-20	26S	20E	18	GRAND	UT	Federal	Federal	OW	P ✓
14505	4301950014	CANE CREEK U #13-1	CANE CREEK UNIT 13-1-26-19	26S	19E	13	GRAND	UT	Federal	Federal	OW	P ✓
14506	4301950019	CANE CREEK UNIT 26-3	CANE CREEK UNIT 26-3-25-19	25S	19E	26	GRAND	UT	Federal	Federal	OW	P ✓
18681	4301950020	CANE CREEK UNIT 28-2	CANE CREEK UNIT 28-2-25-19	25S	19E	28	GRAND	UT	Federal	Federal	OW	P ✓
14505	4301950027	Cane Creek Unit 18-2	CANE CREEK UNIT 18-2-26-20	26S	20E	18	GRAND	UT	Federal	Federal	OW	P ✓
18980	4301950028	Cane Creek Unit 17-1	CANE CREEK UNIT 17-1-26-20	26S	20E	17	GRAND	UT	Federal	Federal	OW	P ✓
19057	4301950030	Cane Creek Unit 36-1	CANE CREEK UNIT 36-1-25-19	25S	19E	36	GRAND	UT	State	State	OW	P ✓
14505	4301950032	Cane Creek Unit 17-2	CANE CREEK UNIT 17-2-26-20	26S	20E	17	GRAND	UT	Federal	Federal	OW	P ✓
19527	4301950033	Cane Creek Unit 36-2H	CANE CREEK UNIT 36-2H-25-19	25S	19E	36	GRAND	UT	State	State	OW	P ✓
19342	4301950034	Cane Creek Unit 24-2H	CANE CREEK UNIT 24-2-26-19	26S	19E	24	GRAND	UT	Federal	Federal	OW	P ✓
19528	4301950035	Cane Creek Unit 36-3H	CANE CREEK UNIT 36-3H-25-19	25S	19E	36	GRAND	UT	State	State	OW	P ✓
19396	4301950037	Cane Creek Unit 32-1-25-19	CANE CREEK UNIT 32-1-25-19	25S	19E	32	GRAND	UT	State	State	OW	P ✓
19767	4301950045	Cane Creek Unit 28-3	CANE CREEK UNIT 28-3-25-19	26S	19E	28	GRAND	UT	Federal	Federal	OW	P ✓
19588	4301950049	Cane Creek 32-1-25-20	CANE CREEK 32-1-25-20	25S	20E	32	GRAND	UT	State	State	OW	P ✓
11356	4303731658	HATCH POINT 1	HATCH POINT FEDERAL 1	29S	21E	14	SAN JUAN	UT	Federal	Federal	OW	P ✓ 26-P
17276	4303731857	THREEMILE 43-18H	THREEMILE UNIT 43-18H-29-22	29S	22E	18	SAN JUAN	UT	Federal	Federal	OW	P ✓
19706	4301950051	Cane Creek Unit 7-2-26-20	CANE CREEK UNIT 7-2-26-20	26S	20E	7	GRAND	UT	Federal	Federal	OW	OPS ✓
17984	4303750003	THREEMILE 16-17	THREEMILE UNIT 16-17-29-22	29S	22E	16	SAN JUAN	UT	State	State	OW	OPS ✓ 3 OPS
19646	4303750069	Three Mile Unit 12-2-29-21	THREE MILE UNIT 12-2-29-21	29S	21E	12	SAN JUAN	UT	Federal	Federal	OW	OPS ✓
19343	4301950036	CANE CREEK UNIT 2-1-25-18	CANE CREEK UNIT 2-1-25-18	25S	18E	2	GRAND	UT	Federal	State	OW	TA ✓ 2TA
19512	4301950046	CANE CREEK UNIT 16-2-25-18	CANE CREEK UNIT 16-2-25-18	25S	18E	16	GRAND	UT	State	State	OW	TA ✓
674	4301915925	LONG CANYON 1	LONG CANYON 1	26S	20E	9	GRAND	UT	Federal	Federal	OW	S ✓
14505	4301931447	CANE CREEK 24-1	CANE CREEK UNIT 24-1-26-19	26S	19E	24	GRAND	UT	Federal	Federal	OW	S ✓
16464	4301931449	CANE CREEK 8-1	CANE CREEK UNIT 8-1-26-20	26S	20E	8	GRAND	UT	Federal	Federal	OW	S ✓
19440	4301950038	Cane Creek 36-1-25-18	CANE CREEK 36-1-25-18	25S	18E	36	GRAND	UT	State	State	OW	S ✓
975	4303730005	CHEVRON FED 1	CHEVRON FEDERAL 1H	29S	23E	24	SAN JUAN	UT	Federal	Federal	OW	S ✓ 7-S
17837	4303750001	Threemile 12-7	THREEMILE UNIT 12-7-29-21	29S	21E	12	SAN JUAN	UT	Federal	Federal	OW	S ✓
17920	4303750002	LA SAL 29-28	LA SAL UNIT 29-28-29-23	29S	23E	29	SAN JUAN	UT	Federal	Federal	OW	S ✓
	4301950044	CANE CREEK UNIT 2-2-25-18		250S	180E	2	GRAND	UT	State	State	OW	APD ✓
	4301950048	Cane Creek Unit 25-1-25-19		250S	190E	25	GRAND	UT	Federal	Federal	OW	APD ✓
	4301950052	Cane Creek Unit 6-1-25-19		250S	190E	6	GRAND	UT	Federal	Federal	OW	APD ✓
	4301950053	Cane Creek Unit 29-1-25-19		250S	190E	29	GRAND	UT	Federal	Federal	OW	APD ✓ 2APD
	4301950054	Cane Creek 10-1-25-19		250S	190E	10	GRAND	UT	Federal	Federal	OW	APD ✓
	4301950055	Cane Creek Unit 30-1-25-19		250S	190E	30	GRAND	UT	Federal	Federal	OW	APD ✓
	4301950056	Cane Creek Unit 19-2-26-20		260S	200E	19	GRAND	UT	Federal	Federal	OW	APD ✓

<u>Entity #</u>	<u>API #</u>	<u>Permitted Well Name</u>	<u>AKA Well Name</u>	<u>Township</u>	<u>Range</u>	<u>Section(s)</u>	<u>County</u>	<u>State</u>	<u>Mineral</u>	<u>Surface</u>	<u>Well Type</u>	<u>Well Status</u>
4301950057		Cane Creek Unit 14-1-25-19		250S	190E	14	GRAND	UT	Federal	Federal	OW	APD ✓
4301950058		Cane Creek Unit 2-3-25-18		250S	180E	2	GRAND	UT	Federal	State	OW	APD ✓
4301950059		Cane Creek Unit 16-3-25-18		250S	180E	16	GRAND	UT	Federal	State	OW	APD ✓
4301950060		Cane Creek Unit 19-1-25-19		250S	190E	19	GRAND	UT	Federal	Federal	OW	APD ✓
4301950061		Cane Creek Unit 32-2-25-19		250S	190E	32	GRAND	UT	State	State	OW	APD ✓
4301950062		Cane Creek Unit 17-1-25-19		250S	190E	17	GRAND	UT	Federal	Federal	OW	APD ✓
4301950063		Cane Creek Unit 16-4-25-18		250S	180E	16	GRAND	UT	Federal	State	OW	APD ✓
4301950064		Cane Creek Unit 2-4-25-18		250S	180E	2	GRAND	UT	Federal	State	OW	APD ✓
4301950065		Cane Creek Unit 5-1-25-18		250S	180E	5	GRAND	UT	Federal	Federal	OW	APD ✓
4301950068		8-2-26-20		260S	200E	8	GRAND	UT	Federal	Federal	OW	APD ✓
4301950069		Cane Creek Unit 19-3-26-20		260S	200E	19	GRAND	UT	Federal	Federal	OW	APD ✓
4301950070		Cane Creek Unit 21-1-25-19		250S	190E	21	GRAND	UT	Federal	Federal	OW	APD ✓
4301950071		Cane Creek Unit 12-2-26-19		260S	190E	12	GRAND	UT	Federal	Federal	OW	APD ✓
4301950072		Cane Creek Unit 26-4-25-19		250S	190E	26	GRAND	UT	Federal	Federal	OW	APD ✓
4301950073		Cane Creek Unit 21-1-25-18		250S	180E	21	GRAND	UT	Federal	Federal	OW	APD ✓
4301950074		Cane Creek Unit 9-1-25-18		250S	180E	9	GRAND	UT	Federal	Federal	OW	APD ✓
4301950075		Cane Creek Unit 7-1-25-19		250S	190E	7	GRAND	UT	Federal	Federal	OW	APD ✓
4301950076		Cane Creek Unit 5-2-25-18		250S	180E	5	GRAND	UT	Federal	Federal	OW	APD ✓
4301950077		Cane Creek Unit 7-1-25-18		250S	180E	7	GRAND	UT	Federal	Federal	OW	APD ✓
4301950078		Cane Creek Unit 13-1-25-18		250S	180E	13	GRAND	UT	Federal	Federal	OW	APD ✓
4303750070		Three Mile Unti 12-3-29-21		290S	210E	12	SAN JUAN	UT	Federal	Federal	OW	APD ✓
4303750071		Three Mile Unit 16-2-29-22		290S	220E	16	SAN JUAN	UT	Federal	State	OW	APD ✓
4301950036		CANE CREEK UNIT 2-1-25-18H2		25S	18E	2	GRAND	UT	Federal	State	OW	APD ✓

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

**Request to Transfer Application or Permit to Drill**

(This form should accompany a Sundry Notice, Form 9, requesting APD transfer)

<b>Well name:</b>	See attached well list
<b>API number:</b>	
<b>Location:</b>	Qtr-Qtr:                      Section:                      Township:                      Range:
<b>Company that filed original application:</b>	Fidelity Exploration & Production Company
<b>Date original permit was issued:</b>	
<b>Company that permit was issued to:</b>	Fidelity Exploration & Production Company

Check one	Desired Action:
<input type="checkbox"/>	<b>Transfer pending (unapproved) Application for Permit to Drill to new operator</b>
	The undersigned as owner with legal rights to drill on the property, hereby verifies that the information as submitted in the pending Application for Permit to Drill, remains valid and does not require revision. The new owner of the application accepts and agrees to the information and procedures as stated in the application.
<input checked="" type="checkbox"/>	<b>Transfer approved Application for Permit to Drill to new operator</b>
	The undersigned as owner with legal rights to drill on the property as permitted, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.	Yes	No
If located on private land, has the ownership changed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> If so, has the surface agreement been updated?	<input type="checkbox"/>	<input type="checkbox"/>
Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Have there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Have there been any changes to the access route including ownership or right-of-way, which could affect the proposed location?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Has the approved source of water for drilling changed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is bonding still in place, which covers this proposed well? Bond No. _____	<input type="checkbox"/>	<input type="checkbox"/>

Any desired or necessary changes to either a pending or approved Application for Permit to Drill that is being transferred, should be filed on a Sundry Notice, Form 9, or amended Application for Permit to Drill, Form 3, as appropriate, with necessary supporting information as required.

Name (please print) Robert W. Kirkwood Title President  
 Signature *Robert W. Kirkwood* Date 4/4/10  
 Representing (company name) Wesco Operating, Inc.

The person signing this form must have legal authority to represent the company or individual(s) to be listed as the new operator on the Application for Permit to Drill.

**Fidelity Exploration & Production Company Paradox APD List**

<u>Date Issued</u>	<u>API #</u>	<u>Permitted Well Name</u>	<u>Township</u>	<u>Range</u>	<u>Section(s)</u>	<u>County</u>	<u>State</u>	<u>Mineral</u>	<u>Surface</u>	<u>Well Type</u>	<u>Well Status</u>
3/4/2014	4301950044	CANE CREEK UNIT 2-2-25-18	250S	180E	2	GRAND	UT	State	State	OW	APD
2/19/2015	4301950048	Cane Creek Unit 25-1-25-19	250S	190E	25	GRAND	UT	Federal	Federal	OW	APD
6/26/2014	4301950052	Cane Creek Unit 6-1-25-19	250S	190E	6	GRAND	UT	Federal	Federal	OW	APD
6/26/2014	4301950053	Cane Creek Unit 29-1-25-19	250S	190E	29	GRAND	UT	Federal	Federal	OW	APD
6/26/2014	4301950054	Cane Creek 10-1-25-19	250S	190E	10	GRAND	UT	Federal	Federal	OW	APD
6/26/2014	4301950055	Cane Creek Unit 30-1-25-19	250S	190E	30	GRAND	UT	Federal	Federal	OW	APD
6/26/2014	4301950056	Cane Creek Unit 19-2-26-20	260S	200E	19	GRAND	UT	Federal	Federal	OW	APD
6/26/2014	4301950057	Cane Creek Unit 14-1-25-19	250S	190E	14	GRAND	UT	Federal	Federal	OW	APD
7/21/2014	4301950058	Cane Creek Unit 2-3-25-18	250S	180E	2	GRAND	UT	Federal	State	OW	APD
8/6/2014	4301950059	Cane Creek Unit 16-3-25-18	250S	180E	16	GRAND	UT	Federal	State	OW	APD
8/6/2014	4301950060	Cane Creek Unit 19-1-25-19	250S	190E	19	GRAND	UT	Federal	Federal	OW	APD
9/22/2014	4301950061	Cane Creek Unit 32-2-25-19	250S	190E	32	GRAND	UT	State	State	OW	APD
7/30/2014	4301950062	Cane Creek Unit 17-1-25-19	250S	190E	17	GRAND	UT	Federal	Federal	OW	APD
8/12/2014	4301950063	Cane Creek Unit 16-4-25-18	250S	180E	16	GRAND	UT	Federal	State	OW	APD
9/24/2014	4301950064	Cane Creek Unit 2-4-25-18	250S	180E	2	GRAND	UT	Federal	State	OW	APD
9/2/2014	4301950065	Cane Creek Unit 5-1-25-18	250S	180E	5	GRAND	UT	Federal	Federal	OW	APD
11/25/2014	4301950068	8-2-26-20	260S	200E	8	GRAND	UT	Federal	Federal	OW	APD
12/19/2014	4301950069	Cane Creek Unit 19-3-26-20	260S	200E	19	GRAND	UT	Federal	Federal	OW	APD
1/14/2015	4301950070	Cane Creek Unit 21-1-25-19	250S	190E	21	GRAND	UT	Federal	Federal	OW	APD
1/13/2015	4301950071	Cane Creek Unit 12-2-26-19	260S	190E	12	GRAND	UT	Federal	Federal	OW	APD
1/13/2015	4301950072	Cane Creek Unit 26-4-25-19	250S	190E	26	GRAND	UT	Federal	Federal	OW	APD
1/14/2015	4301950073	Cane Creek Unit 21-1-25-18	250S	180E	21	GRAND	UT	Federal	Federal	OW	APD
1/20/2015	4301950074	Cane Creek Unit 9-1-25-18	250S	180E	9	GRAND	UT	Federal	Federal	OW	APD
1/14/2015	4301950075	Cane Creek Unit 7-1-25-19	250S	190E	7	GRAND	UT	Federal	Federal	OW	APD
1/20/2015	4301950076	Cane Creek Unit 5-2-25-18	250S	180E	5	GRAND	UT	Federal	Federal	OW	APD
1/14/2015	4301950077	Cane Creek Unit 7-1-25-18	250S	180E	7	GRAND	UT	Federal	Federal	OW	APD
1/14/2015	4301950078	Cane Creek Unit 13-1-25-18	250S	180E	13	GRAND	UT	Federal	Federal	OW	APD
7/8/2014	4303750070	Three Mile Unti 12-3-29-21	290S	210E	12	SAN JUAN	UT	Federal	Federal	OW	APD
10/2/2014	4303750071	Three Mile Unit 16-2-29-22	290S	220E	16	SAN JUAN	UT	Federal	State	OW	APD
12/16/2014	4301950036	Cane Creek Unit 2-1-25-18 H2	25S	18E	2	GRAND	UT	Federal	State	OW	APD

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

5. LEASE DESIGNATION AND SERIAL NUMBER: <b>UTU-90108</b>
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT or CA AGREEMENT NAME:
8. WELL NAME and NUMBER: <b>Blue Hills Gas Plant</b>
9. API NUMBER:
10. FIELD AND POOL, OR WILDCAT:

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Blue Hills Gas Plant</u>
2. NAME OF OPERATOR: <b>Fidelity Exploration &amp; Production Company</b>
3. ADDRESS OF OPERATOR: 1801 California St., STE 2500 CITY <u>Denver</u> STATE <u>CO</u> ZIP <u>80202</u>
PHONE NUMBER: <b>(303) 893-3133</b>

4. LOCATION OF WELL FOOTAGES AT SURFACE:	COUNTY: <u>Grand</u>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:	STATE: <u>UTAH</u>

**11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: <u>3/1/2016</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
Effective March 1, 2016, Fidelity Exploration & Production Company (Operator Number N1355) resigns as Operator of the Blue Hills Gas Plant located in T23S-R19E, Sections 20, 29. Wesco Operating, Inc. has been named as successor Operator.

Wesco Operating, Inc.  
P.O Box 1650  
Casper, Wyoming 82602  
Phone 307-265-5178

Fidelity Exploration & Production Company  
1801 California Street, Suite 2500  
Denver, Colorado 80202  
Phone 303-893-3133

Wesco Operating, Inc.  
Robert W. Kirkwood, President

Signature *Robert W. Kirkwood*

NAME (PLEASE PRINT) <u>Darwin Subart</u>	TITLE <u>Chief Financial Officer</u>
SIGNATURE <u><i>Darwin Subart</i></u>	DATE <u>4/14/2016</u>

(This space for State use only)

**APPROVED**

**APR 21 2016**

DIV. OIL GAS & MINING  
BY: *Rachael Medina*

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER:	
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
7. UNIT or CA AGREEMENT NAME:	
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Compressor Booster Station</u>	8. WELL NAME and NUMBER: <b>Dubinky Booster Station</b>
2. NAME OF OPERATOR: <b>Fidelity Exploration &amp; Production Company</b>	
3. ADDRESS OF OPERATOR: <b>1801 California St., STE 2500</b> CITY <b>Denver</b> STATE <b>CO</b> ZIP <b>80202</b>	PHONE NUMBER: <b>(303) 893-3133</b>
4. LOCATION OF WELL	
FOOTAGES AT SURFACE:	COUNTY: <b>Grand</b>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:	STATE: <b>UTAH</b>

**11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> (Submit in Duplicate) Approximate date work will start: <u>3/1/2016</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

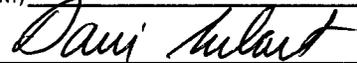
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Effective March 1, 2016, Fidelity Exploration & Production Company (Operator Number N1355) resigns as Operator of the Dubinky Booster Station located along Dubinky Road, approximately 18 miles northwest of Moab, 599142 E 4280872 N UTM Zone 12, NAD83. Wesco Operating, Inc. has been named as successor Operator.

Wesco Operating, Inc.  
P.O. Box 1650  
Casper, Wyoming 82602  
Phone 307-265-5178

Fidelity Exploration & Production Company  
1801 California Street, Suite 2500  
Denver, Colorado 80202  
Phone 303-893-3133

Wesco Operating, Inc.  
Robert W. Kirkwood, President  
  
\_\_\_\_\_  
Signature

NAME (PLEASE PRINT) <u>Darwin Subart</u>	TITLE <u>Chief Financial Officer</u>
SIGNATURE 	DATE <u>4/4/2016</u>

(This space for State use only)

**APPROVED**

**APR 21 2016**

DIV OIL GAS & MINING  
BY: 